

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

HAITI

SOLID WASTE MANAGEMENT IN NORTHERN HAITI

(HA-L1106)

GRANT PROPOSAL

This document was prepared by the project team consisting of: María Eugenia de la Peña, Project Team Leader (INE/WSA); Alfredo Rihm, Corinne Cathala, Efraín Rueda, Hubert Quille, Carlos Faleiro, Lucio Garcia Merino, and Irene Cartin (INE/WSA); Patricio Zambrano (CSD/HUD); Anamaria Núñez (EXR/CMG); Sisi Larrea (INE/INE); Sarah Matthieussent Romain (WSA/CHA); Marise Etienne Salnave and Marie Marcelle Orisme Passard (FMP/CHA); Melissa Barandiaran, Caroline Giffon, and Soraya Senosier (VPS/ESG); Louis François Chretien (LEG/SGO); Heleno Gouvea (ORP/REM); and Claudia Ogialoro (ORP/GCM).

This document is being released to the public and distributed to the Bank's Board of Executive Directors simultaneously. This document has not been approved by the Board. Should the Board approve the document with amendments, a revised version will be made available to the public, thus superseding and replacing the original version.

CONTENTS

PROJECT SUMMARY

I.	DESCRIPTION AND RESULTS MONITORING	1
A.	Background, problem to be addressed, and rationale	1
B.	Objectives, components, and cost	8
C.	Key results indicators	11
II.	FINANCING STRUCTURE AND MAIN RISKS	13
A.	Financing instruments	13
B.	Environmental and social risks	13
C.	Other risks	14
III.	IMPLEMENTATION AND MANAGEMENT PLAN	15
A.	Summary of implementation arrangements	15
B.	Summary of arrangements for results monitoring	17

APPENDIXES

Proposed resolution

ANNEXES	
Annex I	Summary Development Effectiveness Matrix (DEM)
Annex II	Results Matrix
Annex III	Fiduciary Agreements and Requirements

LINKS
REQUIRED
1. Multiyear execution plan and annual work plan
2. Monitoring and evaluation plan
3. Environmental and social management report (ESMR)
4. Procurement plan
OPTIONAL
1. Regional map and territorial divisions
2. Technical annex
3. Socioeconomic analysis
4. Economic assessment appendix
5. Financial analysis
6. Safeguard policy filter (SPF) and safeguard screening form for the classification of projects (SSF)
7. Analysis of compliance with the Public Utilities Policy
8. Lessons learned
9. Gender and environmental education annex
10. Draft of the project PMR
11. Draft project Operating Regulations
12. SAM statutes
13. Public consultations on the project

ABBREVIATIONS

AFD	Agence Française de Développement [French Development Agency]
CGIRS	Integrated Municipal Solid Waste Management Center
CIAT	Comité Interministériel d'Aménagement du Territoire [Interagency Committee on Territorial Planning]
DCT	Direction de Collectivités Territoriales [Territorial Collectivities Division]
ESA	Environmental and Social Analysis
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMR	Environmental and Social Management Report
GIDE	Integrated Waste and Environment Management
ICAS	Institutional Capacity Assessment System
LGRS	Law on Solid Waste Management
MDE	Ministère de l'Environnement [Ministry of the Environment]
MEF	Ministère de l'Economie et des Finances [Ministry of Economy and Finance]
MICT	Ministère de l'Intérieur et de Collectivités Territoriales [Ministry of the Interior and Territorial Collectivities]
NGO	Nongovernmental organization
PCU	Project coordination unit
SAM	Société Anonyme Mixte (mixed capital company)
TEU	Technical execution unit

PROJECT SUMMARY
HAITI
SOLID WASTE MANAGEMENT IN NORTHERN HAITI
(HA-L1106)

Financial Terms and Conditions				
Beneficiary: Republic of Haiti			IDB Grant Facility	
			Amortization period:	N/A
Executing agencies: Ministry of Economy and Finance (MEF) and Ministry of the Interior and Territorial Collectivities (MICT)			Disbursement period:	5 years
			Grace period:	N/A
Source	Amount (US\$)	%	Interest rate:	N/A
IDB (Grant Facility):	33,503,000	90.2	Inspection and supervision fee:	N/A
Local:	1,300,000	3.5		
Co-financing (AFD)^(a)	2,357,000	6.3	Weighted average life:	N/A
Total:	37,160,000	100.0	Approval currency:	U.S. dollars (US\$)
Project at a Glance				
Project objective/description: The objective of this operation is to improve living conditions for residents of the northern region of Haiti through improved hygiene and management practices and the implementation of infrastructure for the handling and final disposal of solid waste.				
Special contractual conditions precedent to the first disbursement of the financing. The beneficiary will present evidence, to the Bank's satisfaction, of: (i) the entry into force of an agreement between the MEF and the MICT, specifying the mechanisms for coordination between the parties for the execution of project activities and the disbursement of funds; and (ii) the entry into force of the Operating Regulations for the project, pursuant to conditions previously agreed upon with the Bank (paragraph 3.6); and (iii) see other special contractual conditions in Annex B to the ESMR .				
Special contractual conditions for disbursement of the financing. (i) Prior to the disbursement of financing for the execution of Component 1 of the project, the TEU/MEF will present evidence, to the Bank's satisfaction, of the designation of key personnel for project execution, including a coordinator, an accountant, a procurement specialist, an infrastructure technician, an environmental specialist, and a social sector specialist; (ii) prior to the disbursement of financing for the execution of Component 2 of the project, the PCU/MICT will present evidence, to the Bank's satisfaction, of the designation of key personnel for project execution, including a coordinator, an accountant at the regional office in Cap-Haïtien, and a procurement specialist (paragraph 3.7); and (iii) see other special contractual conditions in Annex B to the ESMR and in the Fiduciary Agreements and Requirements (Annex III).				
Special contractual conditions of execution: See special contractual conditions in Annex B to the ESMR .				
Exceptions to Bank policies: None				
Strategic Alignment				
Challenges^(b):	SI	<input checked="" type="checkbox"/>	PI	<input checked="" type="checkbox"/>
			EI	<input type="checkbox"/>
Crosscutting themes^(c):	GD	<input checked="" type="checkbox"/>	CC	<input checked="" type="checkbox"/>
			IC	<input checked="" type="checkbox"/>

(a) At the present time, the French Development Agency (AFD) contribution is parallel, but the Bank may receive it in the form of grant financing for specific projects, if the AFD so agrees. The AFD is expected to commit €2 million for this project, equivalent to US\$2,357,000 at the exchange rate in effect on 11 June 2018.

(b) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

(c) GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem to be addressed, and rationale

- 1.1 Haiti has 10.9 million people, of whom 1.5 million live in the northern region of the country,¹ which is experiencing one of the fastest rates of growth and urbanization nationwide,² and where, as in other regions, there are high levels of unemployment, poverty, and inequality,³ as well as lack of access to basic public services.⁴
- 1.2 **Institutional framework.** Consistent with Haiti's legal framework, responsibility for the management of municipal solid waste,⁵ as well as for other basic services, lies with the municipal-level divisions known as "communes,"⁶ and it is these divisions, or groups thereof, or in some cases specialized agencies designated by the communes, that deliver the services. The Ministry of the Interior and Territorial Collectivities (MICT) is the institution at the central level that is responsible for designing, defining, and implementing the policy of the executive branch with respect to supervising the local authorities and overseeing development at the municipal level. The Territorial Collectivities Division (DCT), within the Ministry, is tasked with building the capacity of the territorial collectivities.⁷ In June 2017, a new law⁸ on solid waste management (LGRS) in Haiti was approved, conferring the lead role in the sector upon the Ministry of the Environment (MDE), which according to its draft basic law will have responsibilities for formulating strategic plans, promoting solid waste valorization technologies, developing technical standards and recommendations, and supporting territorial collectivities in the municipal management of waste. As well, the new LGRS tasks the National Solid Waste Management Service (SNGRS) with providing services in coordination with the territorial collectivities. As the LGRS was enacted just a few months ago (paragraph 1.18), the mechanisms for coordination between the various actors involved, as well as the implementation timeline, have not yet been established.
- 1.3 **The northern region of Haiti.** The northern region of Haiti comprises two of the country's nine departments: Nord (with its capital at Cap-Haïtien) and Nord-Est (with its capital at Fort-Liberté). According to the 2015 projections by the Haitian

¹ Comprising the departments of Nord and Nord-Est.

² As estimated in 2015 by the Haitian Institute for Statistics and Information (IHSI).

³ In 2016, Haiti placed 163rd of 188 countries on the Human Development Index published by the United Nations.

⁴ In Haiti, 58% of the population has access to water services, and 28% to sanitation services (report by UNICEF and WHO, 2015).

⁵ This corresponds to solid or semi-solid waste arising from the activities inherent to population centers (waste from households, businesses, services, institutions, and markets, as well as common (nonhazardous) hospital waste, waste from industrial facilities, waste collected through street sweeping, and the trimmings of plants and trees along streets and in plazas and public green spaces). For purposes of this project, trash, waste and garbage are synonymous.

⁶ The Law of 19 September 1937 defines the powers of the communes with respect to public utility services.

⁷ The 1987 Constitution refers to territorial communities as communes, communal sections, and departments.

⁸ Published in the Official Gazette, *Le Moniteur*, 21 September 2017, Vol. 172, special issue 29.

Institute for Statistics and Information (IHSI), the departments of Nord and Nord-Est have populations of 1,067,177 and 393,967, respectively, representing 14% of the country's total. The National Highway 6 (RN6), rehabilitated by the European Union in 2008, traverses these two departments for 70 km and serves as the most important communication link in the northern region. RN6 connects the biggest cities in northern Haiti—Cap-Haïtien and Ouanaminthe—and runs through 13 communes⁹ ([optional link #1](#)).

- 1.4 The Government of Haiti has made a priority of decentralization,¹⁰ through the promotion of economic development and job creation, especially in the North-Northeast corridor traced by RN6.¹¹ In November 2011, with the support of the Bank and the United States government, the Government of Haiti opened the Caracol Industrial Park to promote productive development in the region. In the meantime, other projects have been developed with the same objective, including the expansion of the Port of Cap-Haïtien.¹² As a result of this process, the northern region of Haiti is undergoing significant change that has drawn people from other regions. Accordingly, it is estimated that the region's population could grow considerably,¹³ especially around Cap-Haïtien, the country's second-largest city.¹⁴
- 1.5 The northern region suffers from major deficits in terms of sanitation infrastructure, wastewater treatment,¹⁵ and the management of municipal solid waste.¹⁶ This situation poses a threat to the quality of the soil and of surface and ground water and increases the region's vulnerability to natural disasters, especially flooding, which are being exacerbated by the effects of climate change.¹⁷ As well, there are impacts on human health,¹⁸ and the potential for pursuing economic activities, tourism in particular, is reduced.

⁹ Cap-Haïtien, Limonade, Quartier Morin, Capotille, Caracol, Ferrier, Fort-Liberté, Mont-Organisé, Ouanaminthe, Perches, Sainte-Suzanne, Terrier-Rouge, and Trou-du-Nord.

¹⁰ The decree of 1 February 2006 establishes the general framework for decentralization and the principles governing the organization and functioning of Haiti's territorial communities.

¹¹ Interagency Committee on Territorial Planning (CIAT), *Plan d'Aménagement du Territoire. Couloir Cap-Ouanaminthe*, 2012.

¹² Other undertakings have included urban development projects supported by the United States Agency for International Development (USAID) and the IDB, tourism development with support of the World Bank, health centers with the European Union, and the creation of Three Bays National Park

¹³ Between 2012 and 2030, the population settled in the Cap-Haïtien-Ouanaminthe corridor is expected to increase from 650,000 to 900,000 inhabitants (CIAT, 2012)

¹⁴ According to Bank estimates, the city currently has a population of 422,092, of whom 50,340 are resident in the city center, an area measuring 1.4 square kilometers.

¹⁵ In the northern region, 40% of the population has no sanitation service of any kind (CIAT, 2012).

¹⁶ Virtually all of the solid waste generated in the northern region ends up in uncontrolled systems, posing a risk to water bodies, mangrove forests, and marine habitats (American Institute of Architects, Cumulative Impact Assessment for Regional Development in The Cap-Haïtien to Ouanaminthe Urban Corridor. Final Draft. IDB, AIA Legacy, 2012).

¹⁷ Drainage systems become blocked by sedimentation and solid waste, increasing contamination and generating the threat of waterborne diseases (IDB, *The Northern Development Corridor*, Haiti, 2015).

¹⁸ IDB, Regional Evaluation on Urban Solid Waste Management in Latin America and the Caribbean, 2010 Report, IDB, AIDIS, and PAHO, 2011.

- 1.6 **Solid waste management in northern Haiti.** The northern region of Haiti has no supervised site for final disposal of solid waste,¹⁹ and solid waste collection systems are inadequate.²⁰ In Cap-Haïtien, in particular, there is a municipal collection system in the city center, supported by the Metropolitan Solid Waste Collection Service (SMCRS),²¹ but the routes and frequency of service are irregular. As to the rest of the city center and throughout the city, the municipal government arranges sporadic services provided in coordination with teams at the Ministry of Transportation and Communication Works, focusing on the points of greatest concentration of solid waste. In addition, there are small waste collection companies and informal trash collectors²² who act at the behest of private parties in a system that is not monitored by the authorities. In Limonade and Quartier Morin, cities close to Cap-Haïtien, the municipal systems are burdened with infrastructure that is inadequate and obsolete and cannot deliver quality service.
- 1.7 Recycling activities are beginning to take hold in all localities, primarily on an informal basis, with opportunities for exploiting recoverable products. Compost production is also at an early stage, but there are opportunities for developing the market. There are already some interesting initiatives being promoted by nongovernmental organizations (NGOs)²³ or by private companies²⁴ for producing and marketing compost.
- 1.8 In addition to solid waste of domestic origin, there are at least three groups of interest that produce large quantities of solid waste similar to domestic waste that do not have adequate final disposal services: (i) markets; (ii) Caracol Industrial Park; and (iii) other development projects. In the markets,²⁵ the current collection system relies on trash collectors organized by the commune and paid by the vendors, who leave their collected waste at pick-up points behind the markets, for incineration or for conversion into animal feed, or who deposit the waste at inappropriate dumping points. Caracol Industrial Park had earmarked funds within one of the operations of the IDB Productive Infrastructure Program (2779/GR-HA) for management of the solid waste generated at its facilities. These funds have been used to finance: (i) the environmental and social impact study of

¹⁹ In general, beaches, ravines, and mangroves are used as points of final disposal for solid waste. These are technically inadequate sites, and they generate urban and visual pollution, as well as harbor diseases.

²⁰ United Nations Development Programme, *Esquisse de Plan d'Urbanisme pour la ville de Cap-Haïtien*, 2013.

²¹ This entity is responsible for managing solid waste in the metropolitan area of Port-au-Prince, but in response to the lack of capacity in the rest of the country it supplies collection trucks in several regions.

²² The commune of Cap-Haïtien has five collection trucks, and four companies have been identified as providing service, along with 62 individuals or associations that perform this work informally (*Maire du Cap-Haïtien, Plan Stratégique de Gestion Des Déchets Solides*, 2014).

²³ Located on the same premises as the Integrated Municipal Solid Waste Management Center (CGIRS) of Limonade is the NGO "SOIL", which runs a program that rents out latrines and, as part of its service, removes excreta and processes this into compost, which it sells on the local market at US\$6 for an 18 kg bag.

²⁴ The company Haiti Compost Business (HCB) runs a solid waste collection system in hotels and restaurants of Cap-Haïtien. The organic portion is converted through an artisanal process into compost.

²⁵ According to the CEFREPADE study, the markets generate 3,300 tons per year, and this amount is expected to reach 5,800 tons per year by 2030.

Mouchinette, where the investments planned under this operation will be located (paragraph 1.22); (ii) monetary compensation for individuals at that site who are resettled (paragraph 2.2); and (iii) construction of a perimeter fence around the site. The plan is for solid waste generated at Caracol Industrial Park (of a quality compatible with sanitary landfill) to go to the Mouchinette site.²⁶ With respect to other development projects, in 2017 the World Bank approved the “Project for municipal development and urban resilience,” the principal activity of which involves dredging the Bay of Cap-Haïtien and inland streams and ravines as a flood control measure. A portion of this waste will be similar to domestic solid waste.²⁷

- 1.9 In the specific case of Limonade, the poor condition of drainage infrastructure (canals) and the lack of adequate channeling and gabions, especially along the Zangui creek, next to the municipal market, mean that the market area is highly vulnerable to flooding. These conditions are aggravated by the improper management of solid waste generated at the market, which is dumped into the Zangui (following unsupervised incineration), further choking the municipal drainage system.²⁸
- 1.10 To address the challenges of solid waste management in northern Haiti, the French Development Agency (AFP) launched a project for “Integrated Waste and Environment Management” (GIDE) in 2010. This project focused on developing a municipal solid waste management system for Cap-Haïtien, and was subsequently extended to Limonade and Quartier Morin. The project succeeded in: (i) identifying the Mouchinette site²⁹ in the commune of Limonade for construction of an integrated municipal solid waste management center (CGIRS), which includes as a fundamental component a regional sanitary landfill for municipal and similar solid waste; (ii) producing feasibility studies of the sanitary landfill; and (iii) creating a municipal structure, the Intercommunal Association for the Treatment of Household Garbage (AITOM), to manage and run the sanitary landfill. As well, a strategic plan for the management of solid waste at Cap-Haïtien was developed, along with an action plan and a communication plan published in 2014.³⁰ The AFD earmarked €1.5 million in the original design of the GIDE for municipal solid waste management and the construction of a sanitary landfill at Mouchinette. However, following a detailed analysis, it decided in 2017 to focus on completing a pilot project for collection, valorization and final disposal, based on waste collected in the area of Petit Anse in Cap-Haïtien, with work to start in 2018. At the present time, the AFD is arranging additional resources to broaden the scope of the current Bank project through parallel cofinancing. These resources will be used to consolidate the solid waste collection models in the project areas and to finance supplementary infrastructure at the collection points (paragraph 1.27). This will

²⁶ At Caracol Industrial Park, approximately 7,300 tons of solid waste is generated per year, a volume that is projected to rise to 8,500 tons over the next 10 years.

²⁷ An estimated 15,000 tons of solid waste akin to domestic waste is generated.

²⁸ *Etudes et enquêtes en vue de l'amélioration de l'aménagement de Limonade*, WE Architects & IDB, 2017.

²⁹ The Mouchinette site is located in the commune of Limonade and covers 19 hectares, with the potential for future expansion by an additional 19 hectares.

³⁰ *Mairie du Cap-Haïtien*, 2014.

speed expansion of the service to people who do not have a formal collection system. It will also help to strengthen technical and institutional capacities at the municipal level.

- 1.11 **Bank support for the sector.** Operation 2779/GR-HA financed certain activities for conditioning the final disposal site at Mouchinette (paragraph 1.8). With technical cooperation resources from the operation for “Improvement of Solid Waste Management in the Northern Region of Haiti” (ATN/OC-15400-HA), the following items were financed: (i) final designs for construction of the Mouchinette sanitary landfill, including the analysis of alternatives for treating and disposing of waste; (ii) a study of the market for compost; (iii) an analysis of local and national institutional capacities in the sector; and (iv) studies on valorization potential. The results of these studies and their application in formulating this project are described in the [Technical Annex](#). In addition, the IDB delivered technical cooperation resources under the operation “Master Plan for Rehabilitation and Management of the Trutier Site” (ATN/KP-12488-HA) and the “Program for Inclusion of Informal Recycling” (ATN-JO-13214-HA), an operation that to date has not been finalized, with a view to creating a CGIRS in Port-au-Prince. As well, in 2017 a technical cooperation operation was approved for creating a “Mixed Capital Company for the Management of Public Services in Northern Haiti” (ATN/MA-16398-HA), the objective of which is to support the sustainability of public services in northern Haiti through the creation of a mixed capital company (SAM) to provide water, sanitation, and solid waste management services through a public-private partnership.
- 1.12 **Lessons learned.** The Bank’s experience in Haiti, through water and sanitation³¹ and solid waste projects in the country and in the region, has shown that: (i) infrastructure will only be viable if the service is properly managed through solid institutions;³² (ii) the institutions responsible for administering the services require trained staff in order to supervise and administer contracts;³³ and (iii) there must be support from technical staff with prior experience in design, construction, and transportation, as well as in recycling and valorization activities.³⁴ For this reason, the project calls for: (i) creation of an SAM with a suitable structure and procedures

³¹ The water projects carried out in Haiti in the last few years include: “Water and Sanitation for Midsized Cities II” (2190/GR-HA), “Port-Au-Prince Water and Sanitation Project” (2351/GR-HA), “Port-Au-Prince Water and Sanitation Project II” (2946/GR-HA) and “Port-Au-Prince Water and Sanitation Project III” (4353/GR-HA).

³² The Belize operation, Solid Waste Management Project (2056/OC-BL), proved successful, in particular due to the strength of the Belize Solid Waste Management Authority (SWMP), which built and operated a regional sanitary landfill and a network of pumping stations that will now be expanded with a new operation, Solid Waste Management Project II (3684/OC-BL), Grau, X. et. al., *Cómo mejorar la gestión de residuos en Belice*, IDB, 2016).

³³ To counter-illustrate with the Argentine operation, “Integrated Urban Solid Waste Management Program (1868/OC-AR), despite the successful construction of final disposal centers and recovery facilities, the Bank’s monitoring missions found limited monitoring and management capacity in the beneficiary municipios, which is reflected in weaknesses in the operation of the infrastructure. Netwall, A., et. al., *Emerging Issues in Solid Waste Management in Argentina*, IDB, 2014.

³⁴ To counter-illustrate, the Georgetown Solid Waste Management Operation (1730/SF-GY) experienced problems with performance and fulfillment of indicators in the absence of a company with prior operating experience.

for municipal coordination and internal operation; (ii) technical assistance for SAM and municipal personnel in order to strengthen their service management capacities; and (iii) the contracting of a specialized company for the design, construction, and operation of the CGIRS ([optional link #8](#)).

- 1.13 **Intervention strategy.** To meet the challenges in managing solid waste in the northern region of Haiti, a final disposal site for solid waste is needed that will comply with international technical standards, with a view to protecting the region's natural resources, improving health conditions in the population, and promoting regional economic development. As well, infrastructure for transportation of waste to the final disposal site is needed: this will involve door-to-door trucking, or, where this is not feasible, haulage from the collection point.³⁵ In Limonade, additional sanitation measures will be pursued, specifically with respect to flood control and reconfiguration of the marketplace, so as to reduce the health risks in this commune stemming from improper disposal of solid waste in the market and nearby water bodies, which during the rainy season generate critical public health situations.
- 1.14 Given the lack of skill and capacity in the municipios for managing the solid waste service, the participating communes in the project chose the mixed capital company (SAM)³⁶ as the most appropriate management model for ensuring the project's institutional and financial sustainability. The communes will delegate their responsibilities to the SAM, which will take charge of managing municipal solid waste, and they will hold shares in the company. The communes have already signed the articles of agreement constituting the SAM ([optional link #12](#)),³⁷ which is to be of a commercial nature, will be entitled to charge fees and exercise administrative and financial autonomy, and may act over the entire solid waste cycle, with the possibility of taking on other public services in the future.
- 1.15 Furthermore, the Bank's operation seeks to strengthen municipal capacities in terms of managing solid waste, as well as to consolidate the SAM, making its staff more professional and equipping them with the material resources needed to manage solid waste. To this end, external technical assistance will be contracted to support the process. As well, the project will support environmental education and communication activities in the schools, and for the general population, in order to sensitize people to the health impact inherent in poor management of waste, and the civic responsibility to handle waste properly.
- 1.16 To ensure the success of the project, and recognizing the lack of experience and capacity in Haiti when it comes to the management of sanitary landfills, an international company will be contracted under a public-private partnership arrangement to design, build, and operate the CGIRS over the project's execution

³⁵ The system based on collection points is being tested in Cap-Haïtien as part of the GIDE project. The commune registers waste collectors and grassroots organizations, provides them with collection materials, trains them and advises them in charging rates differentiated by type of user. Subsequently, the collectors and grassroots organizations convey the waste to the collection points where they pay a fixed handling charge.

³⁶ This management model is covered in the 16 September 1963 Law on Mixed Capital Companies and has been used in various sectors in Haiti such as telecommunications, the cement industry, and mining.

³⁷ This process is being financed with technical cooperation funds (ATN/MA-16398-HA).

- period.³⁸ To this end, funds from the technical cooperation operation HA-T1258 and resources from the Bank's Facility to Support Public-Private Partnerships (ATN/OC-16389-RG and ATN/OC-16388-RG) will be used to hire an advisor with experience in the structuring of public-private partnerships. This support will result in the design of a contract with incentives for efficiency in the delivery of services. In this way, the municipios will take responsibility for the solid waste collection system and the private company will handle the transportation system, valorization, and final disposal through the PPP contract. However, their responsibilities will be transferred to the SAM once it is established.
- 1.17 **Gender considerations.** In order to promote gender equality in the sector, the project will focus on identifying economic opportunities for women, based on the project's benefits, through a territorial gender assessment and an economic development proposal. The assessment will serve to identify economic opportunities for women and men in the management of solid waste, productive activities that men and women perform, and ways of involving women in the territorial space ([optional link #9](#)).
- 1.18 **Government strategy in the solid waste sector.** The LGRS published in June 2017 establishes a new, previously absent framework for the pursuit of policies for the management of municipal solid waste in the country. As well, it calls for the creation of a technical support mechanism for the municipios through the Ministry of Environment, in the management of solid waste. For its part, the MICT intends to strengthen the capacities of the municipios for managing basic services, whether directly or by delegation, as well as partnerships to promote and improve the management of services and to create economies of scale. Once the new LGRS is implemented, effective mechanisms will be established to ensure that project execution is aligned with the new legal context.
- 1.19 **Strategic alignment.** The project is consistent with the Bank's country strategy with Haiti (document GN-2904) inasmuch as it will contribute to the strategic priority of making basic public services more accessible in order to enhance human development. The project is consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and it is aligned with the challenges of: (i) social inclusion and equality, by improving the delivery of services primarily for the poorest people, who are most affected by the improper disposal of solid waste; and (ii) productivity and innovation, recognizing that improving waste management services will boost regional productivity by promoting economic development, especially in the tourism and industrial sectors. The project is also aligned with the crosscutting areas of: (i) climate change and environmental sustainability, in that it will reduce environmental pollution and vulnerability to flooding, through proper disposal of waste, thereby relieving degraded areas. Approximately 7.92% of the operation's funds will be invested in adaptation to climate change activities, according to **the joint methodology of the multilateral development banks for tracking climate finance**. These resources contribute to the IDB Group's target of increasing financing for climate-related projects to 30% of all approvals by the end

³⁸ This PPP arrangement, already implemented in Belize (2056/OC-BL) with satisfactory results, figures in Haiti's 12 June 2009 Law establishing the general rules for contracting, implementation, and regulation of public procurement where the estimated value exceeds the procurement thresholds.

of 2020; (ii) gender equality and diversity, through improving living conditions for the population, and especially for women, by identifying their productive needs and promoting their economic empowerment; and (iii) institutional capacity and the rule of law, in that it will improve the management capacities of local governments for delivering better solid waste management services. In addition, it is aligned with the Strategy of Sustainable Infrastructure for Competitiveness and Inclusive Growth (document GN-2710-5), especially in the priority area of “supporting the construction and maintenance of socially and environmentally sustainable infrastructure, thus enhancing quality of life,” and it is consistent with the Dimensions of Success and Lines of Action of the Water and Sanitation Sector Framework (document GN-2781-8), for universal access and improved quality of services, and social and environmental sustainability.³⁹ In addition, the operation is included in the Operational Program Report (document GN-2915-2).

- 1.20 **Consistency with the Public Utilities Policy (document GN-2716-6).** The proposed project and the sector objectives at the regional level are consistent with the principles set forth in document GN-2716-6 and comply with the conditions of financial sustainability and economic evaluation. The works financed by the project are viable in socioeconomic terms (paragraph 1.31). With respect to financial sustainability, to ensure that the service generates or receives sufficient funding to defray the operation and maintenance costs of the systems, the project will support the efforts of the Haitian government to gradually implement a cost recovery mechanism through the creation of a SAM that will invoice and collect fees for collection and final disposal services in the medium term. Until that cost recovery mechanism is established via targeted subsidies and rates in the medium term,⁴⁰ the government will allocate the funds needed to cover the operation and maintenance costs of the systems to be built with project resources, in a transparent and timely manner, through the national budget (paragraph 3.10) ([optional link #7](#)).

B. Objectives, components, and cost

- 1.21 The objective of this operation is to improve living conditions for residents of the northern region of Haiti through improved hygiene and management practices and the implementation of infrastructure for the handling and final disposal of solid waste.
- 1.22 **Component 1: Infrastructure for solid waste management (US\$30,595,000).** This component will finance construction of a center for the integrated management of municipal solid waste⁴¹ (CGIRS) and similar waste,⁴² to be located

³⁹ This operation is specifically aligned with the first dimension of success, for universal access to water and sanitation and improved service quality, and the third dimension of success, for efficient, innovative, and sustainable management of utilities with increased private sector participation.

⁴⁰ Estimated period of two to four years.

⁴¹ Preliminary technical designs for the works are already in hand, as described in the [Technical Annex](#).

⁴² Solid waste similar or equivalent to municipal solid waste is waste from sources other than municipal sources (for example, industrial, as in the case of Caracol Industrial Park) that possesses compositional and quality characteristics that makes it, from the operational, structural, and environmental viewpoint, equivalent to municipal solid waste, and can therefore be handled at the solid waste management center without the need for technical or operational modifications.

- at Mouchinette, which includes a sanitary landfill and infrastructure for the sorting, valorization, recycling, and composting of waste. The facility also includes a leachate treatment plant, administrative office buildings, training spaces, an internal roads network, and auxiliary facilities for the maintenance of heavy equipment and general servicing of the facilities. As well, it will finance the access road to the waste treatment center, the purchase and maintenance of trucks for collecting and hauling solid waste, ancillary equipment (containers and similar items), the installation of collection points on the outskirts of Cap-Haïtien, and supplementary studies. The costs of infrastructure operation and maintenance will be partially covered. In addition, the component will finance sanitation infrastructure in Limonade, in particular the reconfiguration of the local marketplace, through the construction of small-scale civil works, including specific works relating to channeling and bridges, for flood control and environmental sanitation. That infrastructure is intended to boost the community's resilience in the face of climate change.⁴³
- 1.23 The expected outcome is the integration of a formal system for handling and final disposal of domestic and similar waste, with processes for reusing and valorizing waste so as to extend the useful life of the sanitary landfill and guarantee the viability of the system, while improving environmental conditions (both through the recycling of inorganic components and the production of compost). The basic sanitation infrastructure in Limonade will serve to reorganize the solid waste management system in the main waste generator (the market) and to reduce the pollution of water bodies affected by solid waste loads during the rainy season, with the installation of basic infrastructure for flood control.
- 1.24 **Component 2: Institutional strengthening (US\$5,190,000).** This component will finance the development of national and local capacities for managing municipal solid waste and collecting service fees, as well as environmental education and communication activities. In particular, it will support consolidation of the SAM through financing for the following and other items: (i) consulting services to support establishment of the SAM and to generate operational processes and procedures of a technical and commercial nature; (ii) training and salaries for SAM personnel; (iii) construction and outfitting of offices and installation of equipment for supervising works; (iv) environmental education activities; and (v) a territorial diagnostic assessment of gender and a plan for economic empowerment.
- 1.25 The expected outcome is to have in place an entity with the capacity to supervise the tasks performed by the company providing final disposal and transport services for solid waste and to take over the operation after a period of knowledge transfer and training. As well, it is expected that the SAM will be able to set rates for collection, negotiate and sign contracts for collection with other actors, develop environmental communication and education activities, and promote the expansion of the service.
- 1.26 **Administration, evaluation, and auditing (US\$1,375,000).** This will cover the administrative expenses of the executing agency, project monitoring (technical and

⁴³ IDB, 2015.

fiduciary personnel and the necessary equipment), external audits, and midterm and final evaluations.

- 1.27 **Project cost.** The project will have a total cost of up to US\$37,160,000. The Bank will finance US\$33,503,000 from resources of the IDB Grant Facility, while the local counterpart will contribute US\$1,300,000. In addition, the French Development Agency (AFD) plans to commit €2 million for this project, equivalent to US\$2,357,000 (at the exchange rate of 11 June 2018).⁴⁴ The final amount of funds in U.S. dollars will depend on the exchange rate prevailing on the date the Bank receives the funds from the donor and converts them to dollars. If there is an adverse movement in the exchange rate, this will reduce the amount of U.S. dollars reflected in the budget, and if that amount cannot be covered through the contingencies item, the activities called for in the project will be scaled back and the project team will adjust the budget correspondingly. The AFD has the option, until the end of 2018, to contribute to the project through a project-specific grant, which the Bank would administer, instead of parallel cofinancing, in order to cover the amount budgeted. That additional grant would contribute to the project, as indicated in Table I-1. In this case, the Bank will establish a commitment with the AFD by means of an administrative agreement, without having to prepare or approve a separate project proposal. By virtue of this agreement, the Bank will administer the resources contributed by the donor. The Bank will not charge a fee for administering these funds. Consequently, it will ask the Board of Executive Directors to authorize the President, or the person designated by the President, to sign the necessary agreements with the AFD and the Republic of Haiti in order to receive, administer, and allocate to this operation the resources of the aforementioned financing in order to support and implement its components. Table I-1 presents a summary of costs by component and category of investment.

Table I-1 – Project cost (US\$)

Components	IDB	Local Counter-part	AFD	Total	%
Component 1: Infrastructure	28,795,000	1,300,000	0	30,595,000	82.3
Solid waste management infrastructure	20,980,000	0	1,357,000	22,337,000	
Operation and maintenance of solid waste infrastructure	1,291,000	1,300,000	0	2,591,000	
Contingencies	2,000,000	0	0	2,000,000	
Urban interventions in Limonade	2,771,000	0	0	2,771,000	
Studies	396,000	0	500,000	896,000	
Component 2: Institutional strengthening	4,690,000	0	500,000	5,190,000	14.0
Administration, evaluation, and audits	1,375,000	0	0	1,375,000	3.7
Total	33,503,000	1,300,000	2,357,000	37,160,000	100.0

⁴⁴ At the present time, the AFD contribution is parallel, but the Bank could receive it in the form of grant financing for specific projects, if the AFD so agrees.

- 1.28 **Beneficiaries.** The direct beneficiaries of this project will be the residents of the cities of Cap-Haïtien, Limonade, Quartier Morin, Caracol, Trou-du-Nord, and Terrier Rouge, where household waste will be collected and deposited in an appropriate site well away from their homes, degraded areas will be restored, and environmental conditions in the areas of intervention will be improved. As well, industries (primarily, Caracol Industrial Park), businesses, and markets will benefit from having an organized solid waste collection and removal service.

C. Key results indicators

- 1.29 The following table includes the key results indicators for the project:

Table I-2 – Key indicators

Outcome indicator	Baseline 2018	End of project
Municipal solid waste and similar waste collected in the northern region of Haiti ⁴⁵ (tons collected/tons generated)	10	27%
Households in the northern region of Haiti that dispose of solid waste in the CGIRS	0	23,788
Solid waste disposed of in the CGIRS (tons/year)	0	129,440
Compost generated (tons/year)	0	9,021
Recyclable waste separated for re-sale (tons/year)	0	1,811
Proper management of the CGIRS by the SAM	0	1

- 1.30 **Technical viability.** The operation seeks to improve the system for collecting municipal waste in the project's communes and to build a municipal solid waste management center (CGIRS) in Limonade, in an open system that has the capacity for expansion to include nearby cities as well as private customers. With respect to collection, the analysis of current capacities, as well as the urban fabric of the towns, showed that it would be feasible to cover the urban centers of Limonade and Quartier Morin, while Cap-Haïtien would need a conventional intervention in the center and an expandable model of collection points in the peripheral areas. This was considered feasible and conservative on the basis of the conditions of year 0 of the operation. In the case of the CGIRS, four alternatives were analyzed, as described in the Technical Annex, covering different scenarios for valorization and composting. The analysis took into account the costs of investment and operation, the rate of savings in the sanitary landfill operation, the lag in future investment, and the estimated benefits of valorization. The alternative selected calls for composting waste from the markets and from the organic portion of household waste, for use in agricultural activities, with the added innovation of monitoring a hierarchical strategy of waste management and circular economy, in line with the thrust of government action ([optional link #2](#)).
- 1.31 **Socioeconomic viability.** A cost-benefit analysis was performed on the infrastructure component. The project is viable in economic terms, as it offers an

⁴⁵ The scope of this project covers the cities of Cap-Haïtien, Limonade, Quartier Morin, Caracol, Terrier Rouge and Trou-du-Nord. The first three will be part of the SAM and the latter three will be incorporated into the project later.

economic rate of return of 14.4% and an economic net present value of US\$1.5 million for an investment of US\$25 million. The analysis was supplemented with an appropriate sensitivity assessment. The costs taken into account included investment and operation and maintenance costs for the collection system, those for the sanitary landfill, and those for the production of recyclable products and compost. The benefits considered were the increase in the wellbeing of people served by the system, valued by “willingness to pay” (US\$3.61 per month per family), the economic value of the compost and the recyclable materials, and the cost savings to industries, businesses, and public markets, which would have to spend US\$89.4 per ton processed. Although the economic return figures are sensitive to changes in the main assumptions (especially the investment cost), they show that they are not negative even under the worst downside scenarios, unless there is a drastic increase in costs. Based on the data obtained from the socioeconomic survey conducted in June 2017 as part of project preparation, the willingness-to-pay figure represents approximately 1.6% of average family income in Cap-Haïtien, 2.2% in Limonade, and 1.4% in Quartier Morin, placing it within an internationally acceptable level ([optional link #3](#)).

- 1.32 **Institutional viability.** During project preparation, an institutional assessment of the technical execution unit (TEU) and of the project coordination unit (PCU) was performed using the Bank’s Institutional Capacity Assessment System (ICAS), and the resulting risk was rated low for the TEU/MEF. The assessment found that the TEU/MEF has broad experience in executing projects financed by the Bank and that it has internal control, financing, and procurement procedures that are adequate for project execution. Nevertheless, given the continuous increase in the workload of the TEU/MEF, a person will be hired to support the recently created internal audit department, along with an accountant who will support the TEU/MEF office at Cap-Haïtien. For the PCU/MICT, the ICAS assessment found a medium risk. The PCU/MICT has successful experience with implementation of World Bank projects. However, because the PCU/MICT has very limited experience in executing IDB-funded projects, it will need to strengthen its staffing through technical assistance and training in procurement issues. The office of the PCU/MICT at Cap-Haïtien will also be strengthened, with the hiring of an accountant to handle project resources.
- 1.33 **Financial viability.** During project preparation, a financial model was developed to determine the level of collection and final disposal fees that would be needed to recover the costs of operation and maintenance for the systems to be built. The mean level of rates indicated by the model is considered acceptable internationally,⁴⁶ and it is within the limits of beneficiary users’ willingness to pay. Project resources will also be used to constitute an SAM that will invoice and collect those service fees over the medium term. At the same time, there is a contractual clause to ensure that funds will be available from the national budget for proper operation and maintenance of the systems to be built, until the service fees can cover those costs (paragraph 3.10) ([optional link #5](#)).

⁴⁶ The median rate used is 200 Haitian gourdes/month in the center, 100 in outlying neighborhoods and 50 in the small cities, which is less than the willingness-to-pay figure and represents less than 2% of family incomes. As this involves an amount less than 5% of total incomes, the rate is considered to be internationally acceptable.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 This operation is designed as a specific works investment and will be disbursed over five years, according to the following schedule:

Table II-1 – Disbursement Schedule (US\$)

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total	%
IDB	4,450,900	12,028,000	4,968,500	3,838,200	8,217,400	33,503,000	90
AFD	360,000	910,000	519,000	508,000	60,000	2,357,000	6
Local	0	325,000	325,000	325,000	325,000	1,300,000	4
Total	4,810,900	13,263,000	5,812,500	4,671,200	8,602,400	37,160,000	100
%	13	36	16	13	23	100	

B. Environmental and social risks

- 2.2 This project has been classified as category “A” operation in accordance with Operational Policy OP-703, due to the potential to cause environmental and social problems during construction and operation, and in light of the environmental and social liabilities associated with operation 2779/GR-HA (paragraph 1.10). These liabilities, which represent medium-level risks to this operation, are: (i) the environmental impact resulting from ecological degradation associated with siting the proposed Mouchinette landfill in the protected area of the Three Bays National Park; and (ii) the social impact associated with fallout from the resettlement and compensation of 19 families who were engaged in farming at the site prior to 2014. Meanwhile, there are medium-level environmental and social risks inherent to this operation: (i) the potential impact on groups of people living in the vicinity of the collection points; (ii) the potential growth in the number of informal workers in the solid waste supply chain over the medium and long term; and (iii) social opposition to the operation of the collection points or the solid waste treatment center. These risks will be mitigated as follows: (i) compensation for the 1.9 hectares affected, to be financed under 2779/GR-HA; (ii) an audit of the impoverishment of the means of subsistence, which will serve as the baseline for an action plan to restore means of subsistence, which will be carried out for the Mouchinette site; (iii) consultations prior to the start-up of works;⁴⁷ (iv) a study of the impact on informal workers; and (v) preparation and implementation of a grievance mechanism and a communications strategy.
- 2.3 In addition, impacts and risks may occur during construction and operation, including degradation of the soil, improper management of health and occupational safety aspects, and degradation of water quality. The improper handling of waste

⁴⁷ These consultations prior to the startup of works are focused on the collection points and are in addition to the number of consultations required for the approval of this operation, in accordance with Operational Policy OP-703.

over the long term poses an additional risk, based on the local context of northern Haiti.

- 2.4 An environmental and social impact assessment (ESIA) of the landfill was performed. A supplementary environmental and social analysis (ESA) was also prepared, focused on the collection centers and the two access roads, along with an updated biodiversity baseline, a cumulative assessment of the system, and a disaster risk assessment for all infrastructure components.
- 2.5 Both studies included an environmental and social management plan (ESMP), which is available at the websites of the Government of Haiti and the IDB, in accordance with Operational Policy OP-703 and with the Environmental and Social Management Report ([ESMR](#)). In addition, the TEU/MEF prepared a social action plan that describes how the 19 families were compensated (through cash payments), as part of operation 2779/GR-HA. This report, known as the Plan for Resettlement by the Executing Agency, is a retroactive report from 2014 on the actions taken to compensate the 19 families who were living in the area of the Mouchinette landfill.⁴⁸ The consultation events held during preparation of the operation were meaningful, and they ensured adequate participation by women in accordance with the Environment and Safeguards Compliance Policy and the Gender Equality Policy (the annexes to the final Environmental and Social Analysis will include these [consultation reports](#)).

C. Other risks

- 2.6 **Fiduciary risks.** For the PCU/MICT, the following risks were assessed as medium: (i) the possibility of errors in financial reports due to manual processing; (ii) possible delays in financial execution due to the need for the minister's signature to pay for all expenses and formalize contracts; (iii) the absence of a code of ethics; and (iv) possible delays in procurement due to weaknesses in internal procedures and the lack of capacity on the part of procurement staff. To mitigate these risks, the PCU/MICT will have to: (i) complete implementation of the accounting system for monitoring and executing the approved budget, and for automatic generation of the financial reports required by the Bank, with an administrative and financial manual; (ii) include a code of ethics and professional conduct in the project Operating Regulations; (iii) negotiate a limited delegation of authority for the signature of contracts and checks; and (iv) strengthen internal procedures and capacities of the procurement team and complete the organization of the procurement system. The Bank will support these initiatives through technical assistance offered by Bank staff.
- 2.7 **Development risks.** The following were identified as medium risks: (i) delay in the startup of operations at the CGIRS; (ii) lack of interest on the part of international contractors in participating in the bidding process for construction and operation of the CGIRS; and (iii) possible variances in infrastructure costs vis-à-vis the estimates made during project preparation. These risks will be mitigated as follows:

⁴⁸ During preparation of this operation, a corrective action plan to mitigate this social liability was developed. The plan calls for a poverty audit, with terms of reference that have been prepared by the TEU and the IDB, to be commissioned by the Bank, as well as a proposed grievance mechanism that will cover the entire program, including the group of 19 families (see [ESMR](#)).

- (i) a company accredited in the construction and operation of sanitary landfills will be hired; (ii) a transactions advisor will be hired to support publicity for the bidding process; and (iii) the transactions advisor will prepare terms of reference for the process in order to ensure competition and the receipt of proposals at market price.
- 2.8 **Public management and governance risks.** The following risks were identified as medium: (i) lack of coordination between the institutions involved in carrying out the project's commitments; and (ii) delay in making the SAM operational. These risks will be mitigated as follows: (i) a steering committee will be created to coordinate activities of the actors involved in the project; and (ii) a special contractual clause will be included in the contract to ensure the SAM is up and running during execution.
- 2.9 **Fiscal sustainability risk.** The lack of financial sustainability for the system was identified as a high risk. To mitigate it, a business plan will be prepared, and it will include the design of a cost recovery mechanism to be implemented by the SAM, including a targeted and appropriate rate schedule. Over the medium term, the SAM is expected to be able to gradually cover its operating costs with the rates it charges for its collection and final disposal services.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 **Execution mechanism.** The beneficiary of this operation will be the Republic of Haiti. The executing agencies will be the Ministry of Economy and Finance (MEF), through its technical execution unit (TEU/MEF) for the execution of Component 1, and the Ministry of the Interior and Territorial Collectivities (MICT), through its project coordination unit (PCU/MICT) for the execution of Component 2. The MICT, through the Territorial Collectivities Directorate (DCT), will be responsible for financing all consulting services related to capacity-building.
- 3.2 The TEU/MEF and the PCU/MICT will be responsible for executing and administering their respective component, including the following activities: (i) activities planning and reporting on technical and fiduciary aspects; (ii) preparation and periodic update of the multiyear execution plan, the annual work plan, and the procurement plan; (iii) carrying out selection processes for works, goods, and consulting services; (iv) supervising the works and monitoring execution and evaluation; (v) financial and accounting management, including the presentation of disbursement requests and financial reports required by the Bank; and (vi) preparation and update of semiannual project reports and the risk matrix.
- 3.3 Each executing agency will hire a project coordinator to ensure coordination between its offices in Port-au-Prince and those in Cap-Haïtien and the participating communes. In addition, a Steering Committee will be established, comprising representatives of the PCU/MICT, TEU/MEF, MDE, the communes, the SAM, the private sector, civil society, and other donors, in order to facilitate interagency coordination and project supervision, and to ensure consistency when it comes to strengthening the capacities of the actors involved.

- 3.4 With respect to the cofinancing funds contributed by the AFD, the INE/WSA team will be responsible for preparing the implementation and final reports on the project and submitting them to the donor, in accordance with the stipulations of the Administration Agreement.
- 3.5 **Operating Regulations.** Implementation of the project will be governed by the provisions of the project Operating Regulations, which will cover the following and other items: (i) detailed execution schedule, (ii) institutional powers and responsibilities of all participating entities; (iii) the operating mechanism for the SAM; (iv) rules and procedures for administrative and financial management; (v) procedures for monitoring and follow-up; and (vi) the ESMP ([optional link #11](#)).
- 3.6 **Special contractual conditions precedent to the first disbursement of the financing. The beneficiary will present evidence, to the Bank's satisfaction, of: (i) the entry into force of an agreement between the MEF and the MICT, specifying the mechanisms for coordination between the parties for the execution of project activities and the disbursement of funds; and (ii) the entry into force of the Operating Regulations for the project, pursuant to conditions previously agreed upon with the Bank.** These conditions are fundamental for guaranteeing that the borrower will be ready to begin project execution, with detailed guidelines on operational and coordination aspects.
- 3.7 **Special contractual conditions for disbursement of the financing:** (i) prior to the disbursement of financing for the execution of Component 1 of the project, the TEU/MEF will present evidence, to the Bank's satisfaction, of the designation of key personnel for project execution, including a coordinator, an accountant, a procurement specialist, an infrastructure technician, an environmental specialist, and a social sector specialist; and (ii) prior to the disbursement of financing for the execution of Component 2 of the project, the PCU/MICT will present evidence, to the Bank's satisfaction, of the designation of key personnel for project execution, including a coordinator, an accountant at the regional office in Cap-Haïtien, and a procurement specialist. These conditions are fundamental for guaranteeing that the borrower has a qualified team in place for project execution and thus ensuring the institutional sustainability of the operation.
- 3.8 **Fiduciary agreements and requirements:** (i) special accounts and authorized signatures: the PCU/MICT will open three bank accounts, two at the Central Bank in Port-au-Prince (one in dollars and the other in gourdes) and an additional account in gourdes with the *Banque Nationale de Crédit* in Cap-Haïtien; (ii) special audit and financial reporting requirements: each execution unit will be expected to prepare audit and financial reports on the handling of funds under its responsibility. The PCU/MICT will also be responsible for consolidating the financial reports to be included in the audit report. The PCU/MICT and the TEU/MEF will submit an unaudited semiannual financial report within 60 days after the end of each six-month period. (iii) audits: annual audits will be performed, as well as a final audit as indicated in Annex III; and (iv) the exchange rate used for converting funds from the project currency to the local currency will be determined on the basis of the records of expenditures incurred in the local currency.
- 3.9 **Procurement of works, goods, and services.** Procurement of works and goods and the selection of consulting services will be handled in accordance with the Policies for the Procurement of Works and Goods Financed by the IDB

(document GN-2349-9) and the Policies for the Selection and Contracting of Consultants (document GN-2350-9), both approved in March 2011.

B. Summary of arrangements for results monitoring

- 3.10 **Operation and maintenance.** The contract with the infrastructure builder and operator will establish the company's responsibilities: (i) to ensure that the works and equipment for the project are operating properly and are receiving adequate maintenance in accordance with generally acceptable technical standards; and (ii) to take steps for preventive maintenance of the project works and equipment, according to a plan. The TEU/MEF will be responsible for ensuring that those actions are taken in accordance with the contract. The infrastructure is expected to be transferred to the SAM after a period to be defined once the business plan is in hand. Once the infrastructure has been transferred, the above-mentioned responsibilities will pass to the SAM. To this end, the operating company will be responsible for: (i) training the staff in charge of infrastructure operation and maintenance; and (ii) supplying all the manuals and plans for proper operation and for corrective and preventive maintenance. The beneficiary commits to transfer sufficient funds from the national budget to cover the operation and maintenance costs of the infrastructure to be built with the project, until such time as the proceeds from the collection and final disposal fees are sufficient to cover those costs. The beneficiary will submit to the Bank an annual maintenance report on the state of the project works and equipment during the first quarter of each calendar year, up to the fifth year after the end of the disbursement period.
- 3.11 **Monitoring and evaluation.** The project will be monitored using the Bank's supervision instruments. The PCU/MICT will be responsible for integrating and presenting the following instruments as part of its monitoring system, which will contain information provided by the TEU/MEF: (i) the multiyear execution plan; (ii) the annual work plans; (iii) the procurement plan and the schedule for compiling and preparing data for the results matrix; (iv) financial plans; (v) audited financial statements; (vi) environmental audits; and (vii) semiannual reports. The semiannual reports will include: (i) a description of the activities executed, including compliance with the contractual conditions agreed in the grant contract; (ii) progress towards fulfillment of the indicators in the results matrix; (iii) a summary of the project's financial situation; (iv) a cash flow estimate for the following six-month period; (v) in the year-end annual reports, the updated annual work plan and the procurement plan; (vi) an analysis of any problems encountered and the corrective measures adopted; and (vii) problems that might pose a risk to timely execution of the project. These reports will serve as the basis for the monitoring reports and the project completion report.
- 3.12 The proposed evaluation system will include: (i) verification of fulfillment of the targets set in the results matrix (Annex II); and (ii) a performance monitoring report and a supervision plan oriented towards the achievement of results and evaluation of project performance. In addition, a midterm evaluation will be conducted at 30 months from the project eligibility date or when 50% of the financing has been disbursed, whichever occurs first. A final evaluation will be conducted when 80% of the financing has been disbursed. The midterm and final evaluations will be commissioned by the PCU/MICT, taking into consideration the inputs of the TEU/MEF, and will cover: (i) the results of financial execution; (ii) the fulfillment of

outcomes and output targets and progress towards fulfillment of the expected impacts; (iii) the degree of compliance with the environmental requirements and specifications for works, as established in the environmental management plans for the project; (iv) the degree of compliance with operation and maintenance tasks for the completed works, and institutional strengthening; (v) the degree of compliance with the works plans; and (vi) the degree of compliance with the contractual commitments. The final evaluation will also include an ex post cost-benefit analysis and an assessment measuring the changes generated subsequent to the interventions ([required link #2](#)).

Development Effectiveness Matrix		
Summary		
I. Corporate and Country Priorities		
1. IDB Development Objectives	Yes	
Development Challenges & Cross-cutting Themes	-Social Inclusion and Equality -Productivity and Innovation -Gender Equality and Diversity -Climate Change and Environmental Sustainability -Institutional Capacity and the Rule of Law	
Country Development Results Indicators	-Households with solid waste disposed in a sanitary landfill (#)* -Households protected from flood risk (#)*	
2. Country Development Objectives	Yes	
Country Strategy Results Matrix	GN-2904	Render key services more accesible to enhance human development
Country Program Results Matrix	GN-2915-2	The intervention is included in the 2018 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability	Evaluable	
3. Evidence-based Assessment & Solution	9.7	
3.1 Program Diagnosis	3.0	
3.2 Proposed Interventions or Solutions	4.0	
3.3 Results Matrix Quality	2.7	
4. Ex ante Economic Analysis	9.0	
4.1 Program has an ERR/NPV, or key outcomes identified for CEA	3.0	
4.2 Identified and Quantified Benefits and Costs	3.0	
4.3 Reasonable Assumptions	1.0	
4.4 Sensitivity Analysis	2.0	
4.5 Consistency with results matrix	0.0	
5. Monitoring and Evaluation	7.4	
5.1 Monitoring Mechanisms	1.4	
5.2 Evaluation Plan	6.0	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Medium	
Identified risks have been rated for magnitude and likelihood	Yes	
Mitigation measures have been identified for major risks	Yes	
Mitigation measures have indicators for tracking their implementation	Yes	
Environmental & social risk classification	A	
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)		
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	ATN/OC-15400-HA; ATN/MA-16398-HA

Note: (*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

The main objective of the project is to improve the living conditions of the inhabitants of the Northern region of Haiti through the improvement of hygiene and management practices, and the implementation of management infrastructure and final disposal of solid waste.

The project presents a complete diagnosis; with an accurate description of the current environmental situation and disposal of solid waste. It also describes the measures that are being taken in this area in the Northern region of Haiti

The economic analysis of the project was carried out through a cost-benefit analysis (CBA), which is consistent with the logic of the program and uses a rigorous methodology, based on the willingness to pay methodology for estimating the benefits of the program. Program. This analysis concludes that the program is economically viable and has an IRR of 14.4% (using a 12% discount rate).

The project includes a monitoring and evaluation plan that is in accordance with the Bank's standards. The effectiveness of the proposed intervention will be measured according to an ex post cost-benefit analysis.

RESULTS MATRIX

Project objective	The objective of this operation is to improve living conditions for residents of the northern region of Haiti through improved hygiene and management practices and the implementation of infrastructure for the handling and final disposal of solid waste.									
OUTCOMES										
Outcome 1: Solid waste management system operating in northern Haiti										
Indicator	Unit of measure	Baseline	Year of reference	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/means of verification
Municipal and similar ¹ solid waste collected ² in the northern region of Haiti ³	Tons collected/tons generated	10	2018					27%	27%	Final evaluation
Households in the northern region of Haiti that dispose of solid waste ⁴ in the CGIRS	Households	0	2018					23,788	23,788	Final evaluation
Solid waste disposed of in the CGIRS	Tons/year	0	2018					129,440	129,440	Final evaluation
Compost generated ⁵	Tons/year	0	2018					9,021	9,021	Final evaluation
Compost produced in the CGIRS that is then sold ⁶	Tons sold/tons produced	0	2018					100%	100%	Final evaluation
Recyclable waste sorted for sale ⁷	Tons/year	0	2018					1,811	1,811	Final evaluation

¹ Includes waste generated in households, street sweepings, small businesses, commercial facilities, industries and markets; the latter of a quality equivalent (for operating purposes of the CGIRS) to domestic waste.

² Refers to waste collected from households by municipal truck or by garbage collectors under concession from the commune or the SAM.

³ Includes the cities de Cap-Haïtien, Limonade, Quartier Morin, Caracol, Terrier Rouge, and Trou-du-Nord, and industries such as the Caracol Industrial Park.

⁴ Waste from these households is transported by truck or by a formal collection system to the CGIRS where it is subjected to recovery, valorization, or final disposal in the sanitary landfill.

⁵ Generated through a composting process in the CGIRS.

⁶ Used as a soil conditioner for farming or gardening activities.

⁷ Recyclable waste separated and transferred to a firm or institution for recycling or processing.

OUTCOMES											
Outcome 2: Solid waste management institution operating in northern Haiti											
Indicator	Unit of measure	Baseline	Year of reference	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/means of verification	
Proper management of the CGIRS by the SAM ⁸	Institution	0	2018					1	1	Final evaluation	
OUTPUTS											
Component 1: Solid waste management infrastructure											
Output	Unit of measure	Linked outcomes	Cost (US\$)	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/means of verification
CGIRS built	Center	1		0	-	-	-	-	-	-	TEU acceptance report
▪ Final designs validated	Design	1	293,000	0		1				1	The TEU will validate the final designs.
▪ Cells ⁹ and auxiliary installations ¹⁰ built	Cell	1	11,988,000	0			1		1	2	
▪ Composting and recycling center built	Installation	1	5,872,000	0			1		1	2	
Solid waste collection points built	Collection points	1	1,171,000	0			2	3		5	TEU acceptance report
Collection points ¹¹ on trunk roads	Collection points	1	221,000	0			6	6		12	TEU acceptance report

⁸ The SAM is in operation, with the staff and capacity needed to provide the services.

⁹ The sanitary landfill is constructed on the basis of cells that are prepared once the previous one has been filled and compacted.

¹⁰ Refers to construction of the access road to the site, and internal roads.

¹¹ Minimal civil works where the waste containers will be placed.

OUTPUTS											
Component 1: Solid waste management infrastructure											
Output	Unit of measure	Linked outcomes	Cost (US\$)	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/means of verification
Solid waste collection vehicles acquired	Fleet ¹²	1	1,444,000	0			1			1	Acceptance certificates for the goods
Garbage containers acquired and installed	Lot ¹³	1	573,000	0			1			1	Acceptance certificates for the goods
Cleanup campaigns conducted ¹⁴	Campaigns	1	460,000	0		1	1	1	1	4	Annual reports
Pilot projects ¹⁵ to promote waste recovery by the private sector in northern Haiti	Pilot project	1	315,000	0			1		1	2	TEU acceptance report
Market waste management system implemented in Limonade ¹⁶											
▪ Market cleanup project and redistribution of installations (market area)	Works	1	1,800,000	0			1			1	TEU acceptance report
▪ Flood control and drainage in Limonade (market area)	Works	1	971,000	0			1			1	TEU acceptance report
Engineering, environmental, and social studies	Studies	1	896,000	0	2	3	1	1	1	8	Annual reports

¹² Comprising garbage collection trucks, with or without compactors, small vehicles, motorcycles, carts, etc.

¹³ Includes containers of different sizes and materials.

¹⁴ There will be an annual cleanup campaign in the public spaces of Cap- Haïtien, coordinated with the environmental education campaigns of Component 2.

¹⁵ Involves the steps necessary to identify forms of public-private collaboration for using recyclable materials: market analysis, identification of benefits, and implementation.

¹⁶ Market operating and flood control infrastructure functioning according to design.

OUTPUTS											
Component 2: Institutional strengthening and environmental education											
Output	Unit of measure	Linked outcomes	Cost (US\$)	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/means of verification
SAM staff support hired and operating	Persons	2	200,000	0					5	5	Signed personnel contracts and SAM payroll
Service delivery regulations approved	Regulations	2	140,000	0		1				1	Regulation approved by MICT
Master plans for the CGIRS in Terrier Rouge, Caracol, and Trou du Nord approved	Plans	2	60,000	0		3				3	Document validated by the PCU and the communes
SAM offices built	Office	2	1,150,000	0			1			1	MICT acceptance report
SAM offices equipped	Equipment	2	350,000	0			1			1	MICT acceptance report.
SAM business management and information systems installed	System	2	1,480,000	0			1	1		2	MICT and/or SAM Operations report
Technical assistance to SAM contracted and in operation ¹⁷	Contract	2	800,000	0		1				1	Signed technical assistance contract and monthly reports of the consulting firm
Technical assistance to the communes contracted and in operation ¹⁸	Contract	2	300,000	0		1				1	Signed technical assistance contract and monthly reports of the consulting firm
Municipal sanitation promoters contracted and working	Persons	2	200,000	0	5	5	5			15	Annual reports

¹⁷ Technical assistance to the SAM will be responsible for designing the collection regulations and the operating regulations, and for providing training to hired staff.

¹⁸ Municipal personnel will be trained and coached in cadastre and service fee collection.

OUTPUTS											
Component 2: Institutional strengthening and environmental education											
Output	Unit of measure	Linked outcomes	Cost (US\$)	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/means of verification
Environmental education activities performed ¹⁹	Activities	2	500,000	0		1	1	1	1	4	Annual reports
Territorial gender assessment and economic development proposal prepared	Diagnostic assessment	2	10,000	0		1				1	Diagnostic assessment approved by the MICT

¹⁹ Refers to the delivery of workshops and talks, distribution of information and communication materials, radio and/or television programs.

FIDUCIARY ARRANGEMENTS

COUNTRY: Republic of Haiti
PROJECT NUMBER: HA-L1106
NAME: Solid Waste Management in Northern Haiti
EXECUTING AGENCY: UCP/MICT and UTE/MEF
FIDUCIARY TEAM: Marise E. Salnave and Marie Marcelle Orisme Roc Passard

I. EXECUTIVE SUMMARY

- 1.1 The operation's objective is improving the living conditions of the inhabitants of Northern Haiti by improving hygiene and management practices and the implementation of infrastructure for disposal of solid waste. The program will be executed by two executing units: Ministry of Economy and Finance and Ministry of Interior and Territorial Collectivities both through their respective technical project units – *Unité Technique d'Exécution (UTE/MEF)*, which will be responsible for executing Component I and *Unité de Coordination de Projet (UCP/MICT)* for Component II. The total program amount is estimated at US\$37,160,000 financed by the IDB's Grant Facility and the AFD, which has compromised €2 million and a national counterpart, that will finance US\$1,300,000 to cover recurrent costs associated to Component I.
- 1.2 The latest evaluation of public financial management systems of Haiti is included in the Public Expenditure and Financial Accountability (PEFA) assessment report conducted in 2011 and published in February 2012. The GdH has shown continued commitment in improving the country's system and adopted in May 2014 the Public Financial Management reform strategy including an action plan for 2014-2016 to consolidate basic public financial management functions focused on: (i) continuing the implementation of a Single Treasury Account (STA) with the support of IMF; (ii) reaffirming the role of public accountants in the monitoring of expenses in all line ministries; and (iii) improving the monitoring of public debt. Despite these measures, the country financial management systems and external mechanism would require further improvements prior to conforming to levels consistent with their utilization for the fiduciary management of Bank's funded programs. As a result, no country systems will be used for the program's financial management. An evaluation of the National Procurement System was performed in 2013, applying the methodology established by the Organization for Economic Cooperation and Development. Several recommendations were identified through an action plan for the modernization of the national procurement system. Based on the current situation and the need to align the national system to international standards and best practices, the Bank's procurement policies will govern procurement activities under this program. To mitigate these risks, the Bank will continue to: (i) rely on special program executing units for the execution of all programs while at the same strengthening institutional capacities; and (ii) to implement special fiduciary arrangements for program implementation and conduct close supervision of program executing units. External control will be performed for all Bank operations

by independent audit firms acceptable to the Bank in accordance with the Bank's financial reporting and audit guide.

II. EXECUTING AGENCY'S FIDUCIARY CONTEXT

- 2.1 UTE/MEF and UCP/MICT will be responsible for the execution and administration including: (i) planning of activities; (ii) reporting technical and fiduciary aspects; (iii) execution of procurement activities; (iv) supervision of firms and service providers; (v) financial and accounting management; (vi) risk management; (vii) monitoring and evaluation; and (viii) supervision/execution of the environmental and social management plan. UTE/MEF will execute Component I, which will finance the construction and acquisition of waste management infrastructure and equipment and small civil works and flood control actions in Limonade. UCP/MICT will execute Component II, which will finance institutional strengthening of national and local entities in the management of solid waste as well as environmental awareness and communication activities and the organization of the Mixed Capital Company (SAM).
- 2.2 UTE/MEF uses modified cash basis for accounting purposes. Accounting of the projects is done using ACCPAC software system, which generates financial reports by project and funding source. Financial information is exported to Excel for the preparation of financial statements required by the Bank. The last audit report of projects in execution and updated institutional assessment confirmed a satisfactory level of capacity for the financial management of projects. UTE/MEF has extensive experience in Bank financed operations and is executing several bank operations including infrastructure operations such as the PIC (2552/GR-HA, 2779/GR-HA) and Tourism (3383/GR-HA), road rehabilitation project (2383/GR-HA), and school constructions for education projects (2643/GR-HA and 2863/GR-HA). A well-structured procurement unit has five staff: (i) Procurement Director; (ii) four specialists; and (iii) one secretary. It is a team with good knowledge of Bank's procurement procedures for goods, works, non-consulting services and consulting services; Additionally, the staff received several procurement trainings by several recognized organizations.
- 2.3 UCP/MICT also uses modified cash basis for accounting purposes. Accounting of projects is currently done using Excel. UCP/MICT is finalizing the installation of ACCPAC software, which will be used for accounting purposes and the generation of financial reports. This will be first time that the UCP/MICT will be executing a Bank operation. However, UCP/MICT has extensive experience in managing projects financed by the World Bank. In terms of procurement management, the UCP/MICT has an organized structure. The team is composed of one procurement specialist handling planning, procurement, and contract administration.

III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

- 3.1 An institutional assessment of UCP/MICT related to financial management and internal control processes was completed in April 2018. Based on the results, the Bank considers UCP/MICT's overall risk rating to be medium due to: (i) possibility of errors in financial reports due to manual processing; (ii) possible delays in execution due to the non-delegation of signature of the Minister for checks and contracts; (iii) the absence of a code of ethics; and (iv) possible delays in procurement processes due to weakness of internal functions and capacities of the procurement team. To mitigate those risks, UCP/MICT: (i) will complete the

- implementation of ACCPAC to allow for the monitoring and execution of approved budget and the automatic generation of financial reports in format requested by the Bank and the update of administrative and financial manuals to include procedures related to password administration and backup of financial information; (ii) include a code of ethics and professional conduct in the ROP; (iii) negotiate with the Ministry a limited delegation of authority for the signing of checks and contracts; and (iv) strengthening of procurement functions and capacities of the procurement team and finalize the organization of the procurement filing system. The Bank will support these initiatives through technical assistance.
- 3.2 As confirmed by the latest assessment, UTE/MEF invested in strengthening its financial management and internal control processes with positive implication in the overall risks rating, which is evaluated as low risk. Nonetheless, due to the continuing increase in activities, we recommend the recruitment of one junior auditor to support the recently created internal audit department and one accountant for their office in Cap Haitien and setting of the accounting system to allow automatic generation of financial reports in the format required by the Bank.
- 3.3 With regards to the procurement system, an updated assessment was conducted in April 2018, which resulted in a low risk, given the strength of UTE/MEF's procurement management and experience in executing Bank projects. Nevertheless, the Bank's procurement team will continue to conduct regular visits, including one every three months to support the unit in project implementation activities.

IV. ASPECTS TO BE CONSIDERED IN THE SPECIAL CONDITIONS OF THE CONTRACT

- A. Special conditions for the disbursement of the financing for the execution of Component 1**
- 4.1 UTE/MEF will set their accounting system to allow automatic generation of financial reports in the format required by the Bank and update their chart of accounts to reflect current operation.
- 4.2 UTE/MEF will assign an accountant for the project.
- B. Special conditions for the disbursement of the financing for the execution of Component 2**
- 4.3 Special Accounts and authorized signatures. UCP/MICT will open three separate bank accounts, two accounts at the Central Bank in Port-au-Prince (one in US dollars and the other in Gourdes) and one additional Gourdes account at the Banque National de Credit in Cap Haitien.
- 4.4 Update by UCP/MICT of its administrative and financial management procedures manual. The manual should be updated to include the chart of accounts of the project, procedures for password administration and the backup of financial information and procedures for the rendering of advances made to Cap Haitien office.

- 4.5 UCP/MICT should complete the implementation of its accounting system to allow for the monitoring and execution of approved budget and the automatic generation of financial reports in format requested by the Bank.
- 4.6 UCP/MICT will recruit, for their regional office in Cap Haitien, an accountant for the management of project funds and to facilitate the justification of expenses by obtaining supporting documents for expenses incurred on the field for submission to central office in Port-au-Prince.

C. Special aspects to be included in the contract

- 4.7 **Audit special requirements and financial reports.** UCP/MICT will be responsible for the recruitment of external auditors eligible to the Bank to perform the financial audit of the program as follows: (i) annual financial audit of the program to be submitted within 120 days after the closure of each fiscal year; and (ii) a final financial audit to be submitted within 120 days after the date of the last disbursement. For the audit of financial statements, the Haitian fiscal year will be used. Each executing unit will be responsible for the preparation of financial reports for the management of funds under their responsibility for the submission to the auditors. UCP/MICT will also be responsible for the consolidation of financial reports to be included in the audit report. Both units will also submit semi-annual unaudited financial reports within 60 days after the end of each semester of each fiscal year.
- 4.8 **Exchange rate** used to convert the funds denominated in project's currency to local currency will be used to record expenses incurred in local currency.

V. FIDUCIARY ARRANGEMENTS FOR PROCUREMENT EXECUTION

- 5.1 The procurement fiduciary arrangements establish the conditions applicable to all procurement execution activities. UCP/MICT and UTE/MEF will be responsible for all procurement activities.
- 5.2 **Procurement Execution.** Procurements will be carried out in accordance with the Policies for the Procurement of Works and Goods Financed by the IDB (GN-2349-9) of March 2011; and the Policies for the Selection and Contracting of Consultants Financed by the IDB (GN-2350-9) of March 2011, and with the provisions established in the grant contract. In addition, the Borrower is required to prepare and submit to the Bank, a draft General Procurement Notice as well as an initial procurement plan which will be updated in accordance with the applicable sections of the policies and the grant agreement.
- 5.3 **Procurement of Works, Goods and Non-Consulting Services.** The contracts for Works, Goods, and Non-Consulting Services¹ generated under the project and subject to International Competitive Bidding will be executed using the Standard Bidding Documents (SBDs) issued by the Bank. The processes subject to National Competitive Bidding (NCB) will be executed using National Bidding Documents satisfactory to the Bank. The use of shopping as a procurement method shall follow the procedures set out in the policy and will consist in a price comparison of at

¹ Policies for the Procurement of Goods and Works Financed by IDB ([GN-2349-9](#)) paragraph 1.1: The services different to consulting services have a similar process as procurement of Goods.

least three quotes. The technical specifications review during the preparation of the selection process is the responsibility of the project sector specialist

- 5.4 **Procurement of Information Technology (IT) Systems.** Procurement of IT systems will be done following the policies referenced above.
- 5.5 **Selection and Contracting of Consultants.** The consulting services contracts generated under this project will be executed using the Standard Request for Proposals (SRFPs) issued or agreed to by the Bank. The terms of reference review for the selection of consulting services is the responsibility of the project sector specialist.
- 5.6 **Selection of Individual Consultants.** Individual consultants are selected based on their qualifications for the assignment. This will be carried out in accordance with procedures set out in Section 5 of the policies for selecting and contracting individual consultants, GN-2350-9 Sections 5.1-5.4. Consultants shall be selected through comparison of qualifications of at least three candidates among those who have expressed interest in the assignment or have been approached directly by the Borrower.
- 5.7 **Training.** Training will be provided to MICT staff in charge of procurement execution.
- 5.8 **Recurrent Expenses.** This category includes the cost of salaries of UCP/MICT and UTE/MEF personnel and other recurrent costs required for supporting program administration in its implementation.
- 5.9 **Advance Contracting and Retroactive Financing.** No advanced contracting or retroactive financing is foreseen.

ICB and Thresholds (miles US\$)

Method	ICB Works	ICB Goods and Non-consulting Services	Consulting Services International Short List
Threshold	≥ 1.000	≥ 100	< 100

- 5.10 **Procurement Plan (PP).** UCP/MICT and UTE/MEF will each prepare their PP which will indicate the procedure to be used for the procurement of goods, the contracting of works and services, and the method of selecting consultants, for each contract or group of contracts. It also indicates cases requiring prequalification, the estimated cost of each contract or group of contracts and the requirement for prior or post review by the Bank. The PP will be posted on the Bank's website (www.iadb.org/procurement) and will be updated annually or whenever necessary, or as required by the Bank.
- 5.11 **Procurement Supervision.** The Bank will determine the procurement supervision method. For this project, procurement supervision will be ex ante for UCP/MICT and UTE/MEF.
- 5.12 **Records and Files.** UCP/MICT and UTE/MEF shall establish a set of guidelines for document management to maintain necessary documentation to back up all procurement and financial management documentation as required by the Bank.

VI. FINANCIAL MANAGEMENT

A. Programming and Budget

- 6.1 UCP/MICT and UTE/MEF will each prepare an Annual Operation Plan (AOP), a PP and a twelve-month detailed financial plan. The financial plan will respect the budget lines defined in the grant agreement. The execution of the project's financial plans will be evaluated every four months for Component II executed by UCP/MICT and every six months for Component I executed by UTE/MEF.

B. Accounting and Information Systems

- 6.2 ACCPAC system will be used by both executing units for the management of project funds. Detailed annual budget including subcomponents and activities will be included in accounting system to facilitate the comparison of Actual vs Budget forecast at the end of each month and the production of financial reports by source of funds. Cash basis accounting will be used for the preparation of unaudited semi-annual financial statements and annual audited financial statements in accordance with international accounting standards.

C. Disbursements and Funds Flows

- 6.3 Program financial management will be guided by OP-273-6. UCP/MICT and UTE/MEF will each be responsible for the management of funds through special accounts opened for the execution of the project. Direct payment and advance of funds methodology will be used for the disbursement of project funds for the financing of activities derived from their respective AOP and PP. For disbursement of advance of funds UTE/MEF and UCP/MICT will submit to the Bank financial plans covering cash flow need for periods of up to six months in the case of UTE/MEF and for periods of up to four months in the case of UCP/MICT. In both cases disbursement supervision will be ex post. Justification of advance of funds will be submitted on a quarterly basis by UTE/MEF and monthly in the case of UCP/MICT for the first year of execution. For the following years the frequency of justification can be adjusted based on observation raised during inspection visits. For each new advance, both Units will need to justify 80% of cumulative advances received and will be responsible for the funding of the accounts of their respective regional offices and the supervision of said accounts. Advance of funds methodology will also be used for funding the regional office accounts for the same periods and conditions agreed for each executing unit. Exchange rate on the date of conversion of the currency in which the disbursement is made will be used to record all expenses made in local currency; the Central Bank of Haiti exchange rate published on that date will be used as the reference rate.
- 6.4 Local national counterpart will be used to finance recurring costs related to activities financed under Component I. UTE/MEF will be responsible for the management and execution of counterpart resources.

D. Internal Control and Audit

- 6.5 UCP/MICT and UTE/MEF will maintain adequate internal control systems and controls. UCP/MICT does not have an internal audit unit. The internal control environment of UCP/MICT will be strengthened with the implementation of the ACCPAC accounting system for preparation of financial reports and monitoring of budget execution; the update of their administrative and financial manual to include a user guide for basic functions of ACCPAC and procedures related to password administration and backup of financial information and the recruitment of an accountant for their regional office in Cap Haitien. The internal control structure of UTE/MEF was strengthened by the creation, in March 2017, of an internal audit unit. Due to the continuing increase of activities executed by UTE/MEF, we recommend the recruitment of a junior auditor to support the activities of the recently created internal audit department; the recruitment of an accountant for the regional office of UTE/MEF in Cap Haitien and the setting of their accounting system to allow automatic generation of financial reports in the format required by the Bank.

E. External Control and Reporting

- 6.6 Audits of financial statements will be performed in accordance with International Audit Standards and Bank's Guidelines for Financial Reports and External Audits and will be financed by IDB grant and estimated at US\$250,000. The project financial statements will correspond to the Haitian fiscal year. An independent audit firm will carry out the audit of the project as specified in section 4.4 above based on specific terms of reference.

F. Financial Supervision Plan

- 6.7 During the first year of execution, fiduciary staff will perform inspection and supervision visits every six months in the case of UTE/MEF and every four months for UCP/MICT to review the execution of financial plan, supporting documents, recording of financial transactions and implementation of audit recommendations. For the following years, the frequency of visits is subject to change based on findings raised during supervision missions.

G. Execution Mechanism

- 6.8 UCP/MICT and UTE/MEF will maintain proper financial management systems and prepare each an AOP and PP and a twelve-month financial plan indicating cash flow needs. Disbursements will be executed as stated above.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/18

Haiti. Nonreimbursable Financing ____/GR-HA to the Republic of Haiti
Solid Waste Management in Northern Haiti

The Board of Executive Directors

RESOLVES:

1. That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, as Administrator of the IDB Grant Facility (hereinafter referred to as the "Account"), to enter into such contract or contracts as may be necessary with the Republic of Haiti, as Beneficiary, for the purpose of granting it a nonreimbursable financing to cooperate in the execution of the project "Solid Waste Management in Northern Haiti." Such nonreimbursable financing will be for an amount of up to US\$33,503,000, which form part of the Account, and will be subject to the Terms and Financial Conditions and the Special Contractual Conditions in the Project Summary of the Grant Proposal.

2. That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such agreements as may be necessary with the French Development Agency (FDA), and to take such additional measures as may be pertinent, to receive, administer and approve the use of nonreimbursable financing resources chargeable to the resources provided by the FDA, for up to the amount of €2,000,000, as described in Document PR-_____.

(Adopted on __ _____ 2018)