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INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE



1981-1990

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Global Sector Concepts for Water Supply and Sanitation

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The Way Forward

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Background

The **Global Concepts** described in this document have emerged from a series of meetings of multilateral and bilateral donor organizations aimed at improving coordination and resource mobilization activities in support of the International Drinking Water Supply and Sanitation Decade (IDWSSD).

From 1978 through 1984, WHO carried out an Interregional Cooperation Programme aiming primarily at promoting Decade goals and formulating water supply and sanitation sector development plans in a number of developing countries, with support from the German Federal Ministry for Economic Cooperation (BMZ) through the German Agency for Technical Cooperation (GTZ). The next phase of the WHO/GTZ programme involved organization of a series of meetings for regional and country-level donor coordination and resource mobilization, which sought assistance from external support agencies for implementation of Decade plans and projects.

This programme of meetings was launched by a *European Donor Consultation* held in Koenigswinter, near Bonn, Federal Republic of Germany, in October 1984. There followed a meeting, in May 1985, of the *Development Assistance Committee (DAC)* of the Organization for Economic Cooperation and Development (OECD), which concentrated on improving aid effectiveness in the drinking water supply and sanitation sector.

To follow up on the results of these global meetings, the Interregional Cooperation Programme organized and carried out, in collaboration with the three regional development banks, three *Regional External Support Consultations* to formulate new sector concepts. The consultations included representatives of external support agencies and water supply and sanitation sector experts from the respective regions. The Regional Consultation for Asia, co-sponsored by the Asian Development Bank, took place in Manila, Philippines, in October 1985; the one for Africa, co-sponsored by the African Development Bank, was organized in Abidjan, Cote d'Ivoire, in November 1985; and the Consultation for the Americas, co-sponsored by the Inter-American Development Bank, was held in Washington DC, USA, in April 1986. In parallel, and as a continuous activity, a number of country-level *Decade Consultative Meetings* were organized to promote resource mobilization and coordinate water supply and sanitation sector activities in recipient countries with the participation of the donor community.

All these activities have been directed at means of coordinating activities of external support agencies within the framework of the established **Decade Approaches**.

DECADE APPROACHES

Complementarity in developing water supply and sanitation.

Strategies giving precedence to underserved rural and urban populations.

Programmes promoting self-reliant, self-sustained action.

Community involvement in all stages of project implementation.

Socially relevant systems that people can afford, using technologies appropriate to specific projects.

Association of water supply and sanitation with relevant programmes in other sectors, particularly with primary health care, concentrating on hygiene education, human resources development, and the strengthening of institutional performance.

Why Global Concepts are Needed

The *International Drinking Water Supply and Sanitation Decade (1981–1990)* has focussed attention on the plight of about two billion people in developing countries who lack adequate sanitation facilities, including access to a safe supply of potable water. Considerable progress was made during the first half of the Decade, but major challenges remain.

External support agencies have been looking closely at the achievements and the disappointments of recent activities in the water supply and sanitation sector. In two multilateral and three regional consultations (see opposite) six major constraints have been identified and analysed.

THE CONSTRAINTS

1. **Institutions** responsible for water supply and sanitation sector activities in developing countries are frequently inefficient and financially weak.
2. **Cost recovery** is generally ineffective.
3. **Imbalances** exist between the provision of water supply and of sanitation facilities; and between sector inputs in central urban areas and those in urban-fringe and rural areas.
4. **Operation, maintenance and rehabilitation** receive insufficient attention, and the problem is aggravated by application of inappropriate and often too sophisticated technologies, which are neither affordable nor manageable.
5. **Community participation and hygiene education** efforts are inadequate.
6. **Coordination and cooperation** is inadequate among external support agencies, between these agencies and the national water supply and sanitation sector agencies, among the sector agencies themselves, and between the water and sanitation sector and related sector programmes.

Discussions have shown that the relative importance of each constraint varies from region to region. In **Africa**, the central problems are the shortage of qualified, adequately trained people, and poor institutional performance. In **Asia**, the emphasis is on a need to improve coordination among external support agencies and on ways of establishing satisfactory cost-recovery schemes. In the **Americas**, major attention is being given to operation, maintenance and rehabilitation, as a means of optimizing the use of existing resources in a difficult economic environment.

Analysis of the six constraints has led to development of six **Global Concepts** for improving the performance of the water supply and sanitation sector.

Constraint

Institutions responsible for water supply and sanitation sector activities in developing countries are frequently inefficient and financially weak.

Actions Needed

1. Institutional Structures

The International Drinking Water Supply and Sanitation Decade strategy involves emphasis on underserved populations, particularly those in rural and urban fringe areas. Institutional structures and modes of operation need to be adapted to suit this new emphasis. A major change, for many countries, will be **decentralization** and/or privatization of responsibilities for water supply and sanitation activities, and substantial participation of communities in all stages of projects.

External support agencies should, therefore, substantially increase resources devoted to "software" inputs, such as institutional reforms, management and staff training, awareness campaigns and hygiene education. Relevant models for **integrated sector programmes** at district level should be pursued with ministries responsible for coordinating rural development (e.g. Ministry of Community or Rural Development or similar), with technical input from existing or strengthened water supply and sanitation sector ministries.

2. Technical Cooperation

Strengthening of institutions' sector management planning and project preparation capacities is necessarily a long term process. It requires uniform development strategies from external support agencies, as well as reliable and continuous performance by managerial and technical staff in the institutions. It is therefore essential that the external support agencies provide national institutions with support for human resources development, including management training, through financial and technical cooperation. In addition to providing their own support programmes, the external support agencies should encourage activities of Technical Cooperation among Developing Countries (TCDC).

3. Appropriate Technology Research and Application

Participation of benefitting communities has been shown to be vital, if water supply and sanitation projects are to be sustainable and replicable. Appropriate and socially acceptable technologies can save investment and bring down operation and maintenance costs, so making it more viable for communities to take a direct part in all project activities. External support agencies are urged to expand their **research and development** (and application) programmes in that direction, and to help, to the extent possible, to promote **local manufacture** of water supply and sanitation equipment. It is recommended that the leading UN agencies active in the sector (UNDP, The World Bank, WHO) should intensify the elaboration of **engineering design criteria** guidelines for the sector, emphasizing regional differences where these are applicable.

The Role of External Support Agencies

- **Increase resources for public awareness campaigns and hygiene education.**
- **Encourage decentralization and/or privatization of water supply and sanitation institutions, or certain functions of these institutions, and promote collaboration with rural development agencies on integrated programmes.**
- **Involve benefitting communities in project identification, planning, design, implementation, operation and maintenance.**
- **Establish harmonized strategies to be adopted by all agencies active in particular countries or regions.**
- **Provide support for institutions' management and staff training (as well as for education in community participation and hygiene awareness) through technical cooperation. TCDC should be encouraged.**
- **Expand R&D programmes and encourage local manufacture. Press for standardized engineering design criteria relating to appropriate water supply and sanitation technologies.**

Constraint

Cost recovery is generally ineffective

Actions needed

1. Cost Recovery Objectives

The cost of water supply and sanitation services must be borne, or at least shared by the beneficiaries, to ensure adequate operation, maintenance and expansion of installed facilities. Cost recovery is a crucial step towards the **financial viability** and, eventually, autonomy of sector agencies. Full cost recovery involves recuperation of investment costs as well as those for operation and maintenance. To achieve any degree of cost recovery, developing country governments must have the **political will** to require consumers to pay for water supply and sanitation services. The population's **willingness to pay** must be motivated where necessary, by public awareness campaigns which make clear the benefits deriving from the services provided. In **dialogues** with recipient countries, external support agencies need to emphasize the need for maximum cost recovery. Project **designs and technical cooperation** should be based on the principle of cost recovery.

2. Urban Policy

In urban areas, developing countries, with the aid of external support agencies where required, should establish a **cost-recovery strategy** based on the criteria of: making drinking water and sanitation accessible to all segments of the population; ensuring the gradual financial autonomy of the water supply and sanitation agency; and discouraging the waste of water. Full cost recovery (operation and maintenance, depreciation of equipment, and debt servicing) is a long-term objective, to be reached preferably by cross-subsidizing tariffs. No single group of the population should be privileged by external subsidies (e.g. for household or yard connections) while other groups in the project area have no access to any reliable water supply. In the short run, operation and maintenance costs, including replacement of equipment, should be recovered as a minimum target. In all cases, water supply and sanitation costs should be **affordable** by all consumer income groups. Revenues of water and sanitation agencies should remain in the sector.

3. Rural Policy

In rural areas, *income levels are generally low*. Wherever possible, beneficiaries should contribute towards construction, operation and maintenance costs of new services, through a mixture of cash payments, labour, and the supply of local materials, as part of the process of **community participation**. Before projects are prepared, governments and donor agencies should discuss with communities the implications of operation and maintenance costs and provision of labour, and the choice of technology should be appropriate for available resources. In some special cases, particularly in Africa, a **transition** period may be necessary, during which operation and maintenance costs are co-funded by external support agencies. However, the objective should be that beneficiaries should gradually assume responsibility for the full costs of operation and maintenance. Financial contributions for replacement of equipment is a longer term objective.

The Role of External Support Agencies

- **Emphasize in all dialogues with recipient country governments, the crucial importance of cost recovery in sustainable and replicable programs.**
- **Encourage the establishment of strongly progressive, cross-subsidizing tariffs.**
- **Support public awareness campaigns which stress the benefits of water supply and sanitation services and so promote willingness to pay.**
- **Promote and support urban project designs based on full cost recovery from affordable technologies. Back sector agencies in strategies to achieve self-sufficiency and financial autonomy.**
- **Use early community participation in rural areas to establish commitments to contribute cash, labour and materials for construction, operation and maintenance of appropriately designed facilities.**
- **Extend support where necessary into the operation and maintenance phase of projects, but always with the long-term aim of establishing community responsibility for recurrent costs.**

CONCEPT No. 3:

Constraint

Imbalances exist between the provision of water supply and sanitation; and between sector inputs in central urban areas and those in urban-fringe and rural areas.

Actions Needed

1. Promotion and Education

The severe neglect of sanitation services in comparison with water supply reflects insufficient appreciation of the **value** of sanitation. This in turn results from a lack of hygiene education. Sanitation also lags behind because sanitation projects have a **lower prestige** value than those for water supply, and because **traditional design** standards for sanitation result in prohibitively high investment and running costs. In many ways, similar factors have caused rural sector developments to trail behind those in the urban sector. Correcting these imbalances calls for the application of appropriate technology and for emphasis in public awareness campaigns of the **complementarity** of water supply and sanitation in the achievement of health benefits — one of the fundamental elements of the International Drinking Water Supply and Sanitation Decade.

2. Project Planning

Maximum benefits are obtained when water supply, sanitation and hygiene education form part of **integrated** programmes, preferably under the responsibility of a single executing agency. Water supply and sanitation agencies need to strengthen their resources, with the help of external support agencies, to equip their managerial and technical staff to promote, design and implement sanitation components of projects. Development of appropriate and socially acceptable sanitation **technologies** has progressed a long way in recent years, and efforts are now needed on all sides to see that suitable sanitation components are incorporated in future urban and rural water supply programmes.

The Role of External Support Agencies

- Ensure that hygiene education campaigns emphasizing the complementarity of water supply and sanitation are included in sector programmes receiving donor support.
- Bring to the attention of programme planners and designers the sources of information on low-cost and socially acceptable sanitation technologies.
- Raise the proportion of technical cooperation and funding support given to integrated projects, and to the expansion of national water supply agencies' capacities, to enable them to cope with liquid and solid waste disposal activities.
- Re-emphasize the key Decade concept of precedence for the *underserved* urban and *rural* populations, and encourage recipient countries to balance investments accordingly.

Constraint

Operation, maintenance and rehabilitation receive insufficient attention, and the problem is aggravated by application of inappropriate and often too sophisticated technologies (which are neither affordable nor manageable).

Actions Needed

1. Optimising Use of Resources

Premature failure or poor performance of existing water supply and sanitation systems sets back progress towards Decade goals and represents wasted investment. In a worldwide economic climate unfavourable to social sector investments, it is of utmost importance that developing countries and external support agencies can point to successful programmes which bring **long-term** benefits. More attention to the needs of operation and maintenance is vital, and begins with selection of technologies and management systems which are appropriate for **available resources**. Rehabilitation of existing systems should be considered as a necessary precedent of major investments. It may often serve as a substitute for new installations, or a way of postponing them.

2. Policies and Budget Provisions

With the encouragement and support of external support agencies, water supply and sanitation sector agencies need to review policies and **staffing resources**, to ensure that they cater for the operation and maintenance needs of existing and future systems. Assignment of O&M responsibilities to adequately equipped and trained communities will usually be a desirable policy change, but must be accompanied by the right internal structure, including **decentralization**.

Operation and maintenance needs and costs must be evaluated in the project planning and design stages, with due budgetary allowances made in project costings. External support agencies may be willing in some circumstances to continue support into the operation and maintenance phase, particularly in the field of **training** and **institutional development**, but programmes must be designed with the long-term aim of self-sufficiency.

Programme planning and project appraisal by external support agencies should include comparison of proposed new projects with alternative (or supplementary) investments in rehabilitation.

The Role of External Support Agencies

- **Ensure that project or programme proposals take account of operation and maintenance needs, and that financial and human resources are available.**
- **Compare proposed investments in new projects with alternatives for rehabilitation of existing systems which are disused or underperforming.**
- **Assist sector agencies in developing countries to establish policies and institutional structures which provide for adequate operation and maintenance of existing and proposed new facilities.**
- **Extend programme support, where necessary, beyond completion of construction, to help equip agencies and communities for their O&M tasks.**

Constraint

Community participation and hygiene education efforts are inadequate.

Actions Needed

1. Community Participation

The International Drinking Water Supply and Sanitation Decade has produced compelling evidence that participation of benefitting communities in all stages of water supply and sanitation projects is a prerequisite of success. Too many projects prove unsustainable when central agencies assume all decision-making and managerial responsibilities and then prove unable to meet the long-term commitments. A sense of **ownership**, engendered by full involvement of the community in planning, design, construction, operation and maintenance, is the best way to provide for satisfactory upkeep of installed facilities.

Involving **women** in each project stage is particularly important. As the prime users and beneficiaries of improved water and sanitation services, women have continually proved also to be the most diligent in ensuring that those services are properly maintained.

2. Hygiene Education

Motivation of communities to participate in water supply and sanitation activities is most readily accomplished through hygiene education programmes and public awareness campaigns which stress the benefits to be achieved from such improvements. Hygiene education is clearly also important in its own right, as a method for **maximizing health benefits** from the provision of improved water and sanitation facilities.

3. Software and Training

Community participation in water supply and sanitation activities can only be fully effective if it is supported by measures to equip community members to undertake tasks and duties expected of them. Software programmes or components need to include both training for community workers to give them the capacity to take on responsibility for the upkeep and management of water supply and sanitation systems, and the provision of necessary **support** structures (spare parts supplies, power/fuel availability, technical advice). External support agencies are committed (Concept No. 1) to increasing resources for hygiene education and public awareness campaigns, and to providing technical cooperation for training at all levels.

The Role of External Support Agencies

- In providing programme support, ensure that the balance of “software” and “hardware” is correct, and that training of community workers is part of the package.
- Use hygiene education programmes to motivate community members to participate in all project phases, with special emphasis on the role of women. Bring the benefits of water supply and sanitation investments into health education messages promoted through other sector agencies.
- Provide technical cooperation to establish — where possible — the support system necessary for community management of completed installations to function effectively.
- Ensure that project proposals have considered and properly reflected the views of the community on technology choice, service level, affordability, and operation and maintenance commitments.

Constraint

Coordination and cooperation is inadequate among external support agencies, between these agencies and the national water supply and sanitation sector agencies, among the sector agencies themselves, and between the water and sanitation sector and related sector programmes.

Actions Needed

1. Country-level Coordination

It is the prime responsibility of the developing country itself to coordinate sector activities. The International Drinking Water Supply and Sanitation Decade has helped through the concept of **National Action Committees**, which are performing this role successfully in a number of countries. As the Decade focal point at the country level, the **UNDP** Resident Representative should also assist the government, through regular meetings with the locally-represented donor community to discuss sector issues. The aim should be to have a single water supply and sanitation strategy for each of the urban and rural subsectors, which is known to each agency operating in the sector, and to the external support community. The subsectoral strategies should be formulated so as to complement one another.

2. Intersectoral Coordination

Just as water supply and sanitation improvements produce benefits in other sectors — most notably the **health** sector, but also **agricultural** and **industrial** production — so, it is helpful to coordinate activities with other sector programmes such as **housing** and urban and rural development, where water and sanitation components may be introduced into investments with other prime purposes. Integration should mean better use of scarce resources, and, with proper planning, can bring enhanced benefits in all sectors. The process of coordination between sectors can be facilitated by external support agencies, who commonly have dealings in more than one sector.

3. Standardization

One symptom of uncoordinated activities between governments and donors is a proliferation of different types of equipment and services, often the result of **tied aid**. External support agencies have an important role to play by placing more emphasis in discussions among themselves and with governments of developing countries on arrangements for standardizing on equipment and services supplied as well as for the introduction of appropriate technologies. The Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD) has available draft guidelines entitled *Minimum Conditions for Effective International Competitive Bidding (DAC 86-23)*, which contain useful advice.

4. Information Exchange

The World Health Organization is in the process of establishing a *Country External Support System (CESS)*, which will collect from and disseminate to donors and recipient governments information on ongoing and planned projects in the water supply and sanitation sector. The system will depend on accurate and timely inputs, and external support agencies are urged to collaborate fully in the build-up of the system, which aims at **streamlining** sector inputs and so maximizing their benefits.

The Way Forward

The Regional Consultations and Decade Consultative Meetings have created a momentum of dialogue among external support agencies and between the agencies and recipient governments. That momentum now needs to be sustained by similar and related activities. A joint responsibility, and one of the most important follow-up actions for the external support community is the global implementation of the *Conclusions and Recommendations* which emerged from the three Regional Consultations, and which are summarised in this document. A continuous dialogue has to be maintained between the external support agencies and the recipient governments, with the common aim of achieving a policy shift based on the six *Global Sector Concepts*. The outlook for the second half of the International Drinking Water Supply and Sanitation Decade is positive, once sector development activities are directed towards a more efficient use of scarce resources.

Recognizing that altering of development policies often has political implications, it is, nevertheless, hoped that multilateral and bilateral agencies will gradually adapt their water supply and sanitation strategies to the potential solutions they have mutually discussed and endorsed.

For its part, WHO foresees activities linked to water supply and sanitation sector plan implementation as a continuation of the WHO/BMZ Interregional Cooperation Programme and as the next logical step in Decade planning and resource mobilization. As well as organizing more country Decade Consultative Meetings, the programme will concentrate on complementing external support agencies' investment projects with software activities in the field of institutional development. These will include programmes to develop agency and community skills in financial management, cost recovery, community participation and hygiene education. WHO will also continue to develop the information exchange on water supply and sanitation sector activities through the *CESI* system.

The Role of External Support Agencies

- **Promote cooperative efforts among sector agencies in developing countries, through UNDP and other aid coordination meetings.**
- **Encourage integration of water supply and sanitation projects and programmes with plans in other sectors.**
- **Coordinate with other external support agencies policies of standardization for particular countries or regions, and avoid unnecessary proliferation of equipment types resulting from tied aid, and support the introduction of technologies appropriate for the specific situation of the country concerned.**
- **Provide timely and accurate information for WHO's monitoring of project plans and progress, and use the proposed *CESI* system as a basis for sector planning.**
- **Continue participation in global and regional discussions among groups of external support agencies, to use agreed sector strategies, publicize the findings to as wide an audience as possible, and convince the working level in each organization to acknowledge the new concepts and approaches**