

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

HAITI

RURAL WATER AND SANITATION PROGRAM (II)

(HA-X1014)

GRANT PROPOSAL

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ELECTRONIC LINKS	
REQUIRED	
1.	Annual Operating Plan (POA) (English) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2232006
2.	Monitoring & Evaluation Arrangements (English) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2231760
3.	Procurement Plan (English) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2232013
4.	ESMR* (English) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2231583
OPTIONAL	
1.	Technical options and design (English) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2229760
2.	Operation Manual (French) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2229898
3.	Institutional Evaluation (French) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2229865
4.	Environmental and Social Analysis and Social Management Framework (ESMF) (French) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2229919
5.	Socio-economic Evaluation (English) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2232160
6.	Summary of the geo-helminthes eradication program (Component IV) (Spanish) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2230454
7.	Summary of history of the execution of loan 1780/SF-HA (English) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2231759
8.	Safeguard and screening form and classification of projects (English) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=2128969
(*) As required, as specified in the guidelines for OP-703 and Disaster Risk Management Policy	

ABBREVIATIONS

AECID	<i>Agencia Española de Cooperación Internacional para el Desarrollo</i>
AFD	<i>Agence Française de Développement</i>
CAEPA	<i>Comite Autonome d'Eau Potable et d'Assainissement</i>
CAMEP	<i>Centrale Autonome Métropolitaine d'Eau Potable</i>
CEPA	<i>Comite d'Eau Potable et d'Assainissement</i>
DINEPA	<i>Direction Nationale de l'Eau Potable et de l'Assainissement</i>
CDB	Caribbean Development Bank
EPA	<i>Eau Potable et de l'Assainissement</i>
ESMF	Environmental and Social Management Framework
ESA	Environmental and Social Analysis
ESS	Environmental and Social Strategy
EU	European Union
GOH	Government of Haiti
GOS	Government of Spain
IDB	Inter-American Development Bank
INE/WSA	Infrastructure and Environment Sector/Water and Sanitation Division
IRR	Internal Rate of Return
<i>Loi Cadre</i>	<i>Loi Cadre portant sur l'Eau Potable et l'Assainissement</i>
MDG	Millennium Development Goals
MEF	Ministry of Finance
MTPTC	<i>Ministère des Travaux Publics, des Transports et des Communications</i>
NGOs	Non-Governmental Organizations
O&M	Operation and Maintenance
OREPA	<i>Offices Régionaux de l'Eau Potable et de l'Assainissement</i>
OTC	<i>Oficina Técnica de Cooperación</i>
PEP	Project Execution Plan
POD	Proposal for Operation Development
PPMP	Project performance Monitoring Reviews
REGPH Survey	General Survey on Human Habitat and Population
SCL/SPH	Social Sector/Social Protection and Health
SNEP	<i>Service National de l'Eau Potable</i>
SSF	Safeguard and Screening Form for Screening and Classification of Projects
STH	Soil Transmitted Helminthes
SFW	Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean.
UNDP	United Nations Development Program
URSEP	<i>Unité de Réforme de Secteur de l'Eau Potable</i>
UTE	<i>Unité Technique d'Execution</i>
WB	World Bank
WHO/UNICEF	World Health Organization/United Nation Children's Fund

PROJECT SUMMARY				
HAITI				
Rural Water and Sanitation Program (II)				
(HA-X1014)				
Financial Terms and Conditions				
Beneficiary: Republic of Haiti				
Executing Agency: <i>Direction Nationale de l'Eau Potable et de l'Assainissement (DINEPA)</i>				
Source		Amount (US\$)	%	
SFW (Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean)** Non-Reimbursable		10,000,000	100%	
Local		0	0%	
Total		10,000,000	100%	
Disbursement Period:			5 years	
Project at a Glance				
Project objective/Description:				
The objective of this operation is to increase the number of households with access to sustainable water and sanitation services in rural communities in the department of the Artibonite.				
Special contractual conditions: Special contractual conditions precedent to first disbursement: (i) the signing of an agreement between the MEF, MTPTC and DINEPA specifying DINEPA's obligations as the executing agency of the project; and the process for the transfer of the grant proceeds from the borrower to the executing agency (¶3.6); and (ii) evidence that the Operation Manual of the program has entered into effect in accordance with terms and conditions previously agreed upon with the Bank and AECID(¶3.6).				
During Project Implementation: Implement the Environmental and Social Analysis (ESA) / Environmental and Social Management Framework (ESMF), which has been prepared by the Government and disclosed in the country on October 27, 2009 and by the IDB on October 28, 2009. Any changes and updates of this document will be made in consultation with IDB and will follow IDB environmental and social policies and requirements (¶3.7).				
Exceptions to Bank policies: None				
Project consistent with Country Strategy:	Yes [X]		No []	
Project qualifies for:	SEQ[X]	PTI [X]	Geographic[X]	Headcount [X]
Procurement:				
(**) The Agreement between the Government of Spain and the IDB (Framework Document for the Establishment of the Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean) was signed on July 24th, 2009. Resources allocated under the SFW to finance the activities identified under this project are subject to the approval by the Government of Spain.				

I. DESCRIPTION AND RESULTS MONITORING

A. Background, Problem Addressed, Justification

- 1.1 With a total population of 8.7 million, levels of access by Haitians to drinking water and sanitation are among the lowest in Latin America and the Caribbean. Considering an annual growth rate of 2.3% and a heavy rural exodus, Haiti's population will climb to 11.1 million in 2013, with 60% living in rural areas. The services provided are characterized by very low potable water coverage (about 50% of urban residents and 30% for rural residents), unreliable supply, and untested water quality. Water and sanitation surveys conducted as part of the 2003 population census¹ give a fairly good idea of the situation: i) just 8.5% of houses are connected to a water distribution system; ii) 32% of the population takes water from rivers; iii) 32% uses spring water for drinking.
- 1.2 Studies carried out for the UNDP indicate that no less than 76% of the Haitian population lives below the poverty line (i.e. on less than US\$2 per day) and 56% in conditions of extreme poverty (less than US\$1 per day). On average, the per capita income in the extremely poor households amounts to US\$0.44 per day and per person. These studies found that poverty is far more entrenched in the rural areas than in urban areas.² Sanitation services are virtually non-existent with a 30% access to sanitation.³ The country has no sewer systems. Most households are equipped with rudimentary latrines or simple hole dug on the property. The causes of the current situation include:
 - a. The lack of political will in the past administrations, to consider improving the water and sanitation sector as a national priority, resulting in the absence of coordinated actions among the different ministries with responsibilities in the sector, Public Works, Health, Environment, as well as a lack of involvement of the regional and municipal entities.
 - b. Lack of investment. Efforts to build up the sector during the 1980s stopped and the works have not been maintained, leading to their gradual deterioration. In urban areas, the deterioration of works is patent. In rural areas, lack of systematic monitoring means that no one knows whether the investments made are still in service.
 - c. Bankrupt operational management. The two national operators in charge of the sector do not cover their operating costs and do not attach any real priority to generating revenue. CAMEP and SNEP's revenues only cover 70% of their operating costs.

¹ RGPB Survey – Summarized available data in the study “*étude pour une organisation institutionnelle optimale en vue de l’approvisionnement en eau potable et la fourniture de services d’assainissement de base aux populations*”- March 2008.

² The average income per household in rural areas is approximately US\$600 per year.

³ WHO/UNICEF Joint Monitoring Program 2006.

- d. Lack of human resources. Successive waves of emigration have hollowed out many of the sector's most competent staff. The remaining personnel manage a situation of water shortages under a situation that is not conducive to developing professional skills (1 million Haitians left their country between 1971 and 1982).⁴
- 1.3 The evaluations indicate that about US\$1 billion will have to be invested to attain the MDGs for access to water and sanitation by 2015. This represents an investment in the order of US\$150 million a year.⁵
- 1.4 Potable water services are currently provided by two public entities placed under the authority of the Ministry of Public Works, Transport and Communications (MTPTC), the *Centrale Autonome Métropolitaine d' Eau Potable* (CAMEP), covering Port-au-Prince's metropolitan area, and the *Service National de l'Eau Potable* (SNEP), serving the rest of the country. Aware of those problems, the Haitian government has prepared an institutional reform and a framework law that should lay the foundations for the harmonious development of the sector. The reform is based on the following principles:
- a. Creation of a national water and sanitation directorate (DINEPA).⁶
 - b. Creation of several regional water and sanitation offices (OREPAs)⁷ to replace the Metropolitan Water Utility (CAMEP) and the offices of National Water Service (SNEP) in managing water and sanitation systems.
 - c. Standardization of the water supply committees in rural (CAEPAs)⁸ and (CEPA) suburban areas.
 - d. Involvement of the private sector in operational management of the sector.
 - e. Adoption of a Rate Decree for optimum management of the sector under conditions that would be acceptable to all social groups.
- 1.5 This reform was outlined in the "*Loi Cadre portant sur l'Eau Potable et l'Assainissement*" (*Loi Cadre*), which was approved unanimously in Congress in January 2009 and was published in March 2009. It is contemplated in the new *Loi Cadre* that DINEPA will manage the transformation of the sector and will ensure the transition from CAMEP and SNEP towards the decentralized structure, while maintaining its role as the policy setting entity for the sector, as envisaged by the *Loi Cadre*.

⁴ Library of Congress

⁵ According to the Strategic Sector Plan financed by IDB – April 2008.

⁶ "*Direction Nationale de l'Eau Potable et de l'Assainissement*": DINEPA, formally known as Cellule EPA and the executing agency for loan 1010/SF-HA, operates now under a wider mandate.

⁷ *Offices Régionaux d'Eau Potable et d'Assainissement*: Regional Water and Sanitation Operators.

⁸ "*Comité d'Eau Potable et d'Assainissement*" and *Comité d'Eau Potable et d'Assainissement* : community based operators in rural and peri-urban areas.

- 1.6 **Role of the Bank.** The IDB is the largest contributor to the water and sanitation sector in Haiti: as of April 2008, the IDB's outstanding financing represented 57% of total investment resources for the sector. The current execution portfolio includes the following two loans:⁹ (i) the Potable Water and Sanitation Sector Reform (loan 1010/SF-HA) for US\$54 million, which aims at improving water and sanitation services in Haiti in a sustainable manner, through investments and the establishment of an institutional framework for the water and sanitation sector. This loan¹⁰ is supporting infrastructure investments in five intermediate cities consisting of St Marc, Port de Paix, Les Cayes, Jacmel and Ouanaminthe; and (ii) the Rural Water and Sanitation program (loan 1780/SF-HA) for US\$15 million, which is supporting investments in rural areas of the departments of Grande Anse, Nippes, Artibonite and Ouest. So far, the execution of loan 1780/SF-HA has yielded the following results: (i) three firms were contracted in the departments de l'Ouest, Grande Anse and Nippes to carry out the community development activities and the pre-feasibility analyses; (ii) in Ile de la Gonave, a SNEP office is being set up to attend the local communities and the existing offices of Grande Anse have been strengthened.
- 1.7 **Donor coordination.** The Spanish Government (GOS), through the Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean (SFW), will be providing US\$10 million on a non-reimbursable basis. The GOS is very active in the water sector in Haiti through its *Oficina Técnica de Cooperación* (OTC) and through the UNDP. The project teams from the OTC and the IDB have been coordinating their work closely in preparing the proposed project. The Bank has also been coordinating with other institutions with the objective of building a national consensus around a common approach to providing water and sanitation services [specifically with the *Agence Française de Développement* (AFD), the European Union (EU) and more recently the Caribbean Development Bank (CDB)]. It is also coordinating more generally its actions with the different actors of the sector, including the NGOs, through the *Table Sectorielle*.¹¹ In the rural sector, the Bank has also been working closely with the World Bank (WB) and the United Nations Development Program (UNDP). In an effort to harmonize procedures among donors, the Operational Manual for loan 1780/SF-HA is the same as the one used for the intervention of the World Bank in the rural sector in the department *du Sud*. It will be updated with adjustments for this operation.
- 1.8 Justification and conceptualization of the project. SNEP and the MTPTC jointly selected the department of the Artibonite (1.5 million inhabitants), as one of the four departments that have benefited the least from international aid in the sector. In addition, the Artibonite was qualified as being in a critical

⁹ The execution of those loans is considered satisfactory in the latest Project Performance Monitoring Reviews (PPMR).

¹⁰ On September 30th, 2009, the Board of the IDB approved a US\$39 million operation that complemented loan 1010/SF-HA with a strong emphasis on sanitation. This operation is funded both by the SFW and by the IDB Grant Facility for US\$20 million and US\$19 million respectively.

¹¹ Donors and Public sector's thematic coordination group led by DINEPA.

situation with respect to access to potable water (Poverty Map of Haiti, 2004). Approximately 50% of rural population in the Artibonite has access to water, which is not necessarily potable and 15% of the population has access to some form of sanitation.¹²

- 1.9 Consistent with the lessons learned in previous IDB-financed programs, as well as programs funded by other donors and the new sector structure established in the *Loi Cadre*, this operation will support the establishment of autonomous community-based water committees (CAEPAs) in villages with populations consisting of a maximum of 5,000 people. The communities will make all of the important decisions related to their own projects: from deciding to participate in the program in the first place to choosing between alternative systems with different costs. DINEPA's *cellule rurale* will play a supporting role (Section III).
- 1.10 Access to the program will be demand-driven. DINEPA will execute the projects through community advisors¹³ that will be contracted to work with the communities during identification, construction, operation and follow-up of the projects. The construction of the systems will be carried out in clusters to the extent possible to achieve economies of scale and increased efficiency. All contracting will be conducted through public biddings. The program will fund the capital costs of water and sanitation investments through grants. The communities will pay for the operation and maintenance of the systems through the levying of tariffs on the users. The community participation activities will ensure that water and sanitation systems, and as a result tariffs, are commensurate with the communities' capacity to pay. In addition, a follow-up program allowing for a continued technical and management support will be provided to communities operating and maintaining water supply systems as it was demonstrated in the past that continuous technical support is critical to ensure sustainability of the potable water and sanitation systems.
- 1.11 **Country strategy.** The operation is aligned with the Country Sector Strategy for 2007-2011 (GN-2465), specifically with the objective of "Improving access and coverage to basic services, with the improvement of potable and sanitation services". The operation will also contribute with rural communities to the Bank's Water and Sanitation Initiative, specifically to its second objective of "3,000 Rural Communities".
- 1.12 **Strategy of the GOH.** This operation is also consistent with the Government of Haiti's strategy for the sector¹⁴ (compiled in the Water Sector Strategic Plan financed by the IDB and the GOH's strategy for the sanitation sector, in that it supports the implementation of potable water and sanitation activities and supports the organization of the sector.

¹² Evaluation des besoins en eau potable et assainissement, profile des communautés rurales dans les départements de l'Artibonite, Grand'Anse et Ouest.

¹³ Community advisors may be community development organizations, NGOs and consulting firms.

¹⁴ *Plan d'Actions Prioritaires* 2009/2011

- 1.13 **Strategy of the Spanish Cooperation.** Haiti is a priority country for the Spanish Cooperation (AECID) and access to water and sanitation is a strategic line of action within its Strategic Objective of increasing human capacity. Additionally, the Spanish Cooperation has identified the department of the Artibonite as one of its priority geographical zones for assistance. Furthermore, on July 24, 2009, the GOS and the IDB signed the Framework Document for the Establishment of the Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean (SFW). The main objective of the SFW is to contribute to the funding of projects, programs and activities to help accelerate the individual and collective social and economic development processes of the Bank's member countries in Latin America and the Caribbean in all areas related to water and sanitation, in order to assist those countries in pursuing that purpose and attaining the relevant Millennium Development Goals. The specific objectives of the Fund are: (i) to expand access to drinking water while ensuring the sustainable use of natural resources; (ii) to expand access to basic sanitation services while ensuring the sustainable use of natural resources; (iii) to encourage the comprehensive management of water resources and; (iv) to strengthen the governance of the water sector while promoting the transparent and participatory management of water resources.

B. Objective, Components and Cost

- 1.14 The proposed operation of US\$10 million from the SFW is supplementary to the loan 1780/SF-HA and will focus on the department of the Artibonite (loan 1780/SF-HA was covering: the Artibonite, Grande Anse, Nippes and Ouest; however, due to budget limitations, no activities were developed in the Artibonite). The proposed operation will have similar components as loan 1780/SF-HA (see optional link on history of loan 1780/SF-HA) and will focus exclusively on the Artibonite. In addition, as it is expected that new projects will be coming on stream, it is critical that the institutions involved in the sector be strengthened. In that respect, the project will include a support to DINEPA and to the future decentralized OREPA Centre, in coordination with other programs funded by the GOS.
- 1.15 The objective of this operation is to improve the quality of life and sanitary conditions of rural communities through the provision of sustainable potable water and sanitation services. The purpose of the program is to increase the number of households with access to sustainable water and sanitation services in rural communities. The proposed operation will comprise four components:
- 1.16 **Component I (US\$6.60 million): Investments in rural water and sanitation systems:** This component will finance the construction of water and sanitation systems and specifically, the following activities: (i) final feasibility studies and design; (ii) construction, expansion or rehabilitation of potable water and sanitation systems that will comply with established technical, financial and socio-economic and environmental criteria; (iii) protection of water sources; and (iv) supervision of works.

- 1.17 The component will also fund materials, construction of spring intake structures (or, in some cases well drilling/digging and/or pump installation), sedimentation basins, tanks, installation and putting the project into operation. Gravity-fed systems will be given priority consisting of simple integrated systems of intake, piping, regulation and distribution of drinking water by means of public fountains, and a small number of house connections, to serve one or more communities. Based on certain criteria, the program may also attend communities will want to rehabilitate their system. Each potable water project will include adequate means for the disposal of the excreta, either utilizing family latrines or, for households with a private connection, a more sophisticated disposal system. The sanitation infrastructure to be built will be small scale, mostly local infrastructure designed to mitigate the impact of residual water on the environment resulting from increased potable water supply. The program will also finance the construction of sanitary blocks in public schools and health centers (dispensaries) of the beneficiary communities.
- 1.18 The program will benefit approximately 60,000 new rural consumers through the construction of between 12 and 15 potable water supply systems for single communities or groups of communities. Studies and designs will have previously been extensively discussed and accepted by the community. The proposed technology will be compatible with the socioeconomic characteristics and interests of the population. Based on previous experience in the department of Grande Anse and L'Ouest under loan 1780/SF-HA, the new potable water systems have resulted in average per capita investment costs of approximately US\$80. However, initial studies conducted in the Artibonite in 2005 indicate that per capita investment costs may be substantially higher in certain cases. As a result, the eligibility criterion of US\$170 per capita investment costs as a threshold will be maintained for the Artibonite.
- 1.19 **Component II (US\$0.5 million): Promotion, community outreach and project initiation and follow-up:** This component will finance the following activities: (i) pre-investment community development activities leading to the establishment/strengthening of a local water committee; (ii) identification and prioritization of project proposals through a participatory process; (iii) preparation and submission by the communities of project proposals to the DINEPA; (iv) review of tariff schemes to cover operation and maintenance expenses; (v) training and technical assistance for the system's operator; (vi) outreach programs aimed at increasing environmental and public health awareness among the users of water systems; and (vii) follow-up activities after construction is carried out. This component will strengthen the capacity of the communities to identify, systematize and present their demands for services that respond to their needs. During the implementation of the project, the CAEPAs will be provided with training to assist them in organizing some of their administrative systems and procedures (i.e. inventory control, bookkeeping, etc.). The community outreach campaign will also cover environmental issues, including the protection of drinking water sources, as well as community hygiene and sanitation education.

- 1.20 **Component III (US\$0.90 million): Institutional strengthening:** This component will support the establishment of the future regional regulator, the OREPA¹⁵ Centre, the establishment of the rural departmental unit of the DINEPA and DINEPA with respect to the design and follow-up of rural projects. The component will specifically finance the following activities: (i) capacity building for local staff in the areas of accounting, administration, project management, environmental and social management and procurement; and (ii) contracting of additional staff and purchase of equipment. These activities will be properly coordinated with the staffing plan under preparation to be funded by the GOS.
- 1.21 **Component IV (US\$0.5 million): Eradication of Soil Transmitted Helminthes (STH):** This component builds upon the reduction of risks granted by the provision of water and sanitation services and by the hygiene education measures to support the eradication of STH in the department of the Artibonite and complements the activities of the Social protection and Health division (SPH) of the Bank (33% of the population of the Artibonite is affected by STH). It will finance: (i) bi annual campaigns of treatment through the provision of Anti-Helminthic drug; (ii) communication and education on STH in combination with awareness campaign for hygiene and sanitation; and (iii) monitoring and control activities. The execution and evaluation mechanisms will be the same as the ones used by the SPH division.
- 1.22 Administration of the project and support of the execution unit (US\$0.9 million): Resources from the project will support the executing unit, DINEPA, so that it can execute the project adequately. The component will strengthen DINEPA's capacity in the areas of community awareness, technical supervision and operation management, financing specialized personnel and training. It will also support the development of the *Observatoire de l'Eau* by establishing the database of the existing water systems in the department.

C. Costs and Financing

- 1.23 The financing will consist of US\$10 million from the SFW on a non-reimbursable basis. Costs are distributed as follows:

Program Components (US\$)	SFW	Total	%
Administration and supervision of the Program	900,000	900,000	9%
Components:			
1. Investments in rural water and sanitation systems	5,225,000	5,225,000	66%
1.1 Studies	1,040,000	1,040,000	
1.2. Inspection and supervision of civil works	335,000	335,000	
2. Community outreach, communication, project initiation and follow-up	500,000	500,000	5%
3. Institutional strengthening	900,000	900,000	9%
4. Eradication of soil transmitted helminthes	500,000	500,000	5%
Monitoring and evaluation	300,000	300,000	3%
Contingencies	300,000	300,000	3%
TOTAL	10,000,000	10,000,000	100%

¹⁵ Offices Régionaux d'Eau Potable et d'Assainissement: Regional Water and Sanitation Operators.

- 1.24 **Disbursement Timetable.** The disbursement period for the project is five years. The contemplated disbursement schedule is as follows:

Year	1	2	3	4	5	Total
SFW	1.48	1.25	4.05	2.24	1.09	US\$10 million
Percentage	15%	12%	40%	22%	11%	100%

D. Key Results Indicators

- 1.25 DINEPA will maintain a monitoring system to evaluate the progress of all project activities. DINEPA will collect and retain updated information on performance indicators and implementation plans. Program monitoring will be based on the Annual Operating Plans (POA) and the Results Framework. The indicators are described in more details in the Results Framework of the program in Annex II.
- 1.26 The main outcomes, extracted from the Results Framework, are presented hereafter: (i) Component I: number of new water and sanitation systems in participating communities complying with the national norms; (ii) Component II: Tariffs collected by CAEPAs that covers at least 80% of the operation and maintenance costs. The baseline will result from the update of the studies prepared under loan 1780/SF-HA.

II. MAIN RISKS

A. Environmental and Social Safeguard Risks

- 2.1 By improving water supply and sanitation coverage in rural areas, this operation will contribute to the health and well being of Haiti's population, especially in reducing illnesses due to waterborne diseases. Negative expected environmental impacts and risk are mainly related to water and sanitation infrastructure construction works and operations. During construction negative impacts and risk could occur from: inappropriate site selection, pollution of ground and surface water, occupational risks and waste. These impacts are likely to be local and short term for which effective mitigation measures have been designed. During operations risks of nuisance and health issues from increased waste water production could occur. This risk will be mitigated through sanitation activities which will be financed under Component I. A negative anticipated social risk is competition on scarce water resources that may generate tension within and between the communities. This is expected to be mitigated through a strong community outreach program.
- 2.2 Because of the potential impacts, which are considered to be minor to moderate, the project has been classified as Category "B" under IDB's Environmental Policy (OP-703). It is not anticipated that (OP-710) on Involuntary Resettlement will apply. Haiti lies in the middle of the hurricane belt and is subject to natural hazards (severe storms, occasional flooding, and coastal erosion). In compliance with IDB's Disaster Risk Management Policy (OP-704) adequate technical specifications will be used to mitigate these risks.

- 2.3 *A Rapport de Gestion Socio-Environnementale* was disclosed in January 2006 for loan 1780/SF-HA and a *Cadre Environnemental: Rapport de Synthese* (combined World Bank and IDB) was disclosed in August 2006. To take into account (OP-704, B.14 – Multiple Phase and Repeat Loan), an update of the existing documents including an evaluation of the application of the environmental and social procedures has been prepared and disclosed by the Government on October 27, 2009 and by the IDB on October 28, 2009.
- 2.4 An adequate budget to implement the ESA/ESMF is included in the project budget which includes the financing of: (i) environmental and social studies and audits (US\$100,000); and (ii) training and capacity building activities (US\$100,000). Site-specific ESAs and environmental briefs for activities which will be developed during project implementation will include a budget for the preparation and implementation of adequate mitigation measures. An Environmental Specialist will be hired by DINEPA under HA-X1013 to ensure implementation and supervision of the environmental and social aspects for this project.

B. Fiduciary Risk

- 2.5 The proposed operation does not present specific fiduciary risk given DINEPA's experience in the execution of Bank financed projects. DINEPA replaced URSEP (*Unité de Réforme du Secteur de l'Eau Potable*) created in 1998 for the execution of loan 1010/SF-HA and is currently overseeing all water and sanitation projects in urban and rural areas. For the past three years, the supervision visits conducted by the fiduciary specialists of the Bank were all satisfactory as well as the audit reports for the operations under its supervision. The staff of DINEPA is knowledgeable of IDB standards and procedures.
- 2.6 The execution of loan 1780/SF-HA, which was under the responsibility of the *Cellule Rurale* under the SNEP, was recently transferred to DINEPA and its key personnel will be incorporated into DINEPA to form the *Cellule Rurale* DINEPA. The *Cellule Rurale* will continue implementing the rural program under execution as well as this current operation. Its execution capacity will be increased through its inclusion within the structure of DINEPA.
- 2.7 In addition, the following arrangements are proposed:
- a. Procurement: COF/CHA will organize the training of DINEPA staff in late 2009. Ex-ante reviews will be done at the beginning of the execution, and ex-post reviews could be contemplated after the first 18 months of execution.
 - b. Financial Management: a training program will be proposed for at least two staff members, of the DINEPA finance section.
- 2.8 The technical visits for loan 1780/SF-HA from mid-2008 to mid-2009 indicated that DINEPA is lacking an updated planning management and planning system. Such system will be provided under loan 1780/SF-HA before the end of 2009.

C. Other Key Issues and Risks

- 2.9 **Institutional viability.** The implementation of *Loi Cadre* implies a transformation of the institutions of the sector, which is well documented in the Action Plan 2009-2011 for the Reform.¹⁶ As described below (3.1), the execution unit for loan 1780/SF-HA will be incorporated within DINEPA. With respect to the operational capacity of decentralized SNEP in the departments, it will be incorporated within the OREPAs, but will require some strengthening to ensure that the systems are adequately operated and maintained. The program will support the establishment of the OREPA Centre in charge of the department of the Artibonite and the *Cellule Rurale* DINEPA.
- 2.10 **Technical viability.** The program addresses public health deficiencies in a region that lacks adequate potable water and sanitation systems. The implementation of those systems will follow best practices in Haiti and will be executed based on prior agreement with the communities regarding technical solutions and costs.
- 2.11 Currently there is no database giving the information required for a rigorous analysis of a sample of projects similar to those to be implemented under the program. As a result, the project team has based its analysis on a range of possible projects, incorporating best practices in Haiti, and comparing them with the socio-economic situation in the communities and their ability and willingness to pay the cost of operating and maintaining the services in a sustainable way.
- 2.12 All of the technical solutions commonly implemented for rural projects in Haiti could be financed by the program. Project designs will follow the least cost principle. The program will fund reservoir, spring catchment, wells, protected springs and house connections. Gravity-fed systems will be given priority so as to reduce operation and maintenance costs. When the raw water requires disinfection to make it potable, the program will pay for simple chlorination facilities. Communities will be clustered to the extent possible to achieve economies of scale. The program may fund projects with domestic connections. Technical feasibility is based on the assumption that the communities, with the help of the community advisor, will select appropriate solutions. Even a modest project may lead to a worthwhile increase in the well-being of many rural communities and the program will support any technically and economically sound solution.
- 2.13 **Financial viability.** It has been demonstrated in many instances that water committees have been able to cover routine O&M expenditures from the revenues generated from public user contributions and private connection fees. Some have also managed to make major repairs and still were able to increase their capital fund. While revenue diversification efforts will be made by most CAEPAs, the revenues generated from private connections are expected to remain the most important for the vast majority of water committees.

¹⁶ “*Plan d’action 2009-2011 pour la mise en œuvre de la réforme*”.

- 2.14 The community advisor carrying out the feasibility studies will calculate and certify all tariffs that cover project costs, including operation and maintenance costs to cover emergency repairs to ensure that the project is sustainable in the long-run. The communities will select a project based on their willingness to pay that tariff, ensuring that it is financially feasible. The community advisor will make sure that a community does not select a project that is too expensive, putting excessive financial strain on the families.
- 2.15 The operational and maintenance costs of the systems to be financed through the program fluctuate between 3% to 7% of the total investment depending on the topography and distance from the source. Based on the samples that were examined, this translated to an average of about 10 gourdes per month (about US\$0.25) which is well within the affordability of the US\$2.00 daily earnings in the agricultural sector. These costs, however, represent the bare minimum required for a gravitational system to operate. Actual operation and maintenance costs can be higher in the case of water systems using pumping and for which energy costs can be significant. As a result, tariffs can range from 20 to 50 gourdes and are sometimes even higher when water is provided through pumping.
- 2.16 The program intends to finance simple systems that will require minimal operation and maintenance costs and for which the O&M costs are expected to fall within the parameters mentioned above. The feasibility studies will include an initial estimate of the tariff which will be discussed with the community and, if it is within parameters that are acceptable to the beneficiaries the final study will proceed. Systems whose operation and maintenance costs are above acceptable rates will be rejected. Borderline cases will be studied in greater detail and the study will include in addition to the willingness to pay an examination of the actual cost each family has to pay to obtain this resource vis a vis the proposed tariff which will be discussed with the beneficiaries and the community.
- 2.17 **Socio-economic viability.** A cost-benefit analysis was performed for a sample of projects. Only the projects with an internal rate of return (IRR) greater than 12% will be financed. From a sample, a threshold parameter (per capita cost) was deducted.
- 2.18 **Benefits.** There are two distinct and easily measurable benefits resulting from installing a rural potable water system. These are i) incremental benefits, which come from increases in water demand as families do not have to walk long distances to fetch water and can obtain it in the household or in a nearby fountains at a lower cost; and ii) non-incremental benefits, which result from cost savings in obtaining the current volume of water consumed by each family.
- 2.19 **Assessment and threshold parameter.** The economic assessment for the project is based on the analysis done for the current operation in execution, the “Rural Water and Sanitation Program” (loan 1780/SF-HA). In 2005, during the preparation of loan 1780/SF-HA, which was initially designed to cover the department of the Artibonite as well as Grande Anse and l’Ouest departments,

surveys were carried out in 80 villages in the three departments. These surveys provided information on the average cost of fetching water per family without project. This cost varied between 3.8 US\$/cubic meter and 7.4 US\$/cubic meter.

- 2.20 Additionally, during the preparation of loan 1780/SF-HA, a sample of 40 pre-identified villages, for which initial capital investment costs had been estimated, was analyzed with the goal of obtaining the economic assessment of each of these projects (net present values and IRR for each project). From these analyses the cut-off parameter was deducted to be US\$170 per capita corresponding to a 12% IRR. 78% of the projects analyzed are feasible because they fell below the US\$170 per capita investment cost.
- 2.21 In the first half of 2009, the bidding process for the first set of rural communities under loan 1780/SF-HA was carried out. The cost benefit analysis utilizing actual costs for each village resulted in an IRR that varied between 18% and 92%. In the case of the lowest IRR of 23%, this was for a community that would require pumping systems as opposed to gravity-fed systems. In terms of the actual per capita investment costs, these varied between US\$31 and US\$136 per capita, below the US\$170 threshold.
- 2.22 As a conclusion, the economic assessment for the project shows that the project is economically feasible. The investments in new potable water systems will have an Internal Rate of Return (IRR) of 12% or higher. It has been estimated that up to 15 rural communities in the department of the Artibonite will benefit from the project. The economic viability of each project will be one of the criteria to be used for the selection of the project's beneficiary communities. Those communities that result in a per capita investment costs of up to US\$170 or greater will be eligible for financing under components I and II of the project. Communities with per capita costs higher than US\$170 would require additional specific economic studies for each community. Preference will be given to those communities with low-cost sustainable and replicable solutions.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Executing Agency

- 3.1 DINEPA will be the executing agency, under the authority of its General Manager. The *Cellule Rurale* of SNEP, which was the executing agency for loan 1780/SF-HA, has been incorporated within the *Cellule Rurale* DINEPA, reporting to the Technical Direction of DINEPA. The *Cellule Rurale* DINEPA will be in charge of the planning and management of the project with a dedicated team consisting of a project manager, an engineer, a planning specialist and a communication specialist. The fiduciary and environmental and social aspects of the execution will be managed by the appropriate directions and units of DINEPA (see organizational structure of DINEPA in the Institutional Evaluation link).

B. Execution Mechanism

- 3.2 The project execution will be governed by the Operation Manual, which will be based on the existing Operational Manual of loan 1780/SF-HA, incorporating the experience gained in the execution of that operation and of other programs in execution in rural areas (World Bank and UNDP programs including those financed by Spain). Studies are being carried out to compile lessons learned from those operations. The Operation Manual will be developed as a tool to be shared with other sector initiatives funded by the GOS.
- 3.3 The project cycle will consist of five stages: (i) identification: the program is promoted and communities are selected; (ii) design: project preparation and eligible communities will constitute a CAEPA if it does not exist; (iii) execution: contracting of civil works including supervision and development of institutional strengthening component; (iv) transfer and operation: water and sanitation systems are transferred to the communities for their operation and maintenance (see Operation Manual).
- 3.4 Other execution aspects. In order to jump start the execution of the program, resources from loan 1780/SF-HA will be utilized to finance pre-feasibility studies for the rural water and sanitation systems (additional studies will be financed such as inventory of water resources in the Artibonite, regional planning for investment in the Artibonite and pre-selection of communities to benefit from the program).
- 3.5 Special contractual clauses have been set for the project:
- 3.6 Special contractual conditions precedent to first disbursement: **(i) the signing of an agreement between the MEF, MTPTC and DINEPA specifying DINEPA's obligations as the executing agency of the project; and the process for the transfer of the grant proceeds from the borrower to the executing agency and (ii) evidence that the Operation Manual of the program has entered into effect in accordance with terms and conditions previously agreed upon with the Bank¹⁷ and AECID.**
- 3.7 Special condition during Project Implementation: Implement the Environmental and Social Analysis (ESA) / Environmental and Social Management Framework (ESMF), which has been prepared by the Government and disclosed in the country on October 27, 2009 and in the IDB on October 28, 2009. Any changes and updates of this document will be made in consultation with IDB and will follow IDB environmental and social policies and requirements.
- 3.8 The execution mechanism for Component IV will be defined in agreement with both DINEPA and the Ministry of Health, taking into account the

¹⁷ The agreement of the OTC on the content of the Operational Manual of the Program and on the designated Project Manager and Environmental specialist will be sought.

recommendations of the team for HA-L1042, which has been involved in the definition of this STH component developed jointly by SCL/SPH and INE/WSA.

- 3.9 **Procurement of works, goods and services.** The procurement and disbursement requests will follow ex-ante reviews. Procurement of works, goods and services as well as the contracting of consultants will be governed by Bank Policies for the Procurement of Goods and Works and for the Selection and Contracting of Consultants (GN-2349-7 and GN-2350-7). The procurement plan prepared in collaboration with DINEPA is presented in Annex III.
- 3.10 **Coordination with the OTC.** The Bank will coordinate and consult with the OTC with respect to aspects concerning project implementation in accordance with the provisions set forth in the Framework Document as well as in the Operating Regulations of the Fund (document OP-207). The Operation Manual of the program will specify the processes for the participation of the Spanish Cooperation, through the OTC, in the management of the project.
- 3.11 **Monitoring and evaluation.** Throughout the execution period, DINEPA will be responsible to present periodic reports as follows: (i) an annual operational and financial audit report of the program to be submitted within 120 days of the end of each calendar year; (ii) a semi-annual audit of the procurement and disbursement process of the program to be submitted within 60 days of the end of each first semester of the calendar year; (iii) a final operational and financial audit report of the program to be submitted within 120 days after the date of the last disbursement; and (iv) an audit of the DINEPA at mid-term of the contract. DINEPA will be responsible for the contracting of independent auditing firms acceptable to the Bank which will be selected and hired in accordance with the procedures established by the Bank (document AF-200). The cost of the audits will be financed with program resources. The Bank and borrower have agreed to use the results matrix and the activities defined in the PEP as the Monitoring Plan for the operation.
- 3.12 **Revolving fund.** The Bank will establish a revolving fund corresponding to 5% of total resources. The funds will be transferred to DINEPA and be managed in a separate bank account in the project's name. The revolving fund will be used as per Bank policy, for the procurement of goods and services and will be based on the terms agreed for each individual contract. The revolving fund will be replenished on the basis of statements of expenses as the work progresses. No funds will be directly transferred to the beneficiaries.

RURAL WATER AND SANITATION PROGRAM

HA-X1014

CERTIFICATION

I hereby certify that this nonreimbursable investment operation was approved for financing under the Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean (SFW) at the 6 October 2009 meeting of the Executive Committee of Spain's Cooperation Fund for Water and Sanitation (FCAS) through a letter dated on 18 March 2010 and signed by Ms. Carmen Fuente, Director of the FCAS Office of the Spanish Agency for International Development Cooperation (AECID) of the Ministry of Foreign Affairs and Cooperation.

Also, I certify that resources from the Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean (SFW) are available for up to US\$10,000,000 (ten million United States dollars) in order to finance the activities described and budgeted in this document. This certification reserves resources for the referenced project for a period of 12 (twelve) calendar months counted from the date of signature below. If the project is not approved by the IDB within that period, the reserve of resources will be regarded as cancelled, and signature of a new certification will be required to renew the reserve. The commitment and disbursement of these resources shall be made only by the Bank in United States dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country, who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified hereinabove for the implementation of this program. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, for which the Fund is not at risk.

(Original signed)

3/19/2010

Marguerite S. Berger
Chief

Date

Grants and Cofinancing Management Unit
VPC/GCM

**Development Effectiveness Matrix
Summary**

Indicator	Score	Maximum Score
I. Strategic Relevance	High	
1. IDB Strategic Development Objectives	8.7	10
Country Diversification	2.2	2
Corporate Initiatives	2.5	2.5
Harmonization and Alignment	0	3.5
Beneficiary Target Population	4	2
2. Country Strategy Development Objectives	9	10
Country Strategy Sector Diagnosis	5.4	6
Country Strategy sector objective & indicator	3.6	4
II. Development Outcomes - Evaluability	Highly Satisfactory	
3. Evidence-based Assessment & Solution	2.8	10
4. Evaluation & Monitoring Plan	4.3	10
5. Cost-Benefit or Cost-Effectiveness	10.0	10
6. Risks & Mitigation Monitoring Matrix	7.5	10
III. IDB's Role - Additionality		
7. Additionality	3	10
Technical Assistance provided prior the project	3	3
Improvements in management of financial, procurement, monitoring or statistics internal controls	0	4
Improvements in environmental, health and labor performance	0	3

I. Strategic Relevance: This program is in a D country in the Caribbean. The program is aligned with water and sanitation corporate initiative . Country systems will not be used. The program is aligned to the country strategy.

II. Evaluability: There is consistency in its logic of intervention but the identification of institutional and health problems should be clarify . It presents the factors that contribute to the development of the problem, but there is not empirical evidence of the problem and the factors. There are indicator that are not SMART. The project has defined mechanism for monitoring and budget for this activity. A reflexive (before and after) evaluation will be conducted, but there is not specific evaluation plan. Economic analysis includes all components . Mitigation measures have been identified but there are not indicators to follow up the implementation of these mitigation measures.

III. Additionality: Additional Technical Assistance was provided to the public sector entity to increase the likelihood of success of the project.

RESULTS FRAMEWORKS / MATRIX OF INDICATORS									
	Project Objective:		Expand access to potable water and sanitation in a sustainable manner						
			in rural areas, improving the quality of life of the population						
COMPONENT of the PROJECT			INDICATORS						MEASUREMENT
				target values					
		baseline	year 0	year 1	year 2	year 3	year 4	year 5	
IMPACT: Quality of Life									
	Economic Rate of Return	%	12					Equal or greater than 12	Before / after Evaluation. Baseline as per Economic Evaluation
Component 1: Investment in rural water and sanitation									
	Works								
Outputs									
	12 new/rehabilitated potable water systems are built and operating according to design specifications	Nb	0				5	7	Final report of the project
	12 new sanitation systems are built and operating according to design specifications	Nb	0				5	7	Final report of the project
	Number of sanitary blocks built and operating in public schools	Nb	0			5	5	5	Reception of civil works
Outcomes									
	New consumers receiving potable water services through new or rehabilitated systems	Hab.	0				30,000	30,000	Reception of civil works
	New consumers receiving sanitation services through new or rehabilitated systems	Hab.	0				5,000	5,000	Reception of civil works

Component 2: promotion, community outreach, project initiation and follow-up			BASE	year 1	year 2	year 3	year 4	year 5	
	Inventory, diagnosis and pre-feasibility								
Outputs									
	DINEPA publishes a manual of processes guiding the intervention for water and sanitation in the rural sector	U	0	1					Publication of manual
Outcome									
	The project cycle is validated and established as the standard methodology for intervention in the Water and Sanitation sector for the rural area. (Design, construction, operation and Maintenance).	U	0	1					Manual is adopted by the Publication by DINEPA of a manual of processes guiding the intervention for water and sanitation in the rural sector
	Stakeholders strengthening								
Outputs									
	At least 12 CAEPAs (Community based water boards) and water operators have been constituted (Number of CAEPAs complying with those conditions).	Nb	0	3	5	7			Report from DINEPA Agreements signed stating rights and obligations of CAEPAs Final evaluation on number of CAEPAs operating properly
	The communities have accepted the program conditions. (Number of CAEPAs complying with those conditions).	Nb	0	3	5	7			Report from DINEPA Final evaluation on number of CAEPAs operating properly
	The CAEPAs (Community based water boards) and water operators have received training in management, operation and maintenance of water systems.	Nb	0	3	5	7			Report of the training organization
Outcomes									
	At least 12 CAEPAs are operating in a sustainable manner	Nb	0					12	Report from DINEPA

Component 3: institutional strengthening			BASE	year 1	year 2	year 3	year 4	year 5	
Outputs									
	The 3 engineers of the OREPA Centre have received training in management, operation and management of water systems and in community communication.	U	0		1	2			Final and intermediate report of the project
Outcome									
	The OREPA Centre will be able to adequately conduct its activities with adequately trained staff	U	0				1		Construction designs are carried out according to specifications as per supervision reports
Component 4: eradication of soil transmitted Helminthes			BASE	year 1	year 2	year 3	year 4	year 5	
Outputs									
	Annual campaign of deworming	U	0	1	1	1	1	1	Annual report of the Ministry of Public Health provided by SPH division
Outcomes									
	Percentage of the population in the communities benefitted by the program that are affected by the Geo-helminth in Artibonite	%	33% (Department of the Artibonite)		<25%	<20%	<15%	<10%	Annual report of the Ministry of Public Health / Special survey provided by SPH division

SUMMARY PROCUREMENT TABLE											
	Description of and category of procurement contract	Estimated cost in (US\$ thousand)	Procurement method 2	Review (ex-ante or ex-post)	Source of financing and percentage		Prequalification 3 (Yes/No)	Estimated Dates		Status 4 (pending, in process, awarded, cancelled)	Comments
					IDB %	FCE %		Publication of specific procurement notice	Completion of contract		
1	Goods										
3.5	Vehicles (2)	70	PC	ex-ante		100%	No	Sem1 2010	Sem1 2011	pending	
3.6	Motorbikes (3)	19.5	PC	ex-ante		100%	No	Sem1 2010	Sem1 2011	pending	
2	Consulting Services										
1.3	Technical studies of the WSS and tender documents	300	ICB	ex-ante		100%	No	Sem1 2011	Sem2 2011	pending	
1.4	Socio-economic feasibility and technical studies for latrinisation	100	QCBS	ex-ante		100%	No	Sem1 2011	Sem2 2011	pending	
1.8	Supervision of works (WSS and collective latrines)	335	QCBS	ex-ante		100%	No	Sem1 2012	Sem1 2013	pending	
2.1	Pre-feasibility studies and pre-selection	40	QCBS	ex-ante		100%	No	Sem2 2010	Sem2 2010	pending	
2.2	Participative awareness campaign	60	QCBS	ex-ante		100%	No	Sem1 2011	Sem2 2011	pending	
2.3	Awareness campaign for behavioral changes in hygiene,	80	QCBS	ex-ante		100%	No	Sem1 2010	Sem2 2011	pending	
2.4	Training of the water operators	60	QCBS	ex-ante		100%	No	Sem1 2012	Sem1 2013	pending	
2.5	Training and support to the social worker for sanitation program	48	QCBS	ex-ante		100%	No	Sem1 2012	Sem2 2014	pending	
2.6	Planning manager	165.8	QCNI	ex-ante		100%	No	Sem1 2010	Sem2 2014	pending	
2.7	Field engineer	165.8	QCNI	ex-ante		100%	No	Sem1 2010	Sem2 2014	pending	
2.8	Social worker	116.08	QCNI	ex-ante		100%	No	Sem1 2010	Sem2 2014	pending	
2.9	Other personels in Artibonite office (assistant and driver)	88.4	QCNI	ex-ante		100%	No	Sem1 2010	Sem2 2014	pending	
2.1	Coordinator of the project	221.02	QCNI	ex-ante		100%	No	Sem1 2010	Sem2 2014	pending	
2.1	Project accountant	116.08	QCNI	ex-ante		100%	No	Sem1 2010	Sem2 2014	pending	

[illegible]