# UNITED NATIONS

# ECONOMIC AND SOCIAL COUNCIL



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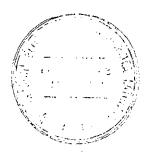
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CEPAL

Economic Commission for Latin America



REPORT OF THE FIRST LATIN AMERICAN SEMINAR ON HORIZONTAL CO-OPERATION FOR THE INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE

(Santiago, Chile, 9-13 March 1981)

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## I. ORGANIZATION OF WORK

1. At the eighteenth session of the Economic Commission for Latin America, held in La Paz, Bolivia, from 8 to 26 April 1979, at which the implementation of the Mar del Plata Plan of Action adopted at the United Nations Water Conference was reviewed, it was recommended that, bearing in mind paragraphs 4 and 5 of resolution IV of the Mar del Plata Conference, among other actions,

"measures be taken with immediate effect to foster the launching of projects for horizontal co-operation in the field of water resources in Latin America".

2. At the same time the Sessional Water Committee, set up as a permanent body to foster the implementation of the Mar del Plata Plan of Action,1/ requested the secretariat to take part in activities undertaken by the World Health Organization/Pan-American Health Organization (WHO/PAHO) with a view to concerting the efforts of the countries of the region to implement the objectives of the International Drinking Water Supply and Sanitation Decade, in particular through:

"consultation with governments for the exchange of experience on the progress achieved and difficulties encountered, and possibly through the convening to special meetings of representatives of national and international agencies connected with the implementation of the programmes for the International Drinking Water Supply and Sanitation Decade".2/

## 1. Place and date

3. In order to comply with the foregoing requests, the Executive Secretary of CEPAL invited the countries of the region to take part in the first Latin American Seminar on Horizontal Co-operation for the International Drinking Water Supply and Sanitation Decade, held at CEPAL headquarters in Santiago, Chile, from 9 to 13 March 1981.

## Attendance 3/

- 4. The seminar was attended by delegates from the following countries: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guatemala, Honduras, Netherlands, Peru, Uruguay and Venezuela.
- 5. From the United Nations Secretariat, representatives attended from the Department for Technical Co-operation for Development (DTCD), the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP).

<sup>1/</sup> CEPAL resolution 411 (XVIII), paragraph 1.

Economic Commission for Latin America, Annual report (8 May 1978-26 April 1979), Official Records of the Economic and Social Council, 1979, Supplement No. 16 (E/1979/51 - E/CEPAL/1083/Rev.1), vol. 1, paragraph 485 (c).

<sup>3/</sup> See the list of participants in annex 1.

- 6. Representatives of the following agencies of the United Nations system took part in the seminar: United Nations Food and Agriculture Organization (FAO), United Nations Educational, Scientific and Cultural Organization (UNESCO) and World Health Organization/Pan-American Health Organization (WHO/PAHO) and its Pan-American Centre for Sanitary Engineering and Environmental Sciencies (CEPIS).
- 7. Representatives of the following intergovernmental organizations attended the seminar: Organization of American States (OAS) and Inter-American Development Bank (IDB).

## Agenda 4/

- 8. The seminar adopted the following agenda:
  - 1. Election of officers and adoption of the agenda and of the programme of work
  - 2. The International Drinking Water Supply and Sanitation Decade
  - 3. Social, economic and financial aspects relating to drinking water and sanitation in connexion with the International Decade
  - 4. Horizontal co-operation as a development strategy for the International Decade
  - 5. Specific horizontal co-operation projects
  - 6. Consideration and adoption of the report.

## 4. Opening meeting

9. At the opening meeting the seminar was addressed by the Deputy Executive Secretary for Co-operation and Support Services of CEPAL, who stressed the importance for Latin America of the International Drinking Water Supply and Sanitation Decade and, among the activities organized for the Decade, the need to set up a forum in which the representatives of the Latin American countries could exchange information on their broad experience in this field, and particularly in economic, financial and social aspects; he also referred to the background, objectives and expected results of the seminar.

## 5. Election of officers

10. At the first working meeting of the seminar, the following officers were elected:

Chairman: Mario Serani M. (Chile)

Vice-Chairman: Gonzalo Procel H. (Ecuador)

Rapporteur: Ruben Clare A. (Honduras)

## 6. Adoption of the report

11. At its closing meeting, the seminar considered and adopted the present report which was prepared by the Rapporteur. At the same time, it recommended that CEPAL should submit the agreements reached at the seminar to the Water Committee at the nineteenth session of CEPAL in Montevideo in May 1981.

<sup>4/</sup> See the list of documents presented by the secretariat in annex 2.

## II. SUMMARY OF THE DISCUSSIONS

- 1. The International Drinking Water Supply and Sanitation Decade (agenda item 2)
- 12. The participants referred to the state of organization, plans and targets relating to the International Drinking Water Supply and Sanitation Decade in their own countries, as well as their experience in mutual co-operation, and singled out the issues they considered most important in relation to the implementation of the targets of the International Decade which could be tackled in the framework of horizontal co-operation.
- 13. The Assistant Secretary-General of the United Nations Development Programme and Co-ordinator of the International Drinking Water Supply and Sanitation Decade stressed the importance of the Decade for the future well-being of the population of the developing nations, outlined the activities of the United Nations system, co-ordinated by UNDP, to promote the Decade, and highlighted the need for participation from all sides in the activities connected with the Decade, ranging from every community provided with a new drinking water and sanitation system to the donor countries and international financial institutions.
- 14. The Director of CEPIS outlined the programmes of WHO/PAHO and of CEPIS itself, and the CEPAL drinking water supply and sanitation consultant reported on some issues relating to his visit to the countries of South America in preparation for the seminar. The representatives of UNEP, DTCD, FAO and UNESCO referred to their programmes connected with the International Decade. The IDB representative presented the Bank's programme to promote technical co-operation among Latin American countries.
- 2. Social, economic and financial aspects relating to drinking water and sanitation in connexion with the International Decade (agenda item 3)
- 15. The secretariat furnished some information in this field, chiefly concerning institutional aspects, economic and social planning and evaluation of projects, financial aspects and training and horizontal co-operation, and listed 8 possible areas for work.
- 16. Three working groups were set up to study this agenda item. They conducted a separate analysis of the potential areas for horizontal co-operation, emphasizing aspects of institutional planning and of finance and technology, and identified various experiences and problems. Each group prepared a report which was subsequently presented at a plenary meeting.
- 3. Horizontal co-operation as a strategy for the Decade (agenda item 4)
- 17. The secretariat made a brief presentation of possible forms and machinery of horizontal co-operation, which was followed by a lively exchange of views on the question, aimed in particular in finding a means of institutionalizing horizontal co-operation both at the governmental level and among enterprises.

- 18. In order to carry out a more thorough analysis and draw some conclusions, two working groups were set up, whose work served as the basis for the recommendations made by the seminar on this issue.
- 19. The seminar's recommendations appear in section 4 of this report.
- 4. Specific horizontal co-operation projects (agenda item 5)
- 20. When dealing with this agenda item, the reports prepared by the three working groups set up to analyse agenda item 3 were taken into account.
- 21. The heads of delegation presented summaries of their countries' experience in horizontal co-operation, of what they could offer in that field, and of their needs in terms of assistance.
- 22. The list of the horizontal co-operation projects offered and requested by countries appears in section 4.

#### III. CONCLUSIONS

- 23. The participants adopted the following recommendations on the two aspects indicated:
- (a) Identification of operational machinery of a global nature:
  - (i) It is recommended that governments should set up focal points or national co-ordination centres to institutionalize horizontal co-operation in the field of drinking water and sanitation, which will operate as the basis for a Latin American horizontal co-operation network. These centres or focal points could be the national committees for the International Decade, or whatever agencies or machinery each country considers most appropriate to achieve this objective.
  - (ii) It is recommended that, within the framework of its terms of reference, CEPAL, through its Water Resources Unit, should promote horizontal co-operation in support of the objectives of the International Decade, co-ordinating its activities with those of WHO/PAHO and other international organizations.
- (b) Identification of specific operational machinery:
  - (i) It is recommended that CEPAL should continue supporting WHO/PAHO in the convening of periodic meetings on horizontal co-operation. It is suggested that as far as possible use should be made of the system of international meetings already in existence at both the governmental and professional levels, such as the meetings of the Inter-American Association of Sanitary Engineering (AIDIS) or those held under subregional agreements. With regard to the AIDIS meetings, it further recommended that these should include the organization of entrepreneurial-level meetings for the purposes of horizontal co-operation at the same time and place as the AIDIS meetings.
  - (ii) It is suggested that governments should draw up bilateral horizontal co-operation agreements to serve as a framework for mutual co-operation agreements among institutions in the field of drinking water and sanitation in relation to the International Decade.

- (iii) In order to improve the exchange of information, it is recommended that countries should strengthen or set up co-operating national centres and national information networks in order effectively to develop the Pan-American Information Network operated by PAHO through CEPIS. It is requested that CEPIS should adjust its information system, if necessary, in order to facilitate the identification of potential areas or specific projects for horizontal co-operation, and specifically to prepare a directory of institutions and a register of professionals working in the drinking water and sanitation field in Latin America and the Caribbean. In this connexion, countries are recommended to reply promptly to the surveys to be undertaken by PAHO for the purposes of preparing the above-mentioned directory and register.
  - (iv) It is recommended that international credit agencies should organize seminars or other machinery to review technical standards and standards relating to the quality of materials and equipment and so forth, with a view to facilitating the preparation and execution of projects financed through their loans.
    - (v) Finally, it is recommended that enterprises and entities in general linked with the drinking water and sanitation sector should annually earmark the necessary financial, human and other resources, to ensure that horizontal co-operation programmes can be implemented.
  - IV. HORIZONTAL CO-OPERATION PROJECTS IN THE FIELD OF DRINKING WATER AND SANITATION: OFFERS AND NEEDS, BY COUNTRIES
- 24. The delegations announced the following offers and requirements in terms of horizontal co-operation relating to drinking water and sanitation:

#### ARGENTINA

#### Offers

- 1. Experience in the implementation of the national plans for the supply of drinking water to rural communities (technical and promotional)
- 2. Co-operation and maintenance in the field of urban and rural drinking water supply
- 3. Laboratories dealing with water resources and water quality
- 4. Training in the Institute of Sanitary Engineering
- 5. Experience in requests for loans for rural drinking water supply
- 6. Treatment of tannery effluents
- 7. Mathematical models for water resource optimization Needs:
- 1. Assistance in planning methodologies for the International Decade
- 2. Institutional and administrative development
- 3. Methodologies for the study of tariffs and measurement systems
- 4. Methods relating to losses and control of unaccounted-for water

#### BOLIVIA

## Offers:

1. Institutional organization based on co-operatives for the supply of water services in provincial nuclei

## Needs:

- 1. Commercial system, particularly tariff studies for rural areas and for urban areas with a population of between 2 000 and 10 000 inhabitants
- 2. Operational and maintenance programmes in such areas
- 3. Appropriate technology for rural water supply, primarily for sparsely populated areas.
- 4. Institutional aspects in general. Implementation of the option chosen
- 5. Implementation of the National Information Centre for Sanitary Engineering and Environmental Sciences (CNIIS)
- 6. Training programmes for human resources

#### BRAZIL

#### Offers:

- 1. Through the National Sanitation Plan (PLANASA) and the National Housing Bank (BNH), experience in:
  - (a) institutional development
  - (b) planning
  - (c) finance and tapping of resources
- 2. Methods of developing water resources through the Compañía Estatal de Tecnología y Saneamiento Básico de São Paulo (CETESB) and the Fundación Estatal de Ingeniería del Medio Ambiente de Río de Janeiro (FEEMA)
- Training of human resources through CETESB and the Brazilian Association of Sanitary and Environmental Engineering (ABES)
- 4. Information systems with the BNH
- 5. Operation and maintenance mannuals
- 6. Participation in the ABES Congress in Fortaleza (June 1981)
- 1. Protection methods for eutrophication in springs

#### COLOMBIA

#### Offers:

- 1. National Drinking Water Revolution Programme
- 2. Experience in institutional development
- 3. INSFOFAL technical and design standards
- 4. Preventive maintenance programmes
- 5. National Training Plan. INSFOFAL courses
- 6. Administration and groundwater courses in the National University Needs:
- 1. Experience in the development of information systems
- 2. Control and monitoring of water quality

#### CHILE

#### Offers:

- 1. Experience in institutional development, particularly in regional enterprises and through the National Sanitation Service (SENDOS)
- 2. Development of marketing systems at the enterprise level
- 3. Rates studies, particularly on marginal costs
- 4. Rural drinking water programme
- 5. Experience in the Santiago sewerage master plan
- 6. Economic planning
- 7. Training at the Melipilla waste-water pilot plan (CEXAS)
- 8. Macromeasurement and micromeasurement for the purpose of reducing unaccounted-for water

#### Needs:

- 1. Methods of treating waste-water in coastal cities
- 2. New systems of waste-water treatment
- 3. Methods of treatment of industrial waste, technicians, legislation and monitoring
- 4. Techniques for drinking water supply and sanitation for sparsely populated areas
- 5. Quality standards

## **ECUADOR**

#### Offers:

- 1. Experience in drinking water and sewerage enterprise associations
- 2. Sewerage master plans of Guayaquil and Quito
- 3. In-service training of fellowship holders
- 4. Experience in systems operation and maintenance
- 5. Use of polymers
- 6. Training of operators in small filtering plants
- 7. Laying of large diameter access drains (Guayaquil)

## Needs:

- 1. Advisory services in institutional and administrative development
- 2. Disposal of waste-water and protection of recipients
- 3. Methods of dealing with industrial waste
- 4. Community education
- 5. Leakage control
- 6. Macromeasurement and micromeasurement to reduce unaccounted-for water
- 7. Administrative and operational commercial experience
- 8. Systems of billing for consumption in multifamily buildings

## **GUATEMALA**

#### Offers:

- 1. Planning methods for the international decade
- 2. Experience in the organization of project banks
- 3. The Guatemalan model for the disposal of waste-water
- 4. Integral use of water-small power stations
- 5. Experience in negotiating loans with international agencies Needs:
- 1. Assistance in institutional development and creation of enterprises
- 2. Assistance in implementation of tariff systems
- 3. Personnel training in these fields

#### **HONDURAS**

#### Needs:

- 1. Assistance for planning the development of the sector
- 2. Assistance in technological aspects of drinking water supply and sanitation
- 3. Project preparation
- 4. Training in operation and maintenance, for operators
- 5. Self-financing methods

#### PERU

#### Offers:

- 1. Entrepreneurial experience of the Lima Sanitation and Drinking Water Company (ESAL)
- 2. Detection and control of leakage
- 3. Development of the various stages of rural drinking water
- 4. Inexpensive chlorination arrangements
- 5. Experience in lagoons and waste-water re-use
- 6. Experience with models for the use of groundwater in alluvial valleys mathematical models

#### Needs:

1. Methods of monitoring the bacteriological quality of drinking water in thinly populated rural zones

#### URUGUAY

#### Offers:

- 1. Collaboration in personnel training in the purification plant of Montevideo in aspects of laboratory work and operation, and in the Central Analysis Laboratory of Montevideo
- 2. Survey methods and determination of leakage and water sold
- 3. Studies of the causes of the low relationship between water charged/ water pumped

#### Needs:

- 1. Assistance in the installation of rural drinking water for small population centres
- 2. Methods for education of the rural community
- 3. Technology for the collection and treatment of waste-water in small population centres

#### VENEZUELA

## Offers:

- 1. Assistance in the execution of regional studies for the purposes of planning the development of the sector
- 2. Management control and follow-up methods based on the MACROPLAN
- 3. Operating and maintenance experience, and experience in project construction and inspection
- 4. Environmental control, especially management of water basins
- 5. Training courses in the School of Malariology and Sanitation Needs:
- 1. Co-operation in the administrative and marketing fields
- 2. Methods of controlling unaccounted-for water
- 3. Preventive maintenance systems

- 4. Training in the above-mentioned areas
- 5. Methods of treating waste-water and industrial waste

## PARAGUAY 5/

## Offers:

- 1. Community organization programmes for the purposes of drinking water supply; contributions of between 35 and 80% of the direct cost of projects in rural zones are obtained
- 2. Organization of systems for rainfall drainage
- 3. Programmes for the study of the environmental impact of the construction of large-scale water projects

## Needs:

- 1. Computer-based internal information systems for all types and levels of water enterprises
- 2. Experience acquired in training programmes relating to:
  - (a) University professionals
  - (b) Operating experience (within institutions)
  - (c) Community (education programmes, etc.)
- 3. The sanitation sector and its working relationship and practical collaboration with other development sectors in the country
- 4. Experience in treatment of industrial waste from: wine-making, slaughterhouses, oil mills, tanneries and alcohol production
- 5. Experience in the operation and maintenance of rural drinking water pumps managed by communal entities. Role of the official parent company
- 6. Experience with water measurement systems in rural systems managed by communal entities
- 7. Experience in provision of household water in rural centres of less than 500 inhabitants. Financial, technical and other aspects

<sup>5/</sup> The representative of WHO/PAHO in Paraguay provided this information to supplement the data given for the other countries, and it is therefore subject to confirmation by the authorities of the country.

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#### Annex 1

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## Annex 2

## LIST OF DOCUMENTS PRESENTED AT THE SEMINAR

- 1. Provisional agenda (E/CEPAL/L.233/Rev.1).
- 2. Annotated provisional agenda (E/CEPAL/L.234/Rev.1).
- 3. Horizontal co-operation in support of the International Drinking Water Supply and Sanitation Decade (E/CEPAL/L.241).