

**INTEGRATED SAFEGUARDS DATA SHEET  
APPRAISAL STAGE**

**Report No.: ISDSA1191**

**Date ISDS Prepared/Updated:** 30-Mar-2015

**Date ISDS Approved/Disclosed:** 30-Mar-2015

**I. BASIC INFORMATION**

**1. Basic Project Data**

<b>Country:</b>	Haiti	<b>Project ID:</b>	P148259
<b>Project Name:</b>	HT Strengthening Hydro-Met Services (P148259)		
<b>Task Team Leader(s):</b>	Gaetano Vivo		
<b>Estimated Appraisal Date:</b>	09-Mar-2015	<b>Estimated Board Date:</b>	28-May-2015
<b>Managing Unit:</b>	GSURR	<b>Lending Instrument:</b>	Investment Project Financing
<b>Sector(s):</b>	Flood protection (60%), Irrigation and drainage (40%)		
<b>Theme(s):</b>	Natural disaster management (60%), Other rural development (20%), Urban planning and housing policy (20%)		
<b>Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?</b>			No
<b>Financing (In USD Million)</b>			
Total Project Cost:	5.00	Total Bank Financing:	0.00
Financing Gap:	0.00		
<b>Financing Source</b>			<b>Amount</b>
Borrower			0.00
Strategic Climate Fund Grant			5.00
Total			5.00
<b>Environmental Category:</b>	B - Partial Assessment		
<b>Is this a Repeater project?</b>	No		

**2. Project Development Objective(s)**

The proposed PDO is to strengthen the Government of Haiti's institutional capacity to provide weather, water and climate services customized to the needs of the civil protection and agriculture sectors, which contributes to increasing resilience.

The PDO will be achieved through: (i) integrating existing hydro-met data collecting networks into a

national data platform and strengthening capacity for data archiving, validation, and analysis; and (ii) identifying weather, water, and climate services' requirements for select end users (including agriculture and civil protection).

### **3. Project Description**

The project will support the Government of Haiti's capacity to increase its resilience today and build its future adaptive capacity by providing access to water, weather, and climate information to end users. By strengthening the collaboration between relevant institutions and end-users, the focus will be on enhancing accessibility and customization of hydro-met information that is critical for decision making in emergency management and agriculture. In these two sectors, the project will leverage synergies with existing World Bank-IDA operations (e.g. the Re-launching Agriculture 2 and the Disaster Risk Management and Reconstruction projects) which aim to increase resilience to exogenous shocks, including hydro-meteorological hazards.

The project will comprise three components:

Component 1. Support the hydro-meteorological services' institutional reform process and develop data management tools (US\$3,000,000). The focus of this component will be on the integration of the existing hydro-met data collection networks into one national data platform accessible across all end users in the GoH. In addition to providing the technical platform, the component will provide the technical assistance to GoH to gradually move from the current structure of six hydro-meteorological networks managed by five different government entities to a structure with one national agency coordinating the development, operation and maintenance of all hydro-meteorological data management. Specifically, the Component will support a country-wide, geo-referenced baseline assessment of stations, define requirements for an optimal national network, repair and replace, where needed, existing data-collecting sensors. It will provide the GoH with a data platform that can gather data from all existing sensors. In order to support the institutional reform process, this component will include technical assistance to achieve the merging of CNM and SNRE and facilitate the evolution towards the Agency model. Finally, the component will support technical capacity building in the hydro-met institutions through training and study tours. This component will also support climate-resilience research benefitting Haiti, by financing scholarships, research projects and international collaborations.

Component 2. Identify weather, water and climate services' requirements for select end users and developing information services to support decision making (US\$1,400,000). The focus of this component will be the definition of hydro-met information requirements for end-users. In line with recommendations from the Global Framework for Climate Services this is expected to be a long-term process, with a continuous user feedback mechanism, including in the aftermath of major events. End users targeted by the project include: civil protection (e.g. parametric thresholds for select high-risk zones, in order to enable use of the hydro-meteorological data platform as a decision support mechanism for the activation of warnings by DPC) and agriculture (e.g. leveraging the new data platform to improve existing information services for farmers and national food security agency). These sectors were chosen with a view to tapping on synergies with existing Bank projects, such as the Re-launching Agriculture: Strengthening Agriculture Public Services II (P126744); the Disaster Risk Management and Reconstruction (P126346). Several other sectors supported by the World Bank in Haiti will benefit from an improved access to reliable hydromet information, including: infrastructure design (e.g. update return periods for select hazards in order to better integrate climate resilience measures into infrastructure design), and public health (e.g. information service for warnings of water-borne diseases and contingency planning).

Component 3. Support to project implementation, monitoring and evaluation, and PPCR knowledge management (US\$600,000). Component 3 will include two subcomponents. (i) Strengthening MARNDR capacity to comply with Bank fiduciary, safeguard, and M&E procedure and ensure effective and timely implementation of project activities. This will include the recruitment of a Project Coordinator in charge of day-to-day project management, additional human resources, and financing of operating cost. (ii) Supporting MARNDR M&E capacity and PPCR knowledge management. An M&E specialist financed through the project will strengthen MARNDR's capacity to monitor and report progress on the project-level results of the SPCR (in coordination with CIAT).

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

The project will maintain and replace hydro-meteorological equipment and provide services and capacity building around the country. In the areas where new equipment will be installed awareness raising and communication activities will be carried out to ensure engagement and support of local communities. Project beneficiaries include all data users that may benefit from reliable hydro-meteorological and climate data to inform their decision-making. Direct beneficiaries include public and private actors who work in sectors specifically targeted by the project, i.e. farmers and emergency responders. Indirectly, the Haitian population in general and particularly the poor and most vulnerable to hydro-meteorological shocks (slum dwellers, rural population, and people living in high risk areas) will benefit from information services provided by the project or by applications stemming from them.

#### **5. Environmental and Social Safeguards Specialists**

Nyaneba E. Nkrumah (GENDR)

Peter F. B. A. Lafere (GSURR)

<b>6. Safeguard Policies</b>	<b>Triggered?</b>	<b>Explanation (Optional)</b>
Environmental Assessment OP/BP 4.01	Yes	<p>Hydromet projects usually provide environmental benefits, given that they support lower risks associated with floods, drought and fire, winds, extreme weather events, and even industrial accidents. Project activities are usually implemented within available hydromet sites and involve a minor installation of observation equipment with no or minimal environmental disturbance. This project, likewise, has a very low environmental and social risk and is rated a low risk Category B project. The main environment impacts are focused on three aspects of the equipment repair (Component 1):</p> <p>(a) the safe disposal/storage of old equipment, in particular, of mercury containing parts such as thermometers, temperature gauges, etc;</p> <p>(b) the safety of workers involved in repair: it is important to ensure that their exposure to mercury is minimized through the use of appropriate protective gear and handling protocols; and</p> <p>(c) possible exposure to electromagnetic fields (EMFs) if</p>

	<p>the system for collection of the data from the equipment is sent by cell tower or other emitting frequency. While there is no clear proved risk to low levels of EMF, higher levels may cause a disturbance, particularly to those who are sensitive to EMFs.</p> <p>The environmental risks mentioned above are only associated with Component 1. This component focuses on strengthening the capacity of the GoH to collect, store and provide hydro-meteorological and climate data to end users. Under this component, the project may also fund the repair of equipment necessary to collect critical hydro-meteorological and climate data and will finance community awareness raising activities in places where repaired stations are located.</p> <p>A short Environmental and Social Management Framework (ESMF) has been prepared by the GoH to address (i) safe disposal/storage of old equipment, in particular, of mercury containing parts such as thermometers, temperature gauges, etc, (ii) the safety of workers involved in the repair or removal of equipment, and (iii) possible exposure to minor electromagnetic fields. The ESMF addresses potential negative impacts and appropriate procedures to avoid, minimize, and mitigate these impacts. It contains an Environmental Management Plan section as part of the ESMF which focuses specifically on procedures for safe removal and disposal of mercury. Consultations with Government personnel on the ESMF and site visits to hydromet stations have been completed. As sites where rehabilitation/installation of stations will happen are not chosen yet, no consultations with project affected people were done. However, once the sites are chosen, consultations will be done with project affected people. The ESMF was disclosed in country on March 24, 2015 and on the Bank's website on March 25, 2015. The ESMF can be accessed at the following link on the Ministry of Agriculture's website <a href="http://agriculture.gouv.ht/view/01/IMG/pdf/cadre_de_gestion_environnementale_et_sociale_cges_.pdf">http://agriculture.gouv.ht/view/01/IMG/pdf/cadre_de_gestion_environnementale_et_sociale_cges_.pdf</a></p> <p>In Haiti, it is unlikely that mercury, like in the US and Europe, is recycled. It is also unlikely that there is any law</p>
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		<p>related to the release of mercury into the air or water or ground. The EMP therefore focuses on assessing what is available in Haiti in terms of mercury storage and assesses other options for safe disposal. The EMP also focuses on safety issues for workers, including directives on protective gear, and standard operating procedures that need to be used when removing and storing (temporarily) parts containing mercury. Standard protocols are available in the literature which elaborate the steps necessary for the removal and storage of these parts prior to transport to a designated center or facility.</p> <p>Component 2 focuses on understanding hydro-met data requirements for end users and includes collection of information from end-users, workshops, etc. This component has no safeguard requirement.</p> <p>Component 3, support to project implementation, monitoring and evaluation focuses on recruitment of the project coordinator and team and project management. This component has no safeguard requirement.</p>
Natural Habitats OP/BP 4.04	No	This policy is not triggered given that the project is not expected to have impacts on natural habitats.
Forests OP/BP 4.36	No	This policy is not triggered given that the project will not finance activities that affect forests.
Pest Management OP 4.09	No	This policy is not triggered given that the project will not finance the purchase or use of pesticides.
Physical Cultural Resources OP/BP 4.11	No	This policy is not triggered given that the project will not impact the quality or management of physical cultural resources as defined under the policy.
Indigenous Peoples OP/BP 4.10	No	This policy is not triggered given that given that there are no indigenous peoples present in the project areas.
Involuntary Resettlement OP/BP 4.12	No	This policy is not triggered given that there will be no involuntary resettlement as defined under the policy.
Safety of Dams OP/BP 4.37	No	This policy is not triggered given that the project will not support the construction or rehabilitation of dams nor will support other investments which rely on the services of existing dams.
Projects on International Waterways OP/BP 7.50	No	This policy is not triggered given that the project will not affect international waterways as defined under the policy.
Projects in Disputed Areas OP/BP 7.60	No	This policy is not triggered given that the project will not affect disputed areas as defined under the policy.

## II. Key Safeguard Policy Issues and Their Management

### A. Summary of Key Safeguard Issues

<b>1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:</b>
The project will replace meteorological, agro-meteorological, hydrological, hydro-geological, climatic and marine equipment as well as support larger scale capacity building. There are no potential large scale, significant or irreversible impacts. The main impact will come from the safe disposal of mercury thermometers and the replacement, where possible, of this equipment with non-mercury elements.
<b>2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:</b>
The main negative environmental impact is related to the safe disposal of mercury, often contained in the thermometers of old hydro-meteorological and other such equipment. Possible adverse effects may include exposure to mercury during installation and removal of the equipment, unsafe disposal of mercury containing components, and short terms exposure to minor electromagnetic fields as meteorological information is relayed over a network from the equipment to a central location. These environmental impacts are expected to be localized and minimized through responsive mitigation measures
<b>3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.</b>
The project alternative considered is to replace these older equipment containing mercury with components that are not hazardous. Where possible, the project will seek to purchase these models of equipment.
<b>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.</b>
The borrower has developed the ESMF and has assumed responsibility for safeguard monitoring and reporting. The borrower's capacity is limited but sufficient to ensure that the procedures outlined in the ESMF/EMP for mercury disposal are followed by the contractor. The ESMF contains screening procedures for the identification of sites for new meteo-hydrological equipment to prevent involuntary resettlement as defined by the policy.
<b>5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.</b>
The potentially affected people are not yet known because the project sites have not been identified. Nevertheless, the borrower has engaged and consulted with stakeholders (government agencies, local CBOs, etc) on the design of the project and the ESMF which are reflected in the ESMF. Mechanisms for local consultation and potentially affected people during site identification for infrastructure works are included in the ESMF.

### ***B. Disclosure Requirements***

<b>Environmental Assessment/Audit/Management Plan/Other</b>	
Date of receipt by the Bank	24-Mar-2015
Date of submission to InfoShop	24-Mar-2015
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	////

"In country" Disclosure	
Haiti	24-Mar-2015
<i>Comments:</i> Disclosed on the Ministry of Agriculture's website: <a href="http://agriculture.gouv.ht/view/01/IMG/pdf/cadre_de_gestion_environnementale_et_sociale_cges_.pdf">http://agriculture.gouv.ht/view/01/IMG/pdf/cadre_de_gestion_environnementale_et_sociale_cges_.pdf</a>	
<b>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.</b>	
<b>If in-country disclosure of any of the above documents is not expected, please explain why:</b>	

### C. Compliance Monitoring Indicators at the Corporate Level

<b>OP/BP/GP 4.01 - Environment Assessment</b>			
Does the project require a stand-alone EA (including EMP) report?	Yes [ <input checked="" type="checkbox"/> ]	No [ <input type="checkbox"/> ]	NA [ <input type="checkbox"/> ]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [ <input checked="" type="checkbox"/> ]	No [ <input type="checkbox"/> ]	NA [ <input type="checkbox"/> ]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [ <input checked="" type="checkbox"/> ]	No [ <input type="checkbox"/> ]	NA [ <input type="checkbox"/> ]
<b>The World Bank Policy on Disclosure of Information</b>			
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [ <input checked="" type="checkbox"/> ]	No [ <input type="checkbox"/> ]	NA [ <input type="checkbox"/> ]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [ <input checked="" type="checkbox"/> ]	No [ <input type="checkbox"/> ]	NA [ <input type="checkbox"/> ]
<b>All Safeguard Policies</b>			
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [ <input checked="" type="checkbox"/> ]	No [ <input type="checkbox"/> ]	NA [ <input type="checkbox"/> ]
Have costs related to safeguard policy measures been included in the project cost?	Yes [ <input checked="" type="checkbox"/> ]	No [ <input type="checkbox"/> ]	NA [ <input type="checkbox"/> ]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [ <input checked="" type="checkbox"/> ]	No [ <input type="checkbox"/> ]	NA [ <input type="checkbox"/> ]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [ <input checked="" type="checkbox"/> ]	No [ <input type="checkbox"/> ]	NA [ <input type="checkbox"/> ]

### III. APPROVALS

Task Team Leader(s):	Name: Gaetano Vivo	
<b>Approved By</b>		
Practice Manager/ Manager:	Name: Josef Lloyd Leitmann (PMGR)	Date: 30-Mar-2015