

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: AB2390

Project Name	Haiti Rural Water and Sanitation Project
Region	LATIN AMERICA AND CARIBBEAN
Sector	Water supply (90%); Sanitation (10%)
Project ID	P089839
Borrower(s)	REPUBLIC OF HAITI
Implementing Agency	Service National de l'Eau Potable (SNEP) Haiti Tel: 509-2465300 or 2464131
Environment Category	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
Date PID Prepared	May 17, 2006
Date of Appraisal Authorization	October 5, 2006
Date of Board Approval	December 19, 2006

1. Country and sector Background

1.1. Country Background

Haiti is the poorest country in the Western Hemisphere. Average per capita income is comparable to the poorest countries of Sub-Saharan Africa, and Haiti ranks 153rd (out of 177 countries) in terms of the Human Development Index. About 78 percent of its population of 8.6 million lives below the poverty line, with 54 percent in extreme poverty. The country's health and social indicators are on the same level as those of the world's poorest countries: Haiti's child mortality rate of 118 deaths per 1,000 is far higher than the Latin American regional average of 33, and closer to sub-Saharan Africa's average of 171.¹

The rural areas exhibit the highest rate of poverty in the country. Of the 60 percent of the population who live in rural areas, 85 percent live on less than \$2 a day and 60 percent live on less than \$1 a day.² Rural education and economic opportunities are extremely limited, and basic social services are severely lacking. Basic rural infrastructure (e.g., water and irrigation, feeder roads, electricity, and sanitation) is virtually absent or severely depleted, reinforcing isolation and exclusion. Only 8 percent of rural households have access to water in their home or on their property,³ and just 11 percent of rural households have electricity, compared to 70 percent of the wealthiest quintile.⁴ These conditions contribute to rural-urban migration, especially into the capital, Port-au-Prince.

¹ WDI indicators, 2003

² SEDLAC database.

³ SEDLAC database.

⁴ *Enquête Sur Les Conditions de Vie en Haiti*, Institut Haitien de Statistique et d'Informatique, 2001.

Rural water coverage in Haiti is the lowest in the hemisphere. Data on water and sanitation coverage from different sources vary widely,⁵ but rural water coverage is estimated at between 52% and 59%. According to the Demographic and Health Survey (DHS) of 2000, the only source providing a breakdown, the rural population relied on the following water sources: 4% house connection, 32% standpipes (from piped systems), 6% protected wells (hand pumps), 10% protected springs, 2% rainwater collection, 31% from unprotected springs, 6% from unprotected wells and 9% from rivers or canals. This means that an estimated 2 million Haitians in rural areas rely on unprotected water sources, jeopardizing their health, as evidenced by very poor health indicators. In addition, significant time is spent to fetch water, which affects in particular women, children, and the poor.

Access to sanitation is also the poorest in the region. According to the Joint Monitoring Programme for Water Supply and Sanitation, Haiti is in a tie with Bolivia for the lowest degree of access to improved rural sanitation at 23 percent. The DHS results show a breakdown with only 12% having access to a private improved latrine and 8% using more basic traditional latrines, which offer only partial protection from the spread of fecal contamination. Another 14% have access to shared improved latrines, while 10% can access shared traditional latrines. Fifty-six percent of the population resort to open defecation. Over a quarter of children under five years of age had experienced an episode of diarrhea in the two weeks preceding the survey. Diarrhea is particularly common between the ages of 6 to 24 months, exceeding 40% in the two weeks before the survey. These statistics highlight the importance of improving sanitation and hygiene in the domestic environment, where such children spend the most time and are most vulnerable to infection.

Haiti is considered a “fragile state,” which is reflected in the poor quality of its institutions. The 15 administrations of the last 20 years lasted on average less than a year and a half each.⁶ Haiti’s political environment has been one of increasing insecurity, pervasive corruption, and a continuous weakening of state institutions and the rule of law. The changing and unreliable flow of external aid has exacerbated the situation, affecting levels of public investment and sustainability. Public institutions lack capacity, transparency, and accountability.

1.2 Sector Background

Institutional capacity for rural water supply is low, and nonexistent for rural sanitation. Rural water supply in Haiti is formally under the responsibility of the Service National de l’Eau Potable (SNEP), the implementing agency for the proposed project. According to the 1977 law creating SNEP (*Loi Organique du SNEP*) it is an “autonomous state entity with civil and legal personality enjoying all the rights and prerogatives derived from this status.” According to the law, SNEP is under the supervision of a Board (*Conseil d’Administration*) presided over by the Ministry of Public Works, and its day-to-day activities are managed by a Director General. SNEP is responsible for water supply outside the Port-au-Prince metropolitan area. SNEP has only limited capacity in rural areas and until recently focused its limited resources on urban

⁵ Data sources analyzed include the WHO/PAHO Water and Sanitation Monitoring System for Haiti, the WHO/UNICEF global Joint Monitoring Program (JMP) for Water Supply and Sanitation, the Ministry of Health’s Demographic and Health Survey (DHS) for 2000, as well as the World Bank’s World Development Indicators (WDI). All four sources show different coverage figures.

⁶ Draft Haiti Country Economic Memorandum, World Bank, May 10, 2006.

water supply in secondary towns. The Ministry of Health also has a rural water unit (POCHEP), but this unit is small and inactive for lack of funds. There is no institutional home for sanitation.

Without an institutional presence in rural areas, rural water supply and sanitation investment has been unplanned and piecemeal. Most investments in rural areas are carried out by non-governmental organizations (NGOs) and the Social Fund (*Fonds d'Assistance Economique et Sociale*--FAES). Between 2000 and 2004, over 40 different NGOs and donors contributed an average annual total of approximately \$3 million to the rural water sector.⁷ The Social Fund invested US\$1.1 million in nine water and sanitation projects in 2004-2005. There is little knowledge about levels of coverage and needs, and thus it is difficult to prioritize investments, which are carried out in a piecemeal manner and do not necessarily reach the neediest.

Local communities do not maintain infrastructure well. Many rural water systems are managed by water committees (*Comité d'Approvisionnement en Eau Potable*--CAEP), consisting of unpaid volunteers elected by the community, as well as in some cases by a plumber hired by the committee. The performance of water committees varies widely, ranging from some that regularly collect funds, deposit them in a Bank account, and perform chlorination and routine maintenance to those that are practically defunct. Most water committees seem to not perform their functions adequately and collect insufficient funds for operation and routine maintenance.

The government of René Préval elected in early 2006 intends to reform the water and sanitation sector through a framework law (*Loi-Cadre*). Since 1996, a draft water and sanitation framework law has been discussed in Haiti, but has never been adopted. The new government has taken the initiative to substantially rewrite the framework law and intends to submit it to Parliament. The framework law aims at the separation of policy/regulatory functions from operating functions, decentralization and the introduction of public-private partnerships. It aims at creating a water and sanitation directorate (DEPA) within the Ministry of Public Works (MTPTC) and regional water and sanitation companies. Furthermore, a rural water and sanitation unit in the Ministry of Health, called POCHEP, will be dissolved and integrated into the new structures. Ultimately, the law envisages the gradual transfer of the responsibility for water and sanitation to those municipalities that have proven their capacity to undertake these responsibilities. Municipalities would in turn have the option to delegate service provision to the private sector, municipal water companies, or water committees. The law would also--for the first time in Haiti--define legal responsibility for sanitation within the public sector.

The substance of the law is still under discussion and the new structures are not expected to be put in place soon, given that after the envisaged adoption of the *Loi-Cadre*, a *Loi Organique* for the regional water and sanitation companies would have to be elaborated and adopted before any new structures could be put in place. The submission of a draft framework law to Parliament is a condition for the second Economic Governance Reform Operation (EGRO II) submitted to the Board in parallel with this project.

1.3 Recent and on-going activities by the Bank and other donors in the sector

⁷ PAHO/WHO Haiti Water and Sanitation Monitoring System.

The Low-Income Countries Under Stress (LICUS) grant for rural water supply uses SNEP as an implementing agency. The LICUS project involves two components: (i) preparation of a national strategy for rural water supply and sanitation, and (ii) rehabilitation of water systems in three communities in the Southern Department. Progress on both components is satisfactory and has led to an increase of SNEP's capacity and motivation. A national workshop was held in November 2005 to discuss elements of the national strategy. Under the second component, a new management model (professional operators and volumetric tariffs) is being tested to increase system sustainability.

The national strategy for rural water supply and sanitation initiated under the LICUS grant foresees a strengthening of SNEP's capacity to intervene in rural areas and the establishment of a closer partnership among SNEP, NGOs and local government. It involves two parts: A largely completed operational strategy that will determine the content of SNEP's cooperation agreements (*protocols d'accord*) with NGOs in terms of technical specifications and community contributions; and a global strategy that will include an investment program to be funded by various donors and a better definition of the roles of various actors in the sector. The operational strategy is expected to be finalized first, at a request of SNEP, and the global strategy will be finalized at a later stage once the framework law has been passed.

This project is closely coordinated with the Inter-American Development Bank (IDB), which is the focal point for the sector according to the Interim Cooperative Framework (ICF). The project is being executed in parallel with a US\$15m IDB-supported rural water and sanitation program.⁸ The Bank's financial contribution, though modest, has enabled it to play a valuable intellectual role in the design and preparation of the program. Elements of the program that have resulted from Bank involvement include the use of SNEP as an implementing agency, professional operators, and incorporation of a hygiene and sanitation component. The IDB will intervene in four departments (Grande Anse, Nippes, l'Ouest and l'Artibonite), while the proposed project will intervene in one (South) and in small parts of Nippes that are best reached from Les Cayes, the capital of the Southern Department. Both banks will use a similar selection mechanism for participating localities and the same operating manual.

The IDB also has supported the execution of a "Sector Reform Program" since 1998. The program intervenes mainly in urban areas, in particular in five towns whose water systems are managed by SNEP (Les Cayes, Port-de-Paix, Saint-Marc, Ouanaminthe and Jacmel). The goal is to provide more autonomy to operating centers of SNEP that operate these urban water systems, while strengthening the role of municipalities in secondary towns. The project is not executed by SNEP, but by a Project Management Unit (PMU) under the Ministry of Public Works (MTPTC). It also covers some rural systems near the above-mentioned towns.

The Bank's Community-Driven Development Project (CDD) complements the Rural Water and Sanitation project. The CDD project transfers resources to local community organizations in poor communities by (i) improving access to basic infrastructure and support income-generating activities at an estimated average

⁸ The IDB uses the term "program" for its overall intervention and the term "project" for each intervention in a particular locality.

cost of \$20,000 per activity, and (ii) improving governance and building social capital of communities by increasing citizen participation and transparency. The CDD project will ultimately cover almost half the country's rural communities. Concerning water supply, investments are limited to a small range of technical options (essentially hand-pumps). The water and sanitation project complements the CDD project, because it allows the financing of high-priority investments that could not be included under the CDD project because of their size. The proposed project will overlap geographically with the first phase of the CDD project in the Southern Department. The CDD project is implemented by the PL-480 Management Office under the Ministry of Planning and NGOs.

2. Objectives

Development Objective: Increase access to and use of water supply and sanitation services in participating rural communities.

Specific Objectives:

- Increase the sustained and effective use of safe drinking water in participating communities;
- Improve use of effective sanitation and hygiene practices in participating communities;
- Strengthen the capacity of the implementing agency, local water committees, and professional operators in cooperation with local government.

Given low capacity in the Haitian public sector and previous implementation experience with Bank projects in Haiti, (i) project design has been kept very simple, (ii) substantial capacity building has been included, and (iii) objectives have been kept modest. At the same time, coordination with other stakeholders (government agencies, donors, and NGOs) is being actively sought beyond the partnership with IDB, which is financing a parallel project to support the rural water and sanitation program.

Key indicators will be: Number of beneficiaries gaining access to and using sustainable⁹ water systems¹⁰ in participating localities, and number of beneficiaries gaining access to and using basic sanitation systems¹¹ in participating localities.

⁹ Systems are considered to be "sustainable" if (i) the systems are functioning as intended and deliver the service either continuous or regularly depending on the service level selected; (ii) the water committees meet on a regular basis; (iii) tariffs are set at a level that guarantees operation and maintenance of the system, and collected; and (iv) the systems are designed to ensure long-term supply (designed appropriately for yield of source).

¹⁰ "Water systems" in terms of this project means systems that are "improved" according to the Joint Monitoring Programme definition of "improved" water supply. (e.g. Improvement in the access to piped water (for those households without access to piped water) or protection of a previously unprotected source.)

¹¹ "basic sanitation systems" in terms of this project means systems that satisfy the Joint Monitoring Programme definition of "basic" sanitation contributing towards the MDG Target. (e.g., both simple and Ventilated Improved Pit latrines, twin pit pour flush latrines, septic tanks etc) which protect the user and the community from fecal contamination,

3. Rationale for Bank Involvement

The project was identified and prepared according to the Transitional Support Strategy (TSS). The TSS was endorsed by the Bank's Board of Directors on January 6, 2005, and included \$132 million in credit and grant commitments over a two-year period, with a focus on poverty alleviation through improved access to basic services and infrastructure. The two-year strategy aimed at restoring hope by supporting: (i) basic services provision; (ii) job creation; (iii) rehabilitation of areas devastated by floods in 2004; and (iv) community initiatives in local development. The strategy also focused on restoring credibility in Haiti's public institutions by strengthening economic governance and institutions, bolstering efforts to fight corruption, improving transparency, and promoting inclusion and consensus-building on development priorities.

The proposed Interim Strategy Note (ISN) for Haiti reflects a continuation of the strategic focus of the TSS. The ISN will follow the twin strategic pillars of the TSS: to deliver hope to the population by helping the Government deliver quick wins in the provision of basic services and job creation; and to restore credibility in Haitian institutions by deepening reforms that promote long-term good governance and institutional development. The strategy will focus on selective interventions in areas where the Government has requested support from the Bank, and where the latter has a comparative advantage and complements other donor support. The ISN will be presented to the Bank's Board of Directors concurrently with this project.

The project supports the ISN in terms of helping the Government deliver quick wins in the provision of basic services and restoring credibility in Haitian institutions. By using the public agency in charge of the sector to deliver services, unlike in the case of most other projects in the sector, the project restores credibility in Haitian public institutions. This is also in line with the recommendation of the Haiti Country Economic Memorandum to improve the capacity within state utilities.

The emphasis on strengthened public institutions is reflected in the proposed project's focus on capacity building within the public institutions in the sector. The project would initially work with the staff of SNEP, which currently still is the national entity responsible for rural water supply. SNEP has demonstrated capacity and their performance under an earlier LICUS grant has been positive. Once the new structure of the sector is in place, responsibility for executing the project is expected to be largely transferred to the regional water and sanitation company in the project's intervention area. Some functions are expected to remain at the national level with the water and sanitation directorate in MTPTC or an associated structure for rural areas. Support to the national-level institutions will be provided primarily under the parallel IDB operation.

The LICUS grant for rural water supply has provided the Bank with useful hands-on experience in working with SNEP as the implementing agency, strengthened SNEP's role in the rural sub-sector, and increased its project management capacity. The LICUS grant has given SNEP experience in Bank financial management and procurement procedures. For the implementation of the grant, SNEP staff have already set up a separate accounting system, developed an operational manual and familiarized themselves with Bank's financial management and disbursement procedures. Furthermore, the support by Engineers Without Borders-Canada

has proven valuable during the LICUS project in terms of strengthening the capacity of SNEP to carry out project management, procurement and *ingénierie sociale* (see below). The arrangement is expected to be continued under the current program.

The project will use a comprehensive methodology known under its French term as “ingénierie sociale”, for which there is no appropriate English translation.¹² “Ingénierie sociale” is defined as a set of support activities that will:

- Ensure that project activities respond to user demand, and that users are consulted in every important phase of the project;
- Create all necessary relationships among stakeholders for joint activities, and to formalize these relationships through contracts if necessary ;
- Ensure that conditions are created that will allow services to be provided on a sustainable basis;
- Strengthen the capacity of community-level stakeholders who will be involved in all phases of the project.¹³

The Rural Water and Sanitation Project thus aims to marry the benefits of a community-focused, demand-driven approach with the benefits of having a competent sector agency involved in terms of procurement, financial management and technical know-how in the design and supervision of good-quality works.

The project will build on the beneficial social dynamics created under the CDD project through its strengthening of community-based organizations for those communities where the projects will overlap. The training and capacity building for community-based organization under the CDD project would support the implementation of RWSS. SNEP and its service provider will have to coordinate with PL-480, the executing agency of the CDD project, and its service provider in the Southern Department, PADF, in order to ensure that the two complementary approaches are clearly presented to communities.

While many aspects of the project are similar to the CDD approach, there is one key difference: Communities are not expected to manage funds or to undertake procurement. Most works contracts are expected to be well above the threshold of US\$ 20,000 currently used under the on-going Haiti CDD project (US\$38million). Having communities manage such large sums has not been tested so far and would entail risks.

The project is coordinated with and complements the CDD project (see above) and other Bank projects in Haiti. The project is consistent and complementary with the completed Economic Governance Reform Operation (EGRO I, \$61 million) and an Economic Governance

¹² “Ingénierie sociale” is not to be confused with the English term “social engineering” which has a completely different meaning. Community development, community mobilization, community outreach and community participation all describe only specific facets of this comprehensive approach. The concept of “ingénierie sociale” has been developed in Haïti in the mid-1990s with the highly successful project to provide water to slum areas of Port-au-Prince using local water committees in partnership with the utility CAMEP, using a service provider (NGO) to facilitate the relationship.

¹³ SNEP, Stratégie Eau Potable et Assainissement en Milieu Rural, Directive Opérationnelles, June 2006, p. 18

Technical Assistance Grant (ECTAG I, \$2 million). The EGRO I focused on strengthening the government's procurement and budgeting practices is consistent with similar work of this project within a single government entity. A second phase of EGRO (EGRO II) is being prepared that will include additional conditionalities for water sector reform, following on the process started in EGRO I to conduct financial, management and technical audits of CAMEP.

The project is expected to improve economic governance and capacity within the public sector in Haiti. The project will, for the first time in Haiti, carry out a systematic assessment of needs and coverage levels for water supply and sanitation in one region, linked to a transparent system of selecting participating communities on the basis of objective criteria. These criteria will include estimates of needs, costs, and community commitment. In addition, the project will ensure that selection of participating localities is also perceived by key local stakeholders as being objective. Furthermore, the project's focus on capacity building within the implementing agency concerning financial management and procurement contributes to the overall strengthening of public sector institutions and economic governance at a higher level.

This project will contribute to the higher level objective of improved health in Haiti. Intestinal infection (largely diarrhea) is cited by PAHO¹⁴ as the leading cause of death in children under five, and the second leading cause of infant mortality, (exceeded only by perinatal infections occurring in the first month of life). According to the most authoritative available estimates, 87% of the burden of diarrheal disease in LAC is attributable to unsafe water and sanitation.¹⁵ (The methodology of health outcome evaluation of water, sanitation, and hygiene interventions for an individual project such as this is complex, uncertain, and expensive, so health outcomes are not listed in the project results framework.) The evidence from global epidemiological experience is clear-cut, however, and indicates that water, sanitation, and hygiene interventions can reduce diarrheal disease by as much as fifty percent—far more than simple water supply interventions alone.

The project will contribute to social cohesion through helping communities make decisions collectively. Water is a good entry point for a community development project as it is used by all and serves a variety of needs. It provides a natural common issue around which the community can unite. The LICUS grant has given the Bank valuable experience in how to effectively mobilize the community around water management.

4. Description

The project has two components, the first one aimed at strengthening the capacity of SNEP and the second one aimed at directly providing services to communities. **The project design has been kept very simple, while differing in important respects from how interventions in the sector have been carried out so far:**

- The project will build, for the first time in rural water supply and sanitation in Haiti, a **close partnership between a public entity (SNEP) as the implementing agency and a service provider (most likely an NGO)** working under the direction and

¹⁴ *Infant mortality in Haiti*, www.paho.org/English/DD/PED/Infant_mortality.ppt, downloaded 4/27/2006.

¹⁵ *The Global Burden of Disease and Risk Factors*, Disease Control Priorities Project, The World Bank 2006.

leadership of the public entity. This approach is being promoted both at the national and departmental level.

- The project will, for the first time in rural water supply in Haiti, **select participating communities based on objective and transparent criteria** in a systematic, department-wide process.
- Building on the experience of the LICUS grant, the project will involve **professional operators** in the operation and maintenance of water systems and introduce volumetric tariffs, in order to promote greater sustainability.
- Concerning sanitation, the project will not build entire individual latrines, but it will test a more cost-effective approach by providing only slabs and working closely with communities to motivate them to build superstructures and to dig holes (**sanitation promotion**).

Component 1: Capacity Building and Project Management

The activities under this component aim at managing the project and strengthening the capacity of SNEP. The component includes four main activities.

- First, it will strengthen SNEP's regional office in Les Cayes through the recruitment of two consultants who are expected to become staff after project closure, as well as through the provision of cars, office space and coverage of operating expenses.
- Second, it will finance services for an international partner organization to assist in project management, documentation, reporting, information technology and supervising the work of the service provider, based on an earlier successful partnership initiated under the LICUS grant. This activity is foreseen over a period of two years, with the aim of making the assistance unnecessary during the remainder of the project.
- Third, the Bank would finance services for surveys to monitor the achievement of performance indicators one year after the construction of water and sanitation systems.
- Fourth, it will assist SNEP in finalizing and disseminating the national rural water supply and sanitation strategy initiated under the LICUS grant mentioned above.

This component complements the work done under the LICUS grant on a National Strategy for Rural Water Supply and Sanitation. The strategy has two parts: Operational and Global. The Operational part of the strategy is being developed as a tool to help SNEP and MTPTC plan its work and investments and coordinate the work of other actors in the sector. This should support the public sector's planning and coordination capacity in the rural water and sanitation sector. The global part of the National Strategy should provide the broader framework into which the operational strategy fits, and offer a far-reaching view of what is required to achieve long term sector goals. The global strategy will be developed after the operational strategy and will reinforce MTPTC's policy role in the sector.

The component complements US\$3m for capacity building to be provided by the IDB under its parallel financing. The IDB financing covers two areas: First, it aims at strengthening SNEP's functions in rural areas in close relation with the investment component, with an emphasis on community development and procurement. Second, it will strengthen SNEP's overall capacity throughout its mandate, including rural and urban areas. It foresees the hiring of

an advisor to the Director General for the first two years of the project and the strengthening of the technical and financial departments of SNEP. It also foresees an assessment of SNEP's human resources in view of a rationalization of its personnel and salary structure. In addition, the IDB will finance vehicles, equipment, and recurrent costs necessary for the project.

Component 2: Water supply, basic sanitation and hygiene promotion

This component will enable participating communities to access and manage water supply and basic sanitation services. This includes the identification of participating communities based on objective criteria; *ingénierie sociale*¹⁶ using a participatory approach allowing communities a series of choices;¹⁷ engineering design; system construction and supervision; and support during the early years of system management. The project will promote the innovative management approach piloted under the LICUS grant involving professional operators, increased cost recovery, metering, and the use of water kiosks instead of standpipes.

The component is expected to have two windows: one for large-scale investments and a second for small-scale investments. The large-scale investment window would mainly finance piped gravity systems supplied by springs in localities with about 1,000 to 5,000 inhabitants.¹⁸ The piped systems will feed water kiosks and house connections. Water kiosks consist of a small concrete structures with faucets on the outside and taps on the inside, thus allowing kiosk operators to sell water by the bucket. Both water kiosks and house connections would be metered. If pumping should be necessary and cost-effective, the project would give a strong preference to renewable energy. Given widespread theft of photovoltaic cells in Haiti, wind energy would be the preferred source of energy, relying on hurricane-proof new technologies as they are currently being tested in the North of Haiti under a pilot project supported by the World Bank's Development Marketplace. The window would also support the construction of *blocs sanitaires* next to schools and health centers in localities that have been selected to benefit from water supply systems under the large-scale investment window. A *bloc sanitaire* is a concrete structure with toilets and basic water supply fixtures in two compartments, one for men/boys and one for women/girls. The large-scale investment window is expected to account for 80-90% of investments, although the allocation between the windows is meant to be flexible. The small-scale investment window would contribute to financing hand pumps, rainwater harvesting systems and household latrines. Water investments under this window would be selected based on prioritized lists established in a participatory manner at the commune level with the support of the CDD project, given that the CDD project would not have sufficient funds to finance all prioritized investments. Latrines are expected to be financed only in localities benefiting from investments in water systems, in order to be able to carry out hygiene promotion in a credible manner and in order to maximize health impacts.

The financial policy under the program includes the following key elements:

¹⁶ See explanation further above.

¹⁷ The proposed key choices are: choice between different water service levels (house connection or water kiosk) and sanitation service levels (pit latrine and VIP latrine) implying different costs to users; choice in the tariff structure (pure volumetric or combined flat rate and volumetric) and level (covering only operating costs and basic maintenance, or including a reserve for major maintenance).

¹⁸ Under exceptional circumstance localities with up to 10,000 inhabitants would be considered.

- **Tariffs:** Communities will charge tariffs that recover at a minimum full operation and routine maintenance costs. All consumption from piped systems is expected to be metered and tariffs will be volumetric. There will be tariffs for water sold in buckets at water kiosks, as well as tariffs for house connections, both residential and for public buildings. House connections will have a fixed portion including a minimal consumption and a volumetric portion for consumption exceeding the minimum. Tariffs for the use of hand pumps will be flat rates per household and month.
- **Up-front financial contribution:** Communities are required to come up with an up-front financial contribution before technical studies will be initiated. The purpose of the contribution is to be an indicator of willingness to pay. It should cover, at the minimum, several months of operation and routine maintenance costs of the system. These funds would not be mingled with project funds, but would rather be used by the community for small initial purchases (e.g. for chlorine, a motorcycle, etc.) or be kept in a reserve for repairs.
- **Pass-through conditions for investment funds:** Following common practice in Haiti and in many other countries, project funds for investments will be passed through to the community as a grant, given limited ability to pay and given that in urban areas so far utilities in Haiti are not required to pay back investment funds either.

Participating localities for the large-scale investment window will be selected based on objective, transparent criteria. A tentative long list of about 40 localities has been established that would be reduced to a short list of about 12 localities based on an objective eligibility and priority criteria. Eligibility criteria include availability of a nearby sufficiently productive, good quality source of water; protection of the source or indication of willingness and likelihood that the source will be protected; estimated per capita costs of less than US\$200; acceptance to pay volumetric tariffs covering operation and routine maintenance costs; acceptance of the professional operator model; a formal letter requesting to be included in the project; and payment of an up-front financial contribution into a fund managed by the water committee. If the number of eligible localities is greater than about 12, participating localities will be selected based on priority criteria. These include greatest needs (as measured by average walking distance to currently used sources of water) and lowest estimated unit costs (as measured by estimates of the required works and the number of houses in the locality assessed based on satellite pictures). Data to estimated costs and benefits will be collected by the service provider on behalf of SNEP.

Sanitation and hygiene promotion will be carried out in the same communities in which water services will be improved. This allows for the creation of synergies among water supply, sanitation, and improved hygiene interventions. SNEP and Haitian NGOs have experience in the construction of *blocs sanitaires* for health centers and schools, and the project will support the continuation of this work, with a focus on their operation and management as well as upon their physical construction.

The approach to sanitation will stress subsidies to promote the construction of individual household facilities. While other sanitation initiatives in Haiti have involved subsidies on the order of \$100 - \$500 per family, this project will explore the viability of an approach in which only the basic slab and seat are subsidized, accompanied by promotion activities. Keeping the

subsidy as low as possible while focusing on promotion has two advantages: (1) reducing the per-unit subsidy enables the project to provide access to sanitation services to a greater number of people; and (2) a low-cost subsidy of appropriate technology may sow the seeds for a small-scale industry that designs basic sanitation at a price families can afford. The sanitation component will thus focus heavily on demand stimulation at the household level.

While sanitation interventions will be coordinated with hygiene promotion activities, the differences between the two must be clearly understood. Hygiene promotion will thus be based on early studies to (a) determine high risk behaviors related to hygiene, sanitation and water supply; (b) identify specific motivators for change, such as concepts of cleanliness, modernity, education, attractiveness, etc; (c) identification of key channels of communication most effective in reaching mothers and children; and (d) development of appropriate messages to promote improved hygiene behavior. The hygiene promotion campaigns can draw substantially from recent experience in hand washing campaigns in LAC and elsewhere. SNEP will have the institutional responsibility for hygiene promotion under this project. However, since SNEP has no experience in hygiene promotion, and given the weakness of other potential stakeholders such as the Direction de l'Hygiène Publique (DHP) in the Ministry of Health, the service provider (see under implementing arrangements) will also undertake hygiene promotion. Solid waste management is not considered a priority issue in rural areas and is thus not included under this project.

5. Financing

Estimates of Project Costs, by Components (US\$ m)

Component	Unit Cost x Number of Units	Total Cost
Capacity Building, and Project Management		0.82
Water Supply, Basic Sanitation and Hygiene Promotion		4.43
TOTAL Project Costs		5.25

6. Implementation

The implementing agency for the project will be the Service National de l'Eau Potable (SNEP). According to the 1977 law creating SNEP (*Loi Organique du SNEP*) it is an “autonomous state entity with civil and legal personality enjoying all the rights and prerogatives derived from this status.” According to the law, SNEP is under the supervision of a Board (*Conseil d'Administration*) presided by the Ministry of Public Works, and its day-to-day activities are managed by a Director General. In reality, the Board has not met in recent history thus leaving SNEP directly under the tutelage of the Ministry of Public Works. SNEP is responsible for water supply in all areas outside the metropolitan area of the capital.

The institutional arrangements of this project are largely based upon the implementation arrangements under the ongoing LICUS grant for rural water supply. The Ministry of Public Works (MTPTC), the government ministry responsible for water supply and sanitation in Haiti, would sign a subsidiary agreement with SNEP, as under the LICUS grant. While the

implementation arrangements for the LICUS grant have proven effective, the proposed program supported by the Bank and IDB will require an absorption capacity that is more than ten times larger (US\$4m/year compared to US\$0.425m/year). In order to ensure the ability of SNEP, to implement the activities under the program, the following measures have been initiated or are envisaged:

- Recruitment of an experienced service provider (see below).
- Individual consultants hired by SNEP with the expectation that they would become SNEP staff when the project ends.
- Capacity building within SNEP for project management and procurement, including supervision of the service provider.

The institutional characteristics of the proposed program and the LICUS grant are compared in the table below:

Table 1: Comparison of proposed program and predecessor pilot project

	Proposed Program (WB and IDB)	Predecessor Pilot Project (LICUS grant)
<i>Ingénierie sociale</i>	Carried out by an experienced service provider, in partnership with SNEP	Carried out in-house by SNEP with support from two international volunteers (EWB-Canada)
Procurement and project management	SNEP, supported by consultants and significant training with intensive capacity building program and Bank supervision; continued support by EWB	SNEP with intensive Bank supervision and support by EWB
Technical design	Carried out by the same service provider (consortium) that will undertake the <i>ingénierie sociale</i>	Engineering firm
Construction	Contractors	Contractors
Construction Supervision	Engineering firm or service provider	Individual consultant
Geographical Coverage	About 50 localities in 5 departments	3 localities in 2 departments
Duration	5 years without the preparation phase	2 years incl. preparation phase
Amount	US\$20m	US\$0.85m

SNEP is the executing agency for the proposed project. SNEP will have the fiduciary responsibility for the project (financial management and procurement). SNEP has selected one of its current employees to become a full-time procurement staff. He and other SNEP staff have been trained by the procurement specialist of the IDB office in Haiti and by the National Procurement Commission which receives support from the Bank and IDB.

The project's financial management will be carried out by SNEP using the same arrangements under the LICUS grant. For the implementation of the grant, SNEP staff have already set up a separate accounting system, developed an operational manual and familiarized themselves with Bank's financial management and disbursement procedures. Additional staff will be hired by SNEP to accommodate the higher workload due to the project.

In order to assist in the process of *ingénierie sociale*, and to carry out engineering designs, SNEP is in the process of selecting a **service provider** (NGO, consulting firm or a consortium of both) for the Southern Department on a competitive basis. The service provider will have as one of its tasks to strengthen the capacity in the local office of SNEP and they will be selected partly based on their methodology and track record in working with and strengthening of public institutions.

Local water committees (CAEP) would have important responsibilities during the feasibility and construction stage. The CAEP is a community-based organization composed of five volunteers elected by the community. Given the weakness of most existing water committees substantial assistance would be provided to existing and new water committees in order not to overload them during these crucial phases. While water committees have an important role, communicating with them is no substitute for communication with the entire community. SNEP and its service provider (NGO or consulting firm) would therefore organize community consultations on key aspects of the project. These would include community contributions, design and location of infrastructure, tariff levels, as well as explaining the concept of and rationale for professional operators and water meters. During the construction stage, the CAEP will organize the community contribution, check and approve the work and assist SNEP and its service provider in resolving any differences between the community and the contractor.

In the operating phase, the role of the water committees will change compared to the role they have played in the sector so far. As mentioned earlier, most water committees do not have the capacity to adequately operate and maintain water systems. **Under the proposed project, water committees would therefore delegate operation and maintenance to remunerated professional operators.** Professional operators are expected to operate systems (chlorination, cleaning of reservoirs, operation of kiosks, meter reading, billing, collection and management of funds generated by tariff revenues), undertake routine maintenance and repair, and ultimately to upgrade and expand systems using revenues from tariffs and connections fees. Operators will be selected by communities based primarily on the level of trust put in them under simple contracts drawn up by the community. These contracts will specify tariff levels and simple service quality standards. Contracts are expected to be for one year and will be renewable, with the objective of establishing a long-term relationship. Professional operators will be individuals from the respective communities, who will in turn hire a small number of employees to assist them. They will collect and own revenues, but they will pay a small fee to the water committee to be used for miscellaneous administrative expenses. Water committees will supervise professional operators by controlling their contractual performance on behalf of the community.

7. Sustainability

« Kabrit anpil mèt mouri grangou nan solèy. »

“The goat of many owners dies hungry in the sun.”

(Proverb used by some Haitians to explain why community-managed infrastructure has failed to be maintained in Haiti.)

A key problem in rural water supply systems in Haiti is the lack of sustainability, due to low-quality construction and lack of maintenance. Many water systems fall apart less than ten years after construction, leading communities to petition donors to rehabilitate them. The low quality of construction is due to poor technical designs, poor quality of execution of works, inadequate supervision of works (often done by the communities themselves, who lack technical expertise). The proposed project will address this problem by using experienced engineering firms (working in a consortium with NGOs or firms specialized in *ingénierie sociale*) to produce technical designs. Furthermore, experienced contractors will be hired to organize the execution of works under the supervision of engineers. The whole process will be closely monitored by the specialized staff of the implementing agency. This will reduce the risk of poor design and execution of works which has been so detrimental to the sustainability of infrastructure in Haiti.

Lack of preventive maintenance and repair, in turn, is due to poor management and insufficiency of funds. About two-thirds of investments in the sector are dedicated to rehabilitation rather than the construction of new infrastructure. This is widely attributed to the lack of payment for water by the majority of users (those receiving water from standposts), the low tariffs charged for house connections, and to the lack of a specific person that can be held accountable for the functioning of the water system. Poor maintenance leads to a vicious circle of declining service quality, reduced willingness to pay and further reduction of funds available for repair. Community management of infrastructure thus is widely perceived as having failed at being sustainable in Haiti. In order to increase the likelihood of maintenance and repair, the project promotes a new model that foresees the hiring of professional operators by the water committees on behalf of the community. Professional operators would be contractually accountable for the functioning of the system and will be remunerated. Concerning the physical and financial aspects of systems, instead of providing water for free at standposts, water would be sold in buckets at metered water kiosks. House connections would also be metered and households would be billed based on their consumption.

Vandalism and misuse also compromise sustainability. A common problem is the destruction of main pipes to divert water for irrigation purposes, mainly by farmers close to the source. This risk would be mitigated through intensive community participation in setting rules for water use that are being perceived as fair by the community. However, among professional operators, water committees, informal local leaders, or SNEP, none have the legal authority to enforce such rules. These rules need to be ultimately enforced by local government. The CASEC (elected bodies at the level of *sections communales*) are the appropriate entity to deal with the issue, but most of them currently lack legitimacy. This may change after the upcoming municipal elections. In any case, strong community organization supported by *ingénierie sociale* may be able to prevent vandalism from occurring, avoiding the need for heavy-handed enforcement measures.

The risk of lacking **environmental sustainability** exacerbates the problem, as the dry season yield of many springs has declined significantly because of deforestation and possibly because of climate change. One of the eligibility criteria under the project is a dry-season yield sufficient to

supply the expected future population served by a piped system. In addition, communities will be encouraged to protect and, if need be, to reforest the catchment area of springs. Funding for reforestation could be provided from a basin management project supported by the IDB in part of the Southern Department (watershed of Les Cayes and Cavaillon).

8. Lessons Learned from Past Operations in the Country/Sector

The following lessons have been incorporated:

- *Design simple and well-defined operations with modest objectives (Operations Evaluation Department Country Evaluation).* The reality and the complexity of the Haitian environment have demonstrated the importance of having a clear project design, to facilitate preparation and implementation. ☞ The proposed project keeps its objectives simple and well targeted.
- *Build on the experience of a pilot project.* ☞ The project builds on a LICUS grant pilot project currently underway in three communities in the Southern Department.
- *Support transparent and timely implementation of the project with adequate procurement expertise.* Previous projects have shown that the lack of clarity in procurement procedures can seriously delay project implementation and eventually undermine its success. ☞ The implementing agency has gained procurement experience during the LICUS grant execution. In addition, it has received training from IDB's procurement staff in the country office. Further training is foreseen. No objection will be given for every single contract, which in itself entails a learning process that was begun under the LICUS grant.
- *Strong involvement and ownership of the implementing agency in order to strengthen its capacity.* Many projects in Haiti heavily relied and rely on foreign consultants and PMUs, which deteriorates capacity and motivation in the implementing agency itself. ☞ The project will not use a PMU structure. Instead it will rely on staff of the implementing agency to make all key decisions, with intensive capacity building and supported by consultants on an as-need basis. The perspective is that any long-term consultants will be integrated into the implementing agency's staff in the future.
- *Need to further improve coordination among donors.* The Interim Cooperative Framework (ICF) has highlighted the importance of donor coordination. The joint preparation of the proposed project between IDB and the World Bank is an important step forward in that spirit. However, cooperation with other donors and with NGOs needs to be improved. A national workshop for the preparation of the national rural water supply and sanitation strategy has been a first step towards better coordination, especially with the numerous NGOs active in the sector. The water and sanitation sector table created through the ICF includes all major donors and was intended to hold regular meetings, increase information sharing and encourage joint planning, but it has suffered from the absence of a full-time person in charge of its organization. ☞ The sector table will be strengthened through a full-time person to be funded by the IDB. The dialogue around the national strategy on rural water supply and sanitation will also be pursued through regular meetings and dissemination activities.

9. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	[X]	[]
Natural Habitats (OP/BP 4.04)	[X]	[]
Pest Management (OP 4.09)	[]	[X]
Cultural Property (OPN 11.03 , being revised as OP 4.11)	[X]	[]
Involuntary Resettlement (OP/BP 4.12)	[]	[X]
Indigenous Peoples (OP/BP 4.10)	[]	[X]
Forests (OP/BP 4.36)	[]	[X]
Safety of Dams (OP/BP 4.37)	[]	[X]
Projects in Disputed Areas (OP/BP 7.60)*	[]	[X]
Projects on International Waterways (OP/BP 7.50)	[]	[X]

10. List of Selected Factual Technical Documents

Cadre De Coopération Intérimaire (CCI), Groupe Thématique : Eau Potable Et Assainissement. Rapport Final, Mai 2004. (Final Report of ICF Thematic Group on Water and Sanitation.)

“Compte-Rendu d’Atelier National pour l’élaboration d’une stratégie eau potable et assainissement en milieu rural, 10 et 11 novembre 2005.” (Minutes of a November workshop on the National Strategy for Rural Water Supply and Sanitation)

LICUS grant progress reports.

T. Niyungeko, “Stratégie Nationale et Développement du Secteur Eau Potable et Assainissement en Milieu Rural. Partie 1 : Diagnostic et Analyse du secteur.” Décembre 2005.

“Water Resources Assessment of Haiti,” US Army Corps of Engineers, August 1999.

Enquête Sur Les Conditions de Vie en Haïti, Institut Haïtien de Statistique et d’Informatique, 2001.

Enquête Mortalité, Morbidité et Utilisation des Services, Haiti 2000. (Haiti DHS survey.)

The Global Burden of Disease and Risk Factors, Disease Control Priorities Project, The World Bank 2006.

Government of Haiti, “Interim Cooperative Framework Summary Report”, July 2004.

Nathalie Brisson Lamaute, Gilles Damais and Willy Egset, “Gouvernance rurale et institutions locales en Haïti: Contraintes et opportunités pour le développement,” 15 Avril 2005.

PAHO/WHO Haiti Water and Sanitation Monitoring System for Haiti.

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties’ claims on the disputed areas

PAHO, “Infant mortality in Haiti”, 2006.

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