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Capacity Building for Water-Sector Development

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Population and economic development can no longer be considered separately from water resources and the environment. Based on the experience of the past decade, UNDP and its partner agencies are better equipped with know-how about managing water resources. The best guardians of water resources and the environment are people working hand in hand with institutions. We find institutions at all levels, with each of them playing its part and interacting within a larger whole: e.g. women caretakers of wells, farmers' associations, utilities, government ministries and external support agencies.

Better trained people and responsive institutions are essential if we are to stay ahead. In addition, people, both as providers and users of water for domestic purposes, agriculture, and industry can no longer live in blissful ignorance of each other. Consumers, technicians, engineers, economists, managers and politicians have no other choice but to better understand each other and work together if social and economic needs are to be met in a balanced and equitable manner.

Clearly, safe water supply and sanitation, and availability of water for agriculture and industry are the basic underpinnings of an environment for sustainable development.

The international cooperation agenda for the nineties was shaped by four global meetings, each of which looked at the water sector from a different perspective. A common theme in these meetings was the importance of capacity building which will be UNDP's area of focus in the years to come.

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Near the conclusion of the International Drinking Water Supply and Sanitation Decade, in September 1990, UNDP organized and the Government of India hosted the Global Consultation on Safe Water and Sanitation for the 1990s. The Consultation reviewed the progress during the Decade and made a number of recommendations for the future. These recommendations, endorsed by the UN General Assembly, formed the basis of actions which should be taken during the 1990s. During the Decade, the international community as a whole made the provision of improved water supply and sanitation facilities a top priority and rallied to the support of Decade goals and objectives. Some 1.3 billion people in the developing world gained access to safe drinking water and 700 million to sanitation facilities for the first time in their lives.

The New Delhi Statement prepared at the Global Consultation in India contained four guiding principles, two directly related to capacity building: "Strong institutions are essential for sustainable development", and "capacity building is necessary to make community management effective..." Two others, environment and health and financing and technology, depend for their implementation on strong sustainable institutions. The concept of and prospects for capacity building were further elaborated during the UNDP Symposium, "a Strategy for Water Resources Capacity Building" - held in Delft, the Netherlands, in June 1991.

A major issue addressed in the Delft Declaration is the daunting challenge "to satisfy the water needs of the exploding cities, given the equally increasing need for water for irrigated agriculture and the problems arising from urban and industrial pollution. In addition, to do this in a sustainable way, measures have to be taken to protect and conserve water as a major resource and unifying element of our environment. Experience shows that institutional weaknesses and malfunctions are a major cause of ineffective and unsustainable water services. This requires urgent attention to building institutional capacity at all levels. Pressure for improved local delivery of water services suggests that development of institutional capacity be

more demand-responsive. Also, the need to better manage overall water resources coherently and facilitate allocation of water among all users suggests an expansion of national, integrated planning". The participants in the Delft Symposium, coming from developing countries, external support agencies and institutions recognized the importance of the capacity building process for sustainable development at national, sub-regional and local levels. The capacity building concept was articulated as follows:

- the creation of an enabling environment with appropriate policy and legal frameworks;
- institutional development, including community participation; and
- human resources development and strengthening of managerial systems.

Subsequently, on the road to the Earth Summit in Rio (the United Nations Conference on Environment and Development - UNCED), a unique event took place in January 1992 in Dublin, Ireland: the International Conference on Water and the Environment. This Conference made recommendations for action at local, national and international levels, based on four guiding principles: the finiteness and vulnerability of water resources; participatory approaches to water management involving users, planners and policy-makers; women playing a central part in the provision, management and safeguarding of water; and the economic value of water. Again, capacity building was recognized as a principal element in the development, use and management of water resources.

Finally, the United Nations Conference on the Environment and Development (UNCED, Rio de Janeiro, June 1992), articulated the concept of sustainability in its agenda 21 which contains numerous recommendations for actions in the water sector from different vantage points e.g. poverty, human settlements, agricultural and rural development, and integrated approaches to development, management and use of water resources. Consistently, the vital role of people, communities and institutions was underlined.

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What is the response of the international community to the expectations raised and recommendations made by the Conferences in New Delhi, Delft, Dublin and Rio?

Virtually all international development agencies support water-related programmes. International and regional development banks and many bilateral agencies have a substantial part of their grant or lending portfolios devoted to agricultural irrigation, water supply and sanitation. Likewise, United Nations system agencies are very active in this area.

By supporting the principles and recommendations of the above conferences, both developing countries and the external support agencies have committed themselves to adapt their water sector programmes to the needs of the nineties and beyond. In spite of promising initiatives by a number of agencies, it is difficult to discern the contours of a concerted programme supported by the international community.

In our view, the United Nations agencies are well placed to take a leading role in the response by the international community by providing policy, technical and financial support to countries which are committed to re-orienting their water sector programmes in line with the aforementioned principles and recommendations, as applicable to the countries' conditions. Similarly, there is the need for the United Nations agencies to re-examine and reorient their role in order to be better equipped for their task.

For its part, UNDP has adopted the following approach to "upstream" water sector development translated into four interrelated global programmes supported by UNDP and partner agencies.

(1) The UNDP/World Bank Water and Sanitation Programme, supported by ten bilateral agencies, which concentrates on capacity building and supporting sustainable investments in low-cost community-based water and sanitation and increasingly in urban sanitation;

(2) **The International Programme for Training and Research on Irrigation and Drainage**, supported by UNDP, the World Bank and bilateral partners.

(3) **The Utility Partnership: Capacity Building for Urban Water and Sanitation Utilities**, initiated by UNDP and the World Bank which concentrates on improving the efficiency of utilities and water conservation/demand management.

(4) **The Capacity Building Programme for Water Sector Development** which emerged from the Delft Symposium. This programme, which is currently being initiated by UNDP, UNDES, and the World Bank, places capacity building squarely among the financial, technical, social and economic elements of water sector programmes. To enhance the capacity building process in developing countries, water sector assessment is considered a necessary first step.

These four programmes are prime factors in shaping "downstream" programmes supported by UNDP, and other external support agencies at the country level. Under the umbrella of capacity building, UNDP will devote increased attention to the following approaches. In terms of financing, greater efficiency should be combined with mobilization of additional resources. Secondly, new public-private partnerships are vital for sustaining water sector programmes. Thirdly, there is a need for concrete coordination among all participants in this effort both nationally and internationally. Indeed, much money can be saved by avoiding duplicative efforts and applying proven solutions. Fourthly, innovation is essential: fresh ideas, imaginative approaches, appropriate technologies and new attitudes. In this connection, a wide array of technologies, techniques and methodologies are available for testing, adaptation and adoption. And finally, strengthening and adaptation of institutions is required at all levels as well as human resources development, within developing countries and the external support agencies.

In conclusion, UNDP is joining UN partner agencies, development banks, bilateral agencies and other public and private sector agencies in the urgent human development venture to serve the unserved.

**CAPACITY BUILDING FOR WATER SECTOR
DEVELOPMENT**

1. Population increase is dominant factor in

- * Urbanization**
- * Industrialization**
- * Food production**
- * Environmental degradation**
- * Water use**

2. In rural and urban fringe areas people spend many hours a day to fetch water

In cities water and sewerage services cannot keep up with demand

Urban water shortages are accompanied by growing demand for irrigation

Urban and rural areas both cause and share water pollution

3. Major constraints facing the water sector

- * outdated policies and laws
- * inadequate institutions
- * shortage of trained people
- * inappropriate technology
- * ineffective financial mechanisms

4. Water supply, waste management and irrigation

- * Instruments available for improvements, e.g.
- * Progressive tariff rate increases according to quantity used
- * Improved collection of tariffs
- * Modified design standards and computerized design systems
- * potential for water reuse and water reclamation

5. Institutional development

- * role of government as promoter rather than as provider of services. Examples of alternatives:
- * community ownership of facilities
- * quasi-governmental agencies which are financially self-sustaining and have their own personnel policies
- * local public utilities
- * private contractors

But role of government is not limited to promotion; it includes policy making, creation of water and environmental legal frameworks, quality control, setting of standards, stimulation of research and mobilization of resources.

6. Human resources development is much more than improving the competence of staff. It involves improvement of employment practices and career structures, and professional and financial incentives.

7. **Capacity building for water sector planning and management;**

- * the creation of an enabling environment with appropriate policy and legal frameworks;
- * institutional development, including community participation; and
- * human resources development and strengthening of managerial systems.

Key actors in capacity building include government at various levels, external support agencies, education and training institutes, professional associations, twinning, multinational corporations, consulting firms.

+ individuals

8. Capacity building

Water Sector Assessment

Main areas covered:

- **context: social and economic development objectives**
- **water resources**
- **needs for water: agriculture, including, water supply and sanitation etc.**
- **policy climate**
- **facilities**
- **institutions**
- **human resources**
- **legal and regulatory tools and constraints**
- **finance : capital, O&M, cost recovery**
- **identification of ESAs for technical and financial assistance**

Characteristics and requirements

- **collaborative and integrative approach**
- **government commitment**
- **ESA commitment**
- **government and other local specialists are the nucleus and corporate memory of the water sector planning process**
- **phases: reconnaissance - terms of reference - assessment - national consultation**
- **Duration: one year**
- **leading to improved regional or national water sector planning and management**

Capacity Building

"Why irrigation and sanitary engineers should talk to each other"

- **Water balance**

- * conservation
- * demand management
- * reuse and reclamation
- * water markets

- **Drainage**

- **Water quality**

- * pollution control at source (e.g. I PM)
- * treatment

- **Public health**

- * water quality
- * diseases associated with water
- * health education

- **Public participation/participatory development**

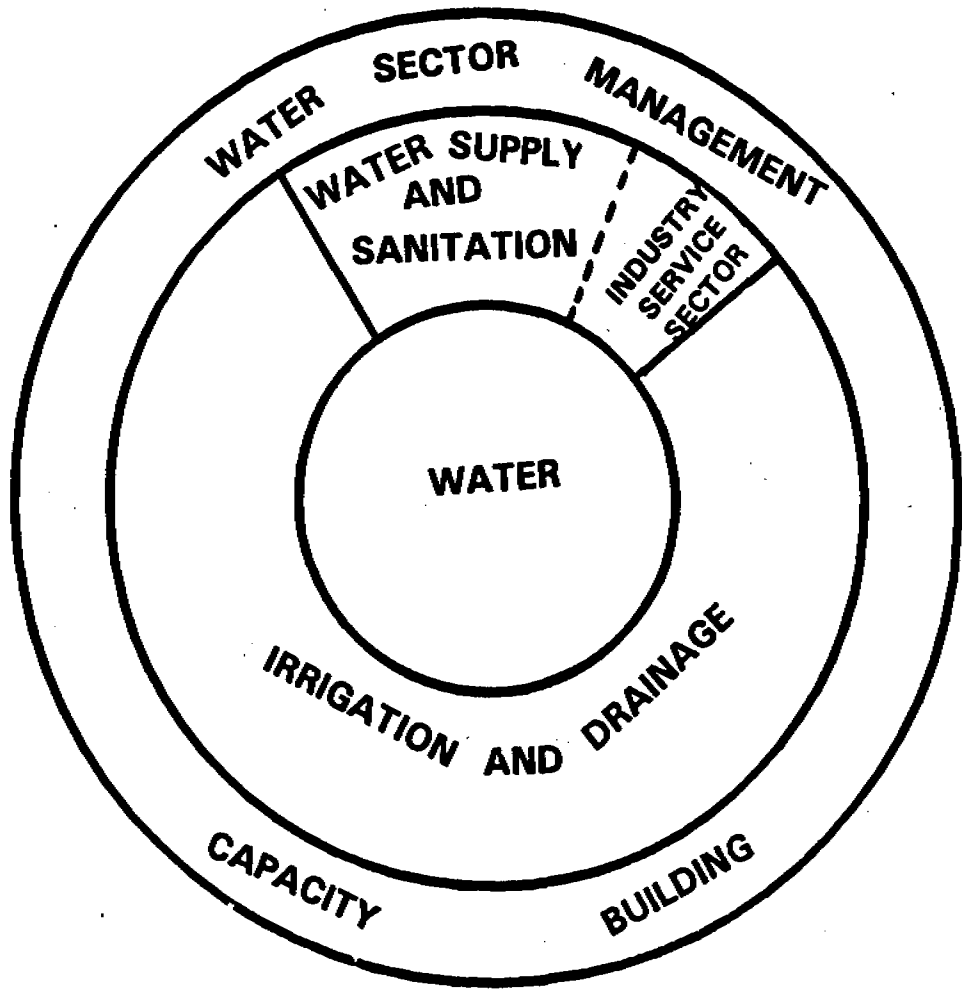
(8)

"Why all concerned parties should talk to each other"

- **Social and economic development**

- * **population growth**
- * **migration**
- * **trade**
- * **food security**
- * **finance (planning, rehabilitation versus new construction)**

- **Cost-sharing**



WATER SECTOR DEVELOPMENT SELECTED INTERNATIONAL PROGRAMMES

[Poverty Alleviation, Environment and Capacity Building]

