



**KEMENTERIAN PEKERJAAN UMUM DAN PERUMAHAN RAKYAT
DIREKTORAT JENDERAL SUMBER DAYA AIR
DIREKTORAT BINA OPERASI DAN PEMELIHARAAN**

INDONESIA:

**DAM OPERATIONAL IMPROVEMENT AND SAFETY PROJECT
ADDITIONAL FINANCING (DOISP AF)**

**ENVIRONMENTAL AND SOCIAL MANAGEMENT
FRAMEWORK (ESMF)**

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DEFINITIONS

Terms	Meaning
Government	The Government of the Republic of Indonesia
Project	Dam Operational and Safety Improvement Project Additional Financing (DOISP AF)
Provincial government	The <i>provinsi</i> government, headed by a governor or <i>gubernur</i>
Local government	Municipal (<i>kota</i>) government (headed by a mayor or <i>walikota</i>) or district or regency (<i>kabupaten</i>) government (headed by a district head/regent or <i>bupati</i>)
Sub-project	Project component implemented at the central, provincial and/or <i>kabupaten/kota</i> level

ACRONYMS

AMDAL	National Required Environmental Impact Assessment
B(B)WS	River Basin Unit (of the MPWH)
BAPPENAS	National Development Planning Agency
BDSF	Basic Dam Safety Facility
BLH	Local-Government Environmental Office (at Provincial or <i>Kabupaten/Kota</i> Level)
BPN	Land Administration Agency
CPIU	Central Project Implementation Unit
CPMU	Central Project Management Unit
DD	Detailed Design
DGWR	Directorate General Water Resources
DSU	Dam Safety Unit (<i>Balai Bendungan</i>)
EAP	Emergency Action Plan
ESMP	Environmental and Social Management Plan
ESMF	Environmental and Social Management Framework
GOI	Government of Indonesia
ICOLD	International Commission on Large Dams
INACOLD	Indonesian Commission on Large Dams (a Chapter of ICOLD)
IPPF	Indigenous Peoples Planning Framework
LARPF	Land Acquisition and Resettlement Policy Framework
MPWH	Ministry of Public Works and Housing
NGOs	Non-Government Organizations
PIU	Project Implementation Unit
O&M	Operational and Maintenance
PIP	Project Implementation Plan
PW Agency	Public Works Agency responsible for water resources management (Provincial or <i>Kabupaten/Kota</i> Level)
RCWR	Research Center for Water Resources (at Bandung, West Java) (formerly Institute for Water Resources Research, IWRR)
TA	Technical Assistance

TD	Tender Document
UKL-UPL	<i>Upaya Pengelolaan dan Pemantauan Lingkungan</i> (Environmental Management and Monitoring Effort)
WBOJ	World Bank Office in Jakarta

1. Introduction

1.1 Description of the Project

The Government of Indonesia with the World Bank has an agreement to finance Dam Operational and Safety Improvement Project (DOISP). The DOISP is a long-term project to substantially improve Indonesia’s dam operation, dam structures and other dam related infrastructure in order to ensure continued water supply for beneficial local community use.

DOISP was implemented from 2009-2016 with Development Objectives to: (i) increase the safety and the functionality with respect to bulk water supply of 34 large Government-owned reservoirs; and (ii) strengthen the safety and operational management policies, regulations and administrative capacity of MPWH.

DOISP Additional Financing (DOISP AF) is a continuation of DOISP with additional financing and restructuring, and planned to be implemented from 2017-2022. The Development Objectives of DOISP AF are to (i) increase the safety and the functionality with respect to bulk water supply of large Government-owned reservoirs; and (ii) strengthen the safety and operational management policies, regulations and administrative capacity of Ministry of Public Works and Housing.

1.2 Components of the Project

The components of the Project are divided into 5 components:

Component 1: Dam Operational Improvement and Safety Works and Studies. The original objective under original DOISP was to restore dam performance and safety by providing for: (i) design and construction of *minor* and localized rehabilitation and remedial works on each of about 34 prioritized large dam/reservoir sites (“sub-projects”) to restore operational performance and/or safety (including spillway equipment repair and/or minor upgrading); (ii) four sub-projects for implementation in the first year; (iii) Surveys, Investigations and Designs (SID) – including social and environmental management plans – for *medium to major* works (sub-projects) to restore and/or improve operational performance and safety for approximately 22 dams/reservoirs to be implemented in the successor project, including the second-phase additional works on about 14 dams/reservoirs that were subject of first improvement in DOISP; (iv) Basic Dam Safety Facility (BDSF) repair and/or upgrading to improve safety monitoring, and preparedness systems for spillway emergency discharge for about 34 dams; (v) establishing a river inflow and sediment monitoring system to improve the operational hydrology for about 63 dams, and review flood flow data, estimated flood discharge frequency, and PMF or “Flood Envelope Curves” related to watershed area; and (vi) assessment of spillway capacity and downstream flooding risks for approximately 34 dams (including surveys, models and feasibility studies regarding downstream effects to determine the viability of any spillway modification or operational change, to be undertaken in the successor project).

The additional financing of DOISP 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 remaining 111 major dams in the portfolio that are to be prioritized based on the objective criteria for identification and assessment. Support would include: (i) specialized studies, Surveys, Investigations and Designs (SIDs), supervision and quality control of rehabilitation works; (ii) rehabilitation works, including civil and hydro-mechanical works; (iii) installation, rehabilitation or upgrading of Basic Dam Safety Facilities (BDSF) to improve safety monitoring, flood forecasting and preparedness systems; (iv) installation, rehabilitation or upgrading of instrumentation for operational hydro-meteorological monitoring; and, (v) hydrological assessments to review flood flow data, estimate flood discharge frequency and review spillway capacity and downstream flooding risks. 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.

Component 2: Operations and Maintenance Improvement and Capacity Building.

The original objective under original DOISP was to support improved operations and maintenance and to strengthen capacity building of the dam agency through: (i) preparation of O&M plans, Standard Operation Procedures (including rule curves and reservoir water balance) and manuals and undertaking needs based budgeting and O&M activities for about 34 dams and reservoirs, and for 29 dam sites to be rehabilitated under the successor project; (ii) preparation of dam and reservoir management plans and emergency spillway operation plans for about 34 dams; (iii) O&M staff training for dam safety monitoring, maintenance and operations, (iv) participatory programs on reservoir and dam management with local communities living near the reservoir, in approximately 20 reservoirs; and (v) provision of incremental operating costs for O&M of dams and reservoirs (borne by GOI).

The additional financing of DOISP will finance improvements in the operational elements required for securing dam safety and improved utilization. This would include: (i) strategic studies (sedimentation, catchment hydrology); (ii) asset management systems and needs based budgeting for operation and maintenance; (iii) Operation and Maintenance Plans; (iv) Instrumentation Plans and service standards; (v) Emergency Preparedness Plans, including dam break analyses, downstream flood mapping and benchmarking; (vi) piloting of Performance Based Contract for Dam Operation and Maintenance; and, (vii) basin-wide dam development and reservoir management plans.

Component 3: Reservoir Sedimentation Mitigation. The original objective under original DOISP was to provide for measures to mitigate the risk of sedimentation of selected reservoirs and for sustained performance and safety through: (i) bathymetric surveys to determine the available total storage and water level-area-volume relations of approximately 30 of the 63 reservoirs known to be affected by accelerated sedimentation; (ii) feasibility studies, designs and any necessary safeguards plans for “within-reservoir” activities and interventions to be taken in the medium-term (e.g., dredging, hydro-suction, etc.) that can be funded in DOISP or the successor project; (iii) preparation for a sample study for decommissioning of a severely silted reservoir to be financed under the successor project; and (iv) piloting of institutional models and plans for treatment of

upstream rivers and (sub-)catchments with construction of sediment retaining and river bank protection structures, mostly through community participation and incentive programs.

The additional financing of DOISP will support the scale-up of a comprehensive Sedimentation Management Program. This will include: (A) Corrective Measures, such as (i) dredging; (ii) flushing and diversion works; (iii) check dams; etc. and, (B) Preventative Measures, such as (i) piloting watershed management program by formulating a Watershed Management Plan for selected dams. This includes developing a hydrological model to predict the impact of mitigation strategies on flood runoff and sediment yield, preparing a local regulation for dam watershed conservation, implementing a watershed conservation program, and setting up a sediment load sampling station; (ii) conduct community participation program in watershed management, that may include carrying out watershed community educational program; and conduct Study of Partnership for Reservoir Maintenance Expenditures..

Component 4: Dam Safety Assurance Institutional Improvement. The original objective under DOISP was to further strengthen and consolidate the regulatory framework and national dam safety institution and strengthen MPWH's capacity for portfolio management and regulation in order to sustain rehabilitation works and reservoir life. This was achieved through: (i) the preparation of the Government and Ministerial regulatory documents and Concept/Academic Papers, including the consultations; (ii) a public awareness campaign about dams and reservoirs, and dissemination to all public and private dam owners of the regulations and guidelines regarding dams and reservoirs; (iii) strengthening and development of the DSU better fulfill its regulatory roles for about 63 dams under MPWH's program, and of other public and mines tailings dams through staff recruitment and training (with outsourcing of work to consultants and RCWR); (iv) provision of a fully furnished and equipped DSU office capable of housing about 30 engineers; (v) preparation of new or updated DSC Guidelines; (vi) establishing and supporting a National Dam Safety Panel to review site investigations and designs; (vii) establishing a dam engineer and technician training and certification system in cooperation with INACOLD; and (viii) incremental costs of the structural CDMU in DGWR to operate as the focal point for dam safety monitoring, review and archiving

The additional financing of DOISP will continue to support Government's institutional evolution and further innovations in building water resources institutions in Indonesia. The institutional activities aim at: (i) strengthening the capacity of MPW to manage its dam portfolio better and regulate large dams in the country, and (ii) improving the sustainability of the rehabilitation works and the reservoir life. This will include support for the following: (i) institutional assessments, benchmarking and enhanced coordination mechanism among line agencies; (ii) regulatory support and instruments, standards and guidelines, including national dam policy on registration, inspection, safety compliance and penalties; (iii) a National Dam Safety Management System; and (iv) human resource development and capacity building.

Component 5: Project Management. The original objective of this component under DOISP 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's (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 of DOISP will support continued implementation and the overall project management through: (i) the Central Project Management Unit (CPMU) within Ministry to provide the necessary support services for timely and effective project implementation, including monitoring & evaluation, procurement, financial management, safeguard monitoring, etc.; (ii) Technical Assistance for the Dam Safety Unit to ensure oversight and effective implementation; (iii) Technical Assistance for the river basin organizations to ensure timely and effective implementation; (iv) Environmental and Social Service Provider/s; (v) an international Dam Safety Panel of Experts; (vi) a National Dam Safety Review Panel; and, (vii) the incremental operating costs of the Central Project Management Unit's (CPMU) and the Project Implementation Units (PIUs) for activities related to project implementation.

1.3 Purpose of the ESMF

The purpose of this Environmental and Social Management Framework (ESMF) is to ensure that each component of DOISP AF is carried out in sustainable way by managing environmental and social aspect. ESMF will clarify the principles, rules, guidelines and procedures, and organizational arrangements to be applied to environmental and social management plan for DOISP AF sub-projects. The ESMF will guide i) the preparation of environmental and social management plan for the sub-projects under DOISP AF for the first annual work plan, as well as for sub-projects identified in subsequent years; and ii) the preparation of social safeguards related documents (Indigenous Peoples Plan and Land Acquisition and Resettlement Action Plan).

Any sub-project that cannot be implemented according to the ESMF will not be funded under the Project. This ESMF is applicable to DOISP AF.

2. Environmental and Social Screening Requirements

2.1 Scope of Activities

The works under DOISP AF have been scoped so as not to include any works with any major environmental or social impacts. Based on the pre-screening of potential sub-projects the potential adverse environmental impacts associated with these works and activities will mostly be construction-related and will be local, minor and easily reversible through the use of readily available and simple mitigation measures. Considering these aspects, all DOISP AF sub-projects are considered **Category B Project** by the World Bank. If, in the detail preparation and screening of the sub-projects under DOISP AF unexpectedly a potentially major negative or irreversible impact relating to the environmental or social safeguards is identified, then this sub-project will subject to further studies and discussion for the World Bank approval.

Restrictions for DOISP AF activities will notably pertain to any construction of new dams and decommissioning of existing dams, to larger-scale dredging and sludge

removal (quantities above 500,000 m³), and to activities that would imply significant land acquisition and involuntary resettlement and significant impact on indigenous peoples.

Table 1: Project Activities List

Project Component	Sub Component	Details
Component 1 – Dam Operational Safety Improvements	Dam Rehabilitation, Modification and Remedial Works in MPWH owned Dams	Investigations and design and analysis of dams to be rehabilitated under DOISP AF, includes: <ul style="list-style-type: none"> ○ embankment material investigations, ○ review of design reports and other information and engineering and economic analyses for design of rehabilitation works for DOISP AF
		Rehabilitation/remedial of 134 Dams/Reservoirs sites, including civil and hydro-mechanical works such as: <ul style="list-style-type: none"> ○ reinstatement of crest roadways, ○ reinstatement of rip-rap, ○ reinstatement of drainage lines, spillways, inlets and outlets and v-notch drains, ○ removal of vegetation growth on embankments which have a potential to impact on the integrity of the dam, ○ replacement of piezometers and other essential instrumentation, ○ repairs to electrical and mechanical equipment, ○ installation, rehabilitation or upgrading of Basic Dam Safety Facilities (BDSF), ○ installation, rehabilitation or upgrading of instrumentation for operational hydro-metrological monitoring, etc.
	Dam Surveillance and Monitoring Improvements	Includes: <ul style="list-style-type: none"> ○ Improve Dam Surveillance and Monitoring Procedures ○ Improvement of O&M practice ○ Preparation of Dam Break Analyses and Emergency Action Plans
Component 2 - Operational and Maintenance Improvement and Capacity Building	Dam O&M Improvement	<ul style="list-style-type: none"> ○ Implementation of sustainable O&M budget for dam, includes improvement of operational procedures for spillways and outlets ○ Establishment and implementation of Dam Asset Management
	Dam Agency and Capacity	<ul style="list-style-type: none"> ○ training of DMU and PDMU staff in Dam Safety

Project Component	Sub Component	Details
	building	Management <ul style="list-style-type: none"> ○ training DSU and DGWR staff ○ Assist career Development and Institutional Strengthening ○ Assist implementation of legal framework to enhance dam safety function and operation improvement
	Community Participation in Reservoir Management	Includes: <ul style="list-style-type: none"> ○ conducting community awareness and education programs for communities living in areas surrounding the reservoir, ○ improving the income of the community by providing incentive schemes for promoting community participation in reservoir management, ○ implementing community participation projects to benefit both the community and the reservoir – these will include projects such as green belt planting and provision of security to the dam and its surrounding areas, including the basic dam safety facilities (BDSF)
Component 3 – Reservoir Sedimentation Mitigation	Reservoir sedimentation surveys	Terrestrial and hydrographic surveys of selected reservoirs to determine extent of sedimentation and reduction in storage capacity of these reservoirs.
	Reservoir sedimentation mitigation interventions: Review of Dam Operational Procedure	<ul style="list-style-type: none"> ○ Modification of Dam Operational Procedures to Reduce Sedimentation Impacts on Operation; ○ Implementing modified operational procedures such as flushing during high reservoir inflows to prevent sediment buildup of sediment near outlets.
	Reservoir sedimentation mitigation interventions: River Bank Stabilization Work in selected areas	Construction of riverbank stabilization measures such as gabion retaining walls, revetments, groins and vegetative barriers to prevent riverbank erosion.
	Reservoir sedimentation mitigation interventions: (Minor) Sediment Removal from Reservoirs	Removal of sediment in minor to moderate quantities (less than 500,000 m ³ in accordance with GOI environmental standards) in reservoirs, in areas near intakes and outlets where these are blocked or their operating capacity has been reduced by sediment deposition. This includes dredging, flushing and diversion works.
	Reservoir sedimentation mitigation interventions: Removal of Aquatic Weeds	Removal of aquatic weeds in limited areas of the reservoir near intakes and outlets where the operation of these is affected by aquatic weed growth.

Project Component	Sub Component	Details
	from Reservoirs	
	Reservoir sedimentation mitigation interventions: Construct Check Dams/Silt traps in selected sites	Construction of check dams on streams to retain sediment and thus reduce sediment flows into reservoirs.
	Reservoir Watershed Management: Water Conservation Plan	Development of Water Conservation Plan, includes formulation of hydrological model that predict the impact of mitigation strategies on flood runoff and sediment yields, preparation of guidelines for dam watershed conservation, implementing a watershed conservation program, and setting up a sediment load sampling station.
	Reservoir Watershed Management: Community Participation in Watershed Management	Includes carrying out community participation in catchment conservation planning in selected pilot watersheds and applying watershed conservation measures to improve village water management, introduce soil conservation techniques, and carry out small local activities inside river beds such as creation of small check dams and gully plugs, and promoting vegetative measures.
Component 4 - Dam Safety Assurance Institutional Improvements	Dam Safety Assurance Institutional Improvement	Includes: <ul style="list-style-type: none"> ○ Institutional Strengthening ○ Certification of dam Rehabilitation Works ○ International and National Dam Safety Panel ○ Established Dam Technology Center
Component 5 – Project Management	Overall Project Management	<ul style="list-style-type: none"> ○ Principal Project Management TA Consultant ○ Incremental operating costs of the CPMU and PIUs activities for coordinating all project interventions ○ TA support

2.2 Screening of DOISP AF

The environmental and social impacts of the activities have been limited by the scope of the proposed works. The following sections detail an overview of the requirements to meet the objectives and to ensure that the environmental and social impacts associated with the project are minimized.

Screening of DOISP AF sub-projects is to ensure that each sub-project is properly screened for the level of potential environmental and/or social impact. Based on this screening process, sub-projects that may present significant impact concerns are identified and subject to secondary screening or further detailed study.

Screening for the sub-project will follow the directions of the World Bank policies (see **Table 2**) and Government Regulations – (i) environmental issue: *Law No. 32/2009 on Environmental Protection and Management* and *Government Regulation (PP) No. 27/2012 on Environmental Permit*, which outlines environmental assessment process (and instruments) required for activities potentially generating adverse environmental and social impacts. Then to streamline the implementation of PP No. 27/2012, the State Ministers enacted Minister of Environment Regulations (PERMEN LH) No. 05/2012 on Type of Activities requiring AMDAL, PERMEN LH No.16/2012 on Guidelines for Preparation of Environmental Documents, PERMEN LH No. 17/2012 on Guidelines for Public Participation in Environmental Assessment Process and Environmental Permit, Minister of Public Works Regulation No. 10/PRT/M/2008 on Types of Business Plan and/or Activities under Public Works Require Environmental Management and Monitoring Efforts (UKL-UPL) documents, Government Regulation (PP) No. 6/1995 on Crop Protection, Minister of Agriculture Decree No.887/Kpts/OT.210/9/1997 on Pest Management, and the Guidelines for Field School of Integrated Pest Management; and (ii) social issue: *Law No. 2/2012* and Presidential Regulation No. 71/2012 on Land Acquisition for Public Interest, and Presidential Regulations No. 40.2014 on Changes to Presidential Regulation No. 71/2012 on Land Acquisition for Public Interest.

Table 2: World Bank Policies for Environmental and Social Safeguards

Safeguard Policy	Policy Summary and Work Required
Environmental Assessment (OP/BP 4.01)	Process of assessing projects potential environmental risks and impacts, the breadth, depth, and type of analysis depending on the nature, scale, and potential environmental impact of the proposed project. EA also examines project alternatives, identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts, and includes the process of mitigating and managing adverse environmental impacts throughout project implementation.
Involuntary Resettlement and Land Acquisition (OP/BP 4.12)	The OP requires that an assessment is made of the likely social impacts of projects, particularly as they entail acquisition of land, relocation of people, loss of productive assets or access to services, both during the implementation and operational phases of project activities. The policy is intended to ensure that resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons affected to share in project benefits, ensure that affected persons are meaningfully consulted and are provided, where possible, opportunities to participate in planning and implementation of resettlement and project activities. The basic objective is to ensure that affected

Safeguard Policy	Policy Summary and Work Required
	persons are provided the means and resources to improve their livelihoods and standards of living, or at least to restore them in real terms, to pre-project levels.
Indigenous Peoples (OP/BP 4.10)	Goal is to (a) ensure that Indigenous Peoples benefit from development projects, and (b) avoid or mitigate potentially adverse effects on Indigenous People caused by Bank-assisted activities. Special action is required where Bank investments affect IP whose social and economic status restricts their capacity to assert their interests and rights in land and other productive resources.
Physical Cultural Resources (OP. 4.11)	Movable or immovable property of great importance to the cultural heritage of every people, such as monuments of architecture, art or history, whether religious or secular; archaeological sites; groups of buildings which, as a whole, are of historical or artistic interest; works of art; manuscripts, books and other objects of artistic, historical or archaeological interest; as well as scientific collections and important collections of books or archives or of reproductions of the property defined above;
Natural Habitat (OP 4.0.4)	Land and water areas where the ecosystems biological communities are formed largely by native plant and animal species and human activity has not essentially modified the area's primary ecological functions, with specific place or natural conditions in which a plant or animal lives.
Pest Management (OP 4.09)	To minimize and manage the environmental and health risks associated with pesticide use and promote and support safe, effective, and environmentally sound pest management.
Safety of Dams (OP 4.37)	To assure quality and safety in the design and construction of new dams and the rehabilitation of existing dams, and in carrying out activities that may be affected by an existing dam.
Disclosure Policy (OP/BP 17.50)	All projects must disclose key information in country and through the Bank's Infoshop.

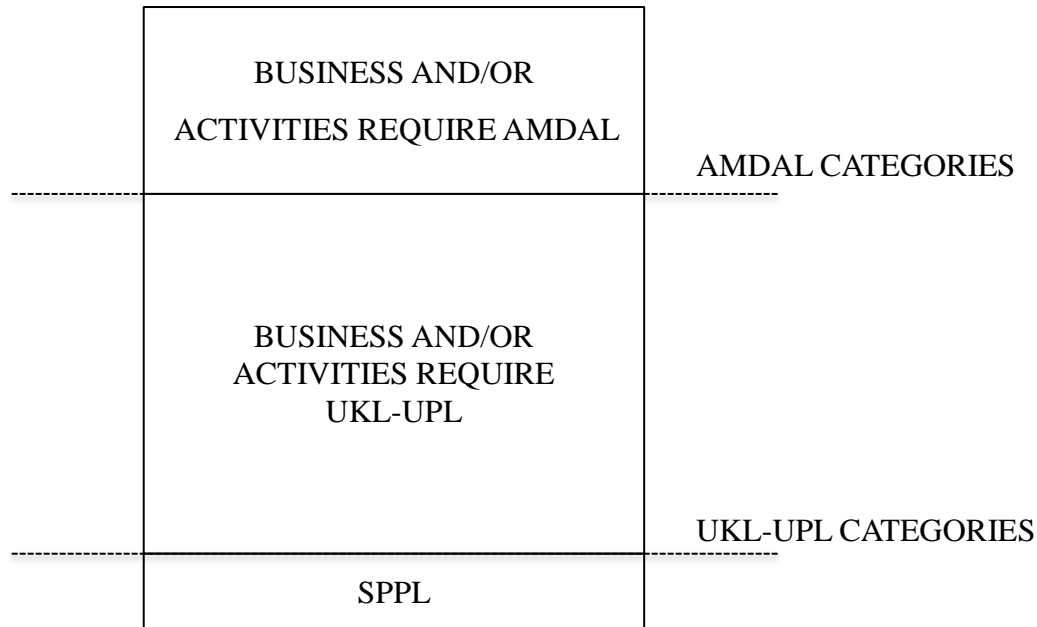
The screening of sub-projects will also determine the necessary environmental assessment to be carried out. There are three types of national environmental assessment and management measures in regards to decision-making process on approval to carry out business plan and/or activities:

- Full environmental assessment (AMDAL),

- Environmental Management and Monitoring Efforts (UKL-UPL),
- Statement of Assurance for Implementation of Environmental Management and Monitoring (SPPL).

The illustration of National environmental assessment requirement is shown in **Figure 1**.

Figure 1: National Environment Assessment Requirement



Implementation of the above environmental assessment requirement vary for each administrative region thus cause differences in responsibility of the proponent of business and/or activities for different area even though the type of business and/or activities is the same. Therefore, in the screening of environmental assessment requirement it is important to refer to local regulations.

As for business and/or activities that are not included in the list of type of business and/or activities require AMDAL and UKL-UPL, will required to conduct environmental management and monitoring efforts according to the relevant Standard Operating Procedures available and to have a Statement of Assurance for Implementation of Environmental Management and Monitoring (SPPL).

Additionally, supplementary impact assessment may be required depends on scope of activities of each sub-project. The supplementary impact assessment will be required when scope of activities includes land acquisition and/or resettlement activities and in the event that indigenous peoples are present in the areas of the sub-project.

Comparison of key features between the GOI's Laws and Regulations and the World Bank 4.01 on environmental assessment requirements is shown in table below.

Table 3: Gap Analysis for Environmental Assessment Requirement

Scope/Topic	Bank Policy	Government of Indonesia Regulation	Gaps Identified	Addressed in the ESMF
OP 4.01 Environmental Analysis				
Reference to legal and administrative framework such as international environmental treaties, agreement, international standard policies etc.	OP 4.01 paragraph 3 OP 4.01 (Annex B) EA takes into account obligations of the country, pertaining to project activities under relevant international treaties or agreement.	Ministry of Environment Regulation No. 16/2012 Annex I stipulated that other data and information required in reporting UKL-UPL shall be incorporated including reference to other requirements.	Lack of reference to legal and administrative framework such as international environmental treaties, agreement, international standard policies etc. The current regulation only refers to “other data and information”.	The subproject ESMP and UKL-UPL when required will cover this shortage.
Project Area of Influence.	OP 4.01 paragraph 2 OP 4.01 (Annex B) <i>EA evaluates a project’s potential environmental risks and impacts in its area of influence, identifies ways of improving project selection and sitting etc.</i>	Ministry of Environment Regulation No. 16/2012 Annex I, requested project proponent to provide information in detail on this aspect with “ <i>map, scale of operation and activities component</i> ” that could be used to determine the project area of influence, availability of ancillary facilities and associated facilities during UKL UPL preparation as good practice. However, it does not state about the project’s area of influence outside the project’s footprints.	Lack of analysis about project area of influence, ancillary facilities, induced impacts and site selection analysis for activities require UKL-UPL.	The subproject ESMP and UKL-UPL when required will cover the project area of influence.
Environmental Impact Screening	OP 4.01 paragraph 8 OP 4.01 (Annex C) <i>Environmental screening of each proposed project to determine the appropriate extent and type of EA.</i>	Ministry of Environment Regulation No. 16/2012 Article 6 regulates the requirement to evaluate all possible impacts from the project and prepare mitigation measures to tackle those issues. Minister of Public Works Regulation No. 10/PRT/M/2008 on Types of Business Plan and/or Activities under Public Works Require Environmental Management and Monitoring Efforts (UKL-UPL) Document provides guidelines in determine the appropriate extent and type of EA.	Environmental screening based on technical thresholds only will result in inappropriate extent and type of EA.	The subproject ESMP and UKL-UPL when required will include the environmental impact screening and scoping as stipulated at Section 2.2 of the ESMF.

Scope/Topic	Bank Policy	Government of Indonesia Regulation	Gaps Identified	Addressed in the ESMF
		However, further screening based on significant environmental impact evaluation is not clearly stated.		
Environmental Monitoring Data	OP 4.01 (Annex C) <i>Environmental monitoring data to evaluate the success of mitigation and to foster corrective actions.</i>	Ministry of Environment Regulation No. 16/2012 Annex II clearly regulates the requirement for data monitoring of UKL-UPL.	Insufficient follow up, analysis, use of environmental monitoring data for evaluation and continual improvement. The environmental monitoring program is not sufficient or is not corresponding to the scale of the impact of the project.	This is addressed in the ESMP and UPL implementation reports of the project as discussed in Section 3.3.
Capacity Development and Training.	OP 4.01 Paragraph 13 <i>(When the borrower has inadequate technical capacity to carry out environmental safeguards management functions, the project includes components to strengthen that capacity).</i> OP 4.01 (Annex C). Paragraph 4 <i>(Technical Assistance program for EMP implementation)</i>	Not covered.	Insufficient capacity development and training for EMP implementation	This is addressed in the Section 4 of this ESMF.
Institutional Arrangements. Institutions responsible for environmental management and EMP implementation	OP 4.01 (Annex C) Para 4 and 5. <i>(EMP must provide specific description of institutional arrangement and implementation schedule for mitigatory and monitoring measures)</i>	Ministry of Environment Regulation No. 16/2012 Annex III clearly regulates the institutional arrangement for UKL UPL implementation, monitoring and reporting.	No gaps identified.	This is addressed in the Annex 2 of this ESMF.

Scope/Topic	Bank Policy	Government of Indonesia Regulation	Gaps Identified	Addressed in the ESMF
Cost estimate of EMP to ensure “the adequacy of financing arrangements for EMP”.	OP 4.01 (Annex C) Paragraph 5. <i>(EMP provides the capital and recurrent cost estimates and source of fund for EMP implementation).</i>	MPW Guidelines No. 08/BM/2009 page 50 clearly specifies budget allocation for UKL UPL studies that shall include the cost for personnel, equipment, materials, field survey, laboratory analysis and report preparation etc.	No gaps identified.	This is addressed in the Section 4 of this ESMF.
Public Consultation.	OP 4.01- paragraph14 <i>Consulted with project affected groups and CSO during preparation and implementation</i> OP 4.01 (Annex B) <i>(For AMDAL but the gap analysis for UKL UPL is also useful as good practice)</i> Consultation requirements are less clearly specified in the UKL UPL preparation especially during project implementation	Ministry of Environment Regulation no 17/2012 about The Guidelines for Public Involvement in Environmental Assessment and Environmental Permitting Process, including UKL UPL document. Ministry of Environment Regulation No. 16/2012 clearly regulates regular reporting requirement for UKL UPL implementation (every 6 month) MPWH Guidelines no 09/BM/2009 <u>section 4.1.3</u> about Public Consultation.	No gaps identified.	This is addressed in the Section 2.3 of this ESMF.
Public Disclosure.	OP 4.01--Paragraph 15. <i>(Timely disclosure and understandable document in local language.)</i>	Not covered in the Ministry of Environmental Regulations but stipulated in the Ministry of Communication and Information.	Public Disclosure is not covered in the Ministry of Environmental Regulations.	This is addressed in the Section 2.5 of this ESMF.

Each year the CPMU will prepare its Annual Work Plan and Budget for the subsequent year. The activity to prepare such all required environmental and social assessment and management documents along with its budget for preparation will be included in the Annual Work Plan and Budget.

It is essential when determining the level of environmental assessment required as part of DOISP AF to identify the environmental and social impacts based on the activities to be undertaken.

The assigned categories are based on a basic risk matrix of likelihood and severity of the consequence of impact and give a high, medium and low classification. These risks are based on activities *without* the mitigation measures that will be addressed in the Environmental and Social Management Plan for each of the sites.

Table 4: Risk Assessment Matrix

Likelihood of event	Severity of consequence of event		
	High	Medium	Low
High	HH	HM	HL
Medium	MH	MM	ML
Low	LH	LM	LL

HH = Extreme Risk

HM = High Risk

MH, MM, HL = Moderate Risk

ML, LH, LM, LL = Low Risk

The work activities associated with DOISP AF have been identified as part of site inspections and review of existing (partial) surveys, feasibility studies, etc., of each of the 134 dams. For each of the dam/reservoir sites, a separate Project Implementation Manual as part of Project Implementation Plan will be prepared featuring the technical and situational description of the site, and description of operational and safety issues. From these the environmental and social impacts will be identified to enable classification for assessment in accordance with **Annex 3**. Additionally, **Annex 6** details activities and possible impacts associated with the project and determine the requirements associated with environmental assessment. The screening process will determine that all most of sub-projects within DOISP AF will require UKL-UPL or SPPL, as there is a zero to moderate potential for significant environmental and social impacts. If in the detail preparation and screening of the sub-projects under DOISP AF unexpectedly a potentially major adverse or irreversible impact relating to the environmental or social safeguards is identified, then this sub-project will subject to further studies and AMDAL may be required.

DOISP AF sub-projects will be mostly located in Java (provinces of West Java, Central

Java, and East Java), and some in the provinces of Nusa Tenggara Barat and Nusa Tenggara Timur, Aceh, Lampung, East Kalimantan and South Sulawesi (list of dams included in DOISP AF is shown in **Annex 1**).

Most catchments on the locations in Java are prone to severe erosion because of steep slopes and soil structure. All dam and reservoir sites have been established for at least two decades, and in some case for nearly a century, and have shaped the local economy and human settlements. The downstream areas of the sites are under cultivation and economic activities for prolonged times of several decades. Most of the water provision is directed for agricultural irrigation, and in some cases for local town and industrial water supply, drainage flushing, and occasionally limited aquaculture. The upstream catchments are all consist of fallow, protected and (semi) cultivated agricultural areas, production forests, rubber and wood plantations, dry and rain-fed agriculture, widely laid out hamlets and villages, and “*hutan masyarakat*” (multi-canopy smallholder agriculture and silvi-culture). In a small number of the upper catchments protection forests are present, however, none of the reservoir sites is closer than 1-2km of such area, and the proposed activities cannot physically extend their reach to impact on these areas in a direct or indirect way. Additionally, there are no downstream or adjacent protected forests or reserves.

Most of the sub-projects on the dams/reservoirs and the community-based activities will not require acquisition of land nor resulting involuntary resettlement. Since the sub-projects are associated with upgrading and minor remedial and rehabilitation of existing facilities there will be no significant alterations in the existing land use patterns. However, Land Acquisition and Resettlement Policy Framework (LARPF) is prepared to give more flexibility during project implementation of the DOISP AF where some proposed activities may require additional land, temporarily or permanently, and presented in separate document as an integral part of this ESMF, for guidelines in preparing Land Acquisition and Resettlement Action Plan (LARAP) in case of land acquisition and resettlements is required for the sub-projects. Additionally, in the case where the sub-project involves activities that may affect physical cultural resources, although it is very unlikely as demonstrated in DOISP, a Chance Find Protocol will be applied (see **Annex 18** for guidelines).

The initial screening based on the available maps, data from the Ministry of Social Welfare and the World Bank on locations of Indigenous Peoples, it appears that there are indigenous peoples living in the vicinity of the 134 reservoir areas or the (sub-) catchment management zones supported under DOISP AF. Therefore, the Indigenous Peoples Planning Framework (IPPF) is prepared for this purpose and presented in separate document as an integral part of this ESMF, as guidelines in preparing Indigenous Peoples Plan for sub-projects where impacts on indigenous people is identified in the screening process. List of distribution of indigenous peoples in the vicinity of the 134 reservoir areas are shown in **Annex 15**. Looking at the project activities that will work on the existing dams already operating for years, and from the experience in the DOISP, it is very unlikely that the subproject will affect the indigenous peoples.

Furthermore, comprehensive dam safety assessments will be conducted as part of Dam Safety Assurance Interventions activities (Component 1). This is aligned with PERMEN PUPR No. 27/PRT/M/2015 on Dam as well as World Bank OP 4.37 on Safety of Dams.

Comprehensive Dam Safety Assessment will be prioritized to be conducted for 23 major dams prepared under DOISP, along with priority investments from the remaining 111 major dams in the portfolio that are to be prioritized based on the objective criteria for identification and assessment. The result of this assessment will be utilized for development of Dam Surveillance and Monitoring Plan for selected dams.

Although the assessment has taken into consideration upstream and downstream impacts associated with their activities, it is not feasible to determine future external activities which may potentially impact the dam sites (for example, future industrial or mining activities upstream of a dam/reservoir that may affect its water quality), although from the reviews of the sites these risks are also considered to be low.

DOISP AF will not fund any activity within critical natural habitats, declared forest and wildlife reserves and protected areas. The works and activities of DOISP AF are restricted to the dam/reservoir sites and existing rivulets and brooks in the upper catchment, without major downstream impacts, thus it would not have any adverse impact on environmentally and socially sensitive areas. It will only support the activities within the existing scheme, and will temporarily impact the aquatic ecosystem insignificantly. Additionally, the rehabilitation of the dams will support the irrigation of the agricultural land where pesticides will be applied as common practices, however, the GOI along with The World Bank promote the implementation of Integrated Pest Management (IPM) and the proper handling practices of pesticides. The Integrated Pest Management will be done with related stakeholders and government agencies (agriculture) according to task and function of each related stakeholders. The Pest Management Framework is provided in the **Annex 19**.

2.3 Screening of Safeguard Requirements

Process of sub-project screening, assessment and identification of potential impacts and development of mitigation measures and safeguards instruments should be part of the project cycle and planning and implementation documents. The safeguard screening process for DOISP AF sub-projects are as bellow:

Step 1: Screening against the negative checklist

Negative List of Prohibited Activities: To avoid adverse impacts on the environment and people, subproject proposals that involve the following activities are explicitly excluded from funding under the DOISP AF:

- (i) Any construction of new dams and decommissioning of existing dams.
- (ii) Larger-scale dredging and sludge removal (quantities above 500,000 m³).
- (iii) Rehabilitation/remedial works inside natural habitats and existing or proposed protected areas.
- (iv) Major rehabilitation/remedial works that expected to lead to significant negative environmental impacts.
- (v) Likely to create significant land acquisition and involuntary resettlement.
- (vi) Likely to create adverse impacts on ethnic groups or indigenous peoples within the village and/or in neighboring villages or unacceptable to ethnic groups living

in a village of mixed ethnic composition

- (vii) Loss or damage to cultural property, including sites having archaeological (prehistoric), paleontological, historical, religious, cultural & unique natural values.
- (viii) Purchase or use of pesticides, insecticides, herbicides and other dangerous chemicals; asbestos and other investments detrimental to the environment.
- (ix) Significant conversion or degradation of natural habitat or where the conservation and/or environmental gains do not clearly outweigh any potential losses.

Step 2: Identification of safeguard issues and preparation of mitigation measures

If a subproject proposal is not excluded from funding because of the negative list shown in Step 1 above, the sub-project applicant shall identify key safeguard issues and provide mitigation measures relating to the following aspects:

- Civil works. DGWR will ensure that all subprojects that involve civil works will comply with GOI regulations. Mitigation measures will be prepared, incorporated, and implemented for any proposal that involves construction work or changes to land or water use that may generate negative environmental impacts. The first fundamental measure is to avoid or minimize the negative impacts to the greatest extent possible through exploring alternate subproject design. Small scale civil works activities may proceed with the application of good engineering and housekeeping practices, or any other activity expected to produce modest, local environmental impacts must produce a subproject Environmental and Social Management Plan.
- Land acquisition. Land acquisition must be avoided or minimized to the greatest extent possible by exploring alternative subproject design. If necessary, small amounts of land acquisition may be conducted in accordance with the principles and procedures described in Land Acquisition and Resettlement Policy Framework (**Annex 4**). Prior consultation, appropriate documentation, review and approval from the World Bank will be necessary.
- Indigenous peoples. No adverse impacts are anticipated to the indigenous peoples. If the subprojects will work at the area that the indigenous peoples are presence, specific measures and plans will be developed in accordance with the principles and procedures describe in the Indigenous People Planning Framework (**Annex 5**) to ensure that the indigenous community who are vulnerable of being excluded from any development programs will receive culturally compatible social and economic benefits.

Sub-projects that will involve only minor land acquisition or may have minor negative effect on natural habitats, physical cultural resources, or cause other minor environmental or social impacts and if the proposal will involve and affect indigenous peoples in positive manner are required to develop UKL-UPL, LARAP and/or IPP. In this context, “minor” denotes land acquisition no greater than 10% of total holding of productive assets and affect <200 persons or involve no physical relocation. Additionally, “minor”

environmental impact denotes a level that can be fully mitigated by good engineering practice. The safeguard screening checklist is described in **Annex 16**.

2.4 Screening Assessment of Sub-Projects Year 1

For the first year of works (year 2017) there are 6 dams/reservoirs, which will undergo rehabilitation/remedial works. The initial sub-projects were screened based on the screening process and risk assessment detailed above, as well as dam safety assessment/special study. The sub-projects are:

1. Ubrug (spillway radial gate) located on Jatiluhur Sub-District, Purwakarta District, West Java Province Ubrug Dam in BBWS Citarum is one of three saddle dams at Jatiluhur. The Special Study found that a fully control gate in the exiting auxiliary spillway is needed to reduce risk of overspill in the morning glory. It is actually in accordance with the original design of the dam. 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;
2. Ketro located on Tanon Sub-District, Sragen District, Central Java Province. Ketro Dam in BBWS Bengawan Solo is a 15m high, earth fill dam with a central clay core built in 1984. The Special Study found that piping in the downstream slope need permanent solution. The section of main dike in 0+180 also found to be unsafe with safety factor (SF) below 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;
3. Penjalin located on Bumiayu Sub-District, Brebes District, Central Java Province. Penjalin Dam in BBWS Pemali Juana is a 23m high, homogenous earth fill dam built in 1934. The Special Study found that the safety main dike to the earthquake is below minimum level, piping in the downstream slope is also observed. Based on the findings of the Special Study, the scope of work under the additional financing includes rehabilitation of the main dike, using diaphragm wall, minor replacement of hydro-mechanical and dredging of sediment;
4. Greneng located on Blora Sub-District, Blora District, Central Java Province. Greneng Dam in BBWS Pemali Juana is a 13m high, homogenous earth fill dam built in 1918. The Special Study found similar case like in 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.;
5. Tempuran located on Blora Sub-District, Blora District, Central Java Province. Tempuran Dam in BBWS Pemali Juana is an 18m high, homogenous earth fill dam built in 1916. The Special Study found frequent piping in a spot where a big tree was removed. Sliding and crack in the crest level also happened. 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.;
6. Mrancang located on Gunung Tabur Sub-District, Berau District, East Kalimantan Province. 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 might not be enough to cope with flood, the dam is not safe. 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.

Table 5 details the screening assessment for the initial 6 dams with the remaining screening will be done upon planning of sub-projects. The assessment is based on the information quantifying the extent of works, which is covered in the Project Implementation Plan (PIP).

Note all activities detailed in **Table 5** will have low risk impacts for:

1. Air pollution associated with vehicle and mechanical equipment use;
2. Domestic and construction waste generation associated with construction activities;
3. Natural resource depletion associated with fuel for vehicles and mechanical equipment, materials use for construction such as cement, masonry and asphalt;
4. Noise pollution directly associated with the activities;
5. Soil and Water pollution associated with spills from mechanical equipment, especially if working adjacent to water bodies;
6. Disruption or change of water release schedule;
7. No land acquisition;
8. No impact on Indigenous Peoples.

It can be determined that the indirect and direct environmental and social impacts both upstream and downstream associated with the activities can be considered minimal.

Detailed mitigation measures for each dam site will be outlined in the site specific UKL-UPL documentation with an example of generic mitigation measures as detailed in **Annex 6**. The process associated with the preparation and approval of UKL-UPL for each site is detailed in **Figure 2** below.

Table 5: Screening Assessment for Initial 6 Dams (Year 1 – 2017)

Activity	Aspects	Environmental & Social Impacts	Level of Impact
UBRUG			
Mobilization of Equipment, Materials and Labor	Transportation	Air pollution – Dust impact on human respiratory systems from material loss during transportation	LOW
		Noise pollution – impacts from vehicle movements	
		Traffic impact – temporary traffic disruption	
	Water pollution – potential additional sediment load within water system from material spillage during transportation		
Mobilization of labor	Social jealousy between the workers and other local member of communities		
Demolition of the arch concrete	Demolition works	Air pollution – Dust impact on human respiratory systems from material loss during demolition	LOW
		Water pollution – potential additional sediment load within water system from demolition	
	Noise pollution – impacts from demolition		
Placement of concrete debris	No additional impacts		
Installation of radial gate	Construction civil works	Water pollution – impacts from residual construction material run-off	LOW
PENJALIN			
Mobilization of Equipment, Materials and Labor	Transportation	Air pollution – Dust impact on human respiratory systems from material loss during transportation	LOW
		Noise pollution – impacts from vehicle movements	
		Traffic impact – temporary traffic disruption	
	Water pollution – potential additional sediment load within water system from material spillage transportation		
Mobilization of labor	Social jealousy between the workers and other local member of communities		
Repair of	Excavation of damaged road	Noise pollution – impacts from excavation works on local resident	LOW

Activity	Aspects	Environmental & Social Impacts	Level of Impact
<i>inspection road</i>		<i>Air pollution – Dust impact on human respiratory systems and from excavation works</i>	
	<i>Placement and compaction of sub base material</i>	<i>Noise pollution – impacts from compaction activities</i>	
	<i>Placement of Asphalt concrete (ATB)</i>	<i>No additional impacts</i>	
<i>Installation of masonry retaining wall</i>	<i>Construction of wall</i>	<i>Air pollution – Dust impact on human respiratory systems and flora and fauna from construction activities</i>	LOW
		<i>Water pollution – impacts from residual construction material run-off</i>	
<i>Dam Crest Rehabilitation</i>	<i>Excavation of masonry from damaged crest</i>	<i>Air pollution – Dust impact on human respiratory systems and from excavation works</i>	LOW
	<i>Placement and compaction of sub base material</i>	<i>Noise pollution – impacts from compaction activities</i>	
	<i>Placement of Asphalt concrete (ATB)</i>	<i>No additional impacts</i>	
	<i>Welding of the dam fence perimeter</i>	<i>No additional impacts</i>	
<i>Sediment dredging</i>	<i>Dredging activities</i>	<i>No additional impacts</i>	-
<i>Rehabilitation of the drainage</i>	<i>Rehabilitation Civil Works</i>	<i>No additional impacts</i>	-
<i>Rehabilitation of trash rack, valve house and its apparels</i>	<i>Welding, painting, fixing and changing of valve</i>	<i>No additional impacts</i>	-
TEMPURAN			
<i>Mobilization of Equipment, Materials and Labor</i>	<i>Transportation</i>	<i>Air pollution – Dust impact on human respiratory systems from material loss during transportation</i>	LOW
		<i>Noise pollution – impacts from vehicle movements</i>	
		<i>Traffic impact – temporary traffic disruption</i>	
		<i>Water pollution – potential additional sediment load within water system from material spillage transportation</i>	

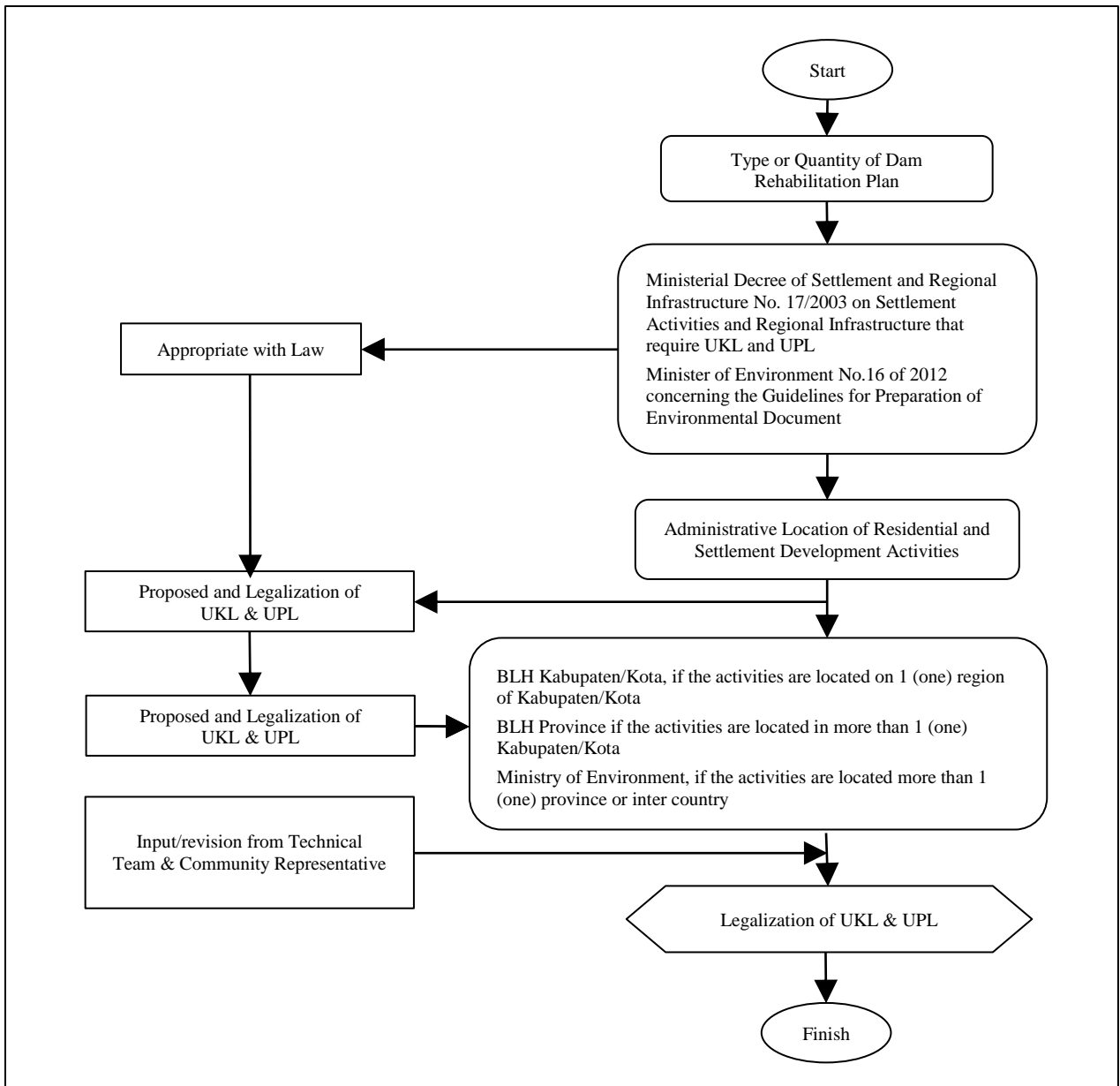
Activity	Aspects	Environmental & Social Impacts	Level of Impact
	<i>Mobilization of labor</i>	<i>Social jealousy between the workers and other local member of communities</i>	
<i>Dam Crest Rehabilitation</i>	<i>Rehabilitation civil works</i>	<i>Air pollution – Dust impact on human respiratory systems and from civil works</i>	LOW
<i>Sediment dredging</i>	<i>Dredging activities</i>	<i>No additional impacts</i>	-
<i>Installation of new equipment (inclinometer, dial gauge) on the dam</i>	<i>Installation and replacement of equipment</i>	<i>No additional impacts</i>	-
MERANCANG			
<i>Mobilization of Equipment, Materials and Labor</i>	<i>Transportation</i>	<i>Air pollution – Dust impact on human respiratory systems from material loss during transportation</i>	LOW
		<i>Noise pollution – impacts from vehicle movements</i>	
		<i>Traffic impact – temporary traffic disruption</i>	
	<i>Water pollution – potential additional sediment load within water system from material spillage transportation</i>		
	<i>Mobilization of labor</i>	<i>Social jealousy between the workers and other local member of communities</i>	
<i>Repair of inspection road</i>	<i>Excavation of damaged road</i>	<i>Air pollution – Dust impact on human respiratory systems and from excavation works</i>	LOW
	<i>Placement and compaction of sub base material</i>	<i>Noise pollution – impacts from compaction activities</i>	
	<i>Placement of Asphalt concrete (ATB)</i>	<i>No additional impacts</i>	
<i>Dewatering activities</i>	<i>Pumping of the water from the reservoir in the rehabilitation location</i>	<i>Water pollution/reservoir water quality – potential impacts from additional load of sediment</i>	LOW
	<i>Kist dam installation</i>	<i>Water pollution/reservoir water quality – potential impacts from additional load of sediment</i>	
<i>Drainage filter works on the toe of</i>	<i>Placement of materials (sand, gravel) and geotextile installation</i>	<i>No additional Impacts</i>	-

Activity	Aspects	Environmental & Social Impacts	Level of Impact
<i>the dam and its apparel construction</i>	<i>Welding of the bridge joint on the spillway building</i>	<i>No additional impacts</i>	
<i>Sediment dredging</i>	<i>Dredging activities</i>	<i>No additional impacts</i>	-
<i>Rehabilitation of the drainage</i>	<i>Rehabilitation civil works</i>	<i>No additional impacts</i>	-
<i>Installation of hydro mechanical and new equipment on the dam</i>	<i>Installation and replacement of equipment</i>	<i>No additional impacts</i>	-
	<i>Hydro mechanical (gate, trash rack at the intake and guide frame on the bottom outlet)</i>	<i>No additional impacts</i>	-
GRENENG			
<i>Mobilization of Equipment, Materials and Labor</i>	<i>Transportation</i>	<i>Air pollution – Dust impact on human respiratory systems from material loss during transportation</i>	LOW
		<i>Noise pollution – impacts from vehicle movements</i>	
		<i>Traffic impact – temporary traffic disruption</i>	
		<i>Water pollution – potential additional sediment load within water system from material spillage transportation</i>	
	<i>Mobilization of labor</i>	<i>Social jealousy between the workers and other local member of communities</i>	
<i>Earth work (in the body of the dam)</i>	<i>Earth work</i>	<i>Water pollution/reservoir water quality – potential impacts from additional load of sediment</i>	LOW
<i>Dewatering activities</i>	<i>Pumping of the water from the reservoir in the rehabilitation location</i>	<i>Water pollution/reservoir water quality – potential impacts from additional load of sediment</i>	LOW
	<i>Kist dam installation</i>	<i>Water pollution/reservoir water quality – potential impacts from additional load of sediment</i>	
<i>Spillway and embankment</i>	<i>Rehabilitation activities</i>	<i>No additional impacts</i>	-

Activity	Aspects	Environmental & Social Impacts	Level of Impact
KETRO			
Mobilization of Equipment, Materials and Labor	Transportation	Air pollution – Dust impact on human respiratory systems from material loss during transportation	LOW
		Noise pollution – impacts from vehicle movements	
		Traffic impact – temporary traffic disruption	
	Water pollution – potential additional sediment load within water system from material spillage transportation		
Mobilization of labor	Social jealousy between the workers and other local member of communities		
Repair of inspection road (on the top of the dam)	Excavation of damaged road	Air pollution – Dust impact on human respiratory systems and from excavation works	LOW
	Placement and compaction of sub base material	Noise pollution – impacts from compaction activities	
	Placement of Asphalt concrete (ATB)	No additional impacts	
Installation of masonry retaining wall	Construction of wall	Air pollution – Dust impact on human respiratory systems and flora and fauna from construction activities	LOW
		Water pollution – impacts from residual construction material run-off	
Dam Crest Rehabilitation	Excavation of masonry from damaged crest	Air pollution – Dust impact on human respiratory systems and from excavation works	LOW
	Placement and compaction of sub base material	Noise pollution – impacts from compaction activities	
	Placement of Asphalt concrete (ATB)	No additional impacts	
	Welding of the dam fence perimeter	No additional impacts	
Sediment dredging	Dredging activities	No additional impacts	-
Installation of new instruments (piezometer,	Installation and replacement of the instruments	No additional impact	-

Activity	Aspects	Environmental & Social Impacts	Level of Impact
<i>inclinometer, v-notch, multilayer settlement of the dam)</i>			

Figure 2: Indonesian Government Policies for Environmental Safeguard



2.5 Public Consultation & Stakeholder Engagement

a. ESMF Development Process

The draft ESMF was presented to national-level stakeholders as well as representatives from the regions where the sub-projects would be implemented, at a consultative workshop that was conducted on 3 November 2016. Participants at the workshop were presented with draft ESMF in the Bahasa Indonesian language. Discussions focused on:

1. Brief summary presentations on the overall DOISP AF project development objectives;
2. Institutional arrangements for project implementation;
3. A review of the list of potential-sub projects in DOISP AF;
4. The list and brief description of the activities being proposed for sub-projects;
5. Status of project preparation;
6. Key environmental and social challenges for the DOISP AF project as a whole and for individual subjects identified for implementation in Year 1;
7. A review of the Indonesian UKL-UPL system as it would apply to this project;
8. A brief review of the World Bank’s Environmental Assessment OP4.01 and how it would apply to this project;
9. The key provisions of the ESMF in terms of screening requirements, processes and responsibilities, sub-project environmental assessment categorizations, preparation of Environmental and Social Management Plan (ESMP) documentation, their review and approval process, etc.;
10. Implementation of the ESMP as part of the sub-project implementation;
11. Standard proposed mitigation measures to manage the environmental and social impacts;
12. Grievance mechanism for potentially Affected Communities to receive and facilitate resolution of Affected Communities’ concerns and grievances about the sub-project’s environmental and social management performance.

The public consultation discussed the positive appreciation for the DOISP AF as these reservoirs have played a positive role overall in terms of provision of water for the local irrigation needs, and discuss the opportunity for much need safety and operational improvements to ensure continued availability of the services being provided. Minutes of the discussions are shown in **Annex 14**.

b. Safeguard Instruments Development Process

In terms of involving public to participate in the ESMP process, DOISP AF will consult project-affected groups and local non-governmental organizations (NGOs) about the project’s environmental aspects and takes their views into account. Project proponent will continue the consultations as early as possible.

Additionally, when a sub-project is required to develop Land Acquisition and Resettlement Action Plan (LARAP) and/or Indigenous Peoples Plan (IPP), additional procedures for public consultation and stakeholder engagement applies as stated in the LARPF and IPPF respectively.

Community and stakeholders’ involvement in preparation of UKL-UPL will be included during approval of UKL-UPL documents through consultation with UKL-UPL Technical Team. Input and suggestions from the related stakeholders will be used in improve the UKL-UPL documents for approval.

The UKL-UPL Technical Team consists of permanent and temporary members. Permanent members are representative from Institutions appointed to manage the environment such as Environmental Agency, Forestry Agency, Health Agency, BPN, Social Affairs Agency and Human Resources Agency. The temporary members are representatives from institutions related to the project activities, such as Public Works Agencies, Mining Agency, and Farming Agency, Representative from the communities, NGOs and environment experts.

The General Guidelines of Stakeholder Consultation for DOISP AF community participation components are outlined in the Project Implementation Plan (PIP) Section 3.3 for community participation in reservoir management and Section 4.4 for community participation in watershed management. Additionally, requirement on establishment of grievance redress mechanism in each sub-project is outline in the **Annex 17**.

Since local knowledge is important in designing and planning the implementation of practical mitigation measures, it is important that public consultation is conducted during the preparation of the UKL-UPL. Such consultation for the six sub-project's UKL-UPL completed for the first year (2017) DOISP AF that will be continued in parallel with Project appraisal, and the comments expecting to be received will be included in the supplementary chapter for the relevant UKL-UPL.

2.6 Disclosure

After final revision of the ESMF and the six UKL-UPLs (EMP) are completed, and accepted by the World Bank, these documents will be disclosed locally in Bahasa Indonesia at MPWH website (<http://sda.pu.go.id>), and the ESMF will also be disclosed at the Infoshop of the World Bank. Further UKL-UPLs pertaining to the other sub-projects will be disclosed in due course each time they have been accepted for inclusion in the successive Annual Work Plans of DOISP AF.

For the case where a sub-project is required to develop Land Acquisition and Resettlement Action Plan (LARAP) and/or Indigenous Peoples Plan (IPP), additional requirements for disclosure of safeguard instruments applies as stated in the LARPF and IPPF respectively.

3. Environmental Management

The DOISP AF will provide resources for the following activities to support environmental management:

- (1) Environmental and Social Screening for DOISP AF sub-projects;
- (2) Preparation of Safeguard Documents (UKL-UPL, LARAP, and IPP as appropriate) for DOISP AF sub-projects;
- (3) Input into the design process for all sub-projects, including stakeholder consultation;
- (4) Refinement of the Environmental and Social Management Plan (as part of UKL-UPL);

- (5) Liaison with Environmental Agency (BLH) and other relevant stakeholders for all sub-projects;
- (6) Liaison and guidance on environmental and social matters among sub-project's consultants and contractors;
- (7) Establishment of grievance mechanism for DOISP AF sub-projects.

3.1 Environmental Management Procedures

To ensure that works associated with the project are undertaken in a manner that minimizes impacts it is necessary to manage the environmental and social issues.

Approvals associated with all stages of preparation and works will be undertaken by B(B)BWS as the Project Implementation Unit in coordination with Central Project Management Unit of MPWH (and, at no-objection level, the World Bank).

Table 6: Roles and Responsibilities

Activity	Implementing Agency Responsible	Monitoring Agency Responsible
1. Screening Impact of Rehabilitation/Remedial Works and/or Sedimentation Management Works	B(B)WS	Directorate O&M (MPWH)
2. Safeguard Document Preparation (UKL-UPL, LARAP, and IPP as appropriate)		
a. Prepare Administration	B(B)WS	Directorate O&M (MPWH)
b. Compose document	B(B)WS	Directorate O&M (MPWH)
c. Approval	UKL-UPL Technical Team (for UKL-UPL) WBOJ (for LARAP and IPP)	Directorate O&M (MPWH)
3. Project Implementation and Monitoring		
a. Project Implementation		
- Operational Dam	B(B)WS	Directorate O&M (MPWH)
- Reservoirs	B(B)WS/PW Agency	Directorate O&M (MPWH)
- Catchment Area	B(B)WS District Agriculture Agency Forestry Agency Mining Agency Industrial Agency PW Agency (<i>Kabupaten</i>) Ministry of Environment and Forestry	Directorate O&M (MPWH) District Agriculture Agency Forestry Agency Mining Agency Industrial Agency PW Agency (<i>Kabupaten</i>) Ministry of Environment and Forestry
- Report	B(B)WS in coordination with related institutions	Directorate O&M (MPWH) PW Provincial Agency

Activity	Implementing Agency Responsible	Monitoring Agency Responsible
b. Environmental Management Implementation		
- Operational Dam	B(B)WS	Directorate O&M (MPWH)
- Green Belt	B(B)WS	Directorate O&M (MPWH)
- Catchment Area	B(B)WS District Agriculture Agency Forestry Agency Mining Agency Industrial Agency PW Agency Ministry of Environment and Forestry	Directorate O&M (MPWH) District Agriculture Agency Forestry Agency Mining Agency Industrial Agency PW Agency Ministry of Environment and Forestry
- Report	B(B)WS Coordination with related institution with the Management	Directorate O&M (MPWH) PW Provincial Agency BLH (Provincial or <i>Kabupaten/kota</i>)
c. Environmental Monitoring Implementation		
- Operational Dam	B(B)WS	Directorate O&M (MPWH)
- Green Belt	B(B)WS	Directorate O&M (MPWH)
- Catchment Area	B(B)WS District Agriculture Agency Forestry Agency Mining Agency Industrial Agency PW Agency Ministry of Environment and Forestry	Directorate O&M (MPWH) District Agriculture Agency Forestry Agency Mining Agency Industrial Agency PW Agency Ministry of Environment and Forestry
- Report	B(B)WS in coordination with related institution	Directorate O&M (MPWH) PW Provincial Agency BLH (Provincial or <i>kabupaten/kota</i>)

Box – 1**Summary of DOISP AF Environmental and Social Management and Monitoring Roles and Responsibilities****Overall Environmental Objective of the Project:**

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

Directorate Operation & Maintenance, DGWR, MPWH:

- Prepare the guidance and supervision of the project's environmental aspects.
- Ensure close coordination with *Kabupaten/Kota/Provincial/Central* governments and the World Bank, and other national and local government agencies.

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

- Assist in establishing and ensuring compliance with the ESMF requirements, particularly during sub-project planning and assessment.
- Ensure close coordination with PIUs including annual consultation and coordination workshops; needed training support and information dissemination.

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

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

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

- Lead role for project planning and supervision at the provincial level.
- 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*)

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

3.2 Document Review and Amendment

The completed UKL-UPLs of the sub-projects will be reviewed by Safeguards Specialists at national level (CPIU) prior to formal submission to the local environmental authority (BLH) and the World Bank for approval. This approval process with the World Bank will take place annually along with the review of the Annual Work Plan and Budget submitted by the CPMU. The World Bank will comment on draft UKL-UPL provided during the semi-annual supervision missions to avoid that “final” EMPs would need to be re-drafted, which would require time and which might create constraints in sub-project implementation. Format of UKL-UPL for DOISP AF sub-project is to follow **Annex 10**.

Review and final approval of all required environmental documents will be a precondition for completion of detailed designs (DDs) and preparation of tender documents (TDs) by Directorate O&M, DGWR, MPWH. PIUs (B(B)WSs) will have to demonstrate how environmental mitigation has been handled, and when required, integrated into detailed sub-project designs and bill of quantities with support from Regional Safeguard Specialist of the CPIU. The PIU team will review and sign off on all completed DDs and TDs, including further safeguards review to ensure key impacts identified have been adequately addressed. This could include one or a mix of the following: structural measures to be incorporated into detailed engineering design; non-structural measures to be listed in specific conditions of contract; and Standard Operating Procedures on environmental impact management integrated into bid documents and contracts. The World Bank will review a sample of completed DD/TDs, at least one for each participating B(B)WS.

Table 7: Overview of Review and Approval Mechanism

<u>Subproject preparation and eligibility</u>	<u>Environmental Procedures</u>	<u>Formal Review and Approval Requirements</u>
Sub-project eligibility	Application of criteria to screen out high risk sub-projects	
Selection of sub-projects	Environmental and social screening of selected sub-projects	Screening results sent to local environmental authority and World Bank
Preparation of selected subprojects	Implementation of UKL-UPL as required	Province BLH reviews and approves UKL-UPLs World Bank reviews and approves all UKL-UPLs
Sub-project approval	Integration of study results into DD/TDs	World Bank reviews a sample of DD/TD packages
Construction supervision and subproject management	Social and environmental monitoring	Submission of bi-annual monitoring reports to GOI and World Bank

3.3 Monitoring and Evaluating Performance

Internal monitoring on the implementation of the sub-components will be undertaken annually by the CPIU with the support of National and Regional Consultant Teams. External monitoring and evaluation will be divided into two types. First by the mid-term review, and second by project closure. This activity will be based on TORs approved by the World Bank and conducted by an independent consultant/NGO/university to assess whether the process of participatory steps was implemented as per the technical guidelines, whether the empowerment, capacity building and the incentives have been effective, what benefit emerged for the community and for the project, and whether implementation still faces problems that require further assistance.

A comprehensive process will be implemented for reporting on, and auditing the activities to meet the GOI and the World Bank requirements based on the Annual Work Plans for each sub-project. The UKL-UPL regulations require bi-annual work reporting, to ensure that the environment and social management and monitoring are being adhered to as per the UKL-UPL. This will include:

- A summary of activities undertaken over the past 6 months;
- The effectiveness of the mitigation measures to address impacts and potential impacts as detailed in the UKL-UPL for each of the dam sites;
- Any incidents and non-compliances with the ESMF and UKL-UPL;
- The corrective actions undertaken to address non-conformances and the effectiveness;
- Community complaints and handling progress;
- Community consultation;
- Any changes to works and the approvals granted for the changes; and
- Any other issues relevant to environmental and social impacts and specific issues covered in the UKL-UPLs.

It is essential that during the project, the performance of works be kept in line with the requirements of the ESMF and the UKL-UPLs. As a result, there is a need to monitor and evaluate project performance. From the screening assessment, site investigations and stakeholder consultation, it can be determined that in general there are a number of possible environmental and social impacts which include:

a. Water Pollution

Water pollution is possibly generated from activities of transportation of materials, construction civil works and dewatering activities. Transportation of materials may result potential additional sediment load within water system from material spillage during transportation, construction, rehabilitation and remedial civil works may result run-off to water bodies, while dewatering activities may result lower water quality due to additional load of sediment. The pre-screening has not indicated that any mining activity is taking place upstream of the reservoir sites (except for sand mining and quarrying) so no need is anticipated to conduct more comprehensive chemical analysis of water or sediment. In

case such potentially nefarious industrial effluents would be detected, water quality analysis will be adjusted to assess the impact on the reservoir.

Baseline water quality parameters that should be also examined include: turbidity, biochemical oxygen demand (BOD), total suspended solids (TSS), dissolved oxygen (DO), and temperature in water.

b. Air Quality and Noise Pollution

Mobilization of heavy equipment and materials may have impacts on the air quality (dust) and generate noises pollution, which could disturb the community in the residential area (near/direct border with the mobilization route).

c. Traffic Disturbance

Mobilization of heavy equipment and material may create temporary traffic disturbance on access road at the surrounding of the dam and will impact the community that utilizing the road.

d. Construction & Domestic Waste

During the project period, construction waste, domestic waste, vegetation waste and domestic water waste, material waste, dam facilities replacement material waste will follow the 3R process (Reduce, Reuse, Recycle) and will be disposed of to the designated waste facilities and in accordance with the UKL-UPL. Additionally, hazardous waste such as used oil from the heavy machineries shall be handled separately according to UKL-UPL.

e. Social Jealousy

Mobilization of labor from external areas for physical works may create social jealousy between the workers and other local member of communities. Also improper implementation of community participation program may also create social jealousy between program's participants with other community.

f. Social Conflict

Works associated with DOISP AF are unlikely to affect normal dam operational activities. However, decrease in the water quality during dam gates rehabilitation and cleaning of the sediments could influence the water needs of the communities in the downstream and could have an impact on the social conflict, this impact is considered as short duration. If in the case where water delivery is affected, full community consultation will be undertaken prior to the works to ensure that there is minimal social and environmental impact.

g. Community Social and Economic Development

Social economy dynamic and community culture around the dam had lost the preservation area and did not receive direct benefit to for an attention. Community participation in dam management should be customized according to local characteristic, such as economy development relating to deforestation, traditional fisheries development, and tourism development.

h. Cultural Resources

As the works associated with DOISP AF are unlikely to affect or alter the operation of the dams it is not considered necessary to address this issue, although if during the approval process or construction, issues regarding cultural resource will be addressed in accordance with the stakeholder consultation procedure and any works will cease until the issue has been resolved.

i. External Water Pollution Impacts

DOISP AF activities are not likely to cause any significant impact on water quality. If, however it is noted either visually or as a result of water quality monitoring that significant water pollution has occurred then works will cease and BLH/PIU will be immediately notified.

Implementation of ESMP (UKL-UPL) of sub-projects is the responsibility of PIU's contractors, as set out in bid and contract documents. Field-based environmental and social management of ESMPs to ensure contractor compliance is the primary responsibility of the supervising engineer assigned for each sub-project by the relevant *Dinas* (local government agency). Additional support and spot-checking will be carried by the Regional Safeguards Specialist assigned to the geographically based consultant teams (CPIU's Regional Consultant Teams) funded under DOISP AF, in coordination with local environmental authorities. Additionally, field based environmental monitoring of ESMP (UKL-UPL) of sub-projects is the primary responsibility of local environmental authorities. As current capacity to fulfill these tasks is very low, monitoring will be carried out by Regional Safeguards Specialist assigned to the geographically based consultant teams (CPIU's Regional Consultant Teams). However special attention will be given to ensure that local environmental authorities are able to participate. For example, the Regional Safeguards Specialist will coordinate their monitoring missions closely with local environmental authorities and ensuring that adequate transportation is available.

The results of environmental monitoring will be collated on a six-monthly basis by Regional Safeguards Specialist and submitted to the CPIU National Consultant team on a biannual basis. Significant non-compliances will be noted in these reports, whether issues raised have been resolved and what corrective actions were taken. Six-monthly monitoring reports will be submitted by the CPIU to the WBOJ as an input to supervision missions.

3.4 Environmental Input into the Design Process

For the environmental process to be effective, it is essential that at various stages in the process there are opportunities for a review of the design to include measures to reduce or eliminate any potential environmental issues. It will therefore be essential for the CPMU and CPIU's National Consultant Team to be actively involved in the design review and checking process through close liaison with the engineering personnel of the various consultant teams and members of the DGWR.

Some of the environmental matters that can be considered during the design review and checking process are as follows:

- Reviewing proposed improvement and rehabilitation requirements in relationship

to existing structures and/or sensitive environmental areas,

- Reviewing the quantity and treatment for cleanings and dredging to assess the off-site impacts of quarrying and transport requirements as well as concerns for erosion, landslides and general stability of cut and fill areas,
- Ensuring that existing water courses, drainage patterns and any coastal habitats are properly considered in proposed activities, and
- Ensuring minimum blockage of existing accesses to adjacent areas.

It will be essential for the Safeguard Specialists of the CPIU to visit all sub-projects that are identified as requiring detailed studies (UKL-UPL) to support their preparation of the Terms of Reference (TOR) based on actual conditions and local concerns. These site visits should be undertaken together with Regional Safeguard Specialist and Local Engineering Specialists who are familiar with the proposed sub-project to provide needed information and clarification of design features.

4. Capacity Building, Training and Technical Assistance

The Project organizational team will be responsible for ensuring that the level of expertise associated with the Project is sufficient to undertake the tasks at hand. The UKL-UPL will ensure that there is a requirement for training of staff and that all project staff working at sites will be inducted in an environmental and social awareness training process.

Under the overall coordination by the MPWH, each project implementing entity at the province and local government level is expected to take responsibility in ensuring that this framework is supported. The key tasks, responsibilities, related management actions required in supporting the framework are listed in the following table.

Table 8: Tasks and Responsibilities for Environment Issue

Tasks	Responsibility	Required actions
Development of training modules and materials, required standards and guidelines	Safeguard Specialist (CPIU National Consultant)	<p>Training materials prepared in Indonesian for joint social and environmental training in three modules including:</p> <ul style="list-style-type: none"> - General introduction to the safeguards framework (3 days) - Specialist training for project staff (2 days) - Specialist training for contractors (2 days) <p>Guidelines and formats for screening (including basic information required when local governments submit their Annual Investment Plans), review, monitoring and reporting.</p>
General environmental and social safeguards orientation training for Project staff, and key local government counterparts (BAPPEDA, PW Agency, and BLH)	Safeguard Specialist (CPIU National Consultant)	Delivery of 3x3-day training events
Specialist environmental and social training in screening, review and supervision procedures, for project staff and field supervision engineers	Safeguard Specialist (CPIU National Consultant)	<p>Year 1 delivery of 3x2-day training</p> <p>Year 2 delivery 1 or 2 training events for newly recruiting staff.</p>

Tasks	Responsibility	Required actions
Specialist environmental and social safeguard training for contractors/consultants focusing on implementation of EMPs (UKL-UPL)	Regional Safeguard Specialist (CPIU Regional Consultant) with guidance from the Safeguard Specialist (CPIU National Consultant)	Rolling training program to be provided for all PIU's contractors and consultants. Contractors/consultants to be issued with a certificate for renewal every 3 years.
Commission environmental and social studies (UKL-UPL) as necessary, including drafting of ToRs	Safeguard Specialist (CPIU National Consultant) on basis of formal requests from respective local governments. Regional Safeguard Specialist (CPIU Regional Consultant) will draft TORs, for review by Safeguard Specialist (CPIU Consultant).	Based on request by respective local governments
Review and approval of UKL-UPL	Local environmental authority. WBOJ to review at least one from each participating local government.	Formal review and approval of UKL-UPL by local environmental authority
Monitoring and reporting	For SOPs, field based supervising engineers supported by Regional Safeguard Specialist (CPIU Regional Consultant)	
	For UKL-UPL, local environmental authorities supported by Regional Safeguard Specialist (CPIU Regional Consultant)	Supervising engineers complete field protocols, monitoring data compiled by local project team into 6 monthly reports for PIU team and WBOJ

The main capacity needs and related budget items required to support implementation of this framework are provided in the following table.

Table 9: Capacity Building and Indicative Budget (Environment)

Item	Needs	Indicative budget
Safeguard Specialist support to the CPIU (National Consultant Team)	1 Senior Environmental & Social Safeguard Specialist	24 months, including 12 months continuous during year 1.
Environmental & Social safeguards training	Development and delivery of modules to be prepared by Safeguards Specialist (CPIU National Consultant)	No additional cost
	Training budget	US\$10,000 per training event to cover costs of travel, accommodation for participations, room hire, and consumables
Capacity building for local environmental authority	3 Regional Safeguard Specialist (CPIU Regional Consultant) to assist Provincial BLH with routine monitoring	Full time (36 months) at local government fee rates for a mid to senior level official
Development of Safeguard Instruments (UKL-UPL, LARAP, IPP)	Year 2017: 6 sub-projects	US\$10,000 x 6 = US\$60,000
	Year 2018: 25 sub-projects (tbd)	US\$10,000 x 25 = US\$250,000
	Year 2019-2021: 103 sub-projects	US\$12,000 x 103 = US\$1,236,000
Implementation of Environmental & Social Management Plan	Year 2017 - 2022	Budget source from APBN
Environmental Management Training for Dam activities	Year 2017– 2022	134 Sub-projects x 2 people x 3 days x IDR 2,000,000 = IDR 1 608M = US\$ 130,000
Monitoring and reporting	Travel costs	US\$25,000 to be allocated to each Tenaga Ahli national and regional team

The Project organizational team will be responsible for ensuring that the level of expertise associated with the Project is sufficient to undertake the tasks at hand. The UKL-UPL will ensure that there is a requirement for training of staff and that all project staff working at sites will be inducted in an environmental and social awareness training process. For more detailed estimated costs and extent of capacity building and training associated with the project can be found in Appendix E of the PIP.

ANNEXES

Annex 1 - List of Dams for Rehabilitation/Remedial Works in DOISP AF

No	Dam Name	Risk Score	District	Province/ Owner	Year Built	Height (M)	Volume of Reservoir (10 ³ m ³)	Hazard Categories	Purpose of the Dam
1	Batu Teji		Talang Padang	Mesuii Sekampung	2002	122	690.000		Irrigation 108.553 ha
2	Darma		Indramayu	Cimanuk Cisaneggarung	1962	37.5	37.900		Irrigation
3	Malahayu		Brebes	Cimanuk Cisaneggarung	1940	31.4	39.880		Irrigation
4	Klego		Bovolali	Pemali Juwana	1989	12	350		
5	Simo		Grobogan	Pemali Juwana	1998	10	10.250		
6	Cacaban		Tegal	Pemali Juwana	1959	38	90.000		Irrigation
7	Wadas Lintang		Kebumen	Serayu Onak	1987	125	440.000		Irrigation
8	Karangates/Sutam		Malang	Brantas	1973	97.5	343.000		Irrigation
9	Selorejo		Malang	Brantas	1970	49	62,300		Irrigation
10	Senguruh		Malang	Brantas	1988	34	23.000		Hydropower 29 MW
11	Penga		Lombok	NT I	1994	33.5	5.333		Irrigation 3.589 ha
12	Jatiluhur		Purwakarta	Citarum	1956	112	3.000.000		Irrigation 200.000 ha
13	Wav Rarem		Kotabumi	Mesuii Sekampung	1984	31	72.400		
14	Wav Jenara		Lampung	Mesuii Sekampung	1994	122	687.761		
15	Situ Patok		Cirebon	Cimanuk Cisaneggarung	1927	27	14.000		Hydropower 1.934 MW
16	Banyuwung		Rembang	Pemali Juwana	1996	13.5	2.176		Irrigation
17	Sermo		Kulon Progo	Serayu Onak	1996	55	25.000		Irrigation 3.550
18	Delingan		Karanganyar	Bengawan Solo	1923	27	3.270		Irrigation
19	Kedung Bendo		Madiun	Bengawan Solo	1948	17.5	1.700		Irrigation 1.430 ha
20	Nawangsan		Wonorejo	Bengawan Solo	1976	25	800		Irrigation 354 ha
21	Ngancar		Wonorejo	Bengawan Solo	1946	25.4	2.050		Irrigation 1.300 ha
22	Parang Joho		Wonorejo	Bengawan Solo	1980	25	1.760		Irrigation 650 ha
23	Pondok		Ngawi	Bengawan Solo	1995	32	30.900		Irrigation 3.511 ha

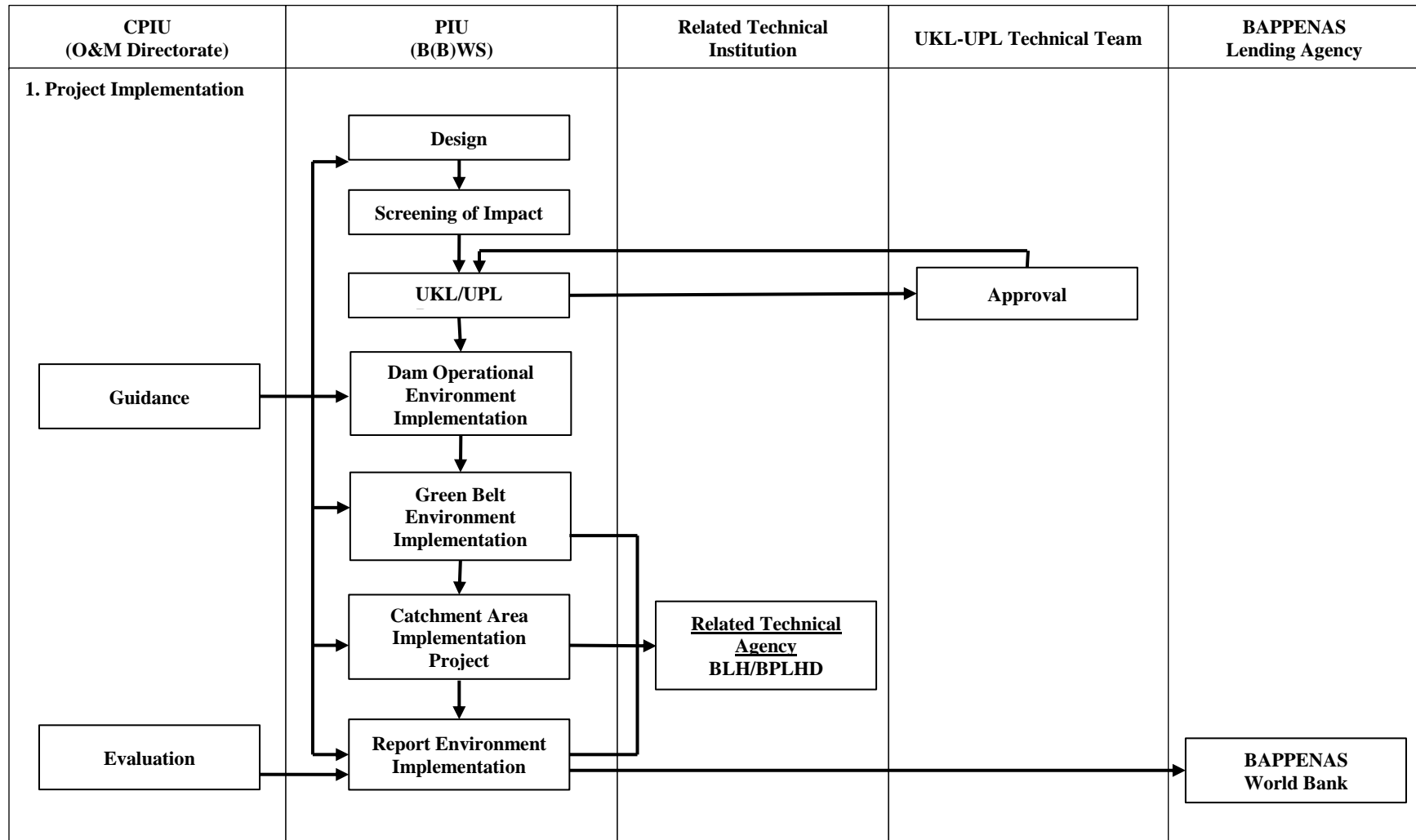
No	Dam Name	Risk Score	District	Province/ Owner	Year Built	Height (M)	Volume of Reservoir (10 ³ m ³)	Hazard Categories	Purpose of the Dam
24	Telaga Pasir/ Sarangan		Magetan	Bengawan Solo	1931	15	3,050		Irrigation 1,777 ha
25	Prijetan		Bojonegoro	Bengawan Solo	1916	23	12.100		Irrigation 4.600 ha
26	Lempake		Samarinda	Kalimantan III	1979	10	766		Irrigation 550 ha
27	Jerowaru			NT I	1942	20			Irrigation 263 ha
28	Batu Bulan		Sumbawa Besar	NT I	2002	38.5	53.600		Irrigation 5.162 ha
29	Ganit		Sumbawa Besar	NT I	1997	29	9.000		Irrigation 13.300 ha
30	Mamak		Sumbawa	NT I	1992	41.5	30.000		Irrigation 5.428 ha
31	Sumi		Bima	NT I	1999	45	19,400		Irrigation 2,272 ha
32	Sepavung Dalam		Sumbawa Besar	NT I	1994	16	1.600		Irrigation 501 ha
33	Manubulu		Kupang	NT II	1994	17	1.021		Irrigation 1.101.5 ha
34	Waerita		Sikka	NT II	1996	15	324		Irrigation 100 ha
35	Livuhahani			NT II					
36	Keuliling		Aceh Besar	Sumatera I	2008	25.5	15.680		
37	Lubok		Aceh Besar	Sumatera I	2011	21	623		Irrigation 200 ha
38	Raini		Pidie	Sumatera I	2013	41.2	2.673		Irrigation 250 ha
39	Sianio-anio		Aceh Singkil	Sumatera I	2006	9.6	1.288		Irrigation 1.300 ha
40	Gintung		Tangerang Selatan	Ciliwung Cisadane	2011	15	690.561		
41	Cinancuh			Ciliwung Cisadane					
42	Situ Bolang		Indramayu	Cimanuk Cisanggarung	1982	5.7	524		Irrigation 8.213 ha
43	Lodan		Rembang	Pemali Juana	1995	26.5	5.052		
44	Panohan		Rembang	Pemali Juana		19	904		Irrigation 531 ha
45	Kd. Waru		Grobogan	Pemali Juana		10	1.267		Irrigation 1.382 ha
46	Kedung Ombo		Bovolali	Pemali Juana	1984	62	723.000		
47	Penialin		Brebes	Pemali Juana	1930	18	10.60		
48	Grenggeng		Blora	Pemali Juana	1919	11.7	1.825		
49	Tempuran		Blora	Pemali Juana	1914	17.8	2.14		
50	Godo		Pati	Serayu Onak		28.75	10.964		Irrigation 1.553 ha

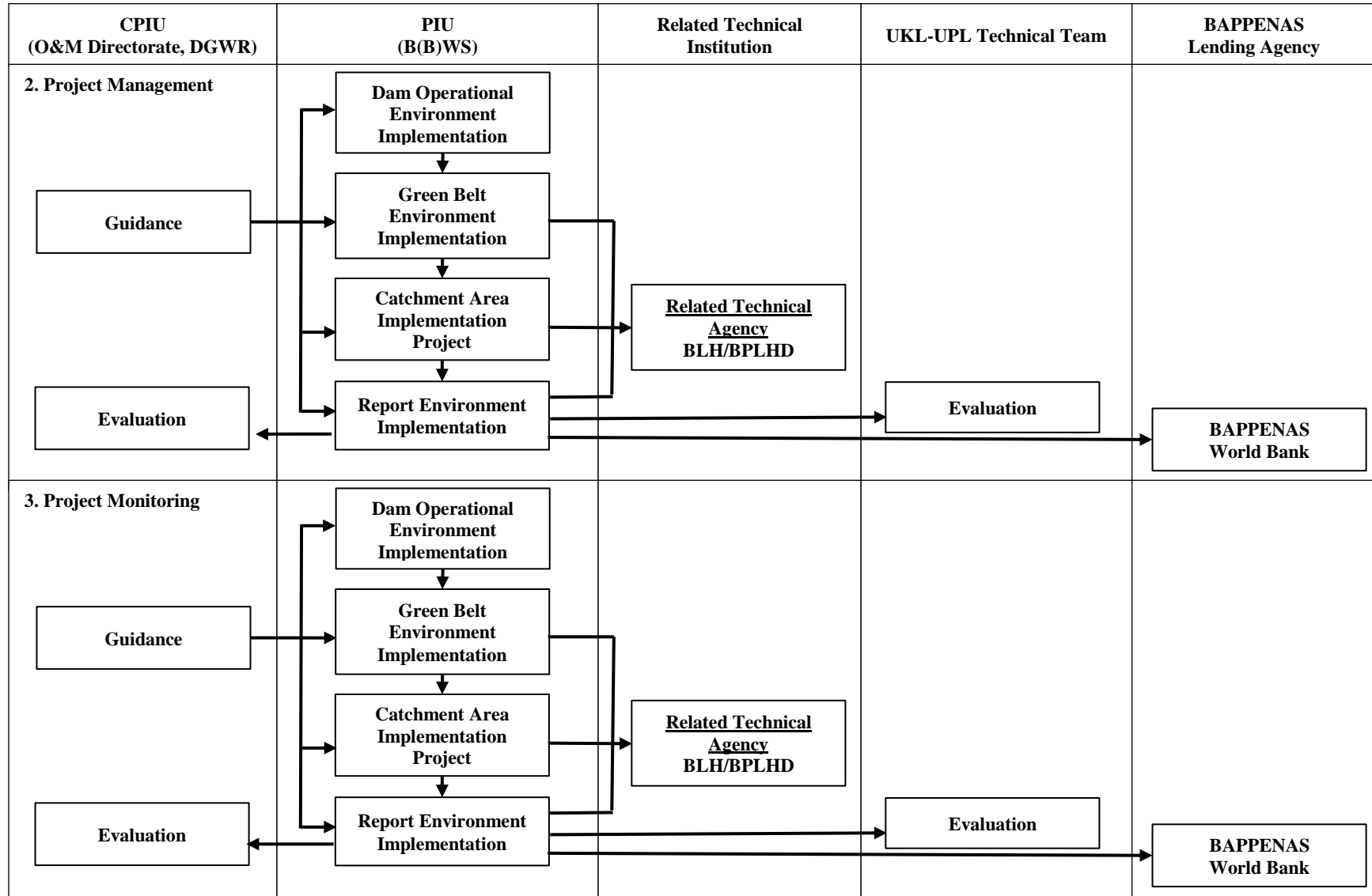
No	Dam Name	Risk Score	District	Province/ Owner	Year Built	Height (M)	Volume of Reservoir (10 ³ m ³)	Hazard Categories	Purpose of the Dam
51	Sempor		Kebumen	Serayu Onak	1978	54	42.341		
52	Sone Putri		Wonorejo	Bengawan Solo	1984	32	630		Irrigation 550 ha
53	Gonggong		Magetan	Bengawan Solo	2011	60	2.234		
54	Kedung Brubus		Madiun	Bengawan Solo	2008	20	2.025		
55	Nelambangan		Bojonegoro	Bengawan Solo	1997	16	2.503		Irrigation 803 ha
56	Dawuhan			Bengawan Solo					
57	Sangiran		Ngawi	Bengawan Solo	2000	26	10.600		Irrigation 1.500 ha
58	Canggah		Lamongan	Bengawan Solo			5.350		
59	Cunekun		Lamongan	Bengawan Solo			3.612		
60	Kembangan		Sragen	Bengawan Solo	1940		650		Irrigation 39.277 ha
61	Manvar		Lamongan	Bengawan Solo			2.700		Irrigation 2.080 ha
62	Lalung		Karanganyar	Bengawan Solo	1940		590		
63	Saradan		Madiun	Bengawan Solo	1935		2.340		Irrigation 251 ha
64	Ketro			Bengawan Solo					
65	Pacal			Bengawan Solo					
66	Cengklik			Bengawan Solo					
67	Kedung Sengon		Nganiuk	Brantas	1978	10	948		Irrigation 1.591 ha
68	Sumberkenuh		Nganiuk	Brantas	1939	9	770		Irrigation 1.578 ha
69	Benine/Widas		Madiun	Brantas	1984	35.6	28.500		
70	Lahor		Malang	Brantas	1975	74	36.100		
71	Klampis			Brantas	1976	22.3	10.250		Irrigation 2.080 ha
72	Benel		Negara	Bali Penida	2006	36.77	1.618		Irrigation 1.050 ha
73	Grokeak		Singaraja	Bali Penida	1996	47	3.750		Irrigation 200
74	Palasari		Jembrana	Bali Penida	1989	39.8	8.000		
75	Telaga Tunjung		Tabanan	Bali Penida	2007	33	1.000		
76	Muara			Bali Penida					
77	Beriwit		Berau	Kalimantan III	2006	16.31	1.452		Hydropower 118.2 MW
78	Binalatung		Tarakn	Kalimantan III	2010	9.3	667		

No	Dam Name	Risk Score	District	Province/ Owner	Year Built	Height (M)	Volume of Reservoir (10 ³ m ³)	Hazard Categories	Purpose of the Dam
79	Manggar		Balikpapan	Kalimantan III	1996	12.9	14,200		
80	Merancang		Berau	Kalimantan III					
81	Bili Bili		Makassar	Pompengan Jeneberang	1999	73	305.000		
82	Ponre Ponre		Jeneberang		2008	55	48.700		
83	Solomeko								
84	Kalola								
85	Abusur		Wohreli	Maluku	1993	15	275		
86	Batunambar		Praya	NT I	1995	20	560		
87	Brangkolong		Sumbawa Besar	NT I	1998	21	1.000		Irrigation 764 ha
88	Jambu		Dompu	NT I	1989	15	400		
89	Jangkik Jawe		Praya Barat	NT I	1996	18	900		Irrigation 360 ha
90	Kali Ujung		Lombok timur	NT I	1994	15	524		Irrigation 1.500 ha
91	Kaswangi		Sumbawa Besar	NT I	1999	18.5	900		
92	Kesi		Dompu	NT I	1997	18.5	620		
93	Kemno		Dompu	NT I	1995	17	500		
94	Kowo			NT I	1996	17	400		
95	Labangka		Brang Labangka	NT I	1992	24.75	200		Hydropower 6.5 MW
96	Laiu		Bima	NT I	2007	25.56	653		Irrigation 515 ha
97	Lanangga		Dompu	NT I	1999	16	300		
98	Mantar		Sumbawa Barat	NT I	1998	19.7	400		
99	Manasan		Praya Barat Daya	NT I	2003	13	253		
100	Menkoang		Bima	NT I	2000	16	1.800		
101	Muer		Sumbawa Besar	NT I	1985	15.3	230		Irrigation 286 ha
102	Ncera		Sumbawa Besar	NT I	1995	18.4	425		Irrigation 230 ha
103	Oi Toi		Sumbawa Besar	NT I	1999	20	500		
104	Olat Rawa		Sumbawa Besar	NT I	1997	20.12	1.920		Irrigation 500 ha
105	Parado Kanca		Bima	NT I	2006	18	500		
106	Pelaperado		Bima	NT I	2004	62	15.750		

No	Dam Name	Risk Score	District	Province/ Owner	Year Built	Height (M)	Volume of Reservoir (10 ³ m ³)	Hazard Categories	Purpose of the Dam
107	Penvaring		Sumbawa	NT I	1996	15	400		
108	Pernek		Sumbawa Besar	NT I	2008	22	590		
109	Roi Roka		Sumbawa Besar	NT I	1991	19	2.035		Irrigation 800 ha
110	Sanggupasante		Dompu	NT I	1985	17.5	11.800		Irrigation 800 ha
111	Sejari I		Plampang	NT I	1997	19.1	421		Irrigation 800 ha
112	Selante		Sumbawa Besar	NT I	1986	19	524		Irrigation 612 ha
113	Serading		Dompu	NT I	1999	16.21	470		
114	Sepit		Mataram	NT I	1984	13	103		
115	Telaga Lebur		Lombok Barat	NT I		28.5	1.539		Irrigation 255 ha
116	Tolotangga		Bima	NT I	2008	23	770		
117	Tonda Selatan		Dompu	NT I	1997	19.5	350		
118	Waworoda		Bima	NT I	1998	15	320		Irrigation 255 ha
119	Wera I		Bima	NT I	1992	24.9	500		
120	Pancor		Lombok Tengah	NT I	1994	13.7	625		
121	Pare		Mataram	NT I	1998	13	23.500		Irrigation 2.775 ha
122	Batujai			NT I					
123	Kuning			NT I					
124	Pandanduri			NT I					
125	Tiu Kulit			NTI					
126	Benkoko		Kupang	NT II	1996	22	204		
127	Haliwen		Atambua	NT II	2004	25	1.870		
128	Haekrit		Belu	NT II		21.5	2.640		Irrigation 200 ha
129	Kenekang		Lombok Tengah	NT II	1995	15	400		
130	Tilong		Kupang	NT II	2001	44.5	17.000		
131	Oel Tua		Kupang	NT II	1997	21.5	2.200		Irrigation 300 ha
132	Karinga		Sumba Timur	NT II	1991	12	644		Irrigation 214 ha
133	Padang Paniang		Alor	NT II	1997	10	798		Irrigation 200 ha
134	Rakawatu		Sumba Timur	NT II	1992	11.5	1.544		Irrigation 174 ha

Annex 2 - Institutional Arrangement for ESMF Implementation





Annex 3 - Types of Activities Should be Accompanied by AMDAL or UKL-UPL

SECTOR AND ACTIVITY	SCALE	
	AMDAL	UKL-UPL
Solid Waste/Disposal		
1. Final disposal with control landfill system/sanitary landfill (non- hazardous waste) - Area coverage, or - Total capacity	> 10 Ha > 100.000 ton	< 10 Ha < 100.000 ton
2. Final disposal in tides area - Landfill coverage, or - Total capacity	All size	-
3. Final disposal with open dumping system	All size	-
Irrigation and Drainage		
a. Development of drainage in medium-sized city - Primary drainage (length) - Secondary and tertiary drainage (length)	> 10km > 10km	< 10 km 2 – 10 km
b. Development of drainage in small-sized city	-	> 10 km
Sediment Dredging		
a. Medium-sized city - Length, or - Volume of dredging	> 10 km > 500,000 m3	1. < 10 km
b. Check dams	15 m	15 m

Notes:

1. With reference to *PERMEN* No. 05/2012 on Type of Activities Requiring AMDAL.
2. This applies for controlled landfill in tides area as well.

Activities that are not require AMDAL or UKL-UPL should prepare SPPL (see format SPPL in **Annex 12**).

Annex 4 – Land Acquisition and Resettlement Policy Framework

**INDONESIA:
DAM OPERATIONAL IMPROVEMENT AND SAFETY PROJECT - 2
(DOISP AF)**

**LAND ACQUISITION AND RESETTLEMENT POLICY FRAMEWORK
(LARPF)**

An Integral Part of Environmental and Social Management Framework (ESMF)

December 2016

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DEFINITIONS

Terms	Meaning
Government	The Government of the Republic of Indonesia
Project	Dam Operational and Safety Improvement Project 2 (DOISP AF)
Provincial government	The <i>provinsi</i> government, headed by a governor or <i>gubernur</i>
Local government	Municipal (<i>kota</i>) government (headed by a mayor or <i>walikota</i>) or district or regency (<i>kabupaten</i>) government (headed by a district head/regent or <i>bupati</i>)
Sub-project	Project component implemented at the central, provincial and/or <i>kabupaten/kota</i> level

ACRONYMS

APBD	Local Government Budget
APBN	Central Government Budget
Bappeda	Local Government Planning Agency
BPN	Local Government Land Agency
CP Program	Community Participation Program
CPIU	Central Project Implementation Unit
CPMU	Central Project Management Unit
DED	Detail Engineering Design
DGWR	Directorate General of Water Resources
GOI	Government of Indonesia
LARAP	Land Acquisition and Resettlement Action Plan
LARPF	Land Acquisition and Resettlement Policy Framework
MHA	Indigenous Community (<i>Masyarakat Hukum Adat</i>)
MPWH	Ministry of Public Works and Housing
NGOs	Non-Government Organizations
OP	Operational Procedures
PAH	Project Affected Household
PAPs	Project Affected Persons
PIU	Project Implementation Unit
PIP	Project Implementation Plan
QPR	Quarterly Project Report (QPR)
WBOJ	World Bank Office in Jakarta

A. Introduction

1. The project is a continuation of the ongoing Dam Operational Improvement and Safety Project (DOISP) and will finance five components required to substantially improve Indonesia's dam operation and safety. The project builds on lessons learned from a number of related projects that advocate for an integrated, holistic approach to dam safety and operations within the context of the river basin to ensure the adequacy of the supporting institutional environment. The project is planned to be implemented from 2017-2022 and aimed at: (i) increase the safety of existing dams in selected locations, and (ii) strengthen institutions for operational effectiveness of dam management. Investments are prioritized based on objective criteria for identification and assessment and includes 23 major dams prioritized and prepared under DOISP, along with priority investments from the remaining 115 major dams in the portfolio. These sub-projects will be mostly located in Java (West Java, Central Java, Yogyakarta and East Java), and some in NTB, NTT, Lampung, East Kalimantan and South Sulawesi.
2. 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, thus it is expected that there will be no activities that would imply significant land acquisition and involuntary resettlement. Additionally, none of the sub-projects under DOISP have involved land acquisition activities. However, to give more flexibility during project implementation of the DOISP AF where some proposed activities may require additional land, temporarily or permanently, this Land Acquisition and Resettlement Policy Framework (LARPF) is developed. The project will ensure that only small-scale land acquisition will take place, which will not have any significant impact on the owners. A Land Acquisition and Resettlement Action Plan (LARAP) will be prepared during project implementation (after the screening, verification and confirmation stage) in the likely event that the sub-project activities will involve land acquisition and/or resettlement. The Bank requires the project to avoid involuntary resettlement where feasible, and where it is not feasible to be avoided, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits.

B. Objective

3. The purpose of this Policy Framework is to provide requirements to Project Implementation Units (PIUs) on the principles, process, procedures, and organizational arrangements to be applied to sub-projects requiring land acquisition and resettlement in preparing a Land Acquisition and Resettlement Action Plan (LARAP) which will need to be prepared during project implementation, once specific planning information of the sub-project is known and as a reference for the Central Project Management Unit (CPMU) of Directorate Operation & Maintenance, DGWR at the central level to ensure that project management staff at the regional level plan and implement land acquisition and resettlement in compliance with this framework.

4. As a framework, LAPRF provides general guidance for the preparation and implementation of small-scale land acquisition and/or resettlement. Protocol for voluntary land donation will also be provided to anticipate land acquisition through voluntary land donation that may take place in the Community Participation (CP) program, as occurred in several sites under CP program of the DOISP.
5. There will be 6 (six) sub-projects to be implemented during the 1st year of project implementation. The detail engineering designs (DEDs) of the sub-projects have confirmed that none of them will involve land acquisition that require land acquisition/resettlement action plan. This LARPF will be applied to sub-projects identified in the following years during project implementation. List of sub-projects under the 1st year implementation is presented in **Appendix 1**.
6. The overall objectives and principles of land acquisition and resettlement in this project are to ensure that:
 - a) Land acquisition and resettlement should be avoided where feasible, or minimized, exploring all viable alternative sub-project designs;
 - b) Where it is not feasible to avoid land acquisition and resettlement, activities of land acquisition and resettlement should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the project affected persons (PAPs) to share the sub-project benefits. The PAPs should be meaningfully consulted and should have opportunities to participate in planning and implementing the land acquisition and resettlement programs.
 - c) PAPs should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-land acquisition and resettlement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

Overall, the PAPs' living conditions should not be worse-off due the land taking by the sub-project, while at the same time they should benefit from the project.

7. The PAPs should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs, and should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them.

C. Definition

8. In this project, involuntary resettlement includes land acquisition implemented under the eminent domain principle that could involve physical and economic displacement. As practice in various World Bank supported projects in Indonesia, understanding of involuntary resettlement includes land acquisition implemented under the Indonesian laws and regulations, and resettlement (or relocation). Hence, as the common practice in other World Bank supported projects, Land Acquisition and Resettlement Action Plan (LARAP) is the term commonly used that is equivalent with the term Resettlement Action Plan (RAP) used in World Bank OP 4.12.
9. This framework applies for the following situation:
 - a. Impacts caused by sub-projects resulting in involuntary land acquisition,

- relocation, loss of assets or loss of access to assets, loss of income sources or means of livelihood whether or not the Project Affected Persons (PAPs) must move to another location; resulting in the involuntary restriction of access to legally designated parks and protected areas that would result in adverse impacts on the livelihoods of the PAPs.
- b. Activities resulting in involuntary land acquisition and resettlement in linked activities, regardless of financing sources that are:
 - Directly and significantly related to the DOISP AF sub-project;
 - Necessary to achieve the objectives of the sub-project; and
 - Carried out, or planned to be carried out contemporaneously with the sub-project.

D. Laws and Regulation Related to Land Acquisition and Resettlement

10. This framework relies on Government of Indonesia laws and regulations to the extent that they are in compliance with the World Bank OP 4.12 on Involuntary Resettlement. Specific provisions are included in this framework to address any aspect of the OP 4.12 that are not fully addressed in the Government of Indonesia laws and regulations. GOI laws and regulations include:
 - a. Law No. 2/2012 on Land Acquisition for Project Activity for Public Interest;
 - b. Presidential Regulation No. 71/2012 on Land Acquisition and its amendments; and
 - c. Regulation of the Head of BPN RI No. 5/2012 on Technical Guidelines on the Implementation of the Land Acquisition.

Land acquisition process based on Law 2/2012 is shown in **Figure 1** and **Figure 2**.

11. The amendment of Presidential Regulation No. 71/2012 on Land Acquisition (Presidential Regulation No. 40/2014) allows that land acquisition for an area less than 5 Ha to be carried out directly by the agency requiring the land based on willing-buyer-willing seller principle, exchange or other schemes agreed by the two parties. In this case, the required land should be located in one area, and can be obtained in one fiscal year. The agency requiring the land may use licensed appraisers to assess the affected assets.
12. Gap analysis between GOI laws and regulations and the World Bank OP 4.12 are described in below.

Table 1: Gap Analysis on Land Acquisition/Resettlement

Issue	Indonesia Framework versus OP 4.12	Gaps Identified	Addressed in the LARPF
Preparation	GOI: Design/planning document focusing on overall cost-benefit and technical consideration.	<ul style="list-style-type: none"> • No consultation in this stage, though later Project Affected Peoples on project location agreement is a requirement • No alternatives scenario • No action plan and No livelihood restoration plan 	LARPF provides an outline relating to consultations with the PAP as early as possible including in selection of alternatives scenarios. LARPF also provides an outline on livelihood restoration plan. However, the practice will subject to GOI approval with consideration of applicable laws and regulations.
	OP: Become part of overall project planning and design. LARAP focus on: solution of social economic problems based on consultation with the PAP (including livelihood restoration), alternatives scenario and action plan		
Eligibility & Entitlement	<p>GOI: Only landowner (with full, development and sufficient proof of traditional right or proof of land transaction from traditional right; including people without proof but with good faith and with 2 witness of ownership) and people who own asset on that land are eligible for compensation.</p> <ul style="list-style-type: none"> • No compensation for renter except, renter from government asset. Squatter on private land is not eligible for compensation (it is private land owner responsibility). • Non-cash compensation is permissible but not preferable 	<ul style="list-style-type: none"> • Only land and asset owner is eligible for compensation on loss of asset • No compensation for renter or squatter on private land • Almost no non-cash compensation 	LARPF considers renter and squatter as PAP that eligible to receive livelihood restoration assistance. The assets other than land will also be compensated. When the PAPs prefer to receive non-cash compensation, project proponent will support the option as long as align with applicable laws and regulation.
	OP: All PAP before cut-off date of PAP inventory is eligible for compensation; non-cash compensation is preferable on resettlement case		
Livelihood restoration	<p>GOI: In Indonesian Society of Appraisers guideline livelihood restoration is part of the valuation of land parcel but this is not specifically mention in the framework. In area where PAP special economic or social opportunity of the location is not express on the land price, there is a possibility that livelihood restoration cost is undervalued.</p>	Livelihood restoration is not mentioned, in the case where PAP special economic opportunity of the location is not representing on land price, the cost tends to be under valued	LARPF requires livelihood restoration to be included in LARAP.
	OP: PAP livelihood restore to at least the original		

	condition		
Agreement & Grievance	<p>GOI: There are 3 agreements and consultation where each of them has grievance procedures: (a) PAP agree on the project location → grievance to (i) preparation team → (ii) Administration Court (PTUN) → (iii) Supreme court;</p> <p>(b) PAP agree on inventory of land & asset → grievance to implementation team (P2T);</p> <p>(c) Agree on compensation (no detail mechanism and time allocation for non-cash compensation) → (i) negotiate again to implementation team → (ii) file a case price agreement to District Court (cash compensation put in the court) → (iii) Supreme Court</p> <p>OP: No discussion on PAP agreement on the project location except for affected indigenous people. Agreement on inventory, negotiation procedure and grievance procedure are detailed in LARAP or project framework. Non-cash compensation that securing livelihood restoration is preferable</p>	<p>Clear agreement and grievance mechanism though no time and procedure for non-cash agreement</p> <p>Limited opportunity for PAP to raise grievances.</p>	<p>ESMF includes Project-wide procedures for grievance redress mechanism to ensure all grievances will be responded in timely manner.</p> <p>LARPF also include livelihood restoration for the PAP in non-cash compensation.</p>
Financial & institutional setting	<p>GAP:</p> <p>(i) No detail scenario and detail financial estimation and arrangement,</p> <p>(ii) No institutional, procedure and time allocation for non-cash compensation</p> <p>(iii) No action plan and institutional capacity self-evaluation required</p> <p>(iv) Access to information is not specifically layout but combination of this framework and the Law of Access of Information No. 14 of 2008¹ is sufficient to close the gap.</p>		<p>LARPF requires development of LARAP as supplementary document of Government's land acquisition plan to address this issue.</p>

¹ Every citizen, by requesting to the relevant agency, has the right to get all public document copy, except certain document that is exempted by the related agency regulation.

Figure 1: Preparation Stage of Land Acquisition Process based on Law 2/2012

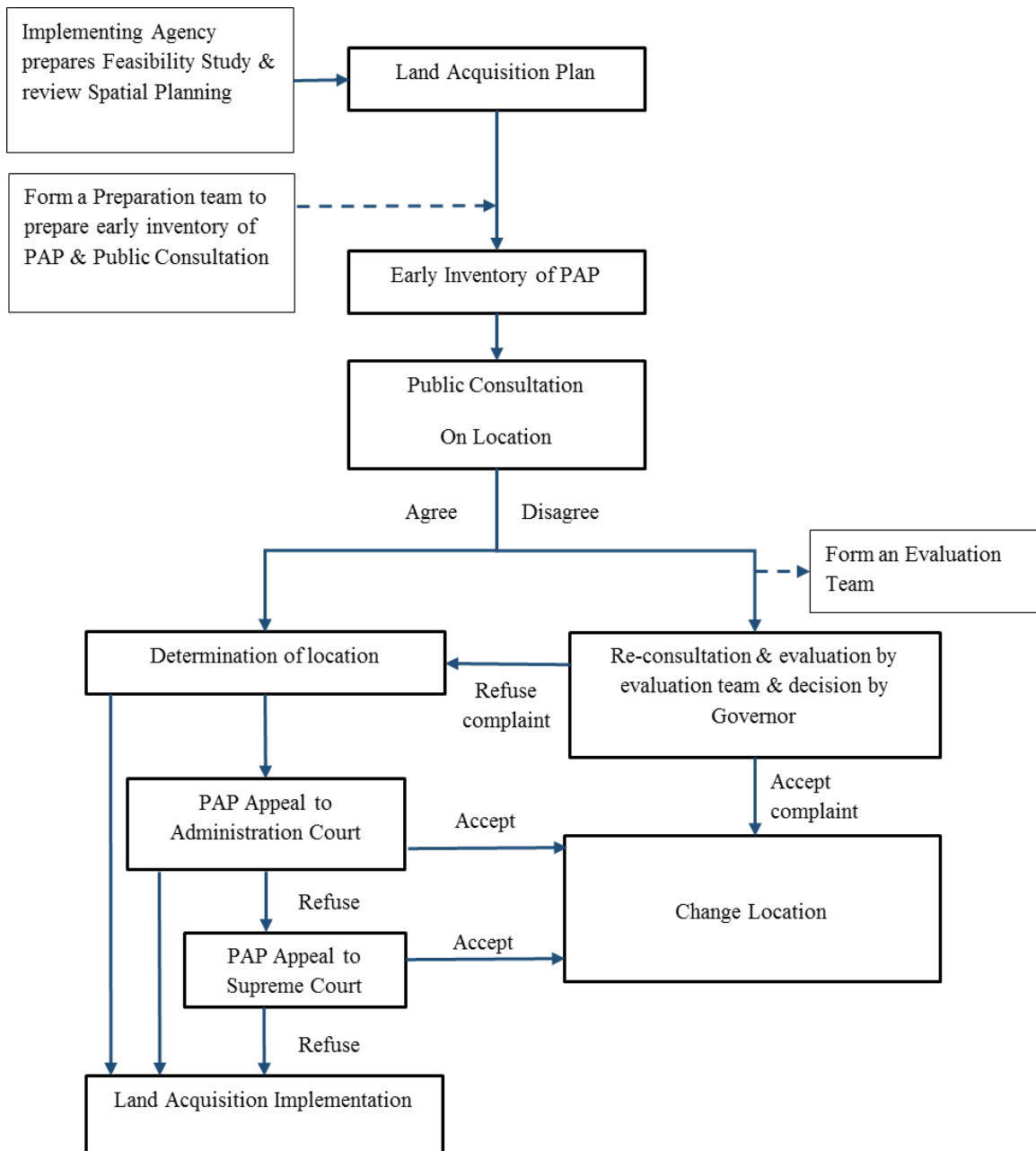
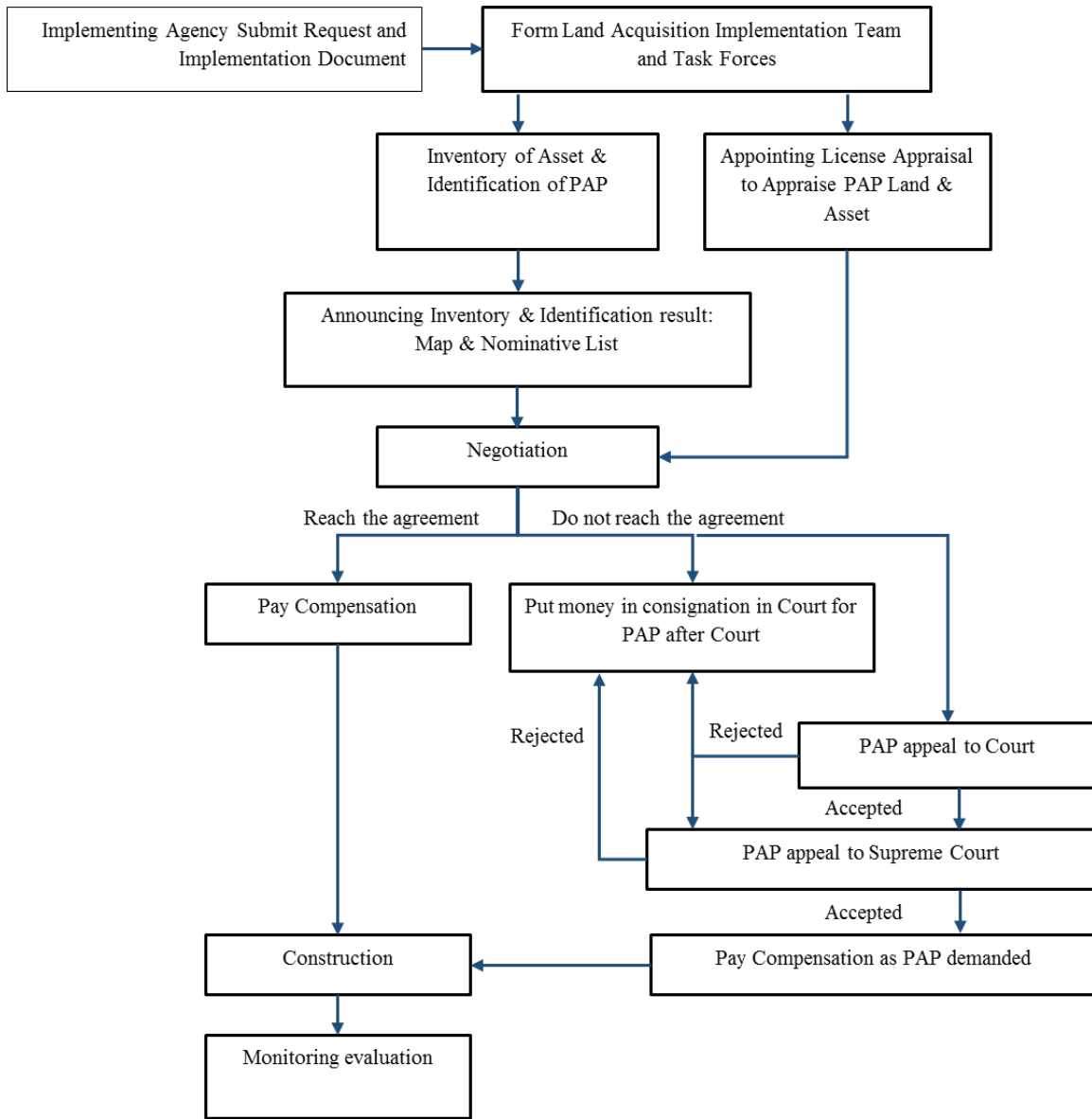


Figure 2: Implementation Stage of Land Acquisition Process based on Law 2/2012



E. Likely Category of Project Affected Persons

13. It is anticipated that the rehabilitation activities would involve some small land acquisition. The project anticipates that there would be two general categories of PAPs in this project: (1) persons affected by the acquisition of privately owned land; (2) persons affected who have lived on the government (state or local government)'s land but do not own the occupied land. These occupants fall into four categories: (a) persons who own and occupy dwellings and other structure built on state or government land without any recognizable legal right or claim to the land they occupy; (b) renters of dwellings and other structures built on state or government land without any recognizable legal right or claim to the land they occupy; (c) encroachers, i.e., persons who extend their personal holdings by encroaching adjacent state or government land; (d) squatter landlords, i.e. persons who derive illegal rents from structures built on state or government land, but do not occupy such structures. Identification of the PAPs will be done during the preparation of LARAP through the census survey.
14. A LARAP should adopt measures to ensure that the PAPs are:
 - a. Informed about their options and rights pertaining to resettlement;
 - b. Consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives; and
 - c. Provided prompt and effective compensation at full replacement costs for losses of assets attributable directly to the project.
15. If the impacts include physical relocation, a LARAP should also include measures ensuring that the PAPs are:
 - a. Provided assistance (such as moving allowance) during relocation; and
 - b. Provided with residential housing, or housing sites, or else, as required and agreed with the PAPs to at least equivalent the situation in the old sites.
16. Where necessary to achieve the objectives of land acquisition and resettlement, a LARAP should also include measures to ensure that PAPs are:
 - a. Offered support after displacement for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living; and
 - b. Provided with development assistance in addition to compensation.

F. Preparation and approval process of LARAP

17. During the sub-project preparation, the PIU will identify activities that will likely involve land acquisition and resettlement and identify the scale of impact of the land acquisition, based on estimated number of affected people and size of land to be taken based on the detail engineering design (DED). Number of affected peoples and/or scale of land acquisition will define whether the PIU should prepare a draft full

LARAP or an Abbreviated LARAP²:

- Full LARAP is required when land acquisition affects more than 200 people, takes more than 10% of household productive assets and/or involves physical relocation;
- Abbreviated LARAP is acceptable if fewer than 200 persons are affected but land acquisition is minor, less than 10% of all productive assets of the affected households is taken.

18. The content is more or less equivalent with the combination of activities under the Land Acquisition Plan and the Inventory and Identification of Land Ownerships, Use and Utilization of Land under the Implementation of Land Acquisition Stage under the national law and regulations. The content of a full LARAP and an Abbreviated LARAP are presented in **Appendix 2**. There are no fundamental differences in terms of achieving objectives of equality and compensating social cost; however, there are some procedural differences between an Abbreviated LARAP and LARAP. The LARAP is more detailed and takes longer to complete. A LARAP needs to include a review of the legal and institutional framework whereas an Abbreviated LARAP does not. An Abbreviated LARAP can be based on an asset census with each affected household while a LARAP requires both an asset census and a community socio-economic survey to provide a monitoring benchmark for understanding how PAPs' socio-economic conditions have changed. Since physical works will be in the existing system, if land acquisitions are involved, they will be in small-scale that will only need Abbreviated LARAPs.

19. PIU will prepare the LARAP in collaboration mainly with the Land Agency (BPN). Local Government Planning Agency (BAPPEDA) will also be consulted particularly to ensure that the LARAP is in conformity with the city spatial development plan, as well as to inform them of the potential estimated budget needs for implementing land acquisition and resettlement. The Draft LARAP will be shared with the CPMU/CPIU (DGWR) for review. Finally, the reviewed LARAP will be shared with the Bank for approval. During the LARAP preparation, the PIU will be guided and assisted by the Regional Safeguards Specialist of CPIU.

G. Eligibility Criteria for Defining Various Categories of PAPs

20. PAPs eligible for compensation for the affected assets are those (a) who have land rights ownership; (b) who have land management/use ownership; (c) who have “*nadzir*” for the donated land of “*wakaf*”; (d) land owners for land that used to be owned by adat; (e) “*masyarakat hukum adat*” (MHA or Adat Community); (f) those who occupy or use state land with good intention/faith; (g) those who hold basic control of land; and/or (h) those who own building/structure, plants and other things related to the land.

² As of OP 4.12, Full LARAP and Abbreviated LARAP refer to the level of significance of impacts

H. Methods of Affected Assets Valuation

21. As required by Law No. 2/2012 and its implementation regulations, values of affected assets will be assessed by licensed appraisers, which will be assigned by the provincial BPN in accordance with the national procurement regulations. The values defined by the licensed appraisers will be used as a basis for negotiation with the PAPs. Types and compensation level will be defined based on the negotiation results between the PIU (who need the land for the sub-project) and the land or property owners. Value assessment will be carried out on per affected land plot basis which include land, space above and beneath land, buildings or structures, plants, things that relate to the affected land and/or other loss that can be valued (e.g. non-physical loss that can be equivalent with monetary value; loss of jobs or income earning sources, cost for moving, cost for change of profession, and value for remaining property). The remaining property that is no longer physically or economically feasible can be also compensated if the owners prefer to do so. Land valuation/appraisal by the licensed appraisers will be carried out based on the MAPPI (Indonesian Society of Appraisers) Standards as specified in MAPPI Guidelines (*Standar Penilaian Indonesia* (SPI) 306).
22. Entitlements Matrix for the Project Affected Persons can see in **Table 2** below.

Table 2: Entitlements Matrix for the Project Affected Persons

Project Affected Persons	Entitlements	Expected Outcomes
Land/asset owners who lose land and/or other assets	Compensation for loss of land and other assets based on value assessment carried out by licensed appraisers to reflect the replacement cost	Land/asset owners will be fully compensated for the loss of land and asset
Land/asset owners who lose temporarily or permanently their sources of income or livelihoods	Compensation for loss of sources of income or livelihoods based on value assessment for non-physical carried out by licensed appraisers	Land acquisition/resettlement will not result in the impoverishment of the affected land/asset owners
Persons who own and occupy dwellings and other structure built on state or government land without any recognizable legal right or claim to the land they occupy	Compensation for loss of dwellings and other structure, for income sources or livelihoods and resettlement assistance, based on the assessment of the licensed appraisers to reflect replacement cost	Compensation received and resettlement assistance provided will enable households to gain access to adequate housing or to a place that can be legally occupied and land acquisition will not result in the impoverishment of the affected persons.
Renters of dwellings and other structures built on state or government land without any recognizable legal right or claim to the land they occupy	The project considers to provide sufficient time (at least 2 months from the cut-off date/at the time of census survey) for the renters to find another place	Renters will find place to rent or to live in accordance to their needs

Project Affected Persons	Entitlements	Expected Outcomes
Squatter landlords, i.e. persons who derive illegal rents from structures built on state or government land but do not occupy such structures.	Do not entitle for any compensation	Do not have incentive to do similar renting scheme in other areas or in the future

I. Forms of Compensation

23. Compensation may take several forms: (a) cash; (b) land replacement; (c) resettlement to other site; (d) shares ownership; or (e) other forms of compensation that are agreed both by the PAPs and the agency requiring the land (in this case is the city/regency PIU). Compensation may take combination of these depending on the agreements between the PAPs and the agency requiring the land.

J. Consultations and disclosures

24. Consultations and disclosures for acquiring land start from the planning, preparation, and implementation phase. In brief summary, Law No. 2/2012 and its implementing regulations specify that consultations should be carried out in the following activities:

- a. At planning stage: plan of the location of sub-project, purpose of the development, steps and time frame for land acquisition, roles of licensed appraisers in the asset valuation, incentive or compensation that would be provided for the PAPs, eligible assets or object for compensation, and responsibility and rights of the eligible PAPs. Consultations will use public meetings, media and information in the closest villages. Consultations will adopt dialogue approach, and can take place more than one time, depending on the need and agreement reached. Agreement will be put in writing. The defined sub-project location requiring land will be disclosed to public in the media, websites of the provincial and city government as well as in the website of the agency requiring the land.
- b. BPN will consult the owners of the asset during the inventory and the identification of the affected assets. Results of the inventory will be disclosed in the sub-project area (village/*kelurahan*) or *kecamatan* (sub-district) offices for 14 days to receive complaints.
- c. Results of asset valuation done by the licensed appraisers will be provided to the PAPs and used as the basis for negotiations.
- d. LARAP document will be disclosed in the *kelurahan*/village where the sub-project requiring land acquisition is located and in posted in the project (MPWH) website (www.pu.go.id).

K. Voluntary Land Donation

25. Voluntary land donation is a common approach in Indonesia for acquiring the land, in particular under the community-based program. Under the Community Participation

(CP) program of the DOISP, there were activities that required lands, which were acquired through land donation. As the DOISP AF will scale-up the CP program, guidance to the voluntary land donation (VLD) for the PIU is required. Consultations and disclosures for acquiring land start from the planning, preparation, and implementation phase. The protocol on conducting VLD is provided in **Appendix 3**.

L. Grievance Redress Mechanisms (GRM).

26. Process, procedures, requirements as well time for complaints to be solved during the land acquisition process will follow Law No. 2/2012 and its implementing regulations (including amendments).
27. Any grievance raise outside of land acquisition timeline and procedures will not be registered as “formal” complaints or as an objection. However, PIU may help to resolve the grievance to certain extend by following the Grievance Redress Mechanism (see **Annex 17**).

M. Organizational & Financing Arrangements

28. Organizational arrangements for the process of acquiring land will follow the Law No. 2/2012 and its implementing regulations (including amendments). The PIU will work closely with the land agency (BPN) who is mainly in charge of the process of land acquisition. LARAP will be prepared based on the information provided by the Land Acquisition Plan and Inventory and Identification Report of the BPN. The draft LARAP will be reviewed by CPMU/CPIU, and approved by the Bank. Implementation of LARAP will be overseen and monitored by the regional implementing unit and regular implementation report will be provided to the CPMU/CPIU and the Bank. Land acquisition process should be completed prior to the start of the construction.
29. Funds should cover compensation, operational and supporting costs during the planning, preparation, implementation, handover of results, administration and management, and socialization. Confirmation on the scope of land that will have to be acquired for a sub-project will be confirmed during or after the DED is completed. In principle, the funding will be available from the Central Budget (APBN) and/or Local Budget (APBD) or combination of these, under the agency who needs the land. Requirement for the operational and supporting budget from APBN is regulated by the Ministry of Finance, whereas that from APBD is regulated by the Ministry of Home Affairs.

N. Monitoring and Reporting

30. PIUs, assisted by the Regional Safeguards Specialist of CPIU, will monitor the LARAP preparation and implementation. Process of preparing and content of LARAP will be ensured in reference to the LARPF. Implementation of LARAP will be monitored based on indicators as specified in the approved LARAP, which includes among others: (a) consultation process; (b) eligible PAPs; (c) agreed compensation level and forms; (d) payment of compensation and delivery of assistance; (e) follow-up on the legal process of the acquired land/remaining land; (f) the effectiveness of complaint handling mechanisms; (g) number, type of complaints and follow up; (h) disclosures of the LARAP and transparency during the process of

land acquisition; etc. The monitoring report of LARAP implementation will be submitted to the Bank. The summary of the report will be included in the Quarterly Project Report (QPR).

O. Implementation Arrangement

31. CPMU/CPIU assisted by the regional safeguard specialist will be responsible for training the respective PIU to undertake the work of consultation, screening, analyses and preparing LARAP and addressing any grievances.
32. PIU of individual sub-projects and local authorities are responsible for undertaking all works related to land acquisition and resettlement activities and implementing the LARAP (arrange adequate staff and budget) under guidance of CPIU's Regional Team.

Appendix 1: List of DOISP AF Sub-Projects in the 1st Year Implementation Arrangement

No	Dam	B(BWS)	Location	Activities	Land Issue
1	Ubrug	Citarum	Kab. Purwakarta, West Java Province	Radial gate installation	No land acquisition required
2	Ketro	Bengawan Solo	Desa Ketro, Kec. Tanon, Kab. Sragen, Central Java Province	<ul style="list-style-type: none"> • Rehabilitation of main dike • Minor replacement of hydro-mechanical • Sediment dredging 	No land acquisition required
3	Penjalin	Pemali Juana	Desa Paguyungan, Kec. Bumiayu, Kab. Brebes, Central Java Province	<ul style="list-style-type: none"> • Rehabilitation of main dike, using diaphragm wall • Minor replacement of hydro-mechanical • Sediment dredging 	No land acquisition required
4	Greneng	Pemali Juana	Dea Tunjungan, Kec. Blora, Kab. Blora, Central Java Province	<ul style="list-style-type: none"> • Replacing some dike material with better soil • Sediment dredging 	No land acquisition required
5	Tempuran	Pemali Juana	Desa Tempuran, Kec. Blora, Kab. Blora, Central Java Province	<ul style="list-style-type: none"> • Replacing some dike material with better soil • Sediment dredging 	No land acquisition required
6	Mrancang	Kalimantan III	Dea Mrancang, Kec. Gunung Tabur, Kab. Berau, East Kalimantan	<ul style="list-style-type: none"> • Leveling of undulating main dike, and repair spillway. • Minor replacement of hydro-mechanical • Sediment dredging 	No land acquisition required

Appendix 2: Format of Land Acquisition and Resettlement Action Plan

A. Format of Full LARAP

A full LARAP shall include, at minimum, the elements below, as relevant. If any component is not relevant to the activity/sub-project's circumstances, it needs to be explained on the full LARAP.

1. Description of Sub-project.

A general description of the sub-project/activity and identification of the site.

2. Potential Impacts.

Identification of: (a) components of sub-project that would require land and/or relocation; (b) areas to be affected by the sub-project (area of influence); (c) alternatives to avoid or minimize land acquisition and/or relocation; and (d) to the extent possible, any measures adopted to avoid or minimize land acquisition and/or relocation.

3. Objectives.

Objectives of the full LARAP.

4. Census of the Project Affected Persons (PAPs) and inventory of affected assets.

Census results and asset inventory, including the following information:

- a. List of PAPs, with differentiation of those having land rights and occupants who do not have land rights; vulnerable and gender;
- b. Inventory of land parcels and structures affected by the sub-project, covering the following information:
 - Size of total land parcels affected, size of land to be acquired by the sub-project, and size of the remaining land;
 - Ownership status of the land and structure affected by the sub-project and proof of ownerships;
 - Function of land affected by the sub-project;
 - Size and function of the affected structure, and remaining size of the structure;
 - Condition of the affected structures (permanent, semi-permanent, temporary, etc.)
 - Other assets affected by the sub-project (trees, crops, wells, fences, etc.).
- c. Total number of PAPs and households affected by the sub-project (Project Affected Households - PAH)
- d. Number of PAHs to be relocated, which differentiate (1) those who can rebuild their houses in the remaining land from the affected land, and (2) those who have to relocate to other locations; and
- e. Number of PAHs who lose more than 10% of their productive assets.

The above information should be summarized in a Table.

5. Socio-economic Study

The Socio-economic Study must be conducted in the early stage of the sub-project preparation and with the involvement of the potentially PAPs. The Study must include the following components:

Census results and asset inventory, including the following information:

- a. The results of the census of the PAPs in paragraph 4 above.
- b. The description about production systems, labour, and household organization; and baseline information on livelihoods and standards of living of the PAPs;
- c. Characteristics of social interaction within the affected communities, including social networks and social support systems, and how they will be affected by the sub-project;
- d. Information about vulnerable groups or persons for whom special provisions may have to be made;
- e. Existing land ownership rights and systems of land transfer, including an inventory of shared natural resources, sources from which community members obtain their livelihood and food, right to use system based on non-ownership rights (including fishing, harvesting from vegetation/trees for own consumption, or use of forested areas) as governed by land allocation mechanisms, locally-applicable systems, and systems to settle any issues arising due to particular land occupation schemes;
- f. Magnitude of the expected loss –total or partial—of assets and the extent of displacement, physical or economic, as well as public infrastructure and social services to be affected;
- g. Social and cultural characteristics of the PAPs, including a description about local formal and informal institutions (for example, community organizations, ritual groups, non-government organizations (NGO), who are possibly related to the public consultation strategy, project design process and implementation of resettlement);
- h. Initial information concerning the livelihoods of PAPs (to include, if necessary, level of production and income obtained from any formal as well as informal economic activity) and level of their livelihood (including their health status); and
- i. Provisions to update information on the PAPs' livelihoods and standard of living at regular intervals so that the latest information is available at the time of their displacement.

6. Legal Analysis

The findings of an analysis of the legal framework, covering:

- a. The scope of the power of eminent domain and the nature of compensation associated with it, in terms of both the valuation methodology and the timing of payment;

- b. The applicable legal and administrative procedures, including a description of remedies available to the PAPs in the judicial process, the normal time frame for such procedures, and any available alternative dispute resolution mechanisms that may be relevant to resettlement under the Project;
- c. Relevant laws (including customary and traditional laws) governing land tenure, valuation of assets and losses, compensation and natural usage of rights; customary personal law related to displacement; and environmental laws and social welfare legislation;
- d. Laws and regulations relating to the agencies responsible for implementing land acquisition and resettlement;
- e. Any legal steps necessary to ensure the effective implementation of land acquisition and resettlement under the Project, including, as appropriate, a process for recognizing claims to legal rights to land, including any claims obtained according to traditional law and traditional usage.

7. Institutional Framework

The findings of an analysis of the institutional framework includes:

- a. The identification of agencies responsible for resettlement activities and NGOs that may have a role in sub-project implementation;
- b. An assessment of the institutional capacity of such agencies and NGOs; and
- c. Any measure proposed to enhance the institutional capacity of agencies and NGOs responsible for implementing land acquisition and resettlement.

8. Entitlement

Identification of PAPs entitled to receive compensation, assistance for resettlement and support for rehabilitation, in addition to explanations regarding the criteria to determine the entitlement among various categories of PAPs, including the time for announcing the PAPs as affected and eligible for compensation (the cut-off-date).

9. Asset valuation and calculation of compensation on affected assets

A description of procedures to determine the types and amount of compensation to be offered to the PAPs, which represent the value assessment carried out by the licensed appraisers.

10. Compensation, assistance for resettlement and support for rehabilitation

A description about the (1) various compensation packages to be offered to PAPs whose land and/or other assets are going to be acquired by the Project Activity; (2) assistance for resettlement to the community members who are physically relocated, and (3) support for rehabilitation for community members who will lose their source of income or livelihood due to land acquisition for the sub-project. The compensation packages, combined with assistance and other support offered for every category of PAPs must be sufficient to ensure that their livelihood following resettlement is not getting worse. Options for resettlement and other assistance offered to PAPs must be prepared based on consultation and must be technically and economically

appropriate, and in accordance to the most preferable options from the cultural viewpoint of the PAPs.

11. Location selection, preparation, and resettlement

Alternative resettlement sites and the description of each site including:

- a. Institutional and technical arrangements that are needed to identify and prepare the resettlement site, whether it is in rural or urban areas, of which, a combination of potentially productive and beneficial locations, as well as a combination of other factors, to the greatest extent possible, will give equal benefits to the PAPs compared to their situation in their previous location, within an estimated time period required to obtain and to convert the land and its additional resources;
- b. Measures to prevent land speculation or an increasing influx of newcomers who are ineligible for resettlement, to the site;
- c. Procedures for physical relocation, including a schedule for preparation of the new relocation site and land transfers; and,
- d. Legal arrangements to occupy the land in the new relocation site and to transfer land rights to the PAPs.

12. Housing, infrastructure, and social services

Plans to provide (or to finance) the settlers to receive their entitlements pertaining to housing, infrastructure (for example, clean water, road access etc.), and basic social services (for example, schools, health services etc.); plans to ensure that those services are equal or greater than the existing standards of the host community; and exploration for expansion of location, technique, and architectural design for those facilities.

13. Environmental management

A description on the boundaries of relocation area, and assessment on the environmental impacts due to the proposed land acquisition, and the steps to reduce and mitigate the impacts (to be coordinated, as necessary, with the environmental assessment of the sub-project, which requires land acquisition).

14. Participatory Process

Participation of affected community and host community is crucial. This requires:

- a. A description of the strategy of public consultation and the participatory process, involving the PAPs, as well as the host community, in design, as well as in implementation of the land acquisition process;
- b. A summary of the views expressed by the PAPs and how these views are being considered in the LARAP;
- c. Review of alternatives to land acquisition are offered and a decision is made by PAPs concerning the various available options, including options on forms of compensation and assistance due to land acquisition, or relocation for families, individuals, or part of the communities or of kinship communities, and efforts to maintain patterns of existing social organization, as well as efforts to maintain

- access to cultural land (e.g. places of religious worship, or burial);
- d. Institutional arrangements in which the relocated community members can report their concerns to the authorized parties of the Project, during the planning and implementation stages, and efforts are in place to ensure that the vulnerable groups are properly represented; and
 - e. Measures taken to reduce impacts of land acquisition on the community member/host community (if relocation takes place), including consultation with members of the host community and local government. There are arrangements to accelerate payment to the community member/host community for the affected land or other assets which are bought for the relocated peoples, as well as arrangements to overcome any possible conflict between the relocated peoples and the host community; and to provide basic public services (for example, education, water, health, and production facilities etc.) for host communities, which should be of equal service level to those of the relocated group.

15. Grievance Redress Procedures

The procedures must be accessible (inexpensive and easy) by any third party to obtain settlement for any dispute arising from the sub-project, as listed in Full LARAP. Such grievance procedures should consider options for settlement through court and other mechanisms such as community-based settlement of dispute, as well as traditional dispute resolution mechanisms.

16. Institutional Responsibility

The organizational frameworks for land acquisition and resettlement, including identification of institutions responsible for the implementation of Full LARAP, of procedures on land acquisition and provision of services; plan to ensure that proper coordination between various institutions and jurisdictions involved in the implementation is already made; and every step (including technical assistance) required to strengthen the capacity of the implementing agency to design and carry out land acquisition; to transfer the work to the local authorized party or to the settlers to manage their own facility and service provided by the Project and to transfer other responsibility from the implementing agency for land acquisition, if any.

17. Schedule of Implementation

A schedule for implementation, which includes all land acquisition activities, starting from preparation to implementation, including target deadlines for realization of benefits expected for the settlers and host community and cut-off dates for the various forms of assistance. The schedule needs to describe how resettlement is linked with the overall sub-project's implementation.

18. Cost and Budget

A table showing an estimation of costs for all land acquisition activities, including an inflation factor, population growth, and other contingency expenses; schedule of disbursement; source of fund; timely cash flow plan, and funding for land acquisition, if any, for areas beyond the jurisdictions of the implementing agency.

19. Monitoring and Evaluation

Plan for monitoring toward land acquisition and resettlement activity by the implementing agency, supported by independent observers as considered necessary by the Bank, to ensure that complete and objective information can be collected; indicators for performance monitoring to measure input, output, and outcome of the land acquisition activity; PAPs' participation in the monitoring; submission of monitoring report to the Bank; evaluation of the impact of land acquisition within a set time frame to be determined after all land acquisition activities and related activities are completed. The results of monitoring should also be used to improve implementation.

B. Format of Abbreviated LARAP

An Abbreviated LARAP is required for a Project Activity that affects less than 200 people, or if it creates insignificant and minor impacts on the PAPs. Impacts are considered minor and insignificant if the PAPs physically do not have to be relocated and not more than 10% of their productive assets are acquired by the Project Activities. An Abbreviated LARAP shall include, at minimum, the following components:

1. *Description of the Project Activity*

General description concerning the sub-project and identification of the site.

2. *Potential various impacts that may occur*

The identification includes: (i) components of sub-project that would require land acquisition; and (ii) areas to be affected by the activity.

3. *Census on the PAPs, and inventory of assets affected by the Project Activity*

Results of the survey and asset inventory, which will include: (i) list of PAPs, which differentiate PAPs who have land rights and land users (tenants) who do not have land rights; and, (ii) inventory of land parcels and structures affected.

4. *Eligibility*

Identification of which PAPs will be entitled to receive compensation and explanation of the criteria used to determine eligibility.

5. *Compensation, assessment of land and assets valuation, and resettlement assistance to be provided*

This includes a description of the compensation options and resettlement assistance that will be offered to the PAPs. Assessment of land and asset values will be determined by the result of an assessment result by licensed appraisers.

6. *Public consultation with local community members who will lose their land and other assets*

This include activities to (a) inform the PAPs about various impacts of the sub-project, available options for compensation and resettlement assistance, and procedures to obtain compensation, and (b) provide opportunity for the PAPs to express their opinion or concerns.

7. *Institutional Responsibility*

Brief description concerning the organizational frameworks to implement the activities of land acquisition.

8. Schedule of Implementation

An implementation schedule shall be made to include all land acquisition activities, including target deadlines for compensation payments. The schedule must describe how land acquisition activities are linked to the overall sub-project's implementation.

9. Cost and Budget

Costs estimations for land acquisition are required by the sub-project.

10. Complaints Handling Procedures

A workable procedure must be set up, which can be accessed by complainants for settlement of disputes arising from the land acquisition; such complaints' mechanisms should consider the options to go to the district court as well as community-based and traditional dispute resolution mechanisms.

11. Monitoring

Plan to monitor land acquisition activities and compensation payment to the PAPs.

12. Monitoring and Evaluation

Plan for monitoring toward land acquisition and resettlement activity by the implementing agency.

Appendix 3: Summary of Voluntary Land Donation Protocol

Voluntary land donation is a common approach in Indonesia for acquiring the land, in particular under the community-based program. The Community Participation program of the DOISP includes activities that required lands through land donation, among others for location of water treatment plant, communal toilet, and catfish farming. As the DOISP AF will scale-up the CP program, guidance to the voluntary land donation (VLD) is provided as one of the option of land procurement for community participation program.

The conditions of voluntary land donation are as follow:

- a. The land donor will receive direct benefit from the sub-project.
- b. The land donor is not categorized as poor.
- c. The land donor is the legitimate owner of such lands.
- d. The land donations must apply to agreed priority sub-project.
- e. Purpose and impacts of proposed activities on donated land must be fully explained to the donor.
- f. The land donations shall not cause relocation nor cause the landowner to lose their land and livelihood in a significant manner.
- g. The donated land is <10% of the total productive land size.
- h. The donated land is not in dispute.
- i. The location and land size is identified by PAPs and verified by facilitators, community forum and it should be free from any environmental impact and health risk.
- j. There are no structures of historic or cultural value on the donated land.
- k. The land donor shall receive clear and complete information about their rights. The landowner needs to be informed about their rights to receive compensation before making the decision to donate the land voluntarily. The donor may request monetary or non-monetary benefits or incentive as a condition for donation.
- l. All family members of the donor must be aware of the donation. Individuals using or occupying community or collective lands must also be aware of the donation.
- m. For community or collective land, donation can only occur with the consent of individuals using or occupying the land.
- n. Verification must be obtained from each person donating land (either through proper documentation or through confirmation by at least two witnesses).
- o. Any donated land that is not used for its agreed purpose is returned to the donor.
- p. In addition, the following aspects need to be carried out:
 - (i) Community facilitators should provide an opportunity to land owners to have an independent consultation prior to making the decision to voluntarily donate their land for the sub-project.

- (ii) Consultation with landowners concerning land donation must guarantee that no pressure is applied to land owners in the process of deciding on whether to donate land.
- (iii) Landowners have the right to refuse the land donation and project management should take measures to identify alternative locations for the facilities. The right of refusal is specified in the donation document the donor will sign.
- (iv) Voluntary land donations must be documented in a legal document, the Statement Letter for Land Donation, to be signed by landowners, facilitators and head of village, community forum, witnesses, as well as heirs. A template Statement Letter for Land Donation is provided in **Appendix 4**
- (v) If the land is only permitted for land use or for easement, a Statement Letter is required and should be signed by landowners, facilitators, and head of village, community forum, and witnesses, as well as heirs. A format for the Statement Letter on the Permit for Land Use is presented in **Appendix 5** and the Format of the Statement Letter on Permit for Land Easement is presented in **Appendix 6**.
- (vi) The community group should attach all other documentation related to voluntary land donation including minutes of meetings, grievances and procedures for the settlement of disputes.
- (vii) Grievance mechanism should follow the project's grievance mechanism. If necessary, the grievance process involves the participation of reviewers who are not directly affiliated with the project implementers or not traditional leaders who are a party to the donation process.
- (viii) An original copy of the Statement Letter should be kept both by the landowner and by the community forum as part of the proposal. A copy of the Statement Letter should be put in the village/*kelurahan* office. The proposal should be made available for the public.
- (ix) The donated land should be legally processed for its ownership status after the land is donated.
- (x) Any taxes to be paid by the land donor for the registration of the land transfer, if applicable, should be covered in full by the project.
- (xi) PIU is also responsible in maintaining the record with documentation for each instance of land donation. The documentation is made available for review in any grievance that may arise.

Appendix 4: Format of the Statement Letter on Land Donation

I/We, the undersigned herein under:

Name :
 ID Card/KTP No :
 Occupation :
 Address :

As the legitimate owner of the land by virtue of a valid Proof of Entitlement Number, Date..... or other valid Proof of..... (specify), hereby confirm that I/we agree to donate land and/or other assets to the Local Government of Province/District/City (specify) to be utilized for the construction of..... for the benefit of the general public.

Project Activities

Location of the land :
 Size of the donated land :
 Size of the remaining land :
 Value of other donated assets :
 Existing land use :
 Ownership status of the land :

(please mention the land boundary and land ownership status as well as land plot map with marking on clear orientations)

This statement is duly made without any pressure from anyone.

Place, date this mutual agreement is signed

The land donator
 Acknowledgement,

Signature (Land owner)

Rp.6000 Stamp Duty

(name)

Signature *Lurah*/Village Head

(name)

Signature of Witnesses

Name 1 signature
 Name 2 signature
 Name 2 signature

The donated land receiver,

Signature (on behalf of the Provincial/District/
 City Government)
 Camat as PPAT

(name)

Signature of Community Board of Trustees

(name)

Signature of inheritance

Name 1 signature
 Name 2 signature
 Name 2 signature

Attachment: Sitemap of land to be donated and photo.

Remarks: Original copy of this letter will be kept by the land donor and by the community forum as part of the proposal. A copy of the letter should be archived in the kelurahan/village office.

Appendix 5: Format of the Statement on Permit for Land Use

I, the undersigned herein under:

Name :
 ID Card/KTP No :
 Occupation :
 Address :

As the legitimate owner of the land by virtue of a valid Proof of Entitlement Number Date or other valid Proof of (please specify) hereby declare that I allow my land to be used by the Province/District/City Government of (please specify) to be utilized for construction work of ... for ... year for the benefit of the general public.

Location of the land :
 Land size to be lent :
 Remaining land size :
 Existing land use :
 Land Ownership status :

(please mention the land boundary and land ownership status as well as land plot map with marking on clear orientations)

This statement is duly made without any pressure from anyone.

Place, date this mutual agreement is signed

Party giving the permit

Party receiving the permit on behalf of
 Province/District/City Govt

Signature of the Land owner

Signature of Camat as PPAT

Rp.6000 Stamp Duty

(name)

(name)

Signature *Lurah*/Village Head

Signature of Community Forum

(name)

(name)

Signature of Witnesses

Name 1 signature
 Name 2 signature
 Name 2 signature

Signature of inheritance

Name 1 signature
 Name 2 signature
 Name 2 signature

Attachment: Sitemap of land to be donated and photo.

Remarks: Original copy of this letter will be kept by the land donor and by the community forum as part of the proposal. A copy of the letter should be archived in the kelurahan/village office.

Appendix 6: Format of the Statement on Permit for Land Easement

I, the undersigned herein under:

Name :
 ID Card/KTP No :
 Occupation :
 Address :

As the legitimate owner of the land by virtue of a valid Proof of Entitlement Number Date or other valid Proof of (please specify) hereby declare that I allow my land to be passed upon by the facility of..... to be constructed/developed by the Province/District/City (please specify) to be utilized for the benefit of the general public.

Land Location :
 Land size to be passed on :
 Existing Land Use :
 Land Ownership status :

(please mention the land boundary and land ownership status as well as land plot map with marking on clear orientations)

This statement is duly made without any pressure from anyone.

Place, date this mutual agreement is signed

Party giving the permit

Party receiving the permit on behalf of
 Province/District/City Govt

Signature of the Land owner

Signature of Camat as PPAT

Rp.6000 Stamp Duty

(name)

(name)

Signature *Lurah*/Village Head

Signature of Community Forum

(name)

(name)

Signature of Witnesses

Name 1 signature
 Name 2 signature
 Name 2 signature

Signature of inheritance

Name 1 signature
 Name 2 signature
 Name 2 signature

Attachment: Sitemap of land to be donated and photo.

Remarks: Original copy of this letter will be kept by the land donor and by the community forum as part of the proposal. A copy of the letter should be archived in the kelurahan/village office.

Annex 5 – Indigenous Peoples Planning Framework

**INDONESIA:
DAM OPERATIONAL IMPROVEMENT AND SAFETY PROJECT - 2
(DOISP AF)**

INDIGENOUS PEOPLES PLANNING FRAMEWORK (IPPF)

An Integral Part of Environmental and Social Management Framework (ESMF)

December 2016

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Appendix 1: List of DOISP AF Sub-Projects in the 1st Year Implementation Arrangement

Appendix 2: Free, Prior, and Informed Consultation (FPIC) Procedures

DEFINITIONS

Terms	Meaning
Government	The Government of the Republic of Indonesia
Project	Dam Operational and Safety Improvement Project 2 (DOISP AF)
Provincial government	The <i>provinsi</i> government, headed by a governor or <i>gubernur</i>
Local government	Municipal (<i>kota</i>) government (headed by a mayor or <i>walikota</i>) or district or regency (<i>kabupaten</i>) government (headed by a district head/regent or <i>bupati</i>)
Sub-project	Project component implemented at the central, provincial and/or kabupaten/kota level

ACRONYMS

CP Program	Community Participation Program
CPIU	Central Project Implementation Unit
CPMU	Central Project Management Unit
GOI	Government of Indonesia
IPs	Indigenous Peoples
IPP	Indigenous Peoples Plan
IPPF	Indigenous Peoples Planning Framework
KAT	Isolated Indigenous Community (<i>Komunitas Adat Terpencil/KAT</i>).
LARPF	Land Acquisition and Resettlement Policy Framework
MPWH	Ministry of Public Works and Housing
NGOs	Non-Government Organizations
PIU	Project Implementation Unit
O&M	Operational and Maintenance
PIP	Project Implementation Plan
PW Agency	Public Works Agency responsible for water resources management (Provincial or <i>Kabupaten/Kota</i> Level)
SA	Social Assessment
WBOJ	World Bank Office in Jakarta

A. Introduction

1. The project is a continuation of the ongoing Dam Operational Improvement and Safety Project – 1 (DOISP) and will finance five components required to substantially improve Indonesia's dam operation and safety. The project builds on lessons learned from a number of related projects that advocate for an integrated, holistic approach to dam safety and operations within the context of the river basin to ensure the adequacy of the supporting institutional environment. The project is planned to be implemented from 2017-2022 and aimed at: (i) increase the safety of existing dams in selected locations, and (ii) strengthen institutions for operational effectiveness of dam management. Investments are prioritized based on objective criteria for identification and assessment and includes 23 major dams prioritized and prepared under DOISP, along with priority investments from the remaining 115 major dams in the portfolio. These sub-projects will be mostly located in Java (West Java, Central Java, Yogyakarta and East Java), and some in NTB, NTT, Lampung, East Kalimantan and South Sulawesi.
2. In the 1st year, the DOISP AF will finance the physical works in the 6 (six) dams already identified and studied in DOISP (**Appendix 1**). It is confirmed that there are no Indigenous Peoples (IPs) in the vicinity of the 6 sites. While the 6 dam sites for the first year financing and some other sites for the following years have been identified, there is a possibility that during the project implementation new dams are proposed for rehabilitation. This Indigenous Peoples Planning Framework (IPPF) is developed prior to project appraisal to anticipate the presence of indigenous community in the new proposed sites. When an indigenous community is present in, or has collective attachment to, the project area, further screening, verification and confirmation will be done through a social assessment.
3. An Indigenous Peoples Plan (IPP) will be prepared during the project implementation (after the screening, verification and confirmation stage) in the likely event that IPs will be affected by sub-project activities. The Bank requires the project involves indigenous peoples to design and implement projects in a way that fosters full respect to Indigenous Peoples' dignity, human rights, and cultural uniqueness and so that they: (a) receive culturally compatible social and economic benefits; and b) do not suffer adverse effects during the development process. Experience from DOISP shows that the activities are localized in the existing schemes that in the event that IPs are present there will be no significant adverse impacts.

B. Objective

4. The primary objectives of the Framework are:
 - a. Ensure that IPs participate in and benefit from the Project;
 - b. Avoid or minimize potentially adverse effects of the Project on IPs, and if it is unavoidable, develop and implement mitigation measures based on free, prior, and informed consultation resulting in broad support from the impacted IPs communities;
 - c. Maximize the potential positive effects of the Project on the IPs, based on free, prior, and informed consultations with the IPs ensuring that the design and implementation of the Project incorporate aspirations and needs of the IPs;

- d. This is in line with the national objective in empowering indigenous community (KAT), in which to grant of authority and belief to KAT to self-determine their own destiny and various development activity programs available within their location and their necessity through protection, reinforcement, development, consultancy and advocating to improve their social prosperity level.

C. Definition

5. The Government of Indonesia defines Indigenous Peoples as *Masyarakat Hukum Adat* (MHA). The national legislation, Minister of Home Affairs Regulations No. 52/2014 on Guidelines of Recognition and Protection of *Masyarakat Hukum Adat* defines MHA as Indonesian citizens who have distinctive characteristics, live in groups harmoniously according to their customary law, have ties to the ancestral origin and/or similarity in residential location, have a strong relationship with the land and the environment, as well as have value system which determines the economic system, political, social, cultural, legal and utilize a single region for generations.
6. The terms “indigenous peoples”, “indigenous ethnic minorities” and “tribal groups”, describe social groups with a social and cultural identity distinct from the dominant society that makes them vulnerable to being disadvantaged in the development process. For the purposes here, “indigenous people” is the term that will be used to refer to these groups.
7. Indigenous people are commonly among the poorest segments of a population. According to the Bank policy, the term “Indigenous Peoples” is used in generic sense to refer to s distinct, vulnerable, social and cultural group processing the following characteristics in varying degrees:
 - a) a close attachment to ancestral territories and to the natural resources in these areas;
 - b) self-identification and identification by others as members of a distinct cultural group;
 - c) an indigenous language, often different from the national language; and
 - d) presence of customary cultural, economic, social or political institutions.
8. For the purpose of this Framework, the definition of IP will follow both the criteria of the Bank and the national legislation.

D. Laws and Regulation Related to IPs

9. This framework takes into account issues related to IPs as included in the following Law and Regulations:

Law / Regulation	Summary
<p>UUD 1945 (Amendment) Chapter 18, clause #2 and Chapter 281 clause # 3;</p>	<p>Chapter 18(2): The State recognizes and respects units of indigenous communities and their traditional rights as long as they live, and in accordance with the development of society and the national principles as set out in the legislation.</p> <p>Chapter 281(3): The cultural identity and the rights of traditional communities are respected in line with the times and civilization.</p>
<p>Law No. 41 on Forestry (and Constitutional Court Decision No. 35/PUU-X/2012);</p>	<p>Chapter 67(1): Masyarakat Hukum Adat (MHA) along by the fact still exist are recognized the right to collect forest products to meet the needs of daily life the indigenous peoples concerned; conduct forest management activities based on customary law and not contrary to law; and empower to improve their welfare.</p> <p>Chapter 67(2): Affirmation of existence and abolishment of MHA as referred to in paragraph (1) shall be determined by the Local Regulation (Perda).</p> <p>Explanations of Chapter 67(1): MHA existence is recognized, if in fact meet the elements, among others:</p> <ul style="list-style-type: none"> a. Its society is still in the form of <i>paguyuban (rechtsgemeenschap)</i>; b. Have institution in the form of the customary authorities; c. Have a clear customary law; d. There are institutions and legal instruments, in particular customary judicial system is still adhered to; and e. Still harvest forest products in the surrounding forest to meet the needs of everyday life.
<p>MOHA Regulation No. 52/2014 on the Guidelines on the Recognition and Protection of MHA;</p>	<p>MHA are Indonesian citizens who have distinctive characteristics, live in groups harmoniously according to their customary law, have ties to the ancestral origin and/or similarity in residential location, have a strong relationship with the land and the environment, as well as have value system which determines the economic system, political, social, cultural, legal and utilize a single region for generations.</p>
<p>Ministry of Forestry Regulation No. 62/2013 on Amendment of Ministry of Forestry Regulation No. 44/2012 on Establishment of Forest Area</p>	<p>Chapter 18a: MHA is a group of people who are bound by customary law as part of the group member that shared a partnership of law because of similarities in the basic residence or descent.</p> <p>Chapter 18b: MHA region is the area to live and organize the life of MHA concerned with clear location and area limits and confirmed by the local regulation (Perda).</p>
<p>Joint Regulation of MOHA, Ministry of Forestry, Ministry of Public Works and Land Agency No. 79/2014 on Procedures to Settle Land Ownership Conflict in Forest Area</p>	<p>Chapter 9: Affirmation of MHA rights on forest area will be carried out in accordance with the provisions of the applicable legislations.</p>

Law / Regulation	Summary
Regulation of the Minister of Land Agency and Spatial Development No. 9/2015 on the Procedures to Establish the Land Communal rights on the MHA Land and Community Living in the Special Area (Revocation of Minister of Land Agency Regulation No. 5/1999 on Guidelines on Resolution of Indigenous Rights (<i>Hak Ulayat</i>) of MHA)	<p>Chapter 1(1): Communal rights on land are joint rights on land of an indigenous community that granted to specific community living in a forest or plantation area.</p> <p>Chapter 1(3): MHA is a group of people who are bound by customary law as part of the group member that shared a partnership of law because of similarities in the basic residence or descent.</p> <p>Chapter 3(1): Requirements of MHA includes a society that is still in the form of <i>paguyuban</i>; have institution in the form of the customary authorities; have a clear customary law; and there are institutions and legal instruments, in particular customary judicial system is still adhered to.</p> <p>Chapter 3(2): Requirements of community groups located in Specific Area (Forest and Plantation area) includes: physically dominating an area for at least 10 years or more in a row; still harvest forest products in a particular region and its surrounding areas to meet the needs of everyday life; the specific area is being the main source of life and livelihood; and there are social and economic activities that are integrated with community lifestyle.</p>
Law No. 6/2014 on Village	<p>Chapter 95(1): Village Official and village community can establish a customary village institution</p> <p>Chapter 95(2): Customary village institution is an institution that performs customary functions and become part of the original composition of the village that grew and developed on the initiative of the village community.</p> <p>Chapter 96: National, Provincial, City/District Governments to make the arrangements of MHA units and establish them into Customary Village (<i>Desa Adat</i>).</p>

E. Screening for Indigenous Peoples among the Affected Populations

1. Once the sub-project areas are defined, the PIU will screen, verify and confirm on the presence of the IPs in reference to the above characteristics. In doing so, PIU will consult experts, local universities or NGOs who have good knowledge or have worked on IPs in the area and use available references e.g. IP Study 2010 by the World Bank and other sources. Further, PIU will consult the community's concerned and neighboring communities to confirm that they are IPs.
2. In the case that the presence of IPs is confirmed and they will be part of or affected by the project, PIU under the guidance of Regional Safeguard Specialist, or assisted by consultant if necessary will carry out a Social Assessment (SA) at the village level, based on free, prior and informed consultations, with the affected IPs communities. Potential adverse and positive effects of the project will be identified during the SA preparation.

F. Social Assessment and Consultation

3. During the preparation of the sub-project proposal and/or sub-project approval, a

Social Assessment process will be undertaken to define the nature and scope of impacts on the IP among the affected populations. By gathering both qualitative and quantitative data in the sub-project areas, the basic social and economic profile of beneficiary population or project affected people will be developed.

4. The Social Assessment (SA) will be undertaken by qualified social scientists (or consultants). The SA will gather relevant information on the following: demographic data; social, cultural and economic situation; and social, cultural and economic impacts - positive and negative.
5. The Social Assessment will become a basis for formulating specific measures to consult with, and give opportunity for IP populations in participating decision making related to the sub-project, should they so desire. The Social Assessment process itself is often the method by which such consultations are undertaken, however they can be undertaken as a separate exercise.

G. Indigenous Peoples Plan

6. An Indigenous Peoples Plan (IPP) will be prepared by PIU under the guidance of regional safeguard specialist during the sub-project implementation (after the screening, verification and confirmation stage) in the likely event that IPs will be affected by sub-project activities. In cases where IPs communities are the beneficiaries of the sub-project(s), such as in the Community Participation (CP) program, full consultation and participation in decision making are mainstreamed into program cycles. In the case that a sub-project needs to acquire land belonged to IPs community or individual of the IPs community, the LARPF (Land Acquisition and Resettlement Policy Framework) applies.
7. Free, prior and informed consultations will be conducted through a series of meetings, including separate group meetings: indigenous village chiefs; indigenous men; and indigenous women, especially those who live in the zone of influence of the proposed work under sub-project. Discussions will focus on sub-project impacts, positive and negative; and recommendations for design of sub-projects. If the SA indicates that the proposed sub-project will cause adverse impact or that the IP community rejects the proposal, the sub-project will not be approved (and therefore no further action is needed). If the IP supports the sub-project implementation an IPP will be developed to ensure that the IP will receive culturally appropriate opportunities to benefit from the sub-project activities.
8. The IPP is prepared in a flexible and pragmatic manner, and its level of detail varies depending on the specific project and the nature of effects to be addressed. It will include the following elements, as needed:
 - a. A summary of Social Assessment;
 - b. A summary of results of the free, prior, and informed consultation that was carried out during sub-project preparation;
 - c. A framework for ensuring free, prior, and informed consultation with the affected indigenous communities during project implementation;
 - d. An action plan of measures to ensure that the Indigenous Peoples receive social

- and economic benefits culturally appropriate;
- e. The cost estimates and financing plan for the IPP;
 - f. Accessible grievance mechanism, which takes into account the availability of customary mechanism;
 - g. Monitoring, evaluation and reporting mechanism.
9. The IPP of each sub-project should be reviewed by the CPMU/CPIU and approved by the Bank before sub-project implementation begins.
 10. The IPP should be disclosed publicly in a local language so that accessible to the affected indigenous community as well as posted at the project/MPWH website (www.sda.pu.go.id)
 11. Upon agreed by the Bank, for the sub-projects that work at the existing systems with community-decision making process, a stand-alone IPP may not be required. The process to ensure that the IPs are included as beneficiaries and participate in any activities will be incorporated in the sub-project design. This may take place under the Community Participation program
 12. Under the CP program, potential adverse impacts and positive effects of the project on IPs, or involvement of IPs as beneficiaries will be identified once the villages are defined. Screening, verification and confirmation will be carried out by PIU assisted by community facilitators.
 13. In the case that IPs constitute the beneficiaries of the project, the design and implementation of the sub-project(s) will accommodate the aspirations and needs of the IPs.
 14. For the areas where IPs communities are identified, regional implementing unit will organize training for relevant facilitators in how to work with IPs communities in a meaningful way and in good faith to identify mechanisms for effective participation through free, prior and informed consultations, and address specific challenges in working with such groups, for example, how to deal with groups that may be in conflict with the larger community, etc.
 15. Since facilitators will be hired locally to the extent possible, they are expected to be familiar with such groups. Preference will be made to recruitment of local people with skills and qualifications fit to the project. They will also be rotated as necessary to ensure that those that have been trained in working with IPs, or have specific skill-sets that would be beneficial in working with such groups, are made available in the right places.
 16. Where the IPs communities speak a language different from Bahasa Indonesia, facilitation and socialization will be held in a language that these communities can easily understand. Relevant brochures and documents will be translated in the appropriate language. Provision has been made in the project budget to allow for additional translations of relevant project documents.
 17. The above aims at ensuring that IPs communities participate fully in the project with free, prior and informed consultations, are aware of their rights and responsibilities,

and are able to voice their needs during the community forum establishment as well as developing the community work plan.

H. Principles if a Sub-Project Affects Indigenous Peoples

18. There are a number of main steps to be applied when the IPs are presence in the sub-project area and are part of the beneficiaries, in relation to the development of Indigenous Peoples Plan (IPP).
19. PIU will ensure that free, prior and informed consultations are undertaken, in a language spoken by, and location convenient for, potentially affected IPs. The views of IP are to be taken into account during preparation and implementation of any sub-project, while respecting their current practices, beliefs and cultural preferences. The outcome of the consultations will be documented into the sub-project documents.
20. If the IPs conclude that the subproject will be beneficial to them, and that any minor adverse impacts, if any, can be mitigated, a plan to assist them will be developed based on consultation with the IPs and local representatives. The community should also be consulted to ensure that their rights and culture are respected. The assistance may also include institutional strengthening and capacity building of indigenous villages and community groups working with the sub-project. A process of free, prior, and informed consultation (FPIC) with the affected Indigenous Peoples' communities is required at each stage of the project, and particularly during project preparation, to fully identify their views and ascertain their broad community support for the project. The consultation methods applied should be appropriate to the social and cultural values of the affected Indigenous Peoples' communities and their local conditions and, in designing these methods, and gives special attention to the concerns of Indigenous women, youth, and children and their access to development opportunities and benefits. The procedure for FPIC is described in **Appendix 2**.
21. Where the indigenous peoples speak a language different from Bahasa Indonesia, relevant brochures and documents will be translated in the appropriate language. Provision has been made in the project budget to allow for additional translations of relevant project documents.
22. These steps will be aimed at ensuring that indigenous people participate fully in the project, are aware of their rights and responsibilities, and are able to voice their needs during the social/economic preliminary survey/exercise and in the formulation of the Irrigation and River Basin sub-projects and operational policies. In addition, they will be encouraged to submit subproject proposals that cater to their group's needs, if necessary.

I. Grievance Redress Procedures

23. The project has a complaint system that allows community members to raise issues or complaints at sub-project (village) level to the national level (see **Annex 17** on Grievance Redress Mechanism). The project has designated contact numbers for complaints via phone-calls and short text message (SMS) systems. There are designated staff members at the PIU/Regional Office/CPIU/CPMU responsible for following-up on complaints and ensuring that they are handled adequately. Where IPs communities are concerned, the facilitators under CP component will ensure that

grievance redress mechanisms are developed in culturally appropriate ways in close collaboration with the relevant group.

J. Reporting, Monitoring and Documentation

24. Besides specific attention to IP issues in supervision and monitoring, CPMU/CPIU will include these matters in their progress reporting (Quarterly Progress Report). The World Bank supervision missions will periodically pay special attention to ensure that the subprojects affecting IPs afford benefits to them and no adverse impacts on them.

K. Implementation Arrangement

25. CPMU/CPIU will be responsible for training the respective project implementing unit or local authorities to undertake the work of consultation, screening, social assessment, analyses and preparing IPPs and addressing any grievances.
26. PIU of individual sub-projects and local authorities are responsible for undertaking all those works related to IPs and implementing the IPP (arrange adequate staff and budget) under guidance of regional implementing unit. PIU may assign experts to ensure adequate implementation of the IPP.
27. Monitoring of the IPP will be undertaken biannually by Regional Safeguard Specialist of the CPIU as part of CPIU six-monthly monitoring report. External monitoring and evaluation may be conducted as part of DOISP AF external monitoring and evaluation process.

Appendix 1: List of DOISP AF Sub-Projects in the 1st Year Implementation Arrangement

No	Dam	B(BWS)	Location	Activities	IP Presence
1	Ubrug	Citarum	Kab. Purwakarta, West Java Province	Radial gate installation	No IP Presence
2	Ketro	Bengawan Solo	Desa Ketro, Kec. Tanon, Kab. Sragen, Central Java Province	<ul style="list-style-type: none"> • Rehabilitation of main dike • Minor replacement of hydro-mechanical • Sediment dredging 	No IP Presence
3	Penjalin	Pemali Juana	Desa Paguyungan, Kec. Bumiayu, Kab. Brebes, Central Java Province	<ul style="list-style-type: none"> • Rehabilitation of main dike, using diaphragm wall • Minor replacement of hydro-mechanical • Sediment dredging 	No IP Presence
4	Greneng	Pemali Juana	Dea Tunjungan, Kec. Blora, Kab. Blora, Central Java Province	<ul style="list-style-type: none"> • Replacing some dike material with better soil • Sediment dredging 	No IP Presence
5	Tempuran	Pemali Juana	Desa Tempuran, Kec. Blora, Kab. Blora, Central Java Province	<ul style="list-style-type: none"> • Replacing some dike material with better soil • Sediment dredging 	No IP Presence
6	Mrancang	Kalimantan III	Dea Mrancang, Kec. Gunung Tabur, Kab. Berau, East Kalimantan	<ul style="list-style-type: none"> • Leveling of undulating main dike, and repair spillway. • Minor replacement of hydro-mechanical • Sediment dredging 	No IP Presence

Appendix 2: Free, Prior, and Informed Consultation (FPIC) Procedures

A. Screening of IP Affected Communities

1. PIU with the support of Regional Safeguard Specialist of the CPIU will carried out screening of Indigenous Peoples presence in the subproject area by utilizing list of dams that potentially having IPs presence in the vicinity of the area.
2. PIU then verified the presence of the IPs in the village directly bordered with the reservoirs and in catchment areas of the reservoirs. PIU may assign Community Facilitator to assist in carried out this activity.
3. After that, PIU to confirm the presence and characteristics of IP that will receive project benefits and/or will be affected by the project by involving local communities affected by the subproject.

B. Initial Meeting

4. PIU will host an opening meeting where representatives from communities where FPIC will be sought are in attendance. These representatives and PIU will agree on the FPIC process, including: the nature of Good Faith Negotiations, how both PIU and the communities recognize that differences of opinion may arise, which in some cases may lead to setbacks or delays in reaching agreement. During this meeting the parties will agree on reasonable avenues of recourse to be applied in such situations. This might include seeking mediation or advice from mutually acceptable third parties.
5. The meeting will agree on type and format of project information to be made available, these include agreement of local language, type of media to be utilized, and timing.
6. The meeting will also identify and selection of local cadre from the IP affected communities to assist in facilitating all activities of the project cycle that involve/affect IPs.

C. Information Dissemination and Community Meetings

7. Prior to development of any plan and its implementation, it is important to conduct socialization and information dissemination to the Affected Communities.
8. The time and place of socialization and discussion should be arranged as appropriate to ensure all affected communities, including the IPs can participate and has equal opportunities to raise their concern.
9. Meeting with the affected communities may be conducted more than once, and may include conducted several Focus Group Discussions in different time and location so that all information regarding DOISP AF and the particular subproject is well distributed to the affected communities.
10. Information on DOISP AF and the particular subproject may be disseminated utilizing printed media such as posters and leaflets as agreed in the initial meeting.

Small and informal discussion may be utilized to ensure IPs understanding on the information. Simple and uncomplicated language should be use during this informal discussion.

11. To ensure that the IPs Affected Communities can access the relevant information, the above media for information dissemination should be posted and distributed near their settlement area and should use local language.
12. During the meeting it is important to confirm willingness of the IPs Affected Communities to participate in the program.
13. The decision taken during the meeting should get approval from all units in the IPs affected communities.

Annex 6 – Typical Environmental Impacts and Mitigation Measures

Source of Impact	Possible Impacts	Aspect	Proposed Impact Management Measures
Pre-Construction Phase			
Investigations and design and analysis of dams to be rehabilitated under DOISP AF	No Impact	N/A	N/A
Dissemination of information regarding project activities to reservoir and watershed communities	Occurrence of Community's Negative Perception	Community Perception	Proper dissemination of information to affected communities. Establish Grievance Mechanism at PIU level.
Sediment Surveys	Occurrence of Community's Negative Perception	Community Perception	Proper dissemination of information to affected communities. Establish Grievance Mechanism at PIU level.
Coordination between related institutions	No Impact	N/A	N/A
Possible limited land acquisition activities	Change of land ownership due to land procurement activity	Land Ownership	Develop and implement of Land Acquisition and Resettlement Plan based on Land Acquisition and Resettlement Policy Framework
	Occurrence of Community's Negative Perception due to derivative impact of the land procurement activity	Social Conflict	Proper dissemination of information to and consultations with affected communities. Establish Grievance Mechanism at PIU level.
Construction Phase			
Mobilization and demobilization of of Equipment, Materials, and personnel during civil works activities	Increased dust concentration (TSP) in the air	Air Quality	Develop and implement transportation management plan that include usage of material cover during material transportation and/or perform dust control by spraying water on the streets & roads when mobilization is performed during a particular hot day (dry season) twice a day (noon and afternoon)

Source of Impact	Possible Impacts	Aspect	Proposed Impact Management Measures
	Dust impact on human respiratory systems from material loss during transportation	Public Health	Develop and implement transportation management plan that include usage of material cover during material transportation
	Temporary traffic disruption due to transportation activities	Transportation	Develop and implement traffic management plan to ensure minimal traffic disruption
Manpower recruitment activities	Increase of Community's income (labor for civil works activities)	Economic impact	Ensure that salary of the workers shall be at a minimum the same as that of the Local Minimum Wage
	Social jealousy between migrant workers with local workers	Social jealousy	Include requirement to involve local communities as workforce in Contractor's contract. Establish Grievance Mechanism at PIU level.
Operation of temporary basecamp for workers	Increased domestic waste from civil works manpower activities	Domestic Waste	Provide septic tank and temporary trash collection point, no burn of waste will be allowed, and implement 3R (reduce, reuse, recycle) methodology
Civil works for rehabilitation/ remedial works of dam/reservoir sites (including access road)	Increased dust concentration (TSP) in the air	Air pollution	Installation of barriers around civil works area to prevent spreading of dust to local community
	Noise generated by civil works activities	Noise Pollution	Installation of barriers around civil works area to minimize noise and not doing any construction works at night
	Impacts from residual construction material run-off	Water Pollution	Develop and implement a working plan to control and minimize construction material run-off
	Temporary traffic disruption due to access road rehabilitation activities	Transportation	Develop and implement traffic management plan to ensure minimal traffic disruption
Demolitions works	Concrete debris as result of demolition works	Construction Waste	Proper handling of concrete debris disposal

Source of Impact	Possible Impacts	Aspect	Proposed Impact Management Measures
	Increased dust concentration (TSP) in the air	Air pollution	Installation of barriers around demolition works area to prevent spreading of dust to local community
	Noise generated by civil works activities	Noise Pollution	Installation of barriers around demolition works area to minimize noise and not doing any construction works at night
	Potential additional sediment load within water system from demolition	Water Pollution	Develop and implement a working plan to control and minimize demolition debris material run-off
Installation of instrumentation & equipment for rehabilitation of dams	No Impact	N/A	N/A
Construction of Check dam and riverbank stabilization measures	Concrete debris as result of demolition works	Construction Waste	Proper handling of concrete debris disposal
	Increased dust concentration (TSP) in the air	Air pollution	Installation of barriers around demolition works area to prevent spreading of dust to local community
	Noise generated by civil works activities	Noise Pollution	Installation of barriers around demolition works area to minimize noise and not doing any construction works at night
	Potential additional sediment load within water system from residual construction material run-off and demolition works	Water Pollution	Develop and implement a working plan to control and minimize demolition debris material run-off
	Decrease of water level due to construction activities	Water Quantity	Proper consultation with and dissemination of information to local communities in determining degree and timing of changes in operational schedule
Implementation Phase			
Sediment removal from reservoirs (dredging, flushing and diversion works)	Sediment sludge removed from reservoir	Sludge waste	Proper handling of sludge disposal, including anticipating hazardous content
	Change of water quality	Water quality	Proper consultation with and dissemination of information to local communities in determining timing of sediment removal activities

Source of Impact	Possible Impacts	Aspect	Proposed Impact Management Measures
	Social jealousy due to procurement of temporary disposal sites for dredged sediment	Social jealousy	Proper dissemination of information to and consultations with affected communities. Establish Grievance Mechanism at PIU level.
Dewatering activities	Decrease of water level and water quality due to dewatering activities	Water Quantity & Quality	Proper consultation with and dissemination of information to local communities in determining degree and timing of dewatering activities
Removal of Aquatic Weeds from Reservoirs	Organic waste	Organic waste	Proper handling of organic waste disposal
Clearing grass around dam	Organic waste	Organic waste	Proper handling of organic waste disposal
Changes in operational schedules of dams	Decrease of water level due to changes in operational schedules	Water Quantity	Proper consultation with and dissemination of information to local communities in determining degree and timing of changes in operational schedule
Community participation in reservoir and watershed management	Occurrence of Community's Negative Perception due to derivative impact of the land procurement activity	Social Conflict	Proper dissemination of information to affected communities and develop community participation plan for each sub-project with reference to Community Participation Guidelines. Develop and implement of Land Acquisition and Resettlement Plan based on Land Acquisition and Resettlement Policy Framework Establish Grievance Redress Mechanism at PIU level.
	Occurrence of social conflict due to social jealousy between participants of program and not participants	Social Conflict	Proper dissemination of information to affected communities and develop community participation plan for each sub-project with reference to Community Participation Guidelines. Establish Grievance Mechanism at PIU level.
	Increase of Community's income due to community participation programs	Economic Impact	Develop & implement community participation plan for each sub-project with reference to Community Participation Guidelines

Source of Impact	Possible Impacts	Aspect	Proposed Impact Management Measures
	Possible impacts on indigenous peoples' way of life	Indigenous Peoples	Develop and implement Indigenous Peoples Plan with reference to Indigenous Peoples Planning Framework.

Annex 7 – Data Requirements in Preparing Environmental Documents

Source of Impact	Possible Impacts	Aspect	Data Requirement	Source of Data
Pre-Construction Phase				
Investigations and design and analysis of dams to be rehabilitated under DOISP AF	No Impact	N/A	N/A	N/A
Dissemination of information regarding project activities to reservoir and watershed communities	Occurrence of Community's Negative Perception	Community Perception	a. Community Perception b. Community concern, complaints and resolve progress	a. Social Assessment b. Grievance Redress Record
Sediment Surveys	Occurrence of Community's Negative Perception	Community Perception	a. Community Perception b. Community concern, complaints and resolve progress	a. Social Assessment b. Grievance Redress Record
Coordination between related institutions	No Impact	N/A	N/A	N/A
Possible limited land acquisition activities	Change of land ownership due to land procurement activity	Land Ownership	Land ownership and utilization	Social assessment
	Occurrence of Community's Negative Perception due to derivative impact of the land procurement activity	Social Conflict	a. Community Perception b. Community concern, complaints and resolve progress	a. Social Assessment b. Grievance Redress Record
Construction Phase				
Mobilization and demobilization of Equipment, Materials, and personnel during civil works activities	Increased dust concentration (TSP) in the air	Air Quality	Air quality data	Air quality survey
	Dust impact on human respiratory systems from material loss during transportation	Public Health	Baseline of public health	Social assessment

Source of Impact	Possible Impacts	Aspect	Data Requirement	Source of Data
	Temporary traffic disruption due to transportation activities	Transportation	Baseline of transportation	Transport survey
Manpower recruitment activities	Increase of Community's income (labor for civil works activities)	Economic impact	a. Baseline of local socio-economic condition b. Work Specification c. % of local recruited manpower d. Total of local workforce	Social assessment
	Social jealousy between migrant workers with local workers	Social jealousy	a. Baseline of local socio-economic condition b. Community concern, complaints and resolve progress	a. Social assessment b. Grievance Redress Record
Operation of temporary basecamp for workers	Increased domestic waste from civil works manpower activities	Domestic Waste	a. Number of workforces in the basecamp b. Time to stay (up to the end of construction)	Project Work plan
Civil works for rehabilitation/ remedial works of dam/reservoir sites (including access road)	Increased dust concentration (TSP) in the air	Air pollution	Air quality data	Air quality survey
	Noise generated by civil works activities	Noise Pollution	Noise baseline data	Noise baseline survey
	Impacts from residual construction material run-off	Water Pollution	Turbidity, biochemical oxygen demand (BOD), total suspended solids (TSS), dissolved oxygen (DO), and temperature in water.	Periodical water sampling activities (including before construction works)
	Temporary traffic disruption due to access road rehabilitation activities	Transportation	Baseline of transportation	Transport survey

Source of Impact	Possible Impacts	Aspect	Data Requirement	Source of Data
Demolitions works	Concrete debris as result of demolition works	Construction Waste		
	Increased dust concentration (TSP) in the air	Air pollution	Air quality data	Air quality survey
	Noise generated by civil works activities	Noise Pollution	Noise baseline data	Noise baseline survey
	Potential additional sediment load within water system from demolition	Water Pollution	Turbidity, biochemical oxygen demand (BOD), total suspended solids (TSS), dissolved oxygen (DO), and temperature in water.	Periodical water sampling activities (including before construction works)
Installation of instrumentation & equipment for rehabilitation of dams	No Impact	N/A	N/A	N/A
Construction of Check dam and riverbank stabilization measures	Concrete debris as result of demolition works	Construction Waste	Estimated amount of waste generated	Project Management record
	Increased dust concentration (TSP) in the air	Air pollution	Air quality data	Air quality survey
	Noise generated by civil works activities	Noise Pollution	Noise baseline data	Noise baseline survey
	Potential additional sediment load within water system from residual construction material run-off and demolition works	Water Pollution	Turbidity, biochemical oxygen demand (BOD), total suspended solids (TSS), dissolved oxygen (DO), and temperature in water.	Periodical water sampling activities (including before construction works)
	Decrease of water level due to construction activities	Water Quantity	Turbidity, biochemical oxygen demand (BOD), total suspended solids (TSS), dissolved oxygen (DO), and temperature in water.	Periodical water sampling activities (including before construction works)

Source of Impact	Possible Impacts	Aspect	Data Requirement	Source of Data
Implementation Phase				
Sediment removal from reservoirs (dredging, flushing and diversion works)	Sediment sludge removed from reservoir	Solid Waste	Estimated amount of waste generated	Project Management record
Dewatering activities	Decrease of water level and water quality due to dewatering activities	Water Quantity & Quality	Turbidity, biochemical oxygen demand (BOD), total suspended solids (TSS), dissolved oxygen (DO), and temperature in water.	Periodical water sampling activities (including before construction works)
Removal of Aquatic Weeds from Reservoirs	Organic waste	Organic waste	Estimated amount of waste generated	Project Management record
Clearing grass around dam	Organic waste	Organic waste	Estimated amount of waste generated	Project Management record
Changes in operational schedules of dams	Decrease of water level due to changes in operational schedules	Water Quantity	Turbidity, biochemical oxygen demand (BOD), total suspended solids (TSS), dissolved oxygen (DO), and temperature in water.	Periodical water sampling activities (including before construction works)
Community participation in reservoir and watershed management	Occurrence of Community's Negative Perception due to derivative impact of the land procurement activity	Social Conflict	a. Community Perception b. Community concern, complaints and resolve progress	a. Social Assessment b. Grievance Redress Record
	Occurrence of social conflict due to social jealousy between participants of program and not participants	Social Conflict	a. Community Conflict b. Community concern, complaints and resolve progress	a. Social Assessment b. Grievance Redress Record
	Increase of Community's income due to community participation programs	Economic Impact	a. Baseline of local socio-economic condition b. Community concern, complaints and resolve progress	a. Social assessment b. Grievance Redress Record

Source of Impact	Possible Impacts	Aspect	Data Requirement	Source of Data
	Possible impacts on indigenous peoples' way of life	Indigenous Peoples	Social survey on indigenous peoples	Indigenous peoples assessment

Annex 8 – Procedure in Developing Environmental Management and Monitoring Effort (UKL-UPL) Report

According to the Minister of Environment Regulation No.16 of 2012 concerning the Guidelines for Preparation of Environmental Document, the following steps must be taken in the formulation and implementation of the UKL-UPL.

Project Management shall coordinate with District Environmental Agency (BLHD) and fill in the UKL-UPL forms provided by the Agency. Template of UKL-UPL and the Statement of Assurance for UKL-UPL Implementation is presented in **Annex 11**.

- (i) Project Management shall prepare the UKL-UPL document that considers impacts on the environment, natural habitats, pest management in the Project Activity's area of influence, including analysis of alternatives and any additional requirements based on the screening of potential impacts.
- (ii) The UKL-UPL document should also contain information such as budget estimation for programs or activities of environmental management, public consultation programs and institutional arrangements for the UKL-UPL implementation.
- (iii) Project Management submits the completed forms to the Local Environmental Agency for review/evaluation.
- (iv) Local Environmental Agency issues approval for the UKL-UPL proposed.
- (v) Project Management submits copy of the final UKL-UPL to Governor/Mayor/*Bupati* through Local Environmental Agency.
- (vi) Project Management implements the UKL-UPL.
- (vii) Project Management reports on UKL-UPL implementation every 6 months to BLH and Governor/Mayor/*Bupati*.

For activities that did not require an UKL-UPL, a Statement of Assurance for Implementation of Environmental Management and Monitoring (SPPL).

Note: The environmental assessment of Project Activities should address pest management issues where relevant and associated environmental and social management plans should promote the implementation of Integrated Pest Management approaches. Pest Management is addressed by the project proponent during the preparation of UKL-UPL.

Annex 9 – Recommended Screening for Environmental Management under DOISP AF Project

No.	Type and Size of Activity	Holding Environmental management documents	Recommended Procedures for Environmental Management
1	Very minor rehabilitation or beyond Environmental Minister Regulation No. 5/2012	Environmental documents available and implemented	SPPL and SOP for rehabilitation
2	Minor rehabilitation related to Environmental Minister Regulation No. 5/2012	Environmental documents available and implemented	UKL-UPL
3	Minor rehabilitation related to Environmental Minister Regulation No. 5/2012	Management documents not implemented	UKL-UPL
4	Minor rehabilitation related to Environmental Minister Regulation No. 5/2012	Not available	SPPL
5	Major-category rehabilitation based on Environmental Minister Regulation No. 5/2012	Documents available and implemented	Updated/Revised RKL-RPL
6	Major-category rehabilitation based on Environmental Minister Regulation No. 5/2012	Documents available and not implemented	Not funded
7	Major-category rehabilitation based on Environmental Minister Regulation No. 5/2012	No environmental management document available	Not funded

Annex 10 – Guidelines of Preparation of Environmental Management and Monitoring Effort (UKL-UPL) Document

The following form is the Format for the Environmental Management and Monitoring Efforts (UKL-UPL). It describes the impact of the planned activities on the environment and how it will be managed. This format complies with the Regulation of the Minister of Environment No. 16/2012 which can be referred to for further guidance.

Title of Chapter/Sub-Chapter	Content/Remarks
Statement Letter from Project Proponent	
a.	The statement letter from project management will state their accountability to ensure that the Environmental Management Plan (UKL) and Environmental Monitoring Plan (UPL) will be done. This statement Letter should be signed on a stamp duty acknowledged by the Head of BLH, (local environmental agency) and the Head of Local Government (Governor/Bupati/Mayor). Project management consists of those parties who prepare and implement the Project Activities, those parties who are responsible for the operations and maintenance of the Project Activities, and other parties responsible for environmental management and monitoring.
I. IDENTITY OF PROJECT PROPONENT	
1.1 Name of Proponent
1.2 Name of Project Management Entity	Name of project management entity and their job description at each stage of the Project Activities, which should include: a. Agency or office responsible for the preparation and implementation of Project Activities. b. Agency or office responsible for the operations and maintenance of the Project Activities after the work is completed. c. Agency or office responsible for environmental management and monitoring.
1.3 Office Address, Postal Code, Phone and Fax No., Website and Email	Clear address of the named agencies or offices related to the Project Activities in accordance to the point 1.1 above.
1.3 Office Address, Postal Code, Phone and Fax No., Website and Email	Clear address of the named agencies or offices related to the Project Activities in accordance to the point 1.1 above.
II. DESCRIPTION OF PROJECT ACTIVITIES AND ITS IMPACT	
2.1 Name of Project Activities	Name of Project Activities in a clear and complete manner.
2.2 Project Activities Location (with map or location illustration)	a. Location of the Project Activities in a clear and complete manner: <i>Kelurahan/Village</i> , District/city, and Province where the Project Activities and its components take place. b. Location of the Project Activities should be drawn in a map using an

Title of Chapter/Sub-Chapter	Content/Remarks
	adequate scale (for example, 1:50.000, accompanied with latitude and longitude of the location).
2.3 Scale of the Project Activities	An estimation of the scale and type of Project Activities (using accepted units of measurement). For example: the construction of a market of certain capacity may need to be accompanied by supporting facilities in line with the Environmental Management Plan that must mention the type of component as well as the scale.
2.4 Conformity the location of planned activities with local government spatial plan	A brief explanation of conformity of planned activities location with spatial plan in accordance with laws and regulation. The information may BE presented in the form of overlay map between project site boundary with applicable Local/Regional Spatial Plan (RTRW).
2.5 Principal approval on planned activities	Outlines approval in principle stating that the type of activity in principle was approved by local authorities. Evidence of formal approval should be attached.
2.6 Component of Project Activities in brief outline	<p>A brief and clear explanation on any component of the Project Activities that have potential environmental impacts. Work components should be divided based on stages as follows:</p> <ol style="list-style-type: none"> a. Pre-construction, for example: mobilization of workforce and materials, transportation, etc. b. Construction, for example the use of ground water, laying out of utility pipes, etc. c. Operations and Maintenance: Post-construction, for example: clearing of excavated waste material, etc. <p>Also, attach the flowchart/diagram to explain the flow of work to be done, if applicable.</p>
III POTENTIAL ENVIRONMENTAL IMPACT	Explain in a brief and clear manner about any Project Activities with potential environmental impacts, source of impacts and type of impacts that might occur, magnitude of impacts, and other matters needed to describe any potential environmental impacts on the natural and social environment. Such descriptions can be presented in tabulation, with each column representing each of the aspects. A description of the size or magnitude of the impacts should be accompanied with measurement units based on applicable laws and regulations or specific scientific analysis. Pest Management is addressed by the project proponent during the preparation of UKL-UPL (according to Public Works Ministerial Decree No. 10/PRT/M/2008,)
IV. ENVIRONMENTAL MANAGEMENT AND MONITORING PROGRAM	
4.1 Environmental Management Plan	<ol style="list-style-type: none"> a. The Environmental Management Plan consists of the plan itself, as well as the party in charge, frequency of interventions, implementation schedule, and types of mechanisms (e.g.: procedures for management, methods, etc.) in order to mitigate the environmental impacts identified Section III above. b. The plan can be presented in a table format, which at minimum contains the following columns: type of impact, source, magnitude, threshold, management plan, location and frequency of interventions, party in charge, and other remarks.
4.2 Environmental Monitoring Plan	<ol style="list-style-type: none"> a. The Environmental Monitoring Plan consists of the plan itself, party in charge, location and frequency of interventions, implementation schedule, and types of mechanisms (e.g.: procedures for monitoring, methods, etc.) in order to monitor the environmental management plan described in

Title of Chapter/Sub-Chapter	Content/Remarks
	<p>section 4.1 above.</p> <p>b. The plan can be presented in a table format, which at minimum contains the following columns: type of impact, source, magnitude, threshold, management plan, frequency of interventions, party in charge, and other remarks. In this monitoring plan, the thresholds should comply with the prevailing laws and regulations that are applicable according to the environmental impacts as already identified in Section III above.</p>
V. SIGNATURE AND OFFICE SEAL	After the UKL-UPL document is prepared and complete, the Project Manager should sign and put an official seal on the document.
VI. REFERENCE	Insert various references used in the preparation of UKL-UPL.
VII. ATTACHMENTS	Attach any relevant documents or information to the UKL-UPL, e.g. tables displaying the monitoring results, and others.

Annex 11 – Format for Statement of Assurance for Environmental Management and Monitoring (UKL-UPL) Implementation

Statement of Assurance for UKL-UPL Implementation

No:.....

In an effort to prevent, minimize and/or address the potential environmental impacts from the Construction Work of....., in the District of.....Province of....., as well as in accordance to the duty and authority of the Directorate....., of the Directorate General....., of the Ministry of Public Works and Housing shall carry out an Environmental Management Plan (UKL) and Environmental Monitoring Plan (UPL) and include the recommendations from UKL-UPL into the Detailed Design.

For the next stage, which is the physical work, implementation of the recommendations from UKL-UPL shall be done by the party in charge for the physical work, which is “Satker..... of the Province.....”.

This statement is duly made, as confirmation to support the Environmental Management Plan (UKL) and Environmental Monitoring Plan (UPL) on the Construction Work for the Construction of, in the District of....., Province.....

Jakarta,.....

DIRECTORATE GENERAL.....

DIRECTORATE.....

Project Manager

.....
NIP.....

Annex 12 – Format of the Statement of Assurance for Implementation of Environmental Management and Monitoring (SPPL)

Format of SPPL

(For activity plan not requiring any UKL-UPL – based on the Regulation of the Minister of Environment No. 16/2012)

We, the undersigned below:

Name :
 Job position :
 Address :
 Phone No. :

As party in charge of the environmental management of:

Company Name/Business :
 Address company/Business :
 Phone Number of the Company :
 Type of Business :
 Production Capacity :
 Permit already obtained :
 Purpose :
 Amount of Capital :

with expected environmental impacts taking place:

- 1.
- 2.
3. etc.

will implement measures to manage environmental impacts:

- 1.
- 2.
3. etc.

hereinafter, we confirm that we are capable and committed to:

- (1) Maintain the public order and always maintain good relations with the neighbouring community.
- (2) Maintain the hygiene, cleanliness, and order of the project site.
- (3) Be responsible for any environmental damage and/or pollution caused by the business and/or the project activity.
- (4) Be willing to be monitored for environmental impacts of our business and/or project activity by the authorized officer.
- (5) Take the responsibility according to prevailing laws and regulation, if we fail to comply with commitments stated above.

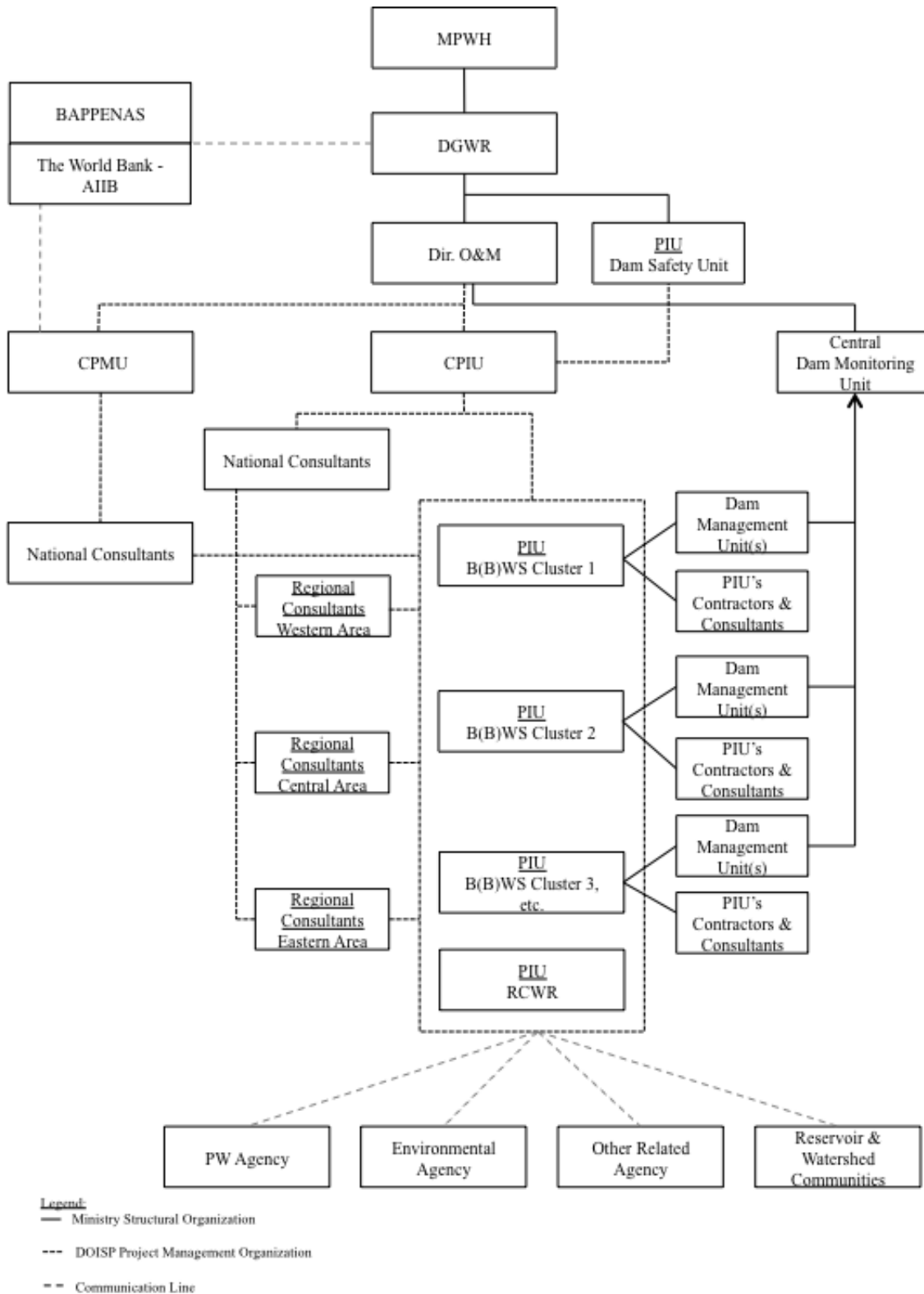
This SPPL shall be effective from the date of its issuance, up to the completion of our business and/or project activity. If the project undergoes any change of location, design, process, type of raw materials and/or supporting materials, this SPPL must be revised.

Date, Month, Year
Project Manager,

Stamp duty of Rp, 6.000,-
Signature
Company seal
(.....Name.....)

Registry number from the local environment agency	
Date	
Receiver	

Annex 13 – DOISP AF Implementation Organization Structure



Annex 14 – Minutes of Public Consultation for DOISP AF Draft Environmental and Social Management Framework (ESMF)

Introduction

Dam Operational Improvement and Safety Project (DOISP) is a long-term project cooperation between the Government of Indonesia and the World Bank to substantially improve Indonesia's dam operation, dam structures and other dam related infrastructure in order to ensure continued water supply for beneficial local community use. DOISP was implemented in 2009-2016. As a continuation of the project, DOISP AF will be implemented in 2017-2022 and aims to (i) improve the operation and safety of dams related to the supply of raw water in more than 100 dams owned by the MPWH; and (ii) strengthen institutions in order to improve the effectiveness of operational management and maintenance of the dam owned by the MPWH.

Environmental and Social Management Framework (ESMF) seeks to clarify the principles, rules, guidelines and procedures, and organizational arrangements to be applied to environmental and social management plan for DOISP AF sub-projects. ESMF serves as the main basis for the management of environmental and social impacts of the sub-project activities.

ESMF consists of scoping of activities that will be carried out in DOISP AF, screening of requirements for environmental and social assessment based on the Government regulations and the World Bank safeguard policies, identification of impacts that will occur for DOISP AF sub-projects which will be implemented in the first year as well as the impact will take place on the sub-project DOISP AF in general, the proposed management measures/impact mitigation and monitoring its implementation, document preparation procedures and the necessary environmental document required. In addition, the ESMF document also includes plans to increase the capacity of institutions and institutional and framework ESMF implementation plan, including implementation of the organizational structure of the ESMF.

DOISP AF ESMF preparation process began with a review of project documents and related legislation; discussions between MPWH team and the World Bank team, public consultation with stakeholders, and accommodations of inputs obtained during the public consultation and improvement ESMF document.

Objectives of the Public Consultation

Public consultation is part of the process in developing ESMF document and implemented to obtain inputs from stakeholders in improving the ESMF. The purposes of public consultation are to:

- present the draft ESMF to ensure fulfillment of environmental and social aspects, in accordance with the applicable laws and legislation;
- obtain feedback from stakeholders to improve the ESMF and to assess the extent of how ESMF can be implemented; and

- obtain feedback about the role of the parties in the implementation of ESMF.

Venue and Agenda

The public consultation of draft ESMF for DOISP AF was held on Thursday, November 3, 2016 at Hotel Ambhara, Jakarta. Invitation letter along with the list of invitees can be found in Appendix 1. The agenda of this public consultation is as follows:

Time	Agenda	Info
08.00 – 09.30	Registration of Participants	
09.30 – 10.00	Opening	<ul style="list-style-type: none"> • Ir. Lolly Martina Martief, MT. Direktur Bina Operasi dan Pemeliharaan, Ditjen. SDA, KemenPUPR • Abdul Malik Sadat Idris, ST M.Eng, Kasubdit Dungai, Pantai, Waduk dan Danau, Direktorat Pengairan dan Irigasi, Bappenas
	<i>Coffee Break</i>	
10.15 – 10.45	Introduction of Dam Operational Improvement and Safety Project – 2 (DOISP AF)	M. Adek Rizaldi, Kepala Subdit Operasi dan Pemeliharaan Bendungan dan Danau, Dir. Bina OP, Ditjen SDA, KemenPUPR
10.45 – 11.15	Lessons Learned from the implementation of environmental and social management of DOISP	Rohadi, Team Leader Konsultan CPIU DOISP
11.15 – 11.45	Draft Environmental and Social Management Framework (ESMF) for DOISP AF	PIP Safeguard Consultant
11.45 – 13.00	Discussion and Q&A	Moderator: Joko Mulyono, Balai Bendungan
13.00 – 13.45	<i>Lunch</i>	
13.45 – 14.00	Summary of Discussion and Closure	

Materials presented in this public consultation are available in **Appendix 2**.

Participants of Public Consultation

The public consultation was attended by 35 participants, and includes representatives of DOISP and DOISP AF implementing institutions, as well as representatives of interested parties both at national and local level. The list of attendance of the public consultation can be seen in **Appendix 3**.

Summary of Discussion

- a. Fatilda Hasibuan, Walhi
 - From the presentation it appears that the mindset for this Project is the people for the dam and not the dam for the people. Community participation is presented in

cliché approach. Does this way of thinking can be transformed into “dam for the people”. For example, dam sedimentation reduction measures are not done by eliminating communities’ annual crops around the green belt and replace them with perennials, but rather by maintaining the annual crops and implementing other programs to reduce sedimentation. More over there is no detailed information about the dam, the owner of the dam, main beneficiaries of the dam (whether public or private sector), and the condition of each dam. It is important to ensure that the rehabilitated dams are utilized by the public.

Responses:

- Scope of DOISP is existing dam, so it does not include construction of new dams. Focus of this project is dams that are generally aging, and its activities include the aspect of dam functions and as well as safety aspect. The main function of the dam is to maintain the water security, to meet the needs of the people. There are two specific functions of the dam: for water conservation (saving water, rain water harvesting to replenish ground water) that usually in NTT area, and for water utilization as raw water (irrigation, water supply, hydropower).
- DOISP AF will only include dams managed by the government (MPWH), and not dams managed by private sector, therefore DOISP AF beneficiaries are not private companies.
- Community participation program has been done in DOISP, so this program is not just a cliché. Later on our counterparts from Central Java can tell more about this, including the results of the program that was carried out. We always involve the community because one of dam’s main problems is dam sedimentation issue that caused by the activity around the reservoir. Therefore, the role of the community in the success of this program is extremely important.
- I haven’t seen how the ESMF consider the culture of indigenous peoples so that the rehabilitation of the dam is not destructive to the indigenous peoples, its cultural, political, economic, and fulfillment of FPIC.

Responses:

- It was explained in the presentation on types of documents need to be developed based on local condition and scope of each sub-project.
- Document that can be downloaded from Water Resources Directorate of MPWH (<http://sda.pu.go.id>) website consists of three documents, namely Draft ESMF; Draft Policy Framework Land Acquisition and Resettlement (LARPF) which will serve to guide the implementation of land acquisition; as well as Draft Indigenous Peoples Planning Framework (IPPF), which already includes the principles of FPIC.

- For activities that will create adverse impacts require AMDAL.

Responses:

- Right, the type of environmental document that need to be developed is highly depend on scope of activities and impacts that may result.

b. Arman Efendi, Kasi OP BWS Kalimantan III

- We haven't received the ESMF document therefore can't give any inputs.

Responses

- As stated in the invitation letter that the draft ESMF document can be downloaded at the website of the Directorate Water Resources MPWH, (<http://sda.pu.go.id>) since the document cannot be distributed along with the invitation due to its large size. Ideally, the participants had read the document before the public consultation. In addition, ESMF document copies can also be obtained from the committee of public consultation.
- The environmental management presented was still normative and general, and not yet customized according to the condition of each sub-project, each sub-project has different characteristic thus its impact will be different. If the management measures already customized according to each sub-project, we will give our inputs.

Responses

- DOISP AF consists of many sub-projects with different scope of activities therefore will result different impacts. Therefore, impacts identified in ESMF are compilation of impacts that might occur based on all activities that might be conducted. In practice these impacts will be different for each site and sub-project because each location has different condition. Based on the ESMF, each sub-project is required to develop and implement its Environmental and Social Management Plan (ESMP), including UKL-UPL.

c. Supriyono, Pelaksana Teknis Satker OP SA Nusa Tenggara I

- Currently we are managing 70 dams, however only 9 dams were planned as dam, the rest oh them were retention basins that change function into dams. These 61 dams' AMDAL is not yet updated. Every 6 months we submit report of implementation of environmental management according to AMDAL for each dam that has AMDAL document. Also, we only have 1 Dam Management Unit that manages 2 islands (Lombok and Sumbawa Island). From institutional point it is preferable to set each island managed by 1 DMU. Is this included as part of DOISP AF scope?

Responses:

- Most of dams in NT1 area are retention basins that change status into dam, because they already fit dam criteria. When status of a retention basin changed into dam, all dam requirements should be implemented accordingly.

- Based on MPWH evaluation we found that each B(B)WS has different structure of organization. Some are based on region/location while others based on field of activity (irrigation, river, shore, etc.). Structure of organization depends on each B(B)WS consideration to ensure effective management so that activities can be implemented. We plan to improve institutional arrangement in the future, but not as part of DOISP AF activities. Additionally, number of DMU is corresponded to the workload of each B(B)WS and there is no regulation governing this.
- There are still confusion/uncertainty on types of activities that requires AMDAL or UKL-UPL, preferably this information is included in ESMF as guidelines for project implementer.

Responses:

- The type of activities that require AMDAL or UKL-UPL shall refer to Minister of Environment Regulation No. 11 Year 2012 on Criteria of Scope of Activities and Its Environmental Permit. Summary of this regulation already included in the ESMF. However, it is need to be noted that sometime local government has different regulation on list of business activities and the required environmental permits, therefore it is important to always coordinate with local government.
 - For 6 sub-projects that will be implemented in 2017, 5 of them required UKL-UPL and are being prepared by consultant.
- d. Anindhita DK, Direktorat Perencanaan dan Evaluasi Pengendalian DAS (PEPDAS), Ministry of Environment and Forestry
- About Component 3 – Mitigation of Dam Sedimentation, especially sediment management program in catchment areas. We would to inform that Directorate of PEPDAS has developed Catchment Area Management Plan in 118 priority catchments, and most of them already ratified. These Catchment Area Management Plans were developed in coordination with many parties, and already include issues and problems in catchment areas as well as matrix of roles of and coordination with related institutions. These Plans also include plan of programs that will be implemented for each region for the next 15 years.
 - Also, we would like to inform that Ministry of Environment and Forestry has ratified 18 local regulation (Perda) on Catchment Conservation in 16 provinces and 2 *kabupaten*.
 - Ministry of Environment and Forestry is highly support the community participation activities, including rehabilitation and greening upstream areas. From year 2015-2016, Directorate of KPA also targeting rehabilitation activities of catchment areas, that includes planting and building construction. We are willing to share data and information on our programs.

Responses:

- Thank you for your information. We will coordinate further with Ministry of Environment and Forestry, especially to synchronize location of catchment

areas. In the future, the community participation program will also involve Ministry of Environment and Forestry.

e. Eko Yuniarto, Kabid SWP, Dinas PSDA, Provinsi Jawa Tengah

- We were involved in the implementation of DOISP from 2011-2014. Until now there are 34 community groups established in 34 villages, 11 kecamatan, covering 7 dams. We think that it is important to ensure the sustainability of these groups. We hope that we will continue to empower these community groups in DOISP AF.
- We hope that DOISP AF will consistently continue the program in 7 dams. There are 3 dams not yet included in list of DAM in DOISP AF.
- We think that in implementation of the sub-project, it is important to disseminate information (socialize) to local community.

Responses:

- We would like to thank four implementing partners for the contribution, especially in the implementation of DOISP. We inform you that in Directorate O&P also has community development programs around the reservoir/dam. One of the programs is inviting communities of people who can take advantage of the opportunities that exist in the reservoir. For example, in Kalimantan III (Semboja Reservoir) there are existing community around the reservoirs that can utilized and get benefit from the reservoir, but need to note that they do not interfere with or alter the function of the reservoir. In Bandung also there are community that utilize aquatic weed (*eceng gondok – Eichornia crasypes*) for home industry. Additionally, it will also invite the Creative Economy Agency and the Ministry of Cooperatives to get information on their program at locations around the dam. Hopefully these activities can be replicated in other dams with similar problems.
- DOISP AF activities are continuation of DOISP therefore DOISP activities that need follow-up or comprehensive action will be a priority in DOISP AF.
- Community groups that have established will still be involved in DOISP AF to achieve sustainability in community empowerment.
- Additionally, we change the concept in DOISP AF where we will place consultants in 3 regional areas, to support in resolving issues in local level so that it can be handled faster.

f. Panca Hermawan, Kabid OP

- One of activities in catchment management is for green belt area, however old dam that was built in Dutch era does not have green belt and directly border with the community. We need guidance in community participation program for this condition.
- About early tender, please inform us whether the design has been finalized, especially on location of sedimentation because without that information it will be difficult for us to conduct the early tender.

Responses:

- Actually dams that were built in Dutch era also have green belt, however due to development of the areas the green belt then transformed into settlement. We will discuss further together to tackle this issue.
- Regarding early tender, the design is finalized and the consultant developing it also joins this event. After the public consultation we can discuss more on 2017 works.

g. A. Ikana Dani, Kasi Perencanaan OP, BBWS – SO, Yogyakarta

- For dams with multi-functions, what is the contribution of related institutions such as PDAM?

Responses:

- For example, the PJT2 is providing budget for water resources management services, however the budget is spent and managed directly by PJT2, and cover among others catchment area rehabilitation, etc., however the budget amount is very less. Because of its small amount, Citarum BWS also prepare budget for operation and maintenance because 80% of reservoir output is used for irrigation (only 20% utilize by PJT2). Unlike the PJT1 where 100% output is utilized for commercial purpose, Berantas BWS doesn't allocate budget for operation and maintenance of the dams.

Summary of Discussion

- DOISP AF is a continuation of DOISP and will focus on function improvement of existing dams owned by MPWH.
- The difference between DOISP AF with DOISP is the increase in number of dams (from 34 dams to more than 100 dams) and the type of dam improvement from minor rehabilitation to major rehabilitation.
- DED and OD of around 134 dams is to be followed up, therefore we need ESMF.
- Main objectives of DOISP AF are:
 - Improvement of dam safety instruments) (O&M, EAPs, etc.)
 - Application of asset management
 - Community participation in dam management and catchment area rehabilitation program
 - SS dams with high risk factor
- Dam rehabilitation in DOISP AF covers upstream areas of dam (catchment areas) and downstream areas of dam (settlement/agriculture/flood area).
- There are in total of 213 dams in Indonesia and these dams have different characteristics, therefore center of dam technology is needed.
- One of lessons learned from DOISP is that environmental management is not entirely implemented according to its UKL-UPL by B(B)WS.

- Need definite limitation on UKL-UPL, for project implementation.
- Need to socialize to PIU/B(B)WS on explanation of ESMF DOISP AF.
- Way forward of DOISP community participation programs should be well planned. One way is by conducting competition among local communities around dam.
- ESMF to be used as the basis of social and environmental management of DOISP AF sub-projects.
- In DOISP AF implementation, PIU B(B)WS should be able to identify impacts that may occur and to formulate impact management measures.
- Impact management activities can involve related institution (such as Ministry of Environment and Forestry, Environment Agency, BAPPEDA, etc.) and this involvement need to be done as early as possible.
- Obligations on impact management should also be followed up by PIU's contractors/consultants and supervised jointly by implementing DOISP AF as well as by the surrounding community.
- Impacts identification and recommendation of impact management measures are for further input that can be given through email or telephone indicated on the screen or in the invitation letter before 10 November 2016.

Photo Documentation



Appendix 1- Invitation Letter and List of Invitees



Nomor : HM. 01.06 - AF / 745
 Sifat : Biasa
 Lampiran : 1 (satu) berkas
 Hal : **Undangan Konsultasi Publik Kerangka Pengelolaan Lingkungan Hidup dan Sosial DOISP-2**

Jakarta, 18 Oktober 2016

Kepada Yth,
(Sesuai daftar terlampir)

Di –
 Tempat

Dalam rangka penyusunan Kerangka Pengelolaan Lingkungan Hidup dan Sosial (*Environmental and Social Management Framework – ESMF*) untuk penyelenggaraan kegiatan Proyek Peningkatan Operasional dan Keamanan Bendungan – 2 (*Dam Operational Improvement and Safety Project-2/DOISP-2*) di lingkungan Direktorat Jenderal Sumber Daya Air yang akan dijadikan sebagai panduan dalam pelaksanaan pengelolaan aspek lingkungan dan sosial pada kegiatan DOISP-2, maka perlu dilakukan konsultasi publik secara partisipatif.

Sehubungan dengan hal tersebut, kami mengundang Bapak/Ibu untuk berpartisipasi dalam kegiatan "**Konsultasi Publik Pembahasan Draft Dokumen ESMF untuk DOISP-2**" yang akan diselenggarakan pada:

Hari/Tanggal : Kamis / 3 November 2016
 Waktu : (agenda terlampir)
 Tempat : Hotel Ambhara
 Jl. Iskandarsyah Raya No. 1, Jakarta

Akses terhadap Rancangan Dokumen ESMF DOISP-2 dapat diunduh di website Direktorat Jenderal Sumber Daya Air - Kementerian Pekerjaan Umum dan Perumahan Rakyat melalui link www.sda.pu.go.id. Untuk informasi lebih lanjut terkait penyelenggaraan acara ini dapat menghubungi sdr. Ronny (021-7395500 / HP. 0811 88888 42).

Demikian disampaikan. Atas perhatiannya diucapkan terima kasih.

Direktur Bina Operasi dan Pemeliharaan

Ir. Lolly Martina Martief, MT.
NIP. 196001101988032001

Tembusan Yth:

1. Direktur Jenderal Sumber Daya Air;
2. Sekretaris Direktorat Jenderal Sumber Daya Air;
3. Kasubdit. OP Bendungan dan Danau;
4. Pertinggal.

Lampiran I*Daftar Alamat Surat*

Nomor : HM.01.06-AR/745
 Tanggal : 18 Oktober 2016

1. Direktur Pengairan dan Irigasi, Kementerian PPN/BAPPENAS;
2. Direktur Perencanaan dan Evaluasi Pengendalian DAS, Kementerian LHK;
3. Kepala Puslitbang SDA, Balitbang, Kementerian PUPR;
4. Senior Water Resources Specialist, World Bank Group;
5. Kepala BBWS Mesuji Sekampung;
6. Kepala BBWS Cimanuk Cisanggarung;
7. Kepala BBWS Citarum;
8. Kepala BBWS Pemali Juana;
9. Kepala BBWS Serayu Opak;
10. Kepala BBWS Bengawan Solo;
11. Kepala BBWS Pompengan Jeneberang;
12. Kepala BWS Sumatera I;
13. Kepala BWS Bali Penida;
14. Kepala BWS Kalimantan III;
15. Kepala BWS Nusa Tenggara I;
16. Kepala BWS Nusa Tenggara II;
17. Kepala Balai Bendungan, Ditjen. SDA;

18. Kepala Dinas PSDA Provinsi Jawa Barat;
19. Kepala Dinas PSDA Provinsi Jawa Tengah;
20. Kepala Dinas Pekerjaan Umum Provinsi Bali;
21. Kepala Dinas Pekerjaan Umum Provinsi Kalimantan Timur;
22. Kepala Dinas Pekerjaan Umum Provinsi Nusa Tenggara Barat;
23. Kepala BPLHD Provinsi Jawa Barat;
24. Kepala BPLHD Provinsi Jawa Tengah;
25. Kepala BLH Provinsi Bali;
26. Kepala BLH Provinsi Kalimantan Timur;
27. Kepala BLH dan Penelitian Provinsi Nusa Tenggara Barat;

28. Dekan Fakultas Teknik, Universitas Indonesia;
29. Dekan Fakultas Teknik Sipil dan Lingkungan, Institut Teknologi Bandung;
30. Dekan Fakultas Teknik Sipil dan Perencanaan, Institut Teknologi Sepuluh Nopember;
31. Dekan Fakultas Arsitektur Lansekap dan Teknologi Lingkungan, Universitas Trisakti;

32. Perwakilan World Bank Group;
33. Sekretaris CPMU/CPIU DOISP;
34. Konsultan TA CPMU DOISP;
35. Konsultan TA CPIU DOSIP;
36. Konsultan TA PIP DOISP-2;

37. Wahana Lingkungan Hidup Indonesia (WALHI);
38. debtWATCH Indonesia;
39. Rimbawan Muda Indonesia (RMI);
40. Aliansi Masyarakat Adat Nusantara (AMAN);
41. CKNet-INA.

Lampiran II

Undangan Konsultasi Publik Kerangka Pengelolaan Lingkungan Hidup dan Sosial DOISP-2

Nomor : HM 01.06 -AR/745

Tanggal : 18 Oktober 2016

No	Waktu	Acara	Keterangan
Kamis, 3 November 2016			
1	08.00 – 09.00	Registrasi Peserta	
2	09.00 – 09.30	Pembukaan	
3	09.30 – 10.00	Pengenalan Proyek Peningkatan Operasional dan Keamanan Bendungan – 2 (DOISP-2)	
4	09.45 – 10.15	Lessons Learned dari pelaksanaan pengelolaan lingkungan dan sosial dalam DOISP-1	
5	10.15 – 10.30	<i>Coffee Break</i>	
6	10.30 – 11.30	Rancangan Kerangka Pengelolaan Lingkungan dan Sosial (ESMF) untuk DOISP-2	
7	11.30 – 12.30	Diskusi dan Tanya-jawab	
8	12.30 – 13.30	Makan Siang	
9	13.30 – selesai	Rangkuman Diskusi dan Penutupan	

**RINGKASAN EKSEKUTIF RANCANGAN KERANGKA PENGELOLAAN
LINGKUNGAN DAN SOSIAL (ESMF) UNTUK PROYEK PENINGKATAN
OPERASIONAL DAN KEAMANAN BENDUNGAN – 2 (DOISP-2)**

ESMF disusun untuk memastikan bahwa seluruh komponen DOISP-2 akan dilaksanakan secara berkelanjutan dengan mengelola aspek lingkungan dan sosial. ESMF akan memperjelas prinsip-prinsip, aturan, pedoman dan prosedur, dan penataan organisasi untuk diterapkan dalam rencana pengelolaan lingkungan dan sosial (ESMP) pada sub-proyek DOISP-2. ESMF akan berfungsi sebagai dasar utama untuk pengelolaan dampak lingkungan dan sosial dari kegiatan sub-proyek.

ESMF terdiri dari pelingkupan kegiatan yang akan dilakukan dalam DOISP-2, penapisan persyaratan kajian lingkungan dan sosial, identifikasi dampak yang akan terjadi untuk sub-proyek DOISP-2 yang akan dilaksanakan pada tahun pertama serta dampak yang akan terjadi pada sub-proyek DOISP-2 secara umum, usulan langkah-langkah pengelolaan/mitigasi dampak dan pemantauan pelaksanaannya, prosedur penyusunan dokumen lingkungan dan sosial yang diperlukan. Selain itu, dokumen ESMF juga meliputi rencana peningkatan kapasitas lembaga dan kelembagaan serta kerangka rencana pelaksanaan ESMF, termasuk didalamnya struktur organisasi pelaksanaan ESMF.

DOISP merupakan proyek jangka panjang kerjasama antara Pemerintah Indonesia dan Bank Dunia untuk meningkatkan operasi bendungan, struktur bendungan dan infrastruktur bendungan terkait lainnya di Indonesia guna memastikan keberlanjutan ketersediaan air demi kepentingan masyarakat. DOISP-2 akan dilaksanakan pada tahun 2017-2022 dan bertujuan untuk (i) meningkatkan keamanan bendungan yang sudah ada pada lokasi yang telah ditentukan, dan (ii) memperkuat lembaga-lembaga untuk peningkatan efektivitas operasional pengelolaan bendungan.

DOISP-2 terdiri atas lima komponen. Komponen 1 - Kajian dan Pekerjaan Umum Peningkatan Operasional dan Keselamatan Bendungan; bertujuan untuk melakukan rehabilitasi fisik bendungan besar untuk mengembalikan kinerja dan keamanan bendungan sesuai dengan kriteria desain awal. Komponen 2 - Peningkatan Operasi dan Pemeliharaan dan Pengembangan Kapasitas; bertujuan untuk melakukan peningkatan unsur-unsur operasional yang diperlukan untuk menjamin keamanan dan peningkatan pemanfaatan bendungan. Komponen 3 - Mitigasi Sedimentasi Waduk; bertujuan untuk peningkatan Program Manajemen Sedimentasi yang komprehensif, yang akan mencakup (a) tindakan korektif, seperti melakukan pengerukan, pembilasan dan pekerjaan pengalihan; dan (b) tindakan pencegahan seperti penyusunan Rencana Pengelolaan DAS. Komponen 4 - Peningkatan Institusional Jaminan Keamanan Bendungan; bertujuan untuk mendukung evolusi kelembagaan pemerintah dan inovasi lebih lanjut dalam membangun lembaga sumber daya air di Indonesia. Kegiatan kelembagaan bertujuan untuk penguatan kapasitas Kemen PUPR untuk mengelola portofolio bendungan dengan lebih baik dan mengatur bendungan besar di Indonesia, dan meningkatkan keberlanjutan pekerjaan rehabilitasi dan kelangsungan waduk. Komponen 5 - Pengelolaan Proyek; bertujuan untuk mendukung pelaksanaan implementasi dan keseluruhan manajemen proyek. Sub-proyek DOISP-2 sebagian besar akan berlokasi di Jawa (provinsi Jawa Barat, Jawa Tengah, dan Jawa Timur), dan beberapa di provinsi Nusa Tenggara Barat dan Timur, Aceh, Lampung, Kalimantan Timur dan Sulawesi Selatan.

Kegiatan DOISP-2 telah diberi lingkupan agar tidak menyertakan pekerjaan yang memiliki dampak lingkungan atau sosial yang besar. Berdasarkan penyingkapan awal sub-proyek potensial, potensi dampak lingkungan yang merugikan terkait dengan pekerjaan dan kegiatan ini sebagian besar akan berkaitan dengan konstruksi dan bersifat lokal, minor dan mudah diselesaikan melalui penerapan langkah-langkah mitigasi yang telah tersedia dan sederhana.

Penapisan untuk sub-proyek DOISP-2 akan mengikuti kebijakan pengamanan (Bank Dunia dan Peraturan dan Perundang-undangan Pemerintah baik untuk aspek lingkungan maupun sosial. Penapisan sub-proyek juga akan menentukan penilaian lingkungan yang perlu untuk dilakukan. Pelaksanaan dari persyaratan penilaian lingkungan di atas berbeda-beda untuk setiap wilayah administrasi sehingga menyebabkan adanya perbedaan dalam tanggung jawab dari pemrakarsa usaha dan atau kegiatan untuk daerah yang berbeda meskipun jenis usaha dan/atau kegiatannya sama.

Kegiatan pekerjaan yang terkait dengan DOISP2 telah diidentifikasi sebagai bagian dari inspeksi lokasi dan peninjauan dari survei yang sudah ada (parsial), studi kelayakan, dll. dari masing-masing 134 bendungan. Proses penapisan menyimpulkan bahwa hampir seluruh sub-proyek DOISP2 akan membutuhkan UKL-UPL atau SPPL, karena tidak adanya hingga sedikit potensi timbulnya dampak lingkungan dan sosial yang signifikan. Jika dalam persiapan detail dan penapisan sub-proyek DOISP2 teridentifikasi potensi dampak besar yang merugikan atau tidak dapat diubah (*irreversible*) yang berkaitan dengan pengamanan lingkungan atau sosial, maka untuk sub-proyek ini akan dilakukan studi lanjutan dan AMDAL mungkin diperlukan.

Untuk tahun pertama (tahun 2017) terdapat 6 bendungan/waduk, yang akan menjalani rehabilitasi/perbaikan minor. Kegiatan yang akan dilakukan diperkirakan akan memiliki dampak risiko rendah terhadap polusi udara terkait dengan penggunaan kendaraan dan peralatan mekanis; limbah domestik dan limbah konstruksi yang terkait dengan kegiatan konstruksi; berkurangnya sumber daya alam alami terkait dengan penggunaan bahan bakar untuk kendaraan dan peralatan mekanik, bahan yang digunakan untuk bangunan seperti semen, batu dan aspal; polusi suara terkait langsung dengan berbagai kegiatan; polusi tanah dan air yang terkait dengan tumpahan dari peralatan mekanik, terutama jika bekerja berdekatan dengan badan air; gangguan atau perubahan jadwal pelepasan air; tidak ada pembebasan lahan; dan tidak ada dampak pada masyarakat adat. Dapat disimpulkan bahwa dampak lingkungan dan sosial langsung dan tidak langsung baik pada area hulu dan hilir yang terkait dengan kegiatan pada tahun pertama dapat dianggap minim. Langkah-langkah mitigasi secara rinci untuk setiap sub-proyek tersebut akan diuraikan dalam dokumen UKL-UPL dari masing-masing lokasi sub-proyek.

Sebagian besar sub-proyek pada bendungan/waduk dan kegiatan berbasis masyarakat tidak akan memerlukan pembebasan lahan maupun menyebabkan pemukiman kembali karena sub-proyek yang terkait dengan peningkatan dan perbaikan minor serta rehabilitasi fasilitas yang ada tidak akan menyebabkan adanya perubahan secara signifikan dalam pola penggunaan lahan yang sudah ada. Namun, Kerangka Kebijakan Pembebasan Lahan dan Pemukiman Kembali (LARPF) disusun sebagai pedoman dalam mempersiapkan Rencana Pembebasan Lahan dan Pemukiman

Kembali (LARAP) jika diperlukan adanya pembebasan lahan dan pemukiman kembali bagi sub-proyek.

Selain itu, diketahui bahwa terdapat masyarakat adat yang tinggal di area sekitar 134 lokasi waduk atau (sub)zona pengelolaan DAS yang termasuk dalam DOISP. Kerangka Perencanaan Masyarakat Adat (IPPF) disiapkan dan digunakan sebagai pedoman penyusunan Rencana Pengembangan Masyarakat Adat (IPP) untuk sub-proyek dimana dampak pada masyarakat dapat diidentifikasi dalam proses penapisan.

DOISP2 tidak akan mendanai aktivitas didalam habitat alami yang kritis, hutan cadangan dan konservasi satwa liar dan kawasan hutan lindung. Pekerjaan dan kegiatan DOISP2 dibatasi pada lokasi bendungan/waduk dan anak sungai (*rivulets*) yang telah ada sehingga tidak akan memiliki dampak negatif terhadap daerah-daerah sensitif. Selain itu, rehabilitasi bendungan akan mendukung irigasi lahan pertanian dimana penggunaan pestisida akan diterapkan sebagai praktik umum, namun, Pemerintah Indonesia bersama dengan Bank Dunia juga mempromosikan pelaksanaan Pengendalian Hama Terpadu (IPM) dan praktik penanganan pestisida yang tepat.


Pelibatan masyarakat dan pemangku kepentingan dalam penyusunan UKL-UPL akan dilakukan dalam proses persetujuan dokumen UKL-UPL dengan konsultasi dengan Tim Teknis UKL-UPL. Masukan dan saran dari para pemangku kepentingan terkait akan digunakan dalam meningkatkan dokumen UKL-UPL guna mendapat persetujuan. Pedoman umum untuk konsultasi dengan para pemangku kepentingan dalam kegiatan sub-proyek DOISP2 diuraikan dalam *Project Implementation Plan* sebagai panduan pada pelaksanaan sub-proyek bagi PIU. Selain itu, mekanisme penanganan keluhan akan diterapkan disetiap sub-proyek dan akan menjadi tanggung jawab PIU terkait, untuk menerima dan memfasilitasi penyelesaian kekhawatiran dan keluhan tentang kinerja pengelolaan lingkungan dan sosial dari kegiatan sub-proyek.

Pelaksanaan ESMP (UKL-UPL) dari sub-proyek merupakan tanggung jawab kontraktor/konsultan PIU, sebagaimana diatur dalam dokumen penawaran dan kontrak. Pengelolaan lingkungan berbasis lapangan dalam ESMP adalah untuk memastikan kepatuhan kontraktor/konsultan dan merupakan tanggung jawab utama dari *engineer* yang ditugaskan mengawasi setiap sub-proyek dibawah Dinas terkait (lembaga pemerintah daerah).

CPMU/CPIU akan bertanggung jawab untuk memastikan bahwa tingkat keahlian yang terkait dengan proyek ini cukup untuk melakukan tugas-tugas yang diberikan. ESMF ini mencakup dukungan peningkatan kapasitas, pelatihan dan bantuan teknis bagi seluruh pihak yang terlibat dalam pelaksanaan proyek ini, antara lain dengan pelatihan staf, penyusunan pedoman, pendampingan dalam penyusunan dokumen lingkungan, serta pendampingan instansi terkait dalam pelaksanaan monitoring dan evaluasi pengelolaan lingkungan dan sosial.

Rancangan ESMF ini akan dikonsultasikan kepada para pemangku kepentingan terkait melalui proses konsultasi publik dan pengungkapan di *website*. Konsultasi publik serta pengungkapan informasi publik ini bertujuan untuk mendapatkan umpan balik dari para pihak terkait dalam penyempurnaan ESMF dan untuk mewujudkan pelaksanaan ESMF yang efektif.


Appendix 2 – Presentation Slides



KEMENTERIAN PEKERJAAN UMUM DAN PERUMAHAN RAKYAT
DIREKTORAT JENDERAL SUMBER DAYA AIR
DIREKTORAT BINA OPERASI DAN PEMELIHARAAN

**Konsultasi Publik
Rancangan ESMF Proyek Peningkatan
Operasional dan Keamanan Bendungan – 2
(DOISP2)**

Jakarta, 3 November 2016
Hotel Ambhara, Jakarta



Penutupan

Masukan untuk penyempurnaan Rancangan ESMF
DOISP2 dapat dikirimkan melalui email:

ronny.bernard_pu@yahoo.co.id dan
putri.satyanugraha@gmail.com

selambat-lambatnya **Kamis, 10 November 2016**



Agenda Kegiatan



- Pengenalan Proyek Peningkatan Operasional dan Keamanan Bendungan – 2 (DOISP2)
- Lessons learned dari pelaksanaan pengelolaan lingkungan dan sosial dalam DOISP1
- Rancangan Kerangka Pengelolaan Lingkungan dan Sosial (ESMF) untuk DOISP2
- Diskusi



**KEMENTERIAN PEKERJAAN UMUM DAN PERUMAHAN RAKYAT
DIREKTORAT JENDERAL SUMBER DAYA AIR
DIREKTORAT BINA OPERASI DAN PEMELIHARAAN**

**Program Peningkatan Operasional dan
Keamanan Bendungan – 2 (DOISP-2)
(Dam Operational Improvement and Safety Project-2)**

Konsultasi Publik - Rancangan ESMF Proyek Peningkatan Operasional dan Keamanan Bendungan – 2 (DOISP2)
Jakarta, 3 November 2016, Hotel Ambhara




Tujuan Pelaksanaan Proyek

- Dam Operational Improvement & Safety Project - 1 (2009-2016), bertujuan untuk:
 - (I) Meningkatkan operasional dan keamanan bendungan yang berkaitan dengan pasokan air baku di 34 waduk yang dimiliki oleh Kementerian PUPR; dan
 - (II) meningkatkan kebijakan dan peraturan mengenai pengelolaan bendungan khususnya milik Kementerian PUPR dalam lingkup operasi pemeliharaan.
- Dam Operational Improvement and Safety Project - 2 (2017-2022), bertujuan untuk:
 - (I) Meningkatkan operasi dan keamanan bendungan yang berkaitan dengan pasokan air baku di lebih dari 100 bendungan yang dimiliki oleh Kementerian PUPR; dan
 - (II) Penguatan lembaga-lembaga guna meningkatkan efektivitas pengelolaan operasional dan pemeliharaan bendungan milik Kementerian PUPR.




Latar Belakang

- Jumlah bendungan 213 (182 dikelola Kementerian PUPR, 31 oleh BUMN/ Swasta). 40 bendungan berumur di atas 50 tahun, 78 bendungan diatas 25 tahun
- DOISP merupakan program kegiatan peningkatan operasional dan keamanan bendungan (bendungan dan infrastruktur bendungan terkait lainnya) guna keberlanjutan ketersediaan air
- DOISP2 merupakan lanjutan dari DOISP1 yang sedang pelaksanaan tahun 2009-2016 (jumlah pinjaman USD 50 juta dari Bank Dunia).
- DOISP2 rencananya akan dilaksanakan pada 2017-2022 dengan pembiayaan tambahan sebesar USD 250 juta dari Bank Dunia dan AIB.




Komponen DOISP2

□ DOISP2 terdiri dari 5 Komponen:

- 1 Pekerjaan Peningkatan Operasional Bendungan dan Keamanan Bendungan (Dam Operational Improvement and Safety Works)
- 2 Peningkatan Operasi dan Pemeliharaan dan Pengembangan Kapasitas Pengelola Bendungan (O & M Improvement and Capacity Building)
- 3 Mitigasi Sedimentasi Waduk (Reservoir Sedimentation Mitigation)
- 4 Peningkatan Jaminan Keamanan Bendungan (Dam Safety Assurance Institutional Improvement)
- 5 Manajemen Proyek (Project Management)



Ringkasan Komponen DOISP2



Komponen 1: Pekerjaan Kajian dan Peningkatan Operasional dan Keamanan Keamanan Bendungan

1. Technical Assistance for CPMU and CPU
2. Special Study bendungan dengan hazard klasifikasi tinggi
3. SID dan DD untuk 134 bendungan untuk diindak lanjut
4. Pekerjaan Rehabilitasi Bendungan
5. Perbaikan dan pemasangan BDSF

Komponen 2: Peningkatan Operasional dan Pemeliharaan dan Pengembangan Kapasitas Pengelola Bendungan


1. Instrumen keamanan bendungan (O&M, EAPs, dll.)
2. Peningkatan kapasitas UPB dan Petugas OP
3. Penerapan Manajemen Aset
4. Rencana Tindak Darurat (RTD)
5. Partisipasi Masyarakat dalam pengelolaan bendungan

Komponen 3: Mitigasi Sedimentasi Waduk
Tindakan korektif, seperti pengerukan, pembilasan dan pekerjaan lainnya

Tindakan Preventif, termasuk partisipasi masyarakat dalam pengelolaan DAS

Komponen 4: Peningkatan Jaminan Keamanan Bendungan

Komponen 5: Manajemen Proyek




Komponen 2 - Peningkatan Operasional dan Pemeliharaan dan Pengembangan Kapasitas Pengelola Bendungan

→ Perbaiki unsur-unsur operasional dan pemeliharaan yang diperlukan untuk menjamin keamanan dan peningkatan pemanfaatan bendungan.

→ Hal ini termasuk:

- kajian strategis (sedimentasi, hidrologi daerah aliran sungai/catchment);
- sistem pengelolaan aset dan kebutuhan berbasis kebutuhan nyata blaya untuk operasional dan pemeliharaan;
- Rencana Operasional dan Pemeliharaan;
- Rencana Monitoring dan Pemantauan Bendungan;
- Rencana pelaksanaan On Job Training bagi Pengelola Bendungan (UPB dan Petugas OP)
- Rencana Persiapan Tindak Darurat (Emergency Preparedness Plans/ERP), termasuk analisa kerusakan bendungan, pemetaan banjir hilir dan benchmarking;
- Pengembangan bendungan dalam wilayah sungai dan rencana pengelolaan waduk; dan
- Pelaksanaan program partisipasi masyarakat dalam pengelolaan bendungan




Komponen 1 – Pekerjaan Kajian dan Peningkatan Operasional dan Keamanan Bendungan

→ Rehabilitasi fisik bendungan besar untuk mengembalikan fungsi kinerja dan keamanan bendungan sesuai dengan kriteria desain awal.

→ Dukungan tersebut akan mencakup:

- melakukan kajian khusus, Survei, Investigasi dan Desain (SID), pengawasan pekerjaan
- pekerjaan rehabilitasi/mayor, termasuk pekerjaan sipil dan hidro-mekanik;
- pemasangan, rehabilitasi atau perbaikan Fasilitas Dasar Keamanan Bendungan (BDSF) untuk meningkatkan pemantauan keamanan, prakiraan banjir dan sistem peringatan tindak darurat terkait keamanan bendungan;
- instalasi, rehabilitasi atau perbaikan peralatan untuk pengoperasian pemantauan hidro-meteorologi;
- intervensi jaminan keamanan bendungan secara berkala dengan melakukan pengawasan dan pemantauan keamanan bendungan termasuk mengurangi risiko penanganan debit yang melebihi kapasitas debit spillway;
- pemasangan peralatan telemetri untuk memantau fungsi kinerja bendungan; dan,
- kajian hidrologi untuk memeriksa data aliran banjir, memperkirakan frekuensi limpasan banjir dan meninjau kapasitas spillway dan risiko banjir di daerah hilir.



Komponen 3 - Mitigasi Sedimentasi Waduk

→ Peningkatan Program Manajemen Sedimentasi yang komprehensif yang mencakup:

(A) Tindakan korektif, seperti pengerukan, pembilasan dan pekerjaan pengalihan aliran sedimen

(B) Tindakan pencegahan, seperti:

- (I) Program percontohan manajemen DAS dengan merumuskan Rencana Pengelolaan Daerah Aliran Sungai untuk bendungan yang ditentukan. Ini meliputi pengembangan model hidrologi untuk memprediksi dampak dari strategi mitigasi pada limpasan banjir dan sedimentasi yang dihasilkan, melaksanakan program konservasi DAS, dan membangun stasiun pengambilan sampel sedimen; dan
- (II) Pelaksanaan program partisipasi masyarakat dalam pengelolaan DAS, termasuk melaksanakan program pendidikan masyarakat mengenal DAS dan menyediakan dana kemiripan bagi masyarakat sekitar DAS untuk meningkatkan pemanfaatan dan pengelolaan daerah sekitar waduk dan tangkapan air.

Komponen 4 - Peningkatan Jaminan Keamanan Bendungan

- Mendukung komunikasi dan koordinasi antar kelembagaan pemerintah.
- Kegiatan kelembagaan bertujuan:
 - (i) Penguatan kapasitas untuk mengelola bendungan yang lebih baik dan mengatur bendungan besar.
 - (ii) Keberlanjutan pekerjaan rehabilitasi guna meningkatkan masa pelayanan yang mencakup:
 - (a) penilaian kelembagaan, *benchmarking* dan peningkatan mekanisme koordinasi antara instansi;
 - (b) dukungan regulasi dan Instrumen, standar dan pedoman, termasuk kebijakan bendungan nasional mengenai perijinan, pemeriksaan, pemenuhan keamanan dan sanksi;
 - (c) membentuk Panel keselamatan Bendungan Nasional;
 - (d) membentuk Pusat Teknologi Bendungan; dan
 - (e) pengembangan sumber daya manusia dan pengembangan kapasitas.

Komponen 5 – Manajemen Proyek

- Mendukung penerapan kontinuitas manajemen proyek secara keseluruhan melalui:
 - (i) Central Project Management Unit (CPMU) dan Central Project Implementation Unit (CPIU) di Kementerian PUPR untuk memberikan dukungan pelayanan yang diperlukan untuk pelaksanaan proyek yang tepat waktu dan efektif, termasuk pemantauan & evaluasi, pengadaan, manajemen keuangan, pemantauan *safeguard*, dll;
 - (ii) Bantuan Teknis (TA) untuk B(B)WS untuk memastikan pengawasan dan pelaksanaan yang efektif;
 - (iii) Bantuan Teknis (TA) untuk Institusi DAS guna memastikan pelaksanaan kegiatan yang tepat waktu dan efektif;
 - (iv) Penyedia Layanan Lingkungan dan Sosial;
 - (v) Ahli keamanan bendungan Internasional; dan
 - (vi) Panel Pengkajian Keamanan Bendungan Nasional.

Lingkup Bendungan/Waduk DOISP2

- Secara keseluruhan DOISP2 akan meliputi total 134 lokasi bendungan/waduk pada 12 BBWS/BWS
- Termasuk 23 bendungan besar DOISP1 yang diprioritaskan serta bendungan besar lainnya yang akan diprioritaskan berdasarkan kriteria teknis.
- Tahun Pertama (2017) – 8 bendungan:
 - ◆ Djuanda, Ubrug (gerbang radial *spillway*) terletak di Kecamatan Jatituhur, Kabupaten Purwakarta, Jawa Barat;
 - ◆ Ketro di Tanon, Kabupaten Sragen, Jawa Tengah;
 - ◆ Penjalin di Bumiayu, Kabupaten Brebes, Jawa Tengah;
 - ◆ Greneng di Blora, Kabupaten Blora, Jawa Tengah;
 - ◆ Tempuran di Blora, Kabupaten Blora, Jawa Tengah;
 - ◆ Merancang di Gunung Tabur, Kabupaten Berau, Kalimantan Timur.
- Daftar sementara bendungan/waduk yang termasuk dalam DOISP2 dapat dilihat pada Lampiran (*daftar bendungan/waduk untuk dibagikan pada peserta*)

Persiapan Pelaksanaan DOISP2

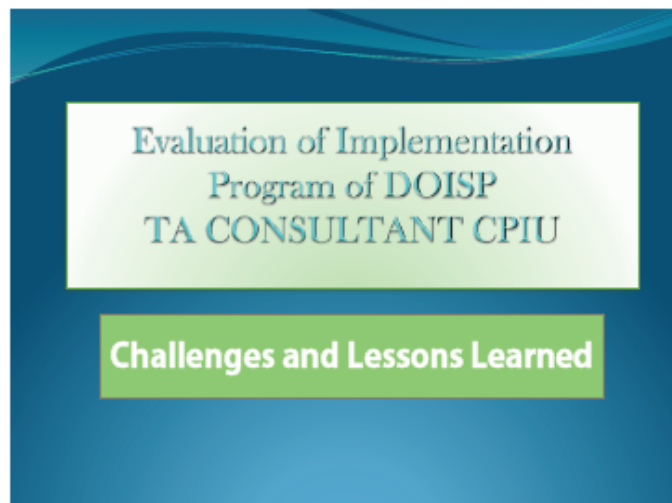


Project Implementation Plan (PIP)

- ❑ Persiapan daftar prioritas bendungan
- ❑ Analisa permasalahan sedimentasi secara komprehensif
- ❑ Kerangka program meningkatkan keamanan bendungan, termasuk aspek BDSF
- ❑ Kerangka pengelolaan peralatan *electrical* dan *hydro-mechanical*
- ❑ Perhitungan kelayakan ekonomi proyek dan analisa risiko ekonomi dan finansial
- ❑ Kerangka penguatan institusional dan pengembangan kapasitas pengelolaan bendungan
- ❑ Kerangka Pengelolaan Lingkungan dan Sosial (ESMF) untuk pelaksanaan DOISP2
- ❑ Penganggaran – kalkulasi perkiraan biaya pelaksanaan
- ❑ Jadwal Pelaksanaan Program



Terima Kasih



Challenges and Lessons Learned	
Institutional Improvement	<ul style="list-style-type: none"> Implementation of the government regulations and guidelines for effective coordination among the stakeholders. Effective coordination between CDMU and DMU. Effective coordination among the CPIU and PIUs for timely implementation of project activities. Effective security arrangements for the safeguard of dam assets by PIUs.
Special Studies (SS)	Selected SS should be got reviewed by an independent Consulting Engineering firm having sufficient experience in the design of dams before the implementation of the recommended rehabilitation works.
BDSF	The BDSF required for the remaining 20 dams should be procured at priority for the meaningful monitoring of the dam behaviour.

Challenges and Lessons Learned	
Capacity Building	<ul style="list-style-type: none"> Lack of trained and experienced staff for the planning, design, construction supervision in government and private sectors Identification of training needs of DMU staff for instrumentation data processing and analysis, and other related aspects of O&M Continuity of periodic training of Dam operation staff to enhance their capacity building in O&M practice.
Community Participation	<ul style="list-style-type: none"> Awareness of community living around the dam for the significance of dam instrument monitoring and removal of U/S and D/S slope protection materials. Delays in provision of funds by PIUs to the facilitators for the community participation activities
O&M	<ul style="list-style-type: none"> Awareness of O&M practices for all stakeholders. Sustainable O&M budgeting.
EAP Preparedness Plan	Preparedness of local authorities to combat emergency situation as proposed in EAP.

RECOMMENDATIONS	
<ul style="list-style-type: none"> The procedure adopted for the DD reports was a bit complicated and time consuming and could have been simplified. Most of the civil works involved in the minor rehabilitation works were simple and just repair works of the existing structures, and for these works detailed design and drawings could have been avoided. The Ministry of Public Works (MPW) guide lines and specifications could have been used for the supervision of the works. The minor rehabilitation works could have been classified as simple repair works and the works which require detailed design and drawings. The most important aspect was preparing the Bill of Quantities (BOQ) for which base line survey was supposed to be more accurate to finalize the quantities and cost estimates. 	

RECOMMENDATIONS – CONT..

- The MPW guide lines and specifications along with BOQ could have been used for awarding the contract of simple repair works.
- The simplified Bidding Documents along with drawings could be used for works which require detail design.
- Most of the O&M Manuals prepared and submitted by the DD Consultant were copy and paste using the other dam manuals. O&M Manual is an important document, and there should have been a separate arrangement for the preparation of O&M Manuals.
- UKL - UPL documents is probably required for the new projects. Not for the minor rehabilitation works.
- The above points may be considered for planning DOISP 2 activities.

Thank You

ESMF (UKL-UPL)

- The UKL-UPL completeness documents include: i) Project location map; ii) Environmental Management Plan Map, iii) Environmental Monitoring Plan Map, iv) UKL-UPL Matrix, and v) Letter of Undertaking for Environmental Management and Environmental Monitoring (SPPL).
- Results of the review on the completeness of UKL-UPL documents showed that not less than 70% do not have a letter of commitment from the owner of the project. In fact, this letter is a form of project owner's responsibility to manage the environmental impact.
- Although 23 RW have been completed 100%, yet the TA CPIU Consultant have not received any Inspection Reports on UKL-UPL from project owner (PIU). This was confirmed by the findings of the Mission, there are two reasons: i) lack of understanding of PIU's and supervision contractors of the need to periodically report on UKL-UPL implementation; and ii) limited traction of the CPIU and TA consultant over the PIU in order to obtain the periodic reports.



**KEMENTERIAN PEKERJAAN UMUM DAN PERUMAHAN RAKYAT
DIREKTORAT JENDERAL SUMBER DAYA AIR
DIREKTORAT BINA OPERASI DAN PEMELIHARAAN**

Rancangan Kerangka Pengelolaan Lingkungan dan Sosial (ESMF) DOISP2

Konsultasi Publik - Rancangan ESMF Proyek Peningkatan Operasional dan Keamanan Bendungan – 2 (DOISP2)
Jakarta, 3 November 2016, Hotel Ambhara



Tujuan ESMF




- Kerangka Pengelolaan Lingkungan dan Sosial (*Environmental and Sosial Management Framework / ESMF*) disusun untuk memastikan seluruh komponen DOISP2 akan dilaksanakan secara berkelanjutan dengan mengelola aspek lingkungan dan sosial.
- ESMF akan berfungsi sebagai dasar utama untuk pengelolaan dampak lingkungan dan sosial dari kegiatan sub-proyek DOISP2.
- ESMF akan memperjelas prinsip-prinsip, aturan, pedoman dan prosedur, dan penataan organisasi untuk diterapkan dalam rencana pengelolaan lingkungan dan sosial (ESMP) pada sub-proyek DOISP2.
- Setiap sub-proyek yang tidak dapat dilaksanakan sesuai dengan ESMF tidak akan didanai di bawah Proyek ini.




Isi dan Proses Penyusunan ESMF

- ESMF terdiri dari:
 - Pelingkupan kegiatan yang akan dilakukan dalam DOISP2,
 - Penapisan persyaratan kajian lingkungan dan sosial berdasarkan peraturan perundangan yang berlaku dan kebijakan pengamanan (*safeguard*) Bank Dunia,
 - Identifikasi dampak yang akan terjadi untuk sub-proyek DOISP2 tahun pertama dan pada sub-proyek DOISP2 secara umum,
 - Usulan langkah-langkah pengelolaan/mitigasi dampak dan pemantauan pelaksanaannya, prosedur penyusunan dokumen lingkungan dan sosial yang diperlukan,
 - Rencana peningkatan kapasitas lembaga dan kelembagaan, dan
 - Rencana pelaksanaan ESMF → struktur organisasi pelaksanaan ESMF.
- Proses penyusunan dokumen ESMF DOISP2:
 - Tinjauan dokumen & peraturan perundangan
 - Diskusi antara Tim Kemen PUPR dan Tim Bank Dunia
 - Penyusunan Rancangan Dokumen
 - **Konsultasi Publik**
 - Finalisasi Dokumen







Konsultasi Publik Rancangan ESMF DOISP2

- Kegiatan konsultasi publik merupakan bagian dari proses penyusunan dokumen Rancangan ESMF dan dilaksanakan untuk mendapatkan masukan dari pihak terkait dalam penyempurnaan ESMF.
- Tujuan dari konsultasi publik ini adalah:
 - Menyampaikan rancangan ESMF sebagai jaminan pemenuhan aspek lingkungan dan sosial, sesuai dengan perundangan yang berlaku;
 - Mendapatkan umpan balik dari para pihak terkait untuk memperbaiki ESMF dan menilai sejauh mana ESMF bisa diimplementasikan; dan
 - Mendapatkan masukan tentang peran para pihak dalam pelaksanaan ESMF ke depan.

Aspek Lingkungan dan Sosial Bendungan/Waduk

Bendungan Wey Jepara
Bendungan Sangah

Bendungan Widak Cibang
Bendungan Sembaja

Peraturan Perundangan Pemerintah

- **Aspek Lingkungan:**
 UU 32/2009 Perlindungan dan Pengelolaan Lingkungan
 PP 27/2012 Ijin lingkungan (dan Instrumennya)
 PERMEN LH 05/2012 Jenis Rencana Usaha/Kegiatan yang wajib memiliki AMDAL
 PERMEN LH 16/2012 Pedoman Penyusunan Dokumen Lingkungan Hidup
 PERMEN LH 17/2012 Pedoman Keterlibatan Masyarakat dalam Proses Analisis Dampak lingkungan Hidup dan Ijin Lingkungan
 PERMEN PU 10/PRT/M/2008 Jenis Rencana Usaha dan/atau Kegiatan di bawah Pekerjaan Umum yang Membutuhkan UKL-UPL
 PP 6/1995 Perlindungan Tanaman
 KEPMEN Pertanian 887/Kpta/OT.210/9/1997 Pengelolaan Hama, dan Pedoman Sekolah Lapangan Pengendalian Hama Terpadu
- **Aspek Sosial:**
 UU 2/2012 dan PP 71/2012 Pengadaan Lahan untuk Kepentingan Umum
 PERPRES 40/2014 Perubahan dari Peraturan Presiden Nomor 71/2012 tentang Pengadaan lahan untuk Kepentingan Umum .

Lingkup Kegiatan DOISP2

- Kegiatan DOISP2 telah diberi lingkup agar tidak menyertakan pekerjaan yang memiliki dampak lingkungan atau sosial yang besar.
- Pembatasan kegiatan DOISP2:
 - ✓ Bukan merupakan pembangunan bendungan baru dan dekomisi bendungan yang sudah ada,
 - ✓ Bukan merupakan penerukan skala besar dan pembuangan lumpur/siludge (dengan volume di atas 500.000 m³),
 - ✓ Tidak meliputi kegiatan yang akan berakibat adanya pembebasan lahan yang signifikan dan pemukiman/penempatan kembali (resettlement) serta memberi dampak yang signifikan terhadap masyarakat adat (indigenous peoples).
 - ✓ Tidak meliputi aktivitas didalam habitat alami yang kritis, hutan cadangan dan konservasi satwa liar dan kawasan hutan lindung.

	JENIS KEGIATAN	
	Investigasi, desain dan analisis bendungan yang akan direhabilitasi • Investigasi material timbunan • peninjauan laporan desain dan informasi lain • analisis teknis (engineering) dan ekonomi untuk desain	Perubahan endapan dan galian air (minor) pada waduk Penerapan langkah-langkah stabilisasi tepian sungai (riverbank)
	Rehabilitasi 134 istak bendungan/waduk, meliputi pekerjaan sipil dan hidro-mekanis • pemeliharaan kondisi jalan pencah bendungan (road) • pemeliharaan kondisi di-up, spillway • instalasi, rehabilitasi atau penggantian EOP, dll.	Modifikasi prosedur operasional bendungan untuk mengurangi dampak sedimentasi terhadap operasional bendungan Perumusan Rencana Pengelolaan Daerah Atas Sungai untuk bendungan tertentu
	Survei Sedimen: Survei berstratifikasi dan Nitrogen waduk tertentu	Partisipasi Publik dalam Pengelolaan DAS
	Partisipasi Masyarakat dalam pengelolaan Waduk: Program penyadaran, dimana masoif dalam mempromosikan partisipasi masyarakat dalam pengelolaan waduk	Pengembangan kapasitas dan Keterampilan PUPK dan Lembaga Pengelolaan Bendungan
	Pembarahan endapan dan galian air (minor) pada waduk	Perubahan jadwal operasional bendungan

Kebijakan Safeguard Bank Dunia

KEBIJAKAN	PRINSIP DAN TUJUAN
Kajian Lingkungan (OP/IBP 4.01)	Melakukan penilaian risiko dan dampak lingkungan potensial dari proyek, menguji alternatif proyek, mengidentifikasi cara untuk meminimalkan proses penyelesaian proyek, dengan cara mencegah, meminimalkan, mitigasi, atau membatasi konsekuensi untuk dampak lingkungan yang merugikan dan meningkatkan dampak positif selama siklus pelaksanaan proyek.
Pemukiman Kembali secara Paksa dan Pembebasan Lahan (OP/IBP 4.12)	Menghindari atau meminimalkan pemukiman kembali secara paksa, membantu warga terdampak untuk meningkatkan mata pencaharian dan standar hidup mereka, atau setidaknya untuk memulihkannya secara nyata, seperti kondisi sebelum relokasi.
Masyarakat Adat/Indigenous Peoples (OP/IBP 4.10)	Memastikan bahwa semua Masyarakat Adat mendapat manfaat dari pengembangan proyek, dan menghindari atau mitigasi potensi etik yang merugikan bagi Masyarakat Adat yang disebabkan oleh kegiatan bantuan dari Bank.
Sumber Daya Budaya Fisik (OP 4.11)	Proyek bergerak atau tidak bergerak sangat penting terhadap warisan budaya setiap orang, seperti monumen arsitektur, seni atau sejarah, baik itu agama atau sekuler; situs arkeologi; kelompok bangunan yang secara kolektif memiliki kepentingan sejarah atau seni; karya seni; manuskrip, buku dan benda seni lainnya, termasuk perhiasan sejarah atau etnologi; serta lokasi bersejarah dan objek penting berupa buku atau arsip atau reproduksi dari properti yang diidentifikasi di atas;
Habitat Alami/Natural Habitat (OP 4.04)	Lahan dan area air dimana komunitas ekosistem biologis terbentuk secara wajar karena adanya spesies tanaman dan hewan asli serta aktivitas manusia yang tidak mengubah fungsi utama ekologi daerah tersebut, pada tempat atau kondisi alam tertentu dimana tanaman atau hewan hidup.
Pengelolaan Hama (OP 4.09)	Meminimalkan dan mengelola risiko lingkungan dan kesehatan yang berhubungan dengan penggunaan pestisida dan mempromosikan serta mendukung pengelolaan hama yang aman, efektif, dan ramah lingkungan.
Kearifan Bendungan (OP 4.37)	Meningkatkan kualitas dan keamanan desain dan pembangunan bendungan baru dan rehabilitasi bendungan yang sudah ada, dan dalam melaksanakan kegiatan-kegiatan yang mungkin akan berpengaruh oleh bendungan tersebut.
Kebijakan Pengungkapan Informasi (OP/IBP 17.50)	Sebelum proyek harus mengungkapkan informasi penting di negara tersebut dan melalui Infotag Bank.



Kewajiban Sub-proyek dibawah DOISP2:

- Kajian Lingkungan (UKL-UPL) dan Rencana Pengelolaan Lingkungan dan Sosial (ESMP)
- Rencana Pembebasan Lahan dan Pemukiman Kembali (LARAP)
- Rencana Pengembangan Masyarakat Adat (IPP)
- Melakukan Integrated Pest Management dan praktik penanganan pestisida yang tepat
- Melakukan pelibatan para stakeholders dan pengungkapan informasi

Hampir seluruh sub-proyek DOISP2 akan membutuhkan UKL-UPL atau SPPL, karena tidak adanya/sedikit potensi timbulnya dampak lingkungan dan sosial yang signifikan. Namun AMDAL mungkin diperlukan jika teridentifikasi potensi dampak besar yang merugikan / tidak dapat diubah (irreversible)

Kegiatan DOISP2 yang Dapat Menimbulkan Dampak

FASE PRA KONSTRUKSI >> FASE KONSTRUKSI >> FASE PELAKSANAAN

Fase Pra-konstruksi:

- Survei dan investigasi lapangan
- Penyebarluasan informasi mengenai kegiatan proyek ke masyarakat sekitar
- Pembebasan lahan secara terbatas

Fase Konstruksi:

- Mobilisasi dan demobilisasi peralatan, material dan personil selama kegiatan sipil
- Kegiatan perekrutan tenaga kerja
- Pengoperasian basecamp sementara untuk pekerja
- Pekerjaan sipil untuk rehabilitasi/perbaikan minor bendungan/waduk (termasuk jalan akses)
- Pekerjaan penghancuran (demolition)
- Pembangunan check dam dan langkah-langkah stabilisasi daerah tepi sungai

Tahap Pelaksanaan:

- Membersihkan sedimen dari waduk (pengukuran, pembilasan dan pekerjaan pengalihan)
- Kegiatan Dewatering
- Membersihkan guano air dari waduk
- Membersihkan rumput-rumput di sekitar bendungan
- Perubahan jadwal operasional bendungan
- Partisipasi masyarakat dalam pengelolaan waduk dan DAS

Dampak Potensial – Fase Pra Konstruksi

- Persepsi Negatif Masyarakat akibat penyebaran informasi yang tidak tepat
- Perubahan kepemilikan lahan karena adanya kegiatan pengadaan / pembelian lahan
- Persepsi Negatif Masyarakat akibat dampak turunan dari kegiatan pengadaan / pembelian tanah dan atau keresahaan masyarakat



Dampak Potensial – Fase Konstruksi



Peningkatan konsentrasi debu (TSP) di udara



Dampak debu bagi kesehatan masyarakat



Gangguan lalu lintas sementara



Peningkatan pendapatan Masyarakat (tenaga kerja untuk pekerjaan sipil)



Kecemburuan sosial antara pekerja migran dengan pekerja lokal



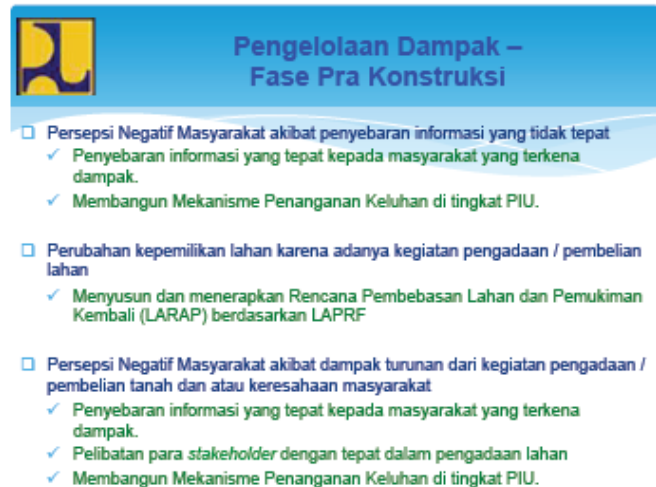
Timbulan limbah konstruksi dan limbah domestik



Kebisingan yang dihasilkan oleh kegiatan pekerjaan sipil



Beban sedimen tambahan pada sistem air dan penurunan muka air akibat konstruksi



Mekanisme Penanganan Keluhan

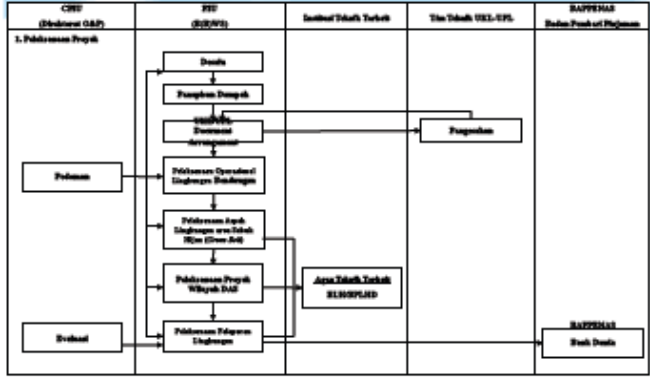
- Mekanisme penanganan keluhan merupakan langkah pengelolaan dampak yang sangat penting untuk dilaksanakan sedini mungkin dalam siklus proyek
 - Dilaksanakan oleh PIU untuk setiap kegiatan sub-proyek DOISP2
 - Dijabarkan lebih lanjut dalam Project Implementation Plan (PIP)



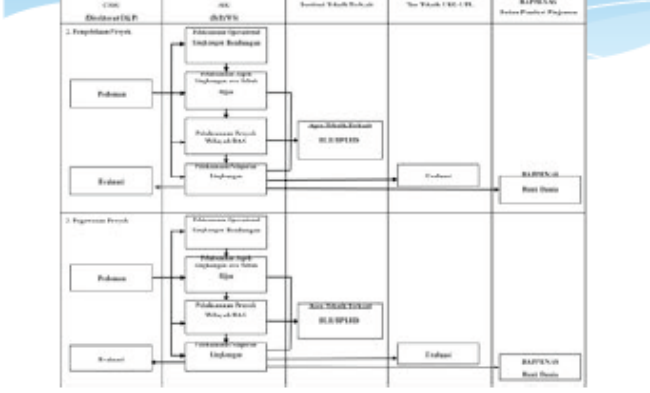
Peran & Tanggung Jawab Pelaksanaan ESMF

Kegiatan	Instansi pelaksana yang bertanggung jawab	Instansi penerima yang bertanggung jawab	Kegiatan	Instansi pelaksana yang bertanggung jawab	Instansi penerima yang bertanggung jawab
1. Penetapan tingkat pelaksanaan Kebutuhan pelaksanaan rasur dan/atau Pekerjaan Pengaduan	BUMS	Devkonal CMP (Komiterian PU/R)	3. Pelaksanaan dan Pemantauan Proyek		
2. Persiapan Dokumen			a. Pelaksanaan Pekerjaan Lapangan		
a. Menyiapkan Administrasi	BUMS	Devkonal CMP (Komiterian PU/R)	- Operasional Berdayaguna	BUMS	Devkonal OGP (Komiterian PU/R)
b. Penyusunan Dokumen	BUMS	Devkonal CMP (Komiterian PU/R)	- Kerja Subok Hija Green Audit	BUMS	Devkonal OGP (Komiterian PU/R)
c. Penetapan	Tim Teknik UKE-UP	Bank Dons	- Durat tanggapan / complaint	BUMS	Devkonal OGP (Komiterian PU/R) Dinas Kesehatan Dinas Perikanan Dinas Perhubungan Dinas Perindustrian Dinas Pekerjaan Umum
3. Pelaksanaan dan Pemantauan Proyek			- Laporan	BUMS	Devkonal OGP (Komiterian PU/R) Badan Pekerjaan Umum Provinsi BLH (Provinsi atau Kabupaten/Kota)
a. Pelaksanaan Berdayaguna	BUMS	Devkonal CMP (Komiterian PU/R)			
- Kerja	BUMS/SDM PU	Devkonal CMP (Komiterian PU/R)			
- DAM/ambone	BUMS Dinas Kesehatan Dinas Perikanan Dinas Perhubungan Dinas Perindustrian Dinas Pekerjaan Umum (Kabupaten)	Devkonal CMP (Komiterian PU/R) Dinas Kesehatan Dinas Perikanan Dinas Perhubungan Dinas Perindustrian Dinas Pekerjaan Umum (Kabupaten)			
- Laporan	BUMS	Devkonal CMP (Komiterian PU/R) Dinas Pekerjaan Umum Provinsi			

Struktur Organisasi Pelaksanaan ESMF



Struktur Organisasi Pelaksanaan ESMF (2)



 Peningkatan Kapasitas dalam Pengelolaan Lingkungan dan Sosial			
Kegiatan	Sasaran	Frekuensi	PIC
Pelatihan Orientasi Umum Safeguard Lingkungan & Sosial	Staf proyek, dan pemerintah daerah (Bappeda, Dinas PU, dan BLH)	Pelaksanaan 3 kali pelatihan, masing-masing 3 hari	Tenaga Ahli Safeguard (Konsultan Nasional CPU)
Pelatihan keahlian lingkungan dalam penataan, review dan prosedur pengawasan	Staf proyek dan engineer pengawas lapangan	Tahun 1: pelaksanaan 3 kali pelatihan, @ 2 hari Tahun 2: pelaksanaan 1 atau 2 kali pelatihan bagi staf baru yang direkrut	Tenaga Ahli Safeguard (Konsultan Nasional CPU)
Pelatihan spesialis lingkungan berfokus pada pelaksanaan ESMF (UKL-UPL)	Kontraktor/konsultan PIU	Program pelatihan bergilir yang akan diberikan untuk semua kontraktor dan konsultan. Kontraktor/konsultan akan diberikan sertifikat untuk perpanjangan setiap 3 tahun.	Tenaga Ahli Safeguard Regional (Konsultan Regional CPU) dengan bimbingan dari Tenaga Ahli Safeguard Nasional (Konsultan Nasional CPU)
Dukungan dalam Pelaksanaan Studi lingkungan dan sosial (UKL-UPL) yang diperlukan, termasuk penyusunan TOR	Staf proyek/PIU	Berdasarkan permintaan pemerintah daerah masing-masing	Tenaga Ahli Safeguard Regional (Konsultan Regional CPU)
Dukungan dalam Pengawasan dan Pelaporan	Untuk SOP, Engineer Pengawas Lapangan Untuk UKL-UPL, Dinas Lingkungan setempat	Berdasarkan permintaan pemerintah daerah masing-masing	Tenaga Ahli Safeguard Regional (Konsultan Regional CPU)



 Tahap Selanjutnya (Setelah Konsultasi Publik)			
<input type="checkbox"/> Menerima masukan tambahan untuk penyempurnaan Rancangan ESMF, dapat disampaikan melalui email: ronny.bernard_pu@yahoo.co.id dan putri.satyanugraha@gmail.com sebelum Kamis, 10 November 2016.			
<input type="checkbox"/> Revisi, finalisasi, dan pengesahan ESMF			
<input type="checkbox"/> Pengunggahan ESMF Final di Website Kemen PUPR			
Kegiatan	Sep	Okt	Nov
Penyusunan Rancangan ESMF			
Konsultasi Publik			
Revisi, finalisasi dan pengesahan			
Pengunggahan ke website Kemen PUPR			



Appendix 3 – List of Attendance

- 1. KEMENTERIAN**
- 2. LEMBAGA
PEMERINTAH
PUSAT**
- 3. WORLD BANK**









KEMENTERIAN PEKERJAAN UMUM DAN PERUMAHAN RAKYAT
 DIREKTORAT JENDERAL SUMBER DAYA AIR
 DIREKTORAT BINA OPERASI DAN PEMELIHARAAN
 Jl. Pattimura No.20 , Kebayoran Baru , Jakarta Selatan Telp.(021) 7395500, Fax.(021) 7246312

DAFTAR HADIR

Hari/tanggal : Kamis, 03 November 2016
 Waktu : 08-00 s/d Selesai
 Tempat : Hotel Ambhara
 Agenda : Undangan Konsultasi Publik Kerangka Pengelolaan Lingkungan Hidup dan Sosial DOISP-II

NO.	NAMA	JABATAN	TANDA TANGAN
1	Suryapurnanita S.	Saeguard Specialist	
2	Panca Hermawan	Wk Krid op	
3	ARMAN Efendi	KRESI OP GUS K-III	
4	A. Ikana Dani	Kasi Pereme. OP KBWS-80	
5	Supriyono	peltek Satker OP SDA MT I	
6	Lolly	Diri SOP	
7	ANTONIUS-S	Kasi op/KBWS.BS	
8	ANDI PRATAMA	KBWS BS	
9	Eudang Budiman	KBWS Citarum	

	NAMA	JABATAN	TANDA TANGAN
0	JOKO MULYONO	Jateng SDA	
1	Adam Wisnu	Bag. Hukum SDA	
2	Fatimah Bincan Q	Konsultan Dir. Pengairan- Bapponas	
3	Anindhita DK.	PEPDAS	
4	SMPU M	KIP 104 SMP	
15	Virza Sasmitawidjaja	WR	
16			
17			
18			
19			
20			
21			

4. PEMERINTAH PROVINSI



KEMENTERIAN PEKERJAAN UMUM DAN PERUMAHAN RAKYAT
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NO.	NAMA	JABATAN	TANDA TANGAN
1	EKO JUNIANTO	Ko Bid SWA DINAS DDA JABAR	
2	Syahrudin	Jawabarat PDA	
3			
4			
5			
6			
7			
8			
9			

- 5. AKADEMISI**
- 6. KONSULTAN**
- 7. LEMBAGA
SWADAYA
MASYARAKAT**




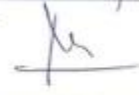

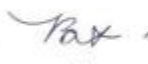



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NO.	NAMA	JABATAN	TANDA TANGAN
1	Suryo T.	PIP	
2	Fatilda Hasabuan ^{Wahni}	Manajer Pengembangan Hubungan dan Partisipasi	
3	Budhiharso	TA Konsultansi CPIM - Dosis	
4	Suhartono	TA - Konsultansi CPIM	
5	ROCHMAN.		
6	Taufiq Pangantjeh	Ast. TA konsultansi	
7	Ety Pringono	TA - CPIM	
8	MERLAW P	TA CPIM	
9	Maulana P	IME Bappepans	

NO.	NAMA	JABATAN	TANDA TANGAN
10	Rusli Rais.	J&M Spes. DESP-I PA CONSULT.	
11	Wibowo	JASAPATRIA	
12	Endang Prastikaswati	PIP TA	
13	NUR KHAKIM	JASA PATRIA G. KONSULTAN	
14	ASWANU	KONSULTAN JASA PATRIA BDC	
15	Rusli Rais.	PIJ Jasa Patra	
16	Roslihm	JPG	
17			
18			
9			
0			

Annex 15 – Distribution of Indigenous Peoples in DOISP AF areas*

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
1	Batutegi	BBWS Mesuji Sekampung	Talang Padang	Lampung	No	N/A	N/A
2	Darma	BBWS Cimanuk Cisanggarung	Indramayu	Jawa Barat	No	N/A	N/A
3	Malahayu	BBWS Cimanuk Cisanggarung	Brebes	Jawa Tengah	No	N/A	N/A
4	Klego	BBWS Pemali Juana	Boyolali	Jawa Tengah	No	N/A	N/A
5	Simo	BBWS Pemali Juana	Grobogan	Jawa Tengah	No	N/A	N/A
6	Cacaban	BBWS Pemali Juana	Tegal	Jawa Tengah	No	N/A	N/A
7	Wadaslintang	BBWS Serayu Opak	Kebumen	Jawa Tengah	No	N/A	N/A
8	Karangkates/Sutami	BBWS Brantas	Malang	Jawa Timur	No	N/A	N/A
9	Selorejo	BBWS Brantas	Malang	Jawa Timur	No	N/A	N/A
10	Sengguruh	BBWS Brantas	Malang	Jawa Timur	No	N/A	N/A
11	Pengga	BWS NT I	Lombok	NTB	No	N/A	N/A
12	Jatiluhur/Ir. H. Djuanda	BBWS Citarum Ciliwung Cisadane	Purwakarta	Jawa Barat	No	N/A	N/A
13	Way Rarem	BBWS Mesuji Sekampung	Kotabumi	Lampung	No	N/A	N/A
14	Way Jeparu	BBWS Mesuji Sekampung	Lampung	Lampung	No	N/A	N/A
15	Situpatok	BBWS Cimanuk Cisanggarung	Cirebon	Jawa Barat	No	N/A	N/A
16	Situ Bolang	BBWS Cimanuk Cisanggarung	Indramayu	Jawa Barat	No	N/A	N/A
17	Penjalin	BBWS Pemali Juana	Brebes	Jawa Tengah	No	N/A	N/A
18	Greneng	BBWS Pemali Juana		Jawa Timur	No	N/A	N/A

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
19	Tempuran	BBWS Pemali Juana	Blora	Jawa Timur	No	N/A	N/A
20	Banyukuwung	BBWS Pemali Juana	Rembang	Jawa Tengah	No	N/A	N/A
21	Lodan	BBWS Pemali Juana	Rembang	Jawa Tengah	No	N/A	N/A
22	Panohan	BBWS Pemali Juana	Rembang	Jawa Tengah	No	N/A	N/A
23	Kedung Waru	BBWS Pemali Juana	Grobogan	Jawa Tengah	No	N/A	N/A
24	Kedung Ombo	BBWS Pemali Juana	Boyolali	Jawa Tengah	No	N/A	N/A
25	Sempor	BBWS Serayu Opak	Kebumen	Jawa Tengah	No	N/A	N/A
26	Sermo	BBWS Serayu Opak	Kulon Progo	Jawa Tengah	No	N/A	N/A
27	Gado	BBWS Serayu Opak	Pati	Jawa Tengah	Yes	Jawa	Kec. Sukolilo
28	Kedung Sengon	BBWS Brantas	Nganjuk	Jawa Timur	No	N/A	N/A
29	Sumber Kepuh	BBWS Brantas	Nganjuk	Jawa Timur	No	N/A	N/A
30	Bening/Widas	BBWS Brantas	Madiun	Jawa Timur	No	N/A	N/A
31	Lahor	BBWS Brantas	Malang	Jawa Timur	No	N/A	N/A
32	Klampis	BBWS Brantas	Sampang	Jawa Timur	No	N/A	N/A
33	Jerowaru	BWS NT I	Lombok Timur	NTB	Yes	IP NO NAME	
34	Batu Bulan	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
35	Gapit	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
36	Mamak	BWS NT I	Sumbawa	NTB	Yes	1) Samawa 2) IP NO NAME	Kec. Lunyuk, Kec. Batulanteh, Kec. Lape-Lopok
37	Sumi	BWS NT I	Bima	NTB	Yes	IP NO NAME	Kec. Monta, Kec. Wawo, Kec. Langgadu, Kec. Lambu, Kec. Donggo
38	Sepayung Dalam	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
39	Batunampar	BWS NT I	Praya	NTB	No	N/A	N/A
40	Brangkolong	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
41	Jambu	BWS NT I	Dompu	NTB	No	N/A	N/A
42	Jangkih Jawe	BWS NT I	Praya Barat	NTB	No	N/A	N/A
43	Kali Ujung	BWS NT I	Lombok Timur	NTB	Yes	IP NO NAME	
44	Kasuangi	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
45	Kesi	BWS NT I	Dompu	NTB	Yes	IP NO NAME	Kec. Woja
46	Kempo	BWS NT I	Dompu	NTB	Yes	IP NO NAME	Kec. Woja
47	Kowo	BWS NT I		NTB	No data yet		
48	Labangka	BWS NT I	Brang Labangka	NTB	No	N/A	N/A
49	Laju	BWS NT I	Bima	NTB	Yes	IP NO NAME	Kec. Monta, Kec. Wawo, Kec. Langgadu, Kec. Lambu, Kec. Donggo
50	Lanangka	BWS NT I	Dompu	NTB	Yes	IP NO NAME	Kec. Woja
51	Mantar	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
52	Mapasan	BWS NT I	Praya Barat Daya	NTB	No	N/A	N/A
53	Mengkong	BWS NT I	Bima	NTB	Yes	IP NO NAME	Kec. Monta, Kec. Wawo, Kec. Langgadu, Kec. Lambu, Kec. Donggo
54	Muer	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
55	Ncera	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
56	Oi Toi	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
57	Oler Rawa	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
58	Parado Kanca	BWS NT I	Bima	NTB	Yes	IP NO NAME	Kec. Monta, Kec. Wawo, Kec. Langgadu, Kec. Lambu, Kec. Donggo
59	Pelaparado	BWS NT I	Bima	NTB	Yes	IP NO NAME	Kec. Monta, Kec. Wawo, Kec. Langgadu, Kec. Lambu,

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
							Kec. Donggo
60	Penyaring	BWS NT I	Sumbawa	NTB	Yes	1) Samawa 2) IP NO NAME	Kec. Lunyuk, Kec. Batulanteh, Kec. Lape-Lopok
61	Pernek	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
62	Roi Roka	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
63	Sanggugupanasante	BWS NT I	Dompu	NTB	Yes	IP NO NAME	Kec. Woja
64	Sejari I	BWS NT I	Plampang	NTB	No	N/A	N/A
65	Selante	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
66	Serading	BWS NT I	Dompu	NTB	Yes	IP NO NAME	Kec. Woja
67	Sepit	BWS NT I	Mataram	NTB	No	N/A	N/A
68	Telaga Lebur	BWS NT I	Lombok Barat	NTB	Yes	1) Sasak 2) IP NO NAME	Kec. Sekotong Tengah, Kec. Lembar
69	Tolatangga	BWS NT I	Bima	NTB	Yes	IP NO NAME	Kec. Monta, Kec. Wawo, Kec. Langgadu, Kec. Lambu, Kec. Donggo
70	Tonda Selatan	BWS NT I	Dompu	NTB	Yes	IP NO NAME	Kec. Woja
71	Waworada	BWS NT I	Bima	NTB	Yes	IP NO NAME	Kec. Monta, Kec. Wawo, Kec. Langgadu, Kec. Lambu, Kec. Donggo
72	Wera I	BWS NT I	Bima	NTB	Yes	IP NO NAME	Kec. Monta, Kec. Wawo, Kec. Langgadu, Kec. Lambu, Kec. Donggo

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
73	Pancor	BWS NT I	Lombok Tengah	NTB	No	N/A	N/A
74	Pare	BWS NT I	Mataram	NTB	No	N/A	N/A
75	Batujai	BWS NT I	Praya	NTB	No	N/A	N/A
76	Tibu Kuning	BWS NT I		NTB	No data yet		
77	Pandanduri	BWS NT I		NTB	No data yet		
78	Tiu Kulit	BWS NT I	Sumbawa Besar	NTB	No	N/A	N/A
79	Manubulu	BWS NT II	Kupang	NTT	Yes	IP NO NAME	Kec. Amfoang Selatan, Kec. Amfoang Barat Daya, Kec. Amfoang Utara Kec. Amfoang Barat Laut, Kec. Amfoang Timur
80	Waerita	BWS NT II	Sikka	NTT	Yes	1) Lio 2) Lio Mego 3) IP NO NAME	Kec. Paga, Kec. Mego, Kec. Lela, Kec. Bola, Kec. Talibura, Kec. Waigete, Kec. Maumere
81	Livuhahani	BWS NT II	Baa	NTT	No	N/A	N/A
82	Benkoko	BWS NT II	Kupang	NTT	Yes	IP NO NAME	Kec. Amfoang Selatan, Kec. Amfoang

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
							Barat Daya, Kec. Amfoang Utara Kec. Amfoang Barat Laut, Kec. Amfoang Timur
83	Haliwen	BWS NT II	Atambua	NTT	No	N/A	N/A
84	Haekrit	BWS NT II	Belu	NTT	Yes	1) Tafuli, 2) Nefonafui 3) Lotatoen 4) IP NO NAME	Kec. Rinhat, Kec. Sasita Mean
85	Kengkang	BWS NT II	Lombok Tengah	NTB	No	N/A	N/A
86	Tilong	BWS NT II	Kupang	NTT	Yes	IP NO NAME	Kec. Amfoang Selatan, Kec. Amfoang Barat Daya, Kec. Amfoang Utara Kec. Amfoang Barat Laut, Kec. Amfoang Timur
87	Oei Tua	BWS NT II	Kupang	NTT	Yes	IP NO NAME	Kec. Amfoang Selatan, Kec. Amfoang Barat Daya, Kec. Amfoang Utara Kec. Amfoang Barat Laut, Kec. Amfoang Timur

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
88	Karingga	BWS NT II	Sumba Timur	NTT	Yes	1) Tansula 2) Baradita 3) Sumba 4) Maidang 5) Mbarandita 6) Peraisalura 7) Kabanda 8) IP NO NAME	Kec. Nggaha Oriangu, Kec. Tabundung, Kec. Pinupahar, Kec. Paberiwai, Kec. Karera, Kec. Metawai La Pawu, Kec. Kahaungu Eti Kec. Wula Waijelu Kec. Umalulu Kec. Haharu
89	Padang Panjang	BWS NT II	Alor	NTT	Yes	1) Pantar 2) Klon 3) Abui 4) Maran 5) IP NO NAME	Kec. Pantar, Kec. Pantar Barat, Kec. Alor Barat Daya, Kec. Alor Selatan, Kec. Alor Timur Kec. Alor Timur Laut Kec. Alor Tengah Utara
90	Rakawatu	BWS NT II	Sumba Timur	NTT	Yes	1) Tansula 2) Baradita 3) Sumba 4) Maidang 5) Mbarandita 6) Peraisalura 7) Kabanda 8) IP NO NAME	Kec. Nggaha Oriangu, Kec. Tabundung, Kec. Pinupahar, Kec. Paberiwai, Kec. Karera, Kec. Metawai La Pawu, Kec. Kahaungu Eti Kec. Wula Waijelu

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
							Kec. Umalulu Kec. Haharu
91	Song Putri	BBWS Bengawan Solo	Wonogiri	Jawa Tengah	No	N/A	N/A
92	Gonggang	BBWS Bengawan Solo	Magetan	Jawa Tengah	No	N/A	N/A
93	Kedung Brubus	BBWS Bengawan Solo	Madiun	Jawa Timur	No	N/A	N/A
94	Nglambangan	BBWS Bengawan Solo	Bojonegoro	Jawa Timur	No	N/A	N/A
95	Dawuhan	BBWS Bengawan Solo	Madiun	Jawa Timur	No	N/A	N/A
96	Sangiran	BBWS Bengawan Solo	Ngawi	Jawa Timur	No	N/A	N/A
97	Canggih	BBWS Bengawan Solo	Lamongan	Jawa Timur	No	N/A	N/A
98	Cungkup	BBWS Bengawan Solo	Lamongan	Jawa Timur	No	N/A	N/A

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
99	Kembangan	BBWS Bengawan Solo	Sragen	Jawa Tengah	No	N/A	N/A
100	Manyar	BBWS Bengawan Solo	Lamongan	Jawa Timur	No	N/A	N/A
101	Lalung	BBWS Bengawan Solo	Karanganyar	Jawa Tengah	No	N/A	N/A
102	Sarada	BBWS Bengawan Solo	Madiun	Jawa Timur	No	N/A	N/A
103	Delingan	BBWS Bengawan Solo	Karanganyar	Jawa Tengah	No	N/A	N/A
104	Kedung Bando	BBWS Bengawan Solo	Madiun	Jawa Timur	No	N/A	N/A
105	Nawangan	BBWS Bengawan Solo	Wonogiri	Jawa Tengah	No	N/A	N/A
106	Ngancar	BBWS Bengawan Solo	Wonogiri	Jawa Tengah	No	N/A	N/A
107	Parang Joho	BBWS Bengawan Solo	Wonogiri	Jawa Tengah	No	N/A	N/A
108	Pondok	BBWS Bengawan Solo	Ngawi	Jawa Timur	No	N/A	N/A
109	Telogo Pasir	BBWS Bengawan Solo	Magetan	Jawa Tengah	No	N/A	N/A
110	Prijetan	BBWS Bengawan Solo	Bojonegoro	Jawa Timur	Yes	Jawa	Kec. Morgomulo
111	Ketro	BBWS Bengawan Solo	Sragen	Jawa Tengah	No	N/A	N/A
112	Pacal	BBWS Bengawan Solo	Bojonegoro	Jawa Timur	Yes	Jawa	Kec. Morgomulo
113	Cengklik	BBWS Bengawan Solo	Boyolali	Jawa Tengah	No	N/A	N/A
114	Lempake	BWS Kalimantan III	Samarinda	Kalimantan Timur	No	N/A	N/A

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
115	Beriwit	BWS Kalimantan III	Berau	Kalimantan Timur	Yes	1) Dayak Kenyah 2) Ema Kulit 3) Dayak Basap 4) Dayak Punan 5) Buramato	Kec. Kelay, Kec. Biduk Biduk Kec. Sambaliung, Kec. Gunung Tabur, Kec. Segah
116	Binalatung	BWS Kalimantan III	Tarakan	Kalimantan Tengah	No	N/A	N/A
117	Manggar	BWS Kalimantan III	Balikpapan	Kalimantan Timur	No	N/A	N/A
118	Marancang	BWS Kalimantan III	Berau	Kalimantan Timur	Yes	1) Dayak Kenyah 2) Ema Kulit 3) Dayak Basap 4) Dayak Punan 5) Buramato	Kec. Kelay, Kec. Biduk Biduk Kec. Sambaliung, Kec. Gunung Tabur, Kec. Segah
119	Keuliling	BWS Sumatera I	Aceh Besar	Aceh	Yes	Aceh	Kec. Kota Jantho Kec. Pulo Aceh
120	Lubok	BWS Sumatera I	Aceh Besar	Aceh	Yes	Aceh	Kec. Kota Jantho Kec. Pulo Aceh
121	Rajui	BWS Sumatera I	Pidie	Aceh	Yes	1) Singkil 2) Aneuk J	Kota Sigli

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
122	Sianjo-anjo	BWS Sumatera I	Aceh Singkil	Aceh	Yes	1) Aceh 2) Aneuk Jame	Kec. Pulau Banyak, Kec. Singkil, Kec. Kuala Baru, Kec. Simpang Kanan, Kec. Danau Paris, Kec. Suro Makmur, Kec. Kota Baharu
123	Gintung	BBWS Ciliwung Cisadane	Tangerang Selatan	Banten	No	N/A	N/A
124	Cipancuh	BBWS Ciliwung Cisadane	Indramayu	Jawa Barat	No	N/A	N/A
125	Muara	BWS Bali Penida	Denpasar	Bali	No	N/A	N/A
126	Benel	BWS Bali Penida	Negara	Bali	No	N/A	N/A

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
127	Grogak	BWS Bali Penida	Singaraja	Bali	No	N/A	N/A
128	Palasari	BWS Bali Penida	Jembrana	Bali	No	N/A	N/A
129	Telaga Tunjung	BWS Bali Penida	Tabanan	Bali	No	N/A	N/A
130	Salomeko	BBWS Pompengan Jeneberang		Sulawesi Selatan	No data yet		

No.	Name of Dam	Name of B(B)WS	District	Province	Presence of IP	IP Identification	IP Location
131	Kalola	BBWS Pompengan Jeneberang		Sulawesi Selatan	No data yet		
132	Bili-Bili	BBWS Pompengan Jeneberang	Makassar	Sulawesi Selatan	No	N/A	N/A
133	Ponre-Ponre	BBWS Pompengan Jeneberang	Jeneberang	Sulawesi Selatan	No	N/A	N/A
134	Abusur	BWS Maluku	Wohreli	Sulawesi Selatan	No	N/A	N/A

*Preliminary screening based on the World Bank and Ministry of Social Affairs study in 2010.

Annex 16 – Environmental and Social Safeguard Screening Checklist

Screening Question	No	Yes	Proposed Mitigation Measures
A. Environmental Aspects			
<ul style="list-style-type: none"> • Include in the list of public works activities that require UKL-UPL (see Annex 9)? 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, to develop UKL-UPL
<ul style="list-style-type: none"> • Involve small civil works and requires contractors? 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, describe key mitigation measures
<ul style="list-style-type: none"> • Introduction on non-native species but these are already present in the vicinity or known from similar setting to be non-invasive? 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, describe key mitigation measures
<ul style="list-style-type: none"> • Noise or dust from construction equipment? 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, describe key mitigation measures
<ul style="list-style-type: none"> • Are there risks of soil erosion? 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, describe key mitigation measures
<ul style="list-style-type: none"> • Are there potential significant impacts or loss or degradation of natural habitats (or non-critical natural habitats)? 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, describe key mitigation measures
<ul style="list-style-type: none"> • Is any AMDAL was prepared for the original project? 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, describe key mitigation measures
<ul style="list-style-type: none"> • Were there any past environmental violations? 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, describe key mitigation measures
<ul style="list-style-type: none"> • Were there any water quality problems? 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, describe key mitigation measures
<ul style="list-style-type: none"> • Was there aquatic weed proliferation? 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, describe key mitigation measures
<ul style="list-style-type: none"> • Is there any reservoir encroachment? 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, describe key mitigation measures
A. Social Aspects			
<ul style="list-style-type: none"> • Include minor land acquisition (affects <10% of land holding and <200 people) 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, to develop Land Acquisition and Resettlement Action Plan (see Annex 4 for guidelines)
<ul style="list-style-type: none"> • Are indigenous peoples presence in the project area 	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, to follow guidelines in Indigenous Peoples Policy Framework and develop Indigenous People Plan as required (see Annex 5)

Annex 17 – Grievance Redress Mechanism

A. Introduction

1. The project is a continuation of the ongoing Dam Operational Improvement and Safety Project – 1 (DOISP) and will finance five components required to substantially improve Indonesia’s dam operation and safety. The project builds on lessons learned from a number of related projects that advocate for an integrated, holistic approach to dam safety and operations within the context of the river basin to ensure the adequacy of the supporting institutional environment. The planned to be implemented from 2017-2022 and aimed at: (i) increase the safety of existing dams in selected locations, and (ii) strengthen institutions for operational effectiveness of dam management. Investments are prioritized based on objective criteria for identification and assessment and includes 23 major dams prioritized and prepared under DOISP, along with priority investments from the remaining 115 major dams in the portfolio. These sub-projects will be mostly located in Java (West Java, Central Java, Yogyakarta and East Java), and some in NTB, NTT, Lampung, East Kalimantan and South Sulawesi.
2. Although DOISP AF seek to minimize potential negative impacts arising from its sub-projects, it is inevitable that queries and grievances will arise throughout the construction and operation phases. DOISP AF recognizes that grievance redress mechanism is essential to minimize and manage risks as systematic, professional, rules-based procedures for handling grievances and appeals.

B. Objective

3. Grievance redress mechanism (GRM) shall be established by each DOISP AF sub-project to receive and facilitate resolution of potentially Affected Communities’ concerns and grievances about the sub-projects’ environmental and social management performance. The objective of this mechanism is to ensure that perceptions and concerns of individual or a group within communities affected by project activities are heard and received, and then responded in timely manner and oriented to resolve the issue.

C. Definition

4. Grievance is defined as a concern or a complaint rose by an individual or a group within communities affected by project activities. Both concerns and complaints can result from either real or perceived impacts of sub-project’s activities implemented by the PIU and/or its consultants and contractors. Grievance can be resulted from disagreements on how the sub-project is implemented, or decisions taken in the sub-project being implemented. These include the concerns on impacts derived by sub-project activities, routine activities of the project, or an accident in the implementation of the sub-project. Identifying and responding to complaints and concerns will support the development of positive relationships between the project and the affected communities, and other stakeholders.
5. Grievance redress mechanism is a process that formally receiving, evaluating and addressing project-related grievances from affected communities. Grievance redress mechanism describes how grievance is handled, specify person responsible on its handling, and trace whether the grievance has been resolved and whether both parties (the party who submit grievance and the party who is being

reported) have reached agreement on the resolution.

6. The GRM is required to be scaled to the risks and impacts of the sub-project and have Affected Communities as its primary user. It will seek to resolve concerns promptly, using an understandable and transparent consultative process that is culturally appropriate, readily accessible, at no cost, and without retribution to the party that originated the issue or concern. The mechanism should not impede access to judicial or administrative remedies.
7. Where the indigenous peoples are concerned, a grievance redress mechanism will be developed in a way that is culturally appropriate in close collaboration with the relevant groups.

D. Procedures

8. The Grievance Redress Unit (GRU) assumes to have primary responsibility for responding to grievances and overseeing redress (see Section I – Implementation Arrangements for further description). The illustration of GRM procedures is described in **Appendix 1**.
9. Receipt of Grievance. The GRM is triggered at the instance a community complaint is received by PIU and/or its contractors and consultants. In general, grievances may be communicated through three primary channels:
 - Oral communications
 - Written communications
 - Inferred understanding of a grievance (e.g. on-going problems raised during visits to program sites by project staff, independent monitors, NGOs, media, government officials, etc.) or alert of grievance via direct public action (e.g. protest).

Common to all of the channels for receipt of a grievance is the need to register a formal entry into the GRM database—a centralized grievance log and tracking system that will equip PIU to identify, understand and address vulnerabilities in sub-project implementation. The GRM database will be utilized to: a) register, track and recall information about specific grievances; b) generate summary reports of grievances by type and frequency, and c) allow the PIU to proactively respond to common grievances.

10. Delegation of Grievance Redress. Many situations necessitate that the GRU coordinate with other unit in the PIU under whose jurisdiction a particular grievance is levied. In such situations where a coordinated response to grievances is necessary, the GRU will ensure the effective and timely communication of receipt of grievance.
11. Initial Reporting. A generic report of the grievance is generated from the initial GRM database entry by the GRU. This report includes all details known at the time that the grievance is registered, and indicates what, if any, information is needed before a full account of the grievance can be logged. This initial report also serves to provide context and guidance for the ensuing fact-finding investigation. Timelines for fact-finding and implementation of possible actions will be established as appropriate for the type and severity of the grievance. Format of GRM database is available in **Appendix 2**.
12. Fact-Finding. Fact-finding investigations seek to establish a clear picture of the circumstances surrounding a particular grievance. Investigations verify the

information contained in the initial grievance report about i) the identity of the complainant and nature of complaint; ii) the status of the complaint, including if it has been resolved by any immediate remedial actions, if the aggrieved expects that any particular actions need to be implemented, if no action toward resolution is known or expected, etc.; and iii) supporting evidence for any disputed claims. For grievances that involve a large number of people or entire villages, community meetings will be held with both open sessions for people to air their complaints and facilitated sessions to help collaboratively identify potential redress actions. Fact-finding investigations shall rely on consultation that is free of discrimination and coercion.

13. **Resolution.** Resolution involves decision-making about grievance redress actions. Resolution is carried out with the hope that agreement on grievance resolution could be achieved at the Project level (i.e. preventing complainants from proceeding to higher levels, such as government authorities). In some cases, redress actions require coordination with the legal authorities, such as when a local law has been violated (e.g. corruption). Resolution processes and approaches rely, whenever possible, on local approaches to conflict resolution. When appropriate, local authorities and/or respected personages are consulted for their insights and advice on the grievance and its proper resolution. Upon reaching agreement with the aggrieved, all such understandings are being put in writing and a statement signed by both sides shall be distributed to all sides in the grievance.
14. **Appeal.** If a complainant is not satisfied with the implementation outcomes of an agreed-upon grievance resolution measure, he/she may appeal the outcome. Written appeals may be registered with the GRU directly, or complainants may express their desire for an appeal to GRU for then to be registered in the database. When an appeal is registered, it is incumbent upon GRU to investigate the cause for dissatisfaction with the implemented resolution measure and to identify follow-up actions that are agreeable to the aggrieved party. Grievance is considered closed if an appeal process is pending or active. If, however, the PIU has acted in good faith to resolve a grievance, and the aggrieved party refuses to acknowledge satisfactory resolution after 3 separate appeal and resolution processes, the PIU reserves the authority to list the grievance as “intractable” and to terminate the appeals process.
15. **Feedback.** Once a grievance has been resolved, the complainant shall be invited to give feedback about the resolution process and asked to indicate their level of satisfaction with the mitigation measures once such measures have been implemented. In all cases, the aggrieved must be aware of the outcome of his/her complaint. If the complainant is anonymous, information on resolution of the complaint shall be posted in the relevant village bulletin boards. Following resolution decision, the GRM database shall be updated to reflect the status ongoing redress measures and the perception of the aggrieved in regard to these measures.
16. **Closeout Reporting.** Closeout reports are generated upon completion of the grievance resolution process. Reviewing the information logged into the GRM database, the GRU generate a summary write-up of the resolution process. Closeout reports should:
 - contain details of the duration of time it took for each step of the grievance resolution process;

- list resolution measures agreed-upon and describe the implementation process;
- provide an evaluation of the resolution process by the GRU;
- provide the feedback of the aggrieved on the resolution process;
- if appeals were registered, indicate the cause for dissatisfaction with the implementation of the initial resolution measures and explain what was done differently during the appeals resolution process reflect on lessons learned.

E. Disclosure of Grievance Redress Mechanism

17. The PIU will inform the Affected communities about the mechanism as part of stakeholder engagement process. PIU may utilize various media to ensure broad community level awareness of the GRM, such as posters, to be hung in village community centers and district government offices, a cartoon booklet illustrating GRM procedures, to be distributed to affected communities, and direct communications with project-affected communities, particularly in relation to Land Acquisition and Resettlement Action Plan (LARAP), Indigenous Peoples Plan (IPP) and the community participation in reservoir and watershed management programs.
18. A Grievance Form may be distributed to the affected communities during project socialization and/or stakeholder engagement and made available at village office as means to facilitate grievance delivery with designated contact of the GRU. Format of grievance form is available in **Appendix 3**.

F. Reporting and Monitoring and Documentation

19. The GRU will compile and report monthly grievance database and ongoing grievance resolution process in a monthly grievance report that provides updates on information such as the volume, type and location of grievances received, actions for their redress and status of resolution process. The report will highlight serious or high profile cases requiring additional attention, including cases of corruption, complaints against PIU staff and its contractors/consultants or widespread fraud or manipulation. The report will attach closeout report of that grievance that has been resolved/closed for that specific month. The monthly report will be submitted to Regional Safeguard Specialist of the CPIU.
20. Monitoring of the GRM implementation will be undertaken biannually by Regional Safeguard Specialist of the CPIU. The monitoring process will utilize GRU monthly report to prepare biannual assessment of the effectiveness of grievance redress mechanisms as part of CPIU six-monthly monitoring report. The Regional Safeguard Specialist will also recapitulate number of grievance, type of grievance and its handling in the biannual report. External monitoring and evaluation may be conducted as part of DOISP AF external monitoring and evaluation process.

G. Institutional arrangements

21. Usually a Grievance Redress Unit (GRU) will be established to operationalize the grievance redress mechanism. However, it is not necessary to always established new unit in the PIU, instead this function can be integrated into existing structure of organization.
22. The Grievance Redress Unit (GRU) assumes to have primary responsibility for responding to grievances and overseeing redress. Many situations, however, necessitate that the GRU coordinate with other project units under whose

jurisdiction a particular grievance is levied. In such situations where a coordinated response to grievances is necessary, the GRU will ensure the effective and timely communication of receipt of grievance notifications, fact-finding inquiries, and will facilitate forums for remediation and restitution decisions.

23. The main functions of the GRU are to:

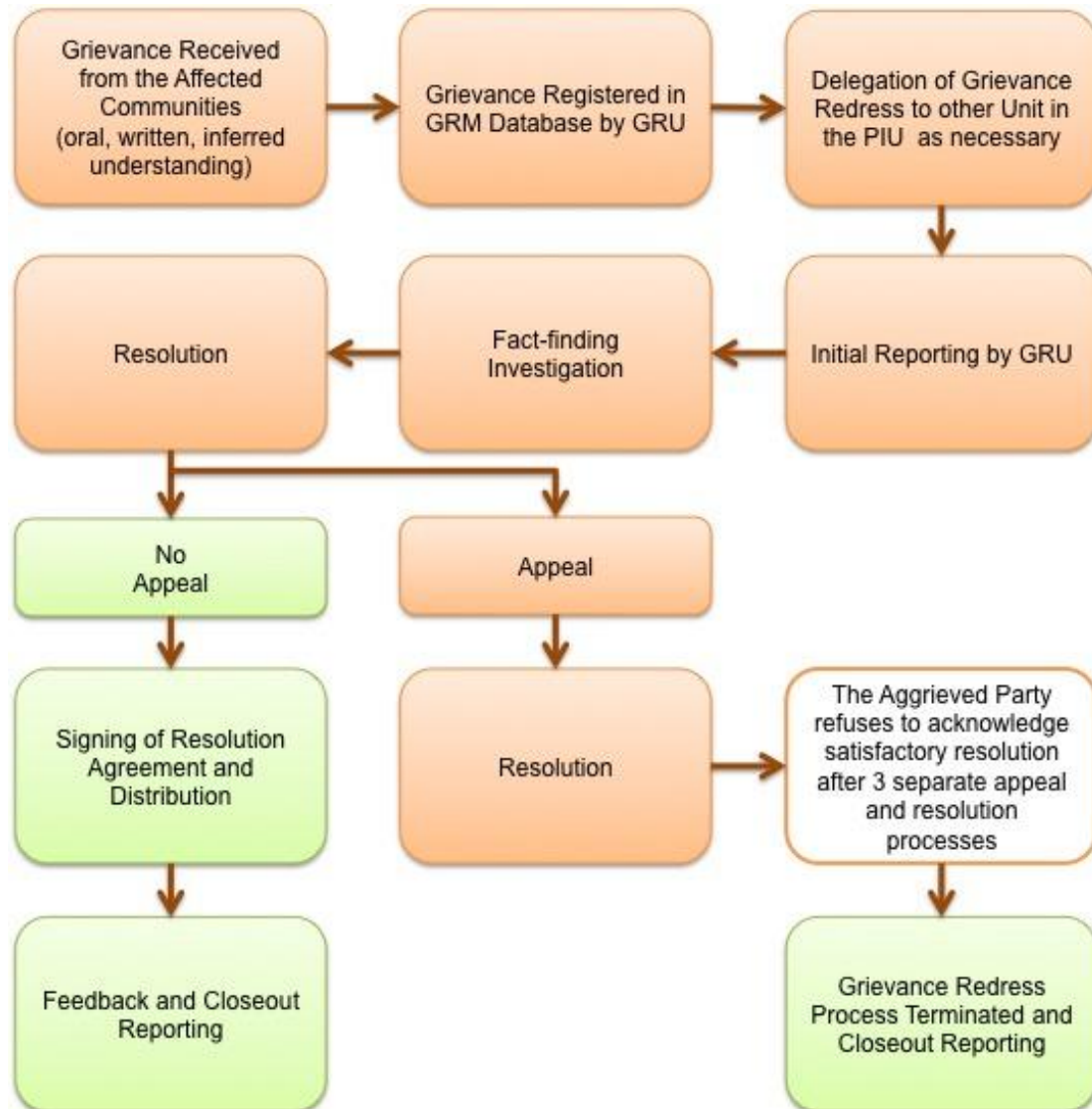
- Built and maintain GRM database;
- Assign access number to receive complaints/concerns through phone calls, email and text messaging system (SMS), as appropriate.
- Monitor and supervise grievance handling, including by categorizing and delegating complaints to the appropriate departments for resolution;
- Investigate serious complaints, especially by coordinating resources for fact-finding missions;
- Prepare a monthly grievance report that provides updates on information such as the volume, type and location of grievances received and actions for their redress. Highlight serious or high profile cases requiring additional attention, including cases of corruption, complaints against PIU staff and its contractors/consultants or widespread fraud or manipulation;
- Analyze trends in grievance reporting and identify strategies to address major problems.

24. The GRU may request assistance from Regional Safeguard Specialist of the CPIU in establishing Grievance Redress Mechanism for the sub-project. PIU contractors and consultants may also requested to establish

25. The GRM shall also extended to PIU's contractors and consultants activities. PIU's contractors and consultants shall notify/report any grievance received to the GRU to be registered in the GRM database and for further processed.

APPENDIX 1 – Illustration of GRM Procedures

The procedures of grievance redress handling is as follow:



APPENDIX 2 – Format of GRM database

The format of grievance redress record (GRM database) is as follow:

No.	Name of Aggrieved Party	Address and Phone Number	Date and Time of Grievance Received	Name of Staff & Unit Receive the Grievance	Date of Grievance Recorded	Name of Staff Record the Grievance (GRU)	Scope of Grievance	Content of Grievance	Status of Grievance Redress Process (Delegation, Fact-finding, Appeal, Resolution, Closed/Intractable)	Delegated Unit (and PIC), as necessary	Status of Initial Report	Status of Information Disclosure to Aggrieved Party	Status of Feedback from the Aggrieved Party	Status of Closeout Report
1.	Budi	Desa Sukajang, Jakarta 08121231234	20-Feb-2017, 17.00	Rika, CP Facilitator	22-Feb-2017, 10.00	Jono	Procurement of Construction Materials Shop	The selected shop is not qualified	Fact-Finding: Recheck qualification of the selected shop	N/A	Finalized	Grievance has been recorded and in fact-finding process	Not yet	Not yet

APPENDIX 3 – Format of Grievance Form



**KEMENTERIAN PEKERJAAN UMUM DAN PERUMAHAN RAKYAT
DIREKTORAT JENDERAL SUMBER DAYA AIR
DIREKTORAT BINA OPERASI DAN PEMELIHARAAN**

DAM OPERATIONAL IMPROVEMENT AND SAFETY PROJECT - 2 (DOISP AF)

GRIEVANCE FORM

Name of Sub-project: _____

Name:
ID No.:
Address:
Phone No.:

Date of Receipt:
Time of Receipt:
Name of Staff Received:
Location:

Detail of Grievance:

Signature of Aggrieved Party	Signature of Staff Receive Grievance	Signature of GRU Staff
()	()	()

<u>To be filled by GRU Staff</u>	
Date of Record:	Grievance No.

Annex 18 – Chance Find Protocol

If any person discovers a physical cultural resource, such as (but not limited to) archeological sites, historical sites, remains and objects, or a cemetery and/or individual graves during excavation or construction, the Contractor shall:

1. Stop the construction activities in the area of the chance find;
2. Delineate the discovered site or area;
3. Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities take over;
4. Notify the Supervising Engineer who in turn will notify BBWS and the responsible local authorities immediately (within 24 hours or less);
5. Responsible local authorities are in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by archeologists. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
6. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
7. Implementation for the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities; and
8. Construction works could resume only after permission is granted from the responsible local authorities concerning safeguard of the physical cultural resource.

Annex 19 – Pest Management Framework

A. Introduction

1. The Dam Operational Improvement and Safety Project Additional Financing (DOISP AF) is a continuation of the ongoing Dam Operational Improvement and Safety Project (DOISP) and will finance five components required to substantially improve Indonesia's dam operation and safety. The project builds on lessons learned from a number of related projects that advocate for an integrated, holistic approach to dam safety and operations within the context of the river basin to ensure the adequacy of the supporting institutional environment. The project is planned to be implemented from 2017-2022 and aimed at: (i) increase the safety of existing dams in selected locations, and (ii) strengthen institutions for operational effectiveness of dam management. Investments are prioritized based on objective criteria for identification and assessment and includes 23 major dams prioritized and prepared under DOISP, along with priority investments from the remaining 111 major dams in the portfolio. These sub-projects will be mostly located in Java (West Java, Central Java, Yogyakarta and East Java), and some in NTB, NTT, Lampung, East Kalimantan and South Sulawesi.
2. Most of the dams covered in DOISP AF have the functionality to meet the needs of irrigation for communities' agriculture activities. Rehabilitating these dams is expected to increase agricultural intensity and productivity thus may eventually result in an increase use of pesticides.

B. Objective

3. Any project funded by the World Bank, where an increase in the use of pesticides is expected, triggers OP 4.09 of the Bank's policies and procedures which require that a Pest Management Framework (PMF) should be prepared and consequently sub-project specific Integrated Pest Management Plans (IPMPs). The objective of this framework is to provide guidance for the PIUs in the event where a sub-project will likely significantly increase agriculture production thus increase the use of pesticides. This will ensure that pests are managed in an integrated and sustainable approach.

C. Laws and Regulation Related to Pest Management

4. This Plan takes into account issues related to pest management as included in the following Law and Regulations:
 - a. Law No. 12/1992 on Food Crops Cultivation;
 - b. Law No.23/1992 on Health;
 - c. Law No.32/2009 on Environmental Protection and Management;
 - d. Law No.8/1999 on Protection of Consumers;
 - e. Government Regulation No.7/1973 on Supervision of Circulation, Storage and Usage of Pesticides;
 - f. Government Regulation No.6/1995 on Protection of Crops and Cultivation
 - g. Minister of Agriculture Decree No.887/Kpts/OT.210/9/1997 on Pest Management
 - h. Minister of Agriculture Regulation No.45/Permentan/SR.140/10/2009 on Condition and Procedure of Pesticide Registration;
 - i. Minister of Agriculture Guidelines on Integrated Pest Management

D. Environmental Impacts

5. The excessive and indiscriminate use of pesticide inevitably has an adverse effect on the environment. While targeting harmful pests, benign insects are also affected, thus disturbing the balance of the ecosystem balance. For example, honeybees, instrumental in pollination in the plant kingdom, are sensitive to pesticides and in some instances are killed in large numbers. Loss in biodiversity occurs, with a consequent adverse effect on birds and other wildlife.
6. In general, the resulting environmental problems may be classified as follows:
 - a. Water Pollution (with a potentially major effect on human life);
 - b. Soil Pollution;
 - c. Environmental Pollution;
 - d. Pollution of fish ponds;
 - e. Animal Health;
 - f. Forced change of habits.

Each of these problems needs to be investigated by suitable research. In particular, research must be directed at established areas of intensive agriculture, both with and without irrigation, which is vital to the country's food supply.

E. Impacts on Human Health

7. The Persons directly affected by pesticides are workers in the pesticide industry, and both male and female agricultural field workers. Sickesses of various kinds are frequently induced, some of which are listed below:
 - a. Headache
 - b. Irritation of the skin, eyes, nose, throat (all very common)
 - c. Dizziness, vomiting
 - d. Blurred vision
 - e. Heart irregularities
 - f. Cancer
 - g. Fatality

F. Integrated Pest Management Plan

8. Integrated Pest Management is a sustainable approach to managing pests by combining cultural, physical/mechanical, biological, and chemical tools in a way that keep pests below their economic injury levels and minimizes economic, health and environmental risks. Fundamentally, IPM aims to maximise the use of biological control; other control measures especially chemicals play a supportive rather than a disruptive role.
9. An Integrated Pest Management Plan (IPMP) will be prepared by PIU in collaboration with related government agencies, with the support of Regional Safeguard Specialist, in the likely event that the sub-project will affect significant increase of agriculture activities. The PIU may assign consultant(s) with expertise in pest management to assist preparation of the IPMP.
10. The IPMP is prepared in a flexible and pragmatic manner, and its level of detail varies depending on the specific project and the nature of effects to be addressed. It will include the following elements, as needed:

- a. Problem Identification: The correct IPM approach promotes “proactive” rather than “reactive” management. Correct identification is the first and most important step in controlling a problem. This first step is critical to future success, since an incorrect diagnosis leads to mismanagement.
 - b. Selection of appropriate management alternative: Once the problem has been identified, considerations on how to control it will have to be made. The goal in selecting control tactics is to use methods that are effective, practical, economical, and environmentally sound.
 - c. Consideration of economic and environmental factors: Despite efforts to avoid using chemicals, there are times when only pesticides can control the damage. Even so, it may not pay to use them. Pesticides should be used in an IPM program only when the benefits (yield, quality, aesthetic value) exceed the costs of control. Otherwise time and money are wasted. It’s not easy to figure out when it pays to use pesticides. There are many variables: the pest population, variety, and growth stage, weather, and cost of the control.
 - d. An action plan of measures to ensure pests are managed in an integrated and sustainable way: The action plan needed must entail a strategy that fits with the short- and long-term plans, labor force, capital, equipment, and finances of the farm. Therefore an evaluation of the costs, benefits, and risks of employing various management options. Opportunities to integrate different pest control strategies must be considered.
 - e. The cost estimates and financing plan for the IPMP;
 - f. Accessible grievance mechanism;
 - g. Monitoring, evaluation and reporting mechanism.
11. The IPMP of each sub-project should be reviewed by the CPMU/CPIU and approved by the Bank before sub-project implementation begins.
 12. The IPMP should be disclosed publicly in a local language so that accessible to the affected indigenous community as well as posted at the project/MPWH website (www.pu.go.id)

G. Grievance Redress Procedures

13. The project has a complaint system that allows community members to raise issues or complaints at sub-project (village) level to the national level. The project has designated contact numbers for complaints via phone-calls and short text message (SMS) systems. There are designated staff members at the PIU/Regional Office/CPIU/CPMU responsible for following-up on complaints and ensuring that they are handled adequately.

H. Reporting and Monitoring

14. Every IPMP should have mechanisms in place to monitor the success or otherwise of the plan. Every sub project investment that utilises pesticides will require as part of its IPMP an evaluation and monitoring plan and a system in place to measure the program's achievements, includes:
- **Efficacy:** Since IPM is better at controlling pests, a measurable reduction in pest sightings should be observed.
 - **Cost:** The IPMP should evaluate the cost reductions over time as a result of the IPM gains.
 - **Safety:** IPM's ability to create a safer environment is predicated in large part on reducing pesticide use. The goal should be a downward trend over time or ideally, a specific reduction amount, with the end result a reduction to only very occasional usage of highly toxic pest control chemicals.
15. CPMU/CPIU will include these matters in their progress reporting (Quarterly Progress Report). The World Bank supervision missions will periodically pay special attention to ensure that that the subprojects affecting IPs afford benefits to them and no adverse impacts on them.
16. PIUs, assisted by the Regional Safeguards Specialist of CPIU, will monitor the IPMP preparation and implementation. Process of preparing and content of IPMP will be ensured in reference to the Pest Management Framework and applicable laws and regulations. Implementation of IPMP will be monitored based on indicators as specified in the approved IPMP. The monitoring report of IPMP implementation will be submitted to the Bank. The summary of the report will be included in the Quarterly Project Report (QPR).

I. Implementation Arrangement

17. Related government agencies to be involved in the development of Integrated Management Plan (IPMP) include:
- a. The Minister of Agriculture (through DG of Land and Water Management and/or DG of Plant Protection) will coordinate the control of pests and other paddy disease, by developing an Integrated Control system, by regulating the distribution and provision of seed of high yielding variety that are resistant to pests, by controlling the usage of pesticides, by monitoring the results of these interventions, in particular the occurrence of resurgent and resistant strains;
 - b. Minister of Home Affairs will instruct all Governors and Bupati to take prescribed measures as follow up to the above mentioned interventions;
 - c. The State Minister of the National Planning Board will synchronies all measures of planning and design for controlling pesticides and their use;
 - d. The Minister of Information will develop programs of clear and focused information directed at stakeholders;
 - e. The Deputy Minister of Agriculture will coordinate, monitor and evaluate all activities on Pest Management.