

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

HAITI

NATURAL DISASTER MITIGATION PROGRAM II

(HA-L1097/HA-G1031)

PROJECT PROFILE

This document was prepared by the project team consisting of: Bruno Jacquet (RND/CHA), Team Leader; Gerard Alleng, (INE/CCS) co-Team Leader; Sergio Lacambra, Gines Suarez, Carmine Paolo De Salvo (INE/RND), Marie Bonnard, (RND/CHA), Jennifer Doherty-Bigara, Sara Valero (INE/CCS); Romina Kirkagacli, Marise Etienne Salnave (FMP/CHA); Annelle Bellony (EDU/CHA); Taos Aliouat (LEG/SGO); Régine Lafontant (CDH/CHA); and Elizabeth Chavez (INE/RND).

Under the Access to Information Policy, this document is subject to Public Disclosure.

PROJECT PROFILE (PP)

I. BASIC DATA

Project name:	Natural Disaster Mitigation Program II	
Project number:	HA-L1097 and HA-G1031	
Borrower:	Republic of Haiti	
Executing agency:	Ministry of Agriculture, Natural Resources and Rural Development (MARNDR)	
Financial Plan:	IDB:	US\$42,000,000
	Climate Investment Fund	US\$ 4,500,000
	Local:	<u>US\$ 1,000,000</u>
	Total:	US\$47,500,000
Safeguards:	Policies triggered:	B.01 (OP-704, OP-102, OP-761), B.02, B.03, B.04, B.06, B.07, B.14, B.15, B.17
	Classification:	B

II. GENERAL JUSTIFICATION AND OBJECTIVES

A. Background and justification of the program

- 2.1 Haiti is highly exposed to hydro-meteorological hazards and Climate Change (CC) impacts as a result of its geographic location (hurricane belt of the Caribbean basin), physical setting (80% of its territory being mountainous) and limited adaptive capacity. Haiti is among the countries with the highest disaster risk indexes in the world¹. UNDP further highlights that in the last 50 years, the country has suffered over 40 climatic events, one internationally-recognized catastrophe every two years, and a major catastrophe every four to six years. In 2008 two storms and two hurricanes left at least 1,100 dead and an estimated damage of more than US\$900 million (15% of GDP), particularly in agriculture (US\$200 million), housing (US\$180 million) and transportation (US\$130 million)². In August 2012, two hurricanes (Isaac and Sandy) wreaked havoc on the agricultural sector, affecting production in more than 80,000 ha and registering losses of over US\$104 million, while leaving 19 deaths and more than 18,000 damaged houses³. The country, and especially the agricultural sector, is also affected by droughts. Bayard (2011) and Bellande (2012) observe that more than a third of the agricultural land is affected by drought every five to seven years, and regarding the intra-annual variation, recent farmers' surveys report that planting is delayed due to lack of rainfall at the beginning of the rainy season.
- 2.2 Haiti's rural areas are particularly exposed to climate risk, due to their inherent physical and socio-economic vulnerability associated to poverty (37.8% of rural population live in extreme poverty⁴), inadequate rural farming practices and weak governance for disaster risk management. At the regional level, it is projected that

¹ World Bank, 2005, Natural disaster hotspots: A global risk analysis; and UNDP, 2004, Reducing Disaster Risk.

² Post-disaster needs assessment, November 2008, Government of Haiti, World Bank, United Nations System and European Commission.

³ Ministry of Agriculture (2012) and United Nations Office for the Coordination of Humanitarian Affairs, 2012.

⁴ Banque Mondiale, 2012, Enquêtes sur les conditions de vie des ménages après séisme.

the frequency and intensity of climate drivers of extreme precipitation, drying trends, damaging cyclones, sea level rise and ocean acidification should increase as a result of climate change⁵ This may exacerbate the projected losses in rural areas, since the above mentioned trends will negatively impact crop yields, which will impact vulnerable farmer households.

- 2.3 **Inadequate rural farming practices.** Farmers have little access to cost-effective farming practices that promote soil conservation and reduce pressure on vegetal cover. Innovation services (research and extension) have been weakened as MARNDR budget started to decline in the late 1980s. Additionally, although the Faculty of Agronomy and Veterinary Medicine (FAMV) has a specialization on natural resources management and rural engineering, its curricula needs to be improved with updated watershed and CC modelling tools, and its facilities need to be rebuilt after being destroyed by the earthquake of 2010.
- 2.4 **Sectorial reforms and Disaster Risk Management (DRM) governance.** The Environment, Rural Development and Disaster Risk Management Division of the Bank (RND) developed an integrated approach in the agriculture sector by combining policy-based grants and investment grants, which fosters sound sectorial and institutional reforms (i.e. water management in agriculture, agricultural innovation, public services modernization, etc.). In addition, RND developed an indicator to assess the DRM governance in Latin America and the Caribbean (LAC), the iGOPP. It evaluates the institutional, legal and budgetary conditions for a comprehensive DRM, and allows assessing gaps and guides public policy reforms. The iGOPP calculated in 2013 ranks Haiti the lowest among 13 LAC countries in terms of DRM governance, with a score of 7%.
- 2.5 **Lesson learned.** With Bank's support, the Government of Haiti (GoH) implemented and currently executes several operations aimed at mitigating natural disasters. These include better watershed management, building watershed protection infrastructure, promotion of sustainable agricultural practices, and development of a flood Early Warning System (EWS)⁶. The main lessons learned are the following: **Integrated approach:** (i) investments in risk reduction must be based on detailed probabilistic risk analysis, and combine protection works, promotion of sustainable agricultural practices and preparation of vulnerable communities; and (ii) results in soil erosion prevention and water retention are better when combining infrastructure and sustainable farming practices. **Appropriate technologies:** (i) Due to the high rate of land use for agriculture⁷ (57%), watershed protection requires the development of sustainable and climate-resilient agricultural practices; (ii) the flood EWS should be simple and community-based rather than high-tech, in order to ensure sustainability. **Governance:** (i) The Civil Protection Directorate (DPC, Ministry of Interior and

⁵ Intergovernmental Panel on Climate Change (IPCC) Working Group II Assessment Report 5 Summary for Policymakers, 2014.

⁶ Since 2005 the Bank approved six operations with watershed management and/or DRM components. Two Technical Cooperations (ATN/MD-11565-HA and ATN/MD-13623-HA) for US\$1.4 million; and four grant loans (2389/GR-HA, 2187/GR-HA, 2562/GR-HA, and 3093/GR-HA) for a total of US\$100 million.

⁷ Centre National d'Information Géo-spatiale CNIGS, 2012.

- Territorial Collectivities (MICT)) should be involved in the implementation of DRM activities; (ii) investments have to be coupled with sectorial reforms.
- 2.6 Based on the lessons learned, the proposed operation is a program consecutive to HA-L1041 operation with similar activities and objectives, and that will end in 2015. It will be articulated along the following axes: (i) capacity-building on climatic vulnerability analysis and research, in order to improve planning and implementation of investments in agriculture and watershed management; (ii) investments in adaptation to climatic vulnerability of agriculture and rural areas in selected watersheds; and (iii) institutional strengthening to improve climatic vulnerability management.
- 2.7 **Consistency with national priorities.** The proposed operation is consistent with the different policies and initiatives developed by the GoH to address natural disaster risks and CC issues at different levels, including: (i) the National Disaster Risk Management Plan; (ii) the 2011-2016 National Agricultural Investment Plan and 2013-2016 Three-Year Agricultural Recovery Programme; (iii) the 2006 National Plan for Adaptation to Climate Change (NAPA); (iv) the 2012 Strategic Plan for Climate Resilience (SPCR), (v) the Disaster Risk Management Program financed by World Bank; and (vi) the 2010-2015 Operational Plan of the Ministry of Education, among others. In the framework of the SPCR, there is strong donor coordination (namely World Bank and IDB) through the Inter-ministerial Land Management Committee (CIAT).
- 2.8 **Consistency with the Country Strategy, Sector Strategy and GCI-9.** The program is aligned with the Bank's 2011-2015 Country Strategy with Haiti (GN-2646). The program contributes to the following lending program priority outlined in the GCI-9 (AB-2764): (i) support to small and vulnerable countries; (ii) poverty reduction and equity enhancement; and (iii) lending to support climate change initiatives, sustainable energy, and environmental sustainability. The operation is consistent with the strategic priority to "Protect the environment, respond to climate change and enhance food security", and will contribute to its Regional Development Goal "Annual growth rate of agricultural GDP" and "Annual reported economic damages from natural disasters". The operation is also consistent with the "Agriculture and Natural Resources Management Sector Framework Document" (GN-2709-2), as well as with the Bank's Integrated Strategy for Climate Change Adaptation and Mitigation and Sustainable Renewable Energy (GN-2609-2) and Action Plan (GN-2609-3).

B. Program Objectives and Expected Results

- 2.9 The **general objective** of the project is to reduce climate vulnerability of the rural population in the targeted watersheds⁸. The program's components are:

⁸ A preliminary identification of prioritized watersheds include: Grande Rivière du Nord, Artibonite (St Raphael, part of St Michel de l'Attalaye, and irrigated plain of Artibonite), Cavailon and Ravine du Sud. As part of project preparation a final watershed prioritization will be conducted.

- 2.10 **Component 1: Analysis of climate vulnerability.** This component aims to develop knowledge tools and institutional capacity to support planning and prioritization of investments to reduce climate vulnerability. Activities included: (i) research on CC resilient agricultural crop systems in the Boucle-Centre Artibonite (to be financed by the CIF under operation HA-G1031); and (ii) identification of investments to reduce climate vulnerability of agricultural activities and related infrastructure (irrigation systems, roads, etc.) in targeted watersheds, based on probabilistic assessments of flood and drought risks, considering CC scenarios. MARNDR (through different operations and studies) already identified or is identifying priority natural disaster mitigation investments, and Component 1 studies will provide further details and fine-tune.
- 2.11 **Component 2: Reduction of climate vulnerability.** Based on existing studies and first component's results, the second component will implement integrated actions aimed to reduce vulnerability of rural population to climate risks, some of which will also improve farmers' income. Activities include: (i) development of protection measures (infrastructure, living fences, etc.) in targeted watersheds, in order to reduce the vulnerability of agricultural areas, economic infrastructure and rural population; and (ii) development of simple, community-based, EWS.
- 2.12 **Component 3: Institutional strengthening.** This component will include: (i) training and technical assistance to support MARNDR's public policy reforms needed to reduce climate vulnerability and improve risk management in agriculture, based on iGOPP results; (ii) strengthening FAMV's curricula on management and analysis of watershed environmental vulnerability (hydrology, modeling, CC, etc.), based on Component 1 results; and (iii) reconstruction of FAMV, which was destroyed by the earthquake of January 2010.
- 2.13 Activities in Components 1 and 2, will be co-financed by the agricultural component of the Pilot Program for Climate Resilience's (PPCR), financed by the Climate Investment Fund under operation HA-G1031, for the area of Centre-Artibonite loop. The Bank has been identified as an implementing partner of said component, to be executed by the MARNDR.

III. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

- 3.1 **Institutional framework.** The project will take into account the lessons learned and the current institutional framework. MARNDR will be the executing agency and specific agreements will be established with MICT for the development of flood EWS, and the Housing and Public Building Construction Unit (UCLPB) for FAMV's reconstruction. Within MARNDR, Natural Disaster Mitigation Program Executing Unit (PMDN) will be responsible for program execution.
- 3.2 **Synergies.** Several national and international institutions develop DRM and CC programs in rural areas. In order to maximize synergies, avoid duplication, identify and adequately plan the activities of this program, the different initiatives will be inventoried and analyzed during both program design and implementation phases. Support to farmers to promote sustainable and CC resilient farming

practices will be financed and executed by the Agricultural Technology Transfer Programme 2562/GR-HA (PTTA), currently being implemented by MARNDR and whose geographical coverage will be extended in line with this program.

- 3.3 **Preparatory study and sector data.** As data is very limited in the sector, project preparation will focus on gathering and analyzing available data from main stakeholders so as to: (i) carry-out a cost-benefit analysis of the infrastructures built in the Natural Disaster Mitigation Program (2187/GR-HA); and (ii) identify, characterize, dimension and prioritize, through technical and economic criteria, the main protection infrastructures to be built in the prioritized watersheds. Special attention will be given to design the project's impact evaluation. The design study of FAMV will be financed by the French Development Agency. The procurement process will be launched once the study is ready.
- 3.4 CIF funding for Haiti was endorsed by the PPCR Sub-Committee in 2013 and has to be presented to the Sub-Committee in 2015 for final approval as part of the CIF process. It is possible that HA-L1097 can stand alone without co-financing, but coupling both synergetic operations will significantly reduce transactional cost and improve implementation efficiency. The Bank will be responsible for managing the funds and ensure technical and fiduciary supervision.

IV. SAFEGUARDS AND FIDUCIARY SCREENING

- 4.1 In accordance with the Environmental and Social Safeguards Compliance Policy (OP-703) of the Bank, the proposed operation is categorized as "B". The operation is expected to have positive environmental and social impacts since it will reduce climatic vulnerability of rural population. However some works will be executed in natural habitats (rivers) which will require an environmental and social management plan to manage potential impacts.
- 4.2 A fiduciary risk assessment of MARNDR, MICT and UCLPB will be undertaken before POD approval in order to determine the fiduciary risk level, and define the corresponding modalities for the fiduciary management of the project.

V. RESOURCES AND TIMETABLE

- 5.1 The distribution of the POD to the QRR is expected May 13th, 2015; the approval by the Board of Executive Directors in July 29, 2015. The approval of HA-G1031 by CIF's Board has to be taken into account in program design schedule. The Project Team has estimated the need for US\$120,770 from the Bank's administrative budget in order to accomplish the preparation of this operation.

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.

SAFEGUARD SCREENING FORM

PROJECT DETAILS	
IDB Sector	AGRICULTURE AND RURAL DEVELOPMENT-SUSTAINABLE AGRICULTURAL DEVELOPMENT
Type of Operation	Other Lending or Financing Instrument
Additional Operation Details	
Country	HAITI
Project Status	
Investment Checklist	Generic Checklist
Team Leader	Jacquet, Bruno (BRUNOJ@iadb.org)
Project Title	Natural Disaster Mitigation Program II
Project Number	HA-L1097
Safeguard Screening Assessor(s)	Jacquet, Bruno (BRUNOJ@iadb.org)
Assessment Date	2014-11-24

PROJECT CLASSIFICATION SUMMARY		
Project Category: C	Override Rating:	Override Justification:
		Comments:
Conditions/ Recommendations	<ul style="list-style-type: none"> No environmental assessment studies or consultations are required for Category "C" operations. Some Category "C" operations may require specific safeguard or monitoring requirements (Policy Directive B.3).Where relevant, these operations will establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.). The Project Team must send the PP (or equivalent) containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports. 	

SUMMARY OF IMPACTS/RISKS AND POTENTIAL SOLUTIONS	
Identified Impacts/Risks	Potential Solutions

DISASTER RISK SUMMARY	
Disaster Risk Category: High	
	<ul style="list-style-type: none"> The reports of the Safeguard Screening Form (i.e. of the Safeguards Policy and the



<p>Disaster/ Recommendations</p>	<p>Safeguard Classification Filters) constitute the Disaster Risk Profile to be summarized in and annexed to the Environmental and Social Strategy (ESS). The Project Team must send the PP (or equivalent) containing the ESS to the ESR.</p> <ul style="list-style-type: none"> • The Borrower should consider including disaster risk expertise in the organization of project oversight, e.g. in the project's panel of experts. For the Bank's requirements, the Borrower addresses the screened disaster risks in a Disaster Risk Management Summary reviewing disaster and climate change risks associated with the project on the basis of a Disaster Risk Assessment (DRA). Based on the specified hazards and the exposure of the project area, it demonstrates the potential impact of the rapid onset events and/or slow inset changes for the project and its area including exacerbated risks for people and environment, given local vulnerability levels and coping capacities. Furthermore the DRM Summary presents proposed measures to manage or mitigate these risks in a Disaster Risk Management Plan (DRMP). The DRA /DRMP to which the DRM Summary refers may be a stand-alone DRA document (see Directive A-2 of the DRM Policy OP-704) or included in other project documents, such as feasibility studies, engineering studies, environmental impact assessments, or specific natural disaster and climate change risk assessments, prepared for the project. These documents should be accessible for the Project Team. • The Project Team examines and adopts the DRM summary. The team remits the project risk reduction proposals from the DRMP to the engineering review by the sector expert or the independent engineer during project analysis or due diligence, and the financial protection proposals to the insurance review (if this is performed). The potential exacerbation of risks for the environment and population and the proposed risk preparedness or mitigation measures are included in the Environmental and Social Management Report (ESMR), and are reviewed by the ESG expert or environmental consultant. The results of these analyses are reflected in the general risk analysis for the project. Regarding the project implementation, monitoring and evaluation phases, the project team identifies and supervises the DRM approaches being applied by the project executing agency. • Climate change adaptation specialists in INE/CCS may be consulted for information regarding the influence of climate change on existing and new natural hazard risks. If the project requires modification or adjustments to increase its resilience to climate change, consider (i) the possibility of classification as an adaptation project and (ii) additional financing options for climate change, and consult the INE/CCS adaptation group for guidance.
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SUMMARY OF DISASTER IMPACTS/RISKS AND POTENTIAL SOLUTIONS	
Identified Impacts/Risks	Potential Solutions
<p>Earthquakes from various sources are prevalent in the project area and the likely severity of impacts is moderate.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of seismic risk for the project and address potential exacerbated risks for people and the environment during construction and operation. Appropriate measures to reduce the risks (predominantly engineering), to prepare for impact (predominantly environmental and social safeguards) and to include financial protection will need to be included.</p>
	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of the storm and flood risks for the project and address potential exacerbated risks for people and the environment during construction and operation, as specified in the Disaster Risk Assessment, which must take into consideration changes in the frequency and intensity</p>



<p>Significant hurricane and other winds may occur in the project area and the likely severity of impacts is major or extreme.</p>	<p>of tropical storms that could occur with climate change. The DRMP includes risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account existing vulnerability levels and coping capacities, the country's disaster alert and prevention system, general design standards, coastal retreat and other land use regulations and civil defense recommendations in coastal areas. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives. The amplified uncertainties due to climate change may be considered in hazard scenarios and an efficient combination of measures in the DRMP.</p>
<p>Tropical Storms are prevalent in the project area and the likely severity of impacts is moderate.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of storm risks for the project and address potential exacerbated risks for people and the environment during construction and operation, which must take into consideration changes in the frequency and intensity of tropical storms that could occur with climate change. Appropriate measures to reduce risks (predominantly engineering), prepare for impact (predominantly environmental and social safeguards) and to include financial protection will need to be included.</p>
<p>Significant riverine flooding from sustained rainfall and/or melting water and/or failing dam may occur in the project area and the likely severity of impacts is major or extreme.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of the flood risks for the project and address potential exacerbated risks for people and the environment during construction and operation, as specified in the Disaster Risk Assessment, which must take into consideration changes in the frequency and intensity of intensive rainfall and in the patterns of snowmelt that could occur with climate change. The DRMP includes risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account existing vulnerability levels and coping capacities, the area's disaster alert and prevention system, general design standards, land use regulations and civil defense recommendations in flood prone areas. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives. The amplified uncertainties due to climate change may be considered in hazard scenarios and an efficient combination of measures in the DRMP.</p>
<p>Area flooding from sustained rainfall is prevalent in the project area and the likely severity of impacts is moderate.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of areal flooding risks for the project which must take into consideration changes in the frequency and intensity of precipitations that could occur with climate change. Areal floods may be exacerbated by the project outside the project boundary by modifying draining patterns for heavy precipitations and increase risks for people and the environment during construction and operation. Appropriate measures to reduce risks (predominantly engineering), prepare for impact (predominantly environmental and social safeguards) and to include financial protection will need to be included.</p>
<p>Droughts are prevalent in the project area and the likely severity of impacts is moderate.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of drought risks for the project and address potential exacerbated risks for people and the environment during construction and operation, which must take into consideration changes in the frequency and intensity of droughts that could occur with climate change. Appropriate measures to reduce risks (predominantly engineering), prepare for impact (predominantly environmental and social safeguards) and to include financial protection will need to be included.</p>
<p>Decreases in average precipitation and top soil moisture in the project area and the likely severity of impacts is moderate.</p>	<p>Possible future modified water availability for residential consumption and use, irrigation, etc., should be addressed appropriately in the hydrological assessment, with risks for the project's viability taken into account. Appropriate adaptation measures (predominantly alternative project design and engineering) will need to be examined, proposed and reviewed.</p>



Reduction or prolongation of rainy season in the project area and the likely severity of impacts is moderate.

Possible future modified seasonal water availability for residential consumption and use, hydropower, irrigation, etc., should be adequately addressed in the hydrological assessment, with risks for the project's viability taken into account. Appropriate adaptation measures (predominantly alternative project design and engineering) will need to be examined, evaluated and selected.

DISASTER SUMMARY

Details

The Project should include the necessary measures to reduce disaster risk to acceptable levels as determined by the Bank on the basis of generally accepted standards and practices. Alternative prevention and mitigation measures that decrease vulnerability must be analyzed and included in project design and implementation as applicable. These measures should include safety and contingency planning to protect human health and economic assets. Expert opinion and adherence to international standards should be sought, where reasonably necessary.

Actions

The project triggered the Other Risks policy (B.04): climate risk. Please include sections on how climate risk will be dealt with in the ESS as well as client documents (EIA, EA, etc); Recommend addressing risks from gradual changes in climate for the project in cost/benefit and credit risk analyses as well as TORs for engineering studies.

ASSESSOR DETAILS

Name of person who completed screening:	Jacquet, Bruno (BRUNOJ@iadb.org)
Title:	
Date:	2014-11-24

COMMENTS

No Comments

SAFEGUARD POLICY FILTER REPORT

PROJECT DETAILS	
IDB Sector	AGRICULTURE AND RURAL DEVELOPMENT-SUSTAINABLE AGRICULTURAL DEVELOPMENT
Type of Operation	Other Lending or Financing Instrument
Additional Operation Details	
Investment Checklist	Generic Checklist
Team Leader	Jacquet, Bruno (BRUNOJ@iadb.org)
Project Title	Natural Disaster Mitigation Program II
Project Number	HA-L1097
Safeguard Screening Assessor(s)	Jacquet, Bruno (BRUNOJ@iadb.org)
Assessment Date	2014-11-24

SAFEGUARD POLICY FILTER RESULTS		
Type of Operation	Loan Operation	
Safeguard Policy Items Identified (Yes)	Activities to be financed by the project are in a geographical area and sector exposed to natural hazards* (Type 1 Disaster Risk Scenario).	(B.01) Disaster Risk Management Policy– OP-704
	The Bank will make available to the public the relevant Project documents.	(B.01) Access to Information Policy– OP-102
	Does this project offer opportunities to promote gender equality or women's empowerment through its project components?	(B.01) Gender Equality Policy– OP-761
	The operation is in compliance with environmental, specific women's rights, gender, and indigenous laws and regulations of the country where the operation is being implemented (including national obligations established under ratified Multilateral Environmental Agreements).	(B.02)
	The operation (including associated facilities) is screened and classified according to their potential environmental impacts.	(B.03)
	The Borrower/Executing Agency exhibits weak institutional capacity for managing environmental and social issues.	(B.04)
	The project is specifically designed to increase the capacity of human social and ecological systems to adapt to a changing climate.	(B.04)

	The project includes activities to close current “adaptation deficits” or to increase the capacity of human social and ecological systems to adapt to a changing climate.	(B.04)
	Consultations with affected parties will be performed equitably and inclusively with the views of all stakeholders taken into account, including in particular: (a) equal participation of women and men, (b) socio-culturally appropriate participation of indigenous peoples and (c) mechanisms for equitable participation by vulnerable groups.	(B.06)
	The Bank will monitor the executing agency/borrower’s compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.	(B.07)
	The operation is a repeat or second phase loan.	(B.14)
	Any part of the investment or component(s) is being co-financed.	(B.15)
	Suitable safeguard provisions for procurement of goods and services in Bank financed projects may be incorporated into project-specific loan agreements, operating regulations and bidding documents, as appropriate, to ensure environmentally responsible procurement.	(B.17)
Potential Safeguard Policy Items(?)	No potential issues identified	
Recommended Action:	<p>Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.</p> <p>The project triggered the Disaster Risk Management policy (OP-704). A Disaster Risk Assessment (DRA) may be required (see Directive A-2 of the DRM Policy OP-704) in case of high risk, a limited DRA in case of moderate risk. Next, please complete a Disaster Risk Classification along with Impact Classification.</p> <p>The project triggered the Other Risks policy (B.04): climate risk. Please include sections on how climate risk will be dealt with in the ESS as well as client documents (EIA, EA, etc); Recommend addressing risks from gradual changes in climate for the project in cost/benefit and credit risk analyses as well as TORs for engineering studies.</p>	
Additional Comments:		



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ASSESSOR DETAILS

Name of person who completed screening:	Jacquet, Bruno (BRUNOJ@iadb.org)
Title:	
Date:	2014-11-24

COMMENTS

No Comments

Environmental and Social Strategy

- 1.1 The general objective of the project is to reduce climate vulnerability of the rural population in the targeted watersheds of Grande Rivière du Nord, Artibonite (St Raphael, part of St Michel de l'Attalaye, and irrigated plain of Artibonite), Cavaillon and Ravine du Sud. The watersheds of Quinte and Acul Dubreuil may also be included. The program will be implemented through three components described in the Project Profile: (i) Analysis of climate vulnerability, (ii) Reduction of climate vulnerability; and (iii) Institutional strengthening.
- 1.2 The operation is expected to have positive environmental and social impacts since it will reduce climatic vulnerability (climate change and natural disaster risks) of rural population, by improving their resilience and preparedness to climate events and variability. The project is expected to improve critical ecosystem services, such as soil and water retention capacities of the watersheds, in order to prevent flooding and losses of soil fertility. It is expected to have positive impacts on rural population income, since it will contribute to improve agricultural income and reduce economic losses due to extreme events. The project will reduce casualties in rural areas. The upstream and downstream biological measures in targeted watersheds may include development of agroforestry systems, live fences, and vegetation of river banks. No invasive species will be used.
- 1.3 Potential negative environmental impacts will be temporary in nature and of limited geographic scope and will be associated primarily to watershed protection works, which will be executed in natural habitats (particularly on river banks); these are limited in scale but may have some short-term impacts during construction associated with the extraction of raw material. No impacts are expected on critical natural habitats. The construction of all infrastructures will comply with the corresponding environmental impact analysis and the execution of preventive and mitigation measures will be incorporated in the bidding documents. All works also comply with social, safety and health applicable rules in Haiti. IDB-financed HA-L1019 operation currently appears to generate impacts that exacerbate disaster risk in the Ravine du Sud and Cavaillon watersheds. The current operation will study and try to address these problems during project implementation.
- 1.4 The Program has been attributed a 'B' classification in accordance with the Environmental and Social Safeguards Policy (OP-703). Given this attribution, the environmental and social analysis will consist of a Strategic Environmental Assessment and the elaboration of an Environmental and Social Management Plan (ESMP). The latest will include: the procedures for environmental and social and environmental impact evaluation and mitigation applicable to civil works; and a monitoring plan including environmental indicators. This information will be incorporated in the Environmental and Social Management Report (ESMR). Priority measures in the ESMR will be incorporated in the POD with corresponding contractual conditions where appropriate.

INDEX FOR COMPLETED AND PROPOSED SECTOR WORK

Topic	Description	Estimated Date	Reference and Electronic links
Technical options and design aspects	Plan National d'Investissement Agricole 2010-2016 (PNIA)	Completed	http://agriculture.gouv.ht/view/01/?Plan-National-d-investissement
	Programme Triennal de Relance Agricole 2013-2016	Completed	http://agriculture.gouv.ht/view/01/?Programme-Triennal-de-Relance
	Strategic Program for Climate Resilience for Haiti, 2012	Completed	IDBDOCS # 39244972
	Plan d'Action National d'Adaptation au Changement Climatique	Completed	IDBDOCS# 39245012
	Système National de Gestion des Risques et Désastres	Completed	http://protectioncivilehaiti.net/index.php/sngrd
	Plan National de Gestion des Risques et Désastres	Completed	http://protectioncivilehaiti.net/images/pdf/Plan_National_de_Gestion.pdf
	USAID, 2007, Environmental Vulnerability in Haiti, Findings & Recommendations	Completed	37690480
	World Bank, 2005, Natural disaster hotspots: A global risk analysis	Completed	http://econ.worldbank.org/external/default/main?pagePK=64165259&piPK=64165421&theSitePK=469372&menuPK=64216926&entityID=000160016_20051123111032
	World Bank LAC, Agricultural Risk Management in the Caribbean, Lessons and Experiences 2009-2012	Completed	IDBDOCS# 39244998
	Watershed management plans of Grande Rivière du Nord, Cavaillon and Ravine du Sud	Completed	IDBDOCS# 39246374
	Watershed management plan of Quinte river	Completed	IDBDOCS# 39246345
	CIAT/CRS - Policy Brief : Haiti: Coffee and Mango Production in a Changing Climate	Completed	IDBDOCS # 39245173
	Evaluation de la vulnérabilité aux inondations des infrastructures hydro-agricoles dans la Vallée de l'Artibonite, BID/Body, Juin 2009.	Completed	IDBDOCS # 19060848
Études de Protection de la Vallée de l'Artibonite contre les Inondations – Tecsalt – MARNDR – BID - 2007	Completed	IDBDOCS # 1170793	

	Projet binational de réhabilitation du bassin versant du fleuve Artibonite, dans la zone frontalière entre Haïti et la République dominicaine – Rapport de l'étude diagnostique – ACDI/Ministère de l'Environnement d'Haïti/Secretaria de Estado de Medio Ambiente y Recursos Naturales de Republica Dominicana/OXFAM Québec/CRC Sogema, 2006	Completed	www.artibonito.org
	Final evaluation and PCR of 2389/GR-HA operation	Completed	IDBDOCS # 39245021
	Grant Proposal and Economic analysis HA-G1023	Completed	37690346 and 37690829
	Aide-Mémoire Mission HA-G1031		38795907
	Grant proposal Agricultural Technology Transfer HA-L1059	Completed	36063254
	Grant proposal Natural Disaster Mitigation Program HA-L1041	Completed	2063965
	Projet de manuel valorisant le retour d'expérience en aménagement des bassins versants – Charles Lilin/Coopération français, BID, MARNDR, CIAT - 2012	Completed	
	Climate Proofing of Agriculture in the Centre Artibonite Loop Area – Preparatory study (Bellande, A.)	December 2014	39239280 and IDBDOCS # 39245306
	Identification and analysis of flood early warning systems existing in Haiti, and recommendations for HA-L1097 design	January 2015	
	Réalisation des études préparatoires pour des investissements en infrastructures de protection des bassins versants de la Grande Rivière du nord, Cavaillon, Ravine du sud, Artibonite, Quinte et Acul Dubreuil	March 2015	
Analysis and economic viability of the Program	Program cost-benefit analysis	March 2015	
Financial management and fiduciary issues	Annex III of the POD	March 2015	
Data collection and analysis for reporting the results	Monitoring and impact evaluation plan	March 2015	
Environmental and Social Safeguards	ESMR	March 2015	

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¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.