

7096

8 2 4

U G 8 9



REPUBLIC OF UGANDA

**WATER SUPPLY AND SANITATION SECTOR
DEVELOPMENT STRATEGY
AND ACTION PLAN**

MINISTRY OF WATER AND MINERAL DEVELOPMENT
DEPARTMENT OF WATER SUPPLY AND
SANITATION (DWS)

PREPARED BY :

MINISTRY OF WATER AND MINERAL DEVELOPMENT

ASSISTED BY :

**UNDP / WORLD BANK REGIONAL WATER AND SANITATION GROUP
NAIROBI**

FINAL EDITION MARCH 1989

REPRINT SEPTEMBER 1989

824 - UG89 - 7096

- the government of reference.
not approved by gov't

UGANDA
WATER SUPPLY AND SANITATION SECTOR
DEVELOPMENT STRATEGY AND ACTION PLAN

TABLE OF CONTENTS

	<u>Page No.</u>
EXECUTIVE SUMMARY	i - iv
I. INTRODUCTION	1
Background	1
Sector Objectives	1
Sector Strategy	2
II. INSTITUTIONAL ASPECTS	4
Responsibilities	4
Analysis of Existing Arrangements and Performance	5
Proposed Organization	8
Sector Legislation	10
III. HUMAN RESOURCES DEVELOPMENT	12
Background	12
Approach	12
IV. INVESTMENT PLANNING AND FINANCE	14
Existing Situation	14
Investment Planning	14
Investment Policies	16
V. CONCLUSIONS AND RECOMMENDATIONS	18
Conclusions	18
Recommendations	18
VI. THE ACTION PLAN	20
Strategy	20
Activities	20
Framework	22
Framework Implementation	23

INTERNATIONAL CENTER FOR
DOCUMENTATION AND INFORMATION
SCIENCE
37, rue de la Libération
1070 Brussels, Belgium
Tel: (32) 81 40 11 ext. 141/142
Fax: (32) 81 40 11 ext. 141/142
E-mail: icdis@icdis.be
URL: <http://www.icdis.be>
ISBN 7096
ISSN 024 4989

Abbreviations

ADF	-	African Development Fund
DANIDA	-	Danish International Development Agency
EEC	-	European Economic Community
GTZ	-	Deutsche Gesellschaft Fur Technische Zusammenarbeit
IDA	-	International Development Association
IDWSSD	-	International Drinking Water Supply and Sanitation Decade
MOEP	-	Ministry of Environmental Protection
MOH	-	Ministry of Health
MOLG	-	Ministry of Local Government
MPED	-	Ministry of Planning & Economic Development
MWMD	-	Ministry of Water and Mineral Development
NRM	-	National Resistance Movement
NWSC	-	National Water and Sewerage Corporation
PCU	-	Project Coordinating Unit
RC	-	Resistance Committee
RDP	-	Rehabilitation and Development Plan
RP	-	Rehabilitation Program
RWSG	-	UNDP/World Bank Regional Water and Sanitation Group, Nairobi
TOR	-	Terms of Reference
UNICEF	-	United Nations Children's Fund
UNDP	-	United Nations Development Programme
WDD	-	Water Development Department

"The Government of the Republic of Uganda endorses and subscribes to the objectives of IDWSSD and therefore the provision of clean water and good sanitation must remain a permanent policy."
Launching decade speech, 1980, by Minister of Lands and Natural Resources.

NOTE: The present edition is a slightly updated reprint of the Final Report, March 1989. The annexes, including Terms of Reference (TOR) for follow-up activities, have been omitted in this reprint due to the fact that some of those activities already have been carried out, and as a result the TORs were adjusted/amended accordingly.

UGANDA
UGANDA WATER SUPPLY AND SANITATION SECTOR DEVELOPMENT
STRATEGY AND ACTION PLAN

EXECUTIVE SUMMARY

1. The Government of the Republic of Uganda, in an effort to implement the aims of the International Drinking Water Supply and Sanitation Decade has in co-operation with the United Nations Development Programme/World Bank (Project UGA/84/008) undertaken a review of the water supply and sanitation sector development programme. Sector strategies, policies and a proposed action programme are described in this action plan for adoption by Government.
2. At present, responsibility for water supply and sanitation services is divided among several ministries and agencies. External lending agencies play a significant role in both urban and rural water supplies. A strong national policy direction and co-ordination is necessary to ensure equitable treatment of the whole population and to ensure optimum efficiency in utilization of resources.
3. The Ministry of Water and Mineral Development (MWMD), is primarily responsible for the sector and it executes its functions through Water Development Department (WDD) and a parastatal organization, the National Water and Sewerage Corporation (NWSC). The NWSC was created in response to the growing requirement that urban water systems be operated on a self sustaining basis. The NWSC is in charge of the seven water supply and sanitation systems in Kampala, Jinja, Mbale, Entebbe, Tororo, Masaka and Mbarara.
4. The service levels do not reflect the actual situation since most systems are inadequately operated and maintained and most of them are out of service. There is improvement on the side of operation and maintenance of the newly rehabilitated or constructed systems.
5. Financial resources have been inadequate and a policy is being proposed requiring the sector to finance its activities from service charges. Prior to implementation of this policy (and during the transition) the Government will be required to provide subsidies to the Sector. At present WDD is not collecting any significant revenues and also the NWSC revenues are inadequate for covering of recurrent costs.
6. In order to improve the service coverage and sector performance the Government has decided to concentrate on:
 - the development and strengthening of the sector organizations;
 - the gradual introduction of appropriate cost recovery procedures in both NWSC and WDD;

(ii)

- the acceleration of sector decentralization and promotion of community participation;
- adjustment of service levels and standard and related technologies to the issue of affordability; and
- standardization of equipment and promotion of local production.

The Government will act through Resistance Councils to promote community participation and to realise improved revenue collections from the consumers. Resistance Councils will be monitored by the higher level Councils.

7. The following organizational structure is proposed:

- (i) NWSC will be developed in stages to take over all urban water supply and sewerage schemes and in its areas of control to be responsible for all related sector activities;
- (ii) Water Development Department (WDD) will be responsible for all other urban and rural water supply and sewerage systems, and all related sector activities. WDD is also in charge of water resources development;
- (iii) A Water and Sanitation Unit is proposed to be established in the Ministry of Water and Mineral Development to enable it to better perform the functions of preparing sector policies, planning of investment programs and allocation of water resources; and
- (iv) Organizational arrangements for on-site sanitation will be subject to review under a proposed sanitation sector strategy study.

8. Sector development would proceed concurrent with project implementation. As the institutional capacity grows, corresponding increases are expected to take place in the investment levels. The following action plan, providing an integrated framework to sector development, has been proposed:

- (i) the preparation of an on-site sanitation sector strategy paper to outline related institutional arrangements and required coordination between low-cost water supply, on-site sanitation and health education;
- (ii) the preparation of an organizational and manpower development study for WDD with subsequent implementation of operational systems and procedures.

(iii)

① (iii) the preparation of a national rural water supply program to address:

- review of service level targets to be commensurate with institutional and investment capacities;
- review of project priorities and investment planning;
- establishment of delivery systems and methodologies in community promotions; and
- financial planning.

The program would serve as a base for the preparation of district projects for donor financing.

(iv) the preparation of a national urban water supply and sanitation program to address in addition to items stated under (iii):

- the transfer of schemes from WDD to NWSC as to be appropriately phased; and
- analysis of appropriate technologies for water and sanitation in view of required cost recovery;

(v) the preparation of a demonstration project for water supply and sanitation in rural growth centers to address:

- service levels, technologies and related affordability;
- delivery systems and approaches in community participation;
- procedures for an integrated approach;
- system developments and manpower requirement; and
- potential for cost recovery;

(vi) the preparation of a demonstration project for water supply, sanitation and health education in urban fringe areas to address:

- issues related to implementation and integration;
- community participation and cost recovery; and
- procedures for operation and maintenance.

*Dominic
financing*

(iv)

9. The above framework would be implemented under different arrangements as part of ongoing or proposed donors programs. For the strengthening of NWSC pertinent studies have already been undertaken and a sizable package of technical assistance has been provided. For monitoring progress a performance contract has also been concluded between NWSC and MWMD.

10. Even if NWSC and WDD are separate authorities, each one with distinct responsibilities, the overall sector development has to proceed in an integrated manner. The Water and Sanitation Unit is proposed to be established in the MWMD to ensure that this takes place.

UGANDA
WATER SUPPLY AND SANITATION SECTOR
DEVELOPMENT STRATEGY AND ACTION PLAN

I. INTRODUCTION

Background

1.01 The Government of the Republic of Uganda is committed to fulfilling the objectives of International Drinking Water Supply and Sanitation Decade. As a result, the Ministry of Water and Mineral Development embarked on a plan to study the water supply and sanitation sector which consists of three phases namely:

- (a) Preparation of a Sector Development Plan (Phase I);
- (b) Formulation of a Sector Development Strategy and Action Plan (Phase II);
- (c) Implementation of Policies and Recommendations (Phase III).

The Sector Development Plan was finished in May 1985, and it provides sufficient background material for the preparation of the Sector Development Strategy and Action Plan. The present report represents Phase II of the above-mentioned approach and concludes with an Action Plan.

Sector Objectives

1.02 The objectives aimed at by the Government of the Republic of Uganda in the sector development are to support national economic development by:-

- (i) Improving on the health and therefore the productivity of the population by providing safe drinking water at a reasonable walking distance, and affording adequate sanitation services for all.
- (ii) Maximising the productivity of commerce and industry by providing effective water supply and waste disposal services and encouraging the private sector to increase its productivity of required materials for providing sufficient water supply and sanitation systems (any constraints in this regard will be identified for analysis and appropriate action).
- (iii) Maximising the level of services of safe drinking water and reasonable sanitation facilities for the entire population.
- (iv) Increasing the efficiency of the sector investments and its financial self-sufficiency. This is to be done in consistency with government equity considerations.

- (v) Planning for the proper development and utilization of water resources, carrying out relevant studies as prerequisite for negotiations regarding the socio-economic development of Water Resources.

Sector Strategy

1.03 The Government of the Republic of Uganda identifies the strategy for the sector as follows, but not limited to:

- (i) The development of NWSC to take the responsibility for urban water supply and sanitation systems under conditions as to be prescribed.
- (ii) The strengthening of WDD to the level of being responsible for the development and operation of water supply and sanitation systems in all rural areas and urban areas not covered by NWSC. WDD also to be responsible for the development of water resources and shall remain as a technical advisory institution on all water matters.
- (iii) The promotion of community participation with the transfer of responsibility for simple schemes, such as maintenance of boreholes, handpump systems, gravity systems and protection of springs and wells in rural areas to the communities under the supervision of Resistance Councils, the smallest administrative units of Government.
- (iv) The development of the sector to the level where it can generate its own resources for operation, maintenance, replacement and to the extent possible, necessary investments through charges for its services. For urban water supplies and sanitation, cross subsidization between different areas may be applied. In rural areas, charges are to be minimised through community operation and maintenance and contributions in kind, with funds to be administered by the community, under the supervision of Resistance Councils.
- (v) The provision of basic needs at affordable costs to the public, and to try as much as possible to limit Government to subsidizing certain basic needs and initiating developments.
- (vi) Channelling of investment funds through the Ministry of Water and Mineral Development under conditions that reflect Government priorities.
- (vii) Placing adequate staff in the Water and Sanitation Unit in the Ministry of Water and Mineral Development to be responsible for policy preparation, over sector investment planning, and monitoring the situation in the sector and the progress of work.

- (viii) The rehabilitation and strengthening of hydrometric and hydrologic network with the establishment of computer based data processing, analysis, storage and retrieval system for surface water and groundwater.
- (ix) The assessment of water resources activities including data on quality and quantity of water available and water use.
- (x) Promotion of local production of necessary supplies and utilization and enhancement of local capacity to carry out all phases of the work.

II. INSTITUTIONAL ASPECTS

Responsibilities

2.01 The Ministry of Water and Mineral Development (MWMD) is primarily responsible for the water supply and sanitation sector and is headed by the Permanent Secretary.

The sector organisation comprises of two main entities:-

- (i) The Water Development Department (WDD)
- (ii) the National Water and Sewerage Corporation (NWSC)

In addition, two specific units, (PCUs) have been established to coordinate development projects financed by ADF and IDA.

2.02 There are other organisations involved in the sector as follows:

- (a) Ministry of Planning and Economic Development (MPED) is responsible for investment planning and aid coordination for water supply and sanitation programmes.
- (b) Ministry of Health (MOH) is responsible for rural sanitation and some water schemes and has been engaged in spring protection and construction of dug wells. It is also responsible for some of the hospital water supplies.
- (c) Ministry of Local Government (MOLG) is responsible for operation and maintenance of rural (non-piped) water supplies and sanitation, particularly in the necessary community mobilisation aspect of the sector.
- (d) Ministry of Environmental Protection (MOEP) is responsible for protection of water sources against pollution and misuse. It also liaises with Ministry of Health in water effluent quality control.
- (e) Ministry of Finance controls all the financed expenditure for water sector and is concerned with cost recovery and budget for any subsidy to help meet basic needs.
- (f) Ministry of Justice is responsible for all legal matters and for providing advice on legal questions.
- (g) Ministry of Women Development is a newly formed ministry (March 1988) and as such it has not had any involvement in the sector. However, it can be expected that this ministry could be a focal point for low-cost water supply and on-site sanitation delivery efforts.

2.03 The functioning of the sector relating to WDD and NWSC could be stated as follows:

- (i) NWSC was established to develop and operate all piped water supply and sanitation systems. To date, NWSC is operating the seven water supplies and sanitation systems, namely, Kampala, Jinja, Entebbe, Mbarara, Masaka, Mbale and Tororo.
- (ii) WDD is in charge of all other systems (whether rural or urban).
- (iii) Systems under the responsibility of NWSC must be operated on a self-sustaining basis with full recovery of recurrent costs. This objective is not being fulfilled because of inadequate revenue base which in turn has resulted in unsatisfactory operation.
- (iv) WDD is responsible for project planning, preparation and implementation for all schemes except for those under NWSC. However, the NWSC involvement in these aspects is very limited although subsequently it may be charged with the responsibility for operation and maintenance. This is an undesirable arrangement in view of the obvious advantages in having project planning, preparation and implementation and operation and maintenance consolidated under one authority.
- (v) The MWMD is in overall charge of water resources, water allocation, water use and sanitation with WDD providing technical advice. However, related matters need to be more firmly regulated.
- (vi) For improved performance of the sector matters such as motivation, career development, employment conditions and administrative support will have to be addressed. NWSC was made a parastatal to give it greater flexibility in these areas but related results have still to be shown.

Analysis of Existing Arrangements and Performance

2.04 Sector responsibilities are principally divided between the NWSC and the WDD, one being a parastatal and the other a department of a Ministry. The main weaknesses in the existing arrangements could be summarized as follows:

- lack of clearly defined sector policies and of medium and long term investment planning;
- divided responsibility for urban areas with overlapping and inadequate coordination;

- divided responsibility between project implementation and works operation;
- inadequate decentralization of various functions;
- development of projects without due consideration to appropriate service standards and affordability;
- inadequate staffing which is aggravated by the organizational arrangements; and
- inadequate cost recovery resulting in unsatisfactory standard of operation and maintenance;

Additionally the staff morale is low because of inadequate office and operational facilities and salaries that cannot sustain a living which has resulted in excessive absenteeism.

2.05 Some of the above shortcomings directly relate to sector policy and organizational matters while others are due to inherent managerial and operational inabilities. The approach to sector strengthening would thus be two-pronged:

- to create an appropriate institutional structure; and
- to development this structure for its intended functions.

2.06 Alternative organisational choices are many and varied, reflecting local conditions and government preferences. However, some basic conditions must be satisfied for the sector to be effective, and experience in many countries has shown that institutions must:

- (i) establish policies to enable a smooth functioning of the sector;
- (ii) establish organisational structures conducive to sound manpower development and utilization which delegate authority and responsibility for specific tasks to clearly defined functional units (there should be maximum decentralization consistent with manpower resources and there must be a well defined and capable referral level for monitoring and to step in when necessary);
- (iii) institute human resources development and personnel policies which attract and keep quality staff in the sector;
- (iv) promote community participation in both planning and operation and maintenance of water supply and sanitation projects and ensure establishment of adequate cost recovery procedures; and
- (v) operate the sector, to the extent possible, on a financially viable basis.

2.07 The following alternative organisational arrangements have been considered:

- (a) Amalgamate WDD with NWSC so as to form a single parastatal authority.
- (b) Amalgamate WDD with NWSC so as to form a single government department.
- (c) Develop the present sector organization along the following proposals:

Proposed for adoption.

- (i) NWSC to be made responsible for all sector activities related to urban water supply and sanitation activities and sewerage. This includes planning, project preparation and implementation, and works operation and maintenance. The phasing for such a development should be reviewed. This also assumes adequate cost recovery which is a prerequisite for satisfactory system operation;
- (ii) WDD to be made responsible for all sector activities related to rural water supply and sanitation as well as water resources monitoring and development. WDD through community involvement should also aim at financial viability;
- (iii) the creation of a Water and Sanitation Unit at the ministerial (MWMD) level to be made responsible for sector policies, overall investment planning and budget allocations and water resources allocation and licensing.
- (d) Revert to the pre-1972 arrangement whereby local authorities in each urban centre were responsible for water supplies. The WDD was then generally responsible for water and sanitation activities in all other areas of the country and this came under the Ministry of Works.

2.08 An analysis of the options stated above could be summarized as follows:

- (i) although the performance of NWSC has not been particularly satisfactory, it can be concluded that the framework of a parastatal organization is more conducive to efficient sector development than a ministerial department;
- (ii) urban water supply and sewerage can appropriately be organized under an authority and to be developed to attain financial self-sufficiency; and

- (iii) rural water supply would also aim at achieving financial self-sufficiency and could be incorporated under a parastatal organization. This may be considered as a long-term objective. For the time being a ministerial structure would be most feasible in view of the significant efforts that are to be made in community promotion and in the integration of sanitation and health education. An additional function would include water resources monitoring and development.

2.09 Based on the above analysis of potential alternatives, arrangements as outlined under para 2.07 (c) are proposed for implementation. This would imply an evolution of existing structures with the additional creation of a ministerial Water and Sanitation Unit.

Proposed Organization

2.10 It is recommended that the overall organisational structure should be as follows:

- (i) for MWMD:
 - Water and Sanitation Unit.
- (ii) for NWSC:
 - headquarters,
 - zonal or regional offices, and
 - branch offices for individual systems.
- (iii) for WDD:
 - headquarters,
 - regional and/or district offices, and
 - local units.

2.11 A summary of functions and responsibilities in the sector under proposed arrangements is given below. Any functional division of works between headquarters and regional, district or branch offices would be subject to a more detailed study taking inter alia the staffing situation into account. Decentralization will also be a gradual process and manpower strengthening with delegation of responsibilities are expected to take place in pace with organizational developments.

- (i) The Water and Sanitation Unit at the ministerial level will serve the sector to:
 - (a) review and make recommendations on sector legislation, rules, regulations and policies and to ensure their adherence;
 - (b) review and make recommendations on tariff proposals as prepared by NWSC and WDD;

- (c) provide policy and strategy coordination with other government agencies;
 - (d) review investment plans, project priorities and budget allocations;
 - (e) prepare policy formulation for water resources development and environmental protection; and
 - (f) review and recommend requests for water allocation for various use and recommend on issues concerning water pollution control.
- (ii) NWSC will, for urban water supply and sanitation, be responsible for:
- (a) policy development, subject to approval by the MWMD, and subsequent implementation;
 - (b) establishment of service levels and standards with objectives to be set on their achievements;
 - (c) investment planning and project prioritization;
 - (d) establishment of managerial, administrative, financial, accounting and operational systems and procedures;
 - (e) development of manpower resources with provision of adequate training;
 - (f) project preparation, implementation and construction supervision;
 - (g) operation and maintenance of pertinent water supply and sewerage systems;
 - (h) review with recommendations on tariff structure and levels to ensure financial viability;
 - (i) collection of revenues, paying of bills and maintaining accounts; and
 - (j) maintaining contacts with concerned urban authorities;
- (iii) WDD will, for urban water supply and sanitation (until their transfer to NWSC), rural water supply and water resources development, be responsible for:
- ↓
- (a) policy development, subject to approval by the MWMD, and subsequent implementation;
 - (b) investment planning and related prioritizations;

- (c) establishment of managerial, administrative, financial, accounting and operational systems and procedures;
- (d) development of manpower resources with provision of adequate training;
- (e) promotion of community involvement with assistance to be provided for community-based operation and maintenance including acceptance of financial responsibilities;
- (f) integration of water supply with sanitation and health education;
- (g) project preparation, implementation and construction supervision;
- (h) operation and maintenance of water supply schemes with pertinent support (spare parts, workshop facilities) to be provided to those taken over by the communities;
- (i) water resources assessment (including the development and maintenance of a hydrometric data gathering system); water resource development, plans for water use/re-use and environmental protection of water;
- (j) investigations of surface and groundwater hydrology as well as exploration and development activities; and
- (k) developing and implementing of financial and cost recovery systems.

2.12 For urban water supply and sanitation branch offices will be established for individual towns or groups of urban areas. For rural areas, the bulk of the activities will be undertaken at the district level. In order to ensure local involvement and participation, district and urban council committees will meet regularly with the branch and district offices of NWSC and WDD.

2.13 The criteria for transfer of an urban water supply and sanitation scheme to NWSC, will have to be developed but are to be based on factors such as level of operational standard and degree of cost recovery.

Sector Legislation

2.14 Legislation referring to the sector includes:

- Water Works Act;
- Mining Act;
- Public Health Act; and
- National Water and Sewerage Corporation Decree (No.34 of 1972).

2.15 Proposed organisational changes constitute a development of existing institutional structure and as such should not require any major legislative amendments. However, besides the establishment of the ministerial water and sanitation unit, Government is concerned about the fragmented nature of existing sector legislation and a review is recommended.

2.16 The review is proposed to be carried by a committee comprising senior WDD and NWSC staff supported by legal specialists to:

- review the compatibility of present legislation with proposed institutional and organizational development;
- assess the 1982 review and the applicability of its recommended amendments;
- review of possible legal implications in view of recommended financial and cost recovery policies; and
- based on conclusions reached, preparation of TOR for legal assistance in formulation of required legislative amendments, including aspects on environmental protection.

III. HUMAN RESOURCES DEVELOPMENT

3.01 Background

An analysis of the existing manpower situation as compared to the current establishment indicates that:

- (i) for professional and technical positions about 55% are filled in WDD and 85% in NWSC;
- (ii) for clerical and support staff positions about 50% are filled in WDD and 85% in NWSC; and
- (iii) the shortage is significant and is more serious in WDD than in NWSC.

3.02 An assessment has not been made of appropriate staff profiles or of productivity factors regarding number of staff in relation to people served. For WDD related issues will be addressed in the forthcoming organization and management study. The NWSC staffing situation is improving through the technical assistance provided under the current GTZ funding.

3.03 The staffing situation is most severe. The potential for local recruitment of professional and skilled employees is greatly constrained by the poor local salary and allowances in the public sector.

3.04 NWSC has an indicative training plan and under the ongoing IDA project provisions are made for the financing of a training assistant with the focus on training of operational and maintenance staff.

3.06 Approach

In connection with the proposed organisational development, a manpower resource assessment for the whole sector shall be undertaken. It should cover or take into account:

- the proposed development of WDD and NWSC, and creation of a Water and Sanitation Unit in MWMD;
- objectives to be established on improvements and increase in service coverages;
- projections on investments in urban and rural areas;
- identification of staffing requirements with proposals on how to satisfy the needs;
- the evaluation of required staff profile for NWSC;
- the assessment of the need for technical assistance; and
- the additional establishment of sector training facilities.

3.07 The Government emphasizes the need for manpower development, without which any efforts in improving the sector performance will be futile. It is also realised that manpower development is a long-term issue and can only succeed within the framework of sound sector policies. The human resource requirements will be addressed further in the proposed organization and management study of WDD, and will also be covered under other activities related to the preparation of a sanitation sector strategy paper and rural and urban water supply and sanitation programs.

IV. INVESTMENT PLANNING AND FINANCE

Existing Situation

4.01 Scarcity of funds for investments as well as recurrent costs has been and will continue to be a major impediment to the proper development of the water supply and sanitation sector. Investments during the last five years have amounted to about US\$69 million corresponding to an average of US\$14 million per year. The ratio of investments in urban to rural areas have been 65% - 35%. Of the total investments only 5% have been provided from Government resources and remaining 95% from bilateral and multilateral donors.

4.02 Actual data on operation and maintenance costs are extremely scarce. In practice revenues are raised in areas operated by NWSC and these only correspond to a smaller portion of actual recurrent costs. Because of the difficult economic situation sufficient funds have not been provided for operation and maintenance costs. This has obviously led to serious deterioration of existing systems, forcing the government to restrict its future water supply and sanitation investments largely to rehabilitation. A solution has to be sought to change this state of affairs.

Investment Planning

4.03 Investment planning since 1982/83 has been determined by the Rehabilitation Programme (RP) covering the years 1982/83 to 1986/87 which has been revised periodically. The RP provided US\$2,870 million for all sectors out of which some US\$807 (or 28%) has been spent by 1987. Corresponding figures for the water supply and sanitation sector were US\$148 million of which some US\$69 million (or 47%) was spent.

4.04 The criteria for selecting water supply and sanitation projects have been:

- works rehabilitation in preference to new systems;
- where new systems are considered, population concentration is a major factor;
- urban centres with administrative status and potential for industrial and commercial development;
- for disease control in areas where epidemics have occurred; and
- drought-prone areas.

4.05 The RP has been revised into a Rehabilitation and Development Plan (RDP) for the four year period 1987/88 - 1990/91. This is well in line with the National Resistance Movement (NRM) ten-point programme for recovery, which can be divided into three parts:

- (i) first priority projects for the restoration of productive capacity and infrastructure works;
- (ii) studies related to drought monitoring and hydrometric and hydrogeological surveys; and
- (iii) second priority activities.

4.06 An analysis of the RDP would indicate that:

- (i) some US\$ 56 million would be spent through June 1991 in the water supply and sanitation sector or about US\$ 14 million per year which equals previous annual investment levels;
- (ii) funds projected to be spent in urban and rural areas corresponds to approximately 90% and 10%, respectively (the concentration in urban areas is significant); and
- (iii) the financing for first priority projects seems to be almost secure. The overall financing gap would be limited to about US\$4 million (the Government contribution remains very minor).

4.07 Funding through UNICEF of US \$10 million has in addition to provisions made under the RDP been made available for rural water supply and sanitation in five districts in south-west of Uganda (a second phase will add 4 more districts at an estimated additional US\$4 million). Additional investments in rural areas are also proposed to be explored to include assistance provided by DANIDA in seven districts in south-east of Uganda. With steps proposed to be taken on improved organisation, staffing and cost recovery, annual investments in the range of US\$20-25 million would be feasible. It is also proposed to review the implementation schedules for ongoing works and possibly to accelerate their completion to take place before June 1991.

4.08 The Government is also negotiating with the World Bank (IDA) seeking support for the water and sanitation sector under the Uganda Infrastructure Project. Out of these proceeds, the water sector is expected to benefit as follows:

- (a) Expansion of the water and sewerage works for the 7 towns, under the NWSC, estimated to cost about US\$ 100 million;
- (b) Institutional strengthening of WDD estimated to cost US\$7 million and for NWSC estimated to cost US\$10 million; and

- (c) Water supply demonstration project in rural growth centers, and a low-cost water supply, sanitation and health education project in peri-urban areas combined earmarked for some US\$6 million.

Additional donors will have to be sought to provide financing for the Uganda Infrastructure Project, which is proposed to be managed by the existing Project Co-ordination Unit under the Ministry of Planning and Economic Development.

Investment Policies

4.09 The investment policies presently reflect the rehabilitation programme under which the following general priorities have been identified:

- operation and maintenance;
- rehabilitation and extensions;
- completion of ongoing projects; and
- new projects.

4.10 Revised targets will be set for service and coverage levels. The 1991 targets will reflect ongoing projects with later targets to reflect resource generation by the sector itself and its increased capacity to effectively operate and maintain its facilities.

4.11 The Government will elaborate further on the future investment plan to take into account, the efficient allocation of resources and the implementation of the Government sector strategy. This will include activities such as:

- (i) the specification of service targets that should be attained by the sector against specified dates;
- (ii) the emphasis on giving basic service to the greatest possible number of people as opposed to providing improved service to fewer people;
- (iii) the formulation of a policy for the sector to achieve financial self-sufficiency by a target date through charging users for the services rendered; till such a target date is achieved adequate Government funds will have to be secured;
- (iv) the development of a national rural water supply program (to be updated and refined annually) to provide a framework for rural water supply development;
- (v) the development of a national urban water supply and sanitation program to provide a framework for investments in urban areas;
- (vi) the restriction of government subsidies to projects or project components designed to satisfy basic needs;

- (vii) the implementation of investments in rural water schemes with the total involvement of the community, through Resistance Councils in order to create willingness and competence to maintain the proposed systems - the Resistance Councils shall ensure that rural tariffs (cash or kind) are sufficient to cover operation, maintenance and future replacement costs;
- (viii) the prioritisation of projects taking into account per capita cost or highest user contribution to investments; and
- (ix) the integration of water supply, sanitation and health education.

4.12 The implementation of proposed activities would assure investments satisfying efficiency and equity considerations. NWSC, WDD and the Water and Sanitation Unit should also design and implement a variety of policies including necessary administrative and personnel procedures.

V. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

5.01 There is an urgent need to rehabilitate and extend delivery systems for water supply and environmental sanitation services. In order to succeed in this effort and make it self-sustaining, means must be found to strengthen the relevant institutions, to improve performance and to involve individual communities and citizens.

5.02 In order to maximize benefits and minimize costs, the entire sector and each sub-sector (urban/rural, water/sanitation) should be developed within a clear framework and action plan. These will be regularly up-dated to keep pace with progress made in the field of water resources, technological and economic developments.

5.03 There is need to improve on the service conditions of the personnel working in the sector; otherwise, retaining and motivating them will prove to be difficult if not impossible.

Recommendations

5.04 The conclusions on the sector performance lead inevitably to certain recommendations. These are briefly listed below and under Chapter 6 further elaborated upon and integrated under an Action Plan:

- (i) A review of sector service objectives in light of existing economic constraints, affordability, and implementation capacities;
- (ii) An adoption of policies that ensure cost-recovery necessary for financial self-sufficiency of the sector, with government contribution clearly defined and limited to achieve specific equity/social targets. Until adequate cost recovery has been achieved, Government commitments are to be made for the coverage through budget allocations of recurrent costs;
- (iii) Development and strengthening of the sector organizations as follows:
 - NWSC to ultimately be responsible for all urban water supply and sanitation. NWSC should be managed on commercial basis under full cost recovery;
 - WDD should be responsible for rural water supply and water resources development. WDD should on an interim basis be responsible for the development of urban water supply and sanitation systems for their transfer to NWSC;

- a ministerial (MWMD) Water and Sanitation Unit should be established for overall sector policy formulation and water resources allocations;
- (iv) elaboration of investment policies and plans taking into account project priorities, design criteria, affordable technologies and potential financing sources;
- (v) development of operational and maintenance systems to ensure that existing, rehabilitated or new works will remain functioning and serve their purposes; and
- (vi) a review of existing sector legislation with recommendations to be made on amendments or the formulation of a new "Water Law".

VI. ACTION PLAN

Strategy

6.01 In order to implement the water supply and sanitation sector development strategy, an Action Plan has been formulated comprising:

- (i) identification of activities to be undertaken;
- (ii) composition of these activities under a specific framework;
and
- (iii) implementation of the framework;

Activities

6.02 Based on a review of existing sector situation and proposed sector development the following activities have been identified as required to be undertaken:

- (i) Sector Legislation:
 - review of existing laws;
 - recommendations on amendments;
- (ii) On-site Sanitation Sub-Sector:
 - analysis of present institutional arrangements;
 - recommendations to be made on future developments;
 - interfacing between water supply, sanitation and health education; and
 - development of sanitation programs.
- (iii) Water and Sanitation Unit:
 - identification of functions, duties and responsibilities;
 - organizational structures, staffing and staffing profiles.
- (iv) Investment Planning:
 - investment and cost recovery policies;
 - investment planning and project prioritisation;

- preparation of detailed investment plan.
- (v) Financial Analysis:
- analysis of existing financial situation;
 - updating of tariff studies with recommendations for tariff structures and levels;
 - financial analysis in the context of proposed investments;
 - assessment of recurrent costs that on a phasing out basis will be covered by Government budget allocations;
 - financial policies, taking the account of equity considerations;
- (vi) Sector Interrelationships:
- development of a program for phased transfer of urban water supply and sanitation systems from WDD to NWSC;
 - operational relationships between WDD/NWSC and Water and Sanitation Unit;
 - operational relationship between WDD/NWSC and MOH/MOLG and local authorities in the integration of water supply, sanitation and health education;
 - approaches to be established in the promotion of community participation;
 - steps to be taken for achieving sector decentralization;
- (vii) Strengthening of NWSC and WDD.
- development of organizational structures;
 - staffing and training;
 - development and implementation of managerial, administrative, financial, accounting, operational and works operation and maintenance systems and procedures.
- (viii) Technologies and Project Preparation:
- development of project planning procedures taking into account affordability as related to standards and technologies;

- introduction of appropriate technologies;
- development of local manufacturing.

Framework.

6.03 The above activities have been composed under the following framework:

- (a) Approach to "Sector Legislation" has been stated under paras. 2.15 and 2.16:
 - to cover activities under 6.02 (i);
- (b) Preparation of a Sanitation Sector Strategy Paper:
 - to cover activities under 6.02 (ii);
- (c) Preparation of an Organizational and Management Study for WDD:
 - to cover activities under 6.02 (iii), (vi) and (vii);

Proposed study will be followed up by an implementation phase;
- (d) Preparation of a National Rural Water Supply Program:
 - to cover activities under 6.02 (iv), (v), (vi) and (viii);
- (e) Preparation of a National Urban Water Supply and Sanitation Program:
 - to cover same activities as under (d) but for urban areas;
- (f) Preparation of a Water Supply and Sanitation Demonstration Project for Rural Growth Centers:
 - to cover activities (fully or partly) under 6.02 (ii), (v), (vi), (vii) and (viii); and
- (g) Preparation of a Water Supply and Sanitation Demonstration Project for Peri-Urban Areas:
 - to cover activities (fully or partly) under 6.02 (ii), (v), (vi) and (viii).

6.04 In addition to the above activities:

- NWSC is gradually being strengthened through provision of technical assistance (financed by GTZ); and
- specific steps are being taken on the development of local handpump manufacturing capacity.

Framework Implementation

6.05 The Framework will be implemented in conjunction with ongoing and proposed investment activities. Close cooperation would thus be established between WDD/NWSC and IDA, UNICEF, DANIDA, GTZ, KfW, EEC, and ADF which are the major donors in the sector. Donors' meeting(s) would also be arranged to keep the donors informed on current developments and also to solicit support.

6.06 The implementation of the framework is proposed as follows:

(i) Study on Sector Legislation:

- Terms of Reference prepared;
- implementation of study to be decided upon.

(ii) Sanitation Sector Strategy Paper:

- study undertaken by RWSG, Nairobi, during February 1989 - April 1989;
- financed under ongoing UNDP project (UGA/84/008);
- follow-up during 1990 (this might include strengthening of MOH and preparation of sanitation programs).

(iii) Preparation of an Organizational and Management Study for WDD:

- study undertaken by mid 1989;
- financed under ongoing UNDP project (UGA/84/008) supplemented by RWSG funding;
- start of implementation phase expected during 1990 (financing source for this phase to be identified).

(iv)

Preparation of a National Rural Water Supply Program:

- the program would supplement and extend the UNICEF activities and DANIDA's plan of operation. Financing to be secured from either of the two agencies;
- subsequent annual updating would be done in-house;
- Terms of Reference prepared, program would be prepared during 1989/90; and
- subsequent steps to be taken would include preparation of "standardized" district programs.

(v)

Preparation of a National Urban Water Supply and Sanitation Program:

- the program would be required for a better structured and coordinated lending activity in urban areas and financing is proposed to be solicited either under the potential IDA credit or through GTZ/KfW, however, no commitments made;
- subsequent annual updateings would be done in-house; and
- draft Terms of Reference is available, program expected to be prepared during 1990.

(vi)

Preparation of a Water Supply and Sanitation Demonstration Project for Rural Growth Centers;

- likely financial arrangements either under the potential IDA credit or by DANIDA as part of Uganda Infrastructure Project;
- Terms of Reference for consultancy services prepared;
- project proposal to be prepared 1989/90;
- project to be executed during 1990-1992;
- experiences being gained to be applied to other ongoing or future rural water programs.

(vii)

Preparation of a Water Supply, Sanitation and Health Education Demonstration Project for Peri-Urban Areas:

- to be financed under an IDA credit;
- project proposal covering Rubaga Division, Kampala, prepared by mid 1989 by RWSG;

- project to be executed during 1990-1993; and
- experience being gained to be applied to other similar urban settings in ongoing or future projects.

(viii) Handpump Manufacturing:

- DANIDA technical advisory assisted large-scale production of the U-2 handpump in progress.

6.07 The bulk of the activities under the framework are expected to take place during 1989-1993 but subsequent follow-up activities will be time consuming and a satisfactory functioning of the sector can only be achieved on long-term basis. However, under the framework the direction should be set for contributions to be provided by the donors active in the sector.