

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**HAITI**

**PRODUCTIVE INFRASTRUCTURE PROGRAM IV**

**(HA-L1101)**

**PROJECT PROFILE**

The project team consisting of prepared this document: Ana María Sáiz, Team Leader; Michael Donovan, Alternate Team Leader; José Brakarz, Patricio Zambrano-Barragan, and Dianela Avila (IFD/FMM); Guisselle Velasquez (FMM/CHA); Ednoux Dormeus; Cedrick Joseph (CDH/CHA); Alfredo Rihm (INE/WSA); Carlos Faleiro Pajares (WSA/CHA); Carlos Mojica (INE/TSP); Serge Troch, Andrew Drumm, France Francois, Melissa Barandiaran, Elizabeth Brito, Soraya Senosier, Graham Watkins (VPS/ESG); Taos Aliouat (LEG/SGO); José Luis Irigoyen, Laurence Telson (CDH/CDH); Nelly Wheelock; Takady Mamadou Konate (FMP/CHA); Team Members.

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

## PROJECT PROFILE

### HAITI

#### I. BASIC DATA

<b>Project Name:</b>	Productive Infrastructure Program IV
<b>Project Number:</b>	HA-L1101
<b>Project Team:</b>	Ana María Sáiz, Team Leader; Michael Donovan, Alternate Team Leader; José Brakarz, Patricio Zambrano-Barragan, and Dianela Avila (IFD/FMM); Guisselle Velasquez (FMM/CHA); Ednoux Dormeus; Cedrick Joseph (CDH/CHA); Alfredo Rihm (INE/WSA); Carlos Faleiro Pajares (WSA/CHA); Carlos Mojica (INE/TSP); Serge Troch, Andrew Drumm, France Francois, Melissa Barandiaran, Elizabeth Brito, Soraya Senosier, Graham Watkins (VPS/ESG); Taos Aliouat (LEG/SGO); José Luis Irigoyen, Laurence Telson (CDH/CDH); Nelly Wheelock; Takady Mamadou Konate (FMP/CHA); Team Members.
<b>Beneficiary:</b>	Republic of Haiti
<b>Executing Agency:</b>	Ministry of Economy and Finance through its Technical Execution Unit (MEF/UTE) and the <i>Société Nationale des Parcs Industriels</i> (SONAPI)
<b>Financial Plan:</b>	IDB: US\$ 41,000,000 Total: US\$ 41,000,000
<b>Safeguards:</b>	Policies triggered: OP-703; OP-704; OP-710; OP-102 Classification: A

#### II. GENERAL JUSTIFICATION AND OBJECTIVES

- 2.1 **Project Justification.** Haiti has 10.9 million inhabitants, 1.8 million of whom live in the North and Northeast Departments, which are the fastest-growing regions in the country.<sup>1</sup> Given considerably high levels of unemployment,<sup>2</sup> poverty,<sup>3</sup> and inequality,<sup>4</sup> one of the government's priorities is to decentralize the country by promoting economic growth and generating local jobs in the North, one of the country's poorest and least populated regions.<sup>5</sup> In addition, as is explained below, the proposed operation is the fifth phase of a program with a clear degree of continuity.
- 2.2 **The Caracol Industrial Park (PIC).** To achieve these goals and increase overall productivity in the region, it is essential to provide favorable conditions to attract and retain private investment. To this end, the Government of Haiti, along with the United States Department of State (US-DOS) and the Bank agreed in September, 2008 to support the establishment of the PIC at the center of the Northern region. The PIC aims to address key obstacles for private investment by providing: (i) modern infrastructure and manufacturing facilities for firms to locate; (ii) reliable utilities (water, sanitation, and electricity); (iii) logistics support

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<sup>1</sup> 2015 Estimates by the *Institut Haïtien de Statistique et d'Informatique* (IHSI).

<sup>2</sup> Estimated at 39.5% in 2012.

<sup>3</sup> 59% of the population lives under the national poverty line of US\$2.44 per day and 24% on less than US\$1.24 per day.

<sup>4</sup> The Gini Coefficient for Haiti is 59.2, according to the World Bank.

<sup>5</sup> Action Plan for National Recovery and Development of Haiti (March 2010); *Plan d'Aménagement du Nord/Nord-Est* (December 2012).

and safe road access for importing and exporting activities; and (iv) professionally managed, operated, and well-maintained industrial park.

- 2.3 The PIC has been implemented at a fast pace and has achieved significant results. It currently hosts six tenants (in apparel, paint, sisal products, fragrance, and soft accessories manufacturing). The demand for rental space continues to be strong. The workforce has rapidly expanded since its opening in 2012; today it employs 6,200 workers, 65% of which are female. In 2014, its firms' total annual sales reached US\$53.6 million and their payroll reached US\$9 million.<sup>6</sup> The PIC is served by a transportation fleet that carries almost 5,500 people to work each day; it produces its own potable water and safely treats its wastewater. However, some challenges remain concerning both the full implementation of the environmental and social strategy (see ¶4.2) and support for the PIC's management.
- 2.4 The present operation marks the end of the PIC's implementation phase, with the completion of its essential infrastructure and construction of buildings to satisfy current demand. Remaining environmental and social issues will be addressed and park management will be strengthened, in preparation for the new financial model whereby its own revenues will cover operation and expansion costs. By 2020, when the Bank's last grant is planned to be fully disbursed, the PIC is expected to be the largest industrial park in Haiti, self-sustainable and providing employment for over 15,000 full-time workers.
- 2.5 The PIC is managed, since May 1st, 2014, by the *Société Nationale des Parcs Industriels* (SONAPI). It has the support of the US Government, who has financed a 10MW power plant (which provides electricity for the PIC and surrounding municipalities), assists in the expansion of the Cap-Haïtien port, and provides the regulatory framework needed to facilitate direct exports to the United States (HELP and HOPE acts). The Bank has provided four grants totaling US\$215.5 million, with the current one being the fifth and final grant proposed for 2015. Previous Bank operations in support of the PIC were:
- 2.6 **First PIC operation:** [Infrastructure Program \(2552/GR-HA\)](#). This operation consisted of a grant of US\$55 million, approved on July 25th, 2011. It financed: (i) initial park infrastructure, including a perimeter wall, a water treatment plant, a temporary domestic wastewater treatment plant, a temporary solid waste facility, an access road, 1.5 kilometers of internal roads, and other utility networks; (ii) four industrial buildings; (iii) an administration building, a 45-room dormitory, and a large canteen; (iv) social and environmental mitigation measures and studies, including the Cumulative Impact Assessment (CIA); and (v) a compensation plan for displaced farmers. This project is 99% disbursed and its objectives have been fully achieved.
- 2.7 **Second PIC operation:** [Productive Infrastructure Program \(2779/GR-HA\)](#). This second grant of US\$50 million was approved by the Bank on September 12th, 2012. It financed: (i) four industrial buildings; (ii) four smaller utility buildings (to accommodate boilers, an industrial laundry, and two canteens); (iii) a permanent waste water treatment plant and a solid waste management facility; (iv) an operation and maintenance management firm and an environmental,

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<sup>6</sup> SONAPI, 2015 Q1 PIC Report.

health, and safety manager for the park; (v) support for the worker's transportation system; (vi) social and environmental studies and mitigation measures - including the support for the establishment of a national park to protect the Caracol Bay; and (vii) small scale urban investments in the cities adjacent to the PIC. Currently, the grant is more than 80% disbursed, and most of the physical works will be completed during 2015.

- 2.8 **Third PIC operation:** [Productive Infrastructure Program II \(3132/GR-HA\)](#). This US\$40.5 million grant was approved by the Bank on December 16th, 2013. It financed: (i) the construction of additional industrial buildings, worker canteens and other service facilities, internal roads and utility networks within the PIC; (ii) small civil works' projects outside the PIC (mainly access roads to nearby cities); and (iii) studies and continuing management support for the PIC. Currently, the grant is almost 50% disbursed, and most of the physical works will be completed during 2015.
- 2.9 **Fourth PIC operation:** [Productive Infrastructure Program III \(3384/GR-HA/HA-X1036\)](#). This US\$70 million grant was approved by the Bank on December 11th, 2014. It will finance: (i) additional factory and utility buildings and service facilities (e.g., canteens, and dormitories); (ii) expansion of the PIC's site infrastructure and equipment; (iii) small scale urban projects in the communities surrounding the PIC; and (iv) support for SONAPI to help fund the PIC's operation and maintenance. The grant will start disbursing soon as the beneficiary completed the eligibility conditions on May 29, 2015.
- 2.10 **Country Strategy.** The program is consistent with the Action Plan for National Recovery and Development of the Government of Haiti and, in particular with its priorities of employment generation and environmental protection. The proposed program is also consistent with the IDB: Country Strategy with Haiti (2011-2015) (GN-2646), by promoting private sector investment and contributing to the development of Haiti's Northern region. The program will contribute to the lending program priorities of the Report on the Ninth General Increase in the Resources of the Inter-American Development Bank (AB-2764) by supporting: (i) small and vulnerable countries; and (ii) poverty reduction and equity enhancement.
- 2.11 **Program Strategy.** The overall strategy of all PIC related operations is to create favorable conditions for attracting private investment to Haiti's Northern region, thus generating employment opportunities for the local population. Other projects and institutions contribute to this goal, such as: the housing projects financed by the United States Agency for International Development (USAID) and the Bank (2318/GR-HA); the tourism development project by the World Bank; a hospital 1km south of the PIC financed by the European Union; agriculture and private sector development projects by USAID; solid waste management by the French Development Agency; ecosystem conservation (IDB, United Nations Development Program and the Global Environmental Facility), among others. For the current last grant for the PIC the main strategy is to provide sufficient technical support to the local agency responsible for its operation in order to establish a solid management capacity and ensure the park's long term sustainability.
- 2.12 **Program objective.** The overall objective is to contribute to the sustainable socioeconomic development of Northern Haiti. The specific objective is to create formal employment in the region by providing the necessary conditions for the

establishment of firms in the PIC and ensuring its adequate management and long term sustainability. The program has two main components:

- 2.13 **Component I. Provision of infrastructure in the PIC (US\$38.7 million).** Finances further expansion of the PIC (buildings and related infrastructure requested by SONAPI to cater to specific requests from tenants, to be defined by the time the project document is presented to Quality and Risk Review-QRR), which include: (i) warehouses, factory buildings to accommodate industrial activities, and other auxiliary and service structures (e.g., canteens, dormitories);<sup>7</sup> (ii) expansion of the park's infrastructure and equipment (roads and utility network); and (iii) civil works' supervision.
- 2.14 **Component II. Institutional Strengthening of SONAPI (US\$1 million).** This component aims to support PIC management in its transition to a self-sustaining and well managed industrial park. It will finance technical assistance to SONAPI in the areas of general management, finance, and specific technical areas, such as the environmental, health and safety (EHS) system. This includes on-the job training to strengthen SONAPI's technical capacity in this EHS and other areas and to ensure the PIC's long term financial sustainability.
- 2.15 **Component III. Administrative Costs (US\$1.3 million).** The program will also fund administration, monitoring, and auditing activities to be implemented through the Ministry of Economy and Finance's Technical Execution Unit (MEF/UTE).
- 2.16 **Expected Results:** The expected results of this final Bank grant are: (i) to generate additional employment at the PIC; (ii) contribute to the Government's export revenues; and (iii) to establish a model for the PIC's managerial and financial long term sustainability.

### III. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

- 3.1 **Program Execution.** The program will be jointly implemented by the MEF/UTE, which is responsible for all construction activities; and by SONAPI, which is responsible for the PIC's management and day-to-day operations.
- 3.2 Critical sector work has already been done for the previous operations. In December 2012, Comité Interministériel d'Aménagement du Territoire with the support of the Bank completed a Northern Regional Master Plan "*Plan d'Aménagement du Nord/ Nord-Est*" that includes recommendations for compact, risk-resilient, and environmentally-friendly urban growth. A possible Bank-financed operation in 2016 to support urban development in cities surrounding the PIC is currently being discussed with the Government of Haiti.
- 3.3 **Program Risks.** The main risks are: (i) long term sustainability of the PIC due to lack of funds for continuing expansion and maintenance; (ii) political instability that may discourage private investors; (iii) logistical problems for exporting goods and construction delays; (iv) environmental and social impacts due to population growth caused by the PIC; and (v) inadequate management of PIC's environmental and social impacts and operating risks (especially the EHS system).

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<sup>7</sup> The Gender Plan is being developed by Environmental Safeguards Unit (ESG) and will be finished for the Proposal for Operation Development (POD).

#### IV. SAFEGUARDS AND FIDUCIARY SCREENING

- 4.1 Financial management will be carried out by the MEF/UTE following the procedures applied in previous PIC operations. The MEF/UTE team already performs financial, procurement, technical, social, and environmental functions. It has been strengthened recently with additional staff in: (i) planning and monitoring; (ii) communication and public relations; (iii) finance; (iv) on-site representation; and (v) sanitation, solid waste, and environmental protection.
- 4.2 **Environmental and Social Impacts and Risks.** This operation is classified as Category A. Since the first PIC operation, the Bank has developed specific environmental, social, and health and safety plans and procedures addressing potential program's risks. Effective prevention and mitigation measures for construction and safety operations have been implemented, addressing risk related to: (i) ecological degradation of the surrounding ecosystem; and (ii) social, economic and urban impacts on the region resulting from possible uncontrolled population growth. Nevertheless, delays in the full implementation of the mitigation measures developed for previous grants still pose environmental and social risks, as described in the [Environmental and Social Strategy](#). The remaining measures will be fully implemented in the course of the current operation.

#### V. RESOURCES AND TIMETABLE

- 5.1 The following timeline is expected: distribution of the Proposal for Operation Development (POD) to the QRR on August 14th, 2015; approval by the Operations Policy Committee (OPC) on October 2th, 2015, and presentation to the Board of Directors on November 18th, 2015. The administrative budget for preparing the operation amounts to US\$94,988 (see Annex V).

CONFIDENTIAL

<sup>1</sup> 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 POLICY FILTER REPORT

PROJECT DETAILS		
IDB Sector	Urban Development And Housing-Neighborhood Upgrading	
Type of Operation	Other Lending or Financing Instrument	
Additional Operation Details		
Investment Checklist	Generic Checklist	
Team Leader	Sáiz, Ana Maria (AMSAIZ@iadb.org)	
Project Title	Productive Infrastructure Program IV	
Project Number	HA-L1101	
Safeguard Screening Assessor(s):	Troch, Serge-Henri L.M. (STROCH@iadb.org)	
Assessment Date	2015-04-06	
SAFEGUARD POLICY FILTER RESULTS		
Type of Operation	Loan Operation	
Safeguard Policy Items Identified (Yes)	Potential disruption to people's livelihoods living in the project's area of influence (not limited to involuntary displacement, also see Resettlement Policy.)	(B.01) Resettlement Policy– OP-710
	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 operation itself has a potential to exacerbate hazard risk* to human life, property, the environment or the operation itself (Type 2 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
	Potential to negatively affect women or gender equality ( <a href="#">See Gender Equality Policy</a> )	(B.01) Gender Equality Policy– OP-761
	Is this project specifically designed to address gender equality or women's empowerment issues?	(B.01) Gender Equality Policy– OP-761
	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	(B.02)



	established under ratified Multilateral Environmental Agreements).	
	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 operation may be of higher risk due to controversial environmental and associated social issues or liabilities.	(B.04)
	Other environmental and social sustainability issues that the Project Team considers to be a risk for this operation. (e.g. wood sourced from Amazon rainforest).	(B.04)
	An Environmental Assessment is required.	(B.05)
	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)
	Environmental or culturally sensitive areas, defined in the Policy as critical natural habitats or critical cultural sites in project area of influence.	(B.09)
	The operation has the potential to impact the environment and human health and safety from the production, procurement, use, and disposal of hazardous material, including organic and inorganic toxic substances, pesticides and Persistent Organic Pollutants (POPs).	(B.10)

	The operation has the potential to pollute the environment (e.g. air, soil, water, greenhouse gases...).	(B.11)		
	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)		
<b>Potential Safeguard Policy Items(?)</b>	No potential issues identified			
<b>Recommended Action:</b>	<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>			
<b>Additional Comments:</b>				
<b>ASSESSOR DETAILS</b>				
<b>Name of person who completed screening:</b>	Troch, Serge-Henri L.M. (STROCH@iadb.org)			
<b>Title:</b>				
<b>Date:</b>	2015-04-06			
<b>COMMENTS</b>				
<b>No Comments</b>				

## SAFEGUARD SCREENING FORM

PROJECT DETAILS		
IDB Sector	Urban Development And Housing-Neighborhood Upgrading	
Type of Operation	Other Lending or Financing Instrument	
Additional Operation Details		
Country	HAITI	
Project Status		
Investment Checklist	Generic Checklist	
Team Leader	Sáiz, Ana Maria (AMSAIZ@iadb.org)	
Project Title	Productive Infrastructure Program IV	
Project Number	HA-L1101	
Safeguard Screening Assessor(s)	Troch, Serge-Henri L.M. (STROCH@iadb.org)	
Assessment Date	2015-04-06	
PROJECT CLASSIFICATION SUMMARY		
Project Category: <b>A</b>	Override Rating:	Override Justification:
		Comments:
Conditions/ Recommendations	<input type="checkbox"/> Category "A" operations require an Environmental Impact Assessment or a Strategic Environmental Assessment (see Environment Policy Guideline: Directive B.5 for EIA and SEA requirements) and at least two consultations with affected parties. <input type="checkbox"/> These operations will require an environmental assessment (EA), normally an Environmental Impact Assessment (EIA) for investment operations, or other environmental assessments such as a Strategic Environmental Assessment (SEA) for programs and other financial operations that involve plans and policies. Category "A" operations are considered high safeguard risk. For some high safeguard risk operations that, in the Bank's opinion raise complex and sensitive environmental, social, or health and safety concerns, the borrower should normally establish an advisory panel of experts to provide guidance for the design and/or execution of the operation on issues relevant to the EA process, including health and safety. However, these operations will also establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.). <input type="checkbox"/> The Project Team must send to the ESR 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	
Conversion or degradation of critical natural habitat is minor to moderate in nature, as confirmed by a specific ecological assessment.	<b>Ensure Adequacy of Biodiversity Management Plan (BMP):</b> The borrower should be required to develop a BMP that demonstrates how impacts have been mitigated and what consultation activities are planned. The borrower should confirm that: (a) there are no feasible alternatives acceptable to the Bank; (b) benefits substantially outweigh environmental costs; and (c) mitigation and compensation measures are acceptable by the Bank. In addition this plan should be part of the ESMP. In all situations, impacts to biodiversity should be avoided in first instance (i.e. relocate or reconfigure proposed activities). If avoidance is not possible impacts should be mitigated by restoration, offsetting impacts or other means. Professional support	

	from suitably qualified experts should be sought and confirmation should be obtained that they are confident that the BMP can mitigate impacts and also that relevant authorities have approved the BMP. Require regular (bi-annual or annual) reporting. Require independent audits of BMP implementation and depending on the financial product, the BMP should be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).
Borrower and/or third party has only a partial commitment/capacity to comply with applicable ILO requirements (including commitment to non-discrimination, equal opportunity, collective bargaining and rights of association) and national employment in relation to working conditions.	<b>Ensure the Development of Adequate Labor Policy and Practices:</b> The borrower should be required to improve employment and employment rights including (as appropriate): (a) clarification of employment practices and terms; (b) support of collective bargaining; (c) approaches to workers' organizations (d) non-discrimination and equal opportunity; (e) fair and transparent retrenchment/redundancy amongst workers; and (f) development of appropriate grievance mechanisms. These issues should be defined in a human resources policy. Depending on the financial product, the policy should be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.) and require regular (bi-annual or annual) reporting and independent review of implementation.
Potential to introduce unequal requirements for access to benefits and economic opportunities based on gender	<b>Incorporation of gender analysis into its social impact and risk assessments:</b> Where project impacts will potentially introduce unequal requirements for access to benefits and economic opportunities based on gender, project preparation and implementation should include specific analysis and consultation/agreements regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.
Potential to introduce conditions that restrict the participation of women or men based on pregnancy, maternity/paternity, marital status	<b>Incorporation of gender analysis into its social impact and risk assessments:</b> Where project has the potential to introduce conditions that restrict the participation of women or men based on pregnancy, maternity/paternity, marital status, project preparation and implementation should include specific analysis and consultation regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation.
Potential to negatively impact the right to equality between women and men, or the specific rights of women under applicable law	<b>Incorporation of gender analysis into its social impact and risk assessments:</b> Where project impacts affect the rights to equality between women and men, or the specific rights of women under applicable law, project preparation and implementation should include specific analysis and consultation/good faith negotiations regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation.
The negative impacts from	<b>Hazardous Materials Management Plan:</b> The borrower should

production, procurement, use and disposal of hazardous materials (excluding POPs unacceptable under the Stockholm Convention or toxic pesticides) are moderate to significant and will comply with relevant national legislation, IDB requirements on hazardous material and all applicable International Standards.	document risks relating to the use of hazardous materials and prepare a hazardous material management plan (as part of the ESMP) that indicates how hazardous materials will be managed (and community risks mitigated). The borrower will be responsible for preparing the ESMP, which should include: a management plan that will address identification, labeling, handling, storage, use and disposal of the relevant hazardous materials. The plan might include confirmation from third-party specialists that risks have been adequately assessed and managed. An action plan should be defined and requires regular monitoring, reporting and independent review of implementation; this plan should be included in legal documentation (covenants, conditions of disbursement, etc.).
Waste generation (excluding hazardous waste) is significant or there is no adequate waste management plan in place.	<b>Solid Waste Management:</b> The borrower should be required to prepare a Waste Management Plan (including management and organizational requirements) consistent with relevant national requirements and International Standards (as appropriate). This plan should be part of the ESMP. Specific attention should be placed on reducing and re-cycling solid wastes. As part of this an action plan should be defined and requires regular reporting and independent review of implementation; this plan should be included in legal documentation (covenants, conditions of disbursement, etc). Additionally, impacts of solid waste should be avoided in first instance (i.e. relocate or reconfigure proposed activities). If avoidance is not possible, impacts should be mitigated by management, offsetting impacts or other means. Specifically (if applicable) in the case that national legislations have no provisions for the disposal and destruction of hazardous materials, the applicable procedures established within the Rotterdam Convention, the Stockholm Convention, the Basel Convention, the WHO List on Banned Pesticides, and the Pollution Prevention and Abatement Handbook (PPAH), should be taken into consideration.
Likely to have significant emissions or discharges that would negatively affect ambient environmental conditions.	<b>Management of Ambient Environmental Conditions:</b> The borrower should be required to prepare an action plan (and include it in the ESMP) that indicates how risks and impacts to ambient environmental conditions can be managed and mitigated consistent with relevant national and/or international standards. The borrower should (a) consider a number of factors, including the finite assimilative capacity of the environment, existing and future land use, existing ambient conditions, the project's proximity to ecologically sensitive or protected areas, and the potential for cumulative impacts with uncertain and irreversible consequences; and (b) promote strategies that avoid or, where avoidance is not feasible, minimize or reduce the release of pollutants, including strategies that contribute to the improvement of ambient conditions when the project has the potential to constitute a significant source of emissions in an already degraded area. The plan should be subject to review by qualified independent experts. Depending on the financial product, this information should be referenced in appropriate legal documentation (covenants, conditions of disbursement, etc.).
Safety issues associated with structural elements of the project (e.g. dams, public buildings etc), or road transport activities (heavy vehicle movement, transport of hazardous materials, etc.) exist	<b>Address Community Health Risks:</b> The borrower should be required to provide a plan for managing risks which could be part of the ESMP; (including details of grievances and any independent audits undertaken during the year). Compliance with the plan should be monitored and reported. Requirements for independent audits should be considered if there are questions over borrower commitment or potential outstanding community concerns.

which could result in moderate health and safety risks to local communities.	
Transport of hazardous materials (e.g. fuel) with minor to moderate potential to cause impacts on community health and safety.	<b>Hazardous Materials Management:</b> The borrower should be required develop a hazardous materials management plan; details of grievances and any independent health and safety audits undertaken during the year should also be provided. Compliance with the plan should be monitored and reported. Depending on the financial product, this information should be referenced in appropriate legal documentation (covenants, conditions of disbursement etc). Consider requirements for independent audits if there are concerns about commitment of borrower or potential outstanding community concerns.
The project will result in a significant increase in community risk from disease (e.g. from water borne diseases) or natural resources risks (landslides, erosion etc).	<b>Environmental Health Management:</b> Where an investment will generate environmental health risks, the borrower should be required to assess and manage risks and develop a environmental health risk plan (this will probably require input from professionally competent advisers/ consultants), as well as engage with local communities through a process of Consultation. Compliance with the plan should be monitored and reported. Regular reporting and independent review of implementation as well as reporting on the plan should be part of the legal documentation (covenants, conditions of disbursement, etc).
Security forces will be used but industry standards (e.g. Voluntary Principles on Security and Human Rights) in terms of selection and management of security staff will not be followed or the capacity to manage them is inadequate.	<b>Manage Use of Security Forces:</b> The borrower should undertake an assessment of security risks to employees and local communities, consult with local communities on the use and deployment of security forces and be strongly encouraged to commit to an appropriate industry standard for the use of such forces. An annual review of performance (including grievances received from local communities) should be required and independent review of that report commissioned.
Project construction activities are likely to lead to localized and temporary impacts (such as dust, noise, traffic etc) that will affect local communities and workers but these are minor to moderate in nature.	<b>Construction:</b> The borrower should demonstrate how the construction impacts will be mitigated. Appropriate management plans and procedures should be incorporated into the ESMP. Review of implementation as well as reporting on the plan should be part of the legal documentation (covenants, conditions of disbursement, etc).
<b>DISASTER RISK SUMMARY</b>	
<b>Disaster Risk Category:</b> Moderate	
<b>Disaster/ Recommendations</b>	<ul style="list-style-type: none"> <li>• The reports of the Safeguard Screening Form (i.e., of the Safeguards Policy Filter and the Safeguard Classification) constitute the Disaster Risk Profile to be included in the Environmental and Social Strategy (ESS). The Project Team must send the PP (or equivalent) containing the ESS to the ESR.</li> <li>• The Borrower prepares a Disaster Risk Management Summary, based on pertinent information, focusing on the specific moderate disaster and climate risks associated with the project and the proposed risk management measures. Operations classified to involve moderate disaster risk do not require a full Disaster Risk Assessment (see Directive A-2 of the DRM Policy OP-704).</li> <li>• 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</li> </ul>

	<p>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.</p> <ul style="list-style-type: none"> <li>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. Please consult the INE/CCS adaptation group for guidance.</li> </ul>
SUMMARY OF DISASTER IMPACTS/RISKS AND POTENTIAL SOLUTIONS	
Identified Impacts/Risks	Potential Solutions
Earthquakes from various sources are prevalent in the project area and the likely severity of impacts is moderate.	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.
Tropical Storms are prevalent in the project area and the likely severity of impacts is moderate.	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.
Area flooding from sustained rainfall is prevalent in the project area and the likely severity of impacts is moderate.	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.
ASSESSOR DETAILS	
Name of person who completed screening:	Troch, Serge-Henri L.M. (STROCH@iadb.org)
Title:	
Date:	2015-04-06

COMMENTS
No Comments



## ENVIRONMENTAL AND SOCIAL STRATEGY (ESS)

<b>Project name:</b>	Productive Infrastructure Program IV		
<b>Project number:</b>	HA-L1101		
<b>Beneficiary:</b>	Republic of Haiti		
<b>Executing agency:</b>	Ministry of Economy and Finance (MEF) through its Technical Execution Unit (UTE) and the National Society of Industrial Parks (SONAPI)		
<b>Financing plan:</b>	IDB: (Grant Facility)	US\$	41,000,000
	<b>Total:</b>	US\$	41,000,000
<b>Safeguards:</b>	Policies triggered:	OP-703; OP-704; OP-270; OP-102	
	Classification:	A	

### I. PROJECT DESCRIPTION

- 1.1 **Background.** Through a series of grants, the Bank is providing the basic infrastructure, industrial facilities, management support and complementary resources required for the construction, operation and expansion of the Caracol Industrial Park (PIC—*Parc Industriel de Caracol*).<sup>1</sup>
- 1.2 **The Proposed Operation.** The proposed operation consists of the fifth and final grant for an amount of US\$41 million to the Government of Haiti to continue the development of the PIC. This grant will be used to expand the existing infrastructure such as warehouses, factory buildings, and other structures (e.g., canteens, dormitories) as well as ancillary site infrastructure and equipment within the PIC (notably the expansion of the roads and utility networks), to supervise civil works, to strengthen the *Société Nationale des Parcs Industriels* (SONAPI), and for the cost of administration, monitoring, auditing and contingencies. The expected implementation period of the operation is two years. The goals of this fifth operation include: (i) generation of 6,250 additional jobs at the PIC; (ii) increase in fiscal revenues from payments to social and health security funds and from the use of utilities; and (iii) establish the basis for SONAPI to continue to manage and expand the PIC in a financially, socially and environmentally sustainable way.
- 1.3 **Status of the development of the PIC.** Construction of the PIC started in September 2011 and has been advancing at a steady pace. The previous operations (2552/GR-HA, 2779/GR-HA and 3132/GR-HA) financed the construction of factories, warehouses, dormitories, security walls, temporary and permanent wastewater treatment plants (WWTP), a temporary solid waste facility, water supply, ancillary infrastructure, internal roads and the local utility network. The construction of the permanent WWTP originally scheduled to be completed in 2012 has been delayed and is not expected to come fully online until May, 2015. The delay in the construction of the WWTP resulted in the need to build a temporary septic system that was in use until July, 2014 and which did not meet the Bank's discharge standards for wastewater effluent under the Bank's policy. This situation required the IDB Board to grant an exception to

<sup>1</sup> The first three operations (2552/GR-HA); (2779/GR-HA), and (3132/GR-HA) are currently being executed. A fourth operation, (3384/GR-HA), was approved in December 2014 with Project eligibility expected to be achieved in June 2015.

- Directive B.11 under policy OP-703 (GN-2208-20), until the permanent wastewater treatment plant is completed and achieves the effluent discharge standards related to such directive. Since July 24<sup>th</sup>, 2014, 100% of domestic wastewater produced in the PIC has been sent to the permanent WWTP. Refer to section 3.13 for more information.
- 1.4 The PIC is delayed in developing and implementing an environmental, health and safety (EHS)<sup>2</sup> management system. Important deficiencies exist in waste management, food and transportation provisioning to the workers, and potable water supply. In addition, the mitigation measures to protect biodiversity are also delayed. Some of these shortcomings are recurrent and have been identified in the Bank's assessment of the previous grant operations, for which specific legal requirements (including a 2779/GR-HA Liabilities Remediation Plan) have been included in the legal documents as reported in the Environmental and Social Management Reports (ESMR) for 2779/GR-HA; 3132/GR-HA; and 3384/GR-HA.<sup>3</sup>
- 1.5 **Executing Agency and Other Parties administering the PIC.** The program will have two executing agencies: (i) MEF/UTE, responsible for all construction and supervision activities, including the management of the permanent waste water treatment plant; and (ii) SONAPI, in charge of all PIC operation and management activities, except for the management of the permanent WWTP, unless the Bank and the Beneficiary agree otherwise in writing.<sup>4</sup> SONAPI is the entity responsible for managing all industrial parks in Haiti. On May 1<sup>st</sup>, 2014, in spite of SONAPI's significant limitations in institutional capacity (including the lack of an EHS system), the Government of Haiti took the decision to revert back to the organization the management authority over the PIC, which had been with the Technical Execution Unit (UTE) since 2011.
- 1.6 SONAPI's staff at the PIC has grown since May 2014, and currently includes a Park Manager, an EHS Manager, as well as a Health and Safety Supervisor, an Environment officer, a Communications officer, and an EHS assistant. Still pending are a Feedback officer and a part-time Health coordinator, which are required to be in place prior to the 1<sup>st</sup> disbursement of the previous grant (3384/GR-HA)
- 1.7 **Tenants.** To date, the PIC has made significant advances in attracting tenants:<sup>5</sup> (i) Sae-A (S&H Global), the anchor tenant (textile manufacturing), is operating with—4,000 workers; (ii) *Peintures Caraïbes* (paint manufacturing) employs approximately 100 workers; (iii) Sisalco (Sisal manufacturing) employs around 40 workers; and (iv) UB Fragrance (fragrance manufacturing) employs around 40 employees. A fifth tenant (Goal—textile manufacturing) started production in early 2015 with around 100-200 workers.

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<sup>2</sup> Including social and labor aspects.

<sup>3</sup> See the Environmental and Social Management Reports (ESMR) for the following grant operations: 2779/GR-HA, 3132/GR-HA and 3384/GR-HA.

<sup>4</sup> As part of the previous projects a table was prepared defining the roles of the UTE and SONAPI. In addition the contract between the IDB and the government clearly defines the roles and responsibilities of each agency.

<sup>5</sup> Data from December 2014.

## II. ENVIRONMENTAL AND SOCIAL CONTEXT

### A. Environmental and Social Setting<sup>6</sup>

- 2.1 The PIC is being built on a 250 ha greenfield site in the rural community of Caracol. The PIC is situated on the plains between the northern massif and the Atlantic Ocean. The communes of Caracol and Fort Liberté in particular are coastal towns located close to ecologically sensitive areas (mangroves, coral reefs and fisheries) and cultural assets. The village of Caracol lies about 4 km to the north of the PIC and approximately 25 km southeast of Cap-Haïtien. The PIC site is bisected by the Trou-du-Nord River, which is bordered by riparian vegetation. The river seasonally floods, inundating riparian habitats, and empties into Caracol Bay approximately 4 km downstream (see Figure 1).
- 2.2 The environmental footprint of the PIC is broader than the actual project site and extends the length of the Northeastern Corridor because of the overall development of the area for which the PIC will act as catalyzer. The PIC is part of the Northeastern Corridor growth pole to develop regions outside Port-of-Prince and is supported by several additional investments including roads, port rehabilitation, housing, hospitals and a university. This is located along National Route 6 (RN6), extending from Ouanaminthe in the east, on the border with the Dominican Republic (DR), to Cap-Haïtien in the west.
- 2.3 Overall, the region is deficient in infrastructure, including roads, energy generation and in public services such as water supply, sanitation, solid waste management, education, healthcare and security. People in the region substantially depend on natural resources and, as a result, the region has suffered environmental degradation through loss of forest, water contamination, and overharvested coastal marine resources.
- 2.4 **Coastal Environment.** Haiti's northern coast is characterized by low-lying alluvial coastal plains. Caracol Bay includes an estimated 5,250 ha of healthy mangroves (mainly red mangroves, or *Rhizophora mangle*), representing more than 18% of the remaining mangroves in Haiti. The sheltered bay also includes sea grass beds and is bounded by a fringing coral reef that extends over 20 km. Caracol Bay provides an important habitat for endangered species, including sea turtles and potentially manatees. Local communities depend on resources from this system, particularly through fisheries, including those containing demersal finfish, conch, shrimp and lobster, and through exploitation of mangroves for firewood, charcoal and building materials. The establishment of evaporation ponds for the production of sea salt presents an additional use of the mangrove area.
- 2.5 In 2013, with the support of the IDB, as a measure to help mitigate the PIC's direct, indirect and cumulative impacts, this area was declared a national protected area – Three Bays National Park – and as such, is considered a critical natural habitat (CNH). The protected area includes the bays, mangroves and coral reefs of Limonade, Caracol and Fort Liberté.

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<sup>6</sup> For more detailed information on the environmental and social setting, see the ESMR of [3384/GR-HA](#).

- 2.6 **Hydrology and Water quality.** The primary source of surface water in the vicinity of the PIC is the Trou-du-Nord River, which begins in the mountainous region to the south and bisects the PIC before reaching its mouth, located in Caracol Bay. Its watershed extends approximately 110 km<sup>2</sup>. Since it is an intermittent river, seasonal variations in precipitation greatly impact its flow.
- 2.7 The PIC is underlain by the Massacre Transboundary Aquifer (MTA), which spans approximately 2,280 km<sup>2</sup> and extends from Haiti's Northeast Department in the west to the DR's Dajabón Province in the east. Groundwater, obtained from dug wells and shallow boreholes, is readily accessible and is the primary source of domestic and irrigation water for local residents. Simple pit latrines reportedly often fill up with water, which poses contamination risks to the MTA and local wells.
- 2.8 Although borehole pump tests indicate that there is sufficient water available for Phase 1 of the anchor tenant's activities, the impact of additional tenants, future phases of the PIC and surrounding infrastructure developments on water availability is unknown, in part due to the limited information available on the MTA. To this end, a Technical Cooperation (TC) on Water Availability, Quality and Integrated Water Resources Management in Northern Haiti (ATN/OC-13756-HA)<sup>7</sup> is being executed to quantitatively assess the current and future water availability and analyze water quality and stakeholder demand to inform an Integrated Water Resources Management (IWRM) Plan for the Trou-du-Nord watershed. Some results from this study include a water model for the watershed that will be delivered to the Government of Haiti.
- 2.9 **Social and Cultural Context.** Today, the population of the towns and cities in the northeast is estimated at 378,000, of which 56% live in urban areas. The population under the age of eighteen in this region is 64%<sup>8</sup>, with slightly more men than women. Even as unemployment remains particularly high (64% in Limonade and 68% in Trou-du-Nord, for example) young Haitians in rural areas are less and less involved in traditional agriculture and are more likely to migrate to cities for education or job seeking. However, the principal sectors generating employment in the region are agriculture, fishing, salt production, and livestock.
- 2.10 Much like most of Haiti, the population lacks equitable access to basic social services such as education, housing, police services, healthcare, and food security. The difficulty of accessing potable water, affordable energy sources other than charcoal, and solid waste management services further exacerbate the social implications of environmental issues.
- 2.11 The PIC is only one of a series of investments the Government of Haiti is planning or has implemented in the northern region. These include investments in roads, tourism, housing and a pilot urban plan for sustainable cities in the Northern Development Corridor that include Limonade, Trou-du-Nord, Terrier Rouge and Caracol. Without the PIC and these other investments, the population in the north of Haiti would be expected to grow estimated 50% by 2030. With these investments and the PIC alone estimated to bring up to 25,000 jobs to the

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<sup>7</sup> See [ATN/OC-13756-HA](#) project's description.

<sup>8</sup> See *Etude D'Impact Environnemental Cumulatif du PIC - Rapport Intermédiaire*

region, the population is projected to grow estimated 100% by 2040 to 1.1 million.<sup>9</sup> Both scenarios will transform this largely rural, agricultural area, which is currently to a great extent dependent on subsistence farming.

- 2.12 Currently, the PIC employs three times more women than men with over 50% of the total work force stemming from Trou du Nord, Cap- Haïtien, and Limonade.<sup>10</sup>

### **III. ENVIRONMENTAL AND SOCIAL COMPLIANCE STATUS**

#### **A. Institutional and Regulatory Framework**

- 3.1 Haiti's Ministry of Environment (MOE) is the primary institution responsible for environmental management and protection. Currently, the MOE does not have a fully functioning EIA review system and its capacity is extremely limited, in particular for on-the-ground technical support, enforcement and monitoring.
- 3.2 The Haitian Legislative Decree of January 2006 addresses issues related to ecosystem conservation, protected areas, protection of habitats and pollution control. As such, and as described in section 2.5, the MOE declared the Three Bays National Park in 2013.
- 3.3 The Haitian Labor Code addresses, among other things: (i) transportation for industrial sector employees; (ii) housing for workers; (iii) food for workers; (iv) the needs of pregnant women and nursing mothers; (v) health insurance for workers; and (vi) also minimum wages. Under the Haitian Labor Code, workers have the right to seek resolution of disputes relating to the payment of wages through a process mediated by the Labor Department. In order to benefit from the Haitian Hemispheric Opportunity through Partnership Encouragement Act of 2008 (HOPE II),<sup>11</sup> Haiti was required to develop a program to assess and promote compliance with core labor standards and national labor law. Better Work Haiti (BWH)<sup>12</sup> is implementing the Technical Assistance Improvement and Compliance Needs Assessment and Remediation (TAICNAR) Program.<sup>13</sup>

#### **B. Compliance with Environmental Assessment Requirements**

- 3.4 The UTE commissioned an Environmental and Social Impact Assessment (ESIA) for the PIC which was completed in May 2011 and disclosed during the assessment of the first grant (2552/GR-HA). This ESIA was deemed by the Bank to be incomplete given the lack of sufficient details and baseline information. To address the limitations of the ESIA, and in light of information regarding the

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<sup>9</sup> Based on the projections from the Emerging and Sustainable Cities Initiative: ATN/OC-13813-HA and ATN/SS-13812-HA.

<sup>10</sup> 2015 Q1 PIC Report.

<sup>11</sup> HOPE II, approved by the U.S. Congress in 2008, initiated support efforts to expand industry in Haiti by extending duty-free treatment to textiles, apparel, and other goods until 2018.

<sup>12</sup> BWH is a partnership program between the International Labor Organization (ILO) and the International Finance Corporation (IFC). Launched in Haiti in October 2009, the program aims at improving both compliance with labor standards and competitiveness in global supply chains. BWH also supports enterprises in implementing the ILO core international labor standards and national labor laws.

<sup>13</sup> These efforts will result in regular monitoring of textile industries with respect to compliance with the Haitian Labor Code and the ILO's Core Labor Standards.

- design of the infrastructure program becoming available, additional environmental and social studies and management plans have been prepared, including a preliminary hydrological assessment; a solid and hazardous waste management study; a Cumulative Impact Assessment (CIA) (with a preliminary draft updated version presented in March 2015 and final version expected to be ready by June 2015); a Social Impact Assessment; an Environmental and Social Management Plan (ESMP) for construction; and a framework ESMP for operation. In addition, a Compensation and Livelihoods' Restoration Plan and, recently, an update to this plan have been prepared. As such the current grant operation has been assessed by the ESIA and associated complementary studies.
- 3.5 However there are still some studies in preparation, including the development of an alternative livelihood strategy and the biodiversity baselines for the Three Bays National Park, which will be the basis for the management plan of the protected area.
- 3.6 A separate TC financed the preparation of a Northern Regional Master Plan under the coordination of the *Comité Interministériel d'Aménagement du Territoire* (CIAT). Currently, the IDB Initiative on Sustainable Cities is assessing how this initiative can assist with the definition of priority actions.
- 3.7 The PIC's power plant (financed by the U.S. Agency for International Development—USAID) is considered an associated facility, for which an Environmental Assessment (EA) has been prepared and disclosed.<sup>14</sup>

### C. Compliance with IDB Policies and Requirements

- 3.8 **Overall Compliance status of the PIC project.** Several EHS conditions (including for first disbursement) were included in the fourth operation (3384/GR-HA) grant agreement and these will need to be met to ensure compliance. In addition, an exception to OP-703 related to Directive B.11 was granted by the Board for 3132/GR-HA (since wastewater was sent to a temporary system not meeting IDB standards), until the permanent wastewater treatment plant is completed and achieves the effluent discharge standards related to such directive. Since July 2014 wastewater is being sent to the permanent wastewater treatment plant and no wastewater is being discharged to the river. For several upcoming conditions from 3132/GR-HA and 3384/GR-HA the UTE has requested more time to be able to comply (see section 3.15). Since the beginning of the PIC program, the limited technical capacity of the UTE and SONAPI, especially in the areas of water and wastewater, solid waste, and health and safety management, are one of the key factors for not been able to reach compliance.
- 3.9 **Environmental Impact Categorization.** As with the three previous grant operations (2779/GR-HA, 3132/GR-HA and 3384/GR-HA), this one is also classified as Category A operation. The Project is likely to cause significant environmental and social impacts, particularly: (i) changes to water quality and quantity; (ii) ecological degradation of the mangrove ecosystem, a CNH; (iii) cumulative impacts in the Northern Corridor resulting from poorly managed

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<sup>14</sup> [PIC Power Plant EA](#)

population influx and new investments, which may result in further degradation of natural resources (e.g., forests, water, mangroves, coral reefs and fisheries); and (iv) negative impacts on local livelihoods. Although the potential impacts of the current grant will be additional and incremental, given that the PIC development is already under way, the above-mentioned issues, if not adequately addressed, may exacerbate the environmental and social risks and present a significant reputational risk for the IDB and the other agencies involved in the project.

- 3.10 **IDB Policies and Directives.** The Operational Directives of the IDB's Environment and Safeguards Compliance Policy (OP-703) triggered include: B.01 (Bank Policies); B.02 (Country Laws and Regulations); B.03 (Screening and Classification); B.04 (Other Risk Factors); B.05 (Environmental Assessment Requirements); B.06 (Consultations); B.07 (Supervision and Compliance); B.08 (Transboundary Impacts); B.09 (Natural Habitats and Cultural Sites); B.10 (Hazardous Materials); B.11 (Pollution Prevention and Abatement); B.12 (Project Under Construction); B.14 (Multiple Phase and Repeat Loans); and B.17 (Procurement). The program also triggers the IDB's Disaster Risk Management Policy (OP-704); the IDB's Policy on Gender Equality in Development (OP-270); and the IDB's Access to Information Policy (OP-102).
- 3.11 In relation to B.4, during the analysis mission an evaluation of the current EHS capacity of UTE and SONAPI will be done to ensure short, medium and long term sustainability of the PIC.
- 3.12 In relation to B.14, it should be noted that an Environmental Audit of the previous operations was deemed unnecessary because these operations are under close monitoring and supervision by the Bank and have specific EHS conditions included in the contracts of the previous operations (including Corrective Action Plans and Liabilities Remediation Plan). In addition, to enhance the Bank's supervision, which now covers four existing operations, the Environmental Safeguards Unit (ESG) hired Environmental Resources Management (ERM), an external international consulting sustainability firm, to conduct quarterly supervision missions. Results and outcomes of these missions will help inform the due diligence process for this operation. Therefore, there is sufficient knowledge of the program's current liabilities and risks.
- 3.13 **Exception to OP-703 B.11.** At the request of the Project Team, the IDB Board granted a temporary exception to Directive B.11 of OP-703 for the approval of 3132/GR-HA. This temporary deviation will be in effect until the permanent WWTP is operating in compliance with Directive B.11.<sup>15</sup>

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<sup>15</sup> Before discontinuing either of the temporary treatment systems, the Government of Haiti and the Bank will independently verify compliance of the permanent WWTP with B.11. In addition, the Government of Haiti will implement measures to manage the interim environmental risks, including: (i) limiting domestic wastewater production to 260 m<sup>3</sup>/day until the permanent WWTP operates in compliance with Directive B.11; (ii) ensuring that adequate staff has been retained to manage the temporary WWTP and the septic system; (iii) implementing measures to ensure that the first temporary WWTP is operating correctly, does not exceed its design capacity and fully implements its monitoring plan; and (iv) prior to the operation of the septic system, executing an enhanced monitoring plan, implementing contingency/emergency measures and developing a decommissioning plan according to the recommendations of the EA, which has been prepared for the septic system.

- 3.14 **Status of the Current Domestic Wastewater Treatment Systems.** The permanent WWTP commenced operations July 24, 2014, when the first line began receiving wastewater. Since that date, 100% of domestic wastewater produced in the PIC has been sent to the permanent WWTP, and the two temporary plants have neither received wastewater nor discharged it into the environment. The anchor tenant (S&H Global) will start doing washing activities in June creating industrial wastewater which will impact the quality of the final effluent. A pre-treatment facility is expected to be in place by October 2015 and the Bank will closely monitor the final effluent during the period when no pre-treatment is done (impacts are expected to be minor).
- 3.15 **Involuntary Resettlement (OP-710).** The new infrastructure that will be constructed inside the PIC will not involve any additional involuntary or economic displacement of affected people. Since the 250 ha site was acquired, a Compensation and Livelihoods Restoration Plan was prepared as part of the original operation (2552/GR-HA). There were 442 persons affected by the PIC's construction, of which to date 10 are still pending final compensation and 9 of those who had requested placement in the *Office National d'Assurance Vieillesse* (ONA) still have their applications pending.
- 3.16 **Gender Equality (OP-270).** Female employment is significantly higher than male employment at the PIC. As per the policy requiring that both men and women enjoy the same conditions and opportunities further action will need to be taken to ensure that these requirements are met. In addition, inadequate application of maternity leave, and lactation periods may have an adverse impact in female employment retention.
- 3.17 **Compliance with previous Action Plans and Grant conditions:** Several conditions from 2779/GR-HA and 3132/GR-HA are still outstanding, in particular, from the Liabilities Remediation Action Plan, the Final Flood Risk Assessment, including appropriate flood risk mitigation measures for the PIC, is still pending. In addition there are some first disbursement conditions for 3384/GR-HA still pending: (i) the signature of the Alternative Livelihood contracts (UTE); (ii) the presentation of evidence that the laboratory for the WWTP is fully operational (UTE); (iii) the presentation and implementation of the prioritized documents of the EHS Management System (SONAPI); (iv) the presentation of the remaining of the documents of the EHS Management System (SONAPI); (v) the contracting of consulting services to support the preparation of the Water Safety Plan (SONAPI); (vi) the presentation of evidence that the temporary solid waste facility is adequately managed with adequate resources allocated to it (SONAPI); (vii) the implementation of the Emergency Response Plan (SONAPI); and (viii) the implementation the hazardous waste management plan (SONAPI).
- 3.18 **Other requirements.** Compliance with national labor law and core labor standards is monitored by BWH as part of the HOPE II legislation. The January 2014 BWH Factory report states that the main tenant at the PIC, Sae-A, is not in compliance with certain articles of the labor code, specifically: (i) compensation (premium pay); (ii) occupational safety and health (emergency preparedness, health services and first aid, welfare facilities, working environment and worker protection); (iii) working time (leave); and (iv) maternity leave and breaks for pregnant women. Compliance will be assessed during due diligence process.



#### IV. ENVIRONMENTAL AND SOCIAL IMPACTS AND RISKS AND CONTROL MEASURES

- 4.1 Since the first operation for the PIC (2552/GR-HA) the Bank has developed a number of environmental, social, and health and safety management plans and procedures (see information in ESMRs for 2779/GR-HA, 3132/GR-HA and 3384/GR-HA) that are commensurate with the potential risks of the Program, which are related to: (i) deterioration of water quality in the river and estuary areas; (ii) ecological degradation of the mangrove ecosystem; (iii) cumulative impacts in the Northern corridor resulting from population influx; and (iv) negative impacts on local livelihoods. Some prevention and mitigation measures for the construction activities have been implemented effectively. However, in other cases, and as the PIC entered in the operational phase, delays in the full and adequate implementation of the mitigation measures developed for the previous operations have increased some environmental and social risks.
- 4.2 The underlying causes for the limited advancement in implementing environmental and social mitigation measures are (i) the limited capacity of the Government of Haiti (especially the SONAPI in the implementation of the EHS management system) and the IDB<sup>16</sup> to plan for and implement such a complex project; and (ii) the mechanisms and procedures needed to ensure the region's sustainable and planned development are not yet fully in place, thereby complicating the planning and implementation of a comprehensive approach to the northern area development program.
- 4.3 The Bank support to the PIC has to date contributed to important environmental and social achievements, including the support provided to the MOE that led to the declaration of the Three Bays National Park; support provided to the CIAT for the preparation of a Northern Regional Master Plan and facilitation of setting up of a Northern Regional Planning Authority, and the support provided to the SONAPI for the preparation of the documents of the EHS Management System.

##### A. Key Impacts from Construction and Control Measures

- 4.4 **Environmental.** Minor to moderate contamination may occur from the improper management, storage or disposal of used oils, hydraulic fluids and empty potentially toxic containers. The improper handling, transport and disposal of solid and hazardous waste may contaminate surface and groundwater, as well as soils. Improperly managed material extraction (i.e. inadequate management of quarries), erosion resulting from construction activities and stormwater runoff can lead to an increase in sediment loads in surface water and present a risk to sea grass beds and coral reefs, which are particularly sensitive to sedimentation.
- 4.5 **Occupational Safety and Health (OSH).** Improvements have been made in relation to health and safety. Personal Protective Equipment (PPE) is more widely used, extinguishers are inspected on due dates, etc. However, lack of PPE on some workers working at structures at heights is still observed, as are vehicles surpassing the speed limit on-site.

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<sup>16</sup> E.g. limited technical expertise, a tight timeline for project preparation leading to ad-hoc decisions.

- 4.6 **Social.** In the new construction phase, Estrella will continue to provide free transportation for its workers. Estrella has its own canteen that provides food for its international staff. The remaining workers eat from one of the 120 local vendors allowed inside the PIC.
- 4.7 **Construction Control Measures.** The procurement process to hire the new firm for the next construction phase is in process. Estrella prepared an ESMP in July 2014, which is used for the implementation of 3132/GR-HA; if Estrella is awarded the contract 3384/GR-HA, this ESMP will need to be reviewed, updated and implemented. If Estrella is not awarded the contract (3384/GR-HA) ESG is expecting to have a firm with a similar approach as Estrella's.
- 4.8 **Supervision.** Supervision of construction activities is performed by an independent Supervision Firm hired by the UTE. Starting with 2552/GR-HA, and throughout 2779/GR-HA, the supervision company has been SNC-Lavalin. The UTE hired a new Supervision Firm, BETA Ingénieurs-Conseils on June 4th, 2014 for 3132/GR-HA.

## **B. Key Impacts From Operation and Mitigation Measures**

- 4.9 The principal environmental impacts and risks of this operation are mainly related to water quality, food health and safety, chemical management, solid waste management, and biodiversity. Social risks and impacts include those that are incremental to the risks and impacts already generated by the PIC, in particular indirect and cumulative risks and impacts such as: (i) a population influx from outside the area, which could generate social tensions, safety risks for women and children, and overload public services; (ii) informal squatting around the PIC, in the case that housing and accommodations are insufficient to supply the demand from new workers; (iii) increased safety risks due to increased road traffic and accidents; (iv) unforeseen gender imbalances and shifts in gender roles in the local communities created by a largely female workforce at the PIC; (v) heightened security risks due to the population influx; (vi) labor issues onsite at the PIC; and (vii) the risk of social exclusion for surrounding communities due to a perception of being unable to benefit from the recent investments in the area, and the inability to have grievances addressed due to the current lack of a fully functioning grievance mechanism. Lack of planning, inadequate land-use zoning and enforcement, and insufficient public infrastructure, pose high associated risks for the program's social and environmental sustainability.
- 4.10 **Park Manager and EHS Management.** SONAPI took on the responsibility of park management on May 1<sup>st</sup>, 2014, in spite of lacking the adequate capacity for EHS management. Since then, they have staffed the ESH team with the EHS Manager, environmental, health and safety officer, as well as an EHS assistant. However, the positions of Feedback officer and Health Coordinator are still pending. Additionally, the EHS team is not yet fully operational due to the lack of resources (the EHS budget has been approved by SONAPI management but has not been disbursed).
- 4.11 To adequately manage the Park's operational environmental, health and safety and social risks and impacts, SONAPI, with the help of the IDB, developed key procedures of an EHS Management System (such as the Grievance Procedure,

the Solid Waste Management Procedure, the Transportation and Community Safety procedure, and the Security and Site Access Procedure, among others), which should become operative by the end of May 2015.

- 4.12 **Control Measures.** Adequate EHS capacity in SONAPI is vital to ensure the PIC's sustainability and avoid reputation risks for the Bank if the PIC starts operating outside an adequate EHS framework once the last Bank operation is fully executed. To address overall PIC management shortcomings, SONAPI management will be required to put the adequate resources (people, infrastructure and salaries) for the team to become operational.
- 4.13 **Environmental Monitoring.** A model of the Trou-du-Nord River (which traverses the PIC) has been prepared through the: ATN/OC-13756-HA. In addition, as a result of the exception to Directive B.11 under OP-703, granted by the Board, an expanded wastewater quality monitoring program has been implemented and results are being carefully evaluated. Notwithstanding, as operations progress, incremental monitoring must be undertaken to evaluate the performance of the program and the adequate implementation of any mitigation measures.
- 4.14 **Tenant Agreements and EHS Requirements.** Under the terms of each grant agreement, the Government of Haiti is required to meet specific EHS requirements consistent with IDB safeguard policies and must ensure compliance by its executing agency and all other relevant parties, including tenants. These EHS requirements have been agreed upon with SONAPI and have been included in the new agreements that have been signed (except with the first two tenants, Sae-A and Peintures Caraïbes). The lease agreements for the first two tenants include the requirement to comply with all applicable laws, including the labor code, all environmental laws and SONAPI's PIC Rules and Regulations. The PIC Rules and Regulations are in the process of being communicated and have specific EHS provision referring the EHS Management System of the PIC. In addition, each tenant operating in the Park is required to develop, submit to SONAPI, and implement its own ESMP.
- 4.15 **Supervision.** Supervision of PIC operations will be performed by SONAPI once the EHS Management System starts being implemented. In addition, the Bank will continue to supervise the Project, including quarterly supervisions with assistance of independent EHS consultants.
- 4.16 **Water Resources.** Demand for water will continue to increase with expansion of the PIC's activities and induced migration resulting from its development. Although water availability is not believed to be a limiting factor in the region, a definitive analysis of water resources availability has not been undertaken. Locally, demand for water from the PIC has the potential to impact flow to the Trou-du-Nord River and/or productive wells located outside the PIC's boundaries.
- 4.17 **Water Resources Control Measures.** In conjunction with ATN/OC-13756-HA and in addition to the monitoring and mitigation measures proposed in relation to Directive B.09, an integrated water resources management strategy (which will include a Water Safety Plan) will be developed. SONAPI will start the process for the contracting of consulting services to prepare that plan in May 2015.

Additional data collection activities and studies will be required to respond fully to the PIC's needs and to address regional impacts.

- 4.18 **Wastewater.** Wastewater production is expected to increase rapidly as new tenants arrive and existing activities expand. Without adequate management and treatment of effluents, the PIC has the potential to significantly impact surface and groundwater resources particularly with the onset of dying activities during the implementation period of this operation. Moreover, an increase in local population combined with a lack of wastewater infrastructure in Northern Haiti will contribute to the existing contaminant load of surface and groundwater resources. This could lead to risks of diseases such as cholera.
- 4.19 A permanent WWTP is currently under construction and started receiving wastewater in July 2014. The calibration phase is expected to last more than 9 months and discharge to the Trou-du-Nord river is expected to start mid-May 2015. Wastewater treatment is expected to be fully compliant with Directive B.11 of OP 703. The WWTP will be operated by INCATEMA, the firm retained under a 3-year *Design Build Operate* contract. Their role does not extend beyond the day-to-day operation of the WWTP, meaning wastewater management across the site remains outstanding. An ESMP for operation was prepared by INCATEMA and is under implementation.
- 4.20 As indicated in 3.14, the anchor tenant (S&H Global) will start doing washing activities in June creating industrial wastewater which will impact the quality of the final effluent. A pre-treatment facility is expected to be in place by October 2015 and the Bank will closely monitor the final effluent during the period when no pre-treatment is done (impacts are expected to be minor).
- 4.21 Component I of 3132/GR-HA includes provisions for the construction of one industrial wastewater treatment plant;<sup>17</sup> as part of the Environmental and Social Due Diligence (ESDD) of long term sustainability of the PIC, the Bank will need to ensure industrial wastewater is adequately treated.
- 4.22 **Water Supply.** The PIC supplies domestic and industrial water to tenants, although the domestic supply is not yet fit for consumption. Attempts to implement the water quality monitoring program necessary to ensure the domestic water supply achieves and maintains internationally recognized drinking water quality standards have been significantly marred by the lack of: (i) local technical expertise; (ii) institutional capacity; and (iii) dedicated oversight. Given that tenants and employees currently have access to bottled water; the failure to provide access to piped drinking water is not a compliance issue, however, it is highly unusual for a project at such an advanced stage not to have provided what is considered a basic service. The risk associated with the failure to provide safe drinking water is therefore reputational and could impact the PIC's ability to attract additional tenants moving forward. A diagnostic of the

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<sup>17</sup> "If necessary. The decision to build the industrial treatment plant depends on the expansion plan of the anchor tenant. To the extent that the current expansion plan proceeds according to the timeline previously agreed with the UTE, the funds for the plant will be already available under Component I. In the event the anchor tenant changes the timing and/or pace of its expansion plan, the funds may be partially or entirely reallocated for the construction of other buildings"

situation was done in early 2015 and recommendations to be implemented are being prepared to ensure that the domestic supply is fit for consumption

- 4.23 **Solid Waste.** The Northeast, like all of Haiti, does not possess a facility for the final disposal of solid waste. To overcome this limitation, the PIC is operating a small temporary waste facility and separation site situated approximately 3 km west of the PIC. This site could be expanded until a permanent, long-term facility is designed and constructed. The SONAPI is developing a specific Waste Management Plan for the temporary waste facility to ensure the PIC's waste is adequately managed.
- 4.24 **Natural Resources and Biodiversity.** In relation to natural habitats, there are potential direct impacts on water quality in the Trou-du-Nord River, as well as indirect impacts from population influx driven by new developments associated with the PIC. There is a risk that the PIC will drive the significant conversion and degradation of a CNH through direct, indirect and cumulative impacts. Specifically, population influx could lead to (i) a loss of ecological services provided by mangroves, such as spawning grounds and protection against storm surges, resulting in a potential loss of livelihoods; (ii) significant depletion of fisheries through overfishing; and (iii) negative impacts on mangroves, beaches from the discharge of pollutants/solid waste.
- 4.25 **Biodiversity Control Measures.** A mitigation plan was established in 2552/GR-HA (US\$300K), 2779/GR-HA (US\$600K), and ATN/OC-14580-HA (US\$180K) which is critical in providing support to "*Agence Nationale des Aires Protégées*" (ANAP) and to support the establishment and functioning of the Three Bays National Park. Currently, ecological and socio-economic baseline studies for the Three Bays National Park are underway and are expected to be completed by the end of 2015. These studies are key inputs for the development of the management plan for the Park. Two Alternative Livelihood studies are also planned and are expected to be contracted in the next 6 months. This funding is critical to implement the mitigation plan and to ensure long term sustainability for the protection measures for Caracol Bay. Unless funding is secured and activities implemented it cannot be guaranteed that the Project will be in compliance with Directive B.09 (risk of significant conversion or degradation of a CNH). In addition, complementary funding for the management of CNH is already assigned through USAID and GEF-UNDP.
- 4.26 Management and monitoring plans relating to water quality and biodiversity will be refined in accordance with the results of the rapid aquatic baseline study. Of particular interest is the impact of the PIC on the water quality of sensitive ecosystems: mangroves, coral reefs, and sea grasses. Specifically, key mitigation and monitoring measures required are: (i) wastewater management systems within the PIC that ensure that effluent from the PIC does not exacerbate pressures on the habitats; and (ii) a water quality and biodiversity monitoring system must be developed and implemented based on existing information and must be functioning during PIC operations to ensure that water quality remains within established standards.
- 4.27 It should be noted that the aquatic baseline and the water quality baseline (already partially undertaken) are complementary products. The latter is

- designed to ensure that: (i) the PIC complies with regulatory requirements, e.g., the International Finance Corporation (IFC), EHS General Guidelines; and (ii) potential contamination from the PIC to the surrounding environment is monitored. The former will then help to determine if the application of existing regulatory requirements is sufficient to maintain a healthy aquatic environment; and if not, develop complementary measures to be included in the ESMP to help ensure the sustainability of the aquatic environment. These two elements need to be addressed collectively through an integrated water quality monitoring program.
- 4.28 **Occupational Safety and Health (OSH).** The OSH risks and impacts that may occur during operations are similar to those of large industrial facilities and are primarily associated with the operation of equipment and machinery, especially for the textile factories; as well as those associated with the use and manipulation of potentially harmful materials, such as fuels, lubricants and solvents. During operations, these risks could also include an inadequate work environment, exposure to high levels of noise and dust and physical and chemical hazards.
- 4.29 **OSH Control Measures.** The OSH impacts are controlled by the implementation of the EHS Management System as well as compliance monitored by BWH for textile factories and the EHS Manager.
- 4.30 **Grievance Mechanism Control Measures.** An internal Grievance Mechanism (GM) was developed as part of the stakeholder engagement procedures; however, this mechanism has not been implemented due to the lack of a Grievance Officer at the PIC. Therefore, as part of the EHS Management System currently being developed for the PIC, the GM will be strengthened to meet international standards and best practices,<sup>18</sup> and address specific labor requirements. A similar model will be used to implement a grievance mechanism for communities outside of the PIC. An overall communications strategy will also need to be developed to ensure adequate communication in regards to management of specific EHS aspects, such as wastewater.
- 4.31 **Worker Transportation.** An interim transportation system organized by SONAPI was initiated in June 2013, involving the Haitian Union of Transporters, which provides the drivers, as well as the State Transportation Company,<sup>19</sup> which provides buses for the workers' daily commutes. The system presents health and safety concerns due to the lack of operational planning and consistent management, lack of control over the physical condition of the buses, insufficient amount of buses leading to over-capacity, and unsafe boarding and driving practices.<sup>20</sup>
- 4.32 **Worker Transportation Control Measures.** Having an adequate transportation system in place is an important mitigation measure in order to avoid uncontrolled development outside of the PIC. The Bank has hired an expert to provide

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<sup>18</sup> UN Global Compact, Ethical Trading Initiative and Social Accountability International, among others.

<sup>19</sup> There are various bus ownership structures in place (buses owned by drivers, by the *Syndicat des Transporteurs* or by SONAPI).

<sup>20</sup> During an IDB supervision mission in March 2015, the IDB team noted that the buses were driving over the speed limits and that the buses were crowded and some had cracked windshields.

recommendations to enhance the operational planning of the system and allow it to expand to include the needs of the PIC for the next two years, when the number of workers is estimated to be 10,000. Also, the IDB and the UTE are developing a long-term approach that involves cooperation with other activities through: (i) the Emerging and Sustainable Cities Initiative, meant to develop a long-term Transportation Plan that focuses on the four cities closest to the PIC; (ii) a consultancy to develop a Business Plan for a multimodal business park (“terminal”) to serve the North/Northeast Region and the PIC; and (iii) a TC (ATN/HR-13820-HA) to address urban development of the 300-meter buffer zone adjacent to the PIC. In addition, the EHS Management System has specific procedures for transportation which should start implementation in mid to end of May 2015.

- 4.33 **Food Provision for Workers.** Food is currently prepared off-site and brought on-site by more than 130 independent cooks during meal times. However, there is no quality control for food safety and food preparation. In addition, two kitchens with inadequate food safety and hygiene standards are in operation in the PIC. A future food provision service must also provide adequate and appropriate eating area(s) that can accommodate the projected growth of the PIC workers. Current shortcomings that will need to be resolved include (i) lack of potable running water in the kitchens; (ii) lack of a number of critical requirements to be provided, including health and safety planning, ventilation, adequate storage and working space; (iii) lack of adequate canteen space to host the projected growth of the PIC employees; and (iv) in the eating areas, insufficient toilets, with many that are present being non-operational. Another broader concern relates to the longer-term sustainability of the food: there is no current management system and/or model in place model given its growth projections (while ensuring that health, safety and hygiene, and cost-efficiency expectations are met).
- 4.34 **Food Provision Control Measure.** The availability of affordable meal options, together with a series of incentives to keep employees on-site during meal times, is an important component of the influx management strategy and is likely to decrease the likelihood of informal food-service providers gathering outside of PIC gates. The Bank is current working with SONAPI to ensure that adequate options are developed and implemented.
- 4.35 **Gender Equality and Childcare.** The significant amount of women of childbearing age working at the PIC, while men are unemployed will have unforeseen long-term social impacts. Pressures to support families on one income will increase. Currently, on-site childcare is not provided for the largely female workforce at the PIC. The lack of childcare (or the significant expense of alternative childcare offsite) can potentially create a barrier to more women joining the PIC workforce, and to women being able to pursue senior positions with increasing responsibility. This can eventually push many women out of the workforce to save money as the primary caregiver for young children.
- 4.36 **Gender Equality and Childcare Control Measure.** As part of the ATN/KP-13789-HA, the Bank is working with SONAPI and its tenants to improve gender aspects through labor trainings focused on best practices and the Haitian labor code. The Bank will evaluate the childcare risks and, if necessary, prepare the necessary control measures.

- 4.37 **Citizen Security.** The expected growth of the Northern Corridor and the influx of people has the potential to increase security risks for the inhabitants of the region as well as PIC workers. Without a carefully coordinated regional strategy between donors, local and national government entities, healthcare workers, and law enforcement that aligns monitoring crime rates, traffic accidents, cost of living, epidemiological data with the population growth, the security of the inhabitants of the region is tenuous.
- 4.38 **Citizen Security Control Measure.** IDB has put in place studies to monitor some of issues mentioned above. A regional strategy has yet to be developed.
- 4.39 **Housing.** The Bank is financing urban planning solutions, including: (i) housing (up to 1,000 units) in Terrier-Rouge, Ouanaminthe and Caracol; (ii) Urban Development Plans, with services to strengthen the urban growth of towns closest to the PIC; and (iii) zoning and Communal Development Plans, which are designed to assist the private sector with investing in housing development and the local population with building its own houses. It is critical to the viability of these newly designed housing communities that an overall urban plan for the region is implemented to integrate the housing development into a larger design that provides access to social services to the local population.
- 4.40 **Housing Control Measures.** Implementation of most of these initiatives has only just begun, and it is critical that sufficient funds are allocated to implement the recommendations of these studies and assessments in a timely manner. In addition, the multiplicity of loans, grant operations and TCs will require close coordination among multiple teams and divisions within the Bank. The Bank will need to analyze potential impacts and risks and present adequate control measures to mitigate them.

## **C. Cumulative Impacts**

- 4.41 **Cumulative Impacts and Risks.** While the construction activities and operation of the PIC, combined with other initiatives financed by various donors, will contribute to the development of Haiti's Northern Region (Cap-Haïtien and Ouanaminthe Corridor), they may lead to negative cumulative environmental and social impacts.
- 4.42 **Cumulative Impacts Control Measures.** As part of the development of the Northern Regional Master Plan, a CIA was finalized in 2012.<sup>21</sup> There is an ongoing challenge in developing the institutional arrangements within the Government of Haiti to implement the recommendations of the CIA for addressing negative cumulative impacts. The Bank is supporting CIAT, the key driver for implementing the Northern Regional Masterplan in the development of a Regional Planning Authority (*Autorité d'Aménagement du Nord/Nord-Est—AANNE*). A high-level workshop was held in March 2015, focusing on (i) the CIAT Regional Planning Authority; and (ii) updating the CIA.
- 4.43 To address some of the cumulative impacts of the PIC, several TCs have been developed. The Emerging and Sustainable Cities Initiative is under way

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<sup>21</sup> [CIA, 2012](#) .



(ATN/OC-13813-HA and ATN/SS-13812-HA), and other several TCs have been approved and are under implementation, including: (i) Mitigating the Social Impacts of the Caracol Industrial Park (ATN/KP-13789-HA); (ii) Water Availability, Quality and Integrated Water Resources Management in Northern Haiti (ATN/OC-13756-HA); (iii) Institutional Strengthening to Increase the Technical Capacity of the Government of Haiti (ATN/FI-13845-HA); (iv) Mitigating the Environmental Impacts of the PIC in the Caracol Bay (ATN/OC-14580-HA); (v) Urban Growth Management in the Vicinity of the Caracol Industrial Park (ATN/SF-11979-HA) and (vi) Strengthening of the PIC's Environmental, Health and Safety Capacity (HA-T1209).

#### **D. Positive Impacts**

- 4.44 The project will contribute to the socioeconomic development of Northern Haiti, provided that there is adequate implementation of environmental and social requirements. It will likely generate increased economic activity and create paying jobs by providing the basic infrastructure, industrial facilities, management support and complementary investments required for the expansion and operation of the PIC, with benefits spilling over into the surrounding population of the North and Northeast Departments. One positive impact has been the access to electricity for some of the PIC surrounding communities. The PIC power plant has connected hundreds of households and public buildings in Caracol, and is now extending connection to Trou-du-Nord and Limonade.
- 4.45 One positive outcome of the PIC is the declaration of the Three Bays National Park. Budget has been allocated under 2552/GR-HA and 2779/GR-HA for park management and the ATN/KP-13789-HA to prepare the ecological baseline studies was approved in mid-2014.<sup>22</sup> The Projects will pave the way for a detailed management plan for the protected area and ecological and social economic baseline studies. An alternative livelihoods program will include environmental awareness campaigns, business plans and value chain analyses for the charcoal, fishing, salt, recycled plastic and tourism sectors and a manager for the new national park. The National Park steering committee, hosted by ANAP, is currently developing a co-management agreement with an NGO to facilitate financial sustainability, technical expertise and capacity building.

#### **E. Other Risks**

- 4.46 **Natural Disasters and Climate Change Risks.** Like much of coastal Haiti, the PIC is located in an area exposed to natural hazards and has the potential to exacerbate risks to human life, property and the environment, particularly if these risks are not adequately assessed and managed. A Disaster Risk Assessment has been prepared for 3132/GR-HA and will need to be updated (including the climate change aspects) and implemented. An Emergency Response Plan for the PIC was developed but still needs to be implemented by the SONAPI.

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<sup>22</sup> The establishment of the Protected Area is supported by the National Protected Areas System, financed by the Global Environment Facility through UNDP. 2552/GR-HA and 2779/GR-HA include a total of US\$900,000 to protect Caracol Bay; a TC (ATN/KP-13789-HA US\$180,000) was approved and additional funding will be made available by the Bank.

- 4.47 **Reputational Risks.** The project poses a general reputational risk to the Bank if environmental and social safeguards are not adequately implemented in a timely manner. For example, failures to implement adequate wastewater treatment, environmental monitoring systems, to secure adequate funding or to implement environmental and social mitigation measures would all have significant impacts on the reputations of the Bank, the Government of Haiti and other agencies. In addition, for the long term EHS sustainability (after the Bank has finished its disbursements), the Bank needs to insure adequate PIC's EHS management by SONAPI.

## V. ENVIRONMENTAL AND SOCIAL DUE DILIGENCE STRATEGY

- 5.1 The Bank has an extensive knowledge of the PIC as a result of its involvement in the previous operations, which are being monitored and supervised very closely by the Bank. In addition, for the previous operations, the Bank retained ERM, an environmental consulting firm, to assist the Bank's supervision activities. ERM is conducting quarterly supervision missions since the beginning of 2014. Given that this proposed fifth operation will complement existing infrastructure for the PIC, which will not change significantly the operation of the PIC, the results of the Bank supervision activities will be the basis for the an ESDD process for this operation, and in particular the progress in the implementation of the Action Plan developed as part of the approval of 3132/GR-HA and the EHS conditions of 3384/GR-HA to address the existing non-compliances of the previous operations as well general impacts and risks. The ESDD will assess the Project's environmental and social impacts and risks, including all liabilities from the previous Project phases (2552/GR-HA, 2779/GR-HA, 3132/GR-HA and 3384/GR-HA).
- 5.2 During the ESDD, the following information will be evaluated:
- a. Status of implementation of the 2779/GR-HA Liabilities Action Plan;
  - b. Status of compliance with the conditions established for 3132/GR-HA and 3384/GR-HA; and
  - c. Status of compliance with the conditions established in the Board's exception to Directive B.11 under OP-703.
- 5.3 The ESDD for this Project will focus primarily on:
- a. **Potential Impacts on Natural Habitats and CNH.** The ESDD will address whether adequate arrangements (including financial resources and institutional set-up) have been made to develop a sustainable park management system for the Three Bays National Park. The effective implementation of this protection and associated natural resource management is critical to ensuring that the PIC does not lead to significant conversion or degradation of CNH.
  - b. **Long-term sustainability.** The ESDD will assess if appropriate mitigation and management measures have been designed for the long-term sustainability of the PIC; and ensuring such measures are timely, financially, comprehensively and consistently applied throughout the life of the project.

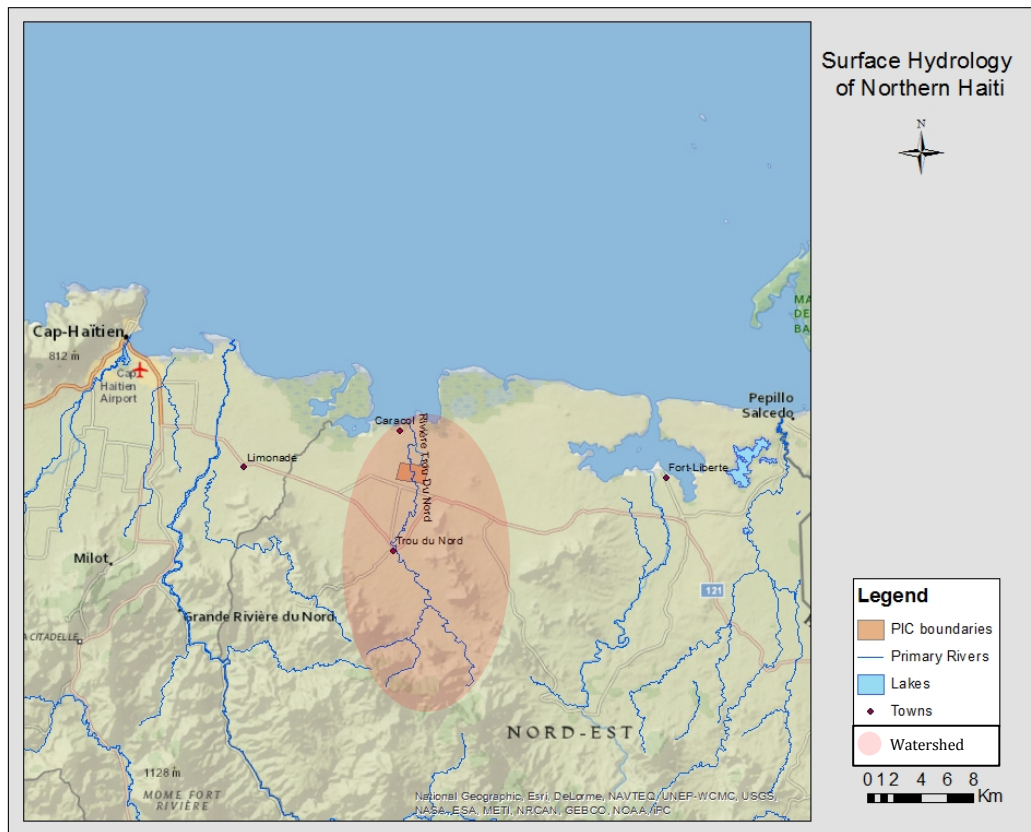
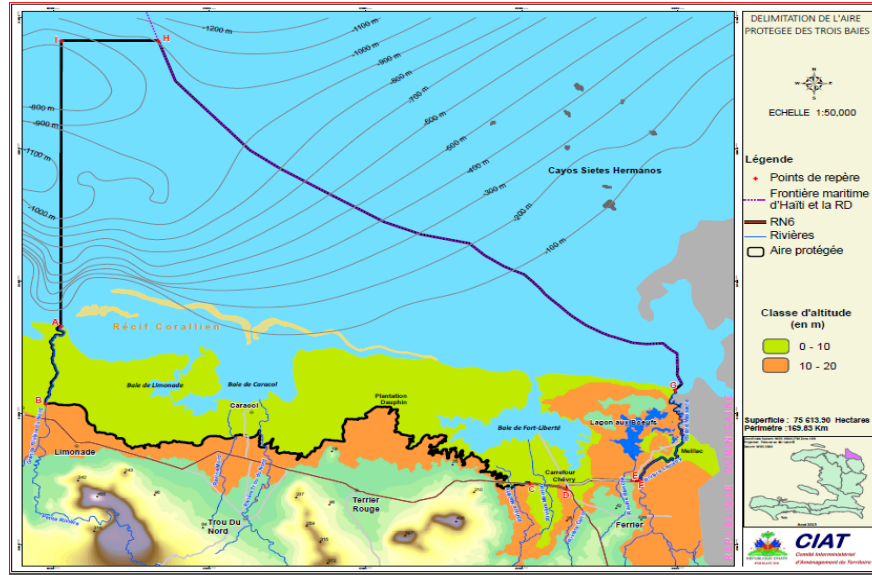
- c. **Capacity of PIC Management.** The ESDD will include the assessment of the Government of Haiti's capacity, especially the technical capability of SONAPI, the Park Manager and the EHS Manager to implement adequate EHS requirements during the operational phase (see also 5.4 (d), (f) and (g) below).
  - d. **Wastewater Treatment.** An Analysis of the discharge alternatives and contaminant fate through the transport model and of the ESMP for Operations. The Bank is supporting the UTE in addressing these critical issues, in particular, the contaminant fate and transport model has now been added to ATN/OC-13756-HA and has been available since mid-2014. The status of the WWTP discharge and operation will be fully addressed during the due diligence process.
  - e. The future construction of the industrial WWTP and pre-treatment facilities to treat industrial wastewater will also be evaluated as part of the ESDD.
  - f. **Other Facilities.** An EHS analysis of current and future road improvements, transportation elements (i.e. potential bus depot) and power plant operation will be done.
- 5.4 In addition, other specific areas to be addressed in the ESDD include:
- a. **IDB Environment and Safeguard Policies.** A number of critical deviations from the Haitian regulations, IDB Environment and Safeguard Policy and international good practice must be addressed to avoid EHS risks for the PIC employees, local communities and surrounding coastal environment. The critical deviations include the lack of: (i) adequate wastewater treatment; (ii) adequate management and disposal of solid waste; (iii) a functioning certified potable water supply and distribution network; (iv) monitoring and enforcement of EHS standards, including monitoring of water quality; (v) adequate transportation for workers; (vi) acceptable food service provisioning inside the PIC; and (vii) non-compliance with the Bank requirement of local employment through the kiosks in local communities. A full review of these deviations will be performed as part of the ESDD.
  - b. **Labor Issues.** The ESDD will include an assessment of the current status of labor issues including the control measures described in section IV..
  - c. **Status of project compliance with the applicable country's EHS standards, regulatory, and permit requirements.** These requirements include project-specific legal requirements and any applicable Bank environmental and social policies or guidelines that apply to the PIC operations, in particular the Environment and Safeguards Compliance Policy (OP-703), the Access to Information Policy (OP-102), the Involuntary Resettlement Policy (OP-710), the Gender Policy (OP-761) and the Disaster Risk Management Policy (OP-704). Other requirements entail the assessment of the status of implementation of ESMPs, and especially the livelihood compensation plan.

- d. **PIC Management.** Review of the adequacy of the structure and operational procedures, including but not limited to the institutional organization, personnel skills, operational, financial and human resources and adequacy of the Management Plans (especially the emergency response plan), among other aspects.
- e. **Grievance Mechanism.** The ESDD will include an assessment of whether the grievance mechanism is adequately implemented, including (i) employee participation in the GM; (ii) dissemination of GM information among employees (e.g. grievance telephone hotline number, pamphlets); (iii) a focal-point staff member to record all complaints; (iv) evidence of responses delivered to complainants within an established time frame; (v) evidence that employees have access to independent assistance regarding their rights and the grievance process if they request it; and (vi) evidence of training on the system to all supervisors and employees (over a period of time), among others.
- f. **EHS Management.** The ESDD will include an assessment of whether: (i) the EHS Manager and Park Manager have been working to adequately implement the EHS management system, monitor, supervise and enforce EHS compliance; (ii) the EHS tenant requirements have been successfully negotiated and are being complied with by each tenant; (iii) the Project is compliant with the EHS requirements; and (iv) a long-term approach for EHS management has been put in place.
- g. **SONAPI Capacity.** An assessment of SONAPI's capacity for managing the PIC, in particular the status of implementation of SONAPI capacity building activities. Assessment elements include, but are not limited to: (i) SONAPI's institutional organization and operational, financial and human resources to respond to the EHS requirements of a growing and expanding PIC in the short, medium and long term, to ensure adequate EHS management and the PIC's long-term sustainability and development; and (ii) the enforcement of the PIC rules and regulations.
- h. **Potable Water Supply System.** A technical visit by an independent water supply expert has been conducted and an Action Plan is being prepared to attain potable water. The status of the potable water supply system will be assessed during the ESDD process.
- i. **Water Resources Management.** The ESDD will include an assessment if water resources management has been adequately addressed.
- j. **Waste Management.** The ESDD will include an assessment of the current management status and the adequacy of the proposed waste management plan.
- k. **Food Service Provision System.** A special focus of the ESDD will be on assessing design and EHS performance of the food service system and, if necessary, developing an Action Plan to mitigate any EHS risks and potential non-compliance with adequate sanitary, health and safety conditions. The ESDD will evaluate how the food provision system is being implemented and

how the long term is being (or will be) implemented to keep up with the rapid expansion of the PIC, including whether the human and financial resources to develop and implement the system have been secured.

- l. **Formal Transportation System for all PIC Employees.** The ESDD will evaluate the adequacy of the transportation system that has been developed for the short and medium term demand of the PIC, including whether the system complies with EHS performance standards and international good practices, and whether the system effectively contributes to mitigating the risks of uncontrolled urban development surrounding the PIC. The ESDD will evaluate how the transportation requirements of the PIC in the long term will be addressed, including whether the human and financial resources to develop and implement the system have been secured.
  - m. **Cumulative, Induced, and Indirect Impacts.** The ESDD will include an assessment whether cumulative, induced, and indirect impacts have been adequately addressed. This includes, but is not limited to: (i) labor requirements for the PIC and a projection of the population influx into the area that is associated with direct and indirect PIC employment opportunities; (ii) infrastructure and service needs for the additional population drawn into the area, including housing, water and sanitation, waste management, transportation, education, security, day care and fuel requirements in the medium and long term; and (iii) analysis if the Government of Haiti agencies have successfully implemented the mitigation measures from the updated CIA.
  - n. **Social Impacts.** The ESDD will include an assessment of direct and indirect social impacts in the communities neighboring the PIC. This includes, but is not limited to: (i) the growth of informal and vulnerable housing and markets; (ii) security issues, including any potential rise in gender-based violence; (iii) increased social risks due to inadequate access to social services (education, healthcare, etc.); (iv) gender and inequality issues; (v) inadequate social management of road construction between the PIC and Caracol; and (vi) transport-related safety risks.
- 5.5 Following the conclusion of the ESDD, and prior to submitting the Operation to the Board, the Bank will prepare an ESMR, which will summarize the conclusions of the above-mentioned assessments and reviews, providing a synthesis of the relevant EHS aspects of the Project, including action plans to address liabilities from the previous PIC operations , if any; additional or modified management plans; and the proposed Bank recommendations for the Grant Agreement and the Project execution.

**Figure 1: Three Bays National Park and PIC Location**



INDEX OF BACKGROUND ECONOMIC AND PROPOSED SECTOR STUDIES<sup>1</sup>

	DESCRIPTION	DATE COMPLETED OR EXPECTED	REFERENCE OR LINK
<b>PROJECT DESIGN (PARTIAL LIST OF STUDIES FROM “PIC I” 2552/GR-HA)</b>			
	Description of Haiti’s North Industrial Park (INE/TSP)	2011	<a href="#">lbd docs#35813746</a>
	Trade preference programs for Haitian textiles and apparel	2011	<a href="#">lbd docs#36157154</a>
	Haiti Northern Pole Development Program (INE/TSP)	2011	<a href="#">lbd docs#36171048</a>
	Identifying demand for industrial space	2011	<a href="#">lbd docs#36190080</a>
	Sector note: Private sector development	2011	<a href="#">lbd docs#36170355</a>
	Koios and Associates: “Development of the Industrial Park Model to Improve Trade Opportunities for Haiti (HA-T1074-SN2)	2011	<a href="#">lbd docs#36174208</a>
<b>ENVIRONMENTAL AND SOCIAL STUDIES (PARTIAL LIST FROM “PIC I” 2552/GR-HA)</b>			
	Hydrologic Evaluation Haiti’s North Industrial Park area (VPS/ESG)	Septembre 6, 2011	<a href="#">lbd docs#36472380</a>
	Updated PGES	December. 2011	<a href="#">lbd docs#36389679</a>
	Environmental and Social Impact Assessment (ESIA) for Haiti’s North Industrial Park, Koios (INE/TSP)	June 2011	<a href="#">lbd docs#36168335</a>
	Water quality monitoring contract	February 2012	<a href="#">lbd docs#36612293</a>
	440 ha site official survey map for Compensation Plan of farmers displaced by the PIC	Sept. 2011	<a href="#">lbd docs#36683484</a>
	EA for the temporary PIC Waste Management and Landfill	March, 2012	<a href="#">lbd docs#37091611</a>
	Environmental and Social Studies		<a href="#">lbd docs#36721481</a>
<b>ENVIRONMENTAL AND SOCIAL STUDIES AND PLANS (PARTIAL LIST FROM PIC II-2779/GR-HA)</b>			
	Cumulative Impact Assessment American Institute of Architects	Aug, 27, 2012	<a href="#">lbd docs#36838525</a>
	Caracol Bay Protected Area 2012	2012	<a href="#">lbd docs#36838445</a>
	Environmental Assessment for Temporary PIC Solid Waste Management	2012	<a href="#">lbd docs#37091611</a>
	Social Impact Assessment	Feb. 2012	<a href="#">lbd docs#37091614</a>
	Wastewater Action Plan (VPS/ESG)	2012	<a href="#">lbd docs#37094949</a>
	Solid Waste Action Plan	2012 same as below	<a href="#">lbd docs#37094878</a>
	Environmental and Social Action Plan (ESAP; VPS/ESG)	2012	<a href="#">lbd docs#37094978</a>
	Rapport Evaluation Capacités Gestion_Joseph & Associes	Jan. 2013	<a href="#">lbd docs#37384210</a>
	Plan d'engagement parties prenantes	Jan. 2013	<a href="#">lbd docs#37384222</a>

<sup>1</sup> The studies listed for HA-L1055, HA-L1076, HA-L1081, and HA-L1091 cover the needs of the present operation.

Résolution conflits - extraits loi Hope 2 - créole	Jan. 2013	<a href="#">lbddocs#37384229</a>
Annexe Parc Industriel de Caracol Air and Bacterial Monitoring	Jan. 2013	<a href="#">lbddocs#37384237</a>
Rapport No. 1 Qualité de l'eau - Partiel	Jan. 2013	<a href="#">lbddocs#37384243</a>
Addendum – Tenant ESHS Clauses	Dec. 2012	<a href="#">lbddocs#37384238</a>
PIC Master Plan (HA-L1081)	August 2013	<a href="#">lbddocs#37948183</a>
Environmental and Social Management Report (ESMR)	November 2013	<a href="#">lbddocs#37972759</a>
Regional Comprehensive Plan (AIA Study)		<a href="#">lbddocs#37744542</a>
Environmental Assessment -Temporary Sewage Treatment System	January 2014	<a href="#">lbddocs#38557908</a>
<b>PROPOSED STUDIES AND TECHNICAL COOPERATIONS FOR/RELATED TO HA-L1101</b>		
Update of Economic and Financial Analysis	October 2015	
Update of Environmental and Social Management Report (ESMR)	October 2015	
Institutional Strengthening to increase the technical capacity of the GoH to address the PIC (HA-T1182)	Agosto 2015	<a href="#">lbddocs#37821160</a>
Urban Growth Management in the Vicinity of the PIC (ATN/SF-11979-HA)	July 2015	
Implementation of a business plan for the PIC's transport fleet	January 2015	
Implementation of a passenger counting system at the PIC (Rapid Response Fund)	August 2015	
Emerging and Sustainable Cities Initiative – Baseline studies on risk, urban growth, transportation, and living conditions in the Northern Corridor (HA-T1185/HA-T1186/HA-T1195/HA-T1196)	June 2015	
Strengthening of the PIC's Environmental, Health and Safety Capacity (HA-T1209)	December 2015	
Water Availability and Integrated Water Resources Management in Northern Haiti (HA-T1179)	May 2016	<a href="#">lbddocs#37657781</a>
Mitigating the Environmental Impacts of the PIC in the Caracol Bay (HA-T1180)	Proposed	<a href="#">lbddocs#38601080</a>
<b>RISK ANALYSIS</b>		
Risk Analysis Update	April, 2013	<a href="#">lbddocs#37388289</a>
NOTE: A complete list of studies for the PIC, 10 pages long, is available in <a href="#">Haiti Database of Contents</a> , and is updated regularly.		



CONFIDENTIAL

<sup>1</sup> 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.