

# International Drinking Water Supply and Sanitation Decade

## National Decade Plans: Eight Questions They Answer



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# INTRODUCTION

The International Drinking Water Supply and Sanitation Decade has stimulated the development of national plans in many countries. These activities have led to the preparation of much valuable information that is required for making decisions, in order to:

- ensure that all important aspects of the subject have been identified and related to one another;
- define a framework, and the objectives, for actions by governments, communities, and organizations;
- make good use of scarce resources;
- view development projects in their proper context;
- clarify the basis for decisions on financing, investment, coverage, and infrastructure development;
- discuss and justify programmes with national decision-makers and external cooperation agencies.

The planning experiences of a number of developing countries have provided a basis for outlining the desirable contents of a national “Decade” plan.<sup>1</sup> The outline that follows is presented in the form of eight questions that a plan should answer — rather than as a list of specific information to be compiled — in order to:

- focus attention on substance, rather than form;
- permit national planners and decision-makers to adapt it — by emphasis and by elimination — to their own national situations;
- enhance the feasibility of discussion among the many people involved in the planning/decision process, by minimizing the use of technical jargon.

Technical guidance for detailed planning work is available in a broad array of specialized documents, a selection of which is listed by source on pages 17-18.

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<sup>1</sup> Some of these experiences are based on field work supported by the United Nations Development Programme (UNDP); the Agency for Technical Cooperation, Federal Republic of Germany (GTZ); and the Swedish International Development Authority (SIDA).

# THE EIGHT IMPORTANT QUESTIONS

The information that a "Decade" Plan should present can be summarized by answering eight major questions:

1. **WHAT ARE THE NEEDS?**

The country's situation as regards the provision of safe water and sanitation now and in the future, in the light of Decade goals and the country's own resources.

2. **WHICH OF THE NEEDS SHALL WE BE ABLE TO MEET AND WHEN?**

The objectives of the national policy, and the improvement targets sought for specific periods.

3. **HOW SHALL WE MEET THEM?**

General strategies, specific tactics, and methods selected to attain the objectives and targets.

4. **WHO IS TO DO WHAT?**

Identification of responsibilities for action among agencies of the government and among organizations, communities, and families.

5. **HOW CAN WE STRENGTHEN THE HEALTH IMPACT?**

Provisions to back-up the installation of water supply and sanitation facilities in support of health objectives.

6. **WHAT RESOURCES MUST BE DEVELOPED?**

Development and financing of institutions and staff, and of equipment, knowledge, and management systems.

7. **WHEN WILL THE STEPS BE TAKEN?**

Identification of projects and priorities and phasing of actions.

8. **HOW DO WE ENSURE PROGRESS?**

Management of development, control of services, and evaluation of operations and impacts.

## 1. WHAT ARE THE NEEDS?

### A. *What main features of the country affect water, sanitation, and health?*

- the major geographical, climatic, and hydrological features;
- the present and projected population, and the size distribution of settlements;
- the status and trends of the economy and the pattern of income distribution, i.e., “ability to pay”;
- the educational, social, and cultural factors that are relevant to the use of water and the practice of sanitation.

### B. *In comparison with the “Decade” goal of Water Supply and Sanitation for All, what is the present status?*

- the numbers and percentages of the urban and rural populations now provided with an adequate level of water supply and sanitation facilities (clarify what is considered “adequate”);
- considering population trends and existing programmes, the extent of coverage expected in 1990 and in 2000;
- the proportion of the population with a “safe” potable water supply — as regards biological and chemical pathogens and the continuity of supply;
- the way in which drinking-water systems relate to other water systems, such as for agriculture, industrial processing, and general household use.

### C. *How does the water/sanitation situation affect the health status of the people?*

- the proportions of the total mortality and morbidity that are caused by diseases related to water and sanitation;
- how these diseases are distributed in relation to age group and type of settlement, and among groups that are not provided with safe water supply and sanitation;
- the diseases that require preventive action, as well as the provision of water and sanitation, for their reduction.

### D. *How is the water supply/sanitation sector organized and managed?*

- the distribution of responsibilities among the agencies of government, at each level of administration — central, intermediate, and local; the differences between urban and rural areas;
- the nongovernmental organizations that are involved in the sector and their functions;
- how planning in the sector is related to the more general planning and budgeting processes of the country;
- the legal and operational linkages between the sector and other sectors, such as education, agriculture, health services, industry, water resources, energy, and environmental protection;

- the roles of communities, individuals, and families in the development, operation, and financing of water supply and sanitation;
- the modifications that are required to the existing laws to make them complete, coherent, and consistent; enforcement of the existing water legislation;
- how the sector (classified according to its main components) is financed in respect of capital as well as recurrent costs.

**E. *How adequate are the existing resources in relation to the current and future requirements of the sector?***

- the water resource situation by major regions; the extent to which these resources are dependent on hydrology, hydrogeology, and vegetation cover, as well as on population trends, industrial and agricultural development, and land use patterns;
- the quantity and quality of the manpower available to the water supply and sanitation sector, considering each operational category of personnel and the ability of the country's educational system to provide the necessary training;
- the ability of national industry to equip and maintain the current water supply and sanitation system; its capacity to meet increased demand;
- the social and community organizations that are or could be effective in influencing people's behaviour in water use, sanitation, and health promotion;
- the proportion of government development funds being invested in the sector;
- in general, the capacity of the government and various population groups to supply funds, material, and labour to improve coverage and quality;
- the willingness of people to pay for water supply and sanitation facilities, in accordance with their perceived needs.

**F. *What are the needs, obstacles, and possibilities in relation to "Decade" goals?***

- the critical needs (and their distribution among areas and population groups) for improved provision of water supply and sanitation and for improved health and wellbeing;
- the critical shortcomings in the sectoral system;
- the major obstacles to improvement in the national situation;
- the factors that represent significant potential resources for improvements.



## **2. WHICH OF THE NEEDS SHALL WE BE ABLE TO MEET AND WHEN?**

### **A. *What government policies determine sectoral objectives?***

- the declared national objectives for provision of safe water and sanitation facilities in the near, medium, and long term; the form in which they are expressed (e.g., legislation, policy declarations, national development plans, indicative budget allocations);
- the declared national objectives for reductions in mortality and morbidity that are related to water supply and sanitation; the form in which they are expressed;
- the declared national objectives in other development sectors that imply expectations of the water/sanitation sector in future periods.

### **B. *In the light of these policies, what are the sector's objectives?¹***

- the sector's objectives, by development plan periods, for the improvement of coverage, service levels, and quality — in percentages and numbers;
- the division of sectoral objectives between the improvement of existing water supply/sanitation facilities and the provision of additional facilities.

### **C. *How can these objectives be translated into targets, by periods?¹***

- the breakdown of sectoral objectives by time-periods and by urban/rural populations (and by further prescribed and logical classifications), the results to be related to identified milestone dates.

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<sup>1</sup> The initial estimated objectives and targets may have to be modified in the light of resource considerations. The plan should set forth the final policy decisions based on these deliberations.

### **3. HOW SHALL WE MEET THEM?**

#### **A. *What general strategies are to be employed in meeting objectives and targets?***

- the main features of the approach to be used in urban and rural areas (and subclasses of each), including methods to be used, standards for service and maintenance, inducements, contributions, technical assistance, and intersectoral cooperation;
- the phasing of the strategy over the medium and long term, considering immediately feasible steps, when funds will become available, the build-up of human and technical resources, community readiness to proceed, and reduction of logistic obstacles;
- how phasing is affected by planned developments in the health service sector, other sectors, and comprehensive area development projects.

#### **B. *What are the key tactics to be used in the strategy?***

- how agents of this and other sectors are to function in promotional activities and education, and in installation, operation, and use of new or improved facilities;
- how technical resources, including skilled personnel, are to be distributed, by level and area;
- the level at which decisions are to be made to proceed with specific domestic or community installations (and the criteria to be used);
- how communities are to participate in planning, decision-making, and financing, and in enjoyment of the benefits;
- how community requests and self-help activities are to be stimulated.

#### **C. *What methods are to be used to implement the strategies?***

- the criteria used (e.g., affordability, acceptability, dependability, simplicity, self-reliance) to determine the appropriate methods to be employed in various regions;
- the range of methods to be made available in water supply, in sanitation, and in health education; how far they will be standardized;
- the roles of users, agents, and officials in making choices among alternative methods in specific cases;
- what the selection of method implies as regards manpower, materials, equipment, spare parts, and degree of institutional development.

#### **D. *By means of what kinds of programmes and subprogrammes are these strategy decisions to be implemented?***

- whether implementation is to be organized according to the components of the plan — manpower, institutional development, facilities provision, supplies, and equipment — or in the form of regional programmes that include all such components, or by some combination of subject and area organization;
- the programme structure that is decided upon;
- the links between these programmes and relevant development programmes in various sectors.

#### **4. WHO IS TO DO WHAT?**

##### **A. *How are governmental responsibilities to be fixed, distributed, and coordinated?***

- at the central level, the specific functions and powers of each agency comprising the sector, or involved with it;
- the structures and processes to be used in coordination at this level;
- the roles and responsibilities of each agency's officials and field units at the intermediate and local levels of government; how these are related to the responsibilities of other governmental officials at these levels — provincial governors, district officers, mayors;
- how coordination is to be obtained at each level and between levels.

##### **B. *Possibilities for other statutory bodies and private organizations to fit into the programme?***

- special authorities/organizations that could be established or expanded to carry out development and operational functions;
- the social, educational, and economic organizations that are to contribute to the support, promotion, supply, and continuity of the programme;
- the linkages to be developed and the management of continuing relationships.

##### **C. *How are communities to be included in the programme's processes?***

- leadership structures in urban and rural areas that are to act as representatives and agents for community organization and participation;
- the role of village development committees and specialized health or water committees in building, maintaining, and promoting the use of water and sanitation facilities;
- the legal responsibilities of local or village bodies in respect of their own water supplies;
- the responsibilities of the water committee for sanitation;
- the functions of various community bodies (including local nongovernmental organizations in the development of local systems, in operations and maintenance, and in education of the public);
- the connections of these local structures with governmental entities.

##### **D. *What are the roles of households and individuals?***

- the respective roles of indigenous leaders and of government agents with regard to families;
- the initiatives that households can take to safeguard their health, improve their own facilities, and participate in the planning process and plan implementation;
- how indigenous leaders and government agents will interact in the planning and implementation processes.

## 5. HOW CAN WE STRENGTHEN THE HEALTH IMPACT?

### A. *How will the safety of water supplies be ensured?*

- how and by whom the safety of domestic water supplies is to be ensured — through design, sanitary facility location, and monitoring;
- how communal water supplies are to be protected against contamination and pollution — through design, user education, emission control, monitoring, and water treatment;
- support of local monitoring activities by means of laboratory services, water treatment supplies, and enforcement powers.

### B. *How can behavioural changes help to achieve the potential health benefits of improved facilities?*

- the types of family behaviour that should be developed and reinforced, as regards proper water use, waste disposal, and domestic hygiene;
- how educational efforts are to be linked with efforts to develop facilities;
- the role of community sanitary workers or community health workers in health education;
- how the health education potential of other community resources — schools, agricultural extension, literacy campaigns, social and worker organizations, etc., — are to be developed and encouraged;
- how consumer appreciation of the health benefits resulting from improved water supply and sanitation facilities can be increased with a view to obtaining more community participation in the planning, construction, operation, and maintenance of sector installations.

### C. *How are “Decade” developments and benefits to be linked with primary health care?*

- how proper emphasis on sanitation is to be ensured;
- how the development of sanitation and water supply is to be integrated with the other basic elements of primary health care at the village and neighbourhood levels;
- coordination of planning, decision-making, resource development, and operations;
- use of the primary health care reporting system to monitor status and progress in reducing water-related diseases.

### D. *How are “Decade” developments and benefits to be linked with other sectors?*

- integration with irrigation, rural development, and other community projects;
- liaison with literacy and other basic community education projects.

## 6. WHAT RESOURCES MUST BE DEVELOPED?

### A. *What human resources are needed and how will they be prepared?*

- categories of professional, technical, auxiliary, and volunteer personnel that will be required to prepare resources and staff the planned system;
- considering the personnel already available, the numbers of each manpower type to be recruited and trained (Question 7 deals with scheduling);
- how recruitment and training will be accomplished — the training plan;
- how personnel are to be organized, assigned, paid, supervised, motivated, upgraded, and evaluated;
- the need to train voluntary and community labour;
- the possibility of “crash” training programmes if the immediate need for new trained manpower is very large;
- the need for sufficient lower level personnel to be trained as trainers for rural programmes requiring quick results over a wide area.

### B. *How are the equipment, materials, and supplies to be made available?*

- in accordance with strategy decisions on methods (Question 3), the requirements, by period, for “hardware” to construct and equip the installations;
- in the interests of the national economy and self-reliance, how local production is to be maximized and how the necessary industrial investment can be stimulated or provided;
- how material is to be distributed, stored, and controlled so as to (a) achieve construction targets, and (b) ensure a safe, continuous water supply and hygienic sanitary operations.

### C. *How are the necessary and appropriate institutional capacities to be developed?*

- needed clarification and mandating of institutional missions, functions, and objectives;
- deficiencies to be overcome in the capacities of the various institutions to develop resources and to manage programme development and operations;
- how the system for coordination (Question 4) is to be implemented.

### D. *What systems of development and support are to be established?*

- when and how subsectoral and project plans are to be produced;
- provisions for the personnel, facilities, and material required for continuing technical and logistic support of operations at each level;
- procedural, training, and informational materials to be prepared and distributed;
- transport, communications, and information processing resources to be procured and maintained.

**E. *What authorizations are to be obtained and what changes in attitude are required?***

- new or changed laws, regulations, and operational policies that are required; steps required before they can be finalized;
- changes needed in the commitment and orientation of the existing resources of agencies to fulfil this “Decade” plan;
- approaches and steps required to bring about a change in the attitudes of officials and staffs;
- means for promoting the goodwill and cooperation of local leaders;
- plans for strengthening the public relations activities of institutions in the drinking water and sanitation sector.

**F. *How is “Decade” development to be financed?***

- the estimated expenditures, by year, that will be required to achieve the programme’s targets;
- the proportion of investment costs to be met from local funds and “in kind” contributions;
- investment and recurring costs that are to be recovered from charges and fees to the beneficiaries of the programme;
- expenditures, by periods, that are eligible for, and likely to receive, funding from external sources;
- remaining funding required from national and subnational governments;
- funding mechanisms to be established;
- whether urban areas are to be graded by level of cost recovery;
- whether each rural area is to be responsible for cost recovery in respect of all its local routine operations and maintenance, with a subsidized back-up service;
- the total funds necessary for the various sector components, to be divided into national currency and foreign exchange requirements.

**G. *How are external agencies to cooperate in meeting resource requirements?***

- the identified needs for information and technical cooperation;
- the use to be made of regional, subregional, or neighbouring-country training and research consultancy services;
- which sectors can carry loans at market rates and which must have grants or highly subsidized loan assistance;
- how specific projects are to be identified that require major donor funding, perhaps combined with technical cooperation.

**7. WHEN WILL THE STEPS BE TAKEN?**

**A. *What are the action priorities indicated by:***

- governmental policies;
- public and group pressures;
- related developments in other sectors;
- deficiencies in critical resources;
- geographical and communication constraints;
- the funding situation — opportunities and obstacles?

**B. *In the light of these (probably conflicting) indications, what is the most appropriate ordering of priorities?***

**C. *In accordance with these priorities, what actions are to be accomplished in the following areas in each designated time-period?***

- development of required resources and infrastructure;
- promotion of community acceptance and readiness;
- attainment of coverage and quality improvement objectives;
- strengthening the support of operating systems;
- assessment of progress and problems;
- measures to be implemented in connection with necessary supporting programmes, such as hydrological and hydrogeological investigations, mapping, local production of equipment and materials, etc.

**D. *How are the projects to be planned and executed?***

- immediate actions to be taken;
- action projects now identified for resource development, coverage, and operational support;
- steps to be taken by certain dates to formulate and execute these projects;
- when and how further projects are to be identified and planned.

## **8. HOW DO WE ENSURE PROGRESS?**

### **A. *How are the developmental activities of the "Decade" to be managed?***

- mechanisms to schedule, direct, and coordinate resource development actions through various institutions and sectoral agencies, and at the several levels of administration;
- similarly, mechanisms to ensure the attainment of coverage targets, with appropriate links to management structures in collaborating agencies;
- synchronizing resource development with the schedule for attaining coverage;
- schedule for replanning.

### **B. *How is the operation of developed facilities to be controlled?***

- methods for monitoring community participation, resource adequacy, operation of facilities, and water quality at each level of programme administration;
- how information from assessment of operations is to be used to influence resource development activities.

### **C. *What provisions are to be made for information support and evaluation?***

- the indicators to be used to monitor operations, evaluate methods, assess coverage, and facilitate replanning;
- how programme impacts on health and wellbeing will be assessed;
- the processes of information collection, analysis, and reporting to support management functions;
- responsibility for the conduct of programme evaluations and their use in making decisions on changes in the programme.



# ADDITIONAL INFORMATION<sup>1</sup>

## **World Health Organization (WHO)**

- *Drinking-water and sanitation 1981-1990. A way to health.* Geneva, World Health Organization, 1981.
- *Global strategy for health for all by the year 2000.* Geneva, World Health Organization, 1981 ("Health for All" Series No. 3).
- *Managerial process for national health development. Guiding principles.* Geneva, World Health Organization, 1981 ("Health for All" Series No. 5).
- *Guidelines for health manpower planning.* Geneva, World Health Organization, 1980.
- *National decision-making for primary health care. A study by the UNICEF/WHO Joint Committee on Health Policy.* Geneva, World Health Organization, 1981.
- *Republic of Terrania: A (fictitious) case study on the economic and financial aspects of programmes and projects in the drinking water and sanitation sector (WHO/World Bank unpublished document, 1980).*
- *Manual for planners* (WHO unpublished document, March 1982, 3rd Edition).

## **United Nations Children's Fund (UNICEF)**

- *Towards a programmer's guide* (UNICEF-EAPRO, Bangkok, unpublished document, 1981).

## **The World Bank (IBRD)**

- *Water supply and waste disposal sector: Project preparation handbook* (World Bank unpublished document, 1981).
- *Pragmatic water planning* (Economic Development Institute, Washington, unpublished document, 1980).
- *Water supply and waste disposal* (World Bank unpublished document, Poverty and basic needs series, 1980).
- *Health: Sector policy paper.* Washington, World Bank, 1980.
- *Appropriate technology for water supply and sanitation: A planner's guide.* Washington, World Bank, 1980.

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<sup>1</sup> The publications and documents mentioned on this page are available through the organizations under which they are listed. The title of this booklet should be mentioned in connection with any order.

**International Reference Centre for Community Water Supply and Sanitation (IRCCWSS)**

- *Evaluation for village water supply planning*. The Hague, IRCCWSS, 1980 (Technical Paper Series No. 15).
- *Planning and evaluation of community water supply and sanitation: A literature review and a selected and annotated bibliography*. The Hague, IRCCWSS, 1982.

**International Labour Organisation (ILO)**

- *Planning for improved enterprise performance: A guide for managers and consultants*. Geneva, International Labour Organisation, 1979 (Management Development Series No. 15).

**United Nations Development Programme (UNDP)**

- *Guidelines on project formulation* (UNDP unpublished document, 1976).

**International Drinking Water Supply and Sanitation Decade (IDWSSD)** (Secretariat: Global Promotion and Cooperation for Water Supply and Sanitation, WHO, Geneva)

- *Project and programme information system*. Geneva, IDWSSD, revised version, 1982.
- *National and global monitoring of water supply and sanitation sector performance*. Geneva, IDWSSD, 1982.
- *Basic strategy document on human resources development* (IDWSSD unpublished document, 1982).