

**INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE**

Report No.: ISDSA8281

Date ISDS Prepared/Updated: 10-May-2014

Date ISDS Approved/Disclosed: 20-May-2014

I. BASIC INFORMATION

1. Basic Project Data

Country:	Philippines	Project ID:	P145391
Project Name:	Studies for Sustainable Flood Mgmt. (P145391)		
Task Team Leader:	Joop Stoutjesdijk		
Estimated Appraisal Date:	15-Apr-2014	Estimated Board Date:	31-Dec-2015
Managing Unit:	EASPS	Lending Instrument:	Specific Investment Loan
Sector(s):	Flood protection (100%)		
Theme(s):	Water resource management (70%), Natural disaster management (30%)		
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?			No
Financing (In USD Million)			
Total Project Cost:	7.00	Total Bank Financing:	0.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			0.00
Philippines - Free-standing Trust Fund Program			7.00
Total			7.00
Environmental Category:	A - Full Assessment		
Is this a Repeater project?	No		

2. Project Development Objective(s)

The proposed development objective is to prepare priority projects that aim to improve flood management and resilience in the Greater Metro Manila Area.

3. Project Description

The recently approved Metro Manila Flood Management Master Plan proposes a large program of priority infrastructure to safely manage and control major flood events in the Greater Metro Manila

Area that comprises Metro Manila and Laguna de Bay and its shore areas. Among the main large-scale priority interventions that have been identified in the Master Plan are: (i) a high dam in the upper Marikina River catchment area to reduce the peak flows entering the city during typhoon and other extreme rainfall events; (ii) flood protection works in the Marikina River, upstream of the proposed Phase IV of the Pasig-Marikina River Channel Improvement Program; (iii) land raising or another similar development along the western shore of Laguna de Bay to protect the population against high water levels in the lake (as the designed solution will most likely involve land raising, as also proposed in the Master Plan, this is referred to in the rest of the text, although there is still a possibility that a more preferred option is selected at the feasibility stage under this project); and (iv) further development of a comprehensive flood forecasting system and monitoring and early warning system for the Greater Metro Manila Area, with maximum participation of local communities.

The Government of the Philippines (GoP) intends to start the implementation of the Master Plan with substantial investments as soon as possible. It is therefore necessary to prepare some of the large high priority investments, both structural and non-structural, as well as develop improved institutional arrangements for flood management. Such investments will be essential to make substantial improvements to flood management in large parts of the Greater Metro Manila Area.

This project will finance two components, the main one related to the carrying out of feasibility and design studies and preparation of tender documents of priority infrastructure that, when implemented, will lead to substantially increased safety of the population during flood events. A small second component relates to project management and administration.

Component A – Preparation of feasibility and design studies for priority flood management infrastructure. Feasibility and design studies will be prepared for: (i) a high dam in the upper Marikina River catchment area; and (ii) land raising along the western shore of Laguna de Bay (in parallel a US\$3 million PHRD grant will finance the preparation of the other major interventions mentioned above). Multi-disciplinary teams of consultants, including expertise in civil engineering, dam engineering, resettlement, hydrology, economics, social science, environment, urban renewal, etc., will be recruited to prepare detailed feasibility and design studies for the above mentioned proposed interventions. The feasibility studies will review, as needed, the various options for flood management improvements in the study areas, including a quick assessment of related social and resettlement impacts in terms of magnitude, costs, and risks, to be followed immediately by design studies and preparation of tender documents of the selected option. The design phase will include the technical and engineering studies, economic studies, and social and environmental studies, all in compliance with the relevant World Bank Operational and Safeguard Policies and government requirements, and up to a level ready for appraisal/financing by the government, possibly with the assistance of international organizations such as the World Bank and JICA. It is envisaged that separate consulting firms will be hired for the technical studies for the dam and for the Laguna de Bay land raising. One consulting firm/institute will be hired for the social and environmental assessments related to both interventions, including the social surveys that will target the communities that are affected by the potential projects. Social surveys will be conducted with active involvement of the communities themselves. NGOs could be hired to carry out the dialogue with the people that live in the high-risk areas. A Panel of Experts on Dams will be established as per OP on Dam Safety.

Component B – Project management and administration. Operational expenses for the Department of Public Works and Highways (DPWH) will be financed to manage the implementation of the grant and monitor the consultants and the outputs of the services. Fixed costs, such as staff costs, will be

paid for by DPWH. The government's Commission on Audit (COA) will conduct the annual audit of the grant.

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

The project location is the Greater Metro Manila Area, in particular a dam site in the upper catchment area of the Marikina River and the western shore of Laguna de Bay.

5. Environmental and Social Safeguards Specialists

Maya Gabriela Q. Villaluz (EASPS)

Victoria Florian S. Lazaro (EASPS)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/ BP 4.01	Yes	<p>While the project only supports the preparation of engineering designs of two priority investments identified in the Metro Manila Flood Management Master Plan, i.e. a high dam in the upper Marikina River catchment area and the raising of low-lying areas along the western shores of Laguna de Bay, and the conduct of environmental and social assessments for these priority investments, including resettlement studies, the policy is triggered since these studies are expected to lead to investments expected to have positive but also potentially adverse environmental and social impacts, including resettlement of mostly informal settlers, if not managed adequately.</p> <p>Part of this project is the conduct of environmental and social assessments and resettlement (rehousing) studies to precisely assess impacts and put forward options and mitigation measures to be considered in the engineering designs of the proposed two main investments. The environmental and social assessments will be carried out by DPWH with technical assistance and support from qualified consultants to ensure that the Bank's and the National Government's environmental and social safeguard policies are being followed and complied with. The environmental and social impact assessments (ESIA, one for the dam and another one for the Laguna de Bay land raising) will carefully assess the environment and social impacts of the priority investments, including impacts from ancillary facilities as well as cumulative impacts, and lay out detailed plans for</p>

		<p>mitigation in the Environmental and Social Management Plan (ESMP), including a monitoring and reporting program. An institutional assessment and capacity building plan for DPWH's Environmental and Social Safeguards Division (ESSD) will be prepared as well. The ESMP will be properly costed to ensure that the costs to fully implement it get incorporated into any future civil works contract. The various options in terms of sites, alignments, resettlement (rehousing) will also be analyzed as part of the ESIA.</p> <p>A Grievance Redress Mechanism will be developed and be detailed in the ESMP and be presented to the communities during public consultations.</p>
Natural Habitats OP/BP 4.04	Yes	<p>The ESIA will identify natural habitats and other ecologically sensitive areas that may be affected by the priority investments. The project will not support activities that would significantly convert or degrade critical natural habitats consistent with the policy. If the ESIA indicates that a project would significantly convert or degrade non-critical natural habitats, the project would include acceptable mitigation measures in the ESMP. Such mitigation measures could include, as appropriate, minimizing habitat loss (e.g. strategic habitat retention and post-development restoration) and establishing and maintaining an ecologically similar protected area.</p>
Forests OP/BP 4.36	Yes	<p>The ESIA will confirm the project impacts on forests and forest-dependent communities, particularly in and around the proposed dam site. As needed, the ESMP will include measures to address impacts on forests, forest health, and forest-dependent communities.</p>
Pest Management OP 4.09	No	<p>The project will not support directly or indirectly any investments that would trigger the policy.</p>
Physical Cultural Resources OP/ BP 4.11	Yes	<p>The ESIA will closely assess the various alternative technical options to determine any possible cause of disturbance and negative impacts to historical areas, architectural land marks, and other cultural property, which may need to be mitigated. During construction, the landscape of the sites may also be affected and</p>

		<p>structural damage to old structures may occur due to vibrations and excavation of adjacent areas. The ESIA will confirm impacts of priority investments on physical cultural resources (PCR), and where needed a PCR management plan will be formulated as part of the ESMP, including chance find procedures that will be followed during construction.</p>
Indigenous Peoples OP/BP 4.10	Yes	<p>The whole of Metro Manila does not have ancestral domains and/or Indigenous Peoples (IP) communities. However, a study done in early 2000s for another project found that there are IP communities in the upland areas of 8 LGUs of Rizal Province. Initial investigations have shown that there are no settlements in and around the proposed reservoir area of the Marikina Dam. The area is, however, part of the ancestral domain of the indigenous Dumagat-Remontados people.</p> <p>The five cities/municipalities where land raising is expected to be done do not have IP communities. These are Taguig, Paranaque, Pateros, Muntinlupa, and Pasig.</p> <p>Further screening of this will be carried out by the social and environment consultants early on during the implementation of the studies and if the screening confirms their presence in and around the proposed reservoir area, and area for land raising along the western shore of Laguna de Bay, social assessment to comply with the policy will be incorporated in the ESIA and an indigenous peoples (IP) Framework and/or IP Plan will be developed, as needed.</p>
Involuntary Resettlement OP/BP 4.12	Yes	<p>The Master Plan has indicated that thousands of families, both formal and informal, are living along the western shore of Laguna de Bay. It is not expected that people live in the possible reservoir area of the dam. The priority investments may cause both temporary and permanent physical and economic displacement of people occupying the flood plain of the lake.</p> <p>A Resettlement Policy Framework (RPF) and/or Resettlement Action Plan (RAP) will be prepared. The RPF and/or RAP will be guided by a series of rehousing studies that are currently under</p>

	<p>preparation. The RPF and/or RAP will assess various alternatives/options that will have the least impacts on people living in danger flood zones and factor these findings in the engineering designs. In addition, impacts to potentially affected persons and planning for mitigation of the same to their housing and livelihood conditions are important aspects of the studies to be made. The outcomes of these studies will influence the decision on the final configuration of the investments, including alignments. Resettlement action plans, where needed, will thus be prepared together with the preparation of the detailed engineering design of the infrastructure to be built as soon as the final sites for the priority investments are known.</p> <p>The RPF or RAP will provide a sufficiently detailed analysis of the resettlement/rehousing impacts, social impacts, and the institutional aspects in order to be able to provide detailed recommendations on how these should be taken into account during implementation. Particular attention will be given to the key institutions and different government entities involved in the resettlement/rehousing. Interventions may include institutional strengthening activities, development of Peoples Plans, and the possible implementation of a rental voucher scheme. The terms of reference (ToR) for the preparation of the RPF or RAP will be cleared by the Regional Safeguard Adviser (RSA) prior to their beginning.</p> <p>An independent Panel of Experts will be established to oversee inter alia the preparation of the RPF and/or RAP and provide guidance, where needed. The Panel will include expertise in social, resettlement, and urban planning and development. This Panel is different from the Panel of Experts on Dams (see below).</p> <p>Identification of potentially linked activities/projects such as those implemented by DPWH, Metro Manila Development Authority and LGUs will also be carried out at the beginning of project preparation and if it is established that some of the activities and projects are related, the</p>
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		preparation of appropriate safeguards instrument will be discussed with the counterparts. The identification of linked activities/projects will be done as one of the first activities in the ESIA and will be carried out by the consultants, in cooperation with government counterparts, the Bank's task team supported by the regional safeguards adviser, and the Panel of Experts.
Safety of Dams OP/BP 4.37	Yes	Since the project will entail the design of a high dam as one of its priority investments, this policy is triggered. OP 4.37 requires that experienced and competent professionals design and supervise construction, and that the borrower adopts and implements dam safety measures through the project cycle. A Panel of Experts on Dams with the needed technical expertise will be established by the time the studies start.
Projects on International Waterways OP/BP 7.50	No	There will be no sub-projects in international waterways.
Projects in Disputed Areas OP/BP 7.60	No	There will be no sub-projects in disputed areas.

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

<p>1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:</p> <p>The project itself is meant to produce design studies. While by itself the project is not expected to have social and environmental impacts, the studies will identify impacts related to future construction of the design interventions and incorporate mitigating measures in ESMPs and the design of the civil works. The future implementation of the identified priority projects may cause temporary and/or permanent displacement of people especially along the western shores of Laguna de Bay. It may also affect the Remontados in the uplands of Antipolo City and Rodriguez Rizal. These issues will have to be carefully taken into account already during the preparation of the studies.</p>
<p>2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:</p> <p>Improved flood management in the Greater Metro Manila Area is the anticipated result of expected future activities. This will help improve the quality of life and socio-economic well-being of communities that currently are perennially subjected to flooding as well as the overall environmental quality in the Greater Metro Manila Area. The implementation of the proposals for the Laguna de Bay flood plain would cause temporary displacement of up to 50,000 households, many of whom are now informally residing along the western shores of Laguna de Bay. The Bank is studying various forms of support for such people, such as voucher schemes. The results of these studies will form an important input into the project activities.</p>
<p>3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.</p>

An analysis of alternatives, in terms of type of civil works and locations, was carried out as part of the master plan preparation. A more detailed analysis will be carried out early on during the implementation of this project to determine in detail which of the infrastructure investments will have the least environmental and social impacts. The selected option will then be worked out up to design level, including tender documents.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

DPWH is familiar with the Bank Safeguards Policies. It has an Environment and Social Safeguards Division, primarily dedicated to the environmental and social impact management of their different projects. It maintains separate sets of safeguard standards depending on the funding source of the project it implements. The performance of ESSD, based on the recent World Bank thematic review for the Philippines, points to the need of putting in place a capacity building program if it is to be in charge of handling safeguard issues during the future implementation of the designs prepared under this project. ESSD will benefit by strengthening its capacity to manage and coordinate the safeguards principles and procedures especially related to the preparation of the environmental and social assessment studies and for resettlement/rehousing of affected communities living in the flood plain of Laguna de Bay. The consultants that will prepare the ESIA, ESMP, and RAP, as needed, will work closely with ESSD during the preparation of the studies.

An independent Panel of Experts will be established to provide overall advice and guidance during the implementation of the studies and endorse key proposals and to oversee the implementation of the social and resettlement studies and how they integrate with the technical studies. The Panel will include expertise in social, resettlement, and urban planning and development. A Panel of Experts on Dams will be established as per OP on Dam Safety.

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

The key stakeholders of the project are the people that live in high risk areas along the western shore of Laguna de Bay and local officials of the five impacted Local Government Units (LGU). There will be extensive formal (through workshops) and informal consultations with the affected communities, non-governmental organizations (NGO) and civil society organizations (CSO) that work with these communities, LGUs, government agencies, etc. to ensure that the social aspects and rehousing/resettlement proposals will be understood and acceptable to all parties. The Bank task team in close cooperation with DPWH and other agencies will implement an information campaign that emphasizes expectations and transparency.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	29-Feb-2016
Date of submission to InfoShop	31-Mar-2016
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	31-Mar-2016

"In country" Disclosure	
Philippines	31-Mar-2016
<i>Comments:</i> The safeguard instruments will be prepared as part of the project, during the preparation of the studies to be funded under the project. Thus safeguard instruments cannot be disclosed prior to appraisal.	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	29-Feb-2016
Date of submission to InfoShop	31-Mar-2016
"In country" Disclosure	
Philippines	31-Mar-2016
<i>Comments:</i>	
Indigenous Peoples Development Plan/Framework	
Date of receipt by the Bank	29-Feb-2016
Date of submission to InfoShop	31-Mar-2016
"In country" Disclosure	
Philippines	31-Mar-2016
<i>Comments:</i>	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, then did the Regional Environment Unit or Sector Manager (SM) review and approve the EA report?	Yes [<input type="checkbox"/>] No [<input type="checkbox"/>] NA [<input checked="" type="checkbox"/>]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
OP/BP 4.04 - Natural Habitats	
Would the project result in any significant conversion or degradation of critical natural habitats?	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>] NA [<input type="checkbox"/>]
If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?	Yes [<input type="checkbox"/>] No [<input type="checkbox"/>] NA [<input checked="" type="checkbox"/>]
OP/BP 4.11 - Physical Cultural Resources	
Does the EA include adequate measures related to cultural property?	Yes [<input type="checkbox"/>] No [<input type="checkbox"/>] NA [<input checked="" type="checkbox"/>]
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?	Yes [<input type="checkbox"/>] No [<input type="checkbox"/>] NA [<input checked="" type="checkbox"/>]

OP/BP 4.10 - Indigenous Peoples			
Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?	Yes []	No []	NA [×]
OP/BP 4.12 - Involuntary Resettlement			
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes []	No []	NA [×]
If yes, then did the Regional unit responsible for safeguards or Sector Manager review the plan?	Yes []	No []	NA []
OP/BP 4.36 - Forests			
Has the sector-wide analysis of policy and institutional issues and constraints been carried out?	Yes []	No []	NA [×]
Does the project design include satisfactory measures to overcome these constraints?	Yes []	No []	NA [×]
Does the project finance commercial harvesting, and if so, does it include provisions for certification system?	Yes []	No []	NA [×]
OP/BP 4.37 - Safety of Dams			
Have dam safety plans been prepared?	Yes []	No []	NA [×]
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?	Yes []	No []	NA [×]
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?	Yes []	No []	NA [×]
The World Bank Policy on Disclosure of Information			
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes []	No []	NA [×]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes []	No []	NA [×]
All Safeguard Policies			
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes []	No []	NA [×]
Have costs related to safeguard policy measures been included in the project cost?	Yes []	No []	NA [×]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [×]	No []	NA []
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [×]	No []	NA []

III. APPROVALS

Task Team Leader:	Name: Joop Stoutjesdijk
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<i>Approved By</i>		
Regional Safeguards Advisor:	Name: Peter Leonard (RSA)	Date: 19-May-2014
Sector Manager:	Name: Ousmane Dione (SM)	Date: 20-May-2014