CEPIS AND THE CARIBBEAN: ENHANCING TECHNICAL COOPERATION

Marta Bryce
Technical Information Advisor, CEPIS/SDE/PAHO

Caribbean: Enhancing technical cooperation

The Pan American Center for Sanitary Engineering and Environmental Sciences, CEPIS/SDE/PAHO, is the regional center specialized in basic sanitation of the Pan American Health Organization (PAHO/WHO) and is a component of the Area of Sustainable Development and Environmental Health (SDE). It is located in Lima, Peru, and operates since 1968.

Our mission is to cooperate with the countries of the Americas in controlling risk factors related to deficiencies or absence of basic environmental sanitation that affect human health. CEPIS/SDE/PAHO goal is to diminish health risks associated with basic sanitation within the framework of equity and sustainable development.

CEPIS/SDE/PAHO and basic sanitation

Within the framework of equity and sustainable development, the action of CEPIS/SDE/PAHO is focused on three axes:

1. Strengthening of basic sanitation policies and regulations:
   - Advise on the definition and implementation of policies and standards.
   - Promote the adoption of surveillance systems of basic environmental sanitation services.
   - Strengthen the capacity of laboratories to improve analytical quality.
2. Generation, exchange, and access to knowledge in basic sanitation:

- Promote and support the development of applied research on technologies.
- Promote and participate in networks of information and specialized collaboration.
- Develop with the countries analyses of health and basic environmental sanitation.
- Support the exchange of information, taking advantage of the potential of modern communication and information technologies.
- Disseminate technological and management models in environmental basic sanitation.

3. Promotion of interventions to improve the access and use of basic sanitation:

- Support and advise programs oriented to the extension of coverage and improvement of service quality.
- Promote citizen mobilization through timely information access and hygiene education programs to foster responsible participation in sustainable development.
- Advise programs for vulnerability mitigation to face natural disasters. Participate in mitigation actions and during emergencies.

General activities:

- Creation of strategic partnerships with public and private institutions, civil associations, and external cooperation agencies.
- Participation in the process of reform and modernization of the environmental sanitation sector.

These activities take into consideration the following public health functions:

- Monitoring, evaluation, and analysis of the health situation.
- Public health surveillance, research, and control of public health risks and damages.
- Health promotion.
- Citizen participation in health issues.
- Policy development and institutional capacity building for public health planning and management.
- Strengthening of institutional capacity for regulation and control with regard to public health.
- Evaluation and promotion of equitable access to health services.
- Human resources development and training in public health.
- Quality assurance and improvement of individual and collective health services.
- Public health research.
- Reduction of the impact of emergencies and disasters on health.

The central objective of these functions is the improvement of the population's health.
The work of CEPIS/SDE/PAHO with the countries

The institutional capacities of the countries of the Region to improve their basic sanitation conditions are strengthened through CEPIS/SDE/PAHO technical cooperation in the following areas:

? Drinking water. It includes drinking water sources, treatment, distribution, and use.

? Wastewater and sanitary excreta disposal. It includes wastewater collection, treatment and use, and sanitary excreta disposal.

? Solid waste. It includes the management, storage, collection, transportation, treatment, and final disposal of municipal and hazardous solid wastes from health care centers and industries.

? Information. Its goal is the dissemination of up-to-date scientific and technical information, collected by the Center and the institutions participating in the Pan American Information Network on Environmental Health (REPIDISCA), through the Virtual Library on Environmental Health (BVSA) or other means.

? Analytical quality. It contributes to improve the self-sufficiency and analytical quality of environmental laboratories optimizing their capacity and the comparability of environmental measurements in the Region. It provides technical assistance for the accreditation of environmental control and surveillance laboratories.

? Health education and social participation. It is mainly focused on hygiene and strengthens processes of governance, decentralization, and enforcement of citizen’s rights for the adequate management of basic sanitation and the application of the Primary Environmental Care strategy.

? Surveillance and research. This area is aimed at assisting the countries in the supervision of health hazards related to basic sanitation and at developing applied research to promote changes of public health practices.

? Prevention and preparedness for emergencies and disasters. It provides assistance to water and sanitation institutions for strengthening their response to emergencies and disasters. It contributes to the preparation of contingency plans by the health sector.

Technical cooperation strategy

The CEPIS/SDE/PAHO technical cooperation strategy is based on a comprehensive approach to basic sanitation and public health. Its main tools include:

- Knowledge networks. Its purpose is to identify, record, process, and disseminate information through distance education or certified self-instruction courses. Its tools are the networks of institutions and professionals, strategic partnerships, the Virtual Library on Environmental Health, and specialized publications
Appropriate technologies. Analyzes the link between the physical components of appropriate technologies with the information and organization required for its use, as well as its relation with the ability to pay and cultural conditions of the beneficiary community. Its tools are intervention methodologies, applied research, and evaluation of projects and technologies related to drinking water, wastewater, excreta disposal, and management of solid wastes.

Management tools. It includes scientific material as guides, manuals, standards, regulations, systematization of experiences (learned lessons), databases, and regional plans to achieve the improvement of the institutions capacity and professionals of the sector. Its tools are the guides, software, intervention methodologies, and procedures for design, operation, maintenance, monitoring and surveillance.

• Strategic analyses. Its purpose is to evaluate the situation of the countries and policies with regard to the problems derived from deficiencies in local basic sanitation. It will also assess the impact of CEPIS/SDE/PAHO programs and its operation plans. Its tools are the national or regional analyses and analytical reports; systematized reports (inventories, studies of case), and the Information System in Environmental Sanitation (SISAM).

To fulfill its responsibilities, CEPIS/SDE/PAHO will maintain close relations with the countries of the Region, supporting national institutions, mainly ministries of health with technical cooperation, and forging partnership and joint ventures with other sectors related to basic environmental sanitation. A flexible attitude, sharing of experiences, and development of common interest projects and alliances are necessary.

Rationale

Population, health, and services:

• Infant mortality has declined considerably in recent years, although it continues to be unacceptably high for many areas.

• Considering the consequences for health and sustainable development, it is imperative to protect natural water resources.

• According to data and information based on the Assessment of Drinking Water and Sanitation 2000, 84.59% of the population in the Americas has drinking water services.

• Approximately 60% of the Region’s population is served through intermittent water supply systems that represent a permanent risk for the users.

• 21% of the Latin America and the Caribbean population do not have wastewater and excreta disposal systems.
• More than 100,000 families are dedicated to informal waste recycling in open
dumps, working in unhealthful conditions. They represent more than 300
thousand people, of which nearly 30% are children.

Institutional aspects

• Distributing water of good quality, with continuity and at accessible prices
requires a well organized, regulated and administered sector, and high-level
human resources.
• The 21st century requires a new health system that favors alliances based in the
health of the population foreseeing events rather than reacting to them.

Integrated approach and priorities

• The effective management of public health requires a vision of continuum for
basic environmental sanitation.

• It has been demonstrated that basic environmental sanitation is instrumental for
the construction of health, knowledge, resources and fundamental rights.

• Maternal and children mortality rates in Bolivia, Haiti, Honduras, Guyana, and
Nicaragua are the highest of the Region and the world.

CEPIS/SDE/PAHO and the Millennium Development Goals

The achievement of the Millennium Development Goals (MDG) is part of the
CEPIS/SDE/PAHO technical cooperation framework, especially “ensuring
environmental sustainability.” One of the aims of that goal is to reduce by half the
proportion of people without sustainable access to safe drinking water and sanitation by
the year 2015. This goal is one of the most important challenges for the coming years
and requires the joint work of CEPIS/SDE/PAHO with the countries to promote the
modernization of the health and environment sector, decentralization processes, and the
involvement of the civil society and the private sector. Within this context, it is
recognized that safe water and sanitation are instrumental to achieve the Millennium
Development Goals.

Virtual Library on Environmental Health (VLEH)

The Virtual Library on Environmental Health (VLEH) compiles information sources on
water, wastewater, solid wastes, sanitation, and evaluation and control of environmental
risk factors that affect the health of human populations. It represents an effective
response to the needs of information and knowledge of the Latin American and
Caribbean Region.

The development of the virtual library follows the model of the Latin American and
Caribbean Health Sciences Information Center, BIREME.
CEPIS/SDE/PAHO has prepared methodological tools for information recording,
quality control, and dissemination of information sources. These include database
manuals, software, guides, and a thesaurus of keywords related to water, sanitation, and
environmental health in five languages: English, Spanish, Portuguese, French and German. All of them are available, free of charge, to the institutions willing to build up their VLEH.

CEPIS/SDE/PAHO also interacts with other specialized virtual libraries, networks, and information systems.

VLEH provides the following services:

- **Full texts**: More than 12,000 documents are available in full text, including REPINDEX and Technical Dissemination Sheets.
- **Bibliographic references**: compiles 170,000 references with abstracts from REPIDISCA Cooperating Centers and CEPIS/SDE/PAHO library.
- **Directory of institutions**: mainly of the Region.
- **Discussion lists**: virtual spaces to exchange ideas.
- **Educational materials**: to support sanitation interventions.
- **Environmental indicators**: Assessment of Drinking Water and Sanitation 2000 and Environmental Health Basic Indicators in the Americas are available.
- **Journals**: the journal holdings of CEPIS/SDE/PAHO and collaborating centers are recorded, including electronic journals available on the Internet.
- **Legislation**: regulations, international agreements, most of them in full text.
- **Links**: more than 1,900 related websites are described.
- **Meetings and courses**: including academic programs.
- **News**: updated every day.
- **Publications**: CEPIS/SDE/PAHO catalog.
- **Selective Dissemination of Information (SDI)**: subscribers to this service receive news on courses, bibliographic references, full texts, journals, and websites in their area of specialization; including monthly information according to their interest profile.
- **Self-learning courses**: on different topics, as a means to provide training through the VLEH.
- **Videos**: comprises over 600 videos some in digital format.

Simultaneous searches in all databases are possible in VLEH. An updated Glossary on Environmental Health has also been developed.

VLEH reflects the concern of the REPIDISCA Network to maintain its leading position among information and knowledge systems related to water, sanitation, and environmental health.

The creation of the Pan American Information Network on Environmental Health in 1981, known as REPIDISCA, was sponsored by PAHO and its coordination was assigned to CEPIS/SDE/PAHO.

It is mainly aimed at facilitating the timely access to information and knowledge on water, sanitation, and environmental health required and produced by the countries of Latin America and the Caribbean. REPIDISCA information services are available 24 hours a day through the VLEH.

“The knowledge of many at your service”
How to contact CEPIS/SDE/PAHO

CEPIS/SDE/PAHO carries out projects with governmental entities, universities, NGO, sanitation companies, and financing agencies among other partners and collaborating centers. As a technical cooperation agency for the governments of Latin America and the Caribbean, CEPIS/SDE/PAHO maintains close ties with the Region’s countries through the PAHO/WHO Country Representative Offices. The countries’ requests for technical cooperation are coordinated by these offices.