

III

WATER AND SANITATION

III. POTABLE WATER AND SANITATION

INTRODUCTION

Since the beginning of 1992, PAHO/WHO has been implementing humanitarian assistance projects in the Potable Water and Sanitation sector to maintain the operation of existing infrastructure. PAHO/WHO is currently gearing toward implementation of rehabilitation projects, to be followed by development projects as soon as the current crisis is solved. A listing of the projects, totalling US\$14.38 million, describes the scope of the proposed interventions.

As this crisis has dramatically weakened the national institutions, destabilized grass-roots community organizations, and consequently, caused a slump in 1990 coverage figures, the implementation of this new 18-month new program will call for more intense technical assistance.

1. SITUATION IN THE POTABLE WATER AND SANITATION SECTOR

1.1 IMPACTS OF THE POLITICAL CRISIS

When the political crisis broke out at the end of September 1991, it slashed all efforts to improve and even deteriorated the already critical situation in the sector. The impacts of the ever-deepening political crisis are outlined below:

- **Drop (30 to 50%) in production of potable water** due to frequent and prolonged interruptions by the Haitian Electricity Authority (EDH) in the power supply of public networks, to major shortages of fuel (embargo) needed for emergency power generators and to the lack of spare parts for electrical and mechanical equipments.
- **Disruption of maintenance services** of potable water systems.
- **Disorganization and replacement of all decision-makers** in national institutions in this sector. The same holds true for executives, who, for the last ten years, had been trained with the contribution of international cooperation agencies, including PAHO/WHO. For example, since February 1986, six different director-generals ruled CAMEP (Metropolitan Water Authority), compared with five for SNEP (National Water Authority), and four executive directors for POCHEP.

- **Reduction of the staff to a minimum.** POCHEP has had to reduce its personnel by 83%, before closing down for lack of funding.
- **Serious shortages of cash in national organisations involved in the sector,** including CAMEP but especially, SNEP.
- **Abrupt suppression of external technical cooperation** (GTZ, FKW, UNDP, World Bank, French CCCE, etc.).
- **Sudden suspension of all on-going projects totalling approximately US\$163 million.**
- **Dramatic reduction in NGO activities in rural areas.**
- **Destabilization of grass-roots community organisations,** such as the Potable Water Committees (PWC). A survey carried out in July 1993 by ASSODLO (an NGO), with the cooperation of PAHO/WHO, showed that 80% of the 105 PWC studied did not function properly.

1.2 COVERAGE OF NEEDS IN POTABLE WATER AND SANITATION (PWS)

As a consequence of efforts by the international community during the 1981-1990 decade - dedicated to potable water and sanitation, **US\$128 million** were invested in this PWS sector, which helped to considerably increase the coverage of needs.

Trained observers estimate that over the three-year political crisis, despite efforts in humanitarian assistance by PAHO/WHO, UNICEF, UNDP, bilateral cooperation and selected NGOs, the coverage of needs in PWS fell by at least 30%. The following table shows the evolution of this coverage from 1980 to 1993.

Geographic Areas	Coverage of needs		
	December 1980	December 1990	December 1993
Potable water in the capital	48%	53%	37%
Potable water in the 27 secondary cities	47%	58%	41%
Potable water in rural areas	8%	33%	23%
Basic sanitation in urban areas	41%	43%	43%
Basic sanitation in rural areas	10%	16%	16%
Garbage collection in the capital	40%	60%	30%

2. OBJECTIVES OF THE EMERGENCY PROGRAM

Six objectives are proposed:

- Rapid re-startup of projects implemented in September 1991, and whose activities were brought to a sudden halt;
- Startup of projects meeting the urgent needs of the populations, for which studies have already been done;
- Rehabilitation/extension of existing systems;
- Supply of essential equipment for the implementation/supervision of projects; supply of spare parts;
- Significant improvement in garbage collection and clean up of rainwater canals in the capital;
- Prevention and control of diarrhoeal diseases, especially cholera, through an improved quality of drinking water and environmental hygiene.

3. TECHNICAL COOPERATION FOR PROJECT DEVELOPMENT

The extreme urgency of the situation, the high volume of investments, the short period of implementation (12 to 18 months), as well as the state of ruin of the State institutions, all call for the establishment of dynamic, flexible and novel structures for the development of emergency programs.

The implementation of substantial projects by national institutions severely weakened by three years of political crisis demands a **highly committed technical assistance** integrated within these institutions. This technical cooperation should contribute to the updating of the projects, the launching of bids, the granting of markets, the preparation of corporate contracts, the financial and technical management of construction sites, the design of procedures for equipment supply, etc.

The technical cooperation for support to the PAHO/WHO team of the "Water and Sanitation" project consists of: two national consulting engineers and one supplementary secretary.

The Potable Water and Basic Sanitation Section of PAHO/WHO is capable of managing the following projects, through NGOs and small, specialised companies:

- rehabilitation of rural Potable Water Systems (PWS);
- installation of water chlorination systems in rural PWS;
- potable water supply by water trucks in the slums;
- construction of cisterns for the collection of rainwater;
- rehabilitation of buildings and hydro-sanitary systems in community clinics and health centres;
- reinforcement of electrical systems in health institutions, including the provision and installation of emergency power generators.

The PAHO/WHO Water and Sanitation section has enjoyed successful experiences with the following NGOs: ASSODLO, CDS, PROTOS, AICF and COHAN/BAGE.

4. LIST OF PROPOSED PROJECTS

A. POTABLE WATER

PROJECT TITLE	LOCATION	DURATION OF IMPLEMENT. (months)	COST US\$	REMARKS
Rehabilitation of 30 rural potable water systems (PWS)	Rural areas	12	600,000	Subcontract to NGOs and small national businesses
Construction of 40 domestic rainwater cisterns including roof rehabilitation	Kenscoff/ Fermathe	12	200,000	Subcontract to NGOs in the area
Rehabilitation of 5 rural PWS	South-East/ Jacmel	12	100,000	Subcontract to ASSODLO
Construction of rainwater cisterns in 13 community clinics and schools	North-West	12	250,000	Subcontract to ASSODLO
Distribution of potable water by water trucks in 3 slums: Solino, Fonds Delmas 33 and St.Philomène	Port-au-Prince	12	450,000	Subcontract to ASSODLO
Construction of 35 chlorination systems in rural PWS	Rural areas	12	280,000	Subcontract to small national businesses
Reinforcement of water truck distribution system in La Saline slum	Port-au-Prince	12	340,000	Implementation with Haitian NGO: CDS
Emergency repairs to wells, pumps and distribution systems	Port-au-Prince	12	1,500,000	Subcontract
Emergency repairs to wells, pumps and distribution systems	Rural Areas	12	1,000,000	Subcontract
Distribution systems in 10 slum areas	Urban and peri-urban areas	12	2,300,000	Subcontract
POTABLE WATER SUB-TOTAL			7,020,000	

B. BASIC SANITATION (HYGIENIC LATRINES IN HEALTH CENTERS)

PROJECT TITLE	LOCATION	DURATION OF IMPLEMENT. (MONTHS)	COST US\$	REMARKS
CONSTRUCTION OF 400 FAMILY-SIZE LATRINES	KENSCOFF	12	80,000	IMPLEMENTATION WITH THE BAPTIST MISSION IN HAITI
CONSTRUCTION OF 3000 FAMILY-SIZE AND 10 PUBLIC LATRINES	NORTH AND CENTER DISTRICTS	12	600,000	SUBCONTRACT TO CADRI (CENTER OF SUPPORT TO INTEGRATED RURAL DEVELOPMENT)

PROJECT TITLE	LOCATION	DURATION OF IMPLEMENT. (MONTHS)	COST US\$	REMARKS
REHABILITATION/IMPROVEMENT OF BASIC SANITATION IN 40 HEALTH CENTERS (EXCRETA AND WASTE WATER DISPOSAL, DOMESTIC INCINERATORS)	RURAL AREAS	12	1,400,000	SUBCONTRACT TO SMALL LOCAL BUSINESSES
PREFABRICATION OF 500 SETS OF SLABS AND LATRINE SEATS FOR HEALTH CENTERS IN ANTICIPATION OF A CHOLERA OUTBREAK	Port-au-Prince	6	30,000	Subcontract to a local NGO
CLEAN-UP AND DRAINAGE IMPROVEMENT IN CITE SOLEIL	Perr-urban	12	3,500,000	Subcontract
EMERGENCY REPAIRS TO SANITARY FACILITIES IN HOSPITAL AND SCHOOLS	Urban	12	250,000	Contract
BASIC SANITATION SUB-TOTAL			5,860,000	

C. REORGANIZATION/REHABILITATION OF HEALTH INSTITUTIONS

PROJECT TITLE	LOCATION	DURATION OF IMPLEMENT. (months)	COST US\$	REMARKS
Rehabilitation of community clinics in Désarmes and La Chapelle	Artibonite	9	295,000	Clinics managed by SOE, a Haitian NGO
Rehabilitation of St.Michel community clinic in Bolosse	Port-au-Prince	4	105,000	Clinic managed by SOE, a Haitian NGO
Rehabilitation of Eliazar Germain Health Center in Pétiön-Ville	Pétiön-Ville	3	80,000	Public sector center
Construction of a processing center for emergencies/re-habilitation of Diquini hospital	Carrefour	9	180,000	Hospital managed by the Adventist Mission in Haiti
Rehabilitation of the Complexe Médico-Social in La Saline	Port-au-Prince	3	75,000	Complex managed by the Methodist Mission in Haiti
Sanitation of the Complexe Médico-Social of Cité-Soleil	Port-au-Prince	2	70,000	Complex managed by CDS, a Haitian NGO
Construction of a processing center for emergencies/re-habilitation of Aquin hospital	Aquin	3	35,000	Public sector hospital
Construction of a processing center for emergencies/re-habilitation of the Carrefour hospital	Port-au-Prince	3	45,000	Public sector hospital

PROJECT TITLE	LOCATION	DURATION OF IMPLEMENT. (months)	COST US\$	REMARKS
Rehabilitation of the Complexe Médico-Social in Solino	Port-au-Prince	6	42,000	Complex managed by a charity organisation called Le Bon Berger
Rehabilitation/Sanitation of the Foyer Orphelinat de l'Enfant Jésus in Méyotte, Pétion-Ville	Pétion-Ville	6	50,000	Charity institution managed by catholic nuns
Rehabilitation of hospital in St.Marc	Artibonite	6	13,000	Public sector hospital
REHABILITATION OF HEALTH INSTITUTIONS SUB-TOTAL			990,000	

D. SUPPORT TO PROGRAMME DEVELOPMENT

PROJECT TITLE	LOCATION	DURATION OF IMPLEMENT. (months)	COST US\$	REMARKS
Funding of studies, design and supervision of projects	Port-au-Prince	18	400,000	
Support staff for program implementation	Port-au-Prince	18	60,000	
2 all-terrain vehicles for construction site supervision and computer equipment	Port-au-Prince	6	50,000	
SUPPORT TO PROGRAMME DEVELOPMENT SUB-TOTAL			510,000	
GRAND TOTAL			14,380,000	

LIST OF ABBREVIATIONS

AICF	Action internationale contre la faim (International Action against Hunger)
ASSODLO	Association haïtienne pour la maîtrise de l'eau en milieu rural (Haitian Association for the Control of Water in Rural Areas)
CADRI	Centre d'appui au développement rural intégré (Center for Development of Rural Integration)
CAEP	Comité d'approvisionnement en eau potable (Committee for Potable Water Supply)
CDS	Centre pour le développement et la santé (Center for Development and Health)
CHU	Communal health units
CIDA	Canadian International Development Agency
EDH	Electricité d'Haïti
FKW	German Bank for Development
GTZ	German Agency for Technical Cooperation
INHSAC	Institut haïtien de santé publique (Haitian Institute for Community Health)
MSPP	Ministère de la Santé publique et de la Population de la république d'Haïti (Ministry of Public Health and Population of Haiti)
NGO	Non-governmental organization
OAS	Organization of American States
ORS	Oral rehydration salts
PAHO/WHO	Pan American Health Organization/World Health Organization
PAC- Humanitaire	Programme d'approvisionnement en combustible pour les activités humanitaires en Haïti (Fuel Program for Humanitarian Assistance Activities in Haiti)
PROMESS	Centrale d'approvisionnement en médicaments essentiels et en produits médicaux (Essential Drugs and Medical Supplies Center)
SDU	Storage and distribution unit
SOE	Service oecuménique d'entraide (Ecumenical Aid Service)
SNEP	Service national d'eau potable (National Service of Potable Water)
UNDP	United Nations Development Program
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WFP	World Food Program

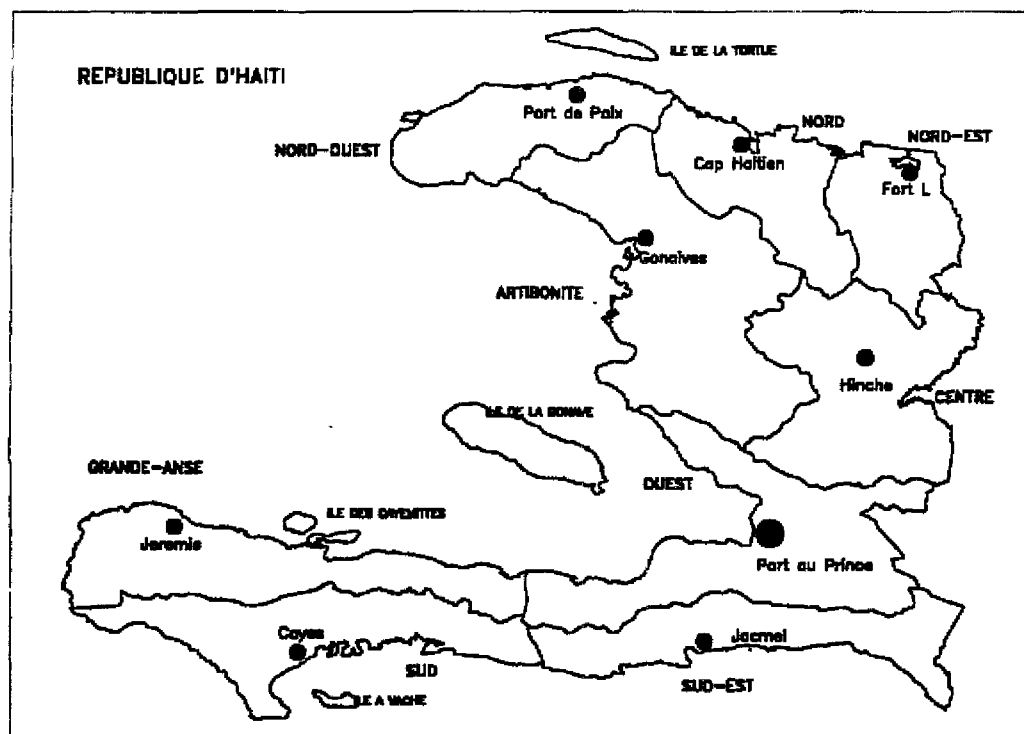


Figure 1.- Carte de la République d'Haïti