

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

HAITI

PRODUCTIVE INFRASTRUCTURE PROGRAM III

(HA-L1091)

PROJECT PROFILE

The project team consisting of prepared this document: Ana María Sáiz (FMM/CHA), Team Leader; Michael Donovan, Alternate Team Leader; José Brakarz, and Dianela Avila (IFD/FMM); Jesus Navarrete (FMM/CCO); Ednoux Dormeus (FMM/CHA); Cedrick Joseph (CDH/CHA); Alfredo Rihm (INE/WSA); Carlos Faleiro Pajares (WSA/CHA); Stefanie Brackmann (ESG/CHA), Crystal Fenwick, France Francois, Melissa Barandiaran, Elizabeth Brito, Ernesto Monter, Graham Watkins (VPS/ESG); Taos C. Aliouat (LEG/SGO); José Luis Irigoyen (CDH/CDH); Nelly Wheelock and Takady Mamadou Konate (FMP/CHA).

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

PROJECT PROFILE

HAITI

I. BASIC DATA

Project name:	Productive Infrastructure Program III	
Project number:	HA-L1091	
Project team:	Ana María Sáiz (FMM/CHA), Team Leader; Michael Donovan, Alternate Team Leader; José Brakarz, and Dianela Avila (IFD/FMM); Jesus Navarrete (FMM/CCO); Ednoux Dormeus (FMM/CHA); Cedrick Joseph (CDH/CHA); Alfredo Rihm (INE/WSA); Carlos Faleiro Pajares (WSA/CHA); Stefanie Brackmann (ESG/CHA), Crystal Fenwick, France Francois, Melissa Barandiaran, Elizabeth Brito, Ernesto Monter, Graham Watkins (VPS/ESG); Taos C. Aliouat (LEG/SGO); José Luis Irigoyen (CDH/CDH); Nelly Wheelock and Takady Mamadou Konate (FMP/CHA).	
Beneficiary:	Republic of Haiti	
Executing agencies:	Ministry of Economy and Finance through its Technical Execution Unit and the <i>Société Nationale des Parks Industriels</i> (SONAPI)	
Financing plan:		US\$ (millions)
	IDB: (Grant Facility)	55.0
	US Government (USAID):	12.0 ¹
	Total:	67.0
Safeguards:	Policies triggered:	OP-761; OP-703; OP-704; OP-710; OP-102
	Classification:	A

II. JUSTIFICATION AND OBJECTIVES

- 2.1 **Project Justification.** Haiti has 10.2 million inhabitants, 3 million of whom live in the metropolitan region of Port-au-Prince, and 1.8 million in the North and Northeast Departments. Unemployment (estimated at 40.6% in 2010) and poverty (55% of the population lives on less than US\$1 per day and 71% on less than US\$2 per day) are critical problems facing the country.² 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 poorest and least populated regions. This requires creating conditions to attract private investment in order to increase the region's manufacturing base and exporting capacity.³ To achieve this goal the country needs to provide favorable infrastructure and operational conditions for attracting and retaining private investment.
- 2.2 **The Caracol Industrial Park (PIC).** To address the lack of infrastructure and facilities for manufacturing activities in the country, the Government of Haiti, along with the United States Department of State (US-DOS) and the Bank, agreed

¹ Currently under negotiation.

² Gross Domestic Product (GDP) for 2013 was estimated at US\$8.355 billion; its rate of growth was 4.3% and is expected to increase to 5.2% in 2014/15 (Economist Intelligence Unit, Haiti Country Report, 2014.)

³ Currently Haiti exports represent 22.6% of GDP, 90% of which is from the apparel sector (CIA, World fact book, 2012).

in September, 2008, to support the establishment of the PIC in the northern part of the country. The US Government contribution until now includes financing of a 10 MW powerplant, political support, and the framework to enable the exports from the PIC to the United states (HELP and HOPE acts). The Bank's support for this initiative includes four grants totaling US\$200.5 million, with a fifth grant proposed for 2015. They have been used to build the basic infrastructure, production facilities and to provide management support for the 250-hectare industrial park. The PIC aims to address key obstacles faced by manufacturers in doing business in Haiti by providing: (i) modern infrastructure and facilities; (ii) reliable utilities (water, sanitation, electricity); (iii) logistic support and secure road access in and out of the park; and (iv) a professionally managed, operated and maintained industrial park. The Bank's contribution also includes environmental, social and urban interventions intended to support the PIC's overall sustainability and help surrounding cities to cope with the population influx that is expected as a result of its implementation. Previous Bank operations in support of the PIC were:

- 2.3 **First PIC operation: Infrastructure Program (2552/GR-HA).** Consisted of a grant of US\$55 million, approved by the Board on July 25, 2011. This project financed the Park's basic infrastructure and initial buildings including: (i) four factory buildings/warehouses; (ii) an administration building and a 45-room dormitory and a canteen for the anchor garment tenant; (iii) 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; and (iv) social and environmental mitigation and compensation plans, studies and works. In parallel, the US-DOS financed a 10 MW power plant that provides electricity to the PIC and surrounding communities and financed a compensation plan for displaced farmers. This project is 99% disbursed and will be completed by the end of 2014.
- 2.4 **Second PIC operation: Productive Infrastructure Program (2779/GR-HA).** This second grant of US\$50 million was approved by the Bank on September 12, 2012. It finances: (i) four industrial buildings; (ii) smaller buildings to accommodate two boiler rooms, one industrial laundry, two worker canteens, one residential hall and one administration building; (iii) a permanent waste water treatment plant and a solid waste management facility; (iv) hiring of an Operation and Maintenance management firm and an Environmental, Social, Health and Safety Manager for the Park; (v) operation of the worker's transportation system; (vi) social and environmental studies and activities to mitigate the impacts of the PIC,⁴ including the preservation of the Caracol Bay mangroves; and (vii) technical assistance and complementary urban investments to assist adjacent municipalities to manage future growth due to the migration of workers and their families. Currently, the grant is more than 70% disbursed, with all of the physical works already contracted and expected to be completed by the end of 2014.

⁴ See the list of studies for both 2552/GR-HA and 2779/GR-HA in Annex IV.

- 2.5 **Third PIC operation: Productive Infrastructure Program II (3132/GR-HA).** This third grant of US\$40.5 million was approved by the Bank on December 16, 2013. It is expected to finance: (i) the construction of industrial buildings, canteens and other services buildings, roads and utility networks, and one industrial wastewater treatment plant, if necessary; and (ii) small civil works' projects outside the PIC and studies, including environmental and social mitigation activities. Project eligibility has been achieved in April, 2014, with 60% of the funds already committed, and civil works expected to be concluded during 2014.
- 2.6 The PIC has been implemented at a fast pace and has achieved significant results. The park currently hosts four tenants (in apparel, paint and fragrance manufacturing) with two more tenants pending startup. The demand for rental space has outpaced the supply of existing and planned buildings. Currently the PIC generates 3,060 jobs, of which 2,572 are workers employed by tenants and 488 are employed by the administration, contractors and service providers. Approximately 80% of the workforce is female. The PIC's production value (mostly for exports) for the first quarter of 2014 reached US\$8,857,403. However, several challenges remain, particularly concerning the full implementation of the environmental and social safeguards, strengthening of the country's capacity to operate the PIC, among others (see ¶4.2. and Annex III).
- 2.7 **Country strategy.** The program is consistent with the Economic Rebuilding strategy of the GoH and, in particular, its priorities of generating employment and protecting the environment. The goal is to provide the basic conditions for the attraction of private investments to the country. The proposed program is also consistent with the Bank's 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 contributes to the GCI-9 (AB-2764), with respect to poverty and inequality reduction in less developed and small countries, promoting private sector development, and environmental sustainability.
- 2.8 **Program strategy.** This program overall strategy is to promote the development of Haiti's northern region by creating conditions to attract private investment to the area and generate employment opportunities for the local population. Other activities complement this effort, such as USAID's and the Bank's (2318/GR-HA) projects to build up to 1,750 houses in the area, and other Bank and donor activities that include tourism development (World Bank), a hospital (1 km south of the PIC), agriculture and private sector development projects, solid waste management (by the French Development Agency), and several studies supporting the region's development (see ¶3.1).
- 2.9 **Program objective.** The program maintains the objective of contributing to the socioeconomic development of Northern Haiti by creating conditions for the establishment of manufacturing firms in the PIC and thus generating employment opportunities for the local population. Women in particular will benefit from the program since they constitute the vast majority of workers in the PIC (approximately 80%). The program has two main components:

- 2.10 **Component I. Provision of infrastructure in the PIC (US\$45 million).** It will finance: (i) warehouses, factory buildings and other structures (e.g., canteens, dormitories) to accommodate industrial activities; (ii) ancillary site infrastructure and equipment within the PIC, notably the expansion of the roads and utility networks; and (iii) civil works' supervision.
- 2.11 **Component II. Complementary projects and studies (US\$3.5 million).** Finances strategic urban, transport and other small scale projects in the surrounding area of the PIC, helping neighboring communities to cope with the social, environmental, and institutional risks associated with its implementation. These interventions will follow urban and regional plans for the area and the program's environmental and social safeguard assessment. They include also technical assistance for local municipalities and other institutions operating in the area, including the organization in charge of the protection of the Caracol Bay.
- 2.12 **Component III Institutional Strengthening of *Société Nationale des Parcs Industriels* (SONAPI) (US\$1 million).** This component will provide funds to strengthen SONAPI's PIC management structure, to adequately manage all operations and management activities.
- 2.13 The program will also finance the cost of administration, monitoring, auditing and contingencies (US\$3.5 million). The expected implementation period of the operation is two years. The overall goals of the PIC are to increase both formal employment and GDP growth in the region; and foreign direct investment in the country. This fourth operation goals include: (i) generate additional 3,000 jobs at the PIC (70% of them for women); and (ii) increase in fiscal revenues from payments to social and health security funds and from the use of utilities.

III. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

- 3.1 Most sector work has already been done in the course of preparation and execution of the previous operations.⁵ In December 2012, CIAT's Regional Master Plan was completed, which includes a Cumulative Impact Assessment containing recommendations for their controlled urban growth. The financial and economic analysis of the PIC for the previous operations indicated its positive socioeconomic impacts. The study will be updated for the current operation.
- 3.2 **Institutional Framework.** As of May 1st, 2014 the operation and management of the PIC returned to the SONAPI, the entity responsible for managing all industrial parks in Haiti. Accordingly, the Program will have two executing agencies:

⁵ Five Technical Cooperations (TC) related to the PIC are currently being implemented: (i) Urban Growth Management in the Vicinity of the PIC (ATN/SF-11979-HA); (ii) Water Availability and Integrated Water Resources Management in N Haiti. (ATN/OC-13756-HA); (iii) Mitigating Environmental Impacts of the PIC in the Caracol Bay (HA-T1180 in preparation); (iv) Mitigating Social Impacts of the PIC (ATN/KP-13789-HA); and (v) Institutional Strengthening of the GoH (ANT/FI-13845-HA).

- (i) UTE/MEF 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 waste water treatment plant, unless the Bank and the Beneficiary agree otherwise in writing.
- 3.3 **Program risks.** The main risks are: (i) long term sustainability of the PIC due to changing market conditions, logistical issues, political instability or poor management of the park; (ii) strains on local communities especially in transportation and housing; (iii) institutional weakness leading to non compliance with environmental and social safeguards by the PIC management. Specific environmental and social risks and mitigating measures are discussed in ¶4.2. The Program is addressing these issues with the help of its partners.

IV. SAFEGUARDS AND FIDUCIARY SCREENING

- 4.1 Financial management will be carried out by the UTE/MEF following the general procedures already in use in the previous operations. The UTE already employs financial, procurement, technical, social and environmental specialists. It has also been substantially 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 operation for the PIC (2552/GR-HA) the Bank has developed a number of environmental, social, and health and safety management plans and procedures that are commensurate with the potential risks of the Program, which are related to: (i) deterioration of water quality; (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 2552/GR-HA and 2779/GR-HA have increased some environmental and social risks. A full description of the risks and mitigation measures proposed and implemented so far is presented in the Environmental and Social Strategy - Annex III.

V. RESOURCES AND TIMETABLE

- 5.1 The following timeline is expected: distribution of the Proposal for Operation Development (POD) to the Quality and Risk Review (QRR) on September 12th, 2014; approval by the Operation Policy Ccommittee (OPC) in October, 2014, and presentation to the Board on November 19, 2014. The administrative budget for preparing the operation amounts to US\$90,000 (see Annex V).

CONFIDENTIAL

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

SAFEGUARD POLICY FILTER REPORT

PROJECT DETAILS	IDB Sector	Urban Development And Housing-Neighborhood Upgrading
	Type of Operation	Other Non-Lending or Non-Financing Instrument
	Additional Operation Details	
	Investment Checklist	Generic Checklist
	Team Leader	Sáiz, Ana María (AMSAIZ@iadb.org)
	Project Title	Productive Infrastructure Program III
	Project Number	HA-L1091
	Safeguard Assessor(s)	Screening Barandiaran, Doris Melissa (DORISS@Contractual.iadb.org)
	Assessment Date	2014-04-02
	Additional Comments	Grant agreement

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 in the project area are located within a geographical area or 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
		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	(B.02)

		being implemented (including national obligations established under ratified Multilateral Environmental Agreements).	
		The operation (including associated facilities) is screened and classified according to their potential environmental impacts.	(B.03)
		There are Associated Facilities (see Policy definition) relating to the investments being financed by the Bank.	(B.04)
		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)
		The operation could increase exposure to risk for ecosystems, communities, etc. from slow onset changes in climatic variables, weather patterns and the consequences incl. sea level rise, glacier run off. (Type 2 Gradual Climate Change Risk Scenario).	(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)
		Affects natural resources of a country not involved in	(B.08)

	the project, including areas such as waterways, coastal marine resources, protected areas, regional air shed and/or aquifers.	
	Environmental or culturally sensitive areas, defined in the Policy as critical natural habitats or critical cultural sites in project area of influence (please refer to the Decision Support System for more information).	(B.09)
	Conversion of Natural Habitats in project area of influence (please refer to the Decision Support System for more information).	(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)
	The operation is already under construction by the Executing Agency or the Borrower.	(B.12)
	The operation is a repeat or second phase loan.	(B.14)
	Suitable safeguard provisions for procurement of goods and services in Bank financed projects may be incorporated into project-specific loan agreements, operating regulations and bidding documents, as appropriate, to ensure environmentally responsible procurement.	(B.17)
Potential Safeguard Policy Items(?)	Type of operation for which disaster risk is most likely to be low.	(B.01) Disaster Risk Management Policy—OP—704
Recommended Action:	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. 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.
	Additional Comments:	

ASSESSOR DETAILS	Name of person who completed screening:	Barandiaran, Doris Melissa (DORISS@Contractual.iadb.org)
	Title:	
	Date:	2014-04-02

SAFEGUARD SCREENING FORM

PROJECT DETAILS	IDB Sector	Urban Development And Housing-Neighborhood Upgrading
	Type of Operation	Other Non-Lending or Non-Financing Instrument
	Additional Operation Details	
	Country	HAITI
	Project Status	
	Investment Checklist	Generic Checklist
	Team Leader	Sáiz, Ana María (AMSAIZ@iadb.org)
	Project Title	Productive Infrastructure Program III
	Project Number	HA-L1091
	Safeguard Screening Assessor(s)	Barandiaran, Doris Melissa (DORISS@Contractual.iadb.org)
	Assessment Date	2014-04-02
	Additional Comments	

PROJECT CLASSIFICATION SUMMARY	Project Category: A	Override Rating:	Override Justification:
	Conditions/ Recommendations	Comments:	
<p>*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.</p> <p>*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.).</p> <p>*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.</p>			

	Identified Impacts/Risks	Potential Solutions
	The project will or may require involuntary resettlement and/or economic displacement of a	Develop Resettlement Plan (RP): The borrower should be required to develop a simple RP that could be part of the ESMP and demonstrates the following attributes: (a) successful engagement with affected parties via a process

	<p>minor to moderate nature (as a result of urban renewal, barrio clearance, road widening or similar activities) and does not affect indigenous peoples or other vulnerable land based groups.</p>	<p>of Community Participation; (b) mechanisms for delivery of compensation in a timely and efficient fashion; (c) budgeting and internal capacity (within borrower's organization) to monitor and manage resettlement activities as necessary over the course of the project; and (d) if needed, a grievance mechanism for resettled people. Depending on the financial product, the RP should be referenced in legal documentation (covenants, conditions of disbursement, project completion tests etc.), require regular (bi-annual or annual) reporting and independent review of implementation.</p>
<p>SUMMARY OF IMPACTS/RISKS AND POTENTIAL SOLUTIONS</p>	<p>Significant conversion or degradation of critical natural habitat.</p>	<p>Potential Biodiversity Issues Indicate Significant Risk of Non-Compliance with IDB policy OP-703: The Bank will not support operations that, in its opinion, significantly convert or degrade critical natural habitats or that damage critical cultural sites. Develop and evaluate alternative projects options and discuss with ESG specialist(s), relevant team members and others before proceeding.</p>
	<p>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.</p>	<p>Ensure the Development of Adequate Labor Policy and Practices: 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.</p>
	<p>The negative impacts from production, procurement, use and disposal of hazardous materials (such as fuels or chemicals) are moderate to significant and will comply with relevant national legislation, IDB requirements on hazardous material and all applicable International Standards.</p>	<p>Hazardous Materials Management Plan: The borrower should 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.).</p>

	<p>Waste generation (excluding hazardous waste) is significant or there is no adequate waste management plan in place.</p>	<p>Solid Waste Management: 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.</p>
	<p>Likely to have significant emissions or discharges that would negatively affect ambient environmental conditions (particularly during construction phases when water quality and quantity, and air quality may be affected).</p>	<p>Management of Ambient Environmental Conditions: 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.).</p>
	<p>Moderate Greenhouse Gas Emissions are predicted (for example as a result of methane emissions from landfill sites, or the conversion of land for new</p>	<p>Greenhouse Gas (GHG) Assessment: The borrower should promote the reduction of project-related greenhouse gas emissions in a manner appropriate to the nature and scale of project operations and impacts. The borrower should quantify direct emissions from the facilities owned or controlled within the physical project boundary and</p>

	<p>urban development).</p>	<p>indirect emissions associated with the off-site production of power used by the project. Quantification and monitoring of GHG emissions should be conducted annually in accordance with internationally recognized methodologies (i.e. IPCC - http://www.ipcc.ch/). In addition, the borrower should evaluate technically and financially feasible and cost-effective options for the reduction/offset of emissions that may be achieved during the design and operation of the project. The Sustainable Energy and Climate Change Initiative (SECCI) can help with this task (http://www.iadb.org/secci/).</p>
	<p>Safety issues associated with structural elements of the project (e.g. dams, public buildings etc), or road transport activities (e.g. increases in heavy vehicle movements, etc.) exist which could result in moderate health and safety risks to local communities.</p>	<p>Address Community Health Risks: 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.</p>
	<p>Transport of hazardous materials (e.g. fuels and chemicals) with minor to moderate potential to cause impacts on community health and safety.</p>	<p>Hazardous Materials Management: 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.</p>
	<p>The project will result in a significant increase in community risks from disease or natural resources risks (e.g. increased risk of downstream flooding, hillside soil erosion, long term decline in air quality arising from increased traffic and air pollution).</p>	<p>Environmental Health Management: Where an investment will generate environmental health risks, the borrower should be required to assess and manage risks and develop an environmental health risk plan (this will probably require input from professionally competent advisers/ consultants), as well as engage with local communities through a process fo 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).</p>
	<p>Security forces will be used and industry standards (e.g. Voluntary Principles on Security and Human Rights) in terms of selection and management</p>	<p>Manage Use of Security Forces: The borrower should be required to provide an annual review of security measures (including details of grievances and any independent audits undertaken during the year).</p>

	of security staff will be followed.	
	Urban development activities will significantly in a negative way affect availability and/or quality of water supplies to local communities or ecosystems (e.g. as a result of increased water abstraction, increased volumes of flow as a result of expanded areas of urban development, changes in groundwater recharge, or reduced quality/increased nutrient burden as a result of inadequate waste water treatment.)	Water Resources: The borrower should demonstrate via a plan (part of the ESMP) how urban development activities (and any associated facilities) will be developed and operated so as to avoid impacts to water supply and quality. Depending on the scale, type and significance of risk, this might involve relocation/reduction of project activities, erosion and sediment control measures during construction, water conservation initiatives or more comprehensive waste water treatment. Evidence of appropriate consultation with local communities should be apparent. 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.).
	The operation has potentially minor transboundary environmental and associated social impacts, such as operations affecting another country's use of waterways, watersheds, coastal marine resources, biological corridors, regional air sheds and aquifers, or transboundary indigenous groups.	Environmental/Social Transboundary Impacts: The borrower should do an environmental and social assessment addressing the following issues: (i) notification to the affected country or countries of the critical transboundary impacts; (ii) implementation of an appropriate framework for consultation of affected parties; and (iii) appropriate environmental mitigation and/or monitoring measures, to the Bank's satisfaction. This analysis should be part of a plan (part of the ESMP). Review of implementation as well as reporting on the plan should be part of the legal documentation (covenants, conditions of disbursement, etc.).

DISASTER RISK SUMMARY	
Disaster Risk Category: High	
Disaster/ Recommendations	<ul style="list-style-type: none"> • The reports of the Safeguard Screening Form (i.e. of the Safeguards Policy and the Safeguard Classification Filters) constitute the Disaster Risk Profile to be summarized in and annexed to the Environmental and Social Strategy (ESS). The Project Team must send the PP (or equivalent) containing the ESS to the ESR. • The Borrower should consider including disaster risk expertise in the organization of project oversight, e.g. in the project's panel of experts. For the Bank's requirements, the Borrower addresses the screened disaster risks in a Disaster Risk Management Summary reviewing disaster and climate change risks associated with the project on the basis of a Disaster Risk Assessment (DRA). Based on the specified hazards and the exposure of the project area, it demonstrates the potential impact of the rapid onset events and/or slow inset changes for the project and its area including exacerbated risks for people and environment, given local vulnerability levels and coping capacities. Furthermore the DRM Summary presents proposed measures to

	<p>manage or mitigate these risks in a Disaster Risk Management Plan (DRMP). The DRA /DRMP to which the DRM Summary refers may be a stand-alone DRA document (see Directive A-2 of the DRM Policy OP-704) or included in other project documents, such as feasibility studies, engineering studies, environmental impact assessments, or specific natural disaster and climate change risk assessments, prepared for the project. These documents should be accessible for the Project Team.</p> <ul style="list-style-type: none"> • The Project Team examines and adopts the DRM summary. The team remits the project risk reduction proposals from the DRMP to the engineering review by the sector expert or the independent engineer during project analysis or due diligence, and the financial protection proposals to the insurance review (if this is performed). The potential exacerbation of risks for the environment and population and the proposed risk preparedness or mitigation measures are included in the Environmental and Social Management Report (ESMR), and are reviewed by the ESG expert or environmental consultant. The results of these analyses are reflected in the general risk analysis for the project. Regarding the project implementation, monitoring and evaluation phases, the project team identifies and supervises the DRM approaches being applied by the project executing agency. • Climate change adaptation specialists in INE/CCS may be consulted for information regarding the influence of climate change on existing and new natural hazard risks. If the project requires modification or adjustments to increase its resilience to climate change, consider (i) the possibility of classification as an adaptation project and (ii) additional financing options for climate change, and consult the INE/CCS adaptation group for guidance.
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SUMMARY OF DISASTER IMPACTS/RISKS AND POTENTIAL SOLUTIONS	
Identified Impacts/Risks	Potential Solutions
<p>Significant Earthquake may occur in the project area and the likely severity of impacts is major or extreme.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of the various seismic risks for the project and address potential exacerbated risks for people and the environment during construction and operation. The DRMP includes risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account the country's disaster alert and prevention system, general seismic design standards and other related regulations. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives. Some sectors have developed comprehensive best practice.</p>
<p>Riverine flooding is prevalent in the project area and the likely severity of impacts is moderate.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of flood risks for the project which must take into consideration changes in the frequency and intensity of precipitations that could occur with climate change. Flood risks may be exacerbated by the project outside the project boundary by modifying flood plains and draining patterns during construction and operation, and increase risks for people and the environment. Appropriate measures to avoid and reduce risks (predominantly engineering), prepare for impact (predominantly environmental and social safeguards) and to include financial protection will need to be included. to include financial protection will</p>

	need to included.
<p>In an area of exposure to prevalent natural hazard (see above questions), project related works increase vulnerability of area of influence to natural hazards and exacerbates risk to property and the environment, or to the project itself.</p>	<p>In areas with prevalent natural disaster risk, the project must not reduce or damage defenses. In cases where this happens it should replace and enhance resilience functions with special attention given to reefs, dunes, mangroves, marshes, flood plains, drainage paths, slope vegetation, etc.</p>

<p>ASSESSOR DETAILS</p>	<p>Name of person who completed screening:</p>	<p>Barandiaran, Doris Melissa (DORISS@Contractual.iadb.org)</p>
	<p>Title:</p>	
	<p>Date:</p>	<p>2014-04-02</p>

ENVIRONMENTAL AND SOCIAL STRATEGY (ESS)

Project name:	Productive Infrastructure Program III	
Project number:	HA-L1091	
Beneficiary:	Republic of Haiti	
Executing agency:	Ministry of Economy and Finance (MEF) through its Technical Execution Unit and the National Society of Industrial Parks—SONAPI	
Financing plan:		US\$ (millions)
	IDB: (Grant Facility)	55.0
	US Government (USAID)	12.0 ¹
	Total:	67.0
Safeguards:	Policies triggered:	OP-761; OP 703; OP 704; OP-710; 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, such as for the protection of the Three Bays National Park, required for the construction, operation and expansion of the development of the Caracol Industrial Park (PIC—*Parc Industriel du Caracol*).²
- 1.2 **The Proposed Operation.** The proposed operation consists of the fourth grant for an amount of US\$55 million to the Government of Haiti to continue the development of the PIC. This grant will be used to expand the existing basic infrastructure, industrial facilities, complimentary projects, studies and management support required for the construction and operation of the PIC. The expected implementation period of the operation is two years. The expected results of this fourth operation include: (i) generation of over 3,000 additional jobs at the PIC; and (ii) increase in fiscal revenues derived from payments to social and health security and use of utilities.
- 1.3 **Status of the development of the PIC.** Construction of the PIC started in September 2011 and has been advancing very rapidly.³ The previous operations (2552/GR-HA; 2779/GR-HA and 3132/GR-HA) finance 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 online until July 2014. The delay resulted in the construction of a temporary WWTP, which has not been

¹ Currently under negotiation.

² The first two operations, 2552/GR-HA and 2779/GR-HA are currently being executed. A third operation, 3132/GR-HA, was approved in December 2013; first disbursement was on June 16th.

³ Construction workforce in 2013 was around 500 people.

- operating correctly and at times exceeds its operational capacity. Concerns exist that untreated effluent is being released into the environment. The UTE constructed in addition a septic system; however, it is not technically feasible for the septic system to meet the Bank's discharge standards for wastewater effluent under the Bank's policy. This situation required the Bank Board to grant an exception to 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. Refer to section 3.13 for more information.
- 1.4 In addition to inadequate wastewater treatment, the PIC lacks critical operational functions that would normally be in place and correctly functioning at the PIC's current stage of operations such as adequate waste management, a potable water supply system, adequate environmental monitoring, an onsite full-time Park Manager, an environmental, health and safety (EHS)⁴ Manager and park management plans, especially a Contingency and Emergency Response Plan. These shortcomings have been identified in the Bank's assessment of the previous grant operation, for which specific requirements have been included in the legal documents as reported in the Environmental and Social Management Reports (ESMR) for 2779/GR-HA and 3132/GR-HA.⁵
- 1.5 **Executing Agency and Other Parties Administering the PIC.** The program will have two executing agencies: (i) UTE/MEF 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 waste water treatment plant, unless the Bank and the Beneficiary agree otherwise in writing. The National Society of Industrial Parks (Société Nationale des Parcs Industriels, or SONAPI) is the entity responsible for managing all industrial parks in Haiti. For the construction of the PIC, SONAPI delegated this responsibility to the Unité Technique d'Exécution (UTE), the Executing Agency of Haiti's Ministry of Economy and Finance (MEF).⁶ However, now that the PIC is in an operational phase, SONAPI took over the management authority on May 1, 2014 without sufficient capacity to manage environmental and social aspects of the PIC.
- 1.6 The UTE has hired LGL S.A. LAVALIN, to supervise the design and construction of civil works for the PIC, including EHS aspects. This contract will end in July 2014. The UTE hired a new supervision firm: Beta Ingenieurs Conseils last June 2014. SONAPI contracted a new Park Manager, replacing a firm that has performed poorly since the inception of the PIC. SONAPI is also in the process of hiring a full-time on-site PIC EHS Manager and of establishing a

⁴ Including social and labor aspects

⁵ <http://www.iadb.org/projectDocument.cfm?id=37972759>.

⁶ The UTE is considered a capable executing agency in Haiti, with experience mainly on construction activities. Upon the PIC started operations, the UTE had to quickly upgrade its expertise to be able to manage and oversight the operational aspects of the PIC.

- PIC management team. For this, the PIC UTE's local management team is in the process to transition to the SONAPI PIC management team.
- 1.7 **Tenants.** To date, the PIC has made significant advances in attracting tenants: (i) Sae-A (S&H Global), the anchor tenant, is operating with 2,400 workers (March 2014), (but is expected to expand to 4,200 employees by the end of 2014, with an estimated expansion to employ up to 10,800 by 2018)⁷; (ii) Peintures Caraïbes employs approximately 100 workers as of February 2014; and (iii) Safi Apparel, a garment production company, is expected to start operations by the end of 2014. New agreements have been signed, but operations have not yet started, with: SISALCO (sisal products manufacturing); Kaitec GaMa Enterprises (a furniture assembly company) and UB Fragrances S.A. (perfume manufacturing).⁸
- 1.8 SONAPI has leased premises located in the PIC to Sae-A for a term of 30 years by means of Framework Agreement dated May 19, 2011. Although the first tenancy agreements with Sae-A and Peintures Caraïbes did not include EHS aspects or requirements, the Bank has managed to include EHS aspects and requirements in the tenancy agreement signed by SONAPI, including requirements to comply with EHS management plans. Under the tenancy agreement, Sae-A and Peintures Caraïbes are required to comply with all applicable laws, including all environmental laws and with SONAPI Internal Regulations which include the PIC Rules and Regulations to be developed under Component 2 of 2779/GR-HA. The PIC Rules and Regulations are still under preparation and plans for finalization and the process for their wider application by SONAPI have not yet been communicated to the Bank.

II. ENVIRONMENTAL AND SOCIAL CONTEXT

A. Environmental and Social Setting⁹

- 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. 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 Annex 1).

⁷ Sae-A is not expanding at the rate predicted in 2013. A revised expansion plan was received on June 03, 2014.

⁸ Signature date of each contract: SAFI (May 15, 2013); SISALCO (January 7, 2013); KAYTEK (September 23, 2013); and UB Fragrances S.A. (November 6, 2013).

⁹ For more detailed information on the environmental and social setting, see the ESMR of 3132/GR-HA.

- 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 Northeastern Corridor is located along National Route 6 (RN6), extending from Ouanaminthe in the east, on the border with the DR, to Cap-Haïtien in the west.
- 2.3 The region is deficient in basic infrastructure, including roads, energy and public services such as water supply, sanitation, solid waste management, education, healthcare and policing. As a result, the region has suffered environmental degradation, including deforestation, contaminated waterways and depleted fish stocks.
- 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*), which represent more than 18% of the remaining mangroves in Haiti. The sheltered bay also includes eelgrass beds and is bounded by a fringing coral reef that extends over 20 km and has an estimated area of 900 ha. This area is considered a critical natural habitat (CNH). Caracol Bay provides an important habitat for endangered species, including turtles and 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 One of the successful mitigation measures put in place by the Government of Haiti and led by the Ministry of Environment (MOE) is the declaration of the Three Bays National Park on October 9, 2013, which includes the bays, mangroves and coral reefs of Limonade, Caracol and Fort Liberté (see section 4.43).
- 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 km². 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 km² 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 TC on Water Availability, Quality and Integrated Water Resources Management in Northern Haiti (ATN/OC-13756-HA)¹⁰ is currently under implementation, with first results expected in June 2014. Its primary objective is quantitatively assessing current and future water availability and analyzing water quality and stakeholder demand to inform an Integrated Water Resources Management (IWRM) Plan for the Trou-du-Nord watershed.

- 2.9 **Social and Cultural Context.** Today, the estimated 387,000¹¹ residents of the towns and cities in the northeast lack access to safe potable water, wastewater treatment and affordable energy sources other than charcoal, and have no solid waste management services. The PIC is only one of a series of investments the Government of Haiti is planning in the northern region. These include investments in roads, a university and tourism. Without the PIC and these other investments, the population in the north of Haiti would be expected to grow estimated 50% by 2030. With the PIC and these investments, the population is projected to grow estimated 100% by 2030. Both scenarios will transform this largely rural, agricultural area, which is currently largely dependent on subsistence farming.

III. ENVIRONMENTAL AND SOCIAL COMPLIANCE STATUS

A. Institutional and Regulatory Framework

- 3.1 Haiti's MOE is the primary institution responsible for environmental management and protection. Currently, the MOE does not have a fully functioning EIA review system. The capacity of the MOE 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. The zoning of the Three Bays National Park has still to be undertaken, this will influence site selection of future projects.
- 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 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

¹⁰ <http://www.iadb.org/en/projects/project-description-title,1303.html?id=HA-T1179>.

¹¹ The current estimate of 387,000 is based on the population forecast published in 2009 and based on the last national census published in 2003. This census, did not take into account the influx of population generated by CODEVI (inaugurated in 2004). The current estimate by local authorities (delegate and mayor) for the Northern Department is above 500,000.

mediated by the Labor Department. In order to benefit from the Haitian Hemispheric Opportunity through Partnership Encouragement Act of 2008 (HOPE II),¹² Haiti was required to develop a program to assess and promote compliance with core labor standards and national labor law. Better Work Haiti (BWH)¹³ is implementing the Technical Assistance Improvement and Compliance Needs Assessment and Remediation (TAICNAR) Program.¹⁴

B. Compliance with Environmental Assessment And Permitting 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 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; 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 an Analysis of Discharge Alternatives for the permanent WWTP (financed under 2779/GR-HA) and an update of the cumulative impact assessment.
- 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 Bank Initiative on Sustainable Cities is assessing how this initiative can assist with the definition of priority actions (see also section 4.35 and 4.36 for other initiatives).

¹² 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.

¹³ 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.

¹⁴ 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.

- 3.7 The PIC’s power plant (financed by the U.S. Agency for International Development - USAID) is considered an associated facility, and an EA for the plant has been prepared and disclosed.¹⁵

C. Compliance with the Bank Policies and Requirements

- 3.8 Overall Compliance status of the PIC project. As part of the negotiation of the third operation 3132/GR-HA, the timeline for some conditions were renegotiated and included in a Liabilities Remediation Plan. In addition, an exception to OP-703 related to Directive B.11, until the permanent wastewater treatment plant is completed and achieves the effluent discharge standards related to such directive was granted by the Board for HA-LI081. For several upcoming conditions from 2779/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, especially in the areas of water and wastewater management, solid waste management, health and safety, aspect has been mentioned as a key factor for not been able to reach compliance.
- 3.9 **Environmental Impact Categorization.** As with the previous grant operations (2779/GR-HA and 3132/GR-HA), this grant operation is also classified as a Category A operation. The Project is likely to cause significant environmental and social impacts, particularly: (i) deterioration of water quality and quantity; (ii) ecological degradation of the mangrove ecosystem, a critical natural habitat (CNH); (iii) cumulative impacts in the Northern corridor resulting from poorly managed population influx and new investments, which may result in further degradation of natural resources (e.g., forests, water, mangroves 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 Bank and the other agencies involved in the project.
- 3.10 **The Bank Policies and Directives.** The Operational Directives (ODs) of the Bank’s Environment and Safeguards Compliance Policy (OP-703) are the same triggered in the previous grant operations and include: B.1 (Bank Policies); B.2 (Country Laws and Regulations); B.3 (Screening and Classification); B.4 (Other Risk Factors); B.5 (Environmental Assessment Requirements); B.6 (Consultations); B.7 (Supervision and Compliance); B.8 (Transboundary Impacts); B.9 (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 Bank’s Disaster Risk Management Policy (OP-704); the Bank’s

¹⁵ <http://ute.gouv.ht/caracol/images/stories/docs/environmental%20assessment%20of%20the%20usaidhaiti%20north%20park%20power%20project.pdf>.

Policy on Gender Equality in Development (OP-761); the Bank’s Policy on Involuntary Resettlement (OP-710) and the Bank’s Access to Information Policy (OP-102).

- 3.11 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 as part of the approval of 3132/GR-HA. The 2779/GR-HA Liabilities Remediation Action Plan was developed and is being implemented to address the existing non-compliances of the previous operations. In addition, to enhance the Bank’s supervision, which now covers three existing operations, ESG hired ERM, an external consulting 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.
- 3.12 **Exception to OD B.11.** At the request of the Project Team, the Bank Board granted a temporary exception to OD B.11 of OP-703 for the approval of HAL1081. This exception permitted under OP-703 (see GN-2208-20, 5.4), was required given that the temporary WWTP has not been operating correctly, it has at times exceeded its operational capacity, and the prescribed monitoring program has not yet been fully implemented, generating concerns that untreated effluent is being released into the environment. To accommodate the anticipated increased volume of wastewater, UTE constructed a septic system; however, it is not technically feasible for the septic system to meet the Bank’s discharge standards for wastewater effluent under OD B.11. Board approval was sought for a temporary deviation from B.11, accompanied by a strategy to minimize risks and, where possible, mitigate any effects. This temporary deviation will be in effect until the permanent WWTP is operating in compliance with Directive B.11.¹⁶
- 3.13 **Status of the Temporary Wastewater Treatment Systems.** The PIC has been relying on temporary wastewater treatment systems since operations began in February 2013. The first temporary wastewater treatment system has not functioned properly and quickly reached its design capacity, resulting in the need for a second temporary wastewater treatment system. As a result, a septic system was constructed in the latter stages of 2014. Because the septic system poses additional environmental risks and cannot comply with the Bank’s environmental policy, specifically OD B.11, a departure from that directive, permitted under

¹⁶ 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 m³/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.

policy OP-703 was requested and subsequently granted, until the permanent wastewater treatment plant is completed and achieves the effluent discharge standards related to such directive and contingent upon specific mitigation measures being implemented prior to the septic system's operation. The non-objection to begin operating the septic system was given 27 February, 2014, pending the requirement to submit additional evidence to the Bank by March 14, 2014, ensuring that all of the outstanding conditions identified by ESG and requiring implementation had been adequately addressed.

- 3.14 **Involuntary Resettlement (OP-710).** The additional 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 program (2552/GR-HA). The Land-for-Land component of the original Plan had to be abandoned due to conflicting interests of stakeholders, which seriously delayed the implementation of the plan. A revised plan is currently in the final stages of being implemented by the UTE. This plan entails four options for the 383 affected persons impacted by the PIC: (i) cash compensation for populations that are not considered vulnerable; (ii) compensation under the national pension system for those over age 65; (iii) an adaptable letter of credit, whereby the UTE will purchase a lease-hold title for plots identified by affected farmers; and (iv) a housing option, under the Bank Housing Program through the Fonds d'Assistance Economique et Sociale (FAES). The final cash compensation has been disbursed to 357 affected persons. The compensation targeted toward the 36 people deemed most vulnerable is underway and, in the instance of the letter of credit, complete. Due to severe delays in the Bank housing option, alternative housing has been identified and is currently being negotiated amongst all interested parties. With regards to the ONA pension plan, nine months of gap compensation has been agreed upon by the Bank and partially disbursed by the UTE until the approved agreement between ONA and the MEF is implemented.
- 3.15 **Compliance with previous Action Plans and Grant conditions:** The timeline for two conditions, established in the Grant Agreement of 2779/GR-HA, has not been met and the UTE requested an extension.¹⁷ A letter requesting an extension for the update of cumulative impact assessment (4.07.(f), (iv)) has been sent to the Bank. In order to comply with Clause 4.07(1) of 2779/GR-HA, an Interim EHS Manager was hired on a temporary basis to supervise EHS aspects of the PIC.
- 3.16 **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 reports that the main tenant at the PIC, Sae-A, is not in

¹⁷ 2779/GR-HA Clause 4.07. (f) (iii) les critères de gestion des ressources hydriques qui permettront d'améliorer ou de maintenir la qualité et les flux de l'eau vers la baie de Caracol et les mangroves et d'assurer une utilisation de l'aquifère ne conduisant pas à la salinisation accrue des zones de mangrove, devront avoir été établis et devront être en cours de leur exécution; and (v) les termes de référence pour les Règles et Règlementations du PIC devront avoir été préparés.

compliance with certain articles of the labor code, specifically; (ii) compensation; (ii) occupational safety and health (chemicals and hazardous substances; Occupational, Safety and Health (OSH) management system; health services and first aid; welfare facilities); and (iv) working time (overtime). 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 that are commensurate with the potential risks of the Program, which are related to: (i) deterioration of water quality; (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 HA L1055 and 2779/GR-HA 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 and the Bank¹⁸ to plan for and implement such a complex project; and (ii) the institutional 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 creating employment opportunities in the North, in particular for women; support provided to the Ministry of Environment that lead to the declaration of for the creation of the Three Bays National Park; and 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.

A. Key Impacts from Construction and Control Measures

- 4.4 **Environmental.** Inadequate sanitation facilities, as well as the improper handling, management and disposal of domestic wastewater could exacerbate pollution of surface/groundwater and/or soils. 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

¹⁸ E.g. limited technical expertise, a tight timeline for project preparation leading to ad-hoc decisions.

disposal of solid and hazardous waste may contaminate surface and groundwater, as well as soils. Improperly managed erosion resulting from construction activities and stormwater runoff can lead to an increase in sediment loads in surface water and present a risk to seagrass beds, 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.
- 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 12 local vendors allowed inside the PIC.
- 4.7 **Construction Control Measures.** The procurement process to hire ESTRELLA for the next construction phase is in process. ESTRELLA prepared an ESMP in May 2013, which will be updated, reviewed and used for the implementation of 3132/GR-HA and HA-L1091. ESG has reviewed the contract and made suggestions, mainly regarding the enhancement of ESTRELLA's organization and human resources for the management of EHS aspects.
- 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.

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 and availability, waste water, 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 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, insufficient public infrastructure, pose high associated risks for the program’s social and environmental sustainability.

- 4.10 **Park Manager and EHS Management.** A contract with a management firm (Park Manager – HALOSA) was signed in April 2013; the contract was cancelled in January 2014 after it became clear that the company would not be able to perform to the satisfaction of the UTE and the Bank. Of particular relevance was the failure to deliver EHS management plans, specifically: emergency response, water supply, solid waste management, pest management and community engagement. Upon cancellation of the contract in January 2014, the UTE has assumed many PIC managing responsibilities, relying on the existing ESMPs and solid waste and water and wastewater action plans developed by the Bank and by the anchor tenant (e.g., in the case of emergency response). For that purpose, the UTE is assuming the role of the EHS Manager, despite the capacity limitations and challenges it faces.
- 4.11 An added challenge is that SONAPI took on the responsibility of park management on May 1, 2014 without having the adequate capacity for EHS management. The implementation of the SONAPI institutional strengthening component of 2779/GR-HA is seriously delayed, and SONAPI is not prepared to take on park management of the PIC. SONAPI hired a Park Manager and is in the process to take over the contracts for the on-site UTE management team and some contracts (e.g. for the solid waste management firm) will be renewed. Also, a full time EHS Manager will be hired. However, no information is currently available as to how this handover will be handled in the short and medium term.
- 4.12 **Control Measures.** Adequate EHS capacity in SONAPI is vital to ensure PIC’s sustainability and avoid reputation risks that could arise 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 (i) the Bank hired a consulting firm to develop the EHS Management System for the PIC’s operations (currently under development); (ii) the UTE hired an Interim EHS Manager to fulfill the most urgent EHS management and monitoring requirements such as: (a) reviewing and approving the Park Manager’s management plans and procedures with respect to EHS aspects; (b) supervising the Park Manager’s operations; (c) directly or indirectly (through contractors) monitoring water supply and water and wastewater quality; and (d) verifying that tenants comply with the EHS plans and procedures. The interim EHS Manager will be in place until SONAPI and the Bank make a decision as to whether to integrate the EHS management into the overall Park Management (as originally envisaged by ESG) or pursue a separate bidding process for the permanent EHS Manager.
- 4.13 A new Park Management team is in the process of being installed; however, the Bank has not yet received the proposal for the new park management structure (personal, budget, TORs). The new Park Manager will be hired directly by SONAPI.

- 4.14 **Environmental Monitoring.** The environmental monitoring program initiated under 2552/GR-HA and 2779/GR-HA has not yet been adequately implemented. In particular, the water and wastewater quality monitoring program began only recently and has so far provided inconclusive results. 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.
- 4.15 **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 the Bank 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. However, currently, neither the lease agreements for the initial tenants nor the PIC Rules and Regulations adequately refer to the Bank's EHS requirements consistent with the Bank safeguard policies. For the PIC Rules and Regulations, once updated and implemented, all tenants will be required to comply with the EHS Requirements as part of their lease agreements. Among these EHS requisites, each tenant will have to agree to develop and implement an ESMP consistent with the EHS requirements in the updated PIC Rules and Regulations.
- 4.16 **Supervision.** Supervision of PIC operations is currently performed *ad hoc*, as UTE supervises compliance by the tenants with the Framework ESMP for the operational phase of the PIC (with assistance from an Interim EHS Manager).
- 4.17 **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.
- 4.18 **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.9, an integrated water resources management strategy will be developed. Additional data collection activities and studies will be required to respond fully to the PIC's needs and to address regional impacts.
- 4.19 **Wastewater.** Wastewater production is expected to increase rapidly as new tenants arrive and existing activities expand. Without adequate management and treatment of effluent, 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.
- 4.20 A permanent WWTP is currently under construction and scheduled to begin receiving wastewater in July 2014. The calibration phase is expected to last 9 months. At the end of that period, wastewater treatment is expected to be fully compliant with Directive 11 of OP 703. The WWTP will be operated by INCATEMA, the firm retained under a 3-year DBO contract. Their role does not extend beyond the day-to-day operation of the WWTP, meaning wastewater management across the site remains outstanding. An EIA was prepared by INCATEMA, however the EIA is incomplete in some areas (see section 5.3.d.).
- 4.21 **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.
- 4.22 **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 UTE is in the process of partnering with the French Development Agency for the co-financing (an additional US\$2-3 million) of a regional waste disposal facility and recycling center located in Limonade. Beyond serving the PIC, it is envisaged that this facility will help address one of the significant issues in the region, which is the lack of solid waste management for the populations in the Northern Corridor.
- 4.23 **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 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.

- 4.24 **Biodiversity Control Measures.** A mitigation plan was established in 2552/GR-HA (300K), 2779/GR-HA (600K), and ATN/JO-11662-HA (600K) 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. The TC HA-T1180 has been submitted for funding in June 2014. 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 B.9 (risk of significant conversion or degradation of CNH).
- 4.25 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; (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; and (iii) the extended aquatic biodiversity baselines must be completed, building on the October 2013 rapid biodiversity baseline study, and the information acquired from this study used to adjust mitigation measures, water quality standards, and the approach to monitoring as necessary.
- 4.26 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 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.
- 4.27 **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, 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.

- 4.28 **OSH Control Measures.** Compliance will be monitored by BWH and the Park Manager.
- 4.29 **Grievance Mechanism Control Measures.** A Grievance Mechanism (GM) was developed as part of the Stakeholder Engagement Plan, however this mechanism is not working adequately. Therefore, as part of the EHS Management System currently being developed for the PIC, the GM will be strengthened in line with international standards and best practices¹⁹, as well as its capacity to address specific labor requirements. A similar model will be used to implement a grievance mechanism for stakeholder communities outside of the PIC.
- 4.30 **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,²⁰ which provides buses for the workers' daily commutes. The system is inefficient and presents health and safety concerns due to the lack of operational planning and consistent management, lack of control over the physical condition of the busses, and unsafe boarding and driving practices.^{21,22}
- 4.31 **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 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 4,000. Also, the Bank 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.
- 4.32 **Food Provision for Workers.** Food is currently prepared off-site and brought on-site by independent cooks during meal times. However, there is no quality control for food safety and hygiene standards. A pilot program will be set up, run by the UTE in partnership with the NGO *Foi et Joie* to provide affordable meals for workers with 12 vendors. Under this pilot, the UTE built 12 kitchens, aiming at providing approximately 1,700 meals per day. This approach is part of a broader

¹⁹ UN Global Compact, Ethical Trading Initiative and Social Accountability International, among others.

²⁰ There are various bus ownership structures in place (buses owned by drivers, by the *Syndicat des Transporteurs* or by SONAPI).

²¹ During a Bank supervision mission in January 2014, Sae-A noted that they have concerns with workers arriving late in the mornings due to the ineffectiveness of the system, which affects productivity

²² During a Bank supervision mission in January 2014, Sae-A reported that an accident occurred on December 13, 2013, in which 23 people were injured.

- initiative to integrate the local community and small businesses into the economics of the PIC and to help avoid the concentration of food vendors outside the PIC entrance. *Foi et Joie* will be responsible for providing cooking training, while the Bank will be responsible for training regarding hygiene and health and safety.
- 4.33 **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 incentives for informal food-service providers to gather outside of PIC gates. Current shortcomings of that will need to be resolved include (i) a lack of potable running water in the kitchens; (ii) a lack of a number of critical requirements to be provided, including health and safety planning, ventilation, adequate storage and working space; and (iii) 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 program: whether the model being employed is scalable for the PIC given its growth projections (while ensuring that health, safety and hygiene expectations are met), and secondly, whether the logic of centralized kitchens will be appropriate for the PIC as it further develops.
- 4.34 **Childcare.** The gender-imbalance created in the neighboring communities surrounding the PIC by having a significant amount of women of childbearing age working while men are unemployed will have unforeseen long-term social impacts. 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 and can eventually push many women out of the workforce to save money as the primary caregiver for young children.
- 4.35 **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 includes monitoring crime rates, traffic accidents, cost of living, epidemiological data, and population growth, the security of the inhabitants of the region are tenuous.
- 4.36 **Citizen Security Control Measure.** The Bank has put in place studies to monitor some of issues mentioned above. A regional strategy has yet to be developed.
- 4.37 **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.

- 4.38 **Cumulative Impacts Control Measures.** As part of the development of the Northern Regional Master Plan, a Cumulative Impact Assessment was finalized in 2012²³ There is an ongoing challenge in developing the institutional arrangements within the Government of Haiti to implement the recommendations of the Cumulative Impact Assessment 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 is planned for September 2014, focusing on (i) the CIAT Regional Planning Authority; (ii) an update on the Cumulative Impact Assessment; and (iii) a high level-meeting to discuss the Three Bays National Park development.
- 4.39 The Emerging and Sustainable Cities Initiative is under way, and several TCs have been approved, 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-3756-HA); (iii) Institutional Strengthening to Increase the Technical Capacity of the Government of Haiti (HA-T1182); (iv) Mitigating the Environmental Impacts of the PIC in the Caracol Bay (ATN/FI-13845-HA)²⁴; and (v) Urban Growth Management in the Vicinity of the Caracol Industrial Park (ATN/SF-11979-HA).
- 4.40 **Housing.** The Bank is financing urban planning solutions, including: (i) housing (1000 units) in Terrier-Rouge, Caracol and in Ouanaminthe; (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.
- 4.41 Implementation of most of these initiatives has only just begun, and it is critical that sufficient funds are allocated to implement the outcomes 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.

C. Positive Impacts

- 4.42 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

²³ <http://www.iadb.org/projectDocument.cfm?id=37301065>.

²⁴ Submitted for funds source eligibility

the access to electricity for some of the PIC surrounding communities. The PIC powerplant has connected hundreds of households and public buildings in Caracol, and is now extending connection to Trou du Nord and Limonade.

- 4.43 One success 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 TC HA-T1180 has been submitted for approval in June 2014.²⁵ 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, develop business plans and value chain analyses for the charcoal, fishing, salt, recycled plastic and tourism sectors and recruit 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.

D. Other Risks

- 4.44 **Natural Disasters.** 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. As new information becomes available, this assessment will have to be updated and finalized prior to the presentation of HA-L1091 to the Board.
- 4.45 **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.

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 operation, 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 fourth operation will complement existing infrastructure for the PIC, which will not change significantly the operation of the PIC, the results of

²⁵ 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 (HA-T1180—US\$180,000) was submitted for approval and additional funding will be made available by the Bank.

the Bank supervision activities will be the basis for the an environmental and social due diligence (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 to address the existing non-compliances of the previous operations. The ESDD will assess if the Project's environmental and social impacts and risks, including all liabilities from the previous Project phases (2552/GR-HA, 2779/GR-HA and 3132/GR-HA) will be adequately mitigated throughout the life of the PIC.

- 5.2 To perform the ESDD adequately, the following information will be needed:
- a. Status of implementation of the 2779/GR-HA Liabilities Action Plan;
 - b. Assessment of the Implementation Status of the Action Plans (ESAPs) established as part of the requirements of 2779/GR-HA;
 - c. Status of compliance with the conditions established for 3132/GR-HA and any potential liabilities of GOH; and
 - d. 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 Critical Natural Habitats.** 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 critical natural habitats.
 - 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 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 ability of SONAPI and the Park Manager to implement adequate EHS requirements (see also 5.4 (d), (f) and (g) below).
 - d. **Wastewater Treatment.** An Analysis of Discharge Alternatives or contaminant fate and transport model as required has not been adequately prepared and a detailed ESMP for Operations was not yet presented for the permanent WWTP. 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 is expected to be available by mid-June 2014. Although after the date the WWTP begins receiving wastewater, this will still be prior to the discharge of treated wastewater to the Trou-du-Nord River. This will be fully addressed during the due diligence process.

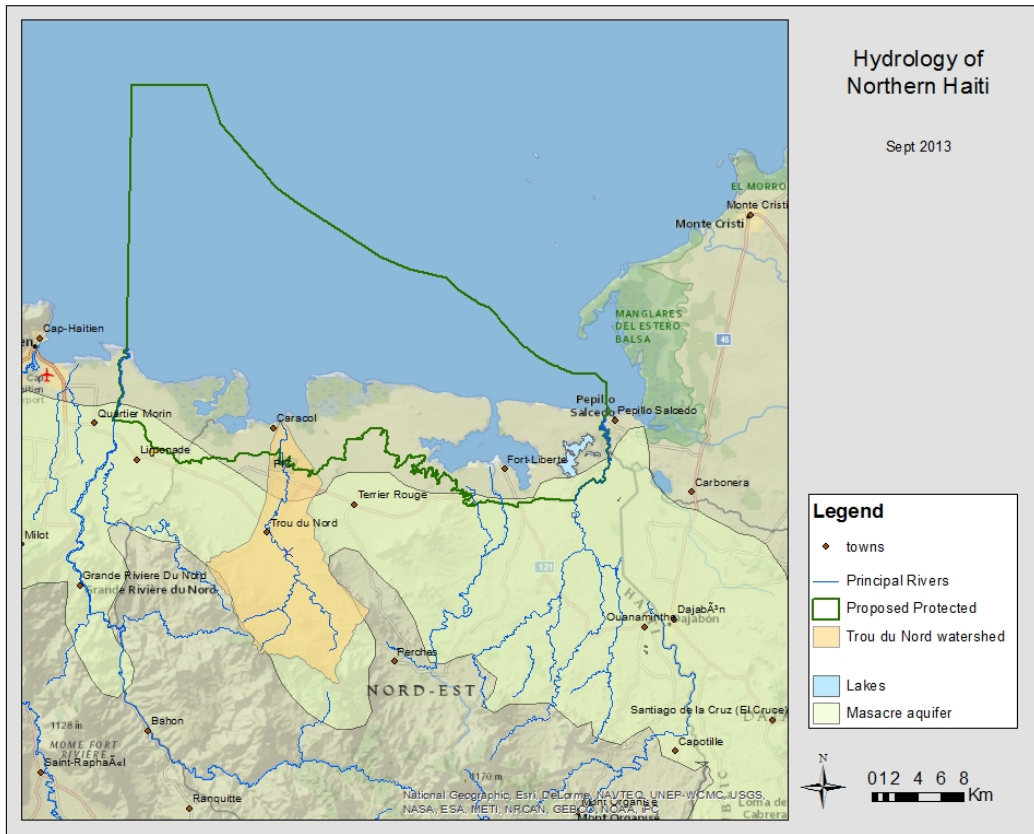
- e. A technical verification visit was undertaken by the Bank on March 18, 2014 although operation of the septic system had already commenced March 6, 2014. The report concluded there were no impediments to continuing the septic system's operation. A detailed review of the Action Plan agreed in January 2014 indicated most of the conditions associated with the Exception to Directive B.11 under OP-703 had not been fully implemented. To address this persistent lack of capacity and importantly to ensure the conditions are implemented correctly and in a timely manner, the Bank will retain a consulting firm to: (i) evaluate potential environmental impacts associated with the operation of the two temporary wastewater treatment systems; (ii) development and implement an extended wastewater monitoring program; and (iii) build the capacity of the UTE/SONAPI through a targeted training program. These activities are anticipated to begin June 2014.
- 5.4 In addition, other specific areas to be addressed in the ESDD include:
- a. **The Bank Environment and Safeguard Policies.** A number of critical deviations from the Haitian regulations, the Bank 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; and (vi) acceptable food service provisioning inside the PIC.
 - b. **Labor Issues.** The ESDD will evaluate if (i) the Government of Haiti and SONAPI reviewed employee contracts used by PIC tenants to ensure they reference appropriate wages and clearly communicate wage calculation methodologies to employees; (ii) detailed labor standards are included in the PIC Rules and Regulations; (iii) specific trainings on sexual harassment in the garment industry in collaboration with Better Work Haiti has been implemented; and (iv) labor compliance requirements, indicators and supervision have been included in tenant ESMPs, PIC management systems and external audit programs.
 - 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 an adequate grievance mechanism is in place 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 who must 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 Interim EHS Manager and Park Manger have been working to adequately 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 PIC rules and regulations, to be developed as part of SONAPI's institutional strengthening (Subcomponent 2.1 of 2779/GR-HA). The ESDD will also include an assessment if provisions on EHS and a standard conduct and behavior protocol have been included in the Rules and Regulations.
- h. **Potable Water Supply System.** A technical visit by an independent water supply expert has been conducted and an Action Plan was prepared. The status of the potable water supply system will be assessed during the ESSD process.
- i. **Water Resources Management.** The ESSD will include an assessment if water resources management has been adequately addressed.

- j. **Waste Management.** The feasibility study for the proposed site in Lemonade did not include hazardous waste and an assessment to determine the best option to manage hazardous waste from the PIC is still required. A detailed justification of site selection and choice of alternatives is still outstanding. The capacity of the Government of Haiti to construct and operate a solid waste facility is extremely limited, while Bank's current capacity to supervise such an activity is likewise limited. The ESDD will include an assessment of the current situation and will also include the assessment if the waste management plan of the PIC is adequate.
 - 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 in 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 and Indirect Impacts.** The ESDD will include an assessment whether cumulative 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.
- 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 Projects, if any; additional or modified management plans; and the proposed Bank recommendations for the Grant Agreement and the Project execution.

Annex 1: Three Bays National Park and PIC Location



INDEX OF BACKGROUND ECONOMIC AND PROPOSED SECTOR STUDIES¹

	DESCRIPTION	DATE COMPLETED OR EXPECTED	REFERENCE OR LINK
PROJECT DESIGN (PARTIAL LIST OF STUDIES FROM “PIC I” 2552/GR-HA)			
	Description of Haiti’s North Industrial Park	2011	IDBDOCS#35813746
	Trade preference programs for Haitian textiles and apparel	2011	IDBDOCS#36157154
	Haiti Northern Pole Development Program	2011	IDBDOCS#36171048
	Identifying demand for industrial space	2011	IDBDOCS#36190080
	Sector note: Private sector development	2011	IDBDOCS#36170355
	Koios and Associates: “Development of the Industrial Park Model to Improve Trade Opportunities for Haiti (HA-T1074-SN2)	2011	IDBDOCS#36174208
ENVIRONMENTAL AND SOCIAL STUDIES (PARTIAL LIST FROM “PIC I” 2552/GR-HA)			
	Hydrologic Evaluation Haiti’s North Industrial Park area	Septembre 6, 2011	IDBDOCS#36472380
	Updated PGES	December. 2011	IDBDOCS#36389679
	Plan of Action and Relocation (PAR)	December. 2011	IDBDOCS#36639359
	Environmental and Social Impact Assessment (ESIA) for Haiti’s North Industrial Park, Koios	June 2011	IDBDOCS#36168335
	Water quality monitoring contract	February 2012	IDBDOCS#36612293
	440 ha site official survey map for Compensation Plan of farmers displaced by the PIC	Sept. 2011	IDBDOCS#36683484
	EA for the temporary PIC Waste Management and Landfill	March, 2012	IDBDOCS#37091611
	Environmental and Social Studies		IDBDOCS#36721481
ENVIRONMENTAL AND SOCIAL STUDIES AND PLANS (PARTIAL LIST FROM PIC II-2779/GR-HA)			
	Cumulative Impact Assessment American Institute of Architects	Aug, 27, 2012	IDBDOCS#36838525
	Caracol Bay Protected Area 2012	2012	IDBDOCS#36838445
	Environmental Assessment for Temporary PIC Solid Waste Management	2012	IDBDOCS#37091611
	Social Impact Assessment	Feb. 2012	IDBDOCS#37091614
	Wastewater Action Plan	2012	IDBDOCS#37094949
	Solid Waste Action Plan	2012	IDBDOCS#37094878
	Environmental and Social Action Plan (ESAP)	2012	IDBDOCS#37094978
	Rapport Evaluation Capacités Gestion_Joseph & Associes	Jan. 2013	IDBDOCS#37384210

¹ The studies listed for HA-L1055 and HA-L1076 cover the needs of the present operation.

Plan d'engagement parties prenantes	Jan. 2013	IDBDOCS#37384222
Résolution conflits - extraits loi Hope 2 - créole	Jan. 2013	IDBDOCS#37384229
Annexe Parc Industriel de Caracol Air and Bacterial Monitoring	Jan. 2013	IDBDOCS#37384237
Rapport No. 1 Qualité de l'eau - Partiel	Jan. 2013	IDBDOCS#37384243
Addendum – Tenant ESHS Clauses	Dec. 2012	IDBDOCS#37384238
PIC Master Plan (HA-L1081)	August 2013	IDBDOCS# 37948183
Environmental and Social Management Report (ESMR)	November 2013	IDBDOCS# 37972759
Regional Comprehensive Plan (AIA Study)		IDBDOCS#37744542
Environmental Assessment -Temporary Sewage Treatment System	January 2014	IDBDOCS# 38557908
PROPOSED STUDIES AND TECHNICAL COOPERATIONS FOR/RELATED TO HA-L1091		
Update of Economic and Financial Analysis	Setiembre 2014	
Update of Environmental and Social Management Report (ESMR)	Agosto 2014	
Institutional Strengthening to increase the technical capacity of the GoH to address the PIC (HA-T1182)	December 2014	
Urban Growth Management in the Vicinity of the PIC (ATN/SF-11979-HA)		
Water Availability and Integrated Water Resources Management in Northern Haiti (HA-T1179)	May 2016	IDBDOCS#37657781
Mitigating the Environmental Impacts of the PIC in the Caracol Bay (HA-T1180)	Proposed	IDBDOCS#38601080
RISK ANALYSIS		
Risk Analysis Update	April, 2013	IDBDOCS#37388289
NOTE: A complete list of studies for the PIC, 10 pages long, is available in Haiti Database of Contents , and is updated regularly.		

CONFIDENTIAL

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