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Report No: PAD 1060

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT IN THE AMOUNT OF SDR 36.3 MILLION (US$ 50.00 MILLION EQUIVALENT)

TO THE

REPUBLIC OF HAITI

FOR A

SUSTAINABLE RURAL AND SMALL TOWNS WATER AND SANITATION PROJECT

May 7, 2015

Global Water Practice
Latin America and the Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective March 31, 2015)

Currency Unit	=	Haitian Gourde (HTG)
HTG 47.45	=	US$1
US$1.38	=	SDR 1

FISCAL YEAR
October 1 – September 31

ABBREVIATIONS AND ACRONYMS

ACAT	Community-based Total Sanitation Approach
AECID	Spanish Agency for International Development Cooperation
AIC	Average Incremental Cost
ASCP	*Agent de Santé Communautaire Polyvalent* (Polyvalent Community Health Agent)
BCC	Behavior Change Communication
CAEPA	*Comité d'Approvisionnement en Eau Potable et Assainissement* (Drinking Water Supply and Sanitation Committee)
CASEC	*Conseil d'Administration des Sections Communales* (Communal Section Board of Administration)
CDC	United Stated Centers for Disease Control and Prevention
CER	Contingent Emergency Response
CLTS	Community-Led Total Sanitation
CPF	Country Partnership Framework
CTE	*Centre technique d'exploitation* (Urban Water Operating Unit)
DA	Designated Account
DINEPA	*Direction Nationale de l'Eau Potable et de l'Assainissement* (National Water and Sanitation Directorate)
DMR	*Département du milieu rural* (DINEPA Rural Division)
DPEM	*Direction de la Passation et de l'Exécution des Marchés* (DINEPA Procurement Department)
DR	Dominican Republic
DT	*Direction Technique* (DINEPA Technical Department)
EIRR	Economic Internal Rate of Return
EPAR	*Programme Eau Potable et Assainissement en Milieu Rural* (Haiti Rural Water Supply and Sanitation Project, previous Bank-financed operation)
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
EMP	Environmental Management Plan
EU	European Union
FIRR	Financial Internal Rate of Return
FTP	Financial and Technical Partner
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GoH	Government of Haiti
GRS	Grievance Redress Service
IDA	International Development Agency
IDB	Inter-American Development Bank
ICR	Implementation Completion and Results Report
IFR	Interim unaudited Financial Report
INFP	*Institut National de la Formation Professionnelle* (National Vocational Training Institute)

ISN	Interim Strategy Note
MAPAS	*Monitoreo de los Avances del País en Agua Potable y Saneamiento* (Monitoring Country Progress in Water and Sanitation initiative)
MCI	*Ministère du Commerce et de l'Industrie* (Ministry of Commerce and Industry)
MDE	*Ministère de l'Environnement* (Ministry of Environment)
MEF	*Ministère de l'Economie et des Finances* (Ministry of Economy and Finance)
MENFP	*Ministère de l'Éducation Nationale et de la Formation Professionnelle* (Ministry of National Education and Vocational Training)
MICT	*Ministère de l'Intérieur et des Collectivités Territoriales* (Ministry of Environment and the Ministry of Interior and Local Authorities)
MSPP	*Ministère de la Santé Publique et de la Population* (Ministry of Health and Population)
MTEF	Medium Term Expenditure Framework
MTPTC	*Ministère des Travaux Publics, Transports et Communications* (Ministry of Public Works, Transport and Communications)
NGO	Non-governmental organization
NPV	Net Present Value
O&M	Operations and Maintenance
ODF	Open Defecation Free
OM	Operations Manual
ONEPA	*Observatoire National de l'Eau Potable et de l'Assainissement* (National Water Supply and Sanitation Observatory)
OP	*Opérateur professionnel* (Professional operator)
OREPA	*Offices Régionaux d'Eau Potable et Assainissement* (Regional Water and Sanitation Offices)
PAD	Project Appraisal Document
PAHO	Pan-American Health Organization
PDO	Project Development Objective
PEPA	*Plateforme Eau Potable et Assainissement* (Water and Sanitation NGO Platform)
PES	Payment for Environmental Services
PPA	Project Preparation Advance
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SCD	Systematic Country Diagnostic
SDC	Swiss Agency for Development and Cooperation
SIP	*Suivi des Indicateurs de Performance* (Performance Indicator Monitoring system)
TEPAC	*Techniciens en Eau Potable et Assainissement Communaux* (Communal Water and Sanitation Technicians)
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
URD	*Unités Rurales Départementales* (Departmental Rural Units)
WB	World Bank
WHO	World Health Organization
WSP	Water and Sanitation Program
WSS	Water Supply and Sanitation

Regional Vice President:	Jorge Familiar
Country Director:	Mary A. Barton-Dock
Senior Director	Junaid Kamal Ahmad
Practice Manager:	Wambui G. Gichuri
Task Team Leader:	Jean-Martin Brault

HAITI
Sustainable Rural and Small Towns Water and Sanitation Project (P148970)

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PAD DATA SHEET

Haiti

Sustainable Rural and Small Towns Water and Sanitation Project (P148970)

PROJECT APPRAISAL DOCUMENT

LATIN AMERICA AND CARIBBEAN

GWADR

Report No.: PAD1060

Basic Information		
Project ID P148970	EA Category B - Partial Assessment	Team Leader Jean-Martin Brault
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [X]	
	Financial Intermediaries [ ]	
	Series of Projects [ ]	
Project Implementation Start Date 15-Oct-2015	Project Implementation End Date 30-Jun-2021	
Expected Effectiveness Date 30-Sep-2015	Expected Closing Date 30-Sep-2021	
Joint IFC: No		

Practice Manager	Senior Global Practice Director	Country Director	Regional Vice President
Wambui G. Gichuri	Junaid Kamal Ahmad	Mary A. Barton-Dock	Jorge Familiar

Borrower: Ministry of Economy and Finance, MEF			
Responsible Agency: National Water and Sanitation Directorate (DINEPA)			
Contact:	Pierre Michael Merisier	Title:	Deputy Technical Director
Telephone No.:	+50937257682	Email:	michael.merisier@dinepa.gouv.ht

Project Financing Data(in USD Million)					
[ ]	Loan	[X]	IDA Grant	[ ]	Guarantee
[ ]	Credit	[ ]	Grant	[ ]	Other

Total Project Cost:	50.00	Total Bank Financing:	50.00
Financing Gap:	0.00		

Financing Source	**Amount**
BORROWER/RECIPIENT	0.00

International Development Association (IDA)	30.00
IDA Regional Program	20.00
Total	50.00

Expected Disbursements (in USD Million)

Fiscal Year	2016	2017	2018	2019	2020	2021				
Annual	6.45	8.75	8.30	13.45	9.65	3.40				
Cumulative	6.45	15.20	23.50	36.95	46.60	50.00				

Institutional Data

Practice Area / Cross Cutting Solution Area

Water

Cross Cutting Areas

[ ] Climate Change
[X] Fragile, Conflict & Violence
[X] Gender
[ ] Jobs
[ ] Public Private Partnership

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Water, sanitation and flood protection	Sanitation	16		
Water, sanitation and flood protection	Water Supply	46	50	50
Public Administration, Law, and Justice	Public administration-Water, sanitation and flood protection	36		
Health and other social services	Health	2		
Total		100		

☐ I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Rural development	Rural services and infrastructure	62
Public sector governance	Decentralization	36

Human development	Other communicable diseases	2
Total		100

Proposed Development Objective(s)

The proposed objectives of the Project are to: (i) increase access to improved water supply and sanitation in targeted rural areas and small towns in zones affected by cholera; (ii) strengthen the Recipient's water and sanitation service delivery mechanism at the deconcentrated level; and (iii) improve the Recipient's capacity to respond promptly and effectively to an Eligible Emergency.

Components

Component Name	**Cost (USD Millions)**
1. Institutional Strengthening, Capacity Building and Project Management	17.35
2. Water Supply and Sanitation	31.65
3. Contingent Emergency Response	1.00
Total	50.00

Systematic Operations Risk- Rating Tool (SORT)

Risk Category	**Rating**
1. Political and Governance	Substantial
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Substantial
9. Other	Substantial
OVERALL	**Substantial**

Compliance

Policy

Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]
Does the project require any waivers of Bank policies?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]
Does the project meet the Regional criteria for readiness for implementation?	Yes [X]	No [ ]

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	X	
Natural Habitats OP/BP 4.04	X	
Forests OP/BP 4.36	X	
Pest Management OP 4.09		X
Physical Cultural Resources OP/BP 4.11		X
Indigenous Peoples OP/BP 4.10		X
Involuntary Resettlement OP/BP 4.12	X	
Safety of Dams OP/BP 4.37		X
Projects on International Waterways OP/BP 7.50	X	
Projects in Disputed Areas OP/BP 7.60		X

Legal Covenants

Name	Recurrent	Due Date	Frequency
DINEPA Subsidiary Agreement (Schedule 2, Section I.B.1)	X	N/A	N/A

Description of Covenant

To facilitate the carrying out of the Project, the Recipient shall make the proceeds of the Financing available to DINEPA under a Subsidiary Agreement between the Recipient, acting through the MTPTC and the MEF, and DINEPA, under terms and conditions approved by the Association.

Legal Covenants

Name	Recurrent	Due Date	Frequency
Sub-Grants (Schedule 2, Section I.D.1)	X	N/A	N/A

Description of Covenant

For purposes of carrying out Part 1 (c) (iii) of the Project and upon the selection of an OP, the Recipient shall cause DINEPA to enter into a Sub-grant Agreement with the OP in accordance with criteria and procedures acceptable to the Association, as set forth in the Project Operations Manual, and under terms and conditions acceptable to the Association.

Legal Covenants

Name	Recurrent	Due Date	Frequency
Safeguards (Schedule 2, Section I.G.1)	X	N/A	N/A

Description of Covenant

No later than six (6) months from the date of this Agreement, and in any case prior to the carrying out of any works under the Project, the Recipient shall cause DINEPA to adopt the ESMF in a manner satisfactory to the Association.

Legal Covenants

Name	Recurrent	Due Date	Frequency

Safeguards (Schedule 2, Section I.G.3)	X	N/A	N/A

Description of Covenant

Prior to the carrying out of any works under the Project, the Recipient shall cause DINEPA to (i) carry out an environmental and social screening and assessment of the proposed activities; (ii) exclude from the Project any activities requiring physical relocation of people; and (iii) as applicable, prepare a plan for land acquisition acceptable to the Association, all in accordance with the RPF.

Legal Covenants

Name	Recurrent	Due Date	Frequency
Financial Management, Financial Reports and Audits (Schedule 2, Section II.B.4)	X	N/A	N/A

Description of Covenant

The Recipient shall not later than six (6) months after the Effective Date recruit an external auditor based on terms of reference acceptable to the Association to carry out the annual audit.

Conditions

Source Of Fund	Name	Type
IDA	Additional Conditions of Effectiveness (Article IV, Section 4.01)	Effectiveness

Description of Condition

The Additional Conditions of Effectiveness consist of the following:
(a) The Subsidiary Agreement has been executed on behalf of the Recipient, and DINEPA.
(b) DINEPA has hired an environmental specialist with terms of reference and in a manner satisfactory to the Association.

Source Of Fund	Name	Type
IDA	Subsidiary Agreement (Article IV, Section 4.02)	Effectiveness

Description of Condition

The Additional Legal Matter consists of the following, namely that the Subsidiary Agreement has been duly authorized or ratified by the Recipient and DINEPA and is legally binding upon the Recipient and DINEPA in accordance with its terms.

Source Of Fund	Name	Type
IDA	Withdrawal (Schedule 2, Section IV.B.1)	Effectiveness

Description of Condition

Notwithstanding the provisions of Schedule 2, Section IV.A, no withdrawal shall be made:

(a) for payments made prior to the date of this Agreement; or
(b) under Category (2), for Emergency Expenditures, unless and until the Association is satisfied, and notified the Recipient of its satisfaction, that all of the following conditions have been met in respect of said activities:

(i) the Recipient has determined that an Eligible Emergency has occurred, has furnished to the Association a request to include said activities in the CER Part in order to respond to said

Eligible Emergency, and the Association has agreed with such determination, accepted said request and notified the Recipient thereof;

(ii) the Recipient has prepared and disclosed all safeguards instruments required for said activities, and the Recipient has implemented any actions which are required to be taken under said instruments, all in accordance with the provisions of Section I.G 2 of this Schedule 2;

(iii) the Recipient's Coordinating Authority has adequate staff and resources, in accordance with the provisions of Section I.E.2 of this Schedule 2, for the purposes of said activities; and

(iv) the Recipient has adopted the CER Operations Manual in form, substance and manner acceptable to the Association and the provisions of the CER Operations Manual remain - or have been updated in accordance with the provisions of Section I.E.1 of this Schedule 2 so as to be appropriate for the inclusion and implementation of said activities under the CER Part.

Team Composition

Bank Staff

Name	Title	Specialization	Unit
Jean-Martin Brault	Water and Sanitation Specialist	Team Lead	GWADR
Christophe Prévost	Senior Water and Sanitation Specialist	Rural Water Supply and Sanitation	GWADR
Martin Gambrill	Lead Water and Sanitation Specialist	Water Supply and Sanitation	GWADR
Prosper Nindorera	Senior Procurement Specialist	Procurement	GGODR
Aboubacar Magassouba	Consultant	Procurement	GGODR
Rose Caline Cadet	Consultant	Procurement – Port-au-Prince	GGODR
Josue Akre	Financial Management Specialist	Financial Management – Port-au-Prince	GGODR
Fabienne Mroczka	Financial Management Specialist	Financial Management	GGODR
Peter Lafere	Social Specialist	Social Safeguards	GSURR
Felipe Jacome	Consultant	Social Safeguards	GSURR
Nyaneba Nkrumah	Senior Natural Resources Management Specialist	Environmental Safeguards	GENDR
Sylvain Adokpo Migan	Senior Water and Sanitation Specialist	Water and Sanitation – Institutional Aspects	GWASA
Zael Sanz Uriarte	Water and Sanitation Specialist	Water and Sanitation	GWASL
Jacqueline Devine	Senior Water and Sanitation Specialist	Water and Sanitation	GWASP
Eleonora Cavagnero	Health Specialist	Health	GHNDR

Andrew Sunil Rajkumar	Senior Economist	Health	GHNDR
Ignacio Jauregui	Counsel	Legal	LEGLE
Sophia Guerrier-Gray	Legal Analyst	Legal	LEGLE
Ndeye Awa Diagne	Junior Professional Associate	Team Support	GWADR
Victor Ordonez	Senior Finance Officer	Controller	CTRLN
Barbara Minguez	ETT	Team Assistant	GWADR
Alejandro Neira Zavala	ETT	Team Assistant	GWADR
Rosemary Chepkirui Rop	Water & Sanitation Specialist	Gender	GWASP

Non Bank Staff

Name	Title	City
Richard Verspyck	Economist	Paris

Locations

Country	First Administrative Division Location	Planned	Actual	Comments
Haiti	Centre	X		
Haiti	Grand'Anse	X		
Haiti	Nippes	X		
Haiti	Sud	X		

I. STRATEGIC CONTEXT

A. Country and Regional Context

1. **Haiti is a country of 10.4 million people located in the Caribbean, seven hundred miles off the coast of the United States.** Though the country's geographical proximity to markets, young labor force, and rich cultural heritage offer a range of economic opportunities, Haiti faces considerable challenges as the poorest country in the Americas and a fragile state. Over 58 percent of the population lives on less than $2 per day (under the 2012 national poverty line) and 23.8 percent are extremely poor (cannot satisfy their nutritional needs). GDP per capita stood at US$820 in 2013. Poverty is highest in rural areas where 52 percent of the population and 63 percent of extremely poor households reside. Basic services are lacking: only 62 percent of Haitians have access to water (47 percent in rural areas) and 24 percent improved sanitation (16 percent in rural areas).[1]

2. **Haiti is highly exposed to natural disasters–hurricanes, floods and earthquakes**.[2] A devastating earthquake struck the country in January 2010, killing 230,000 people and resulting in damages and losses equivalent to 120 percent of GDP. In addition, weather-related disasters occur yearly and cost an average of two percent of GDP per year.[3]

3. **In this fragile environment, cholera broke out in October 2010, facilitated by flooding and heavy rain coupled with very limited access to clean water and improved sanitation.** The disease spread rapidly through Haiti, into the neighboring Dominican Republic (DR). It has claimed over 8,770 lives and affected more than 738,000 people in Haiti[4] and caused 32,200 cases and 487 deaths in the DR.[5] The proposed Sustainable Rural and Small Towns Water and Sanitation Project (the Project) is a key element of a long-term solution to cholera.

4. **The border area between Haiti and the DR is particularly vulnerable to communicable diseases.** With about 90 percent of the Haitian population residing within 100 miles of the border, this area is both strategic and vulnerable. It includes some of the poorest areas in both countries, witnesses movement from migrants, workers and cross-border service users, and hosts bi-national markets. Given the vulnerability of these areas and the magnitude of the impact of cholera, an island-wide approach to improve water supply and sanitation (WSS) services and hygiene practices, protect water resources, and strengthen disease surveillance is needed to control and prevent new outbreaks in both countries.

5. **Eliminating new outbreaks in the long term can only be achieved by substantially increasing access to WSS and health services.** Cholera prevention and control strategies put in place by the governments of Haiti and the DR, supported by the international community, have led to a considerable decrease in cases and deaths, but new outbreaks continue to be recorded. Due

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[1] Progress Report on Sanitation and Drinking Water - Update. WHO-UNICEF, 2014. Improved sanitation is defined as likely to ensure hygienic separation of human excreta from human contact.
[2] From 1993 to 2012, Haiti has experienced two droughts, one earthquake, 31 floods and 26 tropical storms/hurricanes.
[3] Average over 1975-2012, Centre for Research on the Epidemiology of Disasters Emergency Events Database (EM-DAT).
[4] Ministry of Public Health and Population, May 2015.
[5] PAHO/WHO Cholera Epidemiological Update, April 2015.

to late and heavy rains, the number of cases and deaths rose sharply in the last quarter of 2014, and have more than tripled in the first quarter of 2015 compared to the same period a year before. In addition, both countries remain vulnerable to water- and excreta-related diseases.[6] To address these challenges and build resilience to cholera and other related diseases, the continued implementation of short-term response activities must be complemented by a substantial increase in WSS access underpinned by institutions capable of delivering these services.

6. **Cross-border collaboration is essential to promote preparedness and reduce regional vulnerability to cholera and other potential pandemics.** In 2012, a Regional Coalition for Water and Sanitation to Eliminate Cholera in the Island of Hispaniola mobilized to support the Haiti/DR 10-year Cholera Elimination Plan.[7] In this context, the World Bank hosted two high-level conferences in 2014 to promote a comprehensive, evidence-based approach to combatting cholera and raise funds for investments in WSS and health services in 16 priority communes in Haiti identified by the Ministry of Public Health and Population (MSPP), the National Water and Sanitation Directorate (DINEPA) in Haiti, UNICEF and the World Bank. This Project responds directly to the priorities identified and forms a central part of the Government of Haiti's (GoH) strategy for addressing the cholera epidemic and achieving universal access to WSS and health services, as well as preventing the disease from impacting the DR. The interventions under this project are focused on small towns and rural areas in priority communes; other donors provide substantial financing for urban WSS.

7. **Regional rationale.** As designed, the Project meets the eligibility criteria of the IDA Regional Program: (i) it involves two countries, of which one is a Fragile State; (ii) its activities will generate cross-boundary benefits; (iii) there exists clear evidence of country and regional ownership; and (iv) there exists a platform for policy harmonization on which it will build. Annex 6 provides detail on the regional rationale. This project's impacts are regional, although all physical investments will take place in Haiti. Also, the Project will support binational coordination and surveillance.

B. Situations of Urgent Need of Assistance or Capacity Constraints

8. Haiti is a Fragile State with considerable capacity constraints and a challenging security environment. A United Nations peace-keeping force has been stationed in the country for over ten years. In light of the limited capacity of institutions responsible for the implementation of Project environmental and social safeguard requirements, additional time is needed to prepare such instruments, and in accordance with the Special Considerations under OP 10.00 para 12, some Project environmental and social safeguard instruments are deferred to implementation. However, a Resettlement Policy Framework (RPF) has already been prepared and disclosed. Also, although

[6] According to Haiti's Mortality, Morbidity and Use of Health Services Survey (EMMUS-V, 2012) and the DR's Demographic and Health Survey (ENDESA, 2013), 21 and 18 percent of children under 5 years of age were diagnosed with diarrhea two weeks before the national surveys in Haiti and the DR, respectively. Additionally, 11 percent of deaths among children under 5 are attributable to diarrhea in Haiti, compared with 5 percent in the DR [WHO, World health statistics 2014], and an estimated 50 percent of childhood malnutrition in Haiti is associated with repeated diarrhea or intestinal nematode-related diseases [Communication with UNICEF, October 2014].

[7] Members include both countries, PAHO, UNICEF, the US CDC, key civil society organizations, the Government of Spain, the IDB and the World Bank.

this Project aims to put in place long-term measures to combat cholera and address WSS sector capacity, accelerated procedures are used in light of the resurgence of cholera since end 2014 and the continued urgency of making priority investments under Haiti's Cholera Elimination Plan.

C. Sectoral and Institutional Context

9. **Access to quality water is a significant challenge in rural areas and small towns of Haiti.** Rural areas are generally served through water points equipped with handpumps, while small towns are served with gravity-fed piped systems supplied by spring catchments, from which water is delivered through standposts, kiosks[8] and household connections. A substantial portion of systems is not operational,[9] for lack of sufficient funds for operation and maintenance (O&M) and less than ten percent are equipped with chlorination devices. To encourage and test the financial sustainability of water systems, the World Bank- and Inter-American Development Bank (IDB)-financed EPAR Program[10] installed 23 "professional operators" (OPs) to operate and maintain water systems and demonstrate that volumetric billing could be socially acceptable. These OPs are still in place and the proposed Project will expand this model to other regions of Haiti.

10. **Access to sanitation in rural areas and small towns is low.** Both urban and rural populations mostly rely on individual on-site sanitation solutions, as sustainable collection and treatment of sewage are practically non-existent. The GoH has adopted a no-subsidy policy for household sanitation and focuses on behavior change, education and promotion to lead households to construct/improve their own latrines, as well as on provision of institutional sanitation in schools, health institutions and public spaces such as markets.[11] Due to low access to improved sanitation facilities, open defecation is frequent, particularly in rural areas where it stands at 38 percent. DINEPA's Sanitation Department has limited staff both at the central level and deconcentrated level. An assessment of the enabling environment sanitation is found in Annex 9.

11. **DINEPA initiated a sector reform in 2009 with a vision to develop the WSS sector and tackle the low levels of service.** The reform aims to: (i) progressively disengage the Central Government from WSS infrastructure construction and operation, retaining a regulatory role; (ii) establish local WSS committees (CAEPAs); (iii) professionalize WSS service provision; (iv) achieve domestic private sector participation in construction and operation; and (v) ensure the sustainability and affordability of services by introducing the concept of volumetric billing. As per the Water and Sanitation Framework Law, DINEPA is responsible for the control and regulation of WSS systems. The Law also foresees the creation of DINEPA's Regional Offices (OREPAs)

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[8] Standposts (*fontaines* in Haiti) distribute water freely, while kiosks sell water by the *bokit* (5 US gallons or 18.9 liters).

[9] DINEPA's performance monitoring system, which monitors roughly half of the water supply systems, estimates that 41 percent of the standposts and 45 percent of the kiosks do not deliver water.

[10] The Bank-financed project of the Rural WSS Program in the South Region closed in November 2013 (P089839 and P114936).

[11] Schools. Only 32 percent of rural schools have access to water, and, while 69 percent of them have latrines, they lack adequate arrangements for maintenance and are often not used as a consequence. Health facilities. The 2013 Haiti health facility survey found that 79 percent of health facilities had access to an improved water source, while only 46 percent had sanitation facilities. Markets. There is limited recent data available on public markets in Haiti, except on bi-national markets. Haiti and DR share 14 bi-national markets which are open to the public of both countries once or twice a week and where 51 percent of the more than 5,200 sellers are Haitians. These markets typically have low standards of sanitation and often sell goods in unhygienic conditions, increasing the risk of disease transmission.

and the professionalization of WSS service provision. An illustration of the deconcentrated chain of service delivery and the roles of each actor is presented in Annex 3. Despite major improvements since 2009, challenges remain in the implementation of the sector reform.

12. **DINEPA aims to rally partners behind a unified and updated Strategic Sector Plan, but sectoral knowledge and monitoring of WSS services is still fragmented.** Monitoring of the status of WSS services in rural areas and small towns is limited and no consolidated baseline exists at the country level, hampering the efficient prioritization and programming of investments. Databases and monitoring tools developed under various projects, need to be coordinated to ensure continuity in dissemination and updating of information.

13. **Deconcentration[12] is not yet effective at the regional level**, as capacity in social mobilization, sanitation, as well as in fiduciary aspects are mostly built and maintained at the central level. As a consequence, OREPAs and URDs are not yet in a position to help accelerate the development of WSS services in rural and small towns, nor to monitor their delivery. In addition, although communal technicians (TEPACs) deployed to rural communes have been successful in improving coordination between WSS and health activities, including cholera control, they lack proper training, particularly with regard to sanitation, and the financing of their salaries is not sustainable. The TEPACs were put in place to help develop the communes' capacity in WSS-related matters with the long term objective of decentralizing responsibility of service delivery, but the lack of dedicated local budgets and skilled professionals renders decentralization unfeasible in the short- to medium-term.

14. **The development of WSS services, as well as the functioning of sector actors is heavily dependent on external financing,** with 61 percent of DINEPA's operating expenditures and 95 percent of investment costs financed by financial and technical partners (FTPs).[13] The domestic budget covers only 13 percent of DINEPA's central level operating costs. Also, even in urban areas, only 54 percent of the operating expenditures (excluding depreciation) of urban water operating units (or CTEs) are covered by water revenues, highlighting the need to improve commercial management and increase water service revenues in urban centers. Financing needs are massive and the dependence on external assistance is likely to endure over the medium-term.

15. **In the DR, the WSS sector faces similar challenges to service quality and sustainability, despite higher access.** About 81 percent of the Dominican population has access to water (77 percent in rural areas) and 82 percent to sanitation (74 percent in rural areas, with 8 percent resorting to open defecation).[14] Nevertheless, the lack of a clear lead institution in charge of water sector reform, together with a weak legal framework, slows down improvements in access and services. The sector is heavily subsidized, at 100 percent for investment costs and roughly 70

[12] Deconcentration is the process by which responsibility for specified functions are relocated and geographically dispersed to lower levels of the same administrative structure. The Project will support DINEPA in devolving a number of functions to its regional offices, the OREPAs, to (i) better adapt, by proximity, decisions and services to the local context and needs, (ii) increase accountability vis-à-vis WSS service users, and (iii) allow for increased user participation in planning and decision-making.
[13] Source: FY 2013/14 DINEPA Budget. The IDB and the AECID are the major providers of funding and technical assistance for DINEPA, with the World Bank, UNICEF, the Swiss government, the U.S CDC, and other organizations also providing assistance.
[14] While rural access to water has steadily improved over the last 20 years, service quality has deteriorated in urban areas, due to lack of proper maintenance and insufficient new investments.

percent for O&M costs, compounding low water billing and collection rates and undermining service sustainability. See Box 1 for linkages between Bank interventions in Haiti and the DR.

D. Higher Level Objectives to which the Project Contributes

16. **The Project will contribute to the elimination of cholera and other water- and excreta-related diseases,** by supporting the joint MSPP and DINEPA 10-year Cholera Elimination Plan and responding to expert and donor consultations led by the World Bank around this plan in April and October 2014. Interventions will also build on the results of the IDA Emergency Cholera Project (P120110) and complement activities of the ongoing Maternal and Child Health Project (P123706), which aims to strengthen epidemiological surveillance, access to integrated healthcare services (including cholera prevention), and coordination of the national cholera program.

Box 1. Linkages with Bank interventions in the DR. To promote the island-wide response to water- and excreta-related diseases, the Project will coordinate with and build on:

(a) The ongoing IBRD Water and Sanitation in Tourist Areas Project (P054221), and the WSS sector expenditure review and service delivery assessment in intermediate cities currently under preparation. These aim at improving and expanding WSS services in one of the provinces most affected by cholera,[1] tackling the long-term sustainability of WSS by consolidating the sector policy framework; and improving the financial and operational performance of regional utilities;

(b) The Monitoring Country Progress in Water and Sanitation regional initiative (MAPAS) launched by Bank's Water and Sanitation Program (WSP) to identify bottlenecks hindering the achievement of the national targets and the reform actions required to ensure the quality and sustainability of WSS services. A similar exercise has been initiated by UNICEF in Haiti;

(c) The IBRD Health Sector Reform APL3 (P152783) prepared in coordination with this Project, which aims to improve the capacity of the Dominican Ministry of Health to manage water- and excreta-related diseases;

(d) Technical visits and exchanges between DINEPA and the DR's National Water and Sewerage Institute (INAPA) on best practices in rural sanitation and water supply system operation and maintenance. The Project will promote the continuation of these exchanges.

17. **The Project will contribute to the World Bank's goals of reducing poverty and promoting shared prosperity**, by increasing access to basic services in the poorest rural areas of Haiti. Around 300,000 people are expected to benefit from the Project, of which 75 percent estimated to be poor. Improving WSS coverage in rural Haiti will have multiple benefits on productivity and income, cognitive development, mortality rates, and educational attainment, as well as on time and opportunity costs, particularly for women, small children and vulnerable populations. Equally important, the Project will support continued WSS institutional and policy reform, and build much needed capacity, to enable sector institutions to scale-up service delivery.

18. **The Project is consistent with the Interim Strategy Note (ISN) for FY13-FY14 (Report No. 71885-HT) discussed by World Bank Executive Directors on September 27, 2012)**. It contributes to the ISN's overarching objective to support GoH in shifting from emergency response to development, with a focus on: (i) reducing vulnerability and increasing resilience, including to cholera outbreaks; (ii) encouraging sustainable reconstruction; (iii) building human capital; and (iv) promoting inclusive growth, while improving governance.

19. **The Project responds to the findings of the draft Haiti Systematic Country Diagnostic (SCD), which will underpin the upcoming Haiti Country Partnership Framework (CPF)**. The

SCD identifies the need for a multi-sectoral approach to critical development challenges and emphasizes the importance of: (i) investing in human capital (particularly in health) to consolidate Haiti's recent poverty gains; and (ii) sustainably improving access to basic services, especially in rural areas and small towns which experience deep and stagnating poverty. The Project also supports the overarching objectives of sustainably reducing the vulnerability of rural populations to shocks such as water-related epidemics.

II. PROJECT DEVELOPMENT OBJECTIVES

A. Project Development Objective (PDO)

20. The proposed objectives of the Project are to: (i) increase access to improved water supply and sanitation in targeted rural areas and small towns in zones affected by cholera; (ii) strengthen the Recipient's water and sanitation service delivery mechanism at the deconcentrated level; and (iii) improve the Recipient's capacity to respond promptly and effectively to an Eligible Emergency.

21. This Project aims to significantly and sustainably increase access to WSS services in areas of Haiti particularly vulnerable to cholera, and reduce the island of Hispaniola's vulnerability to new outbreaks. In addition, while supporting Haiti's progress toward universal access to WSS services which will build resilience and improve the welfare of its citizens, the Project will help deepen the reform of the WSS sector in close cooperation with other FTPs. In particular, it will assist DINEPA in operationalizing its strategies and policies, including its vision for deconcentration. The Project will build on DINEPA's Strategic Sector Plan and help define a long-term sustainable financing plan for the WSS sector, balancing improved revenues from CTEs[15] with transfers from the national budget and external financing. In the case of an Eligible Emergency, the Project will also improve the Recipient's capacity to respond promptly and effectively, as needed.

B. Project Beneficiaries

22. The Project is expected to reach an estimated 300,000 direct beneficiaries (of which almost 50 percent are women and girls), including 150,000 who will gain access to improved water sources through household connections and kiosks, 50,000 who will benefit from improved sanitation through community-led total sanitation campaigns, sanitation marketing and the construction of latrines in institutions and public spaces, and 100,000 to benefit from small repairs and expansions. Due to the regional nature of cholera and other water- and excreta-related diseases, it is expected that any improvement in WSS access under the Project in Haiti will have positive spill-over effects on the population of the DR. In addition, cross-border benefits will come from increased bi-national coordination and collaboration on disease monitoring, as well as from tackling the long-term sustainability of the WSS sector on both sides of the border.

[15] Although the Project will not fund activities or infrastructure which can have a direct influence on improving revenues from the urban CTEs, the World Bank will work closely with OREPAs and other donors to jointly address sector financing sustainability.

C. PDO Level Results Indicators

23. The PDO will be measured against the following indicators: (i) a national programming mechanism for deconcentrated WSS service delivery is operationalized, as evidenced by tools in place; (ii) the required functions are deconcentrated to the targeted OREPAs; (iii) number of piped water systems managed sustainably by a professional operator (OP) under the Project; (iv) number of people provided with access to "improved water sources" under the Project, disaggregated by sex; (v) number of people provided with access to "improved sanitation facilities" under the Project, disaggregated by sex; and (vi) number of priority cholera communes targeted.

III. PROJECT DESCRIPTION

A. Project Components

24. The Project aims to take a first step toward the effective use of government and donor funding, to build capacity, strengthen institutions and set a foundation for achieving longer term financial sustainability of the WSS sector's overarching structure. The Project will promote a shift from a project to a programmatic approach, pilot the deconcentrated strengthening of OREPAs and contribute to the provision of operationally sustainable WSS service delivery to rural and small town populations, allowing for recovery of O&M costs, and subsequent scale up beyond the targeted communes. This will include the promotion of a corporate culture favorable to the commercial management of service delivery. In order to eliminate cholera (and all other water- and excreta-related diseases) from the Island of Hispaniola, sustainable financing is needed for the sector in Haiti, as well as delivery models that are financially viable and can be rolled out universally. The Project will support the GoH's first step toward this outcome over the coming decade and thus help the GoH attract additional FTPs to support its implementation.

25. ***Component 1: Institutional Strengthening, Capacity Building and Project Management (US$17.35 million).***

(a) *Strengthening DINEPA's capacity to develop and manage a national programming mechanism for deconcentrated WSS service delivery in rural areas and small towns*, including: (i) establishing a national baseline of WSS coverage and services and a monitoring mechanism to update and use data for decision-making and planning; (ii) developing a road map for universal access by 2030; (iii) developing a Medium Term Expenditure Framework (MTEF) for the WSS sector; (iv) developing a three-year rolling consolidated Program Budget; (v) establishing a WSS sector coordination and joint performance mechanism to operationalize the Program Budget review process; (vi) defining a fecal sludge management service chain for rural areas and small towns[16]; and (vii) defining an institutional space, strategy and action plan for citizen engagement and gender mainstreaming as a platform for beneficiaries' voice and for participatory project management.

[16] The service chain includes emptying, transporting, treating and disposing of fecal sludge. The activity would also support the establishment of a regulated framework for the sludge handling, removal and disposal services, as well as the assessment of the involvement of the private sector in the service chain and the definition of models for its implementation.

(b) *Strengthening the fiduciary, sanitation and social mobilization capacity of selected OREPAs*. Social mobilization capacity strengthening will include behavioral change, gender mainstreaming and participatory monitoring through beneficiary assessments; and *financing the operating costs associated with the management of WSS assets and personnel in selected OREPAs, URDs and TEPACs*. For this subcomponent, sector FTPs have agreed to use a common capacity strengthening plan based on ongoing assessments of DINEPA's deconcentrated structures, and provide complementary financing of operating costs throughout the country, while jointly defining a long-term sustainable financing plan for DINEPA.

(c) *Strengthening the local stakeholders in rural and small towns to improve WSS service delivery sustainability* through: (i) the carrying out of training in business plan preparation and access to financing for local operators (OPs and CAEPAs); (ii) the carrying out of training in the management and monitoring of rural and small town water supply systems and public sanitation facilities for local operators, including ensuring women's representation in CAEPAs; (iii) the provision of sub-grants for the financing of toolkits and start-up funds for OPs to, *inter alia*, hire personnel and buy spare parts; (iv) the financing of water meters to be installed by local operators; (v) the piloting water source protection schemes with existing OPs; and (vi) capacity building for community-based monitoring of WSS service delivery.

(d) *Supporting the design of a joint monitoring mechanism between Haiti and the DR to respond to trans-boundary pandemics and outbreaks of water- and excreta-related diseases*, as part of an island-wide strategy. Epidemiologic surveillance needs to be coordinated between both countries to help reduce cross-border disease spread and contain outbreaks at their source. The Project will leverage US$1.0 million from the Regional IDA allocation to sponsor a diagnosis of the disease surveillance capabilities on both sides of the border and look into other experiences to support the design of a binational surveillance strategy and mechanism (see Annex 2).

(e) *Supporting project management, monitoring and evaluation* by enabling DINEPA to deliver its project implementation responsibilities at the central and regional levels, including complying with Bank fiduciary procedures, safeguards, and monitoring and evaluation, while improving its capacity to engage in dialogue with its clients. It will also contribute to the acquisition of equipment and DINEPA's operating costs related to project implementation.

26. ***Component 2: Water Supply and Sanitation (US$31.65 million).*** The Project will deliver a comprehensive package of WSS interventions in selected rural areas and small towns. The localities will be selected among: (i) priority communes that have posted the highest cholera incidence rate in the last three dry seasons, as well as communes along the border with the DR, with specific focus on the Centre department (see Annex 7 for details); and (ii) communes of the South Region in which the previous EPAR Program intervened. This component will leverage US$19.00 million from the Regional IDA allocation for the construction and rehabilitation of water supply systems, as well as for the household and institutional sanitation activities in the selected priority communes focused on cross-border areas.

(a) *Increasing access to safe water and sanitation at the local level*, through: (i) identifying priority works, developing preliminary and detailed engineering designs, conducting supervision

of works and social mobilization activities, as well as carrying out construction and rehabilitation of water systems in the selected localities in a participatory manner; (ii) carrying out small repairs and expansions of water supply networks to consolidate access to safe water in localities of the previous EPAR Program; (iii) implementing household-level sanitation activities consisting of a gender-sensitive community-based total sanitation approach (called ACAT in Haiti), sanitation marketing, hygiene promotion and behavior change communication (BCC);

(b) *Increasing access to safe water and sanitation in schools, health facilities and public spaces*[17] through: (i) developing and implementing water supply solutions in the selected institutions; (ii) constructing latrine blocks for these institutions and public spaces. Equal access to public spaces for women will be ensured and monitored periodically through overall beneficiary assessments, and adequate provisions for Menstrual Hygiene Management will be included; and (iii) establishing a sustainable management and maintenance model with the participation of the stakeholders involved.

27. ***Component 3: Contingent Emergency Response (US$1.0 million).*** Due to the high risk of a catastrophic event in Haiti and to the fact that cholera still poses a significant challenge, the proposed project includes a Contingent Emergency Response (CER) component, to respond rapidly at the GoH's request in the event of an eligible emergency.

B. Project Cost and Financing

28. *Financing instrument.* The financing instrument is Investment Project Financing (IPF), including an IDA grant (US$30 million equivalent) from Haiti's IDA 16 allocation and a grant from the IDA Regional Program (US$20 million equivalent), over six years to finance works, equipment, capacity building and cross-border cooperation.

Table 1. Project Cost and Financing (US$ million) †

Project Components	Project Cost	IDA	IDA Regional Program	Total IDA Financing	% Financing
1.Institutional Strengthening Capacity Building and Project Management	17.35	16.35	1.00	17.35	100%
- Recurrent costs*	*10.30*	*10.30*	-	*10.30*	*100%*
2.Water Supply and Sanitation	31.65	12.65	19.00	31.65	100%
3.Contingent Emergency Response	1.00	1.00	-	1.00	100%
					100%
Total Costs	**50.00**			**50.00**	**100%**
Total Project Costs	50.00	30.00	20.00	50.00	
Front-End Fees	0.00	0.00	0.00	0.00	
Total Financing Required	**50.00**	30.00	20.00	**50.00**	

† The Project is exempted of custom duties in accordance with the provisions of the Framework Law.
* These costs represent the salaries and operating costs of the project team as well as of selected OREPAs, URDs and TEPACs, for the duration of the project.

[17] This will include bi-national markets in selected communes.

29. The GoH requested a Project Preparation Advance (PPA) of US$3.0 million, which became effective on November 6, 2014. Total financing requirements are estimated at US$50 million, inclusive of price and physical contingencies, entirely funded by IDA. The Project will leverage funding in the form of an IDA Regional Grant (eligibility criteria presented in Annex 6).

C. Lessons Learned and Reflected in the Project Design

30. Lessons from the successful EPAR project, best water sector practice in other countries, and the World Bank's experience with regional programs are reflected in the design and include:

- *Sector planning.* Where the WSS sector heavily depends on external financing from multiple donors, coordination and planning are generally weak. In such an environment, it is important to focus on sector planning by setting clear objectives and generating a strong dynamic of responsibility, accountability and results. The Project will use experience from Benin to help DINEPA transition from a project to a programmatic approach and accelerate service delivery;
- *Combining health and WSS interventions.* The high-level technical meeting of global cholera experts, hosted by the World Bank in April 2014, concluded that cholera control requires the effective integration of health and WSS interventions, as well as an integrated approach to treatment at the health facility-level, provision of water treatment products and community-level education and prevention campaigns. The Project will, *inter alia*: (i) support the design of a bi-national monitoring system to strengthen collaboration on controlling pandemics between Haiti and the DR; and (ii) closely coordinate with MSPP at the central and departmental levels, and jointly train health and WSS local actors;
- *Regional approach to disease control.* Disease control is a regional public good and mitigating the adverse effects of communicable diseases on population health requires a collective effort. Experience from West Africa has shown that, while the responsibility rests with each individual country to build and maintain a capacity to detect and respond to public health events of potential international concern, a regional surveillance system is needed to ensure early detection and control of transboundary threats at source;
- *Delegation of service to OPs.* As the OP profession is still emerging in Haiti, most of the operators do not have experience in managing water supply services. Experience from Rwanda shows that the OP model should promote simplicity, flexibility, peer-to-peer learning, and focus on community acceptance, as well as entrepreneurship, rather than solely on technical skills. For this model to be sustainable, OPs will be selected before construction of water supply systems to interact early with their community in their new role and acquire a better knowledge of the network they are about to manage. Additionally, OPs trained under the EPAR Program will train new OPs and regional workshops will be organized to share experiences;
- *Sequencing of sanitation activities.* Sanitation demand and supply strengthening activities must be carefully coordinated and sequenced to avoid shortfalls in which supplies do not match increasing demand, affecting the sustainability of behavior changes. Experience from Indonesia showed that market research to understand consumer preferences and the supply capacity of local markets should precede implementation of community-led total sanitation (CLTS) and BCC interventions to generate demand while helping local supply capacity grow.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

31. DINEPA will be responsible for the technical, administrative, fiduciary, environmental and social management and execution of project activities, according to anti-corruption guidelines, with the following allocation of implementation responsibilities (see also Annex 3):

- DINEPA's Technical Department (DT) will be responsible for (i) overall coordination; (ii) quality control of technical aspects of procurement and safeguards; and (iii) management of Component 1, in close collaboration with its Rural Division (DMR) and the Strategic Orientation and Institutional Strengthening Unit under the Director's office; of water supply activities in Component 2, in close collaboration with the DMR; and of Component 3, in close collaboration with the MSPP's Directorate of Epidemiology, Laboratories and Research (DELR) in charge of cholera epidemiological surveillance;
- The Sanitation Department will be responsible for the management of sanitation activities in Component 2, in close collaboration with the DT and the MSPP. NGOs and consultants may be hired for the implementation of ACAT, sanitation marketing and the development of BCC;
- The Financial Department will be responsible for overall FM, while the Procurement Department (DPEM) will be responsible for procurement;
- The OREPAs will be progressively involved in technical and fiduciary-related tasks, after capacities have been built at the regional level; and
- The URDs and TEPACs will assist in: (i) the selection of targeted communities; (ii) the social mobilization process; (iii) works supervision; and (iv) the implementation of ACAT activities.

32. A subsidiary agreement will be signed between DINEPA, its line ministry, the Ministry of Public Works, Transport and Communications (MTPTC) and the Grant's Recipient, the Ministry of Economy and Finance (MEF) for the implementation of project activities. In addition, activities related to the programmatic approach (Component 1) will require policy dialogue with MTPTC, MEF as well as with the FTPs present in the WSS sector. The Project will use an existing inter-ministerial committee on sanitation which includes DINEPA, MTPTC, MSPP, the Ministry of Environment and the MENFP for sanitation policy and strategy discussions.

33. The Project will also involve various local health actors, particularly for training related to sanitation, engagement of all community members, as well as for the community health agents (ASCP) and departmental Sanitary Officers, and will use the collaboration agreements under development between DINEPA and the MENFP with regards to WSS in schools. In the event of a cholera outbreak, the Project will rely on the existing mechanism involving MSPP and DINEPA local actors (See Appendix 1 to Annex 3) to identify zones of intervention and the required solution (distribution of treatment products or small works/repairs). As for WSS in health facilities, DINEPA will collaborate with MSPP and the Bank's health program in Haiti, particularly in providing technical assistance to design adequate WSS infrastructure and maintain it.

34. The Project will also identify key government actors and external partners in Haiti and the DR to lead the dialogue for the design of a joint monitoring mechanism for pandemics.

B. Results Monitoring and Evaluation (M&E)

35. The overall responsibility for M&E will lie with the project team in the DT, which will consolidate all reports and provide the necessary outputs with support from DINEPA's departments and sub-national structures (OREPA, URD, TEPAC and CAEPA), as well as from OPs, NGOs and independent consultants, as required. DINEPA has also developed two monitoring systems which will be used under the Project.[18] Details on M&E arrangements, including M&E responsibilities, data collection requirements and frequency are provided in the Project's Operations Manual. Specific WSS coverage and service level baselines for the selected communities will be completed with funding under the PPA by project effectiveness, and the Project will finance WSS services beneficiary surveys at mid-term and at project closure.

36. Monitoring of environmental and social safeguards will be conducted by DINEPA. The M&E system will feed progress reports from DINEPA and data will be reviewed by frequent World Bank implementation support missions. Progress reports will also include information on procurement, contracts, disbursements, FM, beneficiaries, and other outputs. Annual independent audit reports will be prepared to monitor use of funds and physical progress. In addition, the Project will track the evolution of the incidence of water- and excreta-related diseases (including cholera) in the selected communities. However, as the Project does not include direct interventions in support of health actors coordinating response and treatment, clear attribution links between the WSS interventions and their impacts on disease incidence cannot be made.

C. Sustainability

37. The Project is part of a decade long program started in 2005 which has evolved from the piloting of OPs in nine communities and leveraging support from other partners to increase scope to another 14, to scaling-up this management model to a national level. The Project will build on the previous achievements which increased the coverage of metered household connections from eight percent to over 20 percent in the project area, and reached agreements with communities to charge households between 150 and 250 gourdes per month (between US$3.50 and US$5.75) for their consumption of chlorinated water, a rate which allows operators to cover O&M costs.

38. As a first step in a long-term engagement, the project objective is for O&M costs for all newly operated systems to be covered by consumer payment for water consumption by the end of the Project. However, the Project will finance the institutional cost of establishing stronger deconcentrated DINEPA services in selected departments. Transfers to cover recurrent expenditures for these services at project end are expected to come from improvements in the commercial viability of CTEs which will be sought by other donors in the context of their support. Progressive reduction of support over the life of the Project (six years) will be considered.

39. Component 2 will also focus on sustainability by supporting behavioral change in both water supply (paying for water by the volume consumed and providing facilities that meet the

[18] These systems are: (i) the SIP system developed to collect and analyze data on a set of indicators to monitor the performance of water supply systems in rural areas and small towns. Data collection and reporting is performed by the TEPACs; and (ii) the SISKLOR system developed to monitor water quality. Data collection and reporting is performed by the CAEPAs and the TEPACs.

needs of all community members) and sanitation (ceasing to defecate in the open, acquiring and maintaining an improved sanitation facility). It is also expected that the processes put in place for social mobilization, active community participation, and promoting gender equality will start to create a mechanism for greater citizen involvement and women's representation in the CAEPA and increased accountability of the service providers to deliver quality services.

V. KEY RISKS AND MITIGATION MEASURES

A. Overall Risk Rating and Explanation of Key Risks

40. Although the proposed operation builds upon strong prior experience acquired under the previous EPAR Project, the overall risk of the Project is assessed as "Substantial". Key risks to achieving results and their respective mitigation measures are:

- *Political and Governance.* These risks arise from Haiti's fragility and high degree of political instability. While it is difficult to mitigate this risk, the Project Team will work closely with the Country Management Unit to continue to identify ways to deliver results;
- *Sector Strategies.* The lack of a complete national strategy for sanitation at the household level may delay implementation of sanitation-related activities. The Project will pursue the discussions with DINEPA and FTPs in order to jointly develop a strategy and action plan to scale up gender-sensitive sanitation and hygiene interventions in rural areas and small towns;
- *Institutional Capacity for Implementation and Sustainability.* DINEPA has limited capacity in sanitation, social mobilization and fiduciary aspects at the deconcentrated level. Component 1 will strengthen these aspects, and additional consultants will be hired when needed;
- *Stakeholders - communities.* The lack of up-front buy-in by communities for new WSS management models, as well as the existence of different models or tariffs in neighboring communities may put at risk the sustainability of volumetric billing and the viability of the OP model. The Project recognizes the importance of social mobilization to collaborate and communicate with communities before, during and after works are executed. Additionally, a number of communities considered under the previous operation, but which had originally rejected the principles of intervention, have since observed the improved level of service in the EPAR beneficiary communities and have requested support to implement the OP model;
- *Stakeholders – multisectoral aspects.* The lack of collaboration between WSS and health actors may put at risk the achievement of the objectives related to sanitation activities as well as to the design of a bi-national monitoring mechanism. The Project will build on existing collaboration mechanisms at the local level and provide joint training for these actors;
- *Other*. This refers to the risk associated with sector sustainability given DINEPA's dependency on external assistance. The Project will work with DINEPA, MTPTC, MEF, as well as other ministries and FTPs to address the long-term sustainability of the current DINEPA structure.

41. *Climate and disaster risks.* During preparation, an assessment of the potential project exposure to climate and geophysical hazards was performed using the Climate and Disaster Risk Screening Tool. To help mitigate potential impacts due to exposure from these hazards, the Project will use non-physical components (enabling environment and capacity building activities), as well as the CER component as a mechanism for rapid response in the event of an eligible emergency.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analysis

42. The Project will increase sustainable access to WSS in rural areas and small towns, contributing to the higher level objective of improved health in Haiti, particularly by curbing the spread and severity of cholera in selected zones. Impacts of improved WSS access on welfare are multi-faceted and may be indirect; however, by providing better access to improved WSS to poor households, benefits – from the easily identifiable and quantifiable (value of water and willingness to pay for water, cost savings and consumer surplus) to the more intangible and difficult to measure (living standards, health, well-being, environmental protection) – can be substantially increased.

43. *Rationale for public sector provision/financing.* The Project will help scale up DINEPA's policy to shift the delivery of water services to local professional operators. Private financing of the development of water services is not, however, a realistic option and rural water investments will need to continue to be subsidized (see Financial Analysis). The Project is expected to improve capacity within the public sector to plan and execute investments for developing services at the appropriate sub-national level by supporting DINEPA's deconcentration efforts and capacity.

44. *Value added of Bank's support.* As a knowledge institution, the World Bank is capable of convening expertise from numerous countries to support the GoH's strategy and of coordinating donors around shared sector objectives. For example, in a successful south-south exchange to Africa, a DINEPA delegation studied Benin's strategies, mechanisms and tools in for the water and sanitation sector which have dramatically increased access to water supply in rural areas.

45. *Methodology/scope.* A cost-benefit analysis was carried out for all water supply-related project activities and for the sanitation activities related to sludge handling and removal. The economic analysis encompasses approximately 63 percent of the total project costs. The assessment of the water benefits is based on: (i) the actual willingness-to-pay as a proxy of the value of water; (ii) the cost savings accruing to beneficiaries; and (iii) the surplus accruing to (previously unconnected) beneficiaries. Water costs include: (i) direct investment costs and an allocated portion of project management costs and institutional support costs; and (ii) incremental operating costs of water facilities. The assessment of sanitation benefits is based on the cost savings accruing to households who would be offered the possibility of adequately emptying their latrines instead of being obliged to build a new latrine. Related costs include the initial investment in sludge handling and removal and the operating costs of facilities.

46. *Results*. The Economic Internal Rate of Return (EIRR) of the water-related activities is estimated at 11 percent and their Net Present Value (NPV) using a discount rate of 10 percent is estimated at U$1.9 million. The EIRR and NPV of the sludge handling and removal activities are estimated at 11.9 percent and US$0.1 million, respectively. The sensitivity analysis shows that the project outcome is above all sensitive to investment cost overruns.

47. *Financial Analysis*. The financial impact of project activities is assessed by the Financial Internal Rate of Return (FIRR) derived from the costs-benefits analysis. Financial calculations are carried out from the perspective of DINEPA and OPs and take into account the financial revenues

and costs in the with/without project situations, including taxes and excluding non-cash generating benefits. The FIRR is estimated at 1.8 percent, which evidences the need to continue to subsidize the development of the rural water supply sector. The difference between the EIRR and the FIRR is attributable to the substantial portion of economic benefits that accrue to the consumers (cost savings and consumer surplus), which amount to one third of total economic benefits.

48. *Financial Sustainability*. Improvements in sustainability of service development and delivery would result from: (i) the increased predictability of sectoral resources that would be facilitated by the shift to a programmatic approach. By planning ahead under this approach, adequate resources for investments, staff and O&M costs can be secured to achieve sector objectives and consolidate progress; and (ii) the enhanced and socially-acceptable O&M cost recovery policies that would be implemented by the OPs. This policy seeks to break the vicious circle of declining service quality for lack of dedicated management (as opposed to community management widely perceived as having failed at being sustainable for rural water supply in Haiti) and maintenance, reduced willingness to pay and further reduction of funds available for repairs and expansions.

B. Technical

49. The Project will rely on approaches, methodologies, technical designs and technologies appropriate for the Haitian context, as reflected in DINEPA's 2013 WSS technical guidelines.

50. *Water supply.* The Project will meet water supply needs through: (i) spring-fed gravity piped networks; and/or (ii) individual or collective boreholes (using hand pumps, or solar or electric power) depending on the specific conditions in each community. DINEPA is familiar with these technical options which offer high quality water with a minimum of complexity and treatment. Though capital costs can be high for gravity-fed systems where sources are distant from populations, operating costs and maintenance requirements are minimal, and thus suitable for management by local OPs and CAEPAs. Additionally, boreholes can generally be located close to the populations to be served, minimizing distribution costs, but can have high operating costs if electric pumping is used. Whenever pumping is necessary and cost-effective, the Project will give a strong preference to renewable energy such as solar power. Production facilities and distribution networks will be designed to enable all households to be connected.

51. *Water quality.* Spring water and groundwater are generally of high quality in Haiti, requiring no other treatment than chlorination at the distribution point. DINEPA's Performance Indicator Monitoring System (SIP) will monitor water quality throughout the Project.

52. *Management of water supply systems.* Under the Project, CAEPAs will enter into delegation contracts with OPs who will operate and maintain the water supply system and collect payments. The OREPA, through its URDs, will support and supervise both the CAEPAs and the OPs. OPs are selected following a call for proposals by a committee of representatives from the DINEPA Project Team, the URD and the relevant CAEPA, to ensure that the OP selected is accepted by the users and possesses the required entrepreneurial skills. Special attention will be given to ensuring women's participation in all aspects of decision making, in line with CAEPA statutes.

53. *Institutional sanitation*. Latrine blocks to be built in schools and markets will follow DINEPA's technical guidelines and take into account gender-specific needs. DINEPA will also provide technical guidance to the MSPP in equipping health facilities in WSS in the selected communities. Management of institutional sanitation facilities by OPs will also be tested.

54. *Readiness and sequencing of technical designs and works.* In order to launch the bidding process for works in the first and second years of implementation, the Project will take advantage of: (i) engineering designs financed under the EPAR to be updated with the PPA; (ii) engineering designs financed under the IDA Maternal and Child Health Project in the Centre department; and (iii) the WSS diagnosis of 20 priority cholera-affected communes.[19] The PPA will also finance engineering designs and socio-economic assessments for other communities in the Centre, as well as the selection of OPs, the election of CAEPAs and the initiation of social mobilization activities.

55. The WSP will complement project activities by providing technical and financial support to the Project and to DINEPA to : (i) strengthen DINEPA's planning, monitoring, reporting, and execution capacity through the development of programmatic budgets - support will also be made available to strengthen citizen engagement (Component 1); (ii) assist OREPAs and URDs in developing a training and monitoring framework for OPs and CAEPAs (Component 2); (iii) assist DINEPA in defining procedures, tools and mechanisms needed to sustain and replicate large scale sanitation programs (see Annex 9). Capacity support to the Sanitation Department will include a south-south exchange to provide DINEPA with examples of successful household sanitation programs (Component 2); (iv) increase DINEPA's capacity to address systemic gender issues by reviewing policy and strategy provisions in the sector, facilitating training on gender for DINEPA, service providers and stakeholders, as elaborated in the preliminary Gender Action Plan presented in Annex 10; and (v) strengthening DINEPA's capacity to engage meaningfully with clients.

C. Financial Management (FM)

56. The World Bank's FM Team has assessed that DINEPA has acceptable FM arrangements in place to take on the fiduciary responsibility for this Project. Nevertheless, FM risks exist at the country level and there is a capacity risk associated with the devolution of FM responsibilities to DINEPA's deconcentrated structures. The Project will use the existing FM framework in place at DINEPA for on-going projects financed by the IDB, Spanish Agency for International Development Cooperation, UNICEF and the Swiss Agency for Development and Cooperation. The main findings from the FM assessment are presented in Annex 3 and include recommendations to ensure the existing structure can adequately handle the additional activities generated by the Project. Specific training on FM practices in Bank-financed operations will be carried out for DINEPA's dedicated technical team, including the FM staff.

D. Procurement

57. An assessment of DINEPA's procurement department (DPEM) was carried out. DPEM has experience in managing the Bank financed EPAR project as well as projects financed by other

[19] Towards Cholera Elimination in Haiti: Estimating the Costs of Health, Water Supply and Sanitation Interventions in 20 Priority Communes. World Bank, 2014.

donors. PPA funds will be used to reinforce its capacity by recruiting an additional procurement specialist and an archivist at the central level and by providing equipment. Moreover, as part of its deconcentration efforts, DINEPA plans to strengthen the procurement capacity of initially one OREPA by hiring one senior and one junior procurement specialists. Procurement staff will receive intensive training in Bank policies and procedures and should be well equipped to execute procurement according to applicable World Bank Guidelines. In addition, the overall public procurement system in Haiti remains relatively weak. Despite some reforms in the legal and institutional framework for procurement, human and physical capacity constraints have delayed the adoption of improved contracting practices in most Government agencies.

E. Social (including Safeguards)

58. *Preparation of safeguards documents in situations of capacity constraints.* The Project is processed under OP 10.00, para 12 and BP 10.00, para 53 (Exceptional Arrangements in Situations of Urgent Need of Assistance or Capacity Constraints) which allows for compliance with all applicable social and environmental requirements to be deferred to the project implementation stage, when localities to benefit from WSS interventions will have been identified. Nevertheless, an RPF has been prepared and disclosed before approval as would be the case under regular procedures. The Safeguards Action Plan in Annex 3 presents the schedule for preparing the other relevant safeguards instruments.

59. *Poverty and gender.* Significant disparities exist in access to WSS services:[20] (i) water supply services fail to reach the poorest with 71 percent and 50 percent of the bottom two wealth quintiles accessing water from unprotected sources; and (ii) 46 percent of the population in the lowest quintile practicing open defecation compared to 9 percent in the highest quintile. By providing access to improved water sources to rural areas and small towns and putting in place activities to eliminate open defecation, the Project will impact service delivery to the poor. The Project will also have a significant impact on women and children, as fetching water is a task mostly undertaken by women (24 percent of people fetching water) and girls (39 percent).[21] Providing safe water and sanitation also has the greatest health impact on children, who are more susceptible to water- and excreta-related diseases. By providing improved sanitation facilities in public markets, the Project will further benefit women, as they hold the majority of market stands, including in bi-national markets where most sellers are Haitian women. In addition to ensuring that project benefits accrue to women, the Project will develop a Gender Action Plan to strengthen their role as decision makers and managers, from policy to service provision with respect to participation in sector activities, disease prevention and personal security (see Annex 10).

60. *Social mobilization.* The Project will place great emphasis on enhancing DINEPA's central and deconcentrated social mobilization capacities to engage with communities and foster the role of the CAEPAs. Appendix 1 of Annex 2 presents activities to strengthen social mobilization capacities, as well as the role of key stakeholders in project design, implementation and M&E.

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[20] This preliminary analysis was conducted by WSP using data from Demographic and Health Surveys (DHS, 2005-2006 and 2012) as well as from the Post-Earthquake Living Conditions Survey (ECVMAS, 2012).
[21] EPAR Project evaluation.

61. *Involuntary Resettlement (OP/BP 4.12).* This policy is triggered and an RPF has been prepared and disclosed. The exact location of WSS works to be financed will be determined by the ongoing socio-economic and technical studies financed under the PPA. Once their location is determined, DINEPA will screen subprojects based on the RPF and ensure their consistency with OP 4.12. When necessary, Resettlement Action Plans (RAP) or Abbreviated RAPs will be prepared, consulted upon and disclosed prior to the start of works.

62. Given the nature and size of the anticipated WSS works, as described in sections III.A and VI.B, and given that the majority of infrastructure is not site-specific, it is unlikely that project interventions will require physical relocation of beneficiaries, but land acquisition may be required. In previous rural water supply projects in Haiti, the construction of water supply systems had been conditional on communities accepting the principle of paying for water by the volume consumed and donating the land necessary for the protection of springwater collection points, standposts, kiosks and water reservoirs. To ensure that people are not negatively affected by the impacts of the Project and guarantee the protection of potentially vulnerable people, the Project will carry out a screening process to ensure that all these donations are effectively voluntary, and not resulting of communal pressure. Such screening process would include private domiciliary visits, the elaboration of a socio-economic profile of the owners of the land to be donated, and an analysis of the profile to ensure that the donation does not represent a significant loss of land or income. The social team at DINEPA will have to pay particular attention to ensure that landowners understand the implications of land donations, particularly where low levels of literacy are found. In addition, the Project will not allow for land donation for site-specific infrastructure and adequate documentation of the screening process would need to be presented before the commencement of works. The RPF as well as the Environmental and Social Management Framework (ESMF) will provide guidance on the screening process as well as on acquisition and compensation guidelines. In the scenario that the screening tool identifies that the donation was not effectively voluntary, the principles described in the RPF will apply and a RAP or Abbreviated RAP will be prepared. The screening tool included in the RPF and ESMF will exclude any activity that will require physical relocation.

F. Environment (including Safeguards)

63. The Project is rated "Category B" because proposed interventions (small-medium scale civil works) are not likely to result in significant negative impacts. This is mainly due to the limited scale of the interventions, their dispersed locations, and the nature of the potential impacts, which are easily identifiable, mostly temporary and easily mitigated with known management techniques.

64. *Environmental Assessment (OP/BP 4.01).* This policy is triggered. Component 1 relates largely to capacity building and will not cause any environmental impact. Environmental impacts will be associated with Component 2 and include: (i) the impact of works on the long term supply of water in both wet and dry seasons given that the draw on the water source may increase exponentially as communities have better (though more expensive) access to water; (ii) impacts related to construction, though likely to be highly localized and reversible; (iii) the design of the latrines – these need to be commensurate with the level of the water table to ensure that groundwater is not contaminated; and (iv) ensuring that latrines are built at a safe distance from water supply systems. The ESMF will set the minimum distance required between the latrines and

any bodies of water as well as the types of systems to be built in areas where there is a high water table. The recommendations from the ESMF will be reflected in the bidding documents and the contractors will be required to respond to these issues in their documents.

As soon as the specific site for each subproject or eligible activity under Component 2 is identified, an Environmental and Social Impact Assessment (ESIA) will be prepared, processed according to the national procedures, submitted for the Association's comment and then disclosed in-country and on the World Bank's external website. When necessary, generic Environmental Management Plans (EMPs) that specifically cover the water supply systems and sanitation works will be completed prior to construction.

65. *Natural Habitats (OP/BP 4.04) and Forests (OP/BP 4.36).* These policies are triggered as a precaution, given that the sites for works are currently unknown and natural habitats may be found around water sources.

G. Other Safeguards Policies Triggered

66. *Projects on International Waterways (OP/BP 7.50).* This policy is triggered. The Project will only finance ongoing schemes (water supply systems), involving additions or alterations that require rehabilitation, construction, or other changes that: (i) will not adversely change the quality or quantity of water flows to the Dominican Republic; and (ii) will not be adversely affected by the Dominican Republic's possible water use. The Project thus falls under the exception to notification requirement under OP 7.50 which applies because: only minor additions or alterations to ongoing schemes will be made; no works and activities that would exceed the original scheme, change its nature, or alter or expand its scope and extent so as to make it appear new or different will be financed under or in connection with the Project. Appropriate assessments of localized environmental impacts will be conducted for each investment under the Project during preparation.

H. World Bank Grievance Redress

67. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the WB's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the WB's corporate GRS, please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

Annex 1: Results Framework and Monitoring

HAITI: Sustainable Rural and Small Towns Water and Sanitation Project (P148970)

Results Framework

Project Development Objectives

The proposed objectives of the Project are to: (i) increase access to improved water supply and sanitation in targeted rural areas and small towns in zones affected by cholera; (ii) strengthen the Recipient's water and sanitation service delivery mechanism at the deconcentrated level; and (iii) improve the Recipient's capacity to respond promptly and effectively to an Eligible Emergency.

These results are at	Project Level

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values[22]						Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	YR5	End Target			
A national programming mechanism for deconcentrated WSS service delivery is operationalized, as evidenced by tools in place	☐	Number	0	0	1 (baseline)	2 (baseline + roadmap)	3 (baseline + roadmap + MTEF)	5 (baseline + roadmap + MTEF + Program Budget + sector coordination mechanism)	5 (baseline + roadmap + MTEF + Program Budget + sector coordination mechanism)	Annual	Progress reports from DINEPA	DINEPA, ONEPA
Required functions deconcentrated to targeted OREPA	☐	Number	0	1	2	4	4	6	6	Annual	Progress reports from DINEPA	DINEPA, OREPAs
Piped water systems managed sustainably by a professional operator (OP) under the Project	☐	Number	0	-	4	10	15	20	20	Annual	Progress reports from DINEPA, beneficiary surveys	DT, DMR, OREPAs

[22] Most of these target values are preliminary estimates and will be determined once the Baseline Study is completed in project areas.

People provided with access to "improved water sources" under the Project – rural, disaggregated by sex	☒	Number	0	0	30,000	56,000	118,000	150,000	150,000	Annual	Progress reports from DINEPA	DT
People provided with access to "improved sanitation facilities" under the Project – rural, disaggregated by sex	☒	Number	0	0	0	6,000	11,200	23,600	30,000	Annual	Progress reports from DINEPA, beneficiary surveys	DINEPA's Sanitation Department
Priority cholera communes supported by the Project	☐	Number	0	-	-	2	4	6	6	Annual	Progress reports from DINEPA	DT
Direct project beneficiaries	☒	Number	0	50,000	133,000	167,600	241,000	293,600	300,000	Annual	Progress reports from DINEPA, beneficiary surveys	DT
Female beneficiaries	☒	Percentage Sub-Type Supplemental	-	50	50	50	50	50	50	Annual	Progress reports from DINEPA	DT
Project beneficiaries in localities on the border with the DR including bi-national markets	☐	Number Sub-Type Breakdown	0	0	6,600	33,000	48,000	58,000	75,000	Annual	Progress reports from DINEPA	DT

Intermediate Results Indicators												
Component 1: Institutional Strengthening, Capacity Building and Project Management												
Intermediate Result: Strengthen institutions in delivering water and sanitation services at the deconcentrated level												
Departments covered by WSS baseline information	☐	Number	0	5	7	10	10	10	10	Annual	Progress reports from DINEPA	DT, DMR

DINEPA conducts an annual joint Government/ partners sector review	☐	Yes/No	No	No	Yes	Yes	Yes	Yes	Yes	Annual	Progress reports from DINEPA	DINEPA
Grievances registered related to delivery of project benefits that are actually addressed	☒	Percentage	0	0	50	60	70	80	80	Annual	Progress reports from DINEPA	DINEPA, OREPAs
At least one OREPA uses the baseline developed under the Project to prioritize interventions and inform DINEPA's Program Budget	☐	Yes/No	No	No	No	Yes	Yes	Yes	Yes	Annual	Progress reports from DINEPA	DT, OREPAs, ONEPA
At least one OREPA has installed an accounting system which facilitates the consolidation of financial information at the central level	☐	Yes/No	No	No	Yes	Yes	Yes	Yes	Yes	Annual	Progress reports from DINEPA	DINEPA, OREPAs
CAEPAs that include at least 20 percent female representation in project area	☐	Percentage	0	0	20	40	60	70	70	Annual	Progress reports from DINEPA	OREPAs
DINEPA supports the design of a Regional joint monitoring mechanism for pandemics is established, as evidenced by	☐	Yes/No	No	No	No	No	No	Yes	Yes	Annual	Progress reports from DINEPA/ MSPP	DINEPA and MSPP

triannual meetings with the MSPP and biannual meetings with the representatives from the DR												
A fecal sludge management service chain for rural areas and small towns is defined	☐	Yes/No	No	No	No	Yes	Yes	Yes	Yes	Annual	Progress reports from DINEPA	DINEPA's Sanitation Department
Component 2: Water Supply and Sanitation **Intermediate Result: Increase sustainable access to clean water and sanitation in rural areas and small towns**												
People benefitting from consolidation work (small repairs and expansions), disaggregated by sex	☐	Number	0	50,000	100,000	100,000	100,000	100,000	100,000	Annual	Progress reports from DINEPA	DT
New piped household water connections that are resulting from project interventions	☒	Number	0	500	1,750	2,800	5,400	6,750	6,750	Annual	Progress reports from DINEPA	DT
Improved community water points constructed or rehabilitated under the Project	☒	Number	0	5	35	50	100	135	135	Annual	Progress reports from DINEPA	DT
People trained to improve hygiene behavior or sanitation practices under the project, disaggregated by sex	☒	Number	0	0	15,000	28,000	59,000	75,000	75,000	Annual	Progress reports from DINEPA	DINEPA's Sanitation Department, MSPP

Communities where DINEPA and MSPP local structures have jointly been trained or collaborated in water supply, hygiene promotion and sanitation themes and activities	☐	Number	0	0	2	9	17	20	20	Annual	Progress reports from DINEPA	DMR, DINEPA's Sanitation Department, MSPP
Students and teachers benefitting from improved sanitation facilities in public schools under the Project, disaggregated by sex	☐	Number	0	0	3,000	5,600	11,800	20,000	20,000	Annual	Progress reports from DINEPA	DINEPA's Sanitation Department, MENFP
Latrine blocks for public institutions or spaces constructed or rehabilitated with management and maintenance arrangements in place under the Project	☐	Number	0	2	10	25	40	60	60	Annual	Progress reports from DINEPA	DINEPA's Sanitation Department
Female and youth beneficiaries rating safety in access to water and sanitation services as satisfactory or better	☐	Percentage	0	30	40	50	50	60	70	Annual	Progress reports from DINEPA, and surveys	DINEPA, DMR and DINEPA's Sanitation Department
Households with latrine built during project implementation and of which use is verified	☐	Number	0	0	0	380	710	1,495	1,900	Annual	Progress reports from DINEPA, and surveys on usage	DINEPA's Sanitation Department

Annex 1: Results Framework and Monitoring

Description of indicators

Project Development Objective Indicators

Indicator Name	Description (indicator definition etc.)
A national programming mechanism for deconcentrated WSS service delivery is operationalized, as evidenced by tools in place	This includes the development of: (i) a national WSS baseline (rural and urban); (ii) a roadmap for universal WSS coverage by 2030; (iii) a Medium Term Expenditure Framework (MTEF) for the sector, including the definition of a long-term sustainable financing plan for DINEPA and its concentrated structures; (iv) a 3-year rolling consolidated Program Budget; and (v) a sector coordination and joint performance mechanism to operationalize the Program Budget review process.
Required functions deconcentrated to targeted OREPAs	This includes: (i) procurement is transferred to the OREPA level; (ii) financial management is transferred to the OREPA level; (iii) payroll for URDs is managed at the OREPA level; (iv) payroll for TEPACs is managed at the OREPA level; (v) at least 50 percent of project contracts are procured and managed at the OREPA level; and (vi) reporting on the region's CAEPA/OP management contracts is done quarterly, including on operator performance indicators defined in DINEPA's SIP monitoring system and in the Project's Operation Manual.
Piped water systems managed sustainably by a professional operator (OP) under the Project	Number of systems constructed or rehabilitated under the Project with delivery of services effectively delegated to an OP. This includes: (i) evidence of contract signed; (ii) evidence of an active dedicated bank account; (iii) 100% O&M cost recovery; (iv) continuity of water service > 6 hours/day for household connections; and (v) percentage of water samples, over each year of operation, meeting DINEPA's quality requirements in terms of chlorine residual (between 0.2 and 2.0 mg/L) > 80 percent. In the case of rural areas and small towns, the systems will be considered to be managed sustainably if these conditions are met. The Project will support and rely on the monitoring system for rural and small town water supply systems put in place by DINEPA (SIP) which collects information on water sales and data on water quality will be obtained from daily analyses performed by the TEPACs, which is centralized at the DMR through DINEPA's SISKLOR water quality monitoring system. Points (iii), (iv) and (v) will be evaluated at the start of each year starting at the second year of operation. Satisfaction surveys will also be completed at the beginning, mid-term and project closure to assess service quality.
Number of people in rural areas provided with access to "improved water sources" under the Project, disaggregated by sex	This indicator measures the number of people in rural areas and small towns who benefited from "improved water sources" under the Project. Improved water sources include piped household connections (house or yard connections), public standposts, public kiosks, boreholes, protected dug wells, protected springs and rainwater collection. Hence, "improved water sources" do not include, inter alia, water provided through tanker truck or vendor, unprotected wells, unprotected springs, surface water (river, pond, dam, lake, stream, irrigation channel), or bottled water. The definition of what is considered an "improved water source"

	follows the UNICEF-WHO Joint Monitoring Program definition. Note that "improved water sources" does not refer to the question of new versus rehabilitated water sources, but is the standard definition used to track progress on the Millennium Development Goals.
Number of people in rural areas provided with access to "improved sanitation facilities" under the Project, disaggregated by sex	This indicator measures the cumulative number of people in rural areas and small towns who benefited from improved sanitation facilities that have been constructed under the Project. This includes people who have improved their own sanitation facilities following ACAT and sanitation marketing activities and does not include people benefiting from rehabilitation works or shared sanitation facilities. Improved sanitation facilities include flush or pour-flush to a piped sewer system, septic tank or pit latrine; ventilated improved pit (VIP) latrine; pit latrine with slab; and composting toilet.
Priority communes targeted by the Project	Priority communes include the most vulnerable commune in each one of the ten departments (selected by Government in the context of the Total Sanitation Campaign) and six communes that have proven the most vulnerable during the cholera epidemic on the basis of high incidence rates (including the origin of cases whenever available) in the dry seasons of 2012 and 2013, as well as alerts from January 2013 to May 2014. These communes are illustrated in Annex 7. Additionally, communes represented in the GoH's 10-year Cholera Elimination Plan, as well as communes identified following new alerts or outbreaks would also be considered as priority.
Direct project beneficiaries, of which female beneficiaries	Direct beneficiaries from water supply and sanitation interventions under the Project, including household and institutional sanitation, of which female.
Project beneficiaries in localities on the border with the DR including bi-national markets	Direct beneficiaries from water supply and sanitation interventions in localities on the border with the DR, including bi-national markets (sub-indicator).
Intermediate Results Indicators	
Indicator Name	Description (indicator definition etc.)
WSS baseline information developed for the entire country	This includes inventory of water sources, systems and distribution points (kiosks, standposts, boreholes, household connections, etc.), as well as surveys for sub-national levels of open defecation, improved vs unimproved latrines. This baseline information will be collected by DINEPA's local actors, under the supervision of a contracted entity, and will be disaggregated by sex.
DINEPA conducts an annual joint Government/partners sector review	A sector coordination and joint performance review mechanism is put in place with DINEPA, relevant ministries and financial and technical partners to operationalize the Program Budget review process.
Grievances registered related to delivery of project benefits that are actually addressed	This indicator will monitor feedback from citizens and build on a DINEPA initiative launched in January 2015 which created a call center for its clients or central hotline called "5959".
At least one OREPA uses the baseline developed under the Project to prioritize interventions and inform DINEPA's Program Budget	This indicator will measure the use of the baseline generated under Component 1 for planning, prioritizing and budgeting purposes at the deconcentrated level.

At least one OREPA has installed an accounting system which facilitates the consolidation of financial information at the central level	This includes: (i) the implementation and operationalization of the accounting system; and (ii) the functional accounting system facilitates the consolidation of financial information at the central level
A fecal sludge management service chain for rural areas and small towns is defined	The fecal sludge service chain to be defined could include containment, emptying, transport, treatment and reuse/disposal, as well as an assessment of the involvement of the private sector in the service chain and helping define models for its implementation. While containment will largely be covered by household onsite facilities and project-financed institutional sanitation facilities, the last four steps of the service chain could be defined with the support of the Project and WSP, where appropriate.
CAEPAs that include at least 20 percent female representation in project area	This indicator will measure the results of the promotion of women's participation in WSS-related decision-making at the local level. Under the standard articles creating the committees, CAEPAs are required to include at least two women representatives (out of at least four members). The members are elected by the community to assume one of the following functions: President, Treasurer, Secretary or Adviser. This indicator is consistent with one of the seven citizen engagement approaches used in Bank operations (see OPSPQ 2014 Results Framework and M&E Guidance Note), namely "Empowering citizens/communities with resources and decision-making powers".
DINEPA supports the design of a Regional joint monitoring mechanism for pandemics is established, as evidenced by triannual meetings with the MSPP and biannual meetings with the representatives from the DR	Support to design the mechanism includes: (i) identifying key actors that can lead the dialogue from each country; (ii) assessing in each country the feasibility (and associated risks) of implementing joint monitoring; (iii) identify options for establishing the joint system, including requirements to create the enabling environment for joint monitoring; (iv) agreeing with both countries on what option to pursue, including their respective roles and areas of accountability in the process; and (iv) helping to address any capacity constraints that may hinder process of joint monitoring.
People benefitting from consolidation work (small repairs and expansions), disaggregated by sex	Number of people from communities which benefitted from interventions from DINEPA's EPAR Program in the South Region and which require small repairs and expansions to increase sustainability.
New piped household water connections that are resulting from project interventions	Number of new piped household water connections which result from project interventions, including system construction and rehabilitation. A piped household water connection is defined as a connection that provides piped water to the consumer through either a house or yard connection. Hence, they do not include, inter alia, standposts, protected wells, boreholes, protected springs, piped water provided through tanker trucks or vendors, unprotected wells, unprotected springs, rivers, ponds and other surface water bodies, or bottled water.
Improved community water points constructed or rehabilitated under the Project	Number of improved community water points constructed or rehabilitated under the Project in rural and small towns. In this case, these refer to public kiosks and standposts (*fontaines*), as well as boreholes or protected springs.

People trained to improve hygiene behavior or sanitation practices under the project (number), disaggregated by sex	This indicator measures the cumulative number of people who have participated in a training activity to conduct improved hygiene behavior or sanitation practices. This does not include people who have been educated and/or informed through public information or mass publication campaigns. The training activities will be associated with: (i) community-led total sanitation campaigns (ACAT) to trigger behavior change and to facilitate community-wide elimination of open defecation in the selected communities; (ii) sanitation marketing to encourage greater household investment in durable, hygienic latrines, while strengthening the local private sector capacity to provide improved and affordable sanitation products and services; and (iii) hygiene promotion
Communities where DINEPA and MSPP local structures have jointly been trained or collaborated in water supply, hygiene promotion and sanitation themes and activities	This indicator will allow tracking the integration of health and WSS actors at the local level. "Community" is defined here as the rural area or small town benefitting from water supply.
Students and teachers benefitting from improved sanitation facilities in public schools under the Project, of which girls and female teachers	For this indicator, the beneficiaries will be gender-disaggregated and data will be collected with the support of the MENFP's departmental directorates.
Latrine blocks for public institutions or spaces constructed or rehabilitated with management and maintenance arrangements in place under the Project	Public institutions include: schools, health facilities, markets, beaches and other areas where significant concentration of people occurs on a regular basis in a given locality. Management and maintenance arrangements include, where appropriate: definition of responsibilities for cleaning and repairing in case of malfunction, for both drinking water equipment and sanitation facilities, availability of cleaning tools and supplies (paper, soap, chlorine, broom, disinfectant, gloves, pump and cleaning brushes, etc.), and an adequate budget for these arrangements.
Female and youth beneficiaries rating safety in access to water and sanitation services as satisfactory or better	This indicator enables DINEPA to monitor the quality of WSS services from the point of view of safety and vulnerability of women and youth.
Households with latrine built during project implementation and of which use is verified	This indicator would allow DINEPA to monitor progress on the population moving from open defecation to unimproved or improved sanitation facilities. Surveys would be required to verify use.

Annex 2: Detailed Project Description

HAITI: Sustainable Rural and Small Towns Water and Sanitation Project (P148970)

1. The proposed objectives of the Project are to: (i) increase access to improved water supply and sanitation in targeted rural areas and small towns in zones affected by cholera; (ii) strengthen the Recipient's water and sanitation service delivery mechanism at the deconcentrated level; and (iii) improve the Recipient's capacity to respond promptly and effectively to an Eligible Emergency.

Project Components

2. ***Component 1: Institutional Strengthening, Capacity Building and Project Management (US$17.35 million).*** Strengthening institutions in delivering water and sanitation services at the deconcentrated level. This will be achieved by:

(a) *Strengthening DINEPA's capacity to develop and manage a national programming mechanism for deconcentrated WSS service delivery in rural areas and small towns*. This sub-component will prepare DINEPA for a shift from a project approach to a programmatic approach and build on the strategic orientations included in the Framework Law and further developed in the Sector Strategic Plan (SSP) to provide the sector with a common framework for unit costs, service delivery standards, validation of population growth hypotheses, technologies, annual service objectives, etc. In addition, this programming mechanism will help DINEPA plan investments and address the need to look for additional financing to achieve universal WSS access. This will include:

(i) Establishing a baseline of WSS coverage and services (disaggregated by gender). A consulting firm/NGO will develop the baseline methodology, including data gathering and processing tools, and data will be collected by TEPACs and centralized at DINEPA's National Observatory on Water Supply and Sanitation (ONEPA). The Project will also support the establishment of a monitoring mechanism to update and use the baseline for decision-making and planning purposes with the ONEPA;
(ii) Developing a roadmap for universal WSS coverage by 2030;
(iii) Developing a Medium Term Expenditure Framework (MTEF) for the sector,
(iv) Developing a 3-year rolling consolidated Program Budget; and
(v) Establishing a sector coordination and joint performance mechanism to operationalize the Program Budget review process.
(vi) Defining the fecal sludge management service chain (i.e. emptying, transport, treatment and disposal) for rural areas and small towns, including establishing a regulated framework for the sludge handling, removal and disposal services, the definition of implementation models and a monitoring framework, as well as the potential involvement of the private sector. Provisions will also be made for financing equipment for sludge removal and transport, as well as for the construction of sludge treatment facilities depending on the outcomes of the definition phase. This activity will help provide adequate solutions for sludge final disposal in rural areas and small towns; and
(vii) Defining an institutional space, strategy and action plan for citizen engagement and gender mainstreaming that can provide a platform for beneficiaries' voice and participatory project

management.

(b) *Strengthening the capacity of the selected OREPAs* to manage WSS assets and deconcentrated personnel (URDs and TEPACs), to be defined in light of the current support provided to specific OREPAs by other donors. This will include: (i) the planning, identification, contracting and supervision of WSS works; (ii) supervision of delegated service delivery contracts with OPs. The Project will initially strengthen the capacity of these OREPAs in sanitation, procurement, FM, social mobilization for behavioral change, gender mainstreaming, and participatory monitoring through formal and non-formal beneficiary assessments, by contracting and training additional dedicated consultants. Particularly for procurement and FM, the progressive transfer of responsibilities will be refined using the experience with the OREPA Ouest initiated with the support of the IDB; and (iii) to ensure continuity of the presence of DINEPA at the deconcentrated levels across the country and to complement financing by other FTPs, the Project will also finance the operating costs associated with the OREPA-URD-TEPAC chain in selected regions. Consultants, training and financing of these operating costs could be expanded to other OREPAs, URDs or TEPACs, if needed.

More specifically, this sub-component will finance:

- Salaries, operating costs and equipment of technical specialists in the selected OREPAs, the selected URDs, as well as the TEPACs in all of the selected region's communes. This activity will finance existing staff costs and operating costs of this deconcentrated chain (OREPA-URD-TEPAC) during the whole project implementation period. Discussions with other FTPs point towards jointly using decreasing financing of the structures, while jointly defining a long-term sustainable financing plan for DINEPA. The details on these arrangements will be worked out with the FTPs and DINEPA during project implementation;
- Fees and equipment of procurement and FM specialists (both consultants) in the selected OREPAs during the whole implementation period;
- Fees and equipment of a sanitation engineer and social specialist specialized in sanitation-related themes (both consultants) in selected OREPAs during the whole implementation period;
- Consulting services, training and operating costs to strengthen social mobilization capacities; consultants and the DMR will prepare a social mobilization manual and train the social specialists of the selected URDs;
- Consulting services, training and operating costs to strengthen works supervision and technical design capacities of OREPA and URD staff;
- Consulting services, training and operating costs for the capacity building of OREPA, URD and TEPAC staff, in fields identified in an ongoing institutional assessment financed by AECID. With the support of WSP, the Project will build on this exercise and look into establishing clear incentives, reporting and coordination, as well as oversight mechanisms for these actors in order to achieve sustainability of investments;
- Consulting services, training and operating costs to update departmental and communal emergency plans in selected departments and train stakeholders (communes, CAEPAs and URDs) through annual workshops to improve emergency preparedness.

(c) *Strengthening the local stakeholders in rural and small towns WSS to improve service delivery sustainability* by: (i) developing training modules and organizing workshops in business

plan preparation, access to financing; (ii) training in the management and monitoring of rural and small town water supply systems and public sanitation facilities such as markets, for local operators (OPs and CAEPAs); (iii) financing start-up funds to pay for, *inter alia*, the initial rent, hire personnel and buy spare parts for OPs, and provision of water system or sanitation facilities maintenance toolkits for OPs, where appropriate; (iv) supplying water meters and protection boxes to be installed by the OPs on all water service connections. DINEPA will procure all meters in a single call for bids to ensure broader competition; (v) piloting water source protection schemes with existing OPs; and (vi) capacity building for community-based monitoring, including ensuring the participation of women's representation in key posts in the CAEPAs and community-based oversight bodies of the local operators.

Under this sub-component: (i) CAEPAs will be trained in communication, community mobilization, conflict resolution, and the roles of the various stakeholders under the OP management model; CAEPAs will also be trained in assuming their roles and responsibilities in monitoring of service, community mobilization around principles of interventions in water and use of sanitation facilities, as well as gender equality in water management; and (ii) OPs (and CAEPAs if they choose to act as operators) in billing and accounting, commercial management, meter reading and repair, water disinfection, plumbing, community relations, and conflict resolution. Additionally, the Project will organize annual regional workshops on various themes including governance, commercial management, performance indicators, exchanges on good practice and lessons learned to support the OPs and CAEPAs. In addition, the Project will finance training for and support the creation of OPs for selected sanitation facilities in public spaces such as markets. Sanitation OPs will be similar to the water OPs in that they will collect a fee from customers who use the sanitation facilities in public spaces which they manage, maintain and keep clean.

Pilot on the inclusion of a simplified payment for environmental services (PES) scheme to protect water sources and their water supply areas. Simple schemes are envisaged to protect water resources and improve water infiltration in the catchment areas, drawing on experience from approaches used in Costa Rica, Mexico and Brazil in which infrastructure and land use changes to protect water sources were coupled with water supply investments, involving local farmers and landowners. This activity will first finance consulting services to assess feasibility, including: (i) identifying the critical areas that will need to be conserved to protect water supplies; (ii) an assessment of the current land ownership environment in the selected areas; (iii) technical feasibility studies of different land use options (reforestation and forest conservation, silvopastoral systems, agroforestry, use of forage or grasses, etc.) to assess their potential contribution to protecting water supplies and to generating benefits for landholders and to identify any tradeoffs between these objectives; (iv) an analysis of alternative arrangements for implementation of the PES scheme on the ground; and (v) an analysis of the economic benefits and potential sustainability of the PES scheme. If the assessment were to be positive and sufficient time remain in the Project, supporting the design of an appropriate pilot PES scheme, training the participating communities and OPs who would implement the PES pilot, and financing part of the initial investments required to protect water sources (eg fencing off areas around springs, building alternative drinking sources for cattle outside the critical areas, reforestation of critical areas). This activity will help consolidate the sustainability of groundwater resources (spring catchments) by improving water infiltration and will be defined during implementation.

(d) *Supporting the design of a joint monitoring mechanism between Haiti and the DR to respond to trans-boundary pandemics and outbreaks of waterborne diseases*, as part of an island-wide strategy. Population movements between Haiti and the DR render the border area a key control zone for cholera, as well as other water- and excreta-related diseases, and epidemiologic surveillance needs to be coordinated between both countries. Bi-national coordination is essential to follow up on all the strategic components put in place to address the epidemic response and the actions towards elimination.

Since the mechanism for joint monitoring is currently non-existent, the Project will first work towards laying the groundwork to support the design of a functional joint monitoring mechanism with buy-in from both countries. This process would entail, *inter alia*: (i) identifying key actors that can support/help lead the dialogue from Haiti and the DR towards the establishment of a functional joint monitoring mechanism; (ii) conducting an assessment in each country of the feasibility (and associated risks) of implementing joint monitoring, including the identification of strategic entry points in each country on which the collaboration can be built; (iii) identifying options for establishing the joint system, including requirements to create the enabling environment for joint monitoring; (iv) agreeing with both countries on what option to pursue, including their respective roles and areas of accountability in the process; (iv) helping to address any capacity constraints that may hinder process of joint monitoring; and (v) supporting the establishment of joint monitoring mechanism.

Additionally, the Project will, *inter alia*, explore the following critical building blocks:

- Build on previous coordination mechanism and exchange of experiences between the DR and Haiti, as generated in the binational meeting in April 2011, when the DR Ministry of Health received a delegation from Haiti, represented by officials from MSPP, the Cuban Medical Brigade (BMC) and the US Center for Disease Control (CDC).
- Build upon and prioritize the implementation of the WHO's 2005 International Health Regulations, including standardization where possible and protocol implementation for cross-border communication and collaboration. The Project will also explore best international practices, such as the Border Disease Infectious Disease Program (BIDS) between the United States and Mexico. This program includes surveillance protocols, epidemiological officers, serologic testing, and shared data reporting for key diseases;
- Identify alternate funding sources to involve the DR and to make this initiative sustainable, and communicate the value of border health actions and initiatives to Haiti and DR policy- and decision-makers;
- Increase cross-border data and information sharing, possibly leveraging enhanced electronic surveillance systems;
- Include migrant populations, particularly seasonal workers from Haiti to the DR, in public health surveillance, prevention and control, and outreach activities;
- Revise policies and practices that hinder the cross-border sharing of public health items; convene a binational work group to advance specific action items to implement this proposal;
- Support in partnership with PAHO/WHO and US CDC the continuing building of relationships and strategic alliances that facilitate binational collaboration on infectious disease and emergency preparedness issues affecting Haiti and the DR beyond cholera.

(e) *Supporting project management, monitoring and evaluation* by enabling the DINEPA project team to deliver its project implementation responsibilities at the central and regional levels, including complying with Bank fiduciary procedures, safeguards, monitoring and evaluation while improving its capacity to engage in dialogue with its clients. It will also contribute to the acquisition of equipment and the project team's operating costs. This sub-component will: (i) finance consultants, training, operating costs, equipment and vehicles for the project team in DINEPA's Technical Department (DT) and the selected OREPA and/or URD in project areas; (ii) finance the carrying out audits of project financial statements; and (iii) support sound environmental and social management of the Project, including the preparation of safeguard documents, monitoring of the Project's ESMP, and financing of compensation, if needed.

3. ***Component 2: Water Supply and Sanitation (US$31.65 million).*** The Project will seek to offer a comprehensive WSS package of interventions in selected rural areas and small towns. The localities will be selected among: (i) priority communes that have posted the highest cholera incidence rate in the last three dry seasons, as well as communes along the border with the DR, with specific focus on the Centre department; and (ii) communes of the South Region in which the previous EPAR Program intervened. The latter interventions first aim at consolidating the results from the previous operation by continuing to support the CAEPAs and OPs, particularly in commercial aspects to increase revenue collection, as well as expanding to neighboring localities, as service sustainability can only be viable in the long run if this approach is implemented at scale.

4. Project interventions will target rural areas and small towns with a population ranging from 3,000 to 10,000 people to be served by a water supply system, including those persons living close to the water source and transmission lines of the system. The Project will build on previous experience which focused on similar types of agglomerations and to complement other FTPs' interventions primarily focusing on dispersed rural areas of less than 3,000 people (ex.: UNICEF and Spain) or on larger towns and intermediate cities of more than 10,000 people (ex.: IDB and Spain). The selection of communities will then be refined using a number of criteria, including the existing water coverage and service quality, willingness to adhere to the principles of paying for water by the volume consumed and to delegating the responsibility of service delivery to an OP, as well as watershed-related aspects and vulnerability to natural disasters.

(a) *Increasing access to safe water and sanitation at the locality level*. This subcomponent will finance: (i) the identification of priority works, development of preliminary and detailed engineering designs, supervision of works and social mobilization activities, as well as the construction and rehabilitation of water systems in the selected localities; (ii) small repairs and expansions to consolidate access to safe water in localities of the previous EPAR Program, including the technical evaluation of the systems built or rehabilitated under the previous DINEPA EPAR Program (financed by both the IDB and the World Bank). For both (i) and (ii), TEPACs and URDs will prepare WSS datasheets and carry out social mobilization, while consulting firms will initially carry out design studies and supervision and will train OREPA and URD staff to progressively replace them; (iii) following the GoH's policy of no-subsidy for household sanitation, the implementation of sanitation activities targeting households, including a gender-sensitive community-based total sanitation approach (called ACAT in Haiti), sanitation marketing, hygiene promotion and behavior change communication. ACAT will be used to trigger behavior

change and to facilitate community-wide elimination of open defecation in the selected communities, while sanitation marketing will encourage greater household investment in durable, hygienic latrines, while strengthening the local private sector capacity to provide improved and affordable sanitation products and services.

ACAT. The following table presents the ACAT methodology. The implementation of ACAT in the selected communities will comprise hygiene promotion through the training and support of the MSPP's community health agents (ASCP), as well as through the inclusion of hygiene training for children and teachers of schools benefitting from WSS interventions.

Table A2.1. Description of the ACAT methodology and phasing in of hygiene promotion and behavior change communication.

Phase	Description	Actors involved
Pre-triggering (i) Awareness and community mobilization workshop (ii) Establishment of ODF certification committee (iii) Training of facilitators	(i) The workshop will serve to explain ACAT principles to local leaders and administrators to secure their support; (ii) This committee will serve to certify that communities have reached the ODF status. For interventions in the Centre, the same committee as the one for UNICEF/NGO-executed interventions could be used, or other implementing agents (firms, consultants, etc.), as required (iii) The facilitators will be leading the community-based dialogue and follow-up	(i) The workshop will be organized and led by the implementing agent and targets mayors, CASECs and CAEPAs (ii) The formation of the committee will be led by the implementing agents and the certification committee will comprise representatives from DINEPA, MSPP, MENFP and from the community (iii) The facilitators will be hired by the implementing agent, and could include TEPACs and URDs
Triggering	(i) Engage the community so that it decides to adhere to the ODF objective → collective decision (ii) Identify community leaders, ensuring active engagement of women, and form the community follow-up committee (*Comité de Suivi*)	The facilitators will lead the triggering with the presence/support of community leaders, TEPACs and community health agents (ASCP)
Post-triggering	Monitoring of progress: this will include (i) weekly visits of the facilitators to the *Comité de Suivi*; and (ii) after 3 months, facilitators to be joined by TEPACs and ASCPs to follow-up with *Comité de Suivi*	*Comité de Suivi*, ASCP, TEPACs and the facilitators
Certification of ODF communities and reward/celebration	The certification committee, with feedback from the facilitators and Comités de Suivi, evaluates and certifies the community's ODF status. The Project will fund rewards or community events to celebrate the ODF status.	Certification committee
Training of masons and local suppliers	Depending on the outcomes of the sanitation marketing preparatory studies and assessments, the Project will finance training for local masons and other suppliers in household latrine construction and product promotion	NGOs, firms or consultants will provide training for the local masons, with the presence of DINEPA local actors (TEPACs and URDs), and support market facilitation in project area in order to test business models that could be replicated in other parts of the country
Hygiene promotion and other complementary	Hygiene promotion will take place at three levels: (i) household, by using ASCPs who already count on hygiene promotion in their	These activities will be led by ASCPs for (i) and facilitators, with the support of CAEPAs, TEPACs, school directors

behavior change communication (BCC)	regular training program. A reminder will be given during ACAT, with specific emphasis on handwashing, use of toilets/latrines and household water treatment and safe storage; (ii) in schools, where training will be given to teachers and students, and where support will be given to establish a sustainable management model for the sanitation facilities and handwashing stations financed under the project. If the school does not count on a "Health Club" (*Club de Santé*) to monitor these health and WSS-related aspects, the Project will support its creation; and (iii) in health facilities where training will be given to the *Officiers sanitaires* in charge of ensuring that facilities have appropriate WSS solutions following the norms. BCC will build on drivers identified through research in order to reinforce messages conveyed through ACAT and stimulate complementary hygiene behaviors. Messages will build on insights from various ongoing consumer studies.	and school committees, as well as the MENFP departmental directorates for (ii) For BCC, other communication relays may be used such as religious leaders, or community elders or *notables*

Sanitation marketing and behavior change communication (BCC). As DINEPA is currently testing ACAT in the Centre and Artibonite departments and has begun the assessment of market conditions for sanitation marketing, this sub-component will finance consulting services, training and operating costs to support DINEPA in finalizing the operationalization of these two approaches and tailor them to Haitian rural areas and small town consumers and supply chains. This will be done in coordination with interventions from other FTPs involved and will include product and business model design, development and testing of promotional and marketing materials and activities, as well as the implementation of a market facilitation program in selected areas.[23] Coordination at the local level between DINEPA and MSPP will be strengthened through the joint training, and local authorities (mayors and administration of communal sections, CASECs) will be involved. In addition, this sub-component will finance NGO/firm services, consulting services and operating costs to implement ACAT, sanitation marketing as well as consulting services and goods for the development of BCC that targets the behavioral determinants most relevant for sanitation behavior change for men and women in the areas of intervention based on insights from consumer research. Sanitation marketing will need to be initiated in parallel and the solution tailored to small town consumers and small town supply chains. This sub-component will help improve hygiene and sanitation practices of household members of selected communities, as well as help create an enabling environment to lead households to construct/improve their sanitation facilities.[24]

[23] For the implementation of sanitation marketing activities, the project will identify geographical areas with concentration and quantity of potential new customers close enough to local suppliers to be profitably serviced.
[24] This includes looking at affordability, the potential involvement of micro-finance institutions, and integration into safety nets.

In addition, this component will finance consulting services for assessing the sanitation features of selected communities, including hydrogeological and soil conditions; the assessments will be used to select the options that might be environmentally and socially acceptable for household sanitation. This component will also be complemented by WSP technical and financial support for the activities related to current efforts in sanitation in Haiti and the sanitation enabling environment – the policy, institutional and financial framework that is necessary for sustaining and replicating large scale sanitation programs.

(b) *Increasing access to safe water and sanitation in institutions.* This subcomponent will finance: (i) water supply solutions in the selected localities' public schools, health facilities and public spaces such as markets (including bi-national markets); and (ii) the construction of latrine blocks for these institutions – in both cases taking into account gender-informed preferences. Equal access of public spaces by women will be ensured and monitored periodically through overall beneficiary assessments. For both water and sanitation, the Project will serve to establish a sustainable management and maintenance/cleaning model to be developed with the institutions and communities involved, and the construction of sanitation facilities (and water supply solutions) will be contingent upon commitment to ensure their proper maintenance/management. DINEPA has developed agreements for this purpose with the MENFP's departmental directorates.

Schools will be targeted to promote, seed and sustain positive sanitation behavior change in children (boys and girls) and the targeted communities, and the Project will provide initial hygiene and latrine maintenance kits for CAEPAs and schools which benefitted from sanitation interventions. Additionally, while the Project will mostly focus on providing WSS solutions to public schools, it will explore financing solutions in private schools during implementation. As for health facilities, DINEPA will work in close collaboration with the MSPP and the Bank's health program in Haiti, particularly in supporting the design and construction/rehabilitation of adequate WSS infrastructure that are aligned with relevant health sector norms and standards. Public sanitation facilities will be inspected regularly by the MSPP's sanitary officers.

5. Activities financed under the PPA related to this component include (i) the preparation of feasibility studies for the identification of potential localities to benefit from water and sanitation interventions; the preparation of (ii) preliminary engineering designs and socio-economic assessments for selected localities, including willingness and ability to pay; and (iii) the initiation of social mobilization activities in the selected localities, including the selection of OPs for the water supply systems and the election of local water and sanitation committees (CAEPAs).

6. ***Component 3: Contingent Emergency Response (US$1.0 million).*** Due to the high risk of a catastrophic event in Haiti and the fact that cholera still poses a significant challenge, the proposed project includes a Contingent Emergency Response (CER) component, designed as a mechanism for rapid response in the event of an eligible emergency, subject to the request of the GoH (e.g. hurricanes, floods, cholera outbreaks, etc.). Such components, which include triggers and conditions for the use of funds, are included in most investment projects in Haiti in keeping with the recommendations of the 2011 World Development Report (WDR) on Conflict, Security and Development and with the operational experience acquired in Haiti since the 2010 earthquake.

7. Following an adverse natural event or crisis during the execution period of the proposed project, DINEPA may request the Bank to reallocate project funds to support response and reconstruction. This component would facilitate the rapid re-categorization of financing and additionally financing request under streamlined procedures during an emergency, should the Government so request. This component would be implemented in accordance with the Bank's Special Considerations under OP/BP 10.00, and all expenditures would be appraised, reviewed and found to be acceptable to the Bank prior to any disbursements. Disbursements would be made against a positive list of critical goods (both domestic and imported) or the procurement of goods, works, and consulting services (including audit costs) required to support the immediate response and recovery needs of the GoH. In the case of cholera outbreaks, the Project will work closely with DINEPA and the Directorate of Epidemiology, Laboratories and Research (DELR) of the MSPP in charge of cholera epidemiological surveillance.

8. Preparatory work would be undertaken for the design of the component, including: (i) preparation of an agreed upon preliminary emergency recovery Action Plan of activities; (ii) compilation of a positive list of eligible critical imports/needs; (iii) terms of reference and contracts for technical services to support the scoping and design of the emergency recovery and reconstruction subprojects; and (iv) a list of firms (national and regional) that have a demonstrable track record in emergency response activities related to the anticipated nature and scope of those required. A CER Operations Manual will apply to this component detailing FM, procurement, safeguard and any other necessary implementation arrangements. Details on specific eligible expenditures can be found in Annex 3.

9. Appendix 1 to this Annex provides a detailed presentation of the project activities to strengthen social mobilization capacities and of its use through the sub-project cycle.

Appendix 1: Social Mobilization

Strengthening DINEPA's social mobilization capacity

1. Appendix 1 to this Annex provides a detailed presentation of the project activities to strengthen social mobilization capacities and of its use through the sub-project cycle.

2. Haiti's vast water and sanitation needs have begun to be tackled during the past decade through a number of internationally funded rural water and sanitation provision projects. These projects have introduced the construction of piped water schemes relying on a volumetric billing and a professional management model involving local water operators to run, maintain and manage the water supply systems based on a contract signed with local water committees.

3. While these projects have been regarded as largely successful, one of the most important lessons learned is the vital role of social mobilizations activities before, during, and after its implementation. Social mobilization activities include informing all community members, men and women, analyzing each community´s capacity and willingness to pay for water provision, forming and continuously training local committees, and assisting communities in conflict resolution. Most of these projects have recruited NGOs and private firms for the implementation of social mobilization activities, which are no longer present once the project comes to an end, and thus pose a clear problem of sustainability.

4. The proposed project will place great emphasis in enhancing DINEPA's social mobilization capacities, including gender considerations. At the central level, the Project will finance the creation of a central social mobilization unit staffed by at least one expert. At the deconcentrated level, each OREPA will include a social specialist that will in turn support the social mobilization delegate of every URD (departmental level). These structures solely dedicated to social mobilization will adequately foster the TEPACs in every commune as well as water committees (CAEPAs) and professional operators (OPs) running each water provision system. Only through a strong social mobilization structure will the CAEPAs and OPs have the support to provide a good and sustainable service to the population. Additionally, the Project will contract a consultant, NGO or firm specialized in social mobilization to elaborate the training manuals and accompany DINEPA's social staff for 2 years creating greater capacity at all levels.

S*ocial mobilization throughout the project cycle*

5. Social mobilization is a transversal component implemented throughout the project cycle: it lays the ground for the project preparation phase, accompanies the construction and implementation of infrastructure, and supports the CAEPAs and OPs to guarantee the adequate functioning of the systems once in place, as well as monitoring and evaluation of project activities.

6. The implementation of community water systems begins with a social mobilization effort to identify communities that accept the guiding concept of this project and of the national water sector reform in Haiti: payment for water provision through volumetric billing. For this, the members of the social team carry out a series of consultation meetings first with an ensemble of authorities and leaders in the community and then with general population, including focus groups

of men and women. In rural Haiti, where people are not used to paying for water, social teams have the challenging task of explaining the benefits of sustainable well-managed water systems. Only if and when a community has understood and accepted water provision through volumetric billing will the project engineers finalize the technical studies and design of the water system. The social mobilization team would then proceed to set up the local water committees (composed of 5 members from different geographic sectors covered by the system), and provide training in a variety of subjects such as administration, community sensitization, and conflict resolution. The social mobilization team would also liaise with the technical experts of the project to make a call for applications for the OP position and pick the best-suited candidate.

7. Throughout the construction of the water systems, the social mobilization staff will need to work closely with the CAEPAs to ensure the collaboration of community members with the construction firm. The CAEPAs would need to inform the community on the advancement of the works on a daily basis and guarantee the access of the construction firm through people's plots of land where infrastructure would be built or pipes will be laid. CAEPAs would carry out a fair and representative recruiting of local labor force required by the firm for the construction of the system. The social mobilization staff would provide crucial support to the CAEPAs to resolve any possible conflicts that may arise between the population and the firm. The social mobilization team might also need to mediate in case of conflicts between the population and the CAEPA.

8. Once a system is built the social mobilization units will continue to accompany the CAEPAs in order to ensure an adequate service provision and resolve potential conflicts. This would potentially include follow-up trainings on the different needs and shortcomings identified by the CAEPA and the population. The social teams will closely follow up on the functioning of the CAEPAs during the first 6 months of operation of the water systems and gradually taper off as the CAEPAs become empowered of the service provision. Social mobilization and related training should also include education on household water quality and safe storage in households.

9. With regards to the sanitation component of the project, social mobilization activities will build upon the Project's total sanitation campaigns and the construction of institutional latrines to promote the construction and utilization of household sanitation facilities. At the deconcentrated level, each OREPA will count with an expert to oversee sanitation of activities and monitor sanitation coverage in project areas. The social delegates of the URDs and the TEPACs will also play a crucial role in training the CAEPAs to promote sanitation and hygiene in the communities benefiting from water systems, as well as to ensure the adequate use and maintenance of institutional facilities. Within each CAEPA, one of its members will become the focal point for sanitation issues. At the local level, the TEPACs and CAEPAs will work in conjunction with the Community Health Agents of MSPP to create awareness of the importance of sanitation and promote household sanitation facilities.

Annex 3: Implementation Arrangements

HAITI: Sustainable Rural and Small Towns Water and Sanitation Project (P148970)

Project Institutional and Implementation Arrangements

1. **Overall implementation responsibility and oversight**. DINEPA will be the implementing agency of the proposed project and execute it through its central departments and OREPAs. The Government of Haiti will ensure that DINEPA carries out the proposed project in accordance with sound administrative, engineering, accounting and environmental standards pursuant to the provisions of the Agreement with the Bank, the applicable Safeguards Documents, the Anti-Corruption Guidelines, and the Operations Manual (OM). A subsidiary agreement will be signed between DINEPA, its line ministry, the Ministry of Public Works (MTPTC) and the Ministry of Economy and Finance (MEF).

2. DINEPA's Sanitation Department also prepared a comprehensive policy paper which outlines the need for close coordination with the Ministry of Public Health and Population (MSPP) local actors to develop the sanitation sub-sector and monitor compliance with public health regulations (See Appendix to Annex 3 for more on coordination between DINEPA and MSPP). Additionally, it further discusses the need to promote coordination with other relevant ministries, such as the Ministry of National Education and Vocational Training (MENFP), the Ministry of Environment (MDE) and the Ministry of Interior and Local Authorities (MICT).

3. *Capacity.* DINEPA has adequate technical capacity at the central level (albeit less at the deconcentrated level), but lacks capacity in environmental and social safeguards-related aspects, as well as in M&E. New staff and training will be provided to strengthen capacity in these areas. Given the previous operation's success and results, DINEPA's fiduciary performance is considered "Satisfactory". However, the larger financial envelope of the new operation will require new staff and training to provide timely FM and procurement support to externally-financed projects. Procurement and FM capacities will be progressively developed at OREPA level under the Project. Additionally, DINEPA's capacity to implement projects is estimated at $40 million per year, a limit which is practically already reached through other donors' programs. To mitigate this capacity risk, the Project will rely on an experienced DINEPA project coordinator (DINEPA's Deputy Technical Director), DINEPA's staff at sub-national levels and consultants hired by DINEPA and dedicated to the Project to complement in areas where DINEPA lacks capacity and human resources.

4. *Specific responsibilities and training needs.* The allocation of implementation responsibilities from DINEPA's and MSPP's actors are presented in Table A3.1. This table also presents the different training needs corresponding to each of these stakeholders. In addition, Figure A3.1 illustrates the deconcentrated chain of WSS service delivery and the general role of each actor.

5. The Project will involve various local health actors and will use the collaboration agreements under development between DINEPA and the MENFP with regards to WSS in schools. In the event of a cholera outbreak, the Project will rely on the existing mechanism

involving MSPP and DINEPA local actors (See Appendix 1 to Annex 3) to identify zones of interventions and the required solution (distribution of treatment products or small works/repairs). As for WSS in health facilities, DINEPA will work in close collaboration with the MSPP and the Bank's health program in Haiti, particularly in providing technical assistance in designing adequate WSS infrastructure.

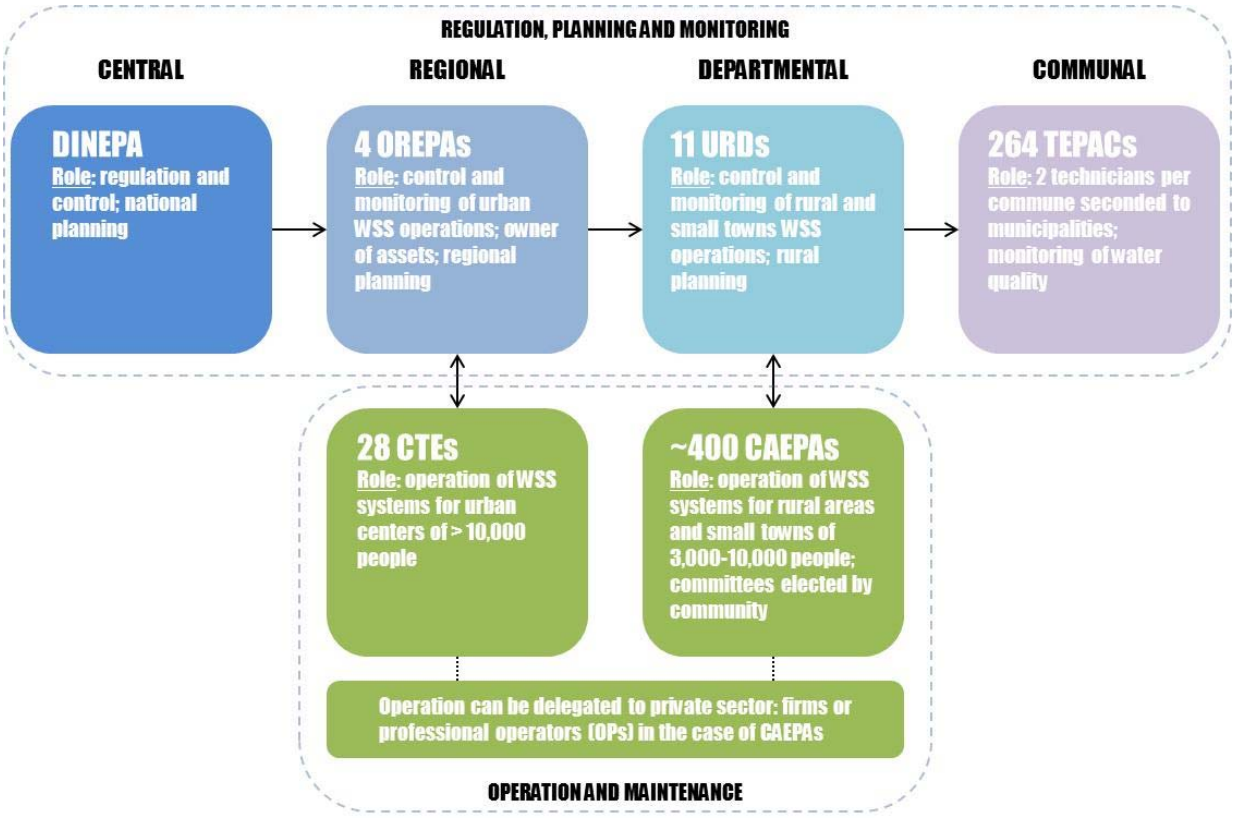

Figure A3.1. Deconcentrated chain of WSS service delivery in Haiti.[25]

6. The Project will also identify key actors in Haiti and the DR, both government and external partners, which can support and help lead the dialogue for the establishment of a joint monitoring mechanism for pandemics between the two countries.

7. *Readiness of project team.* DINEPA has a core team in place to implement the PPA funds, including for technical, fiduciary and social aspects, as well as for overall coordination with other ministries. The PPA will also be used to increase DINEPA's capacity and readiness to implement the Project, including to complement the setup of the project implementation structure at the central DINEPA level (consultants to support DINEPA staff), as well as at the OREPA level

[25] URDs = Rural Departmental Units, TEPACs = communal WSS technicians and CTEs = urban water supply centers.

(consultants and goods). Candidates have been identified and terms of reference drafted, and contracts will be signed at effectiveness.

Table A3.1. DINEPA and MSPP stakeholders, responsibilities and capacity building activities to be financed under the Project.

Stakeholders	Responsibilities	Capacity building activities
DINEPA's Technical Department (DT)	• Overall coordination of the Project • Quality control of technical aspects of procurement and safeguards • Management of Component 1, in close collaboration with its Rural Division (DMR) and the Strategic Orientation and Institutional Strengthening Unit under the Director's office; of water supply activities in Component 2, in close collaboration with the DMR; and of Component 3, in close collaboration with the MSPP's Directorate of Epidemiology, Laboratories and Research (DELR) in charge of cholera epidemiological surveillance	• Training in project management • Strengthening of social mobilization capacity at the central level • Training in gender mainstreaming • Training on social and environmental safeguards and workshop on the implementation of the RPF and ESMF. It is to be noted that a number of DINEPA staff and consultants have participated in training provided by the Bank in 2014 on social safeguards.
Strategic Orientation and Institutional Strengthening Unit	• Coordination of WSS actors and partners • Development of sector strategies	• Training in programmatic approach related themes (MTEF, rolling program budget, sector review mechanism with partners)
DINEPA's Sanitation Department	• Management of sanitation activities in Component 2, in close collaboration with the DT and the MSPP • Overall coordination of NGOs, firms and consultants responsible for the implementation of ACAT, sanitation marketing as well as for the development of behavior change communication	• Training in hygiene promotion and sanitation related to: (i) definition of national sanitation strategy, particularly for small towns and rural areas; and (ii) definition of fecal sludge management service chain • Training in gender mainstreaming • Participation in study tour to Africa or Asia to provide DINEPA with an example of successful household sanitation programs
DINEPA's Rural Division (DMR)	• Collaborate with DT to manage activities in Component 2	• Involvement in the creation of standards training modules for URDs, TEPACs, CAEPAs and OPs • Participation in annual regional workshops on various themes including governance, commercial management, performance indicators, exchanges on good practice and lessons learned • Training in gender mainstreaming

DINEPA's Financial Department	• Financial Management (FM)	• Training of FM practices in Bank-financed grants operations • Training in programmatic approach related themes (MTEF, rolling program budget)
DINEPA's Procurement Department (DPEM)	• Procurement	• Training in Bank policies and procedures
DINEPA's National Observatory on Water Supply and Sanitation (ONEPA)	• Consolidation of sector data for planning and decision-making	• Involvement in the creation of the national WSS baseline • Training in data management and use for planning and decision-making
Regional Water and Sanitation Offices (OREPAs)	• Assist in technical and fiduciary-related tasks (after capacities have been built at the regional level)	• Training in project management and supervision of works • Complementary training in fields identified in ongoing institutional assessments financed by other partners • Strengthening regional capacity in social mobilization, sanitation, FM, and procurement, and corresponding training • Training in gender mainstreaming
Rural Departmental Units (URDs)	• Assist in the selection of targeted communities • Carry out the social mobilization process • Assist in works supervision • Conduct the technical WSS assessment following a cholera outbreak, in collaboration with the local health actors and the DELR	• Training in supervision of works • Complementary training in fields identified in ongoing institutional assessments financed by other partners • Participation in annual regional workshops on various themes including governance, commercial management, performance indicators, exchanges on good practice and lessons learned • Training in gender mainstreaming • Training of trainers (URDs are first trained by project activities, then URDs train TEPACs according to their roles and responsibilities) • Participation in workshops to update departmental and communal emergency plans in selected departments
Communal Water and Sanitation Technicians (TEPACs)	• Conduct water quality monitoring with SISKLOR system • Report on performance indicators through the SIP system • Assist in the implementation of ACAT activities • Conduct the technical WSS assessment following a cholera outbreak, in collaboration with the local health actors and the DELR	• Participation in annual regional workshops on various themes including governance, commercial management, performance indicators, exchanges on good practice and lessons learned • Complementary training in fields identified in ongoing institutional assessments financed by other partners • Training in gender mainstreaming • Training in hygiene promotion and sanitation related to ACAT activities
Local Water and Sanitation Committee (CAEPA)	• Monitoring of the quality of the service delivered • Citizen engagement	• Training in the management of rural and small town water supply systems and public sanitation facilities • Training in community-based monitoring

		• Training in communication, community mobilization around principles of interventions in water and use of sanitation facilities and conflict resolution, as well as on the roles of the various stakeholders under the OP management model • Training in gender equality in water management • Participation in annual regional workshops on various themes including governance, commercial management, performance indicators, exchanges on good practice and lessons learned • Participation in workshops to update departmental and communal emergency plans in selected departments
Professional operators (OPs)* *and CAEPAs, in the case they are selected to operate	• Operate and maintain water supply systems in rural areas and small towns	• Training in business plan preparation • Training in the management of rural and small town water supply systems and public sanitation facilities (in billing and accounting, commercial management, meter reading and repair, water disinfection, plumbing, community relations, and conflict resolution) • Participation in annual regional workshops on various themes including governance, commercial management, performance indicators, exchanges on good practice and lessons learned • Training in gender mainstreaming
MSPP's community health agents (ASCP)	• Collect data on status of sanitation facilities in the localities where they are present	• Training in hygiene promotion and sanitation related to ACAT activities
MSPP's departmental Sanitary Officers	• Supervise the ASCPs • Monitoring of water quality at the household level, as per the MSPP's mandate • Report on cholera and water- and excreta-related diseases at the local level	• Training in hygiene promotion and sanitation related to ACAT activities, particularly supervision of ASCPs for those aspects • Training for water quality monitoring

Financial Management, Disbursements and Procurement

Financial Management (FM)

8. DINEPA will have the financial responsibility over the proposed Project and for the implementation of all components. DINEPA will be responsible for the establishment of financial reports and annual audited financial statements for the whole Project. The current FM arrangements for the proposed Project at DINEPA are adequate and meet the minimum fiduciary requirements under OP 10.00. However, additional FM staff will be hired to strengthen its current

FM capacity and their roles and responsibilities revised to include the additional workload under the Project.

9. **FM assessment.** In accordance with FM Practices, the Bank's FM Team conducted an assessment of DINEPA's capacity and made a number of suggestions to ensure that DINEPA maintains adequate FM arrangements to handle the additional activities generated by the Project:

- Implement the proposed strengthening plan by DINEPA's management, including recruiting two additional FM staff and reviewing the roles and responsibilities of FM and administrative staff to accommodate the additional workload;
- Complete the creation of the internal audit unit by hiring a senior internal auditor;
- Update the existing Operations Manual for the proposed project;
- Update the various administrative, accounting, and financial procedures manual to include the policies and procedures relating to activities under the proposed project;
- Calibrate the ACCPAC SAGE accounting software. The Software's multi-donor, multi-currency and multi-site features will enable the production of periodic interim unaudited financial reports (IFRs) and annual financial statements;
- Within four months of project effectiveness, an external auditor based on terms of reference acceptable to IDA shall be recruited.

10. **FM staffing.** With implementation of Bank-funded projects, DINEPA staff have gained experience in Bank's guidelines and procedures. The FM of the Project will be managed by DINEPA's Financial Department. Similar to other Bank-financed projects, a dedicated full-time Finance Officer will be assigned to ensure effective FM, especially in the areas of internal controls, accounting and financial reporting. In addition to the Finance Officer, a full-time Finance Assistant is also recommended for the Project to further strengthen the FM aspects. In line with DINEPA's deconcentration strategy, it was agreed that an accountant will be hired to be placed in a selected OREPA, which should progressively have complete FM functions to support DINEPA's activities. The arrangements relating to the functioning of such arrangements will be detailed in the OM.

11. **Designated Account and flow of funds.** One segregated Designated Account (DA) will be opened in the Central Bank of the Republic of Haiti (BRH) to be managed by DINEPA, according to the disbursement procedures that will be described in the Disbursement Letter. Another account handled in Haitian Gourdes will be opened in the BRH and will also be managed by DINEPA to process payments in local currency. Documentation for all transactions shall be retained by DINEPA and shall be made available for audit and to the World Bank and its representatives, if requested. Detailed disbursement procedures will also be stipulated in the administrative, financial and accounting manuals which will be a condition for disbursement. An account denominated in Gourdes will also be opened in a commercial bank to support the selected OREPAs' financial transactions, including the provision of sub-grants for the financing of toolkits and start-up funds for OPs. Figure A3.2 illustrates these flows of funds.

12. **Budgeting and flow of funds.** The budget process will be clearly stipulated in the administrative, financial and accounting manuals. Annual budgets and work plans will be coordinated and prepared by DINEPA. They will be approved by the General Director of DINEPA

(in view of approval by the Executive Board of Directors under creation) with the Bank's no-objection at the beginning of the fiscal year and any changes in the budget and work plans will also be approved by the Committee with the Bank's no-objection.

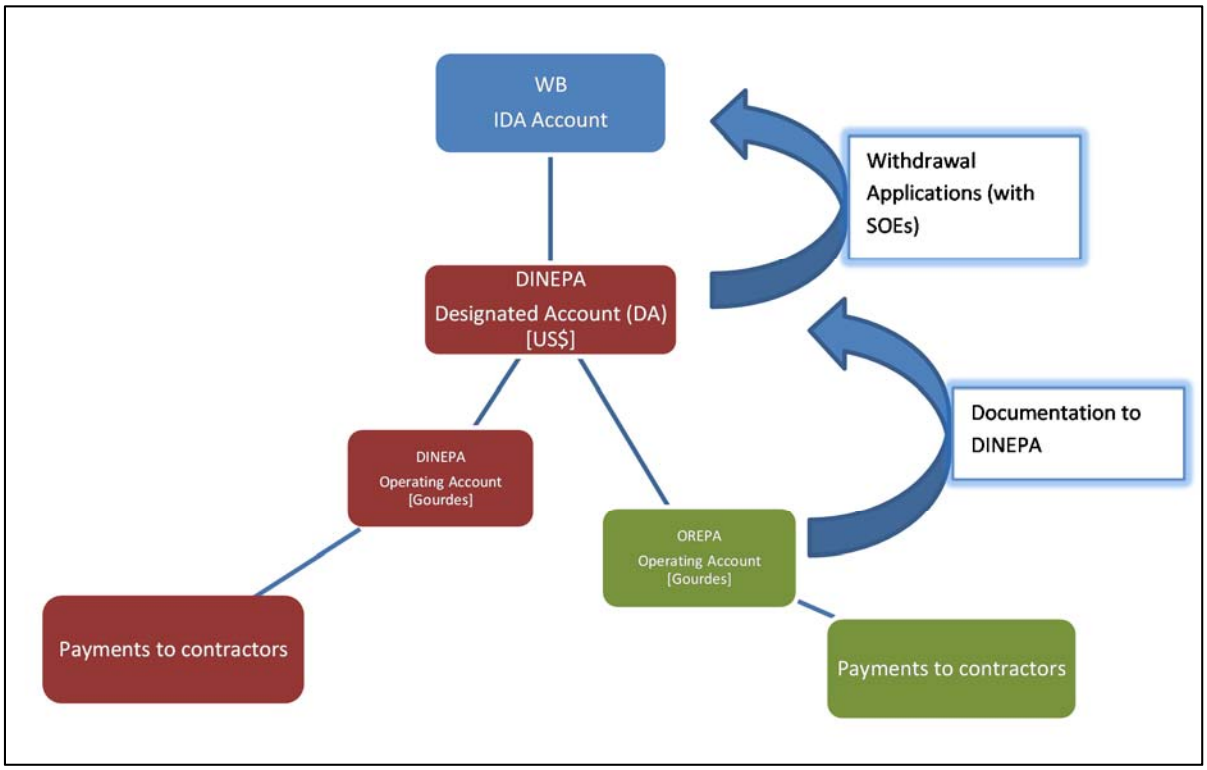

Figure A3.2 Flow of funds for the execution of the proposed project.

13. **Accounting procedures and system.** DINEPA is already drafting and updating various administrative, financial and accounting procedures manuals that detail and document its accounting, policies, and procedures. The administrative, financial and accounting procedures manuals are expected to be approved by the General Director by negotiations. DINEPA also has its ACCPAC accounting software upgraded with multi-project and multi-site capabilities. It was agreed that the accounting system should be calibrated in order to include the proposed project and generate interim unaudited financial reports (IFRs) as well as annual financial statements. Detailed FM documentation will be maintained in the Project files for each project component.

14. **Internal controls.** DINEPA will ensure that staffing arrangements in place are sufficient to ensure adequate internal controls, preparation, approval and recording of transactions as well as segregation of duties. DINEPA will outline the FM and administrative procedures in its existing administrative, financial, and accounting manual (*Système de contrôle interne des projets*) and should make this manual available no later than negotiations. DINEPA should also update the existing Operations Manual (established for projects P089839 and P114936) no later than negotiations. The internal audit functions are being developed, and in this context, a junior internal auditor has been recruited. The process will be completed by the hiring of a senior internal auditor who will be responsible for the overall functions of this new unit under the General Director's authority. Both auditors will be trained in the World Bank-financed projects' procedures.

15. **Financial reporting.** DINEPA will be responsible for the overall reporting. Through the FM specialist at DINEPA, the Project Coordinator will ensure that semi-annual IFRs are prepared and transmitted to the IDA. The reporting format will be documented in the administrative, financial and accounting manual. The semi-annual IFRs will be furnished to the Bank no later than forty-five (45) days after the end of the semester. Annual financial statements will be prepared by DINEPA and will be subject to annual external audits.

16. **External audits.** The annual financial statements of the Project as well as the system of internal controls will be subject to an annual audit by a reputable, competent and independent auditing firm, based on terms of reference satisfactory to the Bank. The auditor will provide an opinion on the Project's consolidated financial statements prepared by DINEPA, as per auditing standards acceptable to the IDA. The audit report will be submitted to the IDA no later than six (6) months after the end of each fiscal year, or the end of each period covered by the audit. In addition to the audit report, the auditor will also provide, in a separate document, a management letter detailing the status of the internal control systems in DINEPA. Auditors should be hired no later than four (4) months after the date of effectiveness of the Project.

17. **Implementation support missions.** In addition to the regular internal and external audits, the Bank team will conduct frequent implementation support missions (see Annex 4). During these implementation support missions, Bank FM staff will evaluate the FM arrangements to ensure that they remain adequate for the implementation of the Project.

Disbursements

18. **Disbursement arrangements.** Disbursements from IDA's Grant will follow the transaction-based method, that is, traditional Bank procedures: (i) Advances; (ii) Reimbursements through Statements of Expenditures (SOEs); (iii) Direct Payments; and (iv) Special Commitments. The initial deposit into the DA will be based on a four-month forecast prepared by DINEPA to be submitted with the first Withdrawal Application. Subsequent disbursements into the DA will be based on submitted SOEs, and accompanied by Withdrawal Applications, reconciled bank statements and copies of all bank statements. The supporting documentation for requests for direct payment should include records which provide evidence of eligible expenditures (copies of receipt, supplier's invoices).

19. **Disbursement under Component 3 – Contingent Emergency Response:**

- Specific eligible expenditures under the category of Goods include: (i) construction materials; (ii) chlorinated products and hygiene promotion kits to be distributed in households in communes affected by cholera; (iii) emergency water supply and sanitation facilities; (iv) petroleum and fuel products; and (v) any other goods items acceptable to the Bank, and agreed upon between the Borrower and the Bank.
- Specific eligible expenditures under the category of Works include emergency infrastructure works (repairs, rehabilitation, construction etc.) to mitigate the risks associated with the disaster for affected populations, and any other Works acceptable to the Bank, and agreed upon between the Borrower and the Bank.
- Specific eligible expenditures under the category of Services include urgent studies (technical,

social, environmental, etc.), necessary as a result of the effects of the disaster, such as the identification of priority works, feasibility assessments, engineering designs of adequate works, delivery of related analyses, and any other Services acceptable to the Bank, and agreed upon between the Borrower and the Bank.

20. Table A3.2 specifies the categories of eligible expenditures under the Project, the allocations of the amounts of financing to each Category, and the percentage of expenditures to be financed for these expenditures in each category.

Table A3.2. Categories of eligible expenditures.

Category	Amount of the grant allocated (expressed in SDR)	Percentage of expenditures to be financed (inclusive of taxes)
(1) Goods, works, non-consulting services, consultants' services and Operating costs for the Project	33,396,000	100%
(2) Emergency Expenditures under the CER Part of the Project	726,000	100%
(3) Refund of Preparation Advance	2,178,000	Amount payable pursuant to Section 2.07 of the General Conditions
TOTAL AMOUNT	36,300,000	

Procurement

21. Procurement for the proposed Project will be carried out in accordance with the *World Bank Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants* dated January 2011, revised July 2014, and *Guidelines: Selection and Employment of Consultants under IBRD Loans & IDA Credits & Grants by World Bank Borrowers* dated January 2011, revised July 2014, the *Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants*, dated October 15, 2006 and revised in January, 2011, and the provisions stipulated in the Financing Agreement. For each contract to be financed by the Project, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame are agreed between the Recipient and the Bank in the Procurement Plan.

22. Procurement activities for the Project will be executed by DPEM for all project activities. The Project's OM, updated by DPEM, should include adequate provisions that meet the Bank's requirements. Based on a preliminary assessment of its capacity, DPEM appears to have sufficient experience implementing procurement financed by the Bank and other donors (e.g. IDB) to manage procurement under the proposed Project. However, DPEM's staff will, most likely, need to be reinforced by the addition of at least one more procurement specialist, as its current work load already stretches the capacity of the five (5) members of the procurement team. Furthermore, in the context of deconcentration, DINEPA plans to recruit a senior procurement specialist and a junior procurement specialist to be placed at the OREPA level. In addition, the unit's procurement staff should receive intensive training in Bank policies and procedures. With this strengthening, DPEM should be well equipped to execute procurement according to World Bank guidelines. However, the overall public procurement system in Haiti remains relatively weak. Despite some pre-earthquake reforms in the legal and institutional framework for procurement, human and

physical capacity constraints have delayed the adoption of improved contracting practices in most Government agencies.

23. **Procurement Plan, Thresholds for Procurement Methods and World Bank Review**. A procurement plan for the first 18 months of project implementation was agreed between the Recipient and the Project Team on March 6, 2015 and the plan will be updated at least annually or as required to reflect actual project implementation needs and improvements in institutional capacity. Bidding documents will be made available to the public through DINEPA's website. The recommended thresholds for the use of the procurement methods specified in the Financing Agreement are identified in Table A3.3. Supervision of procurement will be carried out primarily through prior review supplemented by supervision missions at least twice a year.

Table A3.3. Thresholds for Procurement Methods and Prior Review

Expenditure Category	Contract Value (Threshold) US$ thousands	Procurement Method	Contracts Subject to Prior Review (US$ thousands)
1. Works	>3,000	ICB	All
	>200; <2,000	NCB	First three contracts and all contract above 500
	≤1,000	Shopping	First three contracts
	<100	Force Account	All
	Regardless of value	Direct Contracting	All
	Regardless of value	UN agencies	All
2. Goods	>500	ICB	All
	≤500	NCB	First three contracts and all contracts above 150
	≤500	Shopping	First three contracts
	Regardless of value	Direct Contracting	All
	Regardless of value	UN agencies	All
3.Consulting Services	Regardless of value	QCBS,QBS,FBS,LCS	First three contracts and all contracts above 50
-3.A Firms	<500	CQS	First three contracts and all contracts above 50
	Regardless of value	UN agencies	All
	Regardless of value	Single Source	All
-3.B Individuals	Regardless of value	In accordance with Chapter V of Consultant Guidelines	First three contracts and all contracts above 50 and all single source selection

Abbreviations:

ICB = International Competitive Bidding
NCB = National Competitive Bidding
DC = Direct Contracting
LCS = Least-Cost Selection
CQS = Selection Based on Consultants' Qualifications
QCBS = Quality and Cost-Based Selection
QBS = Quality-Based Selection
FBS = Fixed Budget Selection
SSS = Single Source Selection

Environmental and Social (including safeguards)

24. **Summary.** The project is classified as "Category B". The activities supported through Component 2 of the Project may induce minor to moderate but manageable adverse impacts, including temporary nuisances to people living in the vicinity of civil works sites and limited vegetation clearing. Other possible impacts from the ongoing works include erosion, improper waste disposal, poor drainage, and occupational health and safety issues. Five safeguard policies were triggered to ensure the appropriate mitigation of the aforementioned issues, namely OP 4.01 on Environmental Assessment, OP 4.12 on Involuntary Resettlement, as well as OP 4.04 on Natural Habitats and OP 4.36 on Forests, and OP 7.50 on International Waterways.

25. **Projects in Situations of Urgent Need of Assistance or Capacity Constraints.** In view of the exceptions granted to Projects in Situations of Urgent Need of Assistance or Capacity Constraints in OP 10.00 paragraph 12, the environmental and social requirements set out in OP/BP 4.01, OP/BP 4.04, OP/BP 4.36 and OP/BP 4.12 that are applicable during the preparation phase of the Project are deferred to implementation. Nevertheless, a Resettlement Policy Framework (RPF) was prepared, and will be consulted and disclosed publicly both in-country and at the InfoShop before the Project is submitted for Board approval. An RPF was prepared as the exact location of WSS works to be financed under the Project is dependent on the completion of related ongoing socio-economic and technical studies financed with the PPA. This will allow DINEPA to screen subprojects when their location is determined and ensure their consistency with OP 4.12.

Table A3.4. Safeguard Action Plan

No.	Actions	Timeline	Responsible
1	TOR developed for ESMF	May 31, 2015	DINEPA (DT)
2	Consultant or Environmental Specialist develops draft safeguard instruments and holds consultations. Draft instruments are disclosed prior to the consultations.	August 31, 2015	DINEPA (DT)
3	Final approval of safeguard instruments	Project effectiveness	World Bank/DINEPA
4	Dissemination of the safeguard instruments (ESMF)	Three months after effectiveness	DINEPA (DT)
5	EMP developed for eligible sub-projects	Prior to implementation	DINEPA (DT)
6	Implementation and follow-up of the mitigation measures	Continuous	DINEPA (DT)/Contractors
7	Capacity building of relevant stakeholders, including the contractors	As scheduled	DINEPA (DT)
8	Mid-term and final audits of the implementation of environment and social recommendations and measures	As scheduled	DINEPA (DT)/World Bank

26. In line with BP 10.00 paragraph 53(a), Table A3.4 provides the elements of the Safeguards Action Plan prepared, namely the time schedule for preparing the relevant safeguards instruments in coordination with project activities. No later than three months after the Effective Date, the Environmental and Social Management Framework (ESMF) would be prepared, consulted upon and disclosed publicly both in-country and on the World Bank's external website. When necessary and as soon as activity sites are selected and designs of civil work completed, concise

Environmental Management Plans (EMP)[26] and Resettlement Action Plans (RAP) or Abbreviated RAPs would be prepared, consulted upon and disclosed prior to the commencement of works. In the specific case where a RAP is needed, it would be prepared, approved and executed prior the commencement of works.

27. **Staffing.** The safeguards specialist of DINEPA will be trained in the World Bank's safeguard policies' implementation requirements and the Bank Task Team's environmental and social safeguard specialists will provide guidance to DINEPA. During project implementation support missions, the Bank team will assess the implementation of the safeguard documents and recommend additional strengthening, if required. The safeguards documents, along with the requisite attachments, will be shared directly with the involved stakeholders, including ministries (MTPCT, MSPP), as well as concerned non-governmental organizations and development partners involved with the project.

28. At any time when necessary, DINEPA will consult project-affected groups and local authorities on the project's environmental and social aspects, and will take their views into account. The Project Team will initiate these consultations as early as possible and to ensure meaningful consultations, will provide relevant material in a timely manner prior to consultation, in a form and language(s) that are understandable and accessible to the groups being consulted.

29. **Involuntary Resettlement (OP/BP 4.12).** The anticipated works and protection of water sources and their immediate perimeter as well as the construction works of sanitation facilities are unlikely to physically relocate beneficiaries, but may require land acquisition. Water sources tend to be located in the mountains around communities and far from people's houses, and the infrastructure built by the project concentrates in the immediate perimeter of the source and down the distribution line to a reservoir, considered to be non-specific. Construction of sanitary blocks in public places, particularly in markets, could cause the relocation of people's economic activities to nearby places in the market, but will not represent a loss of income.

30. Screening process. Prior to its commencement, as soon as the specific site is identified, each subproject or eligible activity under Component 2 will be systematically processed through the environmental and social screening procedure as detailed in the ESMF. The screening will be carried out by DINEPA's social specialists. This process would result in the environmental classification of each subproject in Category B or C; Category A subprojects would not be eligible for financing under the Project. For Category B activities, an Environmental and Social Impact Assessment (ESIA) would be prepared, processed according to the national procedures, submitted for the Association's comment and then disclosed in-country and on the World Bank's external website. The relevant measures would be integrated in the activity work break structure, costing (bidding documents) and implementation (contracts, annual work plan and budget structure, as well as reports). With Category C activities, likely to induce minor concerns on environmental or social aspects, simple mitigation measures integrated into the implementation activities would

[26] Generic EMPs that specifically cover the water supply systems and sanitation works will be completed prior to construction. These EMPs will be 5 pages or less, and will outline the basic engineering, the drainage, the distances and flows as well as related negative impacts and mitigation measures (for the water supply system) and a similar one for the sanitation systems which addresses the negative impacts, mitigation measures and the basic engineering design of the system in low and high water table areas.

suffice. The screening process will exclude any project activity that will require physical relocation.

31. Such screening process would include private domiciliary visits, the elaboration of a socio-economic profile of the owners of the land to be donated, and an analysis of the profile to ensure that the donation does not represent a significant loss of land or income, and verify that there is power of choice and free will. The Project's social mobilization teams, under the supervision of DINEPA's social and environmental safeguards specialists, would conduct this process and could offer the donors free access to the water supply system. In case that the project teams encounter any reticence from the land owners to voluntarily donate the land, the RPF will apply. Similarly, if the analysis of the socio-economic profile finds that donating land would take away a significant part of the owner's assets, the Project can refer to the RPF for acquisition and compensation guidelines. Adequate documentation of the screening process would need to be presented before the commencement of the works. The screening process will exclude any project activity that will require physical relocation.

32. Another aspect to monitor is possible restriction to natural resources. The construction of water supply systems, which invariably fence off the water catchment points in order to protect the sources, may disserve a group of people that previously used the source to bathe, do laundry, and provide water to animals. As in the previous Bank-funded rural water supply project, in order to mitigate such a scenario, the Project would need to foresee the construction of public fountains as well as facilities to do laundry and give water to animals in the immediate vicinity of the source. A consultation process with local leaders and the general population on these mitigation measures would take place during the project preparation phases as specified by the RPF. In addition, no restrictions of access to legally designated parks or protected areas are expected under the Project.

33. **Environmental Assessment (OP/BP 4.01).** OP 4.01 is triggered. Component 1 will not cause any environmental impact, and most of the project works and environmental impacts will be associated with Component 2. There are four types of potential environmental impacts for water supply and sanitation activities: (i) impacts on the long term supply of water in both wet and dry seasons given that the draw on the water source may increase exponentially as communities have easier (though more expensive) access to water. It would be important to regulate the use of the water and avoid waste to ensure the sustainability of the supply source; (ii) impacts related to construction which are likely to be highly localized and reversible. Possible negative impacts may include noise, soil erosion, contamination of the drinking water, particularly if heavy machinery operates close to the water supply; health and occupational issues, poor drainage conditions arising from construction or design, proliferation of mosquitoes from standing water, inadequate waste removal and inadequate procedures for dealing with spills; (iii) impacts from the design of the latrines – these need to be commensurate with the level of the water table to ensure that ground water is not contaminated. Latrines would also need to be built at a safe distance from water supply systems. The ESMF will outline the minimum distance required between the latrines and any water bodies as well as the types of systems to be built in areas where there is a high water table; and (iv) impacts from treatment and disposal of sludge, particularly if septic tanks or other storage facilities are used. The ESMF recommendations will be reflected in the bidding documents and the contractors/engineers will be required to respond to these issues in their documents.

34. ***Follow up and reporting of the mitigation measures***. Environmental and social mitigation measures will be executed, monitored and reported via: (i) approved screening sheets; (ii) Safeguard Monitoring Reports; and (iii) the Environmental and Social Safeguards section of the overall project periodic report. The indicators to be monitored as part of the project global monitoring system include: (i) percentage of eligible activities processed through the screening procedure; (ii) number/frequency of safeguard supervision and annual project reviews undertaken; (iii) number of trainees on the implementation and requirements of the Bank's safeguard policies; and (iv) section on safeguards implementation in the project periodic reports.

Monitoring & Evaluation

35. DINEPA's Technical Department, with support from the other relevant departments and ministries, will monitor and evaluate project performance based on the results framework (detailed in Annex 1). Financing will be made available under Component 1 for capacity building in M&E for DINEPA, and for other partners if deemed necessary. Additionally, the Project will contribute to and rely on DINEPA's existing monitoring systems, namely (i) the Performance Indicator Monitoring System for rural areas and small towns (SIP) which tracks indicators related to regulation, access, physical assets, water quantity, and payment of water supply service; and (ii) the SISKLOR which monitors water quality (chlorine residual) with daily analyses of water made by TEPACs and CAEPAs. The results are sent to ONEPA via SMS for control, and the control loop is closed back with the involvement of the DMR and the URDs who can inform the TEPACs of the trends and ask for corrective actions, if needed.

36. In addition, the Project will track a number of additional indicators related to water supply and sanitation, including (i) performance indicators for the OPs developed with DINEPA under the EPAR Program focusing on commercial management of water supply systems; (ii) tracking the use of latrines in the selected communities through surveys and compare with the departmental, regional and national trends; and (iii) tracking the evolution of the incidence of water- and excreta-related diseases (including cholera)[27] in the selected communities, compared with the departmental, regional and national trends. These indicators and their collection methodology will be further refined and included in the OM.

37. The Project will seek the support of an evaluation to measure the impact of joint WSS and health interventions on the incidence of water- and excreta-related diseases.

Role of Partners

38. Activities related to the programmatic approach (Component 1) will require policy dialogue with MTPTC, MEF as well as with the financial and technical partners present in the WSS sector in Haiti.

[27] As the Project does not include direct interventions in the treatment of water- and excreta-related diseases (including cholera) or in the direct support of health actors coordinating response and treatment, it was decided that clear attribution links between the WSS interventions and their impacts on incidence of such diseases cannot be made.

Appendix 1: Background on MSPP structure and cholera control

1. *Health care service provision.* Services in Haiti are provided by (a) a primary level composed by primary care dispensaries and health centers, as well as by community referral hospitals; (b) a secondary level consisting of departmental hospitals; and (c) a tertiary level consisting of specialized national referral or teaching hospitals.[28]

2. Since the cholera outbreak, some primary and secondary facilities have put in place cholera treatment centers, which were generally located in tents. However, since 2013, there has been a shift to integrate cholera treatment centers into health facilities. In addition, a response system has been established at the department and community levels: the most important are rally posts, mobile teams (*Équipes Mobiles d'Intervention Rapide*, EMIRA), clinics and community agents. Generally, these have improved access to healthcare, including for treatment of cholera, but their coordination is still limited. As part of its Cholera Elimination Plan, MSPP aims to integrate these structures to treat all acute diarrheal diseases.

3. *WSS Situation in health facilities*. The 2013 health facility survey found that 79 percent of health facilities had access to an improved water source, while only 46 percent had sanitation facilities. The lowest figures in access to improved water sources were found in the primary healthcare facilities, particularly in the dispensaries: while the vast majority of hospitals (93 percent) and health centers with beds (91 percent) have access to improved water sources, improved water sources are available in only 68 percent of dispensaries. Health facilities in the departments of Grande-Anse (68 percent), Sud-Est (70 percent) and Centre (74 percent) had the lowest access to improved water sources. As for sanitation, while toilet availability increases with facility complexity, the majority of facilities do not have toilets for patients: whereas 74 percent of hospitals provide patients with access to sanitation, only 24 percent of the primary health clinics have toilets. Facilities in the Nord-Ouest (23 percent), Grande-Anse (26 percent), and Sud-Est (27 percent) have lower access to sanitation than in other departments.

4. *Structure of the Ministry of Public Health and Population (MSPP) and cholera control.* Cholera control resides in three primary functions:

- **Surveillance**. All surveillance activities are coordinated centrally by the MSPP's Direction of Epidemiology, Laboratories and Research (DELR), which monitors the evolution of the epidemic, and at the departmental level, the main cholera control mechanisms are the Epidemiological Officers for disease surveillance. Locally, surveillance relies on the polyvalent health community agents (ASCP) who, in the absence of training or equipment for epidemiological surveillance, informally notify on priority diseases. The Community-Based Epidemiological Surveillance initiative (*Surveillance Epidémiologique de Base Communautaire*, SEBAC), currently in pilot phase, will systematize reporting by these agents;

At the institutional level, there are 54 sentinel sites[29] that report on 23 priority diseases, including cholera. An additional 52 sites have epidemiological officers but are not equipped for

[28] Institut Haïtien de l'Enfance (IHE) and ICF International. Evaluation of service delivery in health facilities, EPSSS. 2013
[29] See *Plan Stratégique pour le Renforcement de la Surveillance Epidémiologique en Haïti 2013- 2018.* MSPP-DELR.

epidemiological surveillance. At the regional level, a team composed of a field epidemiologist, epidemiological officers, and data-entry clerks is tasked with the consolidation and analysis of epidemiological information, and field epidemiology. However, capacity varies across regions, with some regions not having the minimum equipment for epidemiological surveillance. In this scheme, ASCP and health units report cholera cases immediately to the region, which then records the data and forwards weekly to the DELR. The DELR consolidates the epidemiological data from additional sources, including the Cuban Medical Brigade sentinel system, other partner organizations (CDC and others), and cholera vertical programs. With this information, the DELR produces a weekly bulletin on cholera, which monitors cholera incidence and distribution in the national territory, and holds monthly meetings to assess the nation's epidemiological profile.

- **Response**. Cholera response is under the coordination of the Cholera Coordination Unit, which coordinates activities with the departmental directorates of the MSPP. The Cholera Coordination Unit is MSPP's main instance for inter-institutional dialogue and response. This unit has a small workforce at the central level as well as 3 regional and 10 departmental Cholera Coordinators. The main function of the Cholera Coordinators is to support the cholera response by the Departmental Directors, who are ultimately responsible for health service delivery at the departmental level;

- **Treatment**. Service delivery for cholera treatment centers is mostly done at cholera treatment centers, which are now mostly integrated into health facilities. In addition, the EMIRAs ensure the timely control of disease outbreaks. The latter are multidisciplinary teams for rapid cholera response comprising a medical doctor, a nursing assistant, a health promotion agent and ASCP or Sanitary Officers. Their main function is to intervene on a suspected infection zones within 48 hours. To that end, they are responsible for the identification of contagion sites, identification of disease reservoirs and other cholera cases, home and water decontamination, as well as rapid diagnosis and basic treatment of those infected (with oral rehydration salts and other basic medicines), before referring patients to hospitals, if needed. Additionally, all dispensaries, health centers and hospitals have the capacity to treat cholera cases.

5. Tackling cholera required a coordinated response by MSPP and DINEPA who have strengthened their collaboration since the beginning of the epidemic. TEPACs and URDs were increasingly used in reporting cholera cases and are now in charge of providing technical evaluations and proposals to address WSS system failures or needs after cholera outbreaks.

6. **Regional aspects of healthcare provision.** Immigration officials monitor daily border crossings of people looking to gain access to basic health services. In 2009, 19 percent of medical consultations in the border provinces of the DR were for Haitians, representing an additional burden on the Dominican health centers along the border.[30]

[30] Cross-Border Urban Migration in the Dominican Republic. Haroldo Dilla Alfonso, Friedrich Ebert Foundation, 2011.

Annex 4: Implementation Support Plan

HAITI: Sustainable Rural and Small Towns Water and Sanitation Project (P148970)

Strategy and Approach for Implementation Support

1. The strategy for Bank Project Implementation Support reflects the nature of the Project and its risk profile (outlined in the Project SORT) and aims to enhance the quality of DINEPA's delivery of proposed project interventions. The implementation support focuses on risk mitigation measures identified in the PAD and standard Bank supervision (including technical, institutional, environmental and social safeguards) and fiduciary aspects (financial management and procurement).

Implementation Support Plan

2. Quaterly implementation support missions (including field visits to investments financed under Components 2) will concentrate on the following areas:

a. ***Strategic.*** To the extent possible, implementation support missions will meet with DINEPA, other financial and technical partners (FTP) and the two oversight committees on sanitation and institutional aspects to: (i) review project activities; (ii) reconfirm strategic alignment of the Project's multi-sector aspects; and (iii) ensure the necessary coordination across respective stakeholders;
b. ***Technical.*** Implementation support will concentrate on the implementation of the institutional strengthening, capacity building and works with regards to Components 1 and 2, as well as on ensuring DINEPA's ability to provide quality assurance for project interventions. Regular field visits will serve to verify compliance with the Project OM and encourage adjustments to project design, as needed, given results on the ground. The Bank technical support team may be supplemented with additional technical support as needed, on a short-term basis by short-term external technical experts. Ongoing support by Bank specialists for monitoring and evaluation as well as contracted evaluation expertise, as needed, will strengthen DINEPA's ability to both monitor project progress and assess the impact of interventions. The Bank team will review technical inputs including terms of reference and bidding documents to ensure adequate technical specifications. In addition, support on procurement aspects will ensure proper preparation of requests for proposals, bidding documents, and eventual evaluation of bids and proposals;
c. ***Safeguards.*** The Bank worked with and advised DINEPA on the preparation of and consultation for the social and environmental safeguards instruments for the proposed project. This support will continue throughout project implementation with regard to the investments financed under the Project. The Bank also worked closely with the Client's team during preparation and consultations will take place during project implementation. The Project is required to fully implement the project environmental, social and health and safety management plans/systems and environmental and social requirements in the Project's OM.

There will be multiple construction contracts and associated works that require adequate supervision;

d. ***Fiduciary.*** The Bank evaluated the capacity and found sufficient capabilities on FM aspects. During implementation, continued guidance will be provided and specific and timely targeted training will be provided on procurement aspects during the remaining period prior to project effectiveness to ensure readiness for contracting of civil works once the project is declared effective. Continued support will be provided through technical support and field visits by the Bank team during project implementation. Implementation support site visits for the Project's FM arrangements will be conducted semi-annually and as needed in response to client needs. Implementation support for procurement aspects will also be carried out semi-annually during regularly scheduled Bank site visits. It is expected that implementation support will intensify as fiduciary functions are gradually transferred to the selected OREPA;

e. ***Client relations.*** The Task Team Leader will: (i) coordinate Bank implementation support to ensure consistent project implementation, as specified in the legal and Project OM; and (ii) meet regularly with the Client's senior representatives (i.e., Project Coordinator, DINEPA's General Director, as well as with the line ministry representatives) to gauge project progress (including the mid-term review) in achieving the PDO and address implementation roadblocks, as they may arise.

Table A4.1. Skills Mix Required

Skills Needed	# Staff Weeks per FY	# Trips per FY	Comments
Task Team Leader (Supervision)	8	4	HQ-based
Institutional Specialist	4	2	HQ-based or other region
Sanitation Specialist	4	3	HQ-based or other region
Behavior Change Specialist	2	2	HQ-based or other region
Water Resources/Watershed Mgmt Specialist	2	1	HQ-based or other region
Health Specialist	2	2	HQ-based or other region
Procurement Specialist	3	2	HQ-based or Country-based
Financial Management Specialist	3	2	HQ-based or Country-based
Environmental Specialist	3	2	Country-based
Social Specialist	3	2	Country-based
Gender Specialist	2	2	HQ-based
Legal Counsel	3	1	HQ-based
Technical Experts	4	4	HQ-based or Country-based

Table A4.2. Partners

Name	Institution/Country	Role
Client	MEF	Project Counterpart, overall responsible for Project implementation, in compliance with agreements spelled out in Financing Agreement coordinating the GoH's support for the Project Participate in the oversight committee on the institutional/financial sustainability of the water sector
Water and Sanitation Partners	DINEPA and its deconcentrated structures	Responsible for execution of project components
Project Partner Institutions (Governmental)	(i) MTPTC, MEF and MICT (ii) MTPCT, MSPP MENFP, MDE, MICT and MCI	Participate in the oversight committees on (i) the institutional/financial sustainability of the water sector and (ii) sanitation MSPP: Participate in training, sanitation and hygiene promotion activities (local agents)
Local Institutions and Authorities	Local level representation of ministries, local authorities at the municipal level	Local level representation of ministries: key actors in the coordination as well as participatory and decision-making mechanisms supported in the Project. Local authorities: mayors and CASECs are key actors in promoting and supporting project interventions, as well as in participatory and decision-making mechanisms supported in the Project.
Bank and other financial and technical partners	IDB, AECID, UNICEF, SDC, CDC, European Union	Ensure coordination so that financed programs complement one another in terms of sectors of intervention, geographical areas of intervention, timeline and sequencing, etc. to leverage development impacts.
Private sector partners	TBD	Commercial partners to support DINEPA's implementation and supervision of works
NGOs	TBD	Non-governmental partners to support DINEPA's implementation of activities, particularly sanitation, many of which have formed a WSS platform (PEPA) to promote a joint approach in working with DINEPA.

Annex 5: Economic and Financial Analysis

HAITI: Sustainable Rural and Small Towns Water and Sanitation Project (P148970)

1. The Economic Analysis Section of this Annex aims to assess the economic impact of the water supply investments and of a portion of the sanitation investments of the project through a cost-benefit analysis. The Financial Analysis Section aims to assess the Financial Internal Rate of Return (FIRR) of the water supply activities.

A. Economic Analysis

Methodology and Scope

2. The economic analysis consists of a cost-benefit analysis that is carried out for all water supply-related activities and for the sanitation activities that are related to excreta handling and disposal. Water benefits are the benefits accruing to the actual project beneficiaries, which may be measured by using: (i) the results of the socio-economic surveys that were carried out in 2013 in the context of the preparation of Water Supply Master Plans for the South and West regions of Haiti; and (ii) the findings of the ICR of the Bank-financed EPAR Project. Water-related costs include the full costs of the water supply component of the Project, the additional implementation costs, and the operating costs. The cost-benefit analysis for sanitation assesses the cost savings accruing to the households as a result of the establishment of a reliable system of excreta handling and disposal. The economic analysis encompasses about 63 percent of the total project costs. All calculations are carried out over a 30-year period, using constant prices and excluding taxes and transfer payments.

Water Supply

3. *Investment Costs*. The investment costs associated with water supply include the costs of: (i) the construction of facilities; (ii) the consolidation of access in the South region; (ii) design, social mobilization and works supervision; (iii) water meters and PES; (iv) project management activities attributable to water supply (about 50 percent); and (v) institutional support in areas where water supply activities are implemented. The per capita cost of the constructed facilities is drawn from the costs observed in the EPAR Project and from the cost estimates of the preliminary design studies. The investment costs allocated to water supply are thus estimated at US$30 million, i.e. 60 percent of the total project costs.

4. *Current Household Supply Sources and Water Demand*. The socio-economic studies show that the current conditions of supply are generally precarious. Only 22 percent of households have access to a water connection and piped water is available on average three days per week. In the coastal towns of the South region, a substantial percentage of connected households installed electric pumps on private wells and provide water to neighbors. Unconnected households are at a 17-minutes walking distance from the closest source of supply. Only one third of the households consider that their drinking water is of acceptable quality in the rainy season and 93 percent of households systematically use chlorination. The average daily water consumption is estimated at

24 liters per capita per day. A majority of the household expressed a strong demand for water connections.

Table A5.1. Investment Costs for Economic Analysis

Activities	Total Costs (US$'000)	Served Population	Per Capita Cost (US$)
Piped systems	18,000	150,000	120
• *South region*	*5,400*	*45,000*	*120*
• *Centre*	*12,000*	*100,000*	*120*
• *La Gonave*	*600*	*5,000*	*120*
Consolidation of access	1,200	100,000	12
Design, supervision and social mobilization	3,750	150,000	25
Water meters and PES	1,300	150,000	9
Sub-total	4,227		154
Project management	2,375		
Institutional support	3,365		
Sub-total	5,740	150,000	38
Total	29,990	150,000	182

5. *"With Project" Water Demand*. The water demand in the "with project" situation is estimated on the basis of the findings of the preliminary design studies. The resulting estimates are given in the table below.

Table A5.2. Supply Sources and Water Demand (Piped Systems)

	Kiosks	HH Connection
Percentage of population served	50%	50%
Daily water consumption per capita	1 bokit†	40 lpcd

† 1 bokit = 5 US gallons (18.9 liters)

6. *Water Benefits*. In the "without project" situation, the population has no access to safe water. Therefore benefits are associated with the total water consumption of the served population. The assessment of the benefits is based on: (i) a proxy of the value of water; (ii) the cost savings accruing to beneficiaries; and (iii) the surplus accruing to (previously unconnected) beneficiaries.

7. The proposed project's water supply works essentially consist of rehabilitation/expansion of existing piped systems, with a substantial portion of beneficiaries served through household connections.[31] Therefore, following the practice used in urban water supply projects, the best proxy for the value of piped water is the willingness-to-pay. A reliable estimate of the actual willingness-to-pay for piped water is given in the ICR of the EPAR Project, which used a reference rate

[31] Time-saving benefits could also be observed in more dispersed areas where technical designs would recommend boreholes for example, but the latter are less likely to be financed in the zones of intervention than piped systems with household connections.

schedule consisting of a 3 m^3 volume included in the monthly fee charged by the private operators and an additional rate of HTG 50 for each m^3 consumed above this threshold. The water consumed at the kiosks is valued at HTG 1 per bokit.

8. The beneficiaries would also save water treatment and energy costs. This applies to 93 percent of beneficiaries, who previously chlorinated water before use and would likely be satisfied with the quality of piped water provided by the Project. The cost of treatment is estimated, by reference to international standards, to about US$2 per month per household. The energy savings would accrue to 25 percent of the beneficiaries and are estimated to US$0.12/$m^3$.

9. The consumer surplus is equal to the increase of water consumption multiplied by the difference of the water price paid before and after the project and by the price elasticity (0.5). The table below shows the variation of daily consumption and prices paid by a household shifting from any source of supply other than a private connection to a water connection provided by the Project.

Table A5.3. Consumer Surplus

	Unit	**Without† project**	**With project**
		Unconnected	Connected
Average monthly cost	HTG	535	304
HH Monthly consumption	m^3	3.65	6.08
Cost/m^3	HTG	147	50
Monthly surplus	HTG		176.25
Annual surplus	HTG		2,115

†Source: Socio-economic studies

10. *Incremental Costs*. The operating costs of the new facilities were estimated on the basis of the information provided in the preliminary design studies (treatment and maintenance costs) and in the ICR of the EPAR Project (average staff and commercial costs of professional operators). There will be no energy costs, as all water schemes are assumed to be gravity-fed. Incremental costs will thus be as follows:

- Treatment costs: HTG 3 per additional m^3 produced;
- Maintenance costs: 0.5 percent of investment costs per year
- Staff and commercial costs: HTG 10 per additional person served per year;

11. *Results*. The economic internal rate of return (EIRR) is estimated at 11.0 percent, considered reasonable for projects in this type of challenging rural environment. The net present value (NPV) of the project's water benefits and costs is estimated at US$1.88 million, with the 10 percent discount rate most frequently used in rural water and sanitation. With the same discount rate, the long-term marginal cost of water of the piped systems− measured by the Average Incremental Cost (AIC) − is estimated at HTG 66/m^3 (equivalent to US$1.34/$m^3$).

12. *Sensitivity Analysis.* A range of scenarios has been developed to test the sensitivity of the EIRR to the main elements of the cash-flows. The variables tested for the sensitivity analysis were: (i) investment costs; (ii) operations and maintenance costs overrun; (iii) water demand; and (iv) connection uptake. The outcome of the scenarios is given in Table A5.4 below, which also provides

the switching values of the variables. The EIRR is particularly sensitive to an increase of investment costs and, to a lesser extent, to a reduction of the demand for water connections and of the water consumption.

Table A5.4. Results of the Sensitivity Analysis

Scenario	EIRR	NPV@10% (US$ M)	Switching value
Base scenario	11.0%	1.88	
Investment cost increase 20%	8.8%	-2.65	8.5%
O&M cost increase 20%	10.8%	1.53	106%
Overall demand decrease 20%	10.0%	-0.09	19.1%
Connection rate decrease 20%	9.3%	-0.31	17.1%
Combined investment and O&M cost increase 10% and demand decrease 10%	8.9%	-1.54	

Sanitation

13. *Scope of Analysis*. The cost-benefit analysis of the sanitation component focuses on the activities for which benefits are quantifiable and exclusively attributable to the proposed project. Whereas the health and sanitary benefits of the ACAT and the institutional sanitation components are unquestionable, their impact may not be easily quantified (now and at project completion) separately of other ongoing and future WSS and health programs. The activities supporting DINEPA in securing adequate sludge removal and treatment, however, will have a clearly measurable impact, as they will generate substantial cost savings for the households. The establishment of a regulated framework for sludge handling would enable to create a network of reliable sludge haulers who would provide adequate services to households.

14. *With/Without Project Situation*. The socio-economic studies show that households in small towns are substantially equipped with latrines (67 percent) and to a lesser extent with pour-flush latrines (11 percent). However, less than five percent of households have their latrines emptied in the absence of sludge haulers, compounded by frequent negative social considerations associated with this type of activity. Consequently households are led to build another latrine next to the full one, which is quite expensive and may become impossible due to the size of the urban compounds.

15. *Benefits.* The potential cost savings accruing every six years to beneficiaries amounts to the difference between the cost of a new latrine (HTG 15,000) and the emptying cost (HTG 3,300). It is assumed that the percentage of potential beneficiaries that would actually use the new sludge handler service would gradually increase from 30 percent in 2018 to 80 percent in 2023.

16. *Costs*. The costs include: (i) the initial investment cost (US$1.5 million); and (ii) the operating costs of the sludge handling and removal facilities (10 percent of investment costs).

17. *Results*. The EIRR is estimated at 11.9 percent. The net present value (NPV) of the activity is estimated at US$0.08 million, with a 10 percent discount rate.

B. Financial Analysis

18. *Financial Information on DINEPA*. DINEPA was created as an administrative parastatal and cannot be considered as a water utility. Its accounting procedures are similar to the ones of ministerial departments. Specific financial statements are prepared and independently audited for donor-financed projects executed by DINEPA. However, DINEPA does not prepare consolidated financial statements and the financial information on the whole of DINEPA's activities (including OREPA activities) is limited to budgetary statements.

19. *Financial Sustainability of DINEPA*. DINEPA is heavily dependent on external financial assistance. The sustainability of its activities related to the development and expansion of water services is hampered by the lack of predictability of budgetary and external resources, and of a linkage between resources and sector objectives related to access to services. The Project would help to address these weaknesses by supporting a shift from the current project approach to a programmatic approach, which would: (i) improve the predictability of sectoral resources through the preparation of a medium-term economic framework; (ii) introduce an output focus in budget preparation and execution; and (iii) facilitate donor coordination and the use of budget support and basket funding by donors.

20. *Financial Information and Viability of Professional Operators*. The ICR of the EPAR Project pointed out several weaknesses that impact the reliability and integrity of the financial information available from private operators: (i) the agreed reporting forms are not used; (ii) water sales at kiosks and standposts are not correctly reported; and (iii) water sales at connections are generally under-billed and metering is not properly used. The ICR also found that implementing the recommendations of the EPAR Evaluation study regarding the application of more realistic water rates and a continuation of support to the operators appear as necessary conditions to restore financial viability. The Project will help to address these shortcomings by: (i) updating the assessment of the operators' financial viability; and (ii) providing appropriate training and tools to the current and future operators, as well as to the entities in charge of overseeing and regulating the operators (DINEPA and CAEPAs).

21. *Financial Impact of Project Activities*. The financial impact of project activities is assessed by the FIRR derived from the costs-benefits analysis. The analysis is carried out from the perspective of both DINEPA and professional operators (OPs). Financial calculations take into account the financial revenues and costs in the with/without project situations, including taxes and excluding non-cash generating benefits (cost savings and consumer surplus). The latter accrue to the consumers and amount to 33.5 percent of total economic benefits. The FIRR is estimated at 1.8 percent, which evidences the need for continuing to subsidize the development of the rural WSS sector.

Annex 6: Justification for IDA Regional Grant

HAITI: Sustainable Rural and Small Towns Water and Sanitation Project (P148970)

1. The Project will support water supply and sanitation (WSS) investments in rural areas and small towns of Haiti, as part of a joint regional approach with the Dominican Republic (DR) to combat cholera and other waterborne diseases through WSS investments on the Island of Hispaniola. The criteria for an IDA Regional Grant are largely met,[32] as follows:

(i) *Involvement of two countries if at least one is a fragile state*. Haiti and the DR – both of which share the Island of Hispaniola – will both be participants in this joint initiative. Haiti is an IDA and fragile country: according to the World Bank's 2014 CPIA data, Haiti's overall average rating of 2.7 qualifies it as "fragile". Both the governments of Haiti and the DR have demonstrated commitment to this regional program.

(ii) *Generating spillover or cross-boundary benefits (generate positive externalities or mitigate negative ones across countries)*. The cholera epidemic that started on the Island of Hispaniola (in Haiti) in October 2010 – after nearly a century without cholera on the Island – began in a localized area that was far from the Haiti-DR border. Interventions that enhance access to clean water and sanitation throughout the Island where access and service quality are low (as is proposed in this project) will clearly generate strong cross-border effects, reducing the spread of cholera as well as other water- and excreta-related diseases on the island.

(iii) *Clear evidence of country or regional ownership*. The Project underpins a joint initiative by the Governments of Haiti and the DR, supported by a Coalition of Donors. The initiative dates back to January 2012, when the Governments of Haiti and DR jointly launched the "Call to Action: A Cholera-Free Hispaniola" with explicit backing from the Presidents of the two countries and with support from UNICEF, the Pan-American Health Organization (PAHO) and the US Center for Disease Control and Prevention (CDC).

(iv) *Platform for policy harmonization*. In support of the initiative launched jointly by the Governments of Haiti and DR in January 2012, the Regional Coalition for Water and Sanitation to Eliminate Cholera in the Island of Hispaniola was established later in the same year. The World Bank is a member of this Coalition, which has 22 members in total including several multilateral and bilateral agencies, NGOs as well as Haitian and Caribbean entities (such as the Haitian Diaspora Federation). This Regional Coalition is active, meeting regularly and providing technical inputs for cholera elimination as well as fundraising. The Project will help finance a $2.2 billion 10-year Plan for Cholera Elimination that was produced by the Government of Haiti with the support of the Coalition, as well as the $310 million plan for 16 priority cholera communes presented in Washington, DC on October 9, 2014.

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[32] IDA17 Resource Allocation Framework: Implementation Guidelines for FY15. DFIRM, World Bank, June 2014.

Annex 7: Selection of project interventions areas

HAITI: Sustainable Rural and Small Towns Water and Sanitation Project (P148970)

1. **Evolution of cholera in Haiti and the Dominican Republic (DR).** Table A7.1 presents the evolution of cholera cases and related deaths in both countries.[33]

Table A7.1. Evolution of cholera cases and deaths in Haiti and the DR

	2010	2011	2012	2013	2014	2015*	Total
Haiti							
Cases	185,351	351,839	101,503	58,574	27,388	13,798	738,453
Deaths	3,951	2,918	908	581	297	124	8,779
DR							
Cases	191	22,225	7,069	1,990	597	185	32,257
Deaths	0	374	52	42	10	9	487

* January to May 2015

2. **Selection of the communes of intervention.** For the construction and rehabilitation of water supply systems and sanitation activities (household and institution levels), the Project will focus on priority cholera communes: (i) the 16 communes identified at the High-Level Meeting on "Haiti: Clean Water, Improved Sanitation and Better Health" held in Washington DC on October 9, 2014 (shown in Figure A7.1); as well as on (ii) other communes which have shown high incidence rate during the dry season.

3. The main criterion to select the communes is the cholera incidence rate (i.e. number of new cases per population) recorded during the dry seasons. The incidence criterion during the dry season was used to allow a better understanding of future recurrent cholera pockets, and helps predict cholera distribution during the rainy season. The incidence data is based on a database of 8,000 cases collected initially during the two dry seasons of 2012 and 2013 at the facility level by MSPP's Epidemiology, Laboratory and Research Directorate (DELR) with support from UNICEF, and all cases were further tracked back to their commune of origin. By intervening in the communes of origin, important disease reservoirs can be eliminated, contributing to controlling the spread of the disease. Based on the data available at the time of selection, the communes with the highest average number of cases per month and per 10,000 people were located in the Artibonite, Centre and Nord departments. Table A7.2 lists these communes and their incidence rate and also shows that these affected communes are mostly rural.

4. **The Project will primarily focus on the Centre department, and intervene in rural areas and small towns to complement other partners' interventions**. To support this selection, data presented in Table A7.2 were complemented by additional investigations on suspected cholera

[33] Data from the Haitian MSPP's weekly updates, through the DELR, PAHO/WHO Cholera Epidemiological Updates and PAHO's Interactive Atlas of Cholera Outbreak on the Island of Hispaniola.
See http://new.paho.org/hq/images/Atlas_IHR/CholeraHispaniola/atlas.html.

transmission carried out in these three departments,[34] and by information on WSS interventions by other partners in these departments, as shown below. The lead agencies working in the Artibonite, Ouest and Nord departments are the Interamerican Development Bank (IDB), Spanish Agency for International Development Cooperation (AECID) and UNICEF.

Table A7.2. Communes with highest cholera incidence rate during the dry seasons

Department	Commune	Population (IHSI, 2012)	Urban population (%)	Rural population (%)	Monthly cholera incidence rate - dry season (cases per 10,000 people)
Artibonite	Gonaïves*	340,042	75.2	24.8	4.6
Artibonite	Gros Morne*	148,577	22.7	77.3	4.9
Artibonite	Saint Marc*	254,458	56.6	43.4	8.8
Artibonite	Saint Michel de l'Attalaye*	143,634	23.8	76.2	7.4
Centre	Boucan Carré	53,468	6.5	93.5	5
Centre	Cerca Carvajal	22,191	23.1	76.9	31.5
Centre	Cerca La Source*	53,949	13.0	87.0	62.1
Centre	Hinche*	115,344	30.5	69.5	7.3
Centre	Lascahobas*	43,776	21.6	78.4	8.6
Centre	Mirebalais*	93,288	18.5	81.5	15.5
Centre	Saut d'Eau	37,284	12.9	87.1	7.8
Nord	Acul du Nord	53,353	21.7	78.3	4.4
Nord	Bas Limbe	19,945	38.7	61.3	7.9
Nord	Borgne	63,864	15.9	84.1	5.6
Nord	Cap Haïtien	261,864	98.1	1.9	12.4
Nord	Dondon	33,023	30.6	69.4	7.2
Nord	Limbe*	81,403	61.9	38.1	5.8
Nord	Pilate	51,580	13.3	86.7	10.3
Nord	Port Margot	47,600	38.9	61.1	4.7
Nord	Quartier Morin	26,109	15.8	84.2	5.1

* These communes have been selected as part of the 16 communes presented at the High-Level Meeting in Washington on October 9, 2014.

5. **Centre department.** The Centre department showed the highest monthly incidence rate with an average of 19.7 cases per 10,000 people, compared with 6.4 for Artibonite and 7.0 for the Nord department. Within the department, the commune of Cerca La Source reported the highest incidence rate. Although the situation has improved in the Centre, recent outbreaks during the rainy season were reported in the department, including in the Cerca La Source, Maïssade, Hinche and Mirebalais communes, as mentioned in a recent report by *Assistance Publique Hôpitaux de Marseille* (APHM)[35] and the latest available information from the DELR (February 2015). Partners such as the AECID and UNICEF are financing complementary interventions: AECID is financing the rehabilitation and expansion of urban water supply systems in Hinche, Lascahobas and Mirebalais, while UNICEF is providing water supply and sanitation solutions for dispersed rural localities in the communes of Mirebalais and Cerca La Source. Additionally, the Project will use

[34] Stanislas Rebaudet, Pierre Gazin, Robert Barrais, Sandra Moore, Emmanuel Rossignol, Nickolson Barthelemy, Jean Gaudart, Jacques Boncy, Roc Magloire, and Renaud Piarroux, "The Dry Season in Haiti: a Window of Opportunity to Eliminate Cholera" PLoS Curr. 2013 June 10; 5. Published online 2013 June 10.

[35] Assistance Publique-Hôpitaux de Marseille (APHM), "Cholera in Port-au-Prince and Haiti, Mission report, January 2015.

feasibility studies financed under the World Bank's health program to rehabilitate and expand the water supply system in the Hinche neighborhood of Los Palis, which showed the highest monthly incidence rate of cholera in the dry seasons of 2012 and 2013 with 47 cases per 10,000 people.

6. **Nord department.** The principal cholera residual focus was located in the city of Cap-Haïtien, concentrated in several neighborhoods without proper access to clean drinking water and sanitation facilities. The APHM's report also re-emphasizes the presence of residual foci of cholera in Cap Haïtien. Partners such as AECID and the IDB are financing the rehabilitation and expansion of water supply systems and piloting professional operators for the management and maintenance of urban public market sanitation facilities in Cap Haïtien, respectively.

7. **Artibonite department.** The most active foci were located in the town of Saint-Marc and several of its neighborhoods, as well as in rural localities near Saint-Marc, where people rely exclusively on unprotected water sources. Other cases were regularly reported in Gonaïves and Saint-Michel-de-l'Attalaye, where most cases originated from the urban and peri-urban areas. Although the situation has improved in Artibonite, recent outbreaks during the rainy season were reported in the department, including in the Gros Morne commune, as mentioned in APHM's report, and MSPP's April 2015 list of red alert communes. The IDB is financing interventions in water supply and piloting professional operators for the management and maintenance of urban public market in Saint Marc, and is complementing urban interventions with the rehabilitation and expansion of water supply systems in dispersed rural areas and small towns in the communes of St-Michel de l'Attalaye, St-Marc, Gonaïves and Gros Morne. Additionally, UNICEF is financing complementary interventions in dispersed rural areas in the same communes.

8. **Ouest department.** This department has sustained the highest number of cases since the beginning of the epidemic in 2010, particularly in the Port-au-Prince conurbation, although the incidence and death rates recorded during the dry seasons were low. This was estimated to be due to the community actions implemented by NGOs which continuously identified areas associated with clusters of cases, and organized awareness campaigns, water treatment product distribution and free bucket chlorination stations. The APHM's latest mission also reports an outbreak in the neighborhoods of Martissant and Carrefour and the latest data obtained from DELR (February 2015), as well as from and MSPP's April 2015 list of red alert communes indicated that the highest number of cases during the latest outbreak comes from the metropolitan region. The IDB is financing a vast program of water supply infrastructure rehabilitation and network expansion in Port-au-Prince, as well as strengthening both the OREPA Ouest and the Port-au-Prince CTE.

9. **Institutional support to the deconcentrated structures.** To complement investments in water supply infrastructure and sanitation campaigns, the IDB and AECID finance the salaries and operating costs of OREPAs Ouest and Sud (IDB, through October 2015), as well as of OREPAs Nord and Centre (AECID, through March 2017). Financing of URDs is guaranteed through March 2015 for the Ouest and Nord departments, through September 2015 for the Sud, Sud-Est, Nippes and Grande Anse departments and through March 2017 for the Nord-Est, Nord-Ouest and Centre departments.

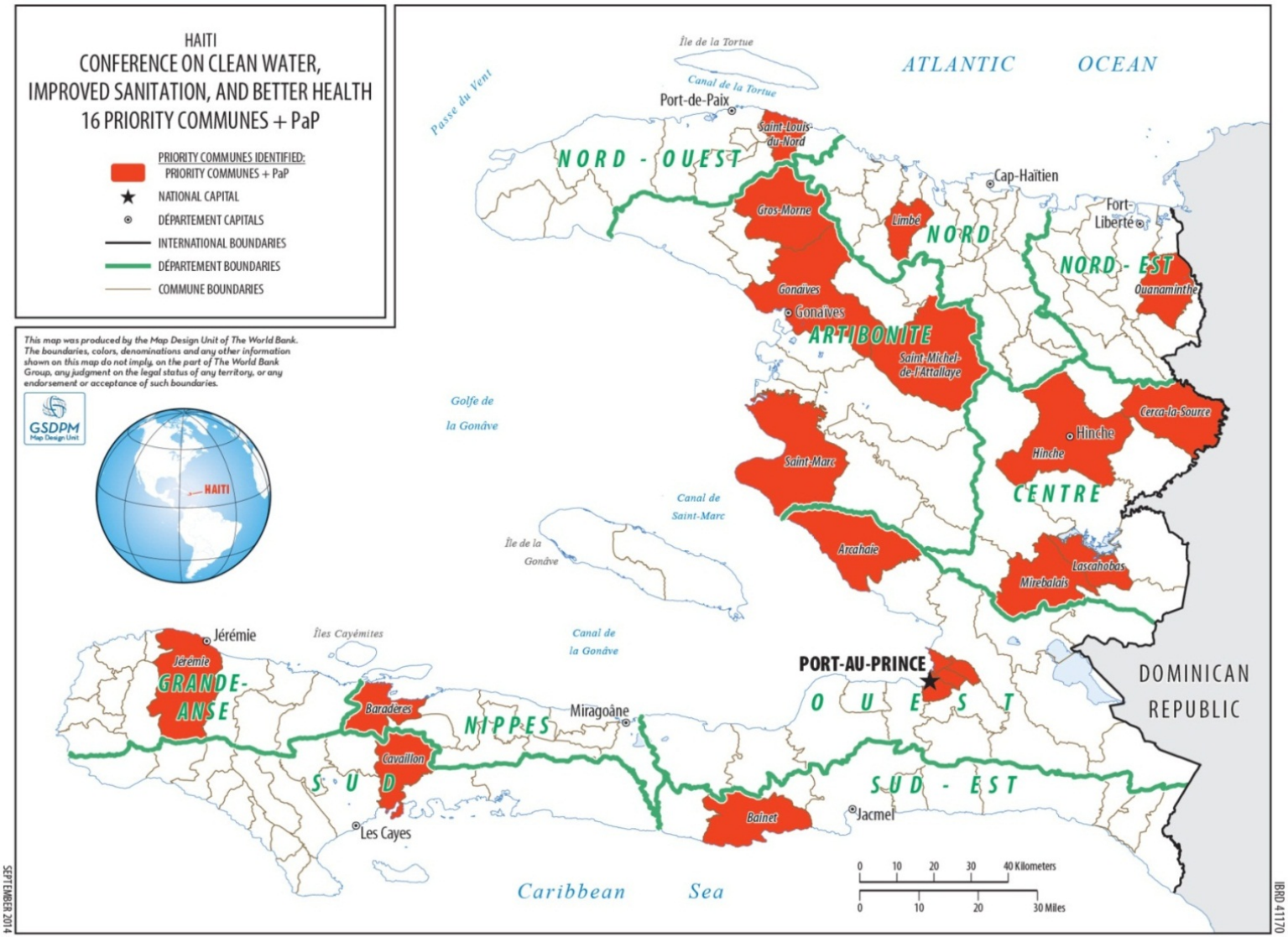

Figure A7.1. Priority cholera communes.

Annex 8: Activities financed and implemented by other financial and technical partners in the water and sanitation sector

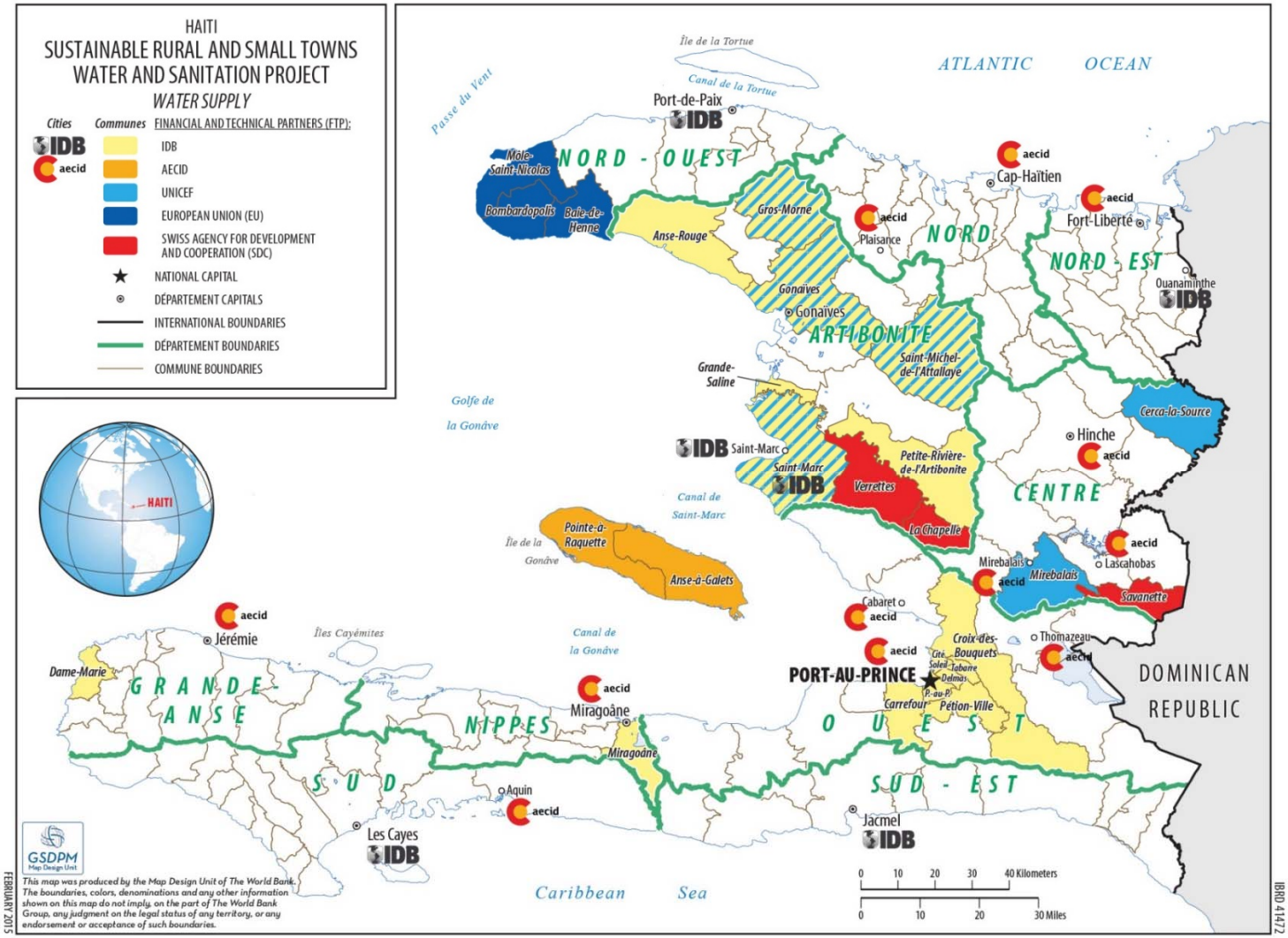

Figure A8.1. Water supply activities financed and implemented by other financial and technical partners.

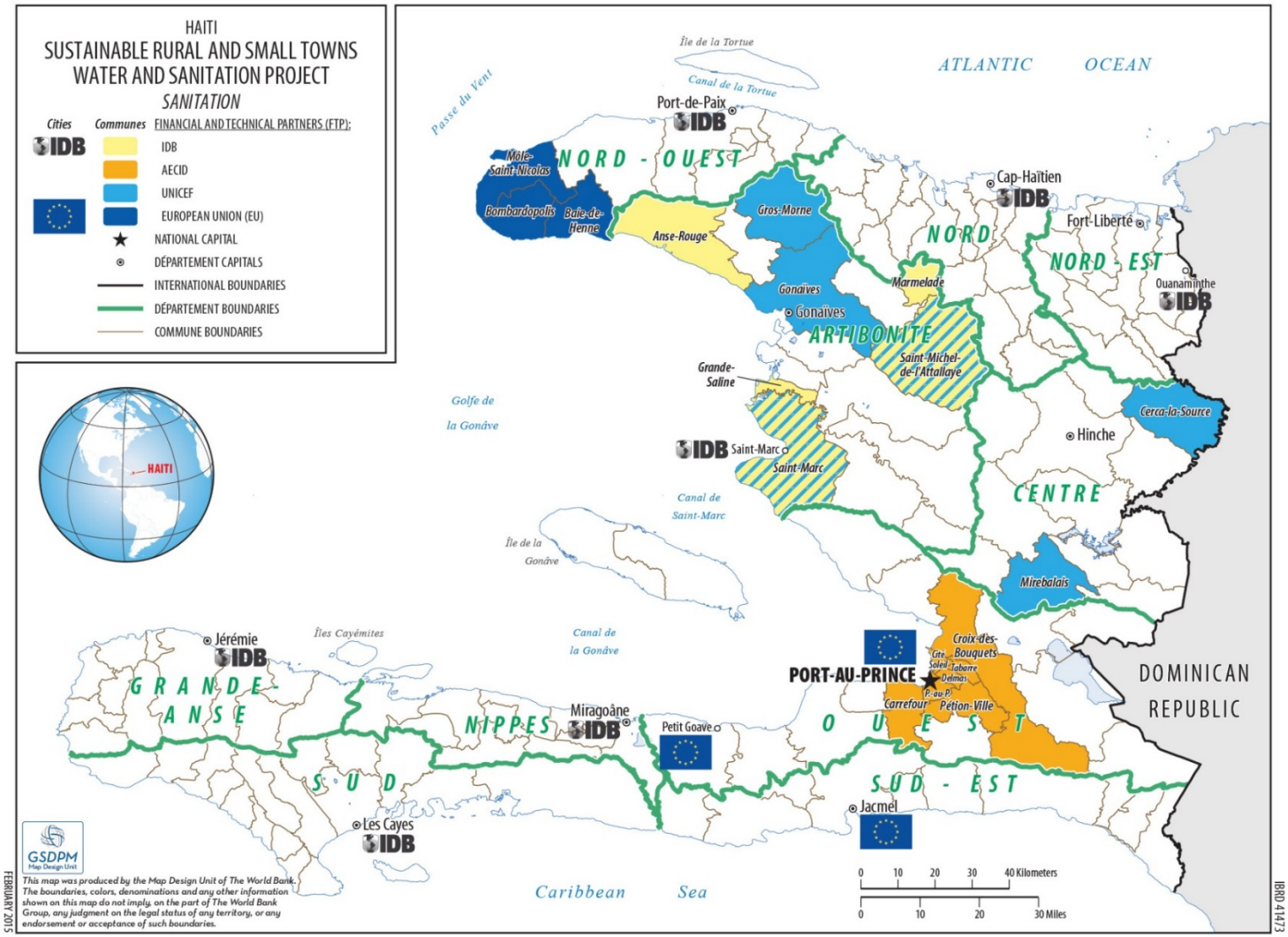

Figure A8.2. Sanitation activities financed and implemented by other financial and technical partners.

Annex 9: Preliminary diagnosis of the sanitation sector in rural areas and small towns of Haiti

Enabling Environment	**Demand Creation**
Policy and Strategy: • The 2009 *Loi-cadre portant organisation du secteur de l'eau potable et de l'assainissement* lays out a framework for the water and sanitation sector, but with little specific detail on sanitation. • DINEPA developed a strategic orientation document in 2012 which describes principles of intervention and responsibilities of sanitation actors, but there is consensus that it needs further development. A Sector Strategic Plan (SSP) is under development with IDB funding, but there is uncertainty on the level of detail included on sanitation. • A zero-household subsidy exists; however, the extent to which NGOs have respected this varies considerably. • DINEPA has an unofficial three pillars for sanitation: legislation, promotion and products/services. Under each of them are three chain links, i.e. access, emptying of sanitation facilities and treatment of excreta. • No scaling-up vision has been developed for rural sanitation. • Fecal sludge management: the lack of fee revenue limits the future development of the sector, including expanding investment in sanitation infrastructure. The absence of effective operational guidelines and enforcement mechanisms also has the potential to increase the negative environmental impact of these excreta treatment sites, due to inadequate monitoring and a heretofore passive approach to trouble-shooting rather than proactive management. DINEPA has already set a reasonable dumping tariff equivalent to US$4 per cubic meter; the immediate challenge is to enforce its implementation and create a dialogue with the private sector (more for urban than small towns). Program methodology: • No programmatic approach exists for rural sanitation; environment is heavily projectized limiting opportunities for scale. • The IDB is supporting the development of a "guide for rural interventions", although there is limited information on how deep the focus is on sanitation. • DINEPA has agreed on the use of CLTS and sanitation marketing tools for rural sanitation, but the methodologies lack definition, adaptation and clear implementation mechanisms. See also Demand Creation.	Community-Led Total Sanitation (CLTS): • Per JMP 2014 update for rural Haiti, improved coverage is 16 percent, shared is 11 percent and other unimproved is 35 percent. Although these numbers suggest that a culture of latrine/toilets exists in rural areas and small towns, open defecation is at 38 percent, suggesting the need for CLTS efforts. • CLTS has been applied on a small scale for the past 3 to 4 years by NGOs. However, only 4 communities have become open defecation free (ODF). Reasons attributed for lack of success include: low quality facilitation, poor or no follow up post triggering, limited social cohesion and the personalized use of shame. • Since official launch of Total Sanitation by high level representatives of UN and WBG, ACAT (variation of CATS) has been accepted by DINEPA. Similar to CLTS, ACAT avoids personalized shaming. First ACAT training underway and triggering will follow in 4 communities of the Centre department by Zanmi Lasante as well as by Oxfam in Artibonite (UNICEF Funding). • It remains unclear whether NGOs understand that ODF is the desired outcome of the ACAT process. Behavioral Change Communication (BCC): • Oxfam plans to build on its radio soap opera produced with PCI Media/Bloom developed to combat cholera and add messages focusing on sanitation and hygiene. Recording to begin in 2015. • Helvetas has developed and is airing a national BCC campaign using popular comedian Tonton Bicha (more details are needed). • The IDB is also planning on financing BCC, but details are not yet available. Other: • Pilot underway by Ministry of Social Affairs to train around 500 family coaches to deliver messages in some 20 areas. A Social Protection project, there may be an opportunity to embed sanitation and hygiene or strengthen it through a safety nets approach.

• Great interest in sanitation marketing with 3 workshops held in 2014. However, best practices and learning from global experiences is limited. Several NGOs now in the space with DINEPA also want to define a national marketing strategy. • BCC campaigns have been developed but they have been NGO led without coordinating with DINEPA and possibly the Ministry of Health and Populations (MSPP). • Use of evidence base to design projects is limited. M&E: • No official ODF definition exists, despite CLTS work being done. One is expected by end of 2014 and will be agreed upon with DINEPA and MSPP. As ACAT is being tested, it is not yet the official State methodology and ODF is not yet a national indicator. • Emphasis still on counting latrines/facilities; use will be assumed based on certain physical observations. • No baseline is available (other than JMP data at the national level and 2012 survey information at the departmental level). Institutional arrangements: • Lead agency for sanitation is DINEPA. However, for IEC and hygiene promotion, the MSPP is also a lead agency (for example, through its community agents, ASCP), requiring greater collaboration for ACAT/CLTS. MoUs are under development between DINEPA, MSPP and the Ministry of Environment (MDE) to establish responsibilities for sanitation at the ministry level. • DINEPA is not yet aiming for decentralization. Deconcentration has begun with 4 regional offices (OREPAs) in place. However, their role, as well as the role of URDs and communal technicians (TEPAC) have yet to be clearly defined with regards to sanitation. An assessment of these structures is under preparation, but will most likely focus on water supply. • A protocol between DINEPA and the departmental directorates of the Ministry of National Education and Vocational Training (MENFP) is under development to clarify responsibilities related to water supply and sanitation in public schools. • The National Vocational Training Institute (INFP) is the lead agency for professional development. An MoU with DINEPA is being prepared and	• Coordination with the Health sector: discussions on the role of health actors with regards to sanitation are ongoing. **Priority areas of support for WBG:** • WSP to conduct an assessment of the various BCC tools being used, drawing out behaviors and populations targeted and communication objectives, opportunities for greater consistency and scale and critical gaps in terms of messaging, target audiences or communication channels. Tools will also be collected and inventoried. Based on assessment, WSP would fill critical gaps and the Bank Project would finance the development of BCC tools. • WSP to support the development of training modules and supporting materials to embed sanitation within the safety nets/family coaches. • WSP to support creation of demand for emptying services (in parallel to strengthening the fecal sludge service chain – see Supply Strengthening).

financing from the AFD and the IDB is available for the development of training modules and programs. • The Ministry of Social Affairs is also piloting (through a social protection project) a family coach network which, if successful, could include sanitation and hygiene promotion. Capacity: • DINEPA lacks human resources. Currently, the Department of Sanitation is composed of one director and 3 assistants at the central level. DINEPA has no deconcentrated staff. It is not clear who leads M&E. • At regional/provincial/commune level, sanitation promotion work has been mostly implemented through NGOs. The capacity of regional/provincial/commune level DINEPA staff will need to be built once their role in sanitation has been defined. • Anecdotal and photographic information suggests poor quality of sanitation facilities constructed and hence, low capacity and skills of suppliers. Availability of products and services: • Since no supply/value chain study has been conducted it is difficult to assess to what extent products and services are available in rural areas, let alone whether they are desirable and affordable. • Fecal sludge management: the absence of excreta treatment stations in Haiti contributed to, or at least prolonged the cholera epidemic, following which the construction of treatment stations in the Port-au-Prince metropolitan area became a priority. But the accelerated timetable to complete construction and operationalize the first two excreta treatment sites at Titanyen and Morne à Cabrit resulted in installed infrastructure whose full implementation and operation is not sustainable. The demand for dumping facilities stemmed largely from densely populated IDP camps in which only temporary sanitation facilities were available. There is little demand for dumping among the broader population. Financing: • Financing of sanitation sector is largely dependent on external support. • As part of the SSP reformulation process, an analysis on the financial sustainability of sector institutions will be undertaken	

Cost-effective implementation: • No formal information available. However, projectized environment may result in duplication of efforts (e.g. multiple curricula for CATS or mason training rather than national standardized ones). **Priorities/Opportunities for WBG support:** • WSP will build on findings from the AECID-funded institutional assessment/diagnosis to define roles at central, provincial and local level, describing competences required and outlining capacity gaps. This will include MSPP, MICT, MDE and other relevant ministries. Approaches such as "Whole System in a Room" that have been used in countries such as Kenya and Ethiopia can be adapted and embedded into the assessment. The Project will allocate funds to support implementation of recommendations from this exercise. • Related to this assessment, WSP to support the development of a roadmap for a national rural and small town sanitation program. The ultimate objective is to have consensus and shared vision among sector players and guidelines on what it will take to have a scaled and sustainable program. • WSP to strengthen DINEPA's monitoring and evaluation, including definition of indicators, system design and capacity of key actors to track indicators and use data. • Support the undertaking of a study on pit –emptying practices and services in rural areas and small towns.	
Supply Strengthening	**Learning and Knowledge**
• Coverage of unimproved sanitation in rural areas increased from 13 to 30 percent from 1990 to 2001 while improved coverage only grew from 14 to 17 percent in the same period. This suggests a lack of affordable, desirable and accessible products in rural areas. • First national supply/value chain for urban and rural products and services is now planned by DINEPA with funding from IDB (early 2015). The national formative research study will hopefully provide insights as to desirable products and features. • Products are generally introduced by NGOs with no field testing. • UNICEF has ordered 11,000 SATO rural plans from Bangladesh to be used in sanitation marketing by Oxfam in Artibonite. They will be mounted on a concrete-based toilet seats and sold. • Supply strengthening efforts to date have been small scale, led by NGOs. Slabs produced by trained masons have been the predominant model.	• Learning and knowledge is highly project-driven and little is shared. • No evaluation of CLTS efforts has been conducted. UNICEF may be initiating one. • A desk review and summary of small formative research studies conducted by NGOs in addition to the national one underway by Kiskeya is planned by IDB (to be confirmed). • Lessons learned are not often captured and shared. Evaluations have been limited. • NGOs working on sanitation marketing have agreed to collaborate and share and have organized their own Forum/platform. However, no common learning questions have yet defined. • Limited knowledge sharing suggests a great opportunity for WSP to develop a common learning agenda and support a wide range of activities.

• Main players in sanitation marketing are the Spanish Red Cross (Jacmel), Danish Red Cross (tbc), Zanmi Lasante (Centre), Oxfam (Artibonite), and Helvetas (tbc). The organizations have decided to share experiences via an online forum whose Secretariat will be housed in the Water Supply and Sanitation Platform of NGOs (PEPA) and supported by Helvetas (with SDC funding). • With funding from IDB, DINEPA plans to collaborate with INFP to develop "filières" in sanitation and hygiene including masonry, entrepreneurial skills, pit emptying/sludge removal, hygiene promotion. Developing high quality standardized curricula reflecting global learning and that can be used by various partners and training institutes will be critical to achieving economies of scale. DINEPA is planning to develop regional sanitation "maisons" which will embed four streams: technical training, product demonstration, customer service/sales and monitoring of public sanitation facilities. It is not clear at this stage how these regional hubs would be executed; however, there is recognition that these functions are needed. • Some discussions (including with American Standard) have been held with Haiti Plastique to produce SATO and potentially other products. • Strategies to address affordability are not mentioned explicitly. Human-centered design could help develop aspirational products while streamlining production costs. There are micro-finance institutions such as Fonkoze, SOGESOL and FINCA; however, it is not known to what extent they have been engaged. Without addressing affordability strategies, supply strengthening may not reach the poorest 60 percent. • Fecal sludge management: in rural areas and small towns, there is a mix of mechanical, more urban private sanitation providers for emptying and transport, and informal manual often marginalized workers for rural and small towns, but supply needs to be strengthened. **Priority areas of support for WBG:** • Allocate project funds to support the development of aspirational and low cost latrine models and handwashing with soap (HWWS) stations and design of business models that can deliver these in small town and rural areas. Business model(s) will be tested and a view of producing a proof of concept for enterprises that can be replicated and supported by other partners. WSP to provide TA for this activity.	**Priority areas of support for WBG:** • WSP to conduct a formal evaluation of sanitation marketing efforts to date, highlighting results, strengths, weaknesses, opportunities for greater scale and sustainability and lessons learned. • WSP to support learning through Knowledge Exchange visits of key DINEPA members to Kenya and Tanzania or Uganda and Indonesia to learn about rural sanitation programs that have been scaled up nationally. • WSP to support the development of a national learning strategy (to complement the M&E strategy, see Enabling Environment), particularly around demand creation and supply strengthening.

Annex 10: Gender Action Plan

Action	Monitoring Indicator	Responsibility
Support to Component 1: Strengthen institutions in delivering water and sanitation services at the deconcentrated level by addressing gender		
• Review and analyze gender gaps and issues in current sector policy and support the development of an action plan to ensure institutional space for gender in the sector. This includes: (i) consulting stakeholders from the water, sanitation and hygiene sector, education and health sector as well as other financial and technical partners; (ii) assessment of socio-cultural practices linked to cholera prevalence and gender-based violence (GBV) associated with WSS access; and (iii) identifying appropriate solutions This activity will draw on information gathered through the disaggregated national WSS baseline and be implemented as part of WSP's Technical Assistance Program for DINEPA, and the WASH Poverty Diagnostic	• Action plan availed to DINEPA and partner stakeholders to implement gender dimensions of policy in WSS and hygiene • At least 1 national gender sensitive indicator is adopted for annual sector monitoring	World Bank, WSP, DINEPA, ONEPA
• Capacity building of sector stakeholders to implement the gender action plan. This includes support to DINEPA in: (i) performing an oversight role with respect to sector gender dimensions; (ii) implementing the gender action plan; monitoring and evaluation related to gender in WSS and hygiene at the national level; (iv) the development of ToRs for project consultancies, contracts and training which include gender dimensions consistent with the gender action plan; (v) the development of technical designs for water supply systems and sanitation facilities that respond to needs and preferences of various segments of the society including women, children and persons with disability; and (vi) ensuring that safeguard documents are sensitive to gender imbalances and do no harm • Targeted actors are ONEPA, OREPAs, URDs as well as MSPP's community health agents (ASCP), departmental Sanitary Officers and partner NGOs This activity will be implemented as part of WSP's Technical Assistance Program for DINEPA and will inform project interventions	• Number of WSS, hygiene and health actors trained • Number of male and female community members and school children trained	DINEPA, OREPA, URD, ASCP,

Action	Monitoring Indicator	Responsibility
Support to Component 2: Increase improved access to clean water and sanitation in rural areas and small towns by maximizing input to gender		
• Gather disaggregated data by sex for water supply, sanitation and hygiene interventions to support monitoring of gender dimensions throughout project implementation. This includes service satisfaction surveys as well as surveys on safety in access to services This activity will draw on information gathered through the disaggregated national WSS baseline and be implemented as part of WSP's Technical Assistance Program for DINEPA	• Percentage of men / women, boys / girls with access to: (i) improved water sources; (ii) improved sanitation facilities; (iii) benefitting from consolidation works; (iv) trained on hygiene and sanitation promotion; (v) with access to institutional sanitation in public schools, health facilities and public spaces; (vi) who use and rate the WSS services satisfactory or better; and (vii) who rate safety in access to water and sanitation services satisfactory or better	World Bank, WSP, DINEPA, OREPA, URD
• Reduce gaps in women's participation and representation in water and sanitation decision making. This includes involving women in project implementation activities; orientation, consultation, training and water supply and sanitation management This will be done through project interventions	• CAEPAs include at least 20 percent female representation in project area by year 3 and 50 percent do so by year 5 • Women form 30 percent of beneficiaries engaged in project orientation and consultations of each new project, benefit from training opportunities and are an active part of the OP management model (both for water supply and sanitation), either as the OP or as a member of the management team	World Bank, WSP, DINEPA, OREPA, URD
• Monitor and report progress on implementation of the Gender Action Plan during project implementation	• Gender action plan integrated within project reporting	World Bank, WSP, DINEPA, OREPA, URD