

ASIA 12-108

INITIAL ENVIRONMENTAL EXAMINATION

Program/Activity Data:

Country: Philippines
Objective: Improve water security for resilient economic growth and stability in the Philippines
Activity Name: Water Security for Resilient Economic Growth and Stability Project (Water Secure Project)
Funding Period: 2012-2015
LOP Amount: \$20 million
IEE Prepared by: Joanne C. Dulce
IEE Amendment (Y/N): N
Date: April 30, 2012
Date of original IEE: N/A

Environmental Action Recommended:

Categorical Exclusion:	<input checked="" type="checkbox"/>	Deferral:	<input type="checkbox"/>
Positive Determination:	<input type="checkbox"/>	Negative Determination:	<input checked="" type="checkbox"/>
With Conditions:	<input checked="" type="checkbox"/>	Exemption:	<input type="checkbox"/>

1. BACKGROUND AND ACTIVITY DESCRIPTION

1.1 Purpose and Scope of IEE

The purpose of this IEE, in accordance with 22CFR216, is to provide the first review of the reasonably foreseeable effects on the environment, as well as recommend Threshold Decisions for the activities under the Water Secure Project that will contribute to improved water security for resilient economic growth and stability in the Philippines. This IEE provides a brief statement of the factual basis for a Threshold Decision as to whether an Environmental Assessment or an Environmental Impact Statement is required for the activities managed under this program.

1.2 Background

Water security is a critical underpinning of sustainable development. On one hand, water of sufficient quantity and quality is an essential input to economic growth, human health, food security, and the maintenance of critical ecosystem services. On the other, it can reverse gains in these areas if adverse impacts of climate change on water resources and services are not properly managed over the long term. Achieving water security is a balancing act – between supply and demand, among diverse economic sectors, ecosystems, and communities. Secretary Clinton has recently noted the importance of sustainable supply of water to human health, economic growth and peace and security.

While the Philippines is not a water stressed country at the national scale, available water for productive and human uses is still scarce in some areas. As populations and economies grow, demand is increasing and competition heightened for limited supplies of clean water. Water quality is also a critical concern due to incidence of pollution and saltwater intrusion. There is considerable under-investment by the Government in sanitation and sewerage, with only seven percent of the country's total population connected to sewer systems and highly ineffective on-site sanitation facilities in most places.

Exacerbating these water security challenges is climate change, evidenced by longer dry El Niño summer conditions, more extreme rainfall events, increasing temperatures, salinity in groundwater, and shifting cyclone paths. When the availability of water resources for productive and domestic use no longer follows historically observed patterns, the economic and social consequences can be enormous. Compounding this situation is a disaster risk management system still handicapped by poor monitoring and warnings, a widespread lack of data sharing, and an absence of anticipatory risk reduction, but which an uncertain and changing climate urgently demands.

In all cases, water security related to either the resource itself or the provision of water-related services remains elusive in the Philippines because of underlying issues of fragmented governance and an unclear institutional framework, inadequate regulatory controls and enforcement, weak capacity at the decentralized level for water management or service delivery, inadequate processes for stakeholder engagement in water sector planning and investment decision-making, lack of access to financing for investments in water supply development and distribution systems, and poorly collected, analyzed and shared water data.

In order for the Philippines to achieve resilient and sustainable water security, three critical dimensions of water security need to be managed: (a) supply of water resources in nature, (b) access to and control of water through the human built environment, and (c) the demand for water resources for communities and economies. Further a balance among them must be maintained while taking climate change into account. The level of human demand for water cannot exceed the amount of renewable water available in nature over the long term, and allocations across sectors and over time must begin to reflect this.

In all challenges faced by the water sector, the strategic focus of the Water Secure Project will be on intermediate drivers of water insecurity that are in the more direct control of governments, communities, civil society, and the private sector and that present real opportunities for USAID investment and collaborative action. These drivers include: legal and policy enabling environment, institutional framework and capacity, data and information for decision-making, management, operations and maintenance capacity as well as human behavior towards water management.

1.3 Description of Activities

1.3.1 Objective and Results

The Water Secure Project aims to improve climate-resilient water services and security for economic growth and stability in the Philippines. This will be achieved through two

interrelated components – one focusing on sustainable water supply and sanitation service delivery, and the other focusing on increased resilience to climate-related water stress and hydrologic extremes.

1.3.2 Activities

The Project has two components— (a) sustainable water services and; (b) climate resilient water sector. Under the sustainable water services component, the Water Secure Project will undertake activities that address (a) sector reform in the national enabling environment and (b) issues of increasing access to and provision of sustainable and quality services at the local level. To strengthen water security, activities under this component will take a systemic and catalytic approach to addressing challenges within the entire value chain of water supply service provision, all the way from the source supplying domestic water systems to the sustainable operations of the services themselves. The focus of USAID assistance is on strengthening the institutional structure, governance, management, regulation, and operation of water service providers and the government agencies that support them in a way that catalyzes larger financial flows, and ensures the viability of high quality services over time.

Under the climate-resilient water sector component, the Water Secure Project will implement activities designed to (a) strengthen analysis, communication, and utilization of water resources and climate data; (b) reduce hydrological risks, and (c) improve capacity for long-term water security. Data and information related to water resources, weather and climate, natural hazards, and vulnerability will play a vital role as the Water Secure Project promotes science-based decision-making and planning in long-term climate change adaptation.

The planned activities under the Water Secure Project are shown in the following table.

Table 1. Key Activities of the Water Secure Project

Key area	Activities
Strengthened enabling environment for sustainable water service delivery	<ul style="list-style-type: none"> • Facilitate and provide technical inputs in sector dialogues to strengthen accountability for sustainable water services and water security • Provide technical inputs, facilitate stakeholder consultations and conduct training to strengthen regulatory framework for sustainable water services and water security • Develop financial mechanism and support policy reform to mobilize financing for sustainable water supply and wastewater service delivery • Establish data and information management systems on water supply sector performance
Strengthened water supply and wastewater service providers for sustainable service delivery	<ul style="list-style-type: none"> • Conduct training on planning, operations and maintenance for improved water service delivery • Conduct vulnerability assessment, facilitate stakeholder consultations and conduct training on disaster risk reduction (DRR) and climate change adaptation for water supply and wastewater service • Support connection of selected rural health clinics and hospitals to level 3 water systems
Strengthened analysis, communication and use of water resources and climate data	<ul style="list-style-type: none"> • Analyze water source and climate data and facilitate meetings towards improved sharing of water resources and climate data • Undertake needs assessment and conduct training to improve capacity of decision-makers to utilize water and climate data

Reduced hydrological risks and improved near term adaptation at the sub-national level	<ul style="list-style-type: none"> • Support innovative approaches to disaster risk reduction and climate change adaptation such as installation of early warning systems (simple rain gauges), rain water harvesting facilities and other small-scale construction • Conduct vulnerability assessment, facilitate stakeholder consultations and conduct training on DRR and climate change adaptation
Improved capacity for long-term water resources security	<ul style="list-style-type: none"> • Provide technical inputs, facilitate stakeholders consultations and conduct training to improve understanding of long term water security issues and options and mainstreaming of integrated water resource management (IWRM) into water supply and wastewater treatment services • Conduct information, education, communication (IEC) campaigns to increase public awareness and support for sustainable use and consumption of water resources

2. COUNTRY AND ENVIRONMENTAL INFORMATION (BASELINE INFORMATION)

2.1 Locations Affected

Each of the project components is supported by a set of interventions that will be carried out at multiple geographic scales. Those interventions with broad ranging impacts affecting the country will occur at the national level, including those relating to the enabling policy or legal environment for water, sanitation and hygiene (WASH), water resources management and/or climate change adaptation. Other interventions will be site-based and will be implemented at subnational, regional and local levels and to the extent possible, at sub-basin watershed scale.

The five (5) geographic sites for the Water Secure Project covering these Provinces: Iloilo Province, Misamis Oriental Province, Isabela Province, Basilan Province and Maguindanao Province. Below are some socio-economic and environmental data on these sites:

Table 2. Site-Specific Socio-Economic and Environmental Data

Province	River Basin	Population ¹	Percent Poverty Index ²	Forest Cover ²		
				Closed Forest	Open Forest	Mangrove
Maguindanao ³	Mindanao River	1,273,715	53.7%	1,094	13,940	1,050
Basilan ⁴	n/a	408,520	23.4%	3,399	12,931	6,973
Misamis Oriental	Cagayan de Oro River	748,885	12.0%	6,870	37,828	160
Iloilo	Jalaur River; Iloilo River	1,691,878	11.4	3,851	15,770	1,059
Isabela	Cagayan Valley River	1,401,495	11.7%	70,813	339,717	1,268

¹ Population and poverty index data is for 2009 and was taken from the Philippine National Statistics Coordination Board (NSCB).

² Reference year: 2003. Based on Forest Management Bureau (2009). 2009 Philippine Forestry Statistics. Quezon City: Forest Management Bureau.

³ Combines forest cover data of Cotabato City and Maguindanao Province

⁴ Combines forest cover data of Isabela City and Basilan Province

Table 3. National Integrated Protected Areas System (NIPAS) Locations

Province	Name	Location	Area (ha.)
Maguindanao	None	--	--
Basilan	Basilan National Park	Lamitan, Basilan	3,100
Misamis Oriental	Initao National Park	Initao, Misamis Oriental	57
	Mimbilisan Falls	Talisayan, Misamis Oriental	72
	Mahoganao Forest Reserve	Cagayan, Misamis Oriental	136
Iloilo	Bulabog-Putian National Park Dingle and San Enrique, Iloilo	Dingle and San Enrique, Iloilo	854.3
	Taklong Island National Marine Reserve	Guimaras, Iloilo	1,143.4
Isabela	Fuyot Strings National Park	Ilagan, Isabela	819

2.2 National Environmental Policies and Procedures (of host country both for environmental assessment and pertaining to the sector)

The Philippine Environmental Impact Statement (EIS) System, which requires all government agencies, government-owned or controlled corporations, and private companies to prepare an environmental impact assessment (EIA) for any project or activity that substantially affects the quality of the environment. The Philippine EIS system is very comprehensive and entails an EIA being conducted to study the relationship between a proposed project and its surrounding environment. Not only does the EIS system emphasize the regulation of industrial pollution, but also aims at protecting natural resources, fragile ecosystems and the rights of local communities. Aside from being a regulatory scheme, the EIS plays a role of a comprehensive planning and management instrument as well. The Environment Management Bureau, a line bureau of the Department of Environment and Natural Resources (DENR), is the agency responsible for policy development and review as well as monitoring the implementation of EIA-related laws.

The first step in the Philippine EIS process is “screening” to determine which requirement covers the project under examination. The law pre-categorizes projects based on the degree of potential environmental impacts and each category has a prescribed environmental assessment instrument. The table below lists the categories and the required environmental study or report:

Table 4: Environmental Categories under the Philippine EIS System

Environment Category	Descriptions	Required Environmental Assessment Study/Report
Category A	Environmentally critical projects or projects with significant potential to cause negative environmental impacts.	Full EIA
Category B	Projects which are not environmentally critical but which may cause negative environmental impacts because they are located in environmentally critical areas.	Initial Environmental Examination or Full EIA
Category C	Projects that are intended to directly enhance environmental quality or address existing environmental problems.	Project Description with EMMP
Category D	Projects that are considered outside the purview of the	Project Description

Environment Category	Descriptions	Required Environmental Assessment Study/Report
	Philippine EIS System because they do not have negative environmental impacts.	
Co-located	Projects or series of similar projects or a project subdivided to several phases and/or stages by the same proponent, located in contiguous areas.	Programmatic EIA
Expansion	Expansion of Existing Projects	Environmental Performance Report and Management Plan*

Source: "The Philippine Environmental Impact Statement System: Framework, Implementation, Performance and Challenges." The World Bank and Asian Development Bank. June 2007. Page 23.

The Philippines Department of Health (DOH) enforces the National Standards for Drinking Water that establishes the threshold limits of certain impurities in drinking water. These limits are intended to minimize risk and prevent damaging health effects from life-long consumption of drinking water. The standard covers bacteriological, physical and chemical properties. It also provides limits for disinfectants, disinfectant by-products and radiological constituents. The standards are based on World Health Organization guidelines and the US Environmental Protection Agency. Likewise, the National Drinking Water Standards provides for frequency of water sampling and acceptable sampling methodology. The Standards also includes guidelines on disinfection, including chlorination, and values for residual chlorine, pre and post chlorination by-products and other chemicals found in drinking water. For chlorination, the DOH issued Administrative Order No. 2007-0005, which serves as guideline on the use of sodium hypochlorite 1.25% solution, Na(HOCl)₂, to treat drinking water and to safely store the treated drinking water to protect households against waterborne diseases.

The Philippines has adopted a National Framework for Climate Change and the Philippine Climate Change Adaptation Strategy as mandated by the Climate Change Act of 2009. Prepared by Climate Change Commission, the Climate Change Framework envisions "a climate-resilient Philippines with healthy, safe prosperous and self-reliant communities, and thriving and productive ecosystems". The framework sets the blue print for the country's response to the challenges of global climate change and the adaptation strategy has identified strategies and a general plan of action for the vulnerable sectors. The National Climate Change Action Plan is being implemented through provincial and municipal adaptation action plans called Local Climate Change Action Plans, or LCCAP, in line with the strategic priorities in the national plan.

The Philippines is also signatory to several international environmental agreements such as the Agenda 21 (on Sustainable Development), and Rio Declaration on Environment and Development, United Nations Framework Convention on Climate Change, and Hyogo Framework of Action. As a signatory, the Philippines commits itself to the principle of sustainable development, climate change adaptation, disaster risk reduction and watershed management.

3. EVALUATION OF ACTIVITY/PROGRAM ISSUES WITH RESPECT TO ENVIRONMENTAL IMPACT POTENTIAL

The activities under this Initial Environmental Examination will provide assistance at the site-, LGU-, and national levels for improving water security for resilient economic growth and stability in the Philippines.

A **Categorical Exclusion** is recommended for the following activities except to the extent that the activities directly affect the environment, pursuant to CFR 216.2(c)(1) and:

- a) CFR 216.2(c)(2)(i), for activities involving education, technical assistance or training programs;
- b) CFR 216.2(c)(2)(iii), for activities involving analyses, studies, academic or research workshops and meetings;
- c) CFR 216.2(c)(2)(v), for activities involving document and information transfers; and
- d) CFR 216.2(c)(2)(xiv), for activities involving studies, projects or programs intended to develop the capability of recipient countries to engage in development planning.

A determination of categorical exclusion notwithstanding, the Mission Environmental Officer and Deputy Mission Environmental Officer are expected to provide advice on and/or inputs to the scope of the training, research, meetings, assessments, and related activities as identified in the table below. At least 95% of the total funding for the Water Secure Project will cover these activities.

Key elements of program / activities	Threshold determination
<ul style="list-style-type: none"> • Facilitate stakeholder consultations and provide technical inputs in sector dialogues • Develop financial mechanism and support policy reform • Establish data and information management systems • Undertake training needs assessment, conduct training on planning, operations and maintenance of water utilities • Conduct vulnerability assessment, conduct training on disaster risk reduction (DRR) and climate change adaptation • Analyze water source and climate data and facilitate meetings • Conduct information, education, communication (IEC) campaigns to increase public awareness 	Categorical exclusion

Activities involving connection of water users to level 3 water supply systems and the implementation of pilot adaption strategies may have negative consequences if environmental considerations are not factored into these activities and the resulting program designs. These activities will utilize no more than 5% of the total funds of the Project. Therefore a **Negative Determination with Conditions** is recommended pursuant to 22 CFR 216.3 (a)(2)(iii) for these activities.

Key elements of program / activities	Illustrative Activities	Risk Classification
1. Provide clean and	• Installation of faucets and laying down of water	Medium-risk

sustainable water supply for rural health clinics and hospitals	<p>pipes to connect rural health clinics and hospitals to level 3 water supply system</p> <ul style="list-style-type: none"> • Development of water supply systems (will most likely involve well drilling) for rural health clinics and hospitals if there are no existing water supply systems servicing the area 	Medium-risk
2. Support innovative approaches to DRR and climate change adaptation	<ul style="list-style-type: none"> • Installation of early warning systems (simple rain gauges) • Development of rain water harvesting facilities and other small-scale water containment structures 	<p>Low-risk</p> <p>Medium-risk</p>

4. RECOMMENDED MITIGATION ACTIONS (INCLUDING MONITORING AND EVALUATION)

4.1 Recommended IEE Determination

Provision of technical assistance, assessments and studies, policy analyses, biophysical and socio-economic research, and stakeholder consultations to be conducted under this program will not have a direct significant impact on the environment. Thus, these are recommended for Categorical Exclusion.

However, activities involving public-private partnerships and technical assistance targeting rehabilitation of infrastructure, which may have negative consequences if environmental considerations are not met, were not factored into this set of activities. Thus, the resulting program design is recommended for a Negative Determination with the following Conditions:

- All technical assistance, workshops, consultations, research, and vulnerability assessments that will provide recommendations for program designs will include Best Practices regarding sustainable use, including principles of environmental protection, impact mitigation and environment sustainability.
- The Project implementor must comply with applicable Government of the Philippines' environmental, health, safety, construction, and other applicable laws, regulations, standards and norms including applicable USAID guidelines Environmental Guidelines for Small-Scale Activities at: <http://www.encapafrika.org/egssaa.htm> and other donors guidelines such as the IFC EHS Guidelines at: <http://www.ifc.org/ifcext/sustainability.nsf/Content/EHSGuidelines> and other applicable international best practice acceptable to USAID. The implementer must furnish USAID with Environmental Documentation Forms and regular report (with maps, schemes, photos) on sub-grants approvals, performance and monitoring.
- For both low and medium risk small-scale infrastructure and GCC adaptation activities, the Contractor, or sub-contractor if appropriate, will develop an Environmental Manual (EM) that will guide environmentally sound design for all small scale infrastructure and GCC adaptation projects, which will be reviewed and approved by the COR and the MEO prior to implementation. The EM should: (1) establish environmental screening, selection and eligibility criteria, environmental review process; and (2) provide forms, like the Environmental Documentation Form, sample Environmental Mitigation and

Monitoring Programs (EMMPs), standard conditions and reporting requirements, and references/links to guidelines and best practice acceptable to USAID and GPH. The EM will establish water quantity and quality monitoring procedures. The EM may also have an exclusion list, i.e. activities USAID will not fund as well as a list of activities, with thresholds/significance, which will require guidance from COR/MEO. Examples of activities that may appear on the exclusion list include activities that are proposed close to or in protected areas, coastal lines, sensitive habitats, archaeological, historical and/or religious sites where caution and diligence should be exercised.

- All infrastructure and GCC adaptation projects that are classified as medium risk will first require submittal and approval of an activity description including an evaluation of the environmental implications of the proposed infrastructure or rehabilitation project being developed through an Environmental Documentation Form. These documents must be approved by the Agreement/Contracting Officer Representative (A/COR) and the Mission Environmental Officer, and if deemed necessary by the A/COR, an IEE will be required. Activities that will have potential impacts to the environment must be further reviewed by A/COR and MEO through environment review report that will include an Environmental Mitigation and Monitoring Plan (EMMP).
- All other small-scale infrastructure and GCC adaptation projects that are not included in the above list but will have a risk threshold of low to medium will follow the conditions stipulated above prior to construction. For infrastructures not included in the above list and will be classified as high risk, an environmental assessment report must be approved by the Mission Environment Officer (MEO) and the Bureau Environmental Officer (BEO) prior to construction.
- In accordance with the Philippine Standards for Drinking Water, all water supply sub-projects will be required to undertake water quality testing prior to construction. Results of the testing will be included in the environmental checklist and the appropriate mitigation measures, if the results exceed the standards, must be identified.
- If, during implementation, activities are considered other than those described above, such as pilot demonstrations, further environmental review will be conducted by the implementing partner, which will be cleared by the relevant MEO and BEO prior to activity implementation.
- These conditions will be integrated in the procurement instruments (contract and/or grant agreement) and shall be reflected in the over-all work plan of the contractors and/or grantees, as appropriate. If necessary, the contract or agreement will require the preparation of an environmental mitigation and monitoring program that will be reviewed and approved by the A/COR and the MEO.

4.2 Mitigation, Monitoring, and Evaluation

The conditions identified in this IEE will be integrated into the awards to implementing partners, which will require the development of an Environmental Mitigation and Monitoring Program (EMMP). The EMMP will be prepared by the implementing partner and will be approved by the A/COTR and the MEO. The EMMP will be developed at the project or activity level to monitor and implement the conditions stated above. In addition, project work plans and budgets will specifically provide for the implementation of the EMMP. Performance management plans will also incorporate measures of EMMP implementation for review and approval of the A/COTR.

4.3 Limitations of the IEE

This IEE does not cover activities involving:

1. Assistance for procurements (includes payment in kind, donations, guarantees of credit) or use (including handling, transport, fuel for transport, storage, mixing, loading, application, cleanup of spray equipment, and disposal) of pesticides (where pesticides cover all insecticides, fungicides, and rodenticides, etc. covered under the "Federal Insecticide, Fungicide, and Rodenticide Act" FIFRA) or activities involving procurement, transport, use, storage, or disposal of toxic materials, which will require preparation of a PERSUAP in accordance with Reg.216.3(2)(b)(1)-(2) in an amended IEE submitted to Asia/BEO for approval.
2. Activities involving support to wood processing, agro-processing, industrial enterprises and regulatory permitting.
3. Assistance, procurement or use of genetically modified organisms (GMOs), which would require preparation of biosafety assessment (review) in accordance ADS 201.3.12.2(b) in an amendment to the IEE approved by Asia BEO.
4. Procurement or use of Asbestos Containing Materials (ACM) (i.e., piping, roofing, etc.), Polychlorinated Biphenyl's (PCB) or other toxic/hazardous materials prohibited by USEPA as provide at <http://www.epa.gov/asbestos> and/or under international environmental agreements and conventions, e.g. Stockholm Convention on Persistent Organic Pollutants as provided at <http://chm.pop.int>

Any of these actions would require an amendment to the IEE duly approved by the Asia BEO.

4.4 Revisions

Pursuant to 22CFR216.3(a)(9), if new activities are added and/or information becomes available which indicates that activities to be funded by the Program might be "major" and the Program's effect "significant," this Categorical Exclusion will be reviewed and revised by the originator of the project and submitted to the Bureau Environmental Officer for approval and, if appropriate, an environmental assessment will be prepared."