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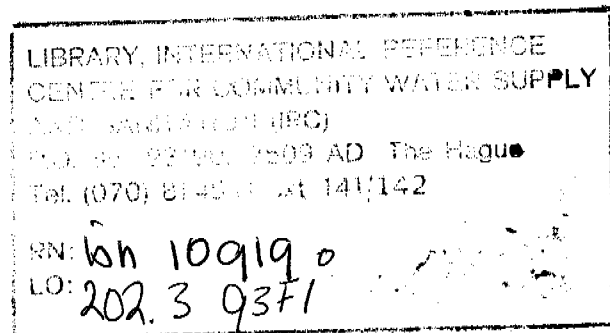
CENTRE
WATER SUPPLY AND

FINNISH DEVELOPMENT COOPERATION
IN THE WATER SUPPLY AND
SANITATION SECTOR
IN THE 1990'S

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1. BACKGROUND

1.1. Water Resources

Global water resources are estimated at approximately 1400 million km³. Only 14,000 km³ or 1% of this is available as a recyclable natural resource suitable for meeting various water demands. The remaining 99% consists of ocean water, glaciers and inaccessible ground water. Most of the water needed for domestic use, agriculture, livestock and industry is presently taken from lakes. Developments in ground water technology have made large-scale utilization of shallow and medium deep aquifers possible as well.

At present, the total global consumption of water is approximately 2600–3500 km³ annually. The available fresh water resources are in principle sufficient for meeting both present and future demands. However, global water resources are very unevenly distributed. Shortages of water supplies place restrictions on social and economic development in many locations. The majority of these are found in developing countries, particularly in Africa.

1.2. Utilization of Water Resources

Water is a necessary prerequisite for nearly all of society's operations. It is essential to domestic life, agriculture, livestock, industry, energy production and water transport. Water systems can also serve as valuable nutritional stores through fishing and the utilization of aquatic vegetation. As these various needs for water compete with one another, a one-sided utilization of water resources creates conflicting situations and diminishes the potential for other uses. This could lead to environmental deterioration, sometimes of an irreversible nature. The compounded economic losses to society caused by unbalanced water management may prove irreversible even in the case of short-term projects. The long-term economic impact of environmental damage can often be even more disastrous. Short-sighted misuse of a water source may compound the social and economic pressures already existent in many developing countries.

The use of land and of water are interrelated. In drawing up a water supply plan it is essential to take into equal account all the various needs for water, often in conjunction with land use management. Thus also water supply and sanitation programmes must be seen as a part of the multi-purpose use of waters. Only in this way will it be possible to prevent the damage and destruction due to one-sided utilization of water courses.

The social effects of an adequate and safe water supply can be significant. Improvements in health conditions ease the pressure on health services, releasing more resources for development and alleviating human suffering. The amount of time and energy which women in particular spend on carrying water in developing countries could be freed for income-generating activities as well as social development and interaction. At the same time an organized water supply can serve the interests of social equality.

2. OBJECTIVES AND GENERAL STRATEGY

The Significance of Water Supply and Sanitation in Achieving Development Cooperation Goals

Water supply and sanitation development is one of the most important sectors in Finland's social development cooperation. The aim is to improve the national level of public health in accordance with the aims of the developing country concerned, and to promote social development through improvements in water supply and sanitation.

Water supply and sanitation projects tend for the most part to be local projects focusing on serving sub-standard and other areas essential from the recipient country's own point of view. In this way Finland seeks to achieve the goals set for sustainable development.

3. FINNIDA'S DEVELOPMENT COOPERATION IN WATER SUPPLY AND SANITATION

3.1 Bilateral Projects

Finland's water supply sector is distinguished by three features:

- The urban water supply is of high quality by international standards and takes advantage of modern technology;
- the water supply systems of rural communities are normally independent companies run by the users themselves;
- and in sparsely populated regions people mainly rely on their own wells.

This experience with the water supply sector, combined with recent international evidence, serves as a good foundation for the country's participation in water supply projects for development cooperation.

3.2. Resources

The implementation of water supply and sanitation projects funded by FINNIDA usually presupposes the involvement of various Finnish professionals. Educational backgrounds of the professionals include engineering, hydrogeology, economics, social science, education and health care.

Finnish expertise continues to be in demand in water supply and sanitation development cooperation, but an increased emphasis is being placed on the assistance for the recipients' own water sector programmes. This requires change also in the qualifications of the Finnish professionals as they will increasingly act as supporting rather than implementing staff.

4. OBJECTIVES AND OPERATIONAL MODELS OF THE WATER SUPPLY AND SANITATION SECTOR

4.1. Target Groups

Water supply and sanitation projects are mainly directed at population groups in rural areas with water supply systems at a nationally substandard level and at urban settlements lacking adequate water supply. The aim is the promotion of social equality through assisting in fulfilling basic needs for water and sanitation services, in accordance with user capacities.

Other main beneficiaries are the recipient country's own organizations responsible for water supply and sanitation. The goal is to upgrade their capacities and abilities to carry on improvements without external assistance.

4.2. Objectives

Long-Term Objectives

The overall objective in water supply and sanitation projects is the improvement of health status of the target population and provision of opportunities for equal social development and economic growth. Another goal is improvement in the use and protection of water resources. The environmental settings must be a fundamental consideration for all projects. Lasting results can only be obtained through environmentally sustainable projects.

In order to provide users with the capacity to operate, maintain and expand water and sanitation facilities in the future by themselves, the aim is to develop operational and economic structures for maintenance and upgrading together with the beneficiaries and recipient organizations.

Operational Models

The operational models of development cooperation in the water supply- and sanitation sector are:

- **support to projects which comprehensively promote social development**
- **protection of water sources and improvement of operation, maintenance and management of water supply systems**
- **strengthening the sector organizations and thereby enabling autonomous responsibility for water supply and sanitation development**
- **the support of projects based on an awareness created through health education and community involvement**
- **continuous improvement of planning and implementation of water and sanitation projects**
- **development of international cooperation and donor coordination**

The approach chosen for each target and the reasons behind it are as follows.

- **Support of Water Supply and Sanitation Projects Promoting Comprehensive Social Development**

The most important aim of water supply and sanitation projects is the improvement of public health. Through this economic benefits may also be obtained from the project. By expanding water supply and sanitation coverage social equality is promoted as well.

1. *In order to promote the improvement of health conditions and the advancement of economic growth people must be guaranteed an adequate amount of safe water to meet their basic needs year round. For improvements in water supply to be effective, the standard of hygiene must be raised through health education and sanitation.*
2. *Water supply and sanitation projects are to be planned in such way that the basic needs of the less privileged segments of the population in both rural and urban areas are met.*
3. *The needs of the various population groups and the local culture must be taken into consideration in the planning and implementation of the project.*
4. *Water supply and sanitation services should support economically and environmentally sound productive activities.*

- **Development of the Use, Maintenance and Protection of Water Sources and Facilities**

Water is a renewable natural resource which is vital to all living creatures and promotes economic operations. This valuable natural resource must be used sustainably without causing any damage to the environment or the water resources themselves.

5. *Water supply and sanitation projects must be environmentally sustainable.*
6. *Water supply and sanitation projects must be planned and implemented to include a solid foundation for the operation, maintenance and upgrading of the systems – technically, financially and from the point of view of skills.*

- **Strengthening of Sector Institutions**

One of the most important forms of development cooperation is the long-term upgrading of the administrative and technical capabilities of sector institutions. The water supply and sanitation sector projects aim at the development and strengthening of the responsible recipient organizations in order to enable them to eventually take over operations of the sector without external assistance.

7. *The development of personnel resources within the water supply and sanitation organizations is supported at all levels in order to upgrade the institutional capacities.*

8. *The operational infrastructure and financial viability of water supply and sanitation organizations should aim at self-operation and the development of economic and efficient services.*
9. *Prospects for the private sector to support the public sector must be considered in water supply and sanitation projects.*

- **Support of Projects Which Create Public Awareness Through Community Involvement and Health Education**

The success of rural water supply and sanitation projects in particular is directly based on the recipients' needs and resources in both planning and implementation. The users must be actively involved in the decision-making through all stages of the project. The possibilities and requirements for user participation in urban water supply and sanitation projects must always be clarified as well.

The development of water supply and sanitation services will only benefit public health if the habits and behavioural patterns related to water and hygiene are changed accordingly. This in turn requires an awareness of those factors which affect personal health and how those factors can be adjusted, as well as encouraging the initiative for making such changes. An adequately planned and implemented health education programme can bring about these results.

10. *Participatory models must be adhered to in projects as a guiding principle. All stages of the project must be based on the personal needs and capabilities of the beneficiaries, who have to be actively involved in the various stages.*
11. *The need and motivation to improve the existing situation and to change behavioural patterns should be encouraged through comprehensive health education. For this reason the national and local health education organizations should be supported, in such a way that health education is provided on a continuous basis.*

- **Improvements in Water Supply and Sanitation Planning and Implementation as a Continuous Process**

In recent years the production-oriented technical approach has been replaced by one that supports the developing countries in their own development efforts. Consequently, training, planning and development of implementation methods, in addition to the improvement of operational and managerial procedures as well as the financial management of organizations are the most important fields of operation. One aim is the improvement of the recipient country's ability to take over the responsibility for sector development. This demands continued improvements in the planning and implementation, in order that projects would at all times respond to the changing conditions and needs of the recipient country.

12. *Project planning must be developed in such a way that project objectives are clearly and realistically defined, based on existing conditions and implementation options. Project planning must comprehensively cover all aspects necessary for the attainment of targets such as health education, improvements in operational systems and procedures, training, development of financial viability and the use of appropriate technology.*

13. *Projects must be comprehensively planned to ensure that they comprise the operations required for the attainment of all objectives.*
14. *Support given to the development of human resources and organizations must be based on long-term considerations.*
15. *Project planning must be a continuous process, based on a dynamic assessment of needs and resources, and on knowledge gained from project monitoring and evaluation.*

● **Development of National and International Cooperation**

Most of the recipient countries within the sphere of Finnish development cooperation have not had a clearly defined strategy for water supply and sanitation which would effectively guide the donors. For this reason individual donors have operated according to their own guidelines and traditions. This has resulted in a diversity of operational methods and the technology selected. This has complicated matters for the recipient organizations and even led to reverses in development.

16. *Development cooperation within a given sector must comply with the guidelines adopted by each country. In order to bring consistency to these goals, coordination in the recipient country must be actively encouraged and participated in.*
17. *International coordination should reduce opposing operational models and aid strategies supporting principles and policies to join efforts in promoting sustainable development.*

Quantitative Targets

Approximately 10% of Finland's bilateral development cooperation funds are to be used for the support of water supply and sanitation development. Rural development projects will likewise should continue to be supported. In addition financing for urban water supply and waste water projects addressing environmental concerns will be increased. The leading principle in all support to the water supply and sanitation sector is that the necessary preconditions for sustainable development should be established. In this way quantitative aims will not overtake qualitative ones.