



THE REPUBLIC OF UGANDA



WATER RESOURCES POLICY

(DOC. 006)

MINISTRY OF NATURAL RESOURCES

DIRECTORATE OF WATER DEVELOPMENT

1995

Library
IRC International Water
and Sanitation Centre
Tel.: +31 70 30 689 80
Fax: +31 70 35 899 84

UGANDA WATER ACTION PLAN

WATER RESOURCES DEVELOPMENT AND MANAGEMENT

WATER RESOURCES POLICY

(DOC. 006)

MINISTRY OF NATURAL RESOURCES

DIRECTORATE OF WATER DEVELOPMENT

1995

LIBRARY IRC
PO Box 93190, 2509 AD THE HAGUE
Tel.: +31 70 30 689 80
Fax: +31 70 35 809 64

BARCODE: 14159
LO: 024 UG95

WATER RESOURCES POLICY

LIST OF CONTENTS

Abbreviations

1	INTRODUCTION	1.1
	1.1 Background	1.1
	1.2 Rationale	1.4
2	WATER RESOURCES POLICY	2.1
	2.1 Water Resources policy framework	2.1
	2.2 Guiding principles for water resources management	2.2
	2.3 Strategies for water resources management	2.5
3	AREAS FOR FURTHER POLICY DEVELOPMENT AND ACTIONS	3.1
	3.1 Further policy development needs	3.1
	3.2 Actions	3.2
APPENDIX 1.1	Uganda Water Action Plan Document List	
APPENDIX 2.1	Selected quotations from National Environmental Management Policy	
APPENDIX 3.1	Preliminary discussion draft of a water supply and sanitation policy	

Uganda Water Action Plan

Directorate of Water Development

ABBREVIATIONS

DWD	Directorate of Water Development
EIA	Environmental Impact Assessment
NEAP	National Environment Action Plan
NEMA	National Environment Management Authority
UNCED	United Nations Conference on Environment and Development
WAP	Water Action Plan
WPC	Water Policy Committee

1 INTRODUCTION

1.1 Background

1.1.1 Water Action Plan development

Project documents entitled "Water Action Plan for Water Resources Development and Management (WAP)", dated January 1993 and October 1993, were agreed between the Government of Uganda and the Government of Denmark (acting through the Ministry of Foreign Affairs -Danida).

The project documents describe two phases of a planning process aiming to develop a Water Action Plan for Uganda.

CONTENTS OF WAP PHASE I

- a rapid assessment of the water resources situation in the physical and management context
- a preliminary proposal for the establishment of an enabling environment for flexible water resources management with linkages between land and water resources, and including suggestions for management roles and functions at various levels, and suitable institutional structures
- a preliminary outline of a national water resources policy
- preparation of detailed project proposals for specific projects in the water resources sector

CONTENTS OF WAP PHASE II	
-	a draft national water resources policy accompanied by target descriptions and brief guidelines
-	an outline proposal for appropriate local water resources management levels based on district studies
-	an outline proposal for management procedures providing the administrative machinery at national and district levels with guidelines for sustainable water resources management
-	a design of a groundwater database and a plan/guidelines for interaction between the various existing and future computerized systems relevant to water resources management
-	support to the preparation of regulations supporting the Water Resource Statute regarding surface water and groundwater abstraction as well as wastewater discharge
-	an outline of training and capacity building activities supporting the appropriate sectors in water resources management
-	a project catalogue with proposed priorities for projects identified during the Water Action Plan Phases I & II
-	a draft Water Action Plan synthesizing the activities carried out in a coherent presentation
-	implementation and monitoring guidelines for the subsequent Water Action Plan implementation
-	a National Seminar for discussion of the draft Water Action Plan by concerned parties

The implementing agency in Uganda is the Directorate of Water Development (DWD) within the Ministry of Natural Resources. A team of Danish consultants has been engaged by Danida to work within the DWD in the execution of the project. The consultant team has been composed of staff members from the VKI Water Quality Institute (leading partner), COWIconsult, Nordic Consulting Group and the Danish Hydraulic Institute.

1.1.2 Guiding principles for the Water Action Plan

The Uganda Water Action Plan is intended to provide a framework for the protection and development of Uganda's water resources. It will provide a flexible and dynamic framework for development and management of the water resources of the country, rather than a traditional prescriptive master plan.

The Water Action Plan deals with aspects of integrated water resources development and management, recognizing the guiding principles emerging from discussions at international conferences, consultations and workshops in Copenhagen (November 1991), Dublin (January 1992) and Rio (UN Conference on Environment and Development, UNCED, June 1992).

GUIDING PRINCIPLES FOR THE WATER ACTION PLAN
<ul style="list-style-type: none">- fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment- land and water resources should be managed at the lowest appropriate levels- the government has an essential role as an enabler in a participatory, demand-driven approach to development- water should be considered as a social and economic good, with a value reflecting its most valuable potential use- water and land use management should be integrated- women play a central part in the provision, management and safeguarding of water- the private sector has an important role in water management

1.1.3 Documentation

During the background studies and drafting of the Water Action Plan a number of working documents have been prepared in draft, and comments to these have been obtained from various relevant parties. In concert with the developments in the Water Action Plan process, parts of these documents have become obsolete after having served their purpose of raising points for discussion and explaining status and contents of the work.

The experience and consensus obtained from those drafts have thus been carried over into a number final documents. These are also drawing heavily on excerpts from the working papers and the draft reports from WAP Phase I. The resulting list of final documents is given in Appendix 1.1. The set of documents constituting the core of the Water Action Plan are nos. 005 to 014.

1.1.4 Water resources policy document

The present document (WAP Doc. 006) proposes a National Water Policy within the framework of the National Environment Management Policy prepared under the National Environment Action Plan (NEAP). Chapter 2 points out some important policy statements from the Draft Constitution and from the National Environment Management Policy and outlines the guiding principles for the National Water Resources Policy. Chapter 3 identifies areas for further policy and strategy development as well as the actions to be undertaken. Appendix 3.1 gives a first discussion draft of a water supply and sanitation policy structure.

1.2 Rationale

1.2.1 Main water resources problems

Although Uganda is usually considered as being well endowed with water resources their seasonal and spatial variability causes specific problems and the country encompasses both humid and semi-arid areas. There are not only differences between distinct wet and dry years, but there are also considerable variations in the timing of the onset of seasons - and in the amount of rainfall and streamflow.

Further, one finds a degradation of the water quality caused both by natural and human factors. The trend in water quality of Lake Victoria is an example of such deterioration caused both by natural and human factors. Among the natural factors are the water hyacinth causing for instance low oxygen levels under the vegetation cover creating unsuitable conditions for fish spawning. Among the human factors is for instance the wastewater discharge into Murchison Bay causing an overload with nutrients resulting in excessive algae growth and increased spreading of water hyacinths.

Human activities have an increasing impact on the availability and conservation of water. Increasing population pressure leads to deforestation and intensive cultivation of the land. Changes in vegetation and in cultivation practices affect the hydrology and the water balance and may lead to increased flood and drought problems, as well as land degradation, soil erosion and siltation. Soil erosion is found for example in the intensively cultivated hill slopes of Kabale District where ensuing siltation is creating problems for the water supply to Kabale town.

Potential conflicts is developing between upstream and downstream users. Locally, upstream riparians may use the water in ways making for instance the water quality unsuitable for the downstream user. Examples can be found where sewage is discharged upstream of points where water for human consumption is collected and used untreated. In the context of the Nile Basin, Lake Victoria and the River Nile are finite shared water resources and the projected demands of the riparian nations may well exceed the resource.

1.2.2 The central role of water resources in development

The water resources of Uganda play a very important role in the country's socio-economic development. The water supply sector is under expansion and small scale irrigation is being promoted and may in the future be of increased importance. The power supply of Uganda is almost totally dependent on hydropower. Sewerage and sanitation service needs increase in step with improvements in water supplies and have important health implications. Fishing in the lakes is a major component of the country's economy and fish ponds on the rivers and streams are fast increasing in importance and numbers. Tourism is one of the designated growth areas and is dependent on the natural beauty and quality of the environment.

1.2.3 The need for a national water resources policy

Considering the central role of water in the socio-economic development of Uganda and the extent of water resources problems there is a clear need for a framework for water resources management. Through proper water management, priorities can be established and optimal use of the water resources planned. The framework will comprise among others, a national water resources policy, water statutes, regulations, guidelines and standards supporting the water statutes as well as management guidelines and procedures.

Policy development efforts within the water sector have mainly taken place within water supply and sanitation. However, the recent National Environment Management Policy, January 1994, outlines a Water Resources Conservation and Management policy. Extending this policy, further policy developments are made with the guiding principles emerging from the Copenhagen-Dublin-Rio process (ref. Sub-section 1.1.2) as background.

2 WATER RESOURCES POLICY

2.1 Water resources policy framework

A central natural resources policy statement is made in the Draft Constitution.

ARTICLE 24
"The State shall control important natural resources, including land, water, minerals, oil and forests on behalf of the people; and those resources shall be managed and utilized for the development and welfare of the people of Uganda"

The implications of this statement is that the State maintains the ultimate control of the natural resources. This does not mean, however, that the State cannot delegate management responsibilities to lower levels of Government.

A key natural resources management policy can also be drawn from the Draft Constitution.

ARTICLE 36, CLAUSE 5
"The utilization of the natural resources of Uganda shall be managed in such a way to meet the development and environmental needs of present and future generations of Ugandans"

This implies a balanced approach to development. The utilization of the natural resources for development will almost always have certain negative environmental impacts. These impacts have then to be balanced against the benefits of the development and crucial decisions on the trade-off between development and environmental impacts have to be made.

The National Environment Management Policy elaborates further on this overall policy goal.

Overall National Environment Management Policy Goal
"To ensure a sustainable social and economic development which maintains or enhances environmental quality and resource productivity on a long-term basis that meets the needs of the present generations without compromising the ability of future generations to meet their own needs."

The Draft Constitution for the Republic of Uganda includes important and basic statements of overall policies within water resources management.

ARTICLE 9, CLAUSE 2
"The state shall take all possible measures to: (a) promote a good water management system at all levels; (b) prevent or minimize damage and destruction to water resources resulting from pollution or other causes; and (c) promote public awareness of the need to manage water resources in a balanced and sustainable manner, for present and future generations."

Likewise the National Environment Management Policy also include a key policy statement on water resource conservation and management.

WATER RESOURCES POLICY OBJECTIVE
"to sustainably manage and develop the water resources in a coordinated and integrated manner so as to secure/provide water of an acceptable quality for all social and economic needs"

Further, the National Environment Management Policy states a number of more specific policy objectives which have relevance to water resources management. Those of highest relevance are selected and quoted in Appendix 2.1 together with the rationale. The linkage to the water resources management is added in brief outline in capitals in the rationale column.

It is within the framework of these overall statements that the guiding principles and strategies for the water resources policy are developed in the following.

2.2 Guiding principles for water resources management

The guiding principles adopted for water resources management are those derived from the Copenhagen-Dublin-Rio process and quoted in Sub-section 1.1.2. These principles, which ave been agreed by all nations in Rio, and which are in harmony with the National Environment Management Policy, are briefly commented upon below.

Principle 1

"FRESH WATER IS A FINITE AND VULNERABLE RESOURCE, ESSENTIAL TO SUSTAIN LIFE, DEVELOPMENT AND THE ENVIRONMENT"

Since water sustains all forms of life, effective management of water resources demands a holistic approach, linking social and economic development with protection of natural

ecosystems. Effective management links land and water uses across the whole of a catchment area or groundwater aquifer.

Principle 2

"LAND AND WATER RESOURCES SHOULD BE MANAGED AT THE LOWEST APPROPRIATE LEVEL"

Centralized, sectoral and too narrow approaches to water resources development and management have often proved insufficient to address local water management problems. The most appropriate level of water resources management may range from the household level to the level of international river basin committees, depending on the nature of the problem related to the specific water resource. The important point is that decisions or actions concerning water resources management should be taken by those affected i.e. at the lowest appropriate level, and that higher levels primarily should act in such a way as to enable lower levels to carry out decentralized and integrated management.

Principle 3

"THE GOVERNMENT HAS AN ESSENTIAL ROLE AS AN ENABLER IN A PARTICIPATORY, DEMAND-DRIVEN APPROACH TO DEVELOPMENT"

The participatory approach involves raising awareness of the importance of integrated water resources development among policy-makers and the general public. It means that decisions are taken democratically with full public consultation and involvement of users in the planning and implementation of water projects. The enabling role of the Government means that prescriptive, central approaches to the developments within the water sector are replaced by the creation of a framework within which the participatory, demand-driven development can take place.

Principle 4

"WATER SHOULD BE CONSIDERED AS A SOCIAL AND ECONOMIC GOOD, WITH A VALUE REFLECTING ITS MOST VALUABLE POTENTIAL USE"

It is vital first to recognize the basic right of all human beings to have access to clean water and sanitation at an affordable price. However, past failure to recognize the economic value of water has led to wasteful and environmentally damaging uses of the resource. Managing water as an economic good is an important way of achieving efficient and equitable use, and of encouraging conservation and protection of water resources.

Principle 5**"WATER AND LAND USE MANAGEMENT SHOULD BE INTEGRATED"**

Water resources and land use (ecosystems) have strong linkages and the land use has significant impact on the temporal and spatial occurrence of water resources. Although the functional relationships are difficult to establish and hydrological effects can only be assessed in the long term, the fundamental role of ecosystems in regulating water quality and quantity cannot be overlooked and planning of water development projects should take into account the linkages and should be implemented in conjunction with plans for land use and land management.

Principle 6**"WOMEN PLAY A CENTRAL PART IN THE PROVISION, MANAGEMENT AND SAFEGUARDING OF WATER"**

The pivotal role of women as providers and users of domestic water and guardians of the living environment has seldom been reflected in institutional arrangements for the development and management of water resources. Acceptance and implementation of this principle require positive policies to address women's specific needs and to equip and empower women to participate at all levels in water resources programmes, including decision-making and implementation, in ways defined by them.

Principle 7**"THE PRIVATE SECTOR HAS AN IMPORTANT ROLE IN WATER MANAGEMENT"**

Whereas the public sector is providing the framework for water management it is the private resource managers at all levels that collectively have a significant impact on the water resources. Their use of the water resources has to be based on an awareness of sound management principles and conservation concerns. Thus, the process of developing the perceptions of water management within the private sector is a prerequisite to effective overall management.

These seven principles can be grouped into three major classes according to their contents.

- Enabling environment.
Principle no. 3 - Government as an enabler

- Institutional arrangements.
Principles nos. 2,5,6 and 7 - Management at lowest appropriate level - Integrated water and land use - Womens central role - Private sector role
- Planning and prioritization.
Principles nos. 1 and 4 - Water as a finite and vulnerable resource - Water as an economic good

2.3 Strategies for Water Resources Management

2.3.1 Enabling environment

The creation of an enabling environment (Guiding Principle 3) for sustainable water resources management will be based on the following strategies.

STRATEGIES FOR AN ENABLING ENVIRONMENT FOR WATER RESOURCES MANAGEMENT	
Government's enabling role	Government agencies will move towards roles as enablers and regulators (incl. monitoring and enforcement) rather than being implementing agencies for water resources activities with direct benefits in limited areas.
Policy and legislation	The legislation, notably the Water Resources Statute with associated operational regulations will safeguard the adherence to the National Water Resources Policy.
Regulations and enforcement	Regulatory control will only be introduced in response to a clear need. Limits in regulations and their application shall be determined such that the cost of administration and enforcement is balanced against the potential benefit. The degree of regulatory control shall be kept at levels consistent with enforcement capacities. Regulatory means shall be combined with economic incentives to influence the behaviour of organizations and individuals in relation to conservation and sound management of water resources.
Guidelines and tools	Guidelines and tools for efficient water resources management will be developed and provided to the appropriate institutions and communities. Further development of guidelines and tools will take place in step with the dynamics of the water resources management situation. Water resources monitoring and information management will be undertaken to provide the necessary basis for management decisions, as well as for awareness building and public participation in water resources management activities.
National Water Action Plan	The National Water Action Plan will as a continuous process provide an appropriate framework for water resources development and management: directing and coordinating preparation of policies, laws, regulations, guidelines and standards, guiding institutional development and training, providing a framework for cross-sectoral coordination and for prioritization of water resources development activities.

2.3.2 Institutional arrangements

The institutional arrangements (Guiding Principles 2,5,6 and 7) complementing the enabling environment are based on the following strategies.

STRATEGIES FOR INSTITUTIONAL ARRANGEMENTS FOR WATER RESOURCES MANAGEMENT	
Cross-sectoral mechanisms	<p>A Water Policy Committee will provide the mechanism for cross-sectoral policy decisions and cooperation and coordination at the national level also dealing with policy development in relation to the shared water resources in the Nile Basin.</p> <p>The Water Policy Committee (WPC) will work in close coordination with other policy making bodies including the National Environment Management Authority (NEMA) and Ministry of Finance and Economic Planning.</p> <p>A secretariat for the Water Policy Committee will be established within the Directorate of Water Development.</p> <p>Mechanisms will be established at relevant administrative levels to ensure cross-sectoral planning and management of water resources.</p>
Integrated institutional approach to project development	<p>An integrated approach by concerned government agencies and non-government organizations will be promoted for the implementation of water conservation and protection projects in catchment areas to control soil erosion, siltation and maintain productive soil and water environments.</p> <p>An integrated approach to extension service will be promoted in order to disseminate consistent cross-sectoral information of importance for water resources management.</p>
Administrative levels	<p>Water resources management functions will be delegated to the lowest appropriate administrative levels based as far as possible on the existing district and Resistance Council structures, but also considering the boundaries of the natural drainage basins.</p> <p>River basin planning will be considered at the broad scale but river basin authorities will only be established in response to clearly identified needs.</p>
Private sector	<p>Private sector involvement in water resources management will be promoted.</p> <p>Participation of women in the water resources management at all levels will be enhanced.</p>
Capacity development	<p>Capacity at national and district levels to carry out water resources planning and prioritization will be developed.</p> <p>Capacity to plan and initiate soil and water conservation measures will be developed.</p> <p>Capacity at national and district levels to monitor water resources use and the related impacts and to enforce regulations will be developed.</p> <p>Local capacity for community management of water resources, in particular in relation to sanitation and contamination of water sources, will be developed as well as awareness of water quality impacts on human health.</p>

2.3.3 Planning and prioritization

The planning and prioritization (Guiding Principles 1 and 4) to be carried out within the framework of the enabling environment and the institutional arrangements outlined above is based on the following strategies.

STRATEGIES FOR PLANNING AND PRIORITIZATION WITHIN WATER RESOURCES MANAGEMENT	
Priorities and allocation	<p>The first priority in water resources allocation will be the provision of water in adequate quantity and quality to meet domestic demands.</p> <p>Allocation of water to meet irrigation, livestock, industrial and other demands will be done considering the economic, social and environmental value of water.</p> <p>Allocation of water will be kept at the minimum requirements in order to avoid wastage.</p> <p>Planning of water use will be based on the sustainable yield of the resource.</p>
Water quality management	<p>Water quality management will be based on the principle of minimizing the discharge of harmful pollutants to the environment and on the specification of appropriate water quality and effluent discharge criteria.</p> <p>Water quality management will take into account the linkages to land use management</p>
Integrated planning and coordination	<p>Water resources management will be coordinated between districts within the same watersheds.</p> <p>Soil and water conservation measures, and agricultural and forestry practices, will be considered an integral part of water resources planning, source selection and protection and all land users will be made aware of the importance of ensuring proper soil and water protection on their land.</p>
Environmental Impact Assessment	<p>Major water resources conservation or development projects will be subjected to considerations of the trade-off between economic and social value and environmental cost based on an Environmental Impact Assessment (EIA) process as given in the National environmental Action Plan.</p>
Economics, fees and charges	<p>Recognizing water as an economic good, not only direct costs, but also opportunity costs and environmental costs will be considered as appropriate in establishing project priorities.</p> <p>Tariff systems, fees and charges will be designed to provide incentives for water conservation and minimum wastage.</p> <p>Adopting the polluter pays principle, fees and penalties will be assessed and levied on the volume, chemical and biological composition of the discharge encouraging pollution reduction at the source.</p>
Regional cooperation	<p>Allocation of water for use within Uganda will take into account international obligations.</p> <p>Regional cooperation in the development, management and equitable utilization of shared water resources will be promoted.</p>
Wetlands	<p>The important linkages between wetlands, surface water regime and water quality will require integration of planning of wetland use with water resources planning and prioritization.</p>

3 AREAS FOR FURTHER POLICY DEVELOPMENT AND ACTIONS

3.1 Further policy development needs

3.1.1 International water resources policy

Uganda is by virtue of her location both a lower and upper riparian in the Nile Basin. Ugandan interests lies within securing her equitable share of the water resources of this basin. Further, it is in Uganda's interest to secure that the water bodies within the country boundaries do maintain a quality that is in harmony with the present and future use of those water bodies. Uganda is presently not having a stated policy on how her interests are best served, and by which means such a policy should be pursued. Certain practices and participation in international basin-wide bodies of cooperation, like for instance TECCONILE, forms an informal policy.

There is obviously a need to clarify Uganda's international policy objectives, obligations and requirements for an equitable share of the water resources of the Nile Basin and state the results in a document for discussion, Cabinet approval and later use during international cooperation.

3.1.2 Policy development in water resources related sectors

Water resources management interacts with activities within several sectors as well as with a number of cross-sectoral activities. This interaction can take place as impacts from activities within the particular sector. Agriculture, for instance, will have an impact on water resources, through cultivation practices and use of agrochemicals. The interaction can also take place through water use requirements of a particular sector. An example of this is the requirement for water for irrigation purposes from the agricultural sector.

Thus, the authority responsible for water resources management (DWD) has a vested interest in that the activities of the interacting sectors are undertaken in a way consistent with sound water resources management. In order to serve such interest there is a need to support the policy development in water resources related sectors and participate in working groups developing such policies.

Presently, policy development within key water resources related sectors has not reached an advanced state and a good possibility to influence policy development exists. The most prominent sectors would be among others, agriculture, forestry, fishery and industry. Wetlands should be given the same status as a separate sector.

3.1.3 Water supply and sanitation policy

Water supply and sanitation has a special status within water resources related sectors as it comes under DWD's own responsibility. Furthermore, as stated in the National Water Resources Policy, the very first priority in water resources allocation is provision of water to meet domestic demands. Obviously, this situation makes water supply and sanitation an immediate area for policy development.

In the present situation there exist several documents where water supply and sanitation policies, strategies and standards have been outlined separately for sub-areas within water supply and sanitation. There is no single consistent and politically approved policy document on water supply and sanitation.

A first attempt to collate and summarize existing statements into a coherent water supply and sanitation policy has been made by DWD during the Water Action Plan working period and the result is given as Appendix 3.1. The document should be seen as a preliminary draft for discussion and a process of further development and comprehensive consultations will have to follow, before the result can be given an official status.

3.2 Actions

Based on the above the following actions are included in the Water Action Plan:

- development of an International Water Resources Policy
- support to policy development in water resources related sectors
- finalization of the water supply and sanitation policy

A closer description of these actions is given in Annex 19, Projects and Actions.

APPENDIX 1.1

WATER ACTION PLAN DOCUMENTS

UGANDA WATER ACTION PLAN (WAP)		
DOCUMENT	TITLE	DATE
001	WATER ACTION PLAN PHASE I - PROJECT DOCUMENT Description of the background and requirements to the work in WAP Phase I including budget	Jan 1993
002	REHABILITATION OF WATER RESOURCES MONITORING AND ASSESSMENT SERVICES IN UGANDA - PROJECT IDENTIFICATION REPORT Background and proposal for a water resources monitoring project including budget.	Feb 1994
003	REGIONAL WATER QUALITY MANAGEMENT IN THE UPPER NILE BASIN - PROJECT IDENTIFICATION REPORT Background and proposal for a water quality management project including budget.	Feb 1994
004	WATER ACTION PLAN PHASE II - PROJECT DOCUMENT Description of the background and requirements to the work in WAP Phase II including budget.	Oct 1993
005	WATER ACTION PLAN - MAIN REPORT Synthesis of the key points of the Water Action Plan comprising the water resources management framework, the action programme and guidance for the implementation and monitoring of the plan.	Jul 1994
006	WATER RESOURCES POLICY Policy document defining a water resources policy with associated management strategies. Outline of areas for further policy development and actions. Preliminary discussion draft of a water supply and sanitation policy.	Jul 1994
007	RAPID WATER RESOURCES ASSESSMENT An assessment of the surface water and groundwater resources occurrence in time and place and a tentative estimate of the water requirements and water resources development trends.	Jul 1994
008	INSTITUTIONAL AND MANAGEMENT ASPECTS An assessment of water resources management functions, structures and tools. Proposals for a future management strategy and corresponding capacity building.	Jul 1994
009	INTERNATIONAL ASPECTS An assessment of the international aspects and implications of Uganda's position in the Upper Nile Basin in relation to water resources	Jul 1994
010	ANNEX REPORT - VOLUME 1 - DISTRICT STUDIES Collation of district studies for Arua, Mbale, Mbarara, Moroto, Mukono and special studies for Hoima, Kabale and Tororo.	Jul 1994
011	ANNEX REPORT - VOLUME 2 - GROUNDWATER DATABASE Groundwater database development description, specification and manual.	Jul 1994
012	ANNEX REPORT - VOLUME 3 - MANAGEMENT ASPECTS Background for preparation of regulations supporting the Water Resource Statute, guidelines for district water resources management and management procedures for issuing of permits	Jul 1994
013	ANNEX REPORT - VOLUME 4 - PROJECTS AND ACTIONS Description of water resources development plans and projects giving guidelines for prioritization, impact assessments, updating and coordination. Catalogue of water resources related projects and actions.	Jul 1994
014	WATER ACTION PLAN - EXECUTIVE SUMMARY A concise short version of the set of strategies, actions and guidelines constituting the Water Action Plan also giving a key to the documentation	Jul 1994

APPENDIX 2.1

SELECTED QUOTATIONS FROM THE NATIONAL ENVIRONMENTAL

MANAGEMENT POLICY

APPENDIX 2.1

SELECTED QUOTATIONS FROM THE NATIONAL ENVIRONMENT MANAGEMENT POLICY

The linkage to the water resources management is added in brief outline in capitals in the rationale column.

POLICY OBJECTIVE	RATIONALE
<p>LAND AND RESOURCE TENURE "to promote improved land stewardship by rural and urban land users by better defining and strengthening land and resource tenure rights."</p>	<p>"The land tenure system in the country involves a mixture of customary tenure, private mailo land, freehold and leasehold. This system fails to provide security of tenure needed for sustainable socio-economic development."</p> <p>LAND TENURE MAY ADVERSELY AFFECT OWNERSHIP OF AND ACCESS TO WATER SOURCES.</p>
<p>LAND USE POLICY AND PLANNING "to provide a coordinated, national approach to sustainable land use and planning; and to prepare national and local land-use plans to help guide land-use decisions in an environmentally sound, economically sustainable and socially acceptable way."</p>	<p>"Given the high rate of population growth which is exerting increasing pressure on land, rational land-use planning is essential for achieving sustainable socio-economic development. At present, there is no comprehensive national land-use policy and in its absence, inappropriate land-use activities have led to serious environmental degradation."</p> <p>LAND-USE PLANNING INVOLVING DESIGNATION OF PROTECTED CATCHMENTS, PROTECTION ZONES ALONG WATER COURSES AND LOCATION OF POLLUTING PRODUCTION FACILITIES IS IMPORTANT FOR WATER RESOURCES MANAGEMENT.</p>
<p>WETLANDS CONSERVATION AND MANAGEMENT "to promote the conservation of wetlands to sustain their ecological and socio-economic functions for the present and future well-being of the people."</p>	<p>"The importance of wetlands arises from the fact that they provide socio-economic and ecological values and functions. However, wetlands are currently threatened with degradation as a result of being drained mainly for agricultural production, brickmaking and industrial expansion."</p> <p>WETLANDS HAVE AN IMPORTANT INFLUENCE ON THE HYDROLOGICAL REGIME OF THE STREAMS AND RIVERS THEY ENCOMPASS. THE ECONOMIC POTENTIAL AND ENVIRONMENTAL VALUE OF WETLANDS NEED TO BE CONSIDERED AS AN INTEGRAL PART OF WATER RESOURCES MANAGEMENT.</p>

POLICY OBJECTIVE	RATIONALE
<p>ENVIRONMENTAL ECONOMICS AND MACRO-ECONOMIC POLICY "to integrate environmental costs and benefits into economic planning and development at all levels of government in order to reflect the true costs and benefits of development." "to incorporate the cost of producing or maintaining natural resources into the costs incurred by (and benefits derived from) resource users through use of appropriate management mechanisms such as leases, management contracts, users fees, concession agreements, and similar pricing mechanisms." "to mobilize increased private sector resources to achieve environmental conservation and management objectives." "To ensure that individuals, groups, businesses and other economic entities have appropriate incentives and disincentives with regard to sustainable resource use and environmental protection."</p>	<p>"Direct and indirect economic measures have potential effects on environmental resource use. Unfortunately for Uganda, the effects of indirect and direct economic measures on the environment are not considered and integrated in the national socio-economic development planning process." THE WATER ACTION PLAN GUIDING PRINCIPLE OF "WATER AS A SOCIAL AND ECONOMIC GOOD" SUPPORTS THE APPLICATION OF DIRECT AND INDIRECT ECONOMIC MEASURES IN WATER RESOURCE PLANNING AND USE, FOR INSTANCE THROUGH THE ESTIMATION OF OPPORTUNITY COSTS AND ENVIRONMENTAL COSTS.</p>
<p>ENVIRONMENTAL IMPACT ASSESSMENT "to provide a system of environmental impact assessment (EIA) and environmental monitoring so that adverse environmental impacts can be foreseen, eliminated or mitigated."</p>	<p>"Development activities and land-use practices have impacts on the environment and therefore their assessment and evaluation is essential. Although EIA is not an entirely new thing in Uganda, its use has not yet been fully understood and appreciated by policy makers and resource users. The low cost of preventing environmental damage compared to the high cost of repairing such damage is a sound economic justification for instituting and carrying out EIAs." LARGER WATER RESOURCES DEVELOPMENT PROJECTS WILL REQUIRE AN IMPACT ASSESSMENT WHICH WILL ENCOMPASS AMONG OTHERS, THE GENERAL REQUIREMENTS OF AN EIA.</p>
<p>CONTROL OF POLLUTION AND MANAGEMENT OF DOMESTIC AND INDUSTRIAL WASTE AND HAZARDOUS MATERIALS "to control the pollution of water, land and air from domestic, industrial and other emissions and discharges, and promote environmentally sound management of wastes and hazardous materials."</p>	<p>"Economic activities of industrial production, mining agriculture, health, transport and education services, among others, are the main sources of pollution in the country. Environmental standards and laws on pollution management are still inadequate and/or non-existent in some areas. In addition, Uganda, like most other developing countries, does not yet have in place adequate waste disposal facilities." WATER POLLUTION AND ITS CONTROL AND PREVENTION IS CRUCIAL TO THE USE OF WATER RESOURCES FOR DOMESTIC INDUSTRIAL AND OTHER PURPOSES.</p>
<p>CLIMATE "to monitor the climate and atmosphere of the country in order to better guide land-use and economic development decisions, and better manage air pollution and greenhouse gas emissions."</p>	<p>"Climate is a vital natural resource necessary for socio-economic development. The influence of climatic variability on agricultural production, among others, cannot be over-emphasized. Although droughts, floods and local changes in climate are continuously being experienced in many parts of the country, there is no comprehensive mechanism/strategy to contain their effects." KNOWLEDGE OF METEOROLOGICAL AND CLIMATIC PARAMETERS ARE ESSENTIAL FOR WATER RESOURCES PROJECT PLANNING AND DEVELOPMENT.</p>

POLICY OBJECTIVE	RATIONALE
<p>AGRICULTURE AND FARMING SYSTEMS "to promote farming systems and land-use practices that conserve and enhance land productivity in an environmentally sustainable way."</p>	<p>"Agriculture is the back-bone of the national economy and domestic food supply. The high population growth rate, poor agricultural practices and past economic and social instability have put severe stress on this sector and consequently on the environment."</p> <p>INAPPROPRIATE AGRICULTURAL PRACTICES MAY LEAD TO SOIL EROSION AND ENSUING SILTATION IN CRITICAL AREAS, AND FERTILIZERS, PESTICIDES AND OTHER AGROCHEMICALS MAY BE A CAUSE OF POLLUTION OF SURFACE AND GROUNDWATER</p>
<p>FOREST CONSERVATION AND MANAGEMENT "to manage sustainably forest resources in protected areas, public and private land; and to promote increased forest production by the private sector and communities"</p>	<p>"Although Uganda is endowed with a rich diversity of forest resources, these resources are highly threatened by over-exploitation and inadequate implementation of policies and laws."</p> <p>FOREST COVER HAS IMPORTANT IMPLICATIONS FOR THE HYDROLOGICAL REGIME AND HENCE TO WATER RESOURCES MANAGEMENT.</p>
<p>LIVESTOCK AND RANGELAND MANAGEMENT "to manage the nation's rangeland resources within the capacity of the land to support both livestock and wildlife."</p>	<p>"Although Livestock and Rangeland sectors play an important role in national socio-economic development, overgrazing, poor stocking methods, inadequate disease control and social and cultural practices, among others, have greatly contributed to the general decline in these sectors."</p> <p>LIVESTOCK WATER DEMANDS REQUIRE CONSTRUCTION OF IMPOUNDED RESERVOIRS IN THE DRIER AREAS. DOWNSTREAM USERS MAY BE AFFECTED BY CHANGES IN THE HYDROLOGIC REGIME CAUSED BY SUCH STRUCTURES. LAND DEGRADATION MAY BE CAUSED BY HIGH LIVESTOCK DENSITIES AROUND WATER POINTS.</p>
<p>FISHERIES AND OTHER AQUATIC RESOURCES CONSERVATION AND MANAGEMENT "to conserve and manage sustainably fisheries and other aquatic resources for sustainable production."</p>	<p>"Fisheries and other aquatic resources constitute an important resource and contribute greatly to the nutritional welfare of the people while providing employment to thousands. This sector also makes significant contribution to the national economy. Unfortunately, fisheries and other aquatic resources are threatened by introduction of exotic species, pollution of the water bodies, and over-exploitation, among others."</p> <p>WATER QUALITY MANAGEMENT SHALL SECURE THE NATURAL HABITAT OF FISH, AND FISH FARMS IS A POTENTIAL SOURCE OF POLLUTION.</p>
<p>ENERGY "to meet the national energy needs through increased use of hydropower, improved efficiency of energy use, increased use of alternative energy sources, increased production of (plantation and on-farm) trees and promotion of exploration and production of fossil fuels."</p>	<p>"The vital role of the energy sector in national socio-economic development cannot be over-emphasized. Woodfuel, petroleum products, electricity, new and renewable sources are the main sub-sectors. Each of these sub-sectors were seriously affected by the economic decline of the 1970s and early 1980s characterized by deforestation, inadequate maintenance, distorted pricing mechanisms and environmentally unsustainable policies and laws."</p> <p>HYDROPOWER DEVELOPMENT IS BASED ON UTILIZATION OF WATER RESOURCES. DEFORESTATION DUE TO THE DEMAND FOR WOODFUEL AFFECTS THE HYDROLOGICAL REGIME AND CONTRIBUTE TO EROSION AND LAND DEGRADATION.</p>



APPENDIX 3.1
WATER SUPPLY AND SANITATION SECTOR POLICY
PRELIMINARY DRAFT

DRAFT

DIRECTORATE OF WATER DEVELOPMENT

WATER SUPPLY AND SANITATION SECTOR POLICY FRAMEWORK¹

1. INTRODUCTION

1.1 Context

Improved water supply and sanitation services have major social, economic, health and environmental impacts on life in general. Some of the benefits that result from water supply and sanitation also have a positive effect on investments in other sectors, such as education and industry - and the effect is mutual.

Access to water and sanitation is not simply a technical issue; it is a crucial component of socio-economic development. Sustainable and socially acceptable services should be extended by using appropriate technologies, adopting community management approaches and enhancing human resources.

In the context of this document, the water supply and sanitation sector includes (a) domestic water supply in rural and urban areas, (b) sanitation and sewerage services, (c) health and hygiene promotion, and (d) water resources protection.

Domestic water demand includes human consumption as well as subsistence garden and livestock watering. Drainage and solid waste removal are understood to be an integral part of any comprehensive sanitation/sewerage strategy.

Other water-related aspects such as irrigation, hydropower and industrial uses are not considered part of this sector, and hence are not dealt with in this document, though they of course influence water resources management.

1.2 The need for a water supply and sanitation policy

Water supply development is characterized by a strong dominance of foreign financing. Bilateral donors, united nations agencies and international development banks often have different views and philosophies with regard to implementation as well as operation and maintenance of schemes or water points. Individual activities by non-governmental organizations and private bodies further complicate the issue of securing a uniformity in conditions and standards required to make operations manageable on a broad scale.

¹ This document (version 2 of August 1994) should be seen as a draft for discussion and be subject to further development before the result can be given an official status. Even then it should be regarded in the context of an evolutionary document being refined as a consequence of changed circumstances.

Cumbersome logistics, insufficiency of local finance and weak local institutional capacity make the water supply and sanitation situation particularly difficult to handle - especially in terms of operation and maintenance.

There is a clear need to improve the efficiency of the sector and derive maximum benefit from the available resources. One of the means by which such an improvement in efficiency can be made, as well as facilitating cooperation and collaboration among the many sector actors, is through the establishment of a sector policy framework accompanied by appropriate sub-sector regulations, guidelines and standards. These should be clearly defined, but with enough flexibility to be applicable to all parts of the country.

Although several documents exist where policies, strategies and standards have been outlined separately for sub-areas, and to a varying degree of detailing, no single consistent and politically approved policy framework document on water supply and sanitation is available at present. A list of the above mentioned policy-related documents is appended to the present draft policy. The list also includes relevant documents from outside Uganda which have been guiding the elaboration of the present national policies.

2. POLICY FRAMEWORK AND GUIDING PRINCIPLES

2.1 Sector policy framework

An overall sector policy statement is made in the Draft Constitution of the Republic of Uganda as follows:

ARTICLE 29, CLAUSE 1:

"Every person is entitled to clean and safe water"

The implication of this statement is that the Government is committed to secure that clean and safe water is available to every person. The commitment does not, however, comprise any specifications of service levels or cost of distribution.

The hierarchy of national policies also includes the National Water Resources Policy which directs itself towards the water supply sector in the following prioritization statements:

NATIONAL WATER RESOURCES POLICY:

"The first priority in water resources allocation will be the provision of water in adequate quantity and quality to meet domestic demands"

"Allocation of water to meet irrigation, livestock, industrial and other demands will be done considering the economic, social and environmental value of water"

These statements mean that meeting the demand for domestic water is the very first priority - the statement is unconditional. When it comes to water for other uses prioritization is dependent on several factors and can be made the subject of trade-offs between various social, economic and environmental considerations.

2.2 Guiding principles

The broad objectives of the International Drinking Water Supply and Sanitation Decade (IDWSSD), and its continuation in the form of the Global Forum for Water and Sanitation, have been endorsed by the Government of Uganda since the inception of IDWSSD in 1980. During the emergence of a national water supply and sanitation sector policy due consideration has been given to the various international resolutions, declarations and guidelines for the improvement of the sector situation at country level - tabled at these meetings and conferences.

At the end of the IDWSSD, the Global Consultation on Safe Water and Sanitation for the 1990s was held in New Delhi, India (September 1990) to draw conclusions from the lessons learnt during the Decade, and, on this basis, outline principles and strategies to guide the future sector development efforts internationally as well as nationally.

The "New Delhi Statement" under the main theme "SOME FOR ALL RATHER THAN MORE FOR SOME" provides a set of overall guiding principles which have been adopted as part of Uganda's national sector policy for water supply and sanitation. These guiding principles are:

Principle 1:

"PROTECTION OF THE ENVIRONMENT AND SAFEGUARDING OF HEALTH THROUGH THE INTEGRATED MANAGEMENT OF WATER RESOURCES AND LIQUID AND SOLID WASTE"

Safe water and proper means of waste disposal are essential for environmental sustainability and better human health, and must be at the centre of integrated water resources management. Improvements to the household environment can be best achieved through the community's involvement as an equal partner with government and sector agencies. Emphasis must be placed on education, social mobilization and community participation.

Principle 2:

"INSTITUTIONAL REFORMS PROMOTING AN INTEGRATED APPROACH AND INCLUDING CHANGES IN PROCEDURES, ATTITUDES AND BEHAVIOUR, AND THE FULL PARTICIPATION OF WOMEN AT ALL LEVELS IN SECTOR INSTITUTIONS"

Strong institutions are essential for sustainable development. They require sound management, legislation and incentives. A changing role of government is envisaged, from that of provider to that of promoter and facilitator. This will enable local public, private and community institutions to deliver better services. Decentralization demands a strong policy and support role from central government; while local private enterprise can assist in improving the efficiency and expansion of service delivery.

Principle 3:

"COMMUNITY MANAGEMENT OF SERVICES, BACKED BY MEASURES TO STRENGTHEN LOCAL INSTITUTIONS IN IMPLEMENTING AND SUSTAINING WATER AND SANITATION PROGRAMMES"

Community management goes beyond simple participation; it occurs when communities are empowered and equipped to own and control their own systems. Communities should have prominent roles in planning, resource mobilization, and all subsequent aspects of development. Within these strategies, gender issues will be all important. Women should be encouraged to play influential roles in both water management and hygiene education. Capacity building is necessary to make community management effective and enable women to play leading roles.

Principle 4:

"SOUND FINANCIAL PRACTICES, ACHIEVED THROUGH BETTER MANAGEMENT OF EXISTING ASSETS, AND WIDESPREAD USE OF APPROPRIATE TECHNOLOGIES"

Given the number of people unserved and the growing demand, more effective financial strategies must be adopted for the long-term sustainability of the sector. The strategies should aim towards two key objectives: (a) increased efficiency in the use of available funds, including use of appropriate low-cost technologies, and (b) mobilization of additional funds from existing and new sources, including governments, donors and consumers.

In addition, during the process which led up to the UN Conference on Environment and Development (Rio de Janeiro, June 1992), various important principles related to general water resources management issues were formulated. Some of these principles have specific relevance to the water supply and sanitation sector; they are:

"FRESHWATER IS A FINITE AND VULNERABLE RESOURCE"

Rapid population growth, coupled with the pace of economic development, is putting increasing strain on available water resources. Depletion and degradation of available resources are causing the costs of new water supplies to escalate and threatening sustainability.

"WATER AND LAND USE MANAGEMENT SHOULD BE INTEGRATED"

Land use can have a significant impact on the temporal and spatial occurrence of water resources. Although the functional relationships are difficult to establish the fundamental rôle of sound land use practices in regulating water quality and quantity cannot be overlooked; planning of water supply projects should take these linkages into account.

It is within the framework of these guiding principles that the national policies for development of the water supply and sanitation sector have been formulated as outlined in the following section.

3. SECTOR POLICIES FOR WATER SUPPLY AND SANITATION

The following sector policies will direct the assistance and development efforts aimed at improving water supply and sanitation in Uganda. To a large extent, the policies reflect the national socio-economic, development and financial fabric prevailing at present, and they may have to be reviewed and modified according to changed circumstances related to the pace of development as well new lessons learnt.

The policies below are grouped into categories in accordance with the variety of subject matters which are part and parcel of the water supply and sanitation sector. After a category which attempts to pool policies on general aspects, categories follow which address technology aspects, health and hygiene, economic and financial aspects, management and institution building, operation and maintenance, sustainability, and lastly water resources and environmental aspects.

3.1 General policy statements

- (a) On a national basis investment and development efforts in the water supply and sanitation sector should follow an equitable share principle with a rationalized view on urban versus rural interventions. Selection of areas most in need of sector improvements will be based on need-related criteria.
- (b) In line with Uganda's decentralization process, the water supply and sanitation sector should be based on the principle that the central authority moves away from being a "provider" of services to an "enabler", which means creating an appropriate framework in terms of institutions, laws, regulations and awareness building to foster a participatory approach to sector development.
- (c) A negotiation driven approach should be a key principle during planning and design of water supply and sanitation facilities. It is essential to ensure that limited funds are channelled to the communities that will maintain their new or improved facilities. A negotiation driven approach also expedites project implementation by encouraging beneficiaries to meet their commitments on schedule.
- (d) Sector interventions should provide support to strengthen the capacity of sector organization through project components for institutional and human resource development as well as support the principle of community

management, whereby rural communities, inclusive of small towns and growth centres, are empowered and equipped to own and control their water supply and sanitation systems.

- (e) Appropriate low-cost water supply and sanitation technologies should be selected, offering good possibilities for community participation in decision making and in physical implementation, inclusive of operation and maintenance of completed facilities.
- (f) Gender issues should be addressed in such a way that both sexes are involved as decision makers and that women are empowered and enabled to determine their own development collectively with men.
- (g) Sustainability of projects should be ensured through cost recovery at a level where at least the cost of operation and maintenance is recovered from the users in rural areas and in periurban (slum) areas of the larger towns, and as much as possible of capital costs are recovered in the larger piped schemes.
- (h) Financial viability of public utilities should be assured. In urban areas focus should be on assuring sustainable services for the poorest sections of the community. Tariff structures with cross-subsidies where appropriate should ensure that services can be reliably maintained including public standposts or other facilities for the urban poor.
- (i) Mechanisms should be established at relevant levels within the administrative system to foster country-level cooperation and collaboration among all stakeholders active in the sector.

3.2 Technology - water supply

- (a) Technology choice should be based upon technical, sociological and financial feasibility studies, including willingness and ability to pay studies. Choices of technology will then depend on availability of source type, population density, affordability, capital and recurrent costs, and maintainability. Only well-known and tested technologies should be applied.
- (b) Preference should be given to point sources or other appropriate technologies, such as protected springs, handpump equipped shallow wells or boreholes and gravity-fed piped schemes, based on cost-benefit analyses balanced with community wishes and demonstrated ability to sustain the chosen system.
- (c) Handpumps should be standardized, preferably locally manufactured, properly field tested, and accepted and maintained by the user community within the Uganda concept of Community-Based Maintenance System.
- (d) Motor or engine driven pumps should normally only be used for water supply to urban areas where availability of regular power and trained operation and maintenance staff are ensured.

- (e) A negotiation-driven approach should lead to a level of service chosen with due consideration to walking distance, number of users per outlet, access to alternative water sources, as well as social barriers. In rural areas, water supply schemes should, in general, be designed to provide an average of 20 to 25 litres per capita per day from each public water point (standposts or handpumps). For urban water supplies, design figures in excess of 60 to 80 litres per capita per day from house connections are rarely considered justified for houses without waterborne sewerage.
- (e) WHO guidelines for drinking water quality should be used with due consideration to specific local conditions and water use habits.

3.3 Technology - sanitation, sewerage and drainage

- (a) Sector programmes should always assess the need for sanitation facilities and drainage of excess water in connection with provision of water supply. When found necessary, provision of such facilities should be part of the projects. The community should be involved in choosing sanitation technology and emphasis should be put on acceptability (culturally and financially) by user communities. Preference should be given to low-cost on-site methods (improved latrine with sanplat).
- (b) In rural towns and growth centres piped sewerage systems should only be considered (i) if the nature of the community is such that on-site sanitation would not be viable or would be environmentally damaging, and (ii) if a piped sewerage system is an inherent result of a chosen service level for the water supply. Treatment by waste stabilization ponds will be preferred.
- (c) Solid waste management and storm water drainage systems should be taken into account mainly in densely populated areas such as growth centres and periurban (slum) areas.

3.4 Health and hygiene

- (a) Information should be disseminated on the correlation between safe drinking water and a decrease in water-related diseases.
- (b) In sector interventions emphasis should be made on the importance of linking low-cost sanitation with the provision of new water supplies, and accompanying both with appropriate health and hygiene education. Schools are important vehicles for disseminating the key health messages, and projects should, wherever appropriate, include construction of latrines in schools, and the provision of educational materials.
- (c) It should be ensured that health promotion, hygiene education and low-cost sanitation are provided in the context of improved environmental sanitation.

- (d) Women's involvement in health promotion should be safeguarded, recognizing their important role in improved health of their families and in changing the behaviour of children.

3.5 Economic and financial aspects

- (a) Generally, financing of new installations should have low priority where maintenance of similar installations in the same areas is neglected.
- (b) The tariff structure in large urban schemes should be designed to cover repayment of construction loans, depreciation of technical installations, and full cost of operation and maintenance.
- (c) Mechanisms should be in place to allow tariffs (in utility-operated water supply systems) to be regulated concurrent with the rise in costs.
- (d) Cross-subsidization should be promoted through water tariffs, thereby ensuring a basic minimum consumption at reduced rates, and larger consumptions at increased rates, and discouraging wastage and excessive consumption.
- (e) For rural water supplies, inclusive of small towns and growth centres, community contributions towards construction should be raised by the beneficiaries before construction starts. In these areas, operation and maintenance costs should be fully covered by the consumers.
- (f) Subsidies on low-cost latrines to the poorest communities should be fixed at a level which will not discourage commercial latrine (sanplat) construction.

3.6 Management and institutional strengthening

- (a) Water supply and sanitation functions and sector management should be delegated to the lowest appropriate administrative levels based as far as possible on the existing district and RC structures, but also considering the affected water user committees, who will take on ownership of their facilities.
- (b) Capacity at national and lower levels for equitable and sustainable water supply coverage should be developed taking into account Government's charging role as a result of the decentralisation process.
- (c) Capacity at district and county/sub-county levels in planning, monitoring and technical service delivery to respond to community requests should be enhanced.
- (d) Training of the beneficiaries should be promoted since they are expected to participate in the choice of water and sanitation technologies, the siting of water points, construction activities when relevant, and the daily running and maintenance of the scheme.

- (e) Women's involvement in design, construction, operation and management of improved water supply and sanitation facilities should be supported. The key criteria is that women and men should have equal opportunity to participate fully in all aspects of community management.
- (f) Private sector involvement in the water supply sector should be promoted, e.g. in drilling operations, in supply/sale of handpump spareparts, and in management of water schemes.

3.7 Operation and maintenance

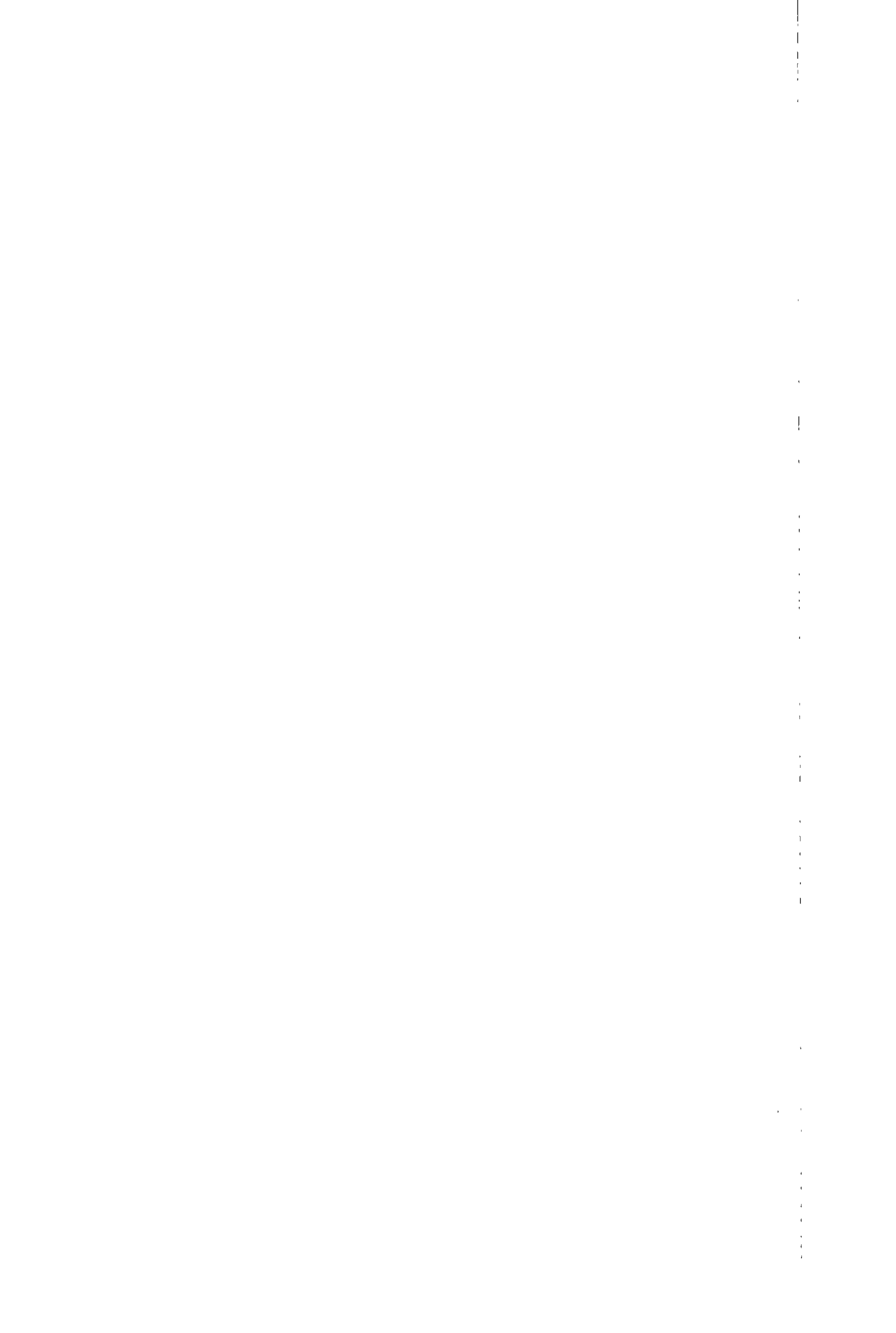
- (a) No new installations/schemes should be established without at the same time establishing or strengthening the system for operation and maintenance, including methods of recovering recurrent cost to ensure sustainability.
- (b) In general, new schemes should be developed on the basis that user communities should own, control and manage their water supply and sanitation services.
- (c) Community-based operation and maintenance should be supported by an organized availability of spare parts, if not readily available on the market, and access to reliable technical support for major breakdowns. Emphasis will be a supporting private sector initiatives to meet these needs.

3.8 Sustainability

- (a) Sustainability should be a prime objective of all water supply and sanitation interventions. Sustainability depends on several matters, e.g. development of institutional capacity at all levels, financial viability, a stable sector policy, and efficient administrative systems.
- (b) The institutional capacity should be enhanced to implement, operate, and maintain donor-supported installations, and to plan and develop the sector ultimately to sustain without foreign assistance.
- (c) When feasible, water and sanitation projects should be used as entry points for a number of related activities which will enhance their sustainability, e.g. income generating activities.
- (d) Monitoring and evaluations activities at central level (sector performance vis-a-vis national goals) and at project level (implementation achievements vs targeted outputs) should be carried out routinely as part of all sector development efforts.

3.9 Water resources and environmental aspects

- (a) Integrated water resources management should be promoted to ensure the long-term sustainability of water sources meant for water supplies. In recognition of the need to integrate water and land resources management, this may involve additional activities to manage catchment areas and protect water sources.
- (b) Sources (surface water or groundwater) should be selected with due consideration to the implication of operating costs. Groundwater should always be considered when risks of contaminated surface water exists. However, groundwater may have other problems such as salinity, excess of iron or fluoride.
- (c) Conditions for and impact of water supply and sanitation projects should be assessed, considering demographic, environmental and health aspects in accordance with stipulation for carrying out Environmental Impact Assessment as given in the Environment Management Statute (prepared within the framework of the National Environment Action Plan - NEAP).



ADDENDUM

DOCUMENTS RELATED TO POLICIES AND GUIDELINES

IN THE WATER SUPPLY AND SANITATION SECTOR

(arranged chronologically)

- "Water Supply and Sanitation Sector Development Plan 1985-1990", Ministry of Lands, Minerals and Water Resources, Kampala, May 1985.
- "Water Supply and Sanitation Sector Development Strategy and Action Plan", Ministry of Water and Mineral Development, UNDP/World Bank Water and Sanitation Programme, Kampala, March 1989.
- "Sanitation Sector Strategy Paper", Ministry of Water and Mineral Development, UNDP/World Bank Water and Sanitation Programme, Kampala, April 1989.
- "The New Delhi Statement and Guiding Principles", Global Consultation on Safe Water and Sanitation for the 1990s, UNDP, New York, September 1990.
- "Organization and Management Study of the Water Development Department", CarlBro International and UNDP/World Bank Water and Sanitation Programme, Kampala, November 1990.
- "National Planning Strategy - Rural Water Supply Programme", Water Development Department, I.Kruger/NCG, Kampala, July 1991.
- "Progress in Developing Information Management Capabilities in the Water Development Department", IRC International Water and Sanitation Centre, the Hague, December 1991.
- "Water Supply and Sanitation Sector Policies", Danida/Ministry of Foreign Affairs, Copenhagen, April 1992.
- "National Sanitation Guidelines", Ministry of Health, Entebbe, July 1992.
- "Towards a Strategy for Standardization of Handpump Types and Spare Parts Supply in Uganda", Water Development Department, Kampala, June 1993.
- "The Potential for Different Abstraction Technologies for Rural Water Supply in Uganda", Water Development Department/UNICEF, Kampala, June 1993.
- "Water Legislation Study", Ministry of Water, Energy, Minerals and Environment Protection, Mott MacDonald/Kabugo and Company, Kampala, June 1993.

- **"Guidelines to Community-Based Operation and Maintenance of Handpump Equipped Water Sources", Directorate of Water Development - RUWASA, Kampala, October 1993.**
- **"Cost Study of Water and Environmental Sanitation Sectors in Uganda", Directorate of Water Development - UNICEF - Consultants, Kampala, November 1993 (draft under discussion).**
- **"National Sector Monitoring and Evaluation", Directorate of Water Development, Memorandum, Kampala, December 1993.**
- **"Policies and Guidelines for the Rural Towns Water and Sanitation Programme", Version 10, Directorate of Water Development, Kampala, June 1994.**
- **"Policy and Guidelines for Gravity Flow Development in Uganda", Directorate of Water Development, Kampala, April 1994 (draft under discussion).**

~

