



# Concept Environmental and Social Review Summary

## Concept Stage

### **(ESRS Concept Stage)**

Date Prepared/Updated: 09/14/2019 | Report No: ESRSC00775



**BASIC INFORMATION**

**A. Basic Project Data**

Country	Region	Project ID	Parent Project ID (if any)
Philippines	EAST ASIA AND PACIFIC	P169280	
Project Name	Preparation of the Agus Pulangi Hydropower Complex for Rehabilitation		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Energy & Extractives	Investment Project Financing		7/31/2019
Borrower(s)	Implementing Agency(ies)		

Proposed Development Objective(s)

The development objective of this activity is to support the National Power Corporation in preparing the Agus-Pulangi Hydropower Complex for rehabilitation, including feasibility study, tender design, technical specifications and bidding documents. Subject to availability of funds, the project could also finance additional activities in support of preparation of APHC rehabilitation.

Financing (in USD Million)	Amount
<b>Total Project Cost</b>	<b>0.70</b>

**B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?**

No

**C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]**

This activity will support the National Power Corporation in preparing the Agus-Pulangi Hydropower Complex for rehabilitation, including feasibility study, tender design, technical specifications and bidding documents. Subject to availability of funds, the project could also finance additional activities in support of preparation of APHC rehabilitation.

**D. Environmental and Social Overview**



D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]

The project will support the preparation of a feasibility study, and a tender design and technical specifications for rehabilitation of the seven APHC plants that are located in Mindanao on the Agus river (six plants) and Pulangi river (one plant). The “Pulangi” facilities are located on the Pulangi River near Maramag in Bukidnon province on the island of Mindanao in the Philippines. It uses two reservoirs, produced by damming the Pulangi River, to supply water to a run-of-the-river hydroelectric power plant; the power plant is capable of generating 255 megawatts (342,000 hp) of power. The artificial lake created by the reservoir proper is called the Pulangi Lake or the Maramag Basin. It has a surface area of about 1,985 hectares and a live storage of 67 Million cubic meters. The reservoir and dam is also the main water source for the province of Bukidnon, both for drinking water and for irrigation through the National Irrigation Administration (NIA).

The “Agus Cascade” is composed of 6 hydropower facilities. Agus River flows for 36.5 kilometres (22.7 mi) from Lanao Lake to Iligan Bay, Philippines. It cuts through the provinces of Lanao del Sur and Lanao del Norte. Settlements along the banks of the river include the City of Marawi, the Municipality of Linamon and the City of Iligan. It separates into two channels as it drains to Iligan Bay; one going over the Maria Cristina Falls while the other supplies the Tinago Falls. The river descends for about 2,200 feet (670 m) from its source as it flows for 21 miles (34 km) before draining to the sea. The river is relatively shallow as it is only 4 feet (1.2 m) deep in some areas. The Agus River's watershed spans about 11,320.00 hectares. It has a discharge of about 10 cubic metres per second (350 cu ft/s) and flows from a narrow depression off the northwestern rim of the lake[7] and over a basalt rock formation.

The project location has a complex social context that defines the safeguards risks for the Project:

- a. Difficulty in securing right of way due to the very complex land issues. The area is known to have many titles are spurious and multiple claimants on lands.
- b. Poor local governance. LGU officials have low awareness about and capacity to implement World Bank’s Environment and Social Framework.
- c. Agus area is conflict-affected. It is a hotbed of Muslim rebellion. Many armed elements exist and operate in the area. Aside from criminal and kidnap for ransom groups, revolutionary groups such as the MNLF, MILF and the Maute group (ISIS-affiliated) operate in the area.
- d. The ARMM/Bangsamoro context. The Moros have long been complaining about their rightful share from the utilization of Lanao lake and Agus River. They claim these are part of their patrimony and ancestral domain.
- e. IP issues may arise depending on related or associated activities in Pulangi-Bukidnon area. There is a history of resistance by IP and CSO groups against dam construction and other projects that would affect the ecosystem of the Pulangi River.

However as the current task of the TA is more on studies and assessment, it is expected that most of the factors described below will not come into play at this stage. However, they would need to be recognized and mainstreamed into project design, e.g. via the TOR for FS and environmental and social instruments. They will also be assessed in detail during implementation to produce a clear picture that allows the design of effective management instruments and processes.

#### Relationship to CPF

The proposed TA is linked to the Bank’s Country Partnership Strategy (CPS) for the period FY15-18, supporting two pillars: (i) Climate Change, Environment, Disaster Risk Management; and (ii) Rapid, Inclusive & Sustained Economic Growth. The TA will prepare the ground for subsequent investments in rehabilitation and a related increase in power generation from clean hydropower energy. Additional hydropower generation would substitute coal power generation and in thi



**D. 2. Borrower’s Institutional Capacity**

The main implementing agency is the National Power Corporation (NPC). NPC has an Environmental Management Department. The Department has a total of 29 staff (24 - technical and 5 - admin) and consists of two sections, (i) EIA and (ii) Monitoring. EIA section is involved in the conduct of EIAs including Social Impact Assessment. When needed the NPC commissions the services of consultants to assist in the conduct of an EIA. The Monitoring Section conducts the regular environmental sampling, environmental audit and also reviews the reports prepared by Pollution Control Officers (PCOs) in each NPC-managed facility. Aside from the EMD, NPC also has a Watershed Management Department that is in-charge of land use permits, tree planting and other watershed conservation activities. This unit is fully capable of ensuring that environmental and social risks of its projects are properly managed, based on requirements of the national environmental and social regulatory framework. NPC has not had any engagement with the World Bank. For this reason, familiarity with World Bank Environmental and Social Framework is low. There is good potential to capacitate and familiarize the environmental unit of NPC with the ESF requirements of the World Bank. A training and capacity building plan will be implemented as part of the project activities aimed at familiarizing the NPC with the requirements of the ESF.

**II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS**

**A. Environmental and Social Risk Classification (ESRC)**

Substantial

**Environmental Risk Rating**

Substantial

The Environmental Risk Rating for the proposed project is Substantial. The TA activities do not themselves have direct adverse environmental or social impacts. Nevertheless, the outcomes of this TA support may have important environmental and social implications going forward, if subsequently implemented by the government. The project will finance feasibility study, tender design and technical specifications for rehabilitation of APHC. An Environmental and Social Impact Assessment (ESIA) will be carried out simultaneous with the Feasibility Study. The government has committed to carrying out an ESIA and will carry out the ESIA through a grant from AFD. AFD has agreed to use and comply with the WB Environmental and Social Framework. AFD has agreed that the ESIA process and outputs will be jointly approved by AFD and the WB. The ESIA will inform the options selection and alternatives study in the FS. The following risks broken down by category, have been identified at this point.

- (i) **Baseline sensitivity.** Based on the technical options of the FS, the typology of the project activity may have substantial civil works (option 3). If limited to option 1 and 2, the risks are moderate and easily mitigated i.e. repair of and optimization of electromechanical equipment. It is important to note here that the project will not include the construction of large dam weirs. The hydrodams structures are existing and will not be modified in any way. The project area is located in a mix of pristine forest areas and modified landscapes. Habitat fragmentation will not be a direct or indirect impact of this project.
- (ii) **Project impacts.** The nature and magnitude of the potential ES risks and impacts directly due to project activities and future investments are substantial at this stage. The high risk rating is also due to the uncertainty of the eventual options to be selected. The technical options for the rehabilitation are still to be determined. Option 1 and 2 have very little physical impact on the environment since these will not involve any civil works construction. Option 3 may include civil works related to the flood control measures and the need to increase water availability to the dams. The exact nature of these investments are still to be finalized.

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(iii) Client capacity and engagement. Risks related to the capacity and commitment of the NPC to manage risks and impacts is moderate, given the adequate staffing and well established Environmental Department of the NPC. This department is very familiar with the Agus-Pulangi area and its inherent risks. Future impacts as a result of implementing the FS and proposed design will be covered in the ESIA.

(iv) External risks. The project area is part of the conflict area within the Mindanao region. The city of Marawi, the epicenter of the conflict is along Lake Lanao in the upstream area of the project site. Risks related to FCV may be considered substantial.

Given this context, the team will continue to assess the risks, which could be upgraded to High, particularly if the FS and ESIA findings would support (future) rehabilitation activities which would require land acquisition, impacts IPs and/or involve access restrictions.

**Social Risk Rating**

Substantial

The social risk rating for the TA is substantial. The physical project site is beset with complex social issues as described above which are not expected to fully come into play for this TA but pose substantial social risks for the rehabilitation. The social risk rating will be reviewed again once the feasibility study has defined the scope of rehabilitation and it will be based on the results of the ESIA to be funded by AFD. The ESIA will involve a thorough social assessment of safeguards risks within an FCV context and will be carried out with the ESF both as a guide and as the standard. It will cover:

- i. Occupational health and safety, labor management procedures, labor codes and GBV prevention;
- ii. Community health and safety, especially warning and emergency response systems for flood surges and dam failure scenarios; traffic safety, managing security services for the project sites;
- iii. Stakeholder analysis for the Pulangi and Agus Rivers focusing on marginalized and vulnerable sectors such as small fisherfolks and farmers and IP groups; capacity assessment of NCIP Region X; and public consultations with CSOs. This will culminate with a Stakeholder Engagement Plan.
- iv. Land acquisition and involuntary resettlement and how such impacts will be avoided or mitigated
- v. Indigenous Peoples and FPIC in the Pulangi and Agus Rivers considering both the Indigenous Peoples Rights Act (IPRA) and ESS7.

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**B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered**

**B.1. General Assessment**

**ESS1 Assessment and Management of Environmental and Social Risks and Impacts**

**Overview of the relevance of the Standard for the Project:**

The main output of the project (TA) is a Feasibility Study and tender design documents. The FS will study alternatives for the rehabilitation of the Agus Pulangi Hydropower Complex (APHC). Each of the technical alternatives will be evaluated regarding their respective technical, economic, environmental and social risks. An Environmental and Social Impact Assessment will be carried out, simultaneous with the FS. FS and ESIA will be developed in an iterative manner and inform each other. This will require clear requirements in both TOR as well as proactive management



and coordination by the Borrower. Impacts (direct, indirect, cumulative) of each alternative will be assessed and studied in the ESIA. Specifically, the ESIA will cover the following:

- Legacy issues: There is a need to address existing environmental and social liabilities of the 7 plants. The ToR for the ESIA will include environmental and social audits / due diligence assessment to identify environmental and social liabilities and potential legacy issues and propose mitigation/remedial measures for such issues.
- Analysis of alternatives: the ESIA needs to include a comparison of each rehabilitation scheme on technical, economic, environmental and social merits.
- Cumulative impacts: If needed, the ToR will include this assessment following IFC methodology.
- The ESIA will also include a plan on how stakeholders would be engaged during future implementation of the eventual construction

Other safeguards requirements will be determined by the scope of the works defined by the FS. The bidding documents prepared under the TA need to include all relevant restrictions/specifications from ESIA and audits. World Bank will review the TOR for the ESIA and the Final ESIA Report.

**Areas where “Use of Borrower Framework” is being considered:**

None

**ESS10 Stakeholder Engagement and Information Disclosure**

A Stakeholder Engagement Plan will be agreed with the NPC at project preparation. The ESIA process will have public consultations as required by local EIA regulations. During preparation, the stakeholder engagement strategy will be developed including communication and dissemination strategy that supports public dialogue on proposed rehabilitation activities of the APHC. It will also put emphasis on Indigenous Peoples, women and other vulnerable groups, and civil society organizations.

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**B.2. Specific Risks and Impacts**

**A brief description of the potential environmental and social risks and impacts relevant to the Project.**

**ESS2 Labor and Working Conditions**

Labor requirements for the technical assistance are limited to management of the consultants to be hired to carry out the FS, tender design. The ESIA will take into account the potential risks associated with the influx of labor required for any resulting rehabilitation works, including occupational health and safety, and labor and camp management requirements for primary suppliers and contractors

**ESS3 Resource Efficiency and Pollution Prevention and Management**

The conduct of Feasibility Study and Tender Design will not lead to the generation of various forms of pollution such as wastewater, solid wastes, dust, noise, odour, soil erosion, etc. Given the potential reduction of interruption of river flows during rehabilitation works, specific assessments of water availability and potential stress on water resources will be included into the ES assessments. Some scenarios and activities (e.g. complete reconstruction of dam structure, reservoir dredging or flushing; reservoir re-filling...) are very likely to cause temporary reduction or suspension of flows, and will be described in the ES assessment and management instruments, and inform the FS.



This requirement, in turn, will be reflected in the TOR for these studies. Future investments are also likely to involve these additional risks and impacts, which will be covered by the planned ESIA.

#### **ESS4 Community Health and Safety**

Future investments are likely to involve these additional risks and impacts in the form of occupation health and safety risks, which will be covered by the planned ESIA. The conduct of FS and tender designs by the consultant firms, will not lead to any significant impacts on community health and safety. Material effects during project implementation may include significant risks and impacts, such as on water supply, ecosystem services (e.g. fish stocks), or safety, e.g. due to flow fluctuations and sudden water releases. The ESIA will need to take into account impacts related to alternatives proposed including for safety of existing dams. A Community Health and Safety Plan commensurate to needs of the future investment will be prepared.

#### **ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

The TA will not result in land acquisition, restrictions on land use, or involuntary resettlement. However, the future investment may result in involuntary resettlement including restrictions to access. If necessary, a Resettlement Framework or Plan and/or a Process Framework will be prepared for the future investment. The ESIA will include environment and social audits to identify potential liabilities and legacy issues concerning land acquisition, resettlement and access restrictions.

#### **ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**

Risks and impacts to natural habitats and biodiversity, which will be covered by the planned ESIA. The conduct of FS and tender designs by the consultant firms, will not lead to any significant impacts on Biodiversity or Natural Habitats. During project implementation, the influx of labor and the potential establishment of additional or improved road access may increase illegal hunting or logging and result in additional stress to wildlife. This also may affect ecosystem services to local communities relevant under ESS4. The ESIA will need to take into account impacts related to alternatives proposed.

#### **ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities**

Indigenous Peoples will be involved in the conduct of the ESIA and in consultations and similar activities needed for the feasibility study. The strategy for engagement with IPs during the ESIA and relevant consultations on potential rehabilitation works consistent with the requirements of ESS7 will be thoroughly identified in the Stakeholder Engagement Plan. Basic information on IPs present in the project areas of influence will be determined as part of the due diligence of upcoming missions and these will be further fleshed out during the scoping under the ESIA which will identify the IP groups present in the project area and their population, whether there are any recognized or have claims to ancestral domains, and FPIC agreements for the existing plants. The ESIA will assess potential impacts, risks and benefits particularly for the IPs present in the project area. It will also include environment and social audits to identify potential liabilities and legacy issues concerning IP issues, including whether FPIC agreements (if needed by national law) and benefit sharing arrangements are in place.



**ESS8 Cultural Heritage**

Future investments may involve additional risks and impacts to cultural heritage assets both tangible and intangible, which will be covered by the planned ESIA. The conduct of FS and tender designs by the consultant firms, will not lead to any significant impacts on cultural heritage.

The ESIA will need to take into account impacts on cultural heritage related to alternatives proposed.

**ESS9 Financial Intermediaries**

This is not an FI operation.

**B.3 Other Relevant Project Risks**

The project is considered to be within a sub-national FCV area. Access to the area is controlled based on security risks. Monitoring and supervision of the project is possible, but with additional security precautions.

**C. Legal Operational Policies that Apply**

**OP 7.50 Projects on International Waterways**

No

not relevant

**OP 7.60 Projects in Disputed Areas**

No

not relevant

**III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE**

**A. Is a common approach being considered?**

Yes

**Financing Partners**

AFD. A common approach to the implementation of safeguards has been agreed with the AFD. The WB ESF will be used as the main guiding document in the preparation of safeguards instruments and in the eventual implementation of the project. Under this common approach, the AFD will finance the conduct of an ESIA and will seek WB input and approval of the document before finalization.

**B. Proposed Measures, Actions and Timing (Borrower’s commitments)**

**Actions to be completed prior to Bank Board Approval:**

Stakeholder Engagement Plan

TOR for the Conduct of ESIA

**Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):**

Completion of Environmental and Social Impact Assessment

Implementation of the Stakeholder Engagement Plan

Environmental and Social Training of the Environmental Department of NPC

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Preparation of relevant ESF instruments if found by the ESIA to be required, including ESMPs, Dam Safety Plans, Community Health and Safety Plans, IPPF, IPPs, RPF, RPs, Process Framework, Plan of Actions (for access restrictions)

**C. Timing**

**Tentative target date for preparing the Appraisal Stage ESRS**

30-Sep-2019

**IV. CONTACT POINTS**

**World Bank**

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**Borrower/Client/Recipient**

**Implementing Agency(ies)**

**V. FOR MORE INFORMATION CONTACT**

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**VI. APPROVAL**

Task Team Leader(s): Takafumi Kadono, Yuriy Myroshnychenko

Practice Manager (ENR/Social) Nina Bhatt Recommended on 14-Sep-2019 at 10:14:16 EDT

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