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# Uganda's Water Sector Development: Towards Sustainable Systems

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**HTN Working Paper: WP 02/96**

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Swiss Centre for  
Development Cooperation in Technology and Management

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## Foreword

Water is a major factor in the socio-economic fabric of our society as well as a determining factor in the development potential of the nation. The rapid growth in population and the increased agricultural and industrial activities require adequate and safe water supply.

The Government realized that a rational approach was required towards planning and implementation of water supply infrastructure, rehabilitation and expansion, and more generally, in creating a realistic framework for proper water resources management, through which priorities can be established and optimal use of the nation's water resources planned.

The framework, within which the water sector is now set to function, consists of three main codes: a Water Action Plan, a new Water Statute, and a National Water Policy.

The first priority in water resources allocation is the provision of water in adequate quantity and quality to meet domestic demand. Allocation of water to meet irrigation, livestock, industrial, fisheries, hydropower and other demands will be done considering the economic, social and environmental value of water.

Within the key domestic water supply sector, Government has developed strategies towards achieving the adopted national target of 75% population coverage by the year 2000. The strategies are built on the main policy principles of democratic decentralization, privatization and true partnership with the future owners (the users) of the water supply facilities.

We are confident that the stage is set in Uganda for a well structured, sustainable and progressive development of the water sector. We are, of course, happy to note that our efforts and achievements are recognized outside our country - a fact which this document bears witness of.

I wish to thank the Swiss Centre for Development Cooperation in Technology and Management (SKAT) and the Handpump Technology Network (HTN) for the recognition they have given to our efforts in strengthening the water sector and for the "mental" support which this case study indeed constitutes in order for us to forge ahead in our endeavours to achieve the ultimate goal of "water for all".

I would like to extend our heartfelt thanks to those friendly countries and donor agencies whose support to the water sector has contributed to the success highlighted in this case study.

B.Z. Dramadri

Permanent Secretary  
Ministry of Natural Resources

January 1996

## **Preface**

This is a story of success in the development of rural water supply, a difficult sector in which to deliver cost-effective, sustainable results. It is a story of success in the public sector in Africa, a continent with few reasons to celebrate the achievements of its civil administrations. Moreover, it is a story of success in Uganda, a country long shunned as one of Africa's "basket cases" — devoid of social, political and economic optimism. Therefore, it is both an *unusual and a highly pertinent* story. It contains many messages. It delivers many lessons. Above all it provides hope.

The case study documents the strategies adopted in Uganda for water resources management and development, with specific reference to provision of rural water supplies. It traces the first tentative steps to re-establish a semblance of order to the sector ten years ago through to the bold actions of the present day. However, it is not a story of success only. It is also a story of continuing needs, of unfinished business. The case study looks forward to the year 2000. It reviews the ambitious targets set by the Government for the provision of rural water supplies and considers the likelihood of the sector maintaining its track record of success.

Much of the success in this story can be attributed to people — people with vision, people with a desire to improve the status quo, people with a will to "make things happen". It is to these people, many of whom remain nameless, that this case study is dedicated.

The author wishes to thank the contributors to the case study, especially the staff of the Ministry of Natural Resources, Directorate of Water Development — for their openness, willingness to share and clarification on points of substance. Special thanks must go to Mr Patrick Kahangire, Director and Dr Sven Jacobi, Senior Technical Advisor (Danida) — for their enthusiastic inputs to the case study, guidance through the wealth of documentation on the subject and thoroughness in reviewing the early drafts of this manuscript.

The author also wishes to acknowledge the financial support from Swiss Development Cooperation that has made possible the preparation and publication of this case study.

*Greg Wishart  
January 1996*

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# 1 Introduction

For many years Uganda's rural water supply sector languished under Governments that cared little for the social well-being of the people they ruled. A combination of incompetence and gross mismanagement wrecked the country's physical and institutional infrastructure. A protracted civil war brought the nation to its knees. Uganda, once described as the "Pearl of Africa", deteriorated from being the envy of nations south of the Sahara to being the laughing stock of the whole world. The "sick man of Africa" could barely support its ruling elite — let alone meet the water and sanitation needs of its rural population.

Since the army of the National Resistance Movement (NRM) liberated the country in early 1986, Uganda has been fighting back from the brink of self-destruction; rebuilding the infrastructure of a ruined, but once-thriving country. Against the odds, the Government of Uganda is establishing the framework for an economic resurgence. It is healing the wounds of nearly a generation of political strife. It is once again turning its attention to the delivery of social good. High on its agenda is the fulfilment of basic human needs — one of the most basic being the provision of water of adequate quantity and quality.

This case study presents a review of the processes leading up to, and encompassing the establishment of, a revitalised system for management and development of water resources in Uganda. In particular, it looks at the priorities and plans for the provision of safe drinking water in rural areas of the country. It outlines the structures and mechanisms for implementing these plans and the strategies the NRM Government has adopted to bring about positive changes within the sector.

The case study investigates rural water supply sector planning methods and reviews progress over the past ten years in the areas of institutional strengthening and policy making. It highlights the close integration between sector planning and overall strategic planning. It shows how sound economic policies at the national level have provided a basis for sustainable economic development at the grass roots.

The case study outlines the ambitious target set for the rural water supply sector — that of bringing water of adequate quantity and quality to 75 per cent of the rural population in Uganda by the year 2000. In a review of the mechanisms used to generate self-sustaining rural water supply systems, the case study explores the role of the private sector in construction, operation and maintenance of water and sanitation infrastructures. It also investigates the increasingly decentralised provision of rural water supply services in Uganda and the roles and responsibilities of district administrations.

In a review of current status, the case study investigates some of the rural water supply projects operating in Uganda. It highlights their features, notes their achievements and investigates their difficulties. It identifies issues and trends and draws out 'lessons learned'. In doing so it provides guidance to policy makers, planners and practitioners, not only in Uganda but throughout the developing world.

Finally, the case study provides some views on the longer-term potential for success. It recognises the major strides forward made by the Government since 1986, but also the enormity of the task still left to do. Despite its optimistic tenor, the case study is also realistic about the probability of the national target being met. The year 2000 is not far off and there is considerable work left to do.

This is a story about fighting back. It is a story about overcoming the legacy of years of neglect and wilful destruction. It is a tale about taking up a challenge of sizeable proportion — and beginning to win. The case study is both a snap-shot in time and a window on the future. It highlights the benefits that can flow from the adoption of sound governing principles and co-ordinated programmes of change. However, it also recognises the frailty of the present and the challenges of the future. Optimism and realism stand side-by-side. Hope and opportunity co-exist with pragmatism and concern.

We believe the story deserves telling. It provides an insight on the success of one African government in meeting the basic water supply needs of its rural people. Therefore, it provides useful guidance on the pre-conditions for success in managing and developing rural water supply sectors in developing countries. However, we believe that many of the messages transcend the sector and stand independent of space and time. For this reason we trust that all readers, no matter their position or location, will find the case study of benefit.

## 2 Roller-Coaster Ride

The image that greets the increasing numbers of visitors to Uganda these days is that of a country at peace — not absolute peace, but peace non-the-less. This is a far cry from the image of some twenty years ago, that of a nation in political, economic and social free-fall. During the 1970s and early 1980s, the world saw Uganda as the classic example of 'everything wrong with Africa'. It was parodied as having a terminal case of post-colonial degenerative disease, intent on destroying itself from within.

### Launched into the abyss

Uganda has not always carried the standing of a global pariah. It had a reputation within East Africa and wider afield as a country blessed by nature. Straddling the equator, but high enough to enjoy a moderate climate, Uganda prospered from its inheritance of fertile soils and regular rainfall. Agricultural exports led the economy. Cash crops such as tea, coffee and tobacco supported a growing industrial base. However, post-independence years highlighted the frailty of Uganda's political situation. As time progressed, the veneer of economic and social well-being also disappeared.

Uganda has been on something of a roller-coaster ride since it inherited an easily won independence on 9 October 1962. The elation of freedom was short-lived — the country lasted less than four years before its first constitutional crisis. Disbelief that history was not turning out as expected quickly led to dismay as the fabric of a prosperous country started to unravel. Within ten years deep political, economic and social decay had taken hold.

Poorly prepared for its role as an independent state, the country was simply 'launched into the abyss'. Political commentators have argued that Uganda's independence constitution was "a triumph of hope over experience".<sup>1</sup> It was a hastily prepared document that attempted to knit together a group of semi-autonomous regions and traditional kingdoms into a single nation state. Allowing for co-existence of unitary and federal forms of government, it stipulated direct election throughout the country except in the federal state of Buganda; a recipe for future dissatisfaction. With so much at stake and inexperienced politicians at the helm, the country soon became 'unhinged'.<sup>2</sup>

In retrospect Uganda was ill-suited to a Westminster form of government. The country consisted of diverse peoples pushed together in a marriage of convenience. Uganda's public institutions were also unprepared for their roles in a post-independence environment. They lacked the skills necessary to undertake their administrative tasks

<sup>1</sup> S. Karugire, *A Political History of Uganda*, Heinemann, Nairobi, 1980.

<sup>2</sup> D. Mukholi, *A Complete Guide to Uganda's Fourth Constitution: History, Politics and the Law*, Fountain Publishers, Kampala, 1995.



unaided or to contain the demands placed upon them. The army never displayed the professional discipline required to support a democratic political process.

**The National Resistance Movement ten-point programme**

- the establishment of democracy
- the restoration of security
- the consolidation of national unity and elimination of all forms of sectarianism
- the defence and consolidation of national independence
- the building of an independent, integrated and self-sustaining national economy
- the restoration and improvement of social services and the rehabilitation of war ravaged areas
- the elimination of corruption and misuse of power
- the rectification of the errors that had dislocated society
- co-operation with other African countries in defending human and democratic rights
- the adoption of a mixed economy strategy

NRM Legal Notice 1, Kampala, January 1986

### **Turning around the corner**

Although it will take a long time to eradicate the legacies of the darkest times, most people believe that Uganda has finally turned the corner. Ugandans trace the turning point in the down-hill slide to the day the National Resistance Movement (NRM) emerged as winners in a protracted struggle for power. Finally capturing Kampala on 26 January 1986 after a five year war, the NRM quickly moved to establish a new political agenda.

In his maiden speech as President, Lt-Gen. Yoweri Museveni, Chairman of the NRM, said that the capture of power was not a mere change of guards. He talked about a 'fundamental change'. He introduced new political structures based on a nine-member Resistance Committee (RC). Set up at five levels — culminating in the National Resistance Council (NRC) — the RC has become the backbone of a decentralised sharing of power throughout society.

In February 1989 Uganda held its first national elections since 1980. In the same month President Museveni appointed a Constitutional Commission to gauge public opinion on Uganda's political future and to draft a new constitution.

## Heading in the right direction

When the NRM established itself in government, the country was in a state of complete collapse. Years of neglect and abuse had taken its toll. Most of the basic infrastructure was decrepit, non-functional or destroyed. Water supply and sanitation systems in urban areas were in poor condition; the situation in the rural areas was much worse. Large parts of rural Uganda had reverted to the informal economy and subsistence measures necessary for their survival.

## The economy

The restoration of economic, political and social order started with emergency surgery on the shattered economy. The Government took tough measures. In May 1986 it abolished the dual exchange rate system. Inflation doubled to 240 per cent within a year. The already weak economy almost collapsed. In May 1987 the Government removed two zeros from the face value of the shilling and during the following month devalued the currency by 76 per cent. It introduced a package of sweeping reforms — the Economic Reform Programme (ERP) — that included plans for curbing budgetary imbalances and excessive monetary expansion.

Over the intervening years the Government continued to follow policies that:

- devalued the exchange rate to restore competitiveness;
- re-established financial discipline in central bank activities to reduce inflationary pressures;
- restored positive real interest rates to stimulate financial savings;
- removed key structural bottlenecks to overcome constraints that restoration of price incentives would not address alone.<sup>3</sup>

Despite initial doubts by some policy makers, the tough economic measures have paid off. Inflation is now below 10 per cent. The shilling has spent the last six months appreciating against the dollar. The economy is showing signs of solid growth. Inward investment is rising.

External supporters of Uganda's macro-economic management have also responded favourably. Last year Uganda received pledges of US\$ 850 million in aid. In September 1994, the International Monetary Fund (IMF) approved a US\$ 175 million three-year enhanced structural adjustment facility. On 20 February 1995 Uganda became the first beneficiary of enhanced terms for debt reduction — the "Naples Terms" (named after the summit location where the Group of Seven (G-7) formulated the proposal). The Paris Club of creditor nations agreed to cancel 67 per cent of Uganda's official bilateral

<sup>3</sup> E. Tumusiime-Mutebile, 'Management of the Economic Reform Programme' in P. Langseth et al (eds.), *Uganda: Landmarks in Rebuilding a Nation*, Fountain Publishers, Kampala, 1995.

debt and reschedule the remaining 33 per cent. This will involve a write-off of US\$ 89 million, representing a reduction of 26 per cent in Uganda's total Paris Club debt.<sup>4</sup>

### **The Civil Service**

The second major area of effort required of the Government was the establishment of a scaled-down, but non-the-less effective and efficient civil service. Over the years, Uganda's public administration had become bloated. The report of the Public Service Review and Reorganisation Commission (PSRRC) identified a host of poor practices and inefficiencies; including abuse of the office and Government property, an erosion of rules and regulations, obsolete procedures, bureaucratic red tape, moonlighting and corruption.<sup>5</sup> It identified the key causes as:

- inadequate pay and benefits;
- inadequate personnel management;
- dysfunctional civil service organisation;
- insufficient management and supervisory training;
- inadequate facilities, assets and maintenance culture;
- lack of leadership of and code of conduct for civil servants.

The PSRRC recommended that the Government wind down some sections of its civil service, sell-off others and shape-up the balance. The Government has addressed these issues through a range of initiatives. In wide-ranging reforms it has rationalised Ministries and their staffing levels. As part of the reforms it merged the Ministries of Water and Mineral Development (MWMD), Environmental Protection, and Energy into one rationalised Ministry of Natural Resources.

### **Constitutional reforms**

The third aspect of change concerns the constitutional reforms necessary for the emergence of a fully functioning democracy. The constitutional crisis of 1966, and subsequent abuses of power had undermined the bases for good government in Uganda. After collecting public views and following protracted discussions, the Constitutional Commission presented a draft constitution on 31 December 1992. A Constituent Assembly, largely elected by universal suffrage and secret ballot, met to debate and amend the draft.

During a sitting on 20 June 1995 the Constituent Assembly voted to retain Uganda's non-party form of government for a further five years. This caused a walk-out by multi-party supporters. Donors, includ-

<sup>4</sup> *Keesing's Record of World Events*, News Digest for February 1995.

<sup>5</sup> *Report of the Public Service Review and Reorganisation Commission 1989/90*, Kampala, September 1990.

ing the United States and Britain, have placed the Government under pressure to introduce a democratic system based on freedom of association and freedom of assembly. To date President Museveni has held firm. He does not rule out a return to multi-party politics but argues that the country is not ready for the trauma of an African-style multi-party election. However, the Government recognises the need for further actions. A senior member of the President's Office has said: "The political system we have adopted has made Uganda better than it was. It is not an act of God that we have had peace and calm in the country over the last 10 years. It is not a perfect system but it is working."<sup>6</sup> After sixteen months of debate and deliberation, the Constituent Assembly promulgated the Fourth Constitution of the Republic of Uganda on 8 October 1995.

### **Decentralisation**

Finally, the Government believes that over-centralisation of power had been instrumental in causing or exacerbating past problems. The system of governance in Uganda since independence had destroyed the dispersed powers of traditional rulers and local authorities, leaving the country to the ransom of a privileged few.

The NRM was determined to build capacity for effective 'grassroots' governance. To this end it introduced the RC system at local and district level in 1986. RC is a village-level committee elected by all adults through the system of queuing. The voting system for RC2 through to the NRC is by electoral college.

The Government is using the RC system as the cornerstone of its decentralisation programme, resulting in a radical transfer of power to local authorities. It is anticipating that decentralisation will create better conditions for economic development, improve administrative performance and increase transparency and accountability in Uganda's thirty-nine Districts.

Recently, the RC system has been renamed to Local Committee (LC) system in harmony with the transition from political liberation to a state of peace and stability.

<sup>6</sup> J. Kibazo, 'Not a perfect system, but it's working', quoting Col. Kahinda Otafire, Minister of State in *The Financial Times*, London, 20 July 1995.

### **3 Driving Forces**

By 1986 Uganda's gross national product (GNP) had fallen to below the level it had achieved in 1968. On a per capita basis, Uganda was 35 per cent poorer than it had been at independence. The rural infrastructure (including rural water supply systems) had collapsed. There were very limited funds for simple operation and maintenance — the sector's institutions could hardly pay their own staffing costs. In remote areas the Ugandan Government was incapable of delivering water supply services. External agencies — albeit very few involved — were the only organisations with sufficient funds to support a basic level of servicing and rehabilitation.

#### **The physical environment**

Fortunately, Uganda has a plentiful supply of water — some 15 per cent of the country is water! Lake Victoria, the second largest fresh-water lake in the world, is shared between Uganda, Kenya and Tanzania. Situated on the equator, rainfall is generally high, averaging from 500 to more than 1600 mm per year. However, seasonal and spatial variability of water resources causes specific problems. Political conflicts are emerging between upstream and downstream users. Locally, upstream riparians may use water in ways making, for instance, water quality unsuitable for downstream users. Internationally, in the context of the Nile Basin, Lake Victoria and the River Nile are finite shared resources and the projected demands of the riparian nations may well exceed the resource.

The provision of safe water was a major concern and with it the closely related issue of sanitation. At the end of the 1980s, the incidence of water-borne diseases was on the increase. Epidemics of typhoid, cholera and dysentery were becoming common place. According to out-patient records from 1990, mortality in under five's due to water-borne diseases was highly prevalent.<sup>7</sup> Uganda's health system was unable to cope. There was an urgent need to improve the rural population's access to safe drinking water and their sanitation practices for better health and general well-being.

#### **State of existing infrastructure**

Close to 90 per cent of Uganda's twenty million people live in the rural areas. The years of neglect took a massive toll on the rural water supply infrastructure. A survey carried out 1981 indicated that more than three quarters of all handpumps in Uganda were inoperable. Despite efforts to strengthen the established construction and maintenance systems during the 5 year Rehabilitation Programme (RP) from 1982 to 1987, most of the field units functioned unsatisfactorily or not at all.<sup>8</sup>

<sup>7</sup> National Sanitation Committee assisted by Environmental Health Unit, *National Sanitation Guidelines*, Ministry of Health, Kampala, July 1992.

<sup>8</sup> *National Planning Strategy: Rural Water Supply Programme*, Water Development Department in co-operation with I. Krüger Consult AS/Nordic Consulting Group, Final Report, July 1991.

According to Government estimates, from 1970 to 1989 it channelled some US\$ 193 million in external funding into the water sector. However, less than thirty per cent found its way to rural projects — much of this US\$ 55 million was mis-allocated. It is not surprising, therefore, that the water supply situation in the late 1980s was one of collapsed systems, inadequate supply of spare parts and little forward progress on rehabilitation. Most of the rural population simply fended for itself.

### **Pressing financial shortages**

The NRM Government inherited a financial nightmare. Virtually none of the country's administrative functions were self-supporting. Few Government departments had the funds to cover their operating requirements. Many could not afford to pay their staff.

In the water sector, revenues covered less than one per cent of the inadequate budget. The inability of the Government to provide subsidy hampered operations, yet the Government's administrative controls dissuaded the MWMD from raising its charges. Inefficient use of the limited capital that was available perpetuated the downward spiral.

The Government's meagre finances could not support the major investments required to rehabilitate and extend the rural water supply systems but it faced a dilemma. It needed external funds to rebuild the rural water supply sector. In particular, it needed donor agency funds. However, donors were wary of Uganda — most would only support the restoration efforts on a contingent basis. The Government needed to demonstrate that it was capable of dealing with the funds in a responsible and productive manner. As a matter of urgency, it had to improve its legislative framework by enshrining proper safeguards in the law. It also needed to rebuild its public institutions so that they could disburse funds in an effective and efficient way. The issue of Government as provider and owner of facilities with minimal or no 'user participation' also required re-thinking and new strategies.

### **Need for legislative reforms**

Much of Uganda's existing legislation was voided during the troubled 1970s and early 1980s. The legal basis for proper management of the country was corrupted by all manner of decrees, dictates and working practices. Therefore, the arduous task of rebuilding the country's physical infrastructure was matched by the strenuous job of restoring the framework for democratic governance.

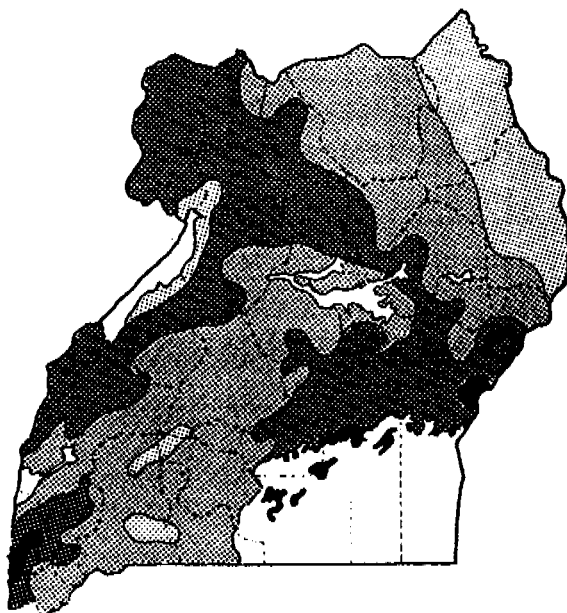
The basis for proper control of the water sector had to be re-established. New regulations, particularly with regard to the management and development of water resources needed to be written. The legal basis for new ownership structures and implementation mechanisms needed to be established. Without these, and the means of enforcing them, any new funds would face a familiar route of 'money washing down a drain'.

## **Institutional requirements**

At the end of the 1980s the MWMD was in poor shape. Its staff were inadequately remunerated, poorly motivated and lacking in enthusiasm. Absorptive capacity of the MWMD was low, in both planning and implementation activities. The situation was particularly acute in areas such as the rural water supply sector where years of neglect had caused a backlog of maintenance and rehabilitation. The capacity of the Water Development Department to plan for and implement rural water supply schemes was seen as a major bottleneck.

The need to rebuild the country's institutional capacity became a priority issue, not only with the Government, but also with the major supporting agencies. In a move that earned the Government the respect of its most ardent critics, it took on the challenges laid down before it. In less than ten years it has radically altered the shape of the civil service, slimmed down existing structures and embraced private sector involvement. As part of the ministerial restructuring process the responsibility for water sector activities was handed over to the Ministry of Natural Resources (MNR) which established a Directorate for Water Development (DWD) to oversee water resources and water supply activities. Despite continuing constraints, the DWD has embarked on a major programme of rehabilitation and development of the rural water supply infrastructure. The results of the DWD's work are beginning to show through — a doubling of the rural water coverage in under five years. The story of how it was done and what is likely to happen next continues in the following chapters.

**Uganda: Annual Rainfall Pattern**

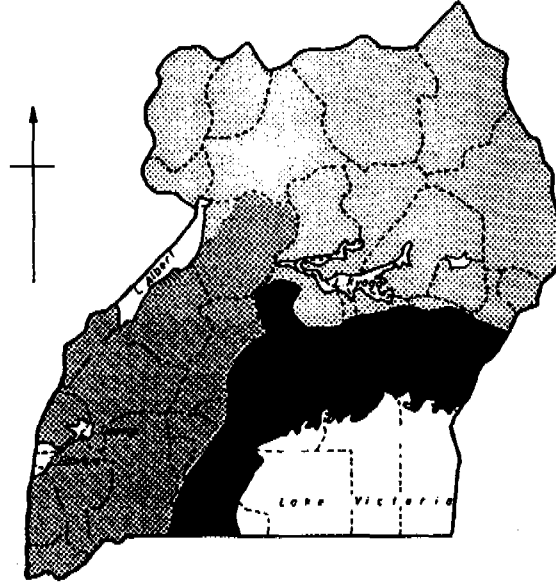





*Mean Annual Rainfall in Millimetres*



*Source: Uganda Secondary School Atlas*

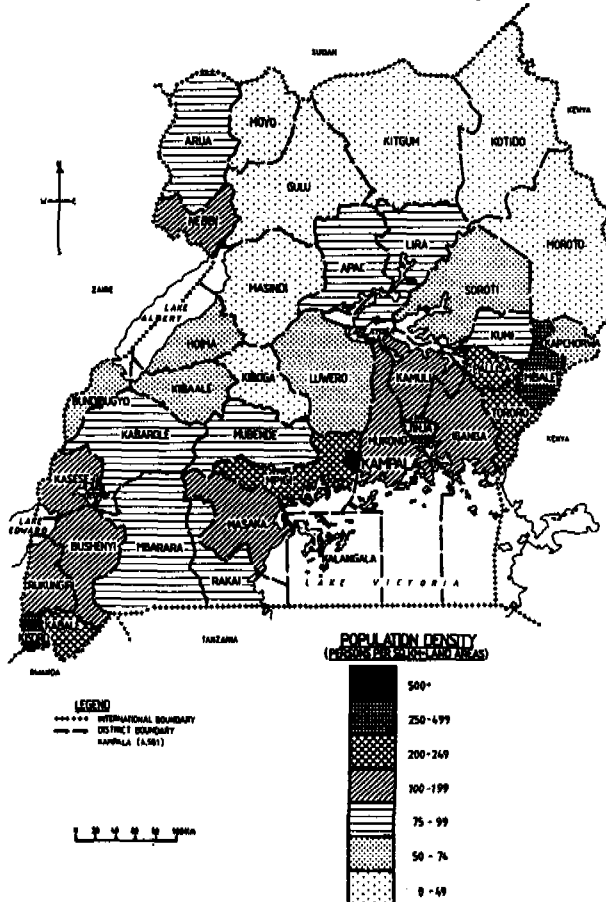
### Uganda: Principal Ecological Zones



-  The high plateau, rich agricultural lands of the central, southern, and southeastern districts which form a crescent around Lake Victoria.
-  The western and southwestern agricultural districts rising to the mountains and rift valley lakes on the western border.
-  The relatively low-lying dry and short grass zones of the North, Northwest, and Northeast.

Source: WCARRD

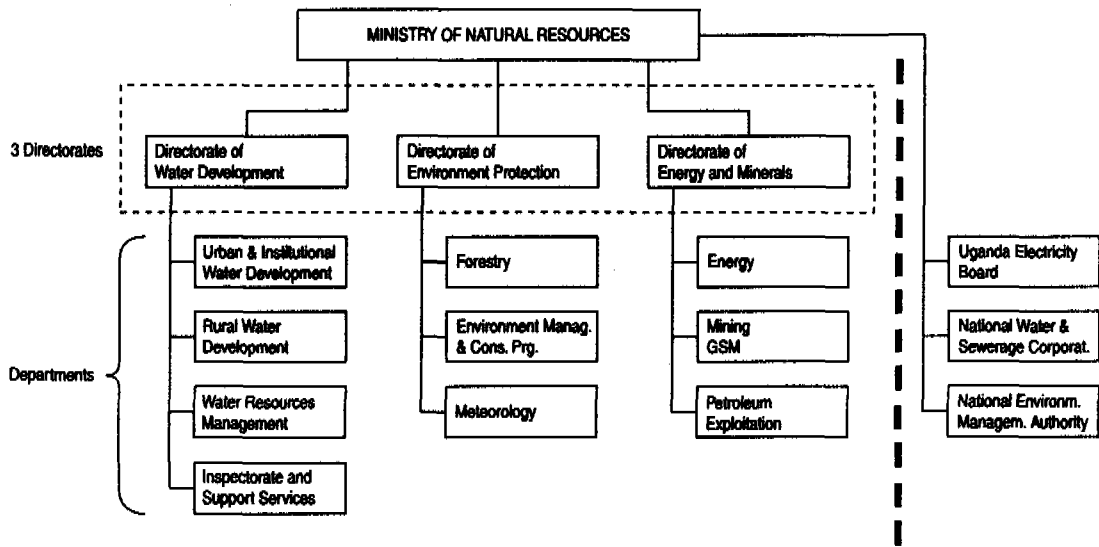
### Uganda: Population Density



Source: The 1991 Population and Housing Census, Uganda  
 (National Summary)



**Uganda: Organisation of the Ministry of Natural Resources,  
including Directorate of Water Development**



*Source: Ministry of Natural Resources*

## 4 Establishing Sectoral Policies

After years of mis-management, Uganda began to recognise the need for an effective framework to regulate and develop its water resources. There is a requirement within a democratised society to embark on policies that are visionary in their formulation of future objectives and targets, yet flexible enough in their implementation to fit into the existing political, economic and social framework. The rural water supply sector's policies combine these overall 'big picture' objectives with the pragmatic approaches so necessary for success.

### Early investigations

Once the NRM Government had stabilised internal security, it showed that it was both willing and able to embrace the changes necessary to rebuild Uganda. Work started in earnest to re-establish the Government's policy planning mechanisms. At the national level, the Ministry of Finance was duplicating macro-economic activities undertaken by the Ministry of Economic Planning. Therefore, the two organisations merged to form the Ministry of Finance and Economic Planning (MFEP). Assisted by advisors from the United Nations Development Programme (UNDP) and the World Bank (WB), MFEP staff have played an instrumental role in policy reform, both as innovators of reforms and co-ordinators of inputs.

Within the water sector, MWMD, assisted by the Nairobi-based UNDP/World Bank Regional Water and Sanitation Group (RWSG), undertook initial surveys. The RWSG completed a joint report with the MWMD in March 1989. It identified that several ministries and agencies, none of them adequately funded, were responsible for water supply and sanitation services. It highlighted that "the (reported) service levels do not reflect the actual situation since most systems are inadequately operated and maintained and most of them are out of service".<sup>9</sup> The report called for the establishment of a strong national policy direction and co-ordination of development to ensure equitable treatment of the whole population. It further recommended:

- development and strengthening of water sector organisations;
- gradual introduction of cost recovery procedures;
- acceleration of sector decentralisation and promotion of community participation;
- adjustment of service levels and technologies to the issue of affordability;
- standardisation of equipment and promotion of local production.

<sup>9</sup> *Water Supply and Sanitation Sector: Development Strategy and Action Plan*, Ministry of Water and Mineral Development, assisted by UNDP/World Bank Regional Water and Sanitation Group, Nairobi, Final Edition March 1989, Reprint September 1989.

The scene was set. Rural water supply developments would be targeted at a broad cross-section of society, especially those underprivileged at the present time. However, the communities would have to share in the costs — both of implementation and of maintenance. They, along with the Government, would take responsibility for the sustainable operation of any future schemes.

## **Process of development**

Despite funding constraints, the Government acted upon many of the early recommendations. A follow-up report on behalf of the RWSG proposed a long-term sector structure based on the principle that cost consciousness and efficiency are closely related to de facto economic responsibility and ownership.<sup>10</sup> It recommended that the MWMD's Water Development Department (WDD) be streamlined in its responsibilities to:

- policy formulation;
- legal aspects and regulation enforcement;
- water resource administration and data collection;
- management and auditing of user associations;
- investment planning and donor co-ordination.

It was clear that the pre-conditions existed in Uganda to facilitate the required changes in organisational set-up and shift in responsibilities. Senior ministerial officers and decision-makers maintained a realistic view on the economic situation and possibilities. An open-minded and results-oriented attitude towards problem solving prevailed. At the ground level LCs were proving to be an effective link between communities and Government institutions.

However, the MWMD (and latterly the MNR) made relatively slow progress. This was partly due to a lack of funding and technical assistance. While the donor community was relatively forthcoming with funds for field activities, it had not yet fully grasped the level of support required to restructure the WDD. The first, large donor funds were directed at an emergency rural water and sanitation rehabilitation programme in the early-to-mid 1980s that paved the way for the UNICEF/SIDA/CIDA/NORAD-financed SWIP project. The WDD was formed as a prerequisite to solicit funding and plan investment. A donors' consultative meeting in 1991 — based on the document, "National Planning Strategy: Rural Water Supply Programme" — gave impetus and subsequently accelerated water sector development activities.

Since the early seventies, from the first global environmental conference in Stockholm in 1972, to the UN global summit on Environment and Development in Rio de Janeiro twenty years later, there has been an increasing awareness and much talk about principles

<sup>10</sup> *Organisation and Management Study of Water Development Department*, Carl Bro International on behalf of UNDP/World Bank Regional Water and Sanitation Group, Working Document, November 1990.

of managing water resources — and the need for having national policies in place. With financial support from the Danish International Development Assistance (Danida), Uganda was one of the first countries to go beyond the rhetoric of the international conferences by formulating a national Water Action Plan. The Uganda Water Action Plan was prepared during the period 1993 - 1994.

Given the changing priorities and needs of the country, an evolving and dynamic framework was required, rather than a traditional prescriptive (“top-down”) master plan. The emerging national policy framework for water resources shows that the process is working.

### **Emerging national policy framework**

Development of a new framework for rural water supply and sanitation took place against a background of emerging national policies. During the last five years Uganda has investigated many of the most basic questions about its political, economic and social future. It has revisited its past, accepted the present and looked into the future. The emerging national policy framework for rural water supply fits into a wider framework for national development.

The new Constitution charges that the State shall control important natural resources — including water — on behalf of the people, and manage and utilise them for the development and welfare of the people. Also enshrined in the Constitution is the need for the State to ensure that it manages Uganda's natural resources in a “sustainable” manner. Important, basic statements regarding water appear in the Constitution:

**“XIV General social and economic objectives**

**The State shall endeavour to fulfil the fundamental rights of all Ugandans to social justice and economic development and shall, in particular, ensure that —**

- (a) .....**
- (b) all Ugandans enjoy rights and opportunities and access to education, health services, clean and safe water, work, decent shelter, adequate clothing, food security, and pension and retirement benefits.**

**XXI Clean and safe water**

**The State shall take all practical measures to promote good water management systems at all levels.**

**XXVII The Environment**

**The State shall promote sustainable development and public awareness of the need to manage land, air and water resources in a balanced and sustainable manner for the present and future generations.”**

*Republic of Uganda, 4th Constitution*

The National Environment Management Policy, published in 1994 further elaborates these overall statements. Its overall policy goal of "sustainable social and economic development" rests within parameters of maintenance or enhancement of environmental quality and resource productivity on a long-term basis. It includes a key policy statement on water resource conservation and management, the objective being: "to sustainably manage and develop the water resources in a co-ordinated and integrated manner so as to provide water of acceptable quality for all social and economic needs".

The National Environment Management Policy (1994) was followed up by enactment of the Environment Management Statute (1995).

### **New framework documents**

Within the context of these clear, over-riding national requirements, the Ministry of Natural Resources has developed a series of water sector framework documents consisting of three main codes:

- The Water Statute, 1995;
- National Water Policy (still under review, not yet finalised/approved);
- Uganda Water Action Plan.

These documents form a solid basis for appropriate water resource management as well as sound water uses in Uganda.

### **The Water Statute, 1995**

The existing laws governing the water sector in Uganda were scattered through a variety of legislation and administered by a number of ministries and departments. In the past this has resulted in overlaps and conflicts. In the period 1992 to 1994, a Consultant was engaged to draw up revised legislation to adequately cover present and envisaged future requirements.

The Water Statute, 1995, provides the legal framework for overall control and administration of water resources in Uganda. It also specifies essential water control functions such as water extraction and wastewater discharge permits. The Statute was enacted by Parliament in November 1995.

The objectives of the Statute are:

- “(a) to provide for the use, protection and management of water resources and supply;**
- (b) to provide for the constitution of water supply and sewerage undertakings; and**
- (c) to facilitate the devolution of water supply and sewerage undertakings.”**

The Water Statute, 1995

The Statute seeks to promote the rational management and use of the waters of Uganda. It endeavours to encourage the provision of a clean, safe and sufficient supply of water for domestic purposes to all persons. Further aims include the orderly development and use of water for non-domestic use and controls on water pollution.

Because the Statute, to a large extent, is an empowering act, subsidiary regulations, in the final stages of being drafted, are required to put the Statute into practical operation.

#### **National Water Policy (draft under discussion)**

*Foreign financing characterises water supply development in Uganda. Bilateral and multilateral donors, the World Bank, NGOs and private sector organisations promote a widely varying range of views. They often differ on philosophies and approaches to implementation of schemes, as well as to operation and maintenance.*

The DWD has identified a clear need to improve the efficiency of the sector and to derive maximum benefit from the available resources. Therefore, it is in the process of finalising a sector policy document that will help bring about such an improvement in efficiency and facilitate co-operation and collaboration among the many sector participants. *The final document will consist of appropriate sub-sector guidelines and standards.*

The Constitution states that all Ugandans are entitled to clean and safe water. The Government, therefore, has a duty to allocate sufficient priority to this basic human right. Within the context of prioritisation, the draft National Water Policy proposes that:

**“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.”**

## Uganda Water Action Plan

An integrated team of Ugandan and Danish water resources experts (the WAP team) prepared the Water Action Plan over the period 1993 to 1994. Published in 1995, the Water Action Plan consists of fourteen documents—four 'project' documents and ten 'results' documents (see panel for details). It is an important milestone in the process of improving the framework for water resources development and management in Uganda.<sup>11</sup> The Water Action Plan provides guidelines and strategies for the protection and development of Uganda's water resources and a structure for their management. The Water Action Plan re-formulated the overall policy objective for the water resources sector to read:

**"to manage and develop the water resources of Uganda in an integrated and sustainable manner, so as to secure and provide water of adequate quantity and quality for all social and economic needs"**

The Water Action Plan defines actions leading to the establishment of an enabling environment for flexible water resource management. It defines management roles and identifies appropriate institutional structures.

The outputs of the WAP formulation process consisted of:

- identification of the key water resources management functions and the appropriate levels at which they should be performed;
- an institutional framework for water resources management at the national, district and community levels;
- long and short term strategies for establishing water resources management in Uganda;
- training and capacity building needs to implement the short term strategy.

Related activities included:

- formulation of a draft national water resources policy for further refinement;
- rapid assessment of the existing water resources situation in Uganda, both surface water and groundwater;
- creation of a groundwater database;
- drafting of detailed management procedures for a water extraction permit system, to be used as an input to the drafting of subsidiary regulations to the Water Statute;
- drafting of detailed management procedures for a wastewater discharge permit system, for the same purpose as above;

<sup>11</sup> *Uganda Water Action Plan: Water Resources Development and Management*, Ministry of Natural Resources, Directorate of Water Development, Kampala, 1995.

- listing of the existing water resources plans and projects - project catalogue - and proposing guidelines on how they can be prioritised;
- detailing of the actions needed to initiate implementation of the Water Action Plan, and to monitor progress in implementing the action programme.

### Water Action Plan Documents

UGANDA WATER ACTION PLAN (WAP)		
DOCUMENT	TITLE	DATE
001	<b>WATER ACTION PLAN PHASE I - PROJECT DOCUMENT</b> Description of the background and requirements to the work in WAP Phase I including budget.	Jan 1993
002	<b>REHABILITATION OF WATER RESOURCES MONITORING AND ASSESSEMENT SERVICES IN UGANDA - PROJECT IDENTIFICATION REPORT</b> Background and proposal for a water resources monitoring project including budget.	Feb 1994
003	<b>REGIONAL WATER QUALITY MANAGEMENT IN THE UPPER NILE BASIN - PROJECT IDENTIFICATION REPORT</b> Background and proposal for a water quality management project including budget.	Feb 1994
004	<b>WATER ACTION PLAN PHASE II - PROJECT DOCUMENT</b> Description of the background and requirements to the work in WAP Phase II including budget.	Oct 1993
005	<b>WATER ACTION PLAN - MAIN REPORT</b> 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	<b>WATER RESOURCES POLICY</b> 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	<b>RAPID WATER RESOURCES ASSESSMENT</b> 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	<b>INSTITUTIONAL AND MANAGEMENT ASPECTS</b> An assessment of water resources management functions, structures and tools. Proposals for a future management strategy and corresponding capacity building.	Jul 1994
009	<b>INTERNATIONAL ASPECTS</b> 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	<b>ANNEX REPORT - VOLUME 1 - DISTRICT STUDIES</b> Collation of district studies for Arua, Mbale, Mbarara, Moroto, Mukono and special studies for Hoima, Kabale and Tororo.	Jul 1994
011	<b>ANNEX REPORT - VOLUME 2 - GROUNDWATER DATABASE</b> Groundwater database development description, specification and manual.	Jul 1994
012	<b>ANNEX REPORT - VOLUME 3 - MANAGEMENT ASPECTS</b> 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	<b>ANNEX REPORT - VOLUME 4 - PROJECTS AND ACTIONS</b> 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	<b>WATER ACTION PLAN - EXECUTIVE SUMMARY</b> 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



## **Agenda 21 - Addressing the Question of Sustainability**

The Uganda Water Action Plan is one of the first official responses to the guiding principles on water laid down at the UN Conference on Environment and Development in Rio de Janeiro in June 1992 — the so-called Agenda 21.

### **Principle 1: Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.**

What is needed is a holistic approach to water resources management—one which links economic and social development to the protection of natural ecosystems.

### **Principle 2: Land and water resources should be managed at the lowest appropriate level.**

Decisions and actions concerning water resources management should be taken by those who are affected by them. Depending on the nature of the issues, the forum might be a household, a meeting of two community groups, or an international river basin committee.

### **Principle 3: The Government has an essential role as an enabler in a participatory, demand-driven approach to development.**

Legislation, structures and procedures should make up a framework within which there can be participation, by all interested parties, in the analysis of problems and the taking of actions.

### **Principle 4: Water should be considered as a social and economic good, with a value reflecting its most valuable potential use.**

To encourage conservation and protection, the true economic value of water resources should always be taken into account when prioritising potential uses - without infringing the basic right of all people to have access to clean water at affordable prices.

### **Principle 5: Water and land use management should be integrated.**

The planning of both land and water development projects should take into account the interrelationships - and the fundamental way in which ecosystems regulate both water quantity and quality.

### **Principle 6: Women play a central part in the provision, management and safeguarding of water.**

Though women are so obviously active in providing and using water, they are far less involved in its management. Special efforts should be made to facilitate women's effective participation in decision-making forums concerned with water resources.

### **Principle 7: The private sector has an important role in water management.**

Also, special efforts should be made to sensitise private sector resource managers to the benefits of sound water - because, collectively, these managers have a significant impact on water resources.

Source: Uganda Water Action Plan

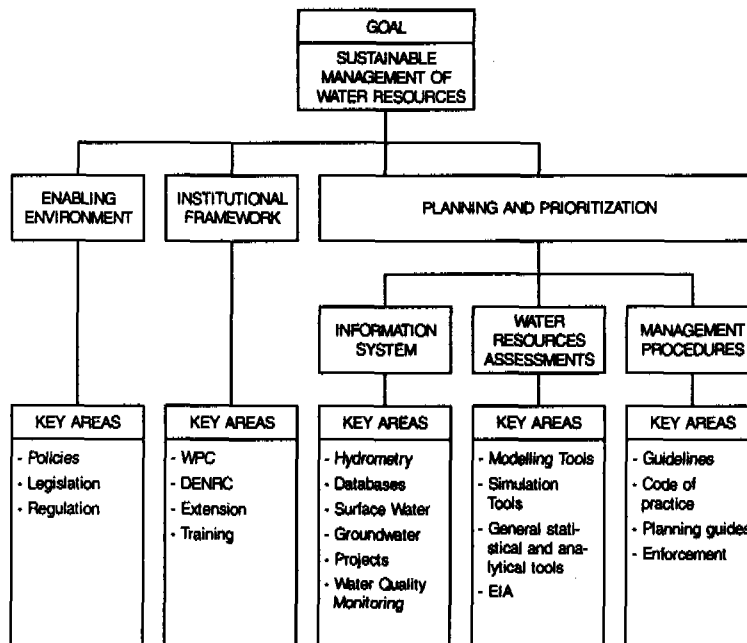
## 5 Implementation Strategies

The WAP team designed a strategy for water resources management that addresses three main considerations:

- **Creation of an enabling environment** that consists of policies, national legislation, regulations and local by-laws for encouraging sound management of the nation's water resources and constraining potentially harmful practices.
- **Creation of an institutional framework** that strikes a balance between national, regional and local levels of accountability for the management of water resources.
- **Establishment of priorities and planning procedures** that enable decision makers to make choices between alternative actions based on agreed policies, available resources, environmental impacts and social and economic consequences.

These fit into the Government's general strategies for the development of the water sector.

### Water Action Programme



DENRC District Environmental and Natural Resources Committee  
 EIA Environmental Impact Assessment  
 WPC Water Policy Committee

## **Creating an enabling environment**

### **Policy**

The draft National Water Policy, identified above, is the primary policy guidance document for the sector. The National Water Policy takes its direction from the Constitution and the National Environmental Management Policy (1994). It includes the policy and strategies for provision of water supply and sanitation services. Through it the Government is attempting to exert influence over the participants in the water supply sector — to assist their planning and direct their efforts.

The Government anticipates that the emerging policy environment will facilitate management of water resources at the most appropriate levels. It hopes to focus the combined energies of all participants towards the achievement of common objectives. The policies will provide the guidance necessary to cut wastage and improve co-operation. They will generate a constructive environment within which each participant will realise their maximum potential.

### **Legislation**

As mentioned above, the new Water Statute has been enacted recently. The Statute is the legal cornerstone for administration of the water supply and sanitation sector. The Water Statute is a comprehensive document. However, the Government must support the Statute through appropriate regulations approved by the responsible minister.

#### **Creating an enabling environment**

- Government agencies will set the water resources framework, monitor, mediate and enforce, rather than implement water resource activities.
- The Water Statute, and its associated regulations, will ensure adherence to the National Water Policy.
- Regulatory controls will be introduced only in response to clear needs.
- Costs of administering regulations will be balanced against potential benefits.
- Regulations will be kept at a level consistent with the capacity to enforce them.
- Regulatory controls will be combined with economic incentives, to influence individuals and organisations towards sound management of water resources.
- Guidelines and tools for efficient water resource management will be developed and made available to appropriate institutions and community groups.

- The Water Action Plan will be a continuous process of co-ordinating the preparation of policies, laws, regulations, guidelines and standards; advising on institutional development and training programmes; providing a framework for prioritising and co-ordinating water resource development activities.

Source: Uganda Water Action Plan

## **Regulations**

The Government has singled out two important areas for the introduction of improved regulations:

- extraction of surface and groundwater;
- wastewater discharge.

However, it is realistic about the impact it should have on the rural population. Therefore, it will exclude small-scale extraction from regulations if they do not significantly affect the possible use by others of the same resource. Likewise, the scope of wastewater legislation is unlikely to impact upon rural users. The Government is taking a pragmatic view; weighing the perceived and expressed demand from those affected against its administrative and enforcement capabilities.

## **Creating the institutional framework**

The Water Action Plan attempts to strike a balance between national and local ownership of the responsibility for carrying out the activities detailed in the plan. The organisational framework builds on existing reconstruction of the ministries. It anticipates the roll-out of reforms within district administrations. It recognises the strong participation of village-based LCs and user groups in securing water supplies.

## **Water Policy Committee**

The Government is in the process of establishing a Water Policy Committee (WPC) in accordance with the provisions of the Water Statute. The Permanent Secretary of the Ministry of Natural Resources will be Chairman of the WPC and the Directorate of Water Development will provide its Secretariat. The WPC will interact with the National Environment Management Authority (NEMA) with regard to environmental policies and effluent standards. The WPC will not be in a position to take decisions binding on all member organisations, except where specified in legislation. However, agreements reached by the Committee will be at such a high level that formal decisions and implementation should be assured.

The main functions of the WPC will be to:

- co-ordinate the formulation of national priorities for the use of water and related land resources;
- co-ordinate policy formulation regarding international water resources;
- co-ordinate the continued Water Action Plan process;
- review plans for major development projects that affect the protection and utilisation of water resources;
- resolve conflicts between government bodies regarding water resources that cannot be resolved at the district level.

Members of the WPC will represent government ministries and departments. They will be heads of relevant institutions and membership cannot be delegated. Other members will include representatives from district administrations, research organisations and NGOs.

### **Directorate of Water Development**

In the future the DWD will function primarily at the national level — regulating and supervising rather than implementing. District LCs, through the District Executive Secretaries, will employ district staff concerned with water supply services. The DWD will station some staff in district centres but these people will be employed on water resource monitoring rather than construction or maintenance activities.

#### **Creating the Institutional Framework**

- A Water Policy Committee (WPC) will provide the mechanism for cross-sectoral policy decisions at the national level - as well as for policy development in relation to the shared water resources of the Nile Basin.
- WPC will work in close collaboration with other policy making bodies, such as the National Environment Management Authority (NEMA) and the Ministry of Finance and Economic Planning.
- A WPC Secretariat will be established within the Directorate of Water Development.
- An integrated approach will be promoted by concerned government agencies and NGOs for the implementation of water development projects.
- An integrated approach to extension services will be developed.
- Water resources management functions will be delegated to the lowest appropriate levels - based on existing Local Committee structures.
- River basin authorities will be established only in response to clear needs.

- Private sector involvement will be promoted.
- The participation of women will be enhanced.
- Capacities will be developed at the national, district and community levels - to plan and initiate soil and water conservation activities, to monitor the use of water resources, and to enforce regulations.
- Public awareness will be raised about the impacts of water quality on health.

Source: Uganda Water Action Plan

### **District committee and departmental structure**

The District Development Committee and its sub-committee, the Technical Planning Committee will assume overall planning and co-ordination of rural water supply at the district level. The District Environment and Natural Resources Committee (DENRC) will supervise technical staff in the implementation of their tasks and recommend policies, priorities, by-laws and standards to be adopted by the DRCs.

The DRC will determine membership of the DENRC. Members will include political and administrative personnel with relevant social, technical and economic skills.

### **Integrated extension approach**

The Government has thrown its support behind an integrated approach to extension work. It requires districts to co-ordinate their extension staff in various departments so that they disseminate the same environment and water resources management information and guidelines. This is to ensure that the districts make maximum use of scarce resources and co-ordinate water and land management practices in an environmentally sound manner.

### **Community structures**

The village and sub-county water and sanitation committees are linked to, and may be part of the Local Committees (LC1 to LC3). This close coupling of overall decision-making to the needs of the water sector allows the development of demand-driven community management of rural water supply.

The Government anticipates that women — who already play an important role in the maintenance of water facilities — will take higher profile roles in committees. It will encourage them to take greater overall management responsibility for water supply and sanitation.

## **Mediation structures**

Like the community structures mentioned above, the mediation and judicial structures proposed by the Water Action Plan fit into the existing LC framework. At the lowest level, the LC1, courts, chiefs and elders will settle local water disputes. At a district level, the District Environment and Natural Resources Committee (DENRC) will act as an administrative appeal board.

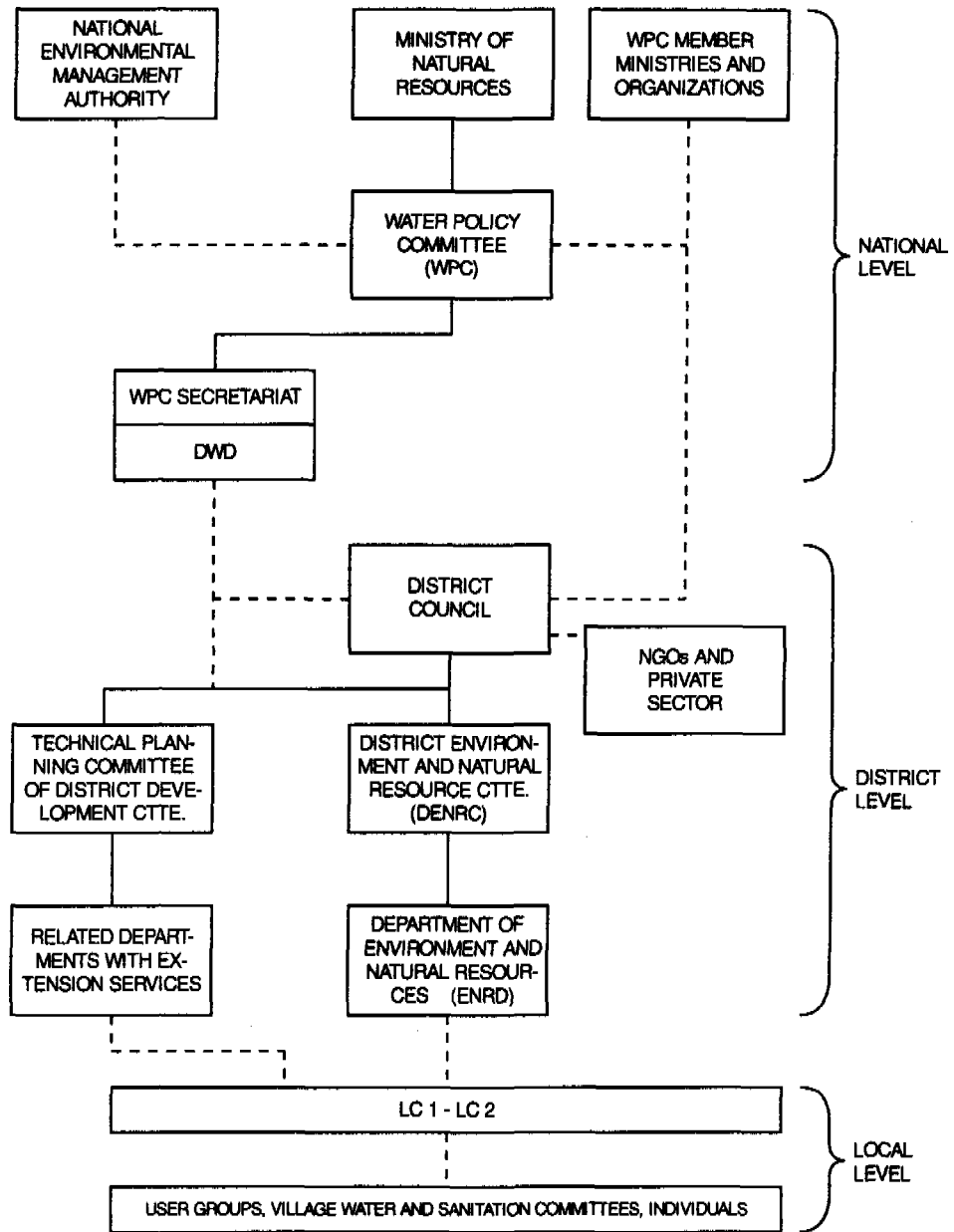
The District Development Committee (DDC) can resolve inter-departmental disputes. Alternatively, persons or organisations disagreeing with a decision of the DENRC can take a civil dispute to the Magistrates Court.

## **Capacity building**

With all the change anticipated within the sector, the Government sees a clear need for training, education and information activities at national, district and community levels. It plans work on the following:

- orientation programmes to inform politicians, officials and public representatives about the Water Action Plan, new water resources legislation and structural changes;
- reorientation programmes for staff in DWD, other key sector ministries and district administrations to deepen awareness of water resources management issues and clarify new roles and responsibilities;
- curriculum development to integrate water resource management topics within the curricula of relevant training institutions;
- extension training to support workers with a responsibility for providing information and facilitating discussion about water resource issues;
- information dissemination on water resource management issues — particularly to members of LCs and natural resource committees within local communities.

## Institutional Structure for Water Resource Management



————— LINES OF RESPONSIBILITY

- - - - - LINES OF COMMUNICATION, LIAISON AND SERVICES

NOTE: LINES OF RESPONSIBILITY FROM DISTRICT TO NATIONAL LEVEL WILL CONFORM TO DECENTRALIZATION DIRECTIVES  
 CTTE.: COMMITTEE



## **Establishing the required management procedures and tools**

The Government recognises that it cannot single-handedly cope with alleviating poverty among the poorest population. Therefore, it sees its role in the future as that of a facilitator of action, rather than an implementer of project activities. In order to play an effective role in the rural water sector, it needs to play a stronger hand during the conceptual development and planning of rural water supply and sanitation projects.

The Water Action Plan identified serious shortcomings in existing management procedures and tools. The DWD needs to develop these tools and techniques, including:

- an information system for collecting, analysing and disseminating data required for management decisions;
- water resource assessments that provide the basic knowledge to evaluate impacts of alternative management decisions;
- management procedures — a set of guidelines and codes of practice — needed for consistent responses in problem solving and decision making.

### **Data management system**

The DWD plans to develop an integrated data management system that will collect, analyse, store and disseminate information. The DWD will assist the wide variety of users in their access to, and use of, the information relevant to their specific functions. It will attempt to abstract and analyse information at a district level wherever possible, thereby improving speed and efficiency in making and implementing decisions. The data flows to other sectors related to water resources, including agriculture, land, fisheries and forestry, present a significant challenge.

### **Water resources assessments**

Within the Water Action Plan the DWD undertook a series of rapid water resource assessments. It needs to undertake further work to gain a better picture in the following areas:

- Upper Nile system to ensure that this major water source is managed in an appropriate and sustainable manner. As an upstream riparian, Uganda must assure its use of the Upper Nile does not have an impact of significance on downstream countries.
- Ugandan catchments to assess the suitability of surface water sources to supply concentrations of demand — particularly the needs of small towns and rural growth centres.

### **Establishing the Required Management Procedures and Tools**

- First priority will be given to providing water of adequate quantity and quality to meet domestic needs.
- The allocation of water to meet the needs of irrigation, livestock, industry and other demands, will be made considering the economic, social and environmental values of water.
- The planning of water use will be based on sustainable yields of sources.
- Water quality management will focus on minimising pollution by specifying appropriate water quality and effluent discharge criteria.
- Linkages to land use management will be taken into account.
- Water resources management will be co-ordinated between districts within the same watersheds.
- Soil and water conservation measures, agricultural and forestry practices will be seen as integral to water resource planning.
- The important linkages between wetlands, surface water regimes and water quality will necessitate an integrated conservation and development strategy.
- In major water resources conservation or development projects, consideration will be given to the trade-offs between economic or social benefits and environmental costs; and the Environmental Impact Assessment process will be used.
- Opportunity and environmental, as well as direct, costs will be taken into account when establishing project priorities.
- Tariff systems, fees and charges will be designed to provide incentives for water conservation and minimum wastage.
- Adopting a "polluter pays" principle, fees and penalties will be assessed and levied on the volume, chemical and biological composition of the discharge - so pollution reduction at source will be encouraged.
- The allocation of water for use within Uganda will take into account international obligations.
- Regional co-operation in the development, management and equitable use of shared water resources will be promoted.

Source: Uganda Water Action Plan

- Groundwater resources to determine the ability of groundwater to meet the needs of rural water supply. Within the rural water supply sector in Uganda corrosiveness is a widespread problem. High fluoride concentrations also cause concern in some locations. There has been some speculation about the possible drying up of groundwater sources.

## **Regulation and management**

The DWD has recognised that it needs to put in place appropriate regulatory machinery for conservation, equitable use and protection of Uganda's water resources. It has to ensure that it has the capacity to operate and maintain that machinery. It is taking a pragmatic approach to its task, addressing the need for control over major users of water without hindering access to water for the general population, in particular the rural poor.

Under the criteria laid down in the Water Statute, and subsidiary Regulations, no regulation will be imposed on extraction of water by manual means from any source — groundwater or surface water. This means that, although the Government plans to tighten up its control over larger water users, it will continue to exempt the vast majority of rural water supply schemes from water extraction charges.

## **General strategies for domestic water supply**

The domestic water supply sector has prominent status within the broader context of water resources. Therefore, the Ugandan Government is focusing its strategies on the sustainable development and management of this sector.

Its policy objective for the domestic water supply sector is:

**“provision of water of acceptable quality, in adequate quantities and within easy reach of every household based on management responsibility and ownership by the users; the coverage target on a national basis is 75% of the population in rural areas and close to 100% in urban areas by year 2000 with a 90% effective use and functionality of facilities.”**

Uganda National Plan of Action for Children (UNPAC, 1992)

The water supply sector in this context incorporates (a) domestic water supply in rural and urban areas, (b) sanitation and sewerage services, and (c) health and hygiene promotion. Further, 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 sanitation and sewerage strategy.

Based on the overall policy objective, the Government has set general strategies for provision and management of domestic water supply, sanitation and sewerage services as follows:

- The Government, on a national basis, will assess investment and development efforts in the water supply and sanitation sector using an equitable share principle. Decisions will take a rationalised view on urban versus rural interventions. The Government will select areas most in need of sector improvements based on need-related criteria.

- In line with Uganda's democratic decentralisation process, water supply and sanitation policies will be based on the principle that the central authority moves away from being a 'provider' of services to an 'enabler'. This means the creation of an appropriate framework of institutions, laws, regulations, as well as capacity building and awareness raising to foster a participatory approach to sector development.
- A negotiation-driven approach will be a key principle during planning and design of water supply and sanitation facilities. The Government will channel limited funds to the communities that will maintain their new or improved facilities sustainably. This approach will also expedite implementation by encouraging beneficiaries to choose systems that they can operate and maintain and to meet their scheduled commitments accordingly.
- Sector interventions will provide support to strengthen the capacity of water sector organisations within development projects. Support will include institutional and human resource development as well as support for the principle of community management. The Government will empower and equip rural communities to own and control their water supply and sanitation systems.
- Appropriate low-cost water supply and sanitation technologies will be selected. This will offer good possibilities for community participation in decision making. It will allow communities to take responsibility for physical implementation, including operation and maintenance of completed facilities, without compromising the role of water as a vital infrastructure for socio-economic development.
- Sources (surface water or groundwater) will be selected with due consideration to the implication of operating costs. Groundwater should always be considered when risk of contaminated surface water exists which would necessitate water purification with associated higher capital and operational costs.
- The importance of gender is recognised. The Government will address gender issues in such a way that both sexes are involved as decision makers. It will empower women and enable them to determine their own development collectively with men (A specific gender policy paper has been finalised recently).
- The Government will ensure sustainability of projects through cost recovery at a level where it recovers at least the cost of operation and maintenance from the users in rural areas. It will recover as much of the capital costs in the larger piped schemes, in addition to operation and maintenance costs.
- The Government will ensure the financial viability of public utilities. Tariff structures, with cross-subsidies where appropriate, will ensure that services can be reliably maintained, including public standposts or other facilities for the poor.

- Co-operation within the sector is important. The Government will establish mechanisms at relevant levels within the administrative system to foster country-level collaboration among stakeholders active in the sector. Tools to be used to achieve this will include Inter-Ministerial Steering Committee (IMSC) meetings for the rural water sector, Water Policy Committee (WPC) meetings for the entire water resources sector and Letter of Understanding (LOU) to guide and monitor the operation of NGOs within the water sector.
- The Government's commitment to the privatisation process in many spheres of the national development effort also includes various aspects of the water and sanitation sector. Hence, it will establish mechanisms to facilitate participation of the private sector in the construction and actual provision of services either as individuals or groups and associations.
- The Government will support community-based operation and maintenance. It will organise access to spare parts, if not readily available on the market, and provide access to reliable technical support for major breakdowns. It will place emphasis on supporting private sector initiatives to meet these needs.
- The Government will place emphasis 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 will be important vehicles for disseminating the key health messages. Projects will, wherever appropriate, include construction of latrines in schools and provision of educational materials on hygiene.
- The Government will protect public utilities against vandalism, personalisation and unlawful take-overs.

The strategies outlined above are still under further development. Over time the Government will supplement these general strategies with more detailed strategies covering specific issues like technology, health and hygiene, economic and financing, management and institutional aspects, private sector involvement, operation and maintenance, and aspects related to sustainability of services.<sup>12</sup>

<sup>12</sup> S. Jacobi, 'Framework for Sustainable Rural Water Development in Uganda', presented at *Second Regional Workshop on Country Level Collaboration*, Entebbe, Uganda, 18-20 October 1995.

## 6 Moving Forward in the Rural Water Sector

After years of decline, the rural water sector in Uganda is once again moving forward. Within the sector, the DWD is taking a lead role. Together with the Ministry of Health, its project staff, supported by district administrations and local community groups, are implementing or rehabilitating rural water supply systems right across the country. The rate of progress is quickening and, considering the problems that need to be tackled, visible results are starting to emerge.

### Rural water supply and sanitation programmes

The Government attempts to meet its national area target (75 per cent coverage by 2000) through the provision of basic services. It has defined basic services as:

**“a protected (safe), year-round supply of 20 - 25 litres per capita per day, preferably within 1,500 metres (1.5 km) of all households.**

**The general design criteria is to serve a maximum of 200 to 300 persons per outlet.**

**Further, the difference in elevation between the household and the outlet should preferably not exceed 100 metres.”**

Uganda National Plan of Action for Children (UNPAC, 1992)

At present, projects catering for rehabilitation and expansion of rural water supply and sanitation services can be found in all 39 districts of Uganda — though at quite varying levels of activity.

The largest programmes are:

- RUWASA East Uganda Project covers a total of eight districts in the south-east of the country and targets a population of more than three million. After a first phase that started in 1990, it is about to enter its second phase also of a five-year duration. The project is Danida financed.
- WES, National Water and Environmental Sanitation Programme (formerly SWIP, South West Integrated Project, and WATSAN Programme), is a country-wide programme (rather than RUWASA which is area-based). It attempts to introduce implementation activities in thirty districts where no other donor financed projects are on-going, though in some cases with only limited impact due to low activity level. The programme is financed through multi-partite arrangements between UNICEF, SIDA, NGOs, and district authorities. A programme co-ordinating unit is located in DWD, and Government is taking overall implementation responsibilities.

- NURP, Northern Uganda Reconstruction Project, is a World Bank financed infrastructure project operating in eight of the northern districts. The water supply component includes emergency repairs of a few piped water schemes, but the budget is mainly geared towards provision of rural water supplies. The activities started in 1993 and are scheduled to last four years.
- RTWSP, Rural Towns Water and Sanitation Programme, addresses the needs of more than 60 smaller towns and rural growth centres. Policies and guidelines have been developed with assistance from the World Bank. A phased implementation is envisaged in the coming years based on "project packages" to be financed by a number of external support agencies including World Bank, Danida, Austrian Government and BADEA.

In addition, a number of other project activities in the rural water sector are in progress financed and executed by NGOs. Presently, the most prominent NGOs in the Ugandan context are: WaterAid (UK), AVSI (Italy), World Vision International, Lutheran World Federation and CARE.

Finally, some projects are on the drawing board. Most advanced is a JICA-financed rural water project to be implemented in three districts in the centre of the country.

### **Water supply**

Depending upon local conditions, the DWD constructs protected springs, shallow wells (both hand-dug and augered) and deep boreholes. In most cases handpumps are installed on these sources of supply but in a few cases, where conditions allow and demand exists, gravity-fed systems are constructed. In the future, protected springs and boreholes or wells fitted with handpumps will continue to be the dominant means of providing rural communities with drinking water.

With proper training, greater involvement and mobilisation, communities have the capacity to maintain water points once constructed. The community is responsible for fencing off areas around springs prone to pollution risks. A three-tier community-financed maintenance system that works at village, sub-county and district levels is being introduced (see panel for details).<sup>13</sup>

### **Sanitation**

Sanitation is seen as an integral part of the community development strategy. It is both a fundamental component of primary health care and an essential component of the overall socio-economic development of the country through minimisation of water-borne diseases. Water development activities and promotion of sanitation are inter-dependent and inter-active.

<sup>13</sup> *Guidelines to Community-based Operation and Maintenance*, RUWASA District Operations Unit, First Edition, May 1993.

### **Community-based Management System**

The objective of a Community-based management system (CBMS) for the rural water supply sector is to establish a community-financed maintenance system operated and managed by the users.

The CBMS operates on the following levels:

- Village level (1st tier): users form a Water User Committee which appoints two caretakers for each source. The Committee collects funds for preventative maintenance and repairs. It is responsible for maintenance of the installation.
- Sub-county level (2nd tier): the private sector is responsible at this level. Private handpump mechanics undertake repairs and preventative maintenance on the handpumps. Local shops distribute spare parts. The role of the LC3 and Sub-county Water and Sanitation Committees is limited to selection of handpump mechanics and spare parts dealers, and partial payment for the training of mechanics.
- District level (3rd tier): district-level spare part dealers, appointed by spare part manufacturers, distribute spares within wholesale and retail markets. DWD's District Water Officers monitor the operation of the maintenance system. They also operate Borehole Maintenance Units that undertake rehabilitation and repairs beyond the capacity of the handpump mechanics. Over time the private sector will take over this function.
- National level: spare part distributors provide spares and distribute them to private district-level dealers. DWD monitors the general performance of the maintenance system and takes corrective actions at policy level as appropriate.

Sanitation provisions make up an important component of the integrated water supply and sanitation schemes. In some cases, the DWD has not entertained a water supply project until a certain number of leaders in the recipient community have installed an improved latrine for use by their household. The intention was that no project should start without the key influencers within a community demonstrating a core level of support. This specific "integration" strategy, and the strictness of its policing, are subject to review presently.

In line with policies that demand user-absorption of costs, the DWD is progressively removing subsidies on sanitation platforms (Sanplats). It plans to phase out all subsidies on Sanplats by the year 2000. With the support of DDCs it is shifting construction of latrine slab production away from district headquarters towards sub-county and parish levels with the private sector playing an increasing role in production and sale.



## Hygiene Education

Mass education remains the most important factor in rural sanitation.<sup>14</sup> Therefore, each integrated water supply and sanitation project involves a strong education component. In the past, sanitation programmes have not been very successful because of operational problems that include low levels of community awareness and participation, and conflicting cultural values and practices.

Over time, a wide variety of appropriate methods of education have been developed, including community meetings, drama, radio programmes, posters, calendars, etc. Schools are seen as a place where the message can be delivered to a receptive audience. Integrated water supply, improved latrine and education programmes invariably use the local school as one of their demonstration sites.

## Area-based centrally implemented programmes

The large-scale RUWASA project provides some good examples of the lessons learned to date. Over a period of five years it has constructed or rehabilitated two thousand five hundred water sources and met the basic water supply needs of six hundred thousand people. It has almost doubled water supply coverage from a base of 10 to 15 per cent. By the middle of 1995, coverage varied between 45 and 53 per cent in three of the eight RUWASA districts. In the other five districts the project had achieved 20 per cent coverage. Unforeseen problems included:

- over-estimation of the potential from protected springs and shallow wells — only 40 per cent of identified sites could be adequately protected;
- high cost and low water quality from hand-dug wells — driving up the average cost of supply;
- high incidence of corrosive water conditions throughout the project area — the project found it necessary to install stainless steel (rather than galvanised iron) rising mains;
- the WHO drinking water quality guidelines proved too stringent — over 50 per cent of shallow wells and springs did not qualify.

Hence, the original RUWASA project coverage target was not met. However, this and other DWD projects have provided a firm foundation for all future rural water supply and sanitation projects. Within the RUWASA project, the DWD was able to create much of its implementation 'software' that now includes workmanship standards, installation guides, training packages and monitoring systems. Notwithstanding the problems identified above, the RUWASA project will be followed by RUWASA II, a second phase that will build on the success of, and incorporate lessons learned from the first phase. In particular, the centralised project planning and management structure will be re-designed to be based on district management units.

<sup>14</sup> E.E.N. Muzira, Permanent Secretary/Director of Medical Services, in preface to *National Sanitation Guidelines*, July 1992.

## **Decentralised rural water development**

Moving from central control to district level implementation is an interesting example of the use of decentralisation as a strategy for sustainability. Over the past few years, Uganda has gained experience with decentralised implementation approaches under a programme named WATSAN. Only recently, these activities have been grouped under a national umbrella programme referred to as the National WES Programme. The individual projects within the programme are characterised as being relatively limited in scope as far as financing and number of water points are concerned.

In a WES project, the overall planning, financing, implementation and management terms and responsibilities are agreed to through a multi-partite arrangement (spelled out in a Letter of Understanding) between an external donor, an implementer (often an NGO), DWD, the district authorities as well as local community/user group committees.

The following sections highlight various aspects and lessons learnt in one of the WES programme areas, viz. Mpigi District.

### **Situation before decentralisation**

At the beginning of 1994 the DWD started a water and sanitation project covering the entire district. The project was funded and implemented by UNICEF, an NGO, Central Government, District Administration and local communities. During the early period of the project, district headquarters initiated, planned and implemented most of the water and sanitation improvement activities. There was limited mobilisation, involvement and responsibility shared at lower levels (county, sub-county, parishes and communities). As a result, the project experienced the following problems:

- Supervision of facility construction was difficult. A small team of supervisors from district headquarters simply could not cover all construction sites.
- Output lagged behind expected performance. It was noted to be well below potential capacity because there was little community participation and involvement.
- Most of the community lacked knowledge of WES activities, facilities and procedures. This was evidenced by the community's improper use and maintenance of facilities provided by the project.
- Follow-up for proper construction, use and maintenance by the district level staff was inadequate. They were stationed too far from the facilities, resulting in poor maintenance of the facilities provided.
- Capacity building was lacking. As a result, the community depended on limited district level resources for construction and repairs.
- Latrine slabs, blocks, concrete rings etc. procured in support of WES activities were produced at a casting yard located at the district headquarters.

Recognising the problems with the project, the WES management team decided to decentralise some of the operations to sub-county and lower levels. They felt that this would help to make the project more community-based and ultimately more sustainable.

Under the revised project arrangements, initiation, planning and execution are carried out at community level. The central level and district structure provide some off-shore materials, logistics, policy and planning guidelines, support supervision and monitoring and evaluation. The WES project team has developed the following strategies together with project beneficiaries in order to decentralise as much as possible to grassroots level. The project makes extensive use of the existing administrative and political structures — the LC system.

### **District council advocacy**

The WES team has lobbied hard for district council support. The Mpigi District Council, composed of councillors from sub-country levels, took some convincing. However, the council is now mobilised and convinced of the value of the WES project as an essence for development in the district. The project is now one of the capital development projects earmarked within the district budget. This financial support supplements budgets allocated at lower levels of the LC system.

### **Mobilisation and training**

Project activities begin with mobilisation and training of county and sub-county field staff from the Office of Health and Community Development. District level staff train community and opinion leaders to sensitise and give them skills for up-coming project activities. After this, local leaders are judged capable of mobilising the community and giving them advice on health and hygiene, technical issues and procedures of the project.

### **Water source maintenance fund**

An operation and maintenance fund is established for each water source protected. The fund is maintained through user contributions. It supports construction, operation and maintenance of the water source.

### **Formation and training of committees**

The users form water and sanitation committees at sub-county, village and source levels to plan, implement and monitor water and sanitation activities in their respective areas. The water and sanitation committee at source level is responsible for development and maintenance of the source and supervision of sanitation in the user community. Sub-county Health and Community Development staff train these committees so that members are aware of their roles and functions and equipped with the necessary skills to perform effectively. The training follows a standard training curriculum that was developed for the district.

## **Establishment of construction and maintenance structures at sub-county level**

The community, through their leaders, selects local masons and pump mechanics. District project staff train these recruits in *construction, maintenance and repair of water and sanitation facilities*. The masons and pump mechanics carry out the construction and repairs that may be required in their respective sub-counties. Their remuneration is met from the operation and maintenance fund at source level. Local area Health and Community Development staff supervise construction. District level staff provide support, planning, supervision, monitoring and evaluation services.

## **Rural towns water and sanitation programme**

A growing number of communities in Uganda are emerging between the two extreme settings of scattered rural settlements or villages and larger urban areas. These centres encompass communities ranging from district centres, small towns, to rural growth centres. They provide focus for *increased social and economic activity* in the local areas, which justify the provision of essential services such as schools, medical facilities, and basic water supply and sanitation systems.

During the past few years the DWD has, as a priority activity, prepared a nationwide Rural Towns Water and Sanitation Programme (RTWSP). This programme addresses improvement of the water supply and sanitation services in small towns and rural growth centres. As part of this preparation a "Policies and Guidelines" document has been drafted which describes the strategy for the planning, design, implementation and maintenance of these water and sanitation facilities. The RTWSP policies and guidelines represent a major shift in government strategy towards decentralised operation and maintenance of services in urban areas currently provided by DWD.

## **Principles of the programme**

The programme follows a negotiation-driven approach to planning, implementation, and operation of water supply and sanitation improvements in the small towns and rural growth centres. Beneficiaries will have a choice of technology, within the prevailing technical limitations and hence the choice of management. Those who wish to participate in the scheme will form Water User Groups (WUGs) and will make a contribution to the capital cost that varies with type of technology. They will commit themselves to manage and finance operation and maintenance. In the case of piped systems serving more than one WUG, a Water User Association (WUA) will be established to manage the system. *In line with the decentralisation policy*, the local authorities will play a major role in the planning and implementation process in each town. The DWD will plan, regulate and facilitate the process rather than implement and operate the schemes as before.

## **Objectives of the programme**

The objectives of the RTWSP are:

- to assist all towns to obtain basic water and sanitation services, while encouraging the higher levels of service for those who can afford it;
- to increase the capacity of communities, the private sector and government to provide and maintain sustainable water supply and sanitation facilities;
- to promote better health, through improved personal hygiene, excreta disposal and environmental management practices.

Basic service for water supply is defined as a protected, year-round supply of 20 to 25 litres per capita per day, preferably within 250 to 500 metres of all households and serving 200 to 300 persons per outlet. Higher service levels for piped water supply systems (yardtaps and house connections) are encouraged in order to increase revenue and thus better ensure sustainability of the individual schemes. In these cases the unit consumption figures are higher, typically in the range of 50 to 100 litres per capita per day.

Basic service for sanitation is defined as an improved household latrine. The Sanplat and VIP technologies are some of the means towards latrine improvements. Due attention will be paid to match service levels of sanitation and water supplies.

## **Financing arrangements**

Financing arrangements under the RTWSP are as follows:

- the community will contribute the equivalent of one year's operation and maintenance costs as their contribution to the construction of a water supply system — this will also serve as an indicator of their ability to operate and maintain the chosen system in future;
- for private household connections, the cost of the connection will be borne in full by the individual (or institution), while the project will finance the source and distribution costs for these individual connections;
- operation and maintenance costs will be fully borne by the beneficiaries (and institutions) including the replacement of components with useful life expectancies of to about eight years;
- future rehabilitation and expansion of source works and mains will be financed on an appropriate cost sharing basis to be determined later.

## **Maintenance**

Maintenance of point source water supply systems (handpumps, protected springs and public standpipes) will be the responsibility of individual WUGs through their respective Water and Sanitation Committee (WSC). Maintenance of all on-site sanitation systems will be the responsibility of individual households. The WSCs will supervise use of the water point, collect revenues, keep accounts,

and make repairs themselves or hire the services of a private mechanic.

Maintenance of piped water and sanitation systems will be the responsibility of WUAs who normally will contract operation, maintenance and repair functions to a private entity. Household revenue collection will be the responsibility of individual WSCs, who will be charged by their WUA on the basis of water delivered as metered at individual outlets (standpipes and house connections).

### **Procedures**

The DWD, prior to officially inviting a particular town to participate in the project, will carry out a "low key" rapid resource survey. The survey will confirm the population size and geographic distribution; test the need and willingness to participate and pay; and, identify technical options that are feasible.

Thereafter, the project will establish a formal contact with the district and town. The RTWSP implementation process in a given town includes the following phases: (a) Promotion Phase; (b) Mobilisation Phase; (c) Planning and Design Phase; (d) Construction Phase; and, (e) Operations and Maintenance Phase.

### **Features of the Implementation strategy**

The DWD's implementation strategy contains a number of features that are both innovative and imperative to the long-term sustainability of the sector. These features provide useful insight into the need for a pragmatic, as well as a visionary, plan for the future.

### **Technology issues**

The Government insists that technology choice is based on technical, sociological and financial feasibility studies. The criteria applied include the willingness and ability of user groups to pay. It shows a clear preference for appropriate technology solutions when these can be shown to be effective and in the best interests of the recipient groups.

At present, the DWD is in the process of defining appropriate national drinking water standards. In the meantime, the DWD deems the World Health Organisation (WHO) drinking water guidelines to be desirable rather than mandatory. The DWD relaxes the requirements in some instances after taking due consideration of specific local conditions and water use habits.

The DWD does not demand the inclusion of sanitation facilities into all water supply projects. However, it calls for the assessment of needs during the planning stage. When sanitation facilities are found to be desirable, it insists that the community is involved in choosing appropriate sanitation technologies. It stipulates that an emphasis should be placed on acceptability — both culturally and financially — by user communities. In practice, most rural projects support the introduction of low-cost solutions such as improved latrine with Sanplat as an integral part of a water supply system.

## **Standardisation**

Standardisation has become something of a mantra for many rural water supply engineers. Standardisation of equipment has many advantages. It facilitates centralised co-ordination, supervision and monitoring of sector activities; it promotes more efficient utilisation of resources and interchangeability of hardware; and it helps to sustain programme outputs.

The issue of standardisation becomes important in conditions of scarce resources. In particular, the need for standardisation becomes most urgent in situations of extreme financial shortage, especially shortage of foreign currency. Within an open economy, the issue of standardisation becomes less critical — open borders allow freer movement of pumps and spare parts. The market plays a greater role in the decision-making process. Therefore, with Uganda's embrace of a floating foreign currency exchange system, it can be argued that the issue of standardisation loses its urgency, if not its *raison d'être*.

In theory, the DWD supports a policy of 'standardisation'. In practice, it has implemented a policy of 'limited-use'. At deepwell sites, the DWD insists on U2 and U3 (India Mark II & III) handpumps as standard equipment — on all projects, regardless of the donor or implementation agency. These pumps may have cylinder assemblies entirely of stainless steel or comprise brass-lined cast iron walls with stainless steel plungers. The DWD uses either uPVC or stainless steel rising mains and stainless steel pumping rods, except in the case where groundwater is non-aggressive. Here, galvanised iron rods and rising mains may be installed.<sup>15</sup>

For shallow settings, a formal policy decision is still pending. At the present time, modified (light handle) U3, NIRA AF85, Tara, Consallen and privately imported pumps are used. The DWD stipulates that shallow groundwater pumps installed on public works programmes must be properly field tested, have gained acceptance by the user community and be supportable under the CBMS. It promotes the use of public-domain direct action-pumps and/or pumps manufactured locally or regionally.

## **Health and hygiene**

The Government places great importance on the dissemination of information about the correlation between safe drinking water and a decrease in water-related diseases. It places emphasis on the importance of linking low-cost sanitation with the provision of new water supplies, and accompanying both with appropriate health and hygiene education. Health promotion, hygiene education and low-cost sanitation are provided in the context of improved environmental sanitation.

<sup>15</sup> *Towards a Strategy for Standardisation of Handpump Types and Spare Parts Supply in Uganda*, Ministry of Water, Energy, Minerals & Environment Protection, Water Development Department, June 1993.

## **Role of women**

Women's involvement in design, construction, operation and maintenance of improved water supply and sanitation facilities is supported even to the extent that a separate gender policy exists for the water supply sector. The key criterion is that women and men have equal opportunity to participate fully in all aspects of community management.

More specifically, women's involvement in health promotion is safeguarded, recognising their important role in improved health of their families and in changing the behaviour of children. The Government also uses schools as vehicles for disseminating key health messages.

## **Sustainability and financing**

Generally, financing of new installations is given low priority where maintenance of similar installations in the same area is neglected. For rural water supplies, inclusive of small towns and growth centres, community contributions towards construction are based on technology choice and raised by the beneficiaries before construction starts. The Government fixes subsidies on low-cost latrines to the poorest communities a level that will not discourage sanplat construction.

## **Management and institutional strengthening**

One of the over-riding objectives of the Government's policies is to delegate water supply and sanitation functions to the lowest appropriate administrative levels, based (as far as possible) on the existing district and LC structures. It sees the role of the DWD as one of strengthening and adding value to the district operations rather than placing a layer of bureaucracy over them. It is attempting to improve the capacity to respond to community requests, at district and county/sub-county levels in planning, monitoring and technical service delivery.

The DWD encourages the training of beneficiaries, as they are expected to participate in the choice of water and sanitation technologies. The users also assist in the siting of water points and, where relevant, construction activities.

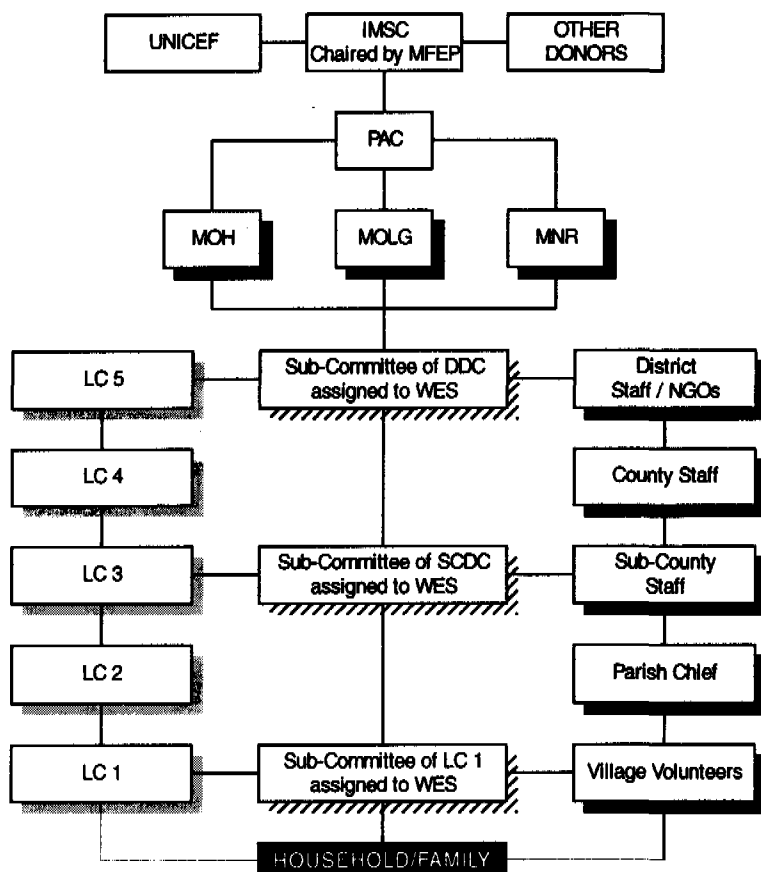
## **Partnership**

Water resources and water supply development management interact 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 agro-chemicals. 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. Thus, the DWD has a vested interest in that the activities of the interacting sectors are undertaken in a way consistent with sound water resources management principles and guidelines.



In the water supply sector, a strong partnership exists with other ministries and departments, for instance the Ministry of Health, Ministry of Local Government, Ministry of Gender and Community Development, and Ministry of Finance and Economic Planning. For the rural WES activities, the established Inter-Ministerial Steering Committee (IMSC) that includes members from these various ministries, carries out overall co-ordination and supervision.

### Generalised Co-ordination/Management Structure for Rural WES Activities



DDC	District Development Committee	MNR	Ministry of Natural Resources
IMSC	Inter-Ministerial Steering Committee	PAC	Programme Administrative Committee
MFEP	Ministry of Finance & Economic Planning	LC	Local Committee
MOH	Ministry of Health	SCDC	Sub - County Development Committee (Proposed)
MOLG	Ministry of Local Government	WES	Water and Environmental Sanitation

Source: WES Programme Co-ordination Unit/DWD

A considerable number of external donor agencies, NGOs and other actors play a role in the water supply sector. The DWD actively seeks to partner with these organisations. It recognises their strengths and tries to accommodate their needs. In the case of the NGO community, the Government is attempting to strengthen its relationship through the establishment of a regular forum for information exchange, project agreements through Letters of Understanding and guidelines for their operations.

### **Private sector involvement**

The private sector has not played a significant role in the water supply sector in Uganda to date. However, the Government is committed to the privatisation process — including its application to the rural water sector. The overall community-based approach, with the implication of user groups' responsibilities for, and ownership of, facilities is in itself a strong drive towards privatisation.

The DWD is planning to strengthen its use of private sector design and supervision services. It will shift responsibility for general maintenance away from its district-based borehole maintenance units so that they can specialise in borehole repair and desilting operations. Over time most of these activities can be handed over to the private sector.

Planned borehole drilling operations over the coming years will swamp the capacity of the DWD's existing borehole drilling units. However, the DWD sees no need to increase its own drilling capacity — indeed it has developed plans to reduce its capacity. In the future, it will retain only enough plant and equipment to respond to specific emergency situations. Over the past year at least one private drilling contractor has entered the market. The DWD will encourage future projects to place drilling activities in the hands of the private sector via competitive tendering procedures.

As privatisation gathers pace the DWD will shift its focus towards tasks like:

- licensing drilling contractors;
- issuing technical specifications in respect of borehole completion;
- granting drilling and abstraction permits;
- setting water quality standards as well as preparing regulations governing sampling and analysis techniques;
- drafting guidelines related to contractors' reporting requirements to maintain the centrally maintained groundwater and borehole database.<sup>16</sup>

<sup>16</sup> S. Jacobi, 'Policies and Guidelines for the Water Sector', presented at *Uganda Water Sector Conference*, Directorate of Water Development, Kampala, 3-4 March 1994

## 7 Potential for Success

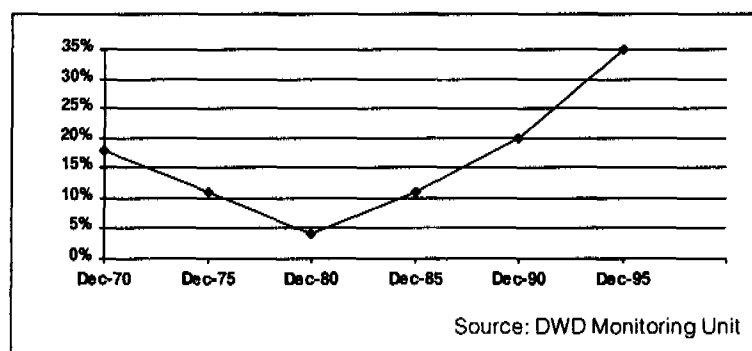
The political, economic and social situation in Uganda has improved markedly over the past few years. However, many parts of the rural population are still without safe drinking water supplies. The policy formulation process has established a framework for success and implementation strategies have taken the process forward. It is now contingent on the main actors to ensure that the potential for success is realised.

### Keeping up the momentum

Despite the odds, progress in improving the rural water supply situation over recent years has been encouraging.

### National water supply coverage

National coverage increased from less than 5 per cent during the early 1980s to around 35 per cent by the end of 1995. The annual rise is currently running at 3 to 4 per cent — this against a steadily increasing population base.



*National Water Supply Coverage*

However, a good start never guarantees a great finish. Not all projects have delivered results up to expectations — there have been some failures and set-backs. Despite this, the mood within the DWD and other sector agencies is one of optimism. Staff are keen to make up ground; to recover momentum previously lost.

### Monitoring

The national framework for water resources management and development will have no significance if the actions are not implemented and unless all concerned parties are aware of the principles and procedures and are prepared to co-operate in its implementation. In order to know and assess the impact of the policies and strategies, monitoring and evaluation mechanisms must be established. The DWD will be the key monitoring agent. It has established a basic list of indicators to monitor and evaluate progress in policy implementation across the three main components of activities. Monitoring and evaluation activities are also integral components of the National WES Programme as well as the Rural Towns Water and Sanitation Programme.

<b>Enabling environment</b>	Passing of the Water Statute and the NWSC Statute
	Approval of associated regulations
	Delegation of water resources management functions to district administrations — shown by redeployment of DWD staff and policy statements of DWD vis-à-vis relationship with district authorities.
	Acceptance of responsibilities by district administrations — shown by budget allocations and priorities in committee structures.
<b>Institutional framework</b>	Setting up of Water Policy Committee (WPC)
	Nature of WPC membership — frequency of meetings, attendance, actions taken, etc.
	Setting up of WPC Secretariat, and resources allocated.
	How "water resources interests" are catered for in new committees under decentralisation, whether or not a Department for Environment and Natural Resources is created, and whether or not an Environment and Natural Resources Committee (or its equivalent) is established.
	Formation/number of Water User Associations and Water and Sanitation Committees and their functioning.
	Number of districts that take up the idea of an integrated extension service related to environmental management.
	Response to orientation workshops: attendance; quality of staff; follow-up in terms of acting on conclusions.
	Response to training related to integrated extension services: membership; attendance; quality of participation; follow-up.
<b>Planning and Prioritisation</b>	Activation of information system: reporting schedule; reliability of data; speed of processing; efficiency of dissemination mechanisms.
	Setting up water abstraction and waste discharge permit systems; efficacy of procedures; reactions of permit holders; impact on affected sources.
	Operation of enforcement and mediation mechanisms; number and types of cases; utilisation of agencies (LCs, Magistrates Courts, Chiefs, Elders, etc.); reactions of disputants.

*Water Action Plan Implementation: Monitoring Indicators*

## **Constraints on progress**

Despite the optimism, Uganda faces significant constraints to its progress towards the 2000 rural water supply goal. It would be foolish to discount the problems it is likely to encounter along the way. These range from the generic problems faced by any country in the developing world to those unique to Uganda.

## **Macro-economic issues**

The Ugandan economy, despite improving indicators, is still very weak. It is highly dependent upon inflows of capital for infrastructure development. Currently about 90 per cent of water supply development funding originates from external sources. Uganda has liberalised its economy, yet it is not yet past the point that it could revert to less pragmatic, inward-looking economic policies. In addition, the removal of macro-economic distortions in and of itself does not lead to better institutions and organisations. Indeed, it can highlight many of their inconsistencies and failures. It does, however, provide a firm basis for moving forward. The goal for Uganda is to use the few resources it does have to best effect.

The bottom-up economic planning and policy formulation system will help — likewise the more open foreign currency system. However, Uganda is still very exposed on a macro-economic level. Its main exports are prone to heavy fluctuations in price. Hence, any optimism for the rural water supply sector needs to be tempered by the knowledge that the country, as a whole, still faces major risks.

## **Institutional weaknesses**

When the NRM came to power, Uganda's public institutions were almost non-functional. Its planning and policy functions are still weak. They are hampered by lack of information and skills and constrained by inadequate procedures for exchanging information between the various planning agencies. The situation has, and continues to, improve. However, the situation is not reversible overnight.

The concerted efforts of the DWD and the other sector players have been pivotal in the re-establishment of the rural water supply sector. As the DWD moves to a policy making and support institution, the responsibility for implementation and maintenance must be picked up by district and lower-level organisations, as well as users. The hand-over of this responsibility is still in the early stages and it is not possible to determine the effectiveness of transfer to date. However, the capacity at different levels, and of various players is generally inadequate. Further training and support will be required for successful policy implementation. It will involve the successive detailing of policy from the top level of intent through the structuring of actions required to achieve intended policy outputs and impacts.

There is some danger that Uganda is undertaking too many changes at once. The risk is in the process of change, rather than the end goal. On the other hand, change is necessary and should make the water supply sector more sustainable.

## **Inadequate funding**

On present projection, the existing target for rural water supply coverage looks optimistic. The DWD has the capacity to deliver, but not the resources. It has estimated that it will need US\$ 30 million per year to meet the 75 per cent target. At the present time, around US\$ 15 million is available to the sector. More could be channelled through the DWD, but some donors resist, believing that the DWD is not yet capable of administering increased levels of funding. Others, feel that different sectors demand greater assistance. Some hold back as a way of influencing further political change.

Under decentralisation, implementation is delegated to district-level operations. Therefore, the absorption capacity of the sector is dependent on the districts' capabilities to handle the investments and deliver the services accordingly.

Uganda is not in the fortunate position of generating sufficient internal funds to reach the planned rural water supply coverage. Therefore, it stands dependant upon external support. With the necessary framework now in place, it would be disturbing to see the 2000 goal slip by for want of needed support.

## **Decentralisation**

Decentralisation policy has many benefits. However, some issues are not yet clear and capacity requirements cannot always be met. This problem will subside with implementation, but, at the moment, the goals of the Government seem to be a distant challenge rather than a future reality. The Government is supporting a radical decentralisation of power — right back to grass roots. The outcome for the rural water supply sector should be positive. Decentralisation should lead to improved administrative performance, institutional accountability and quick response to needs of beneficiary committees. However, the success of implementation within the sector falls increasingly upon the shoulders of local leaders. Whether they have the skills to manage and assess the programmes remains an issue. Another issue is how various district authorities prioritise the water supply sector among competing requirements. There is a strong need, therefore, for the DWD to sensitise and build the capacity of these individuals, the district structures and community-level organisations.

The barriers to progress include a possible reversion by central government departments once the full implications of the decentralisation policies are felt. Capacity will be stretched and resources will be limited. There will be some tendency to balk at the challenge. However, the further into implementation the policies are driven, the greater the signs of a re-emergence of sustainable local participation and management. The future for rural water supply will be brighter if this continues.

## **Political reform process**

The donor community and other private agencies outside the Government can play an influential role in advocating for particular policy issues. Donor influence can bring about significant short-term improvements. The offer of their funds can be persuasive. However, donors also influence policy shifts that may not be in the interest of the country over the longer-term. The Government already faces pressure on the issue of the speed of its move towards reinstatement of full political freedom. It feels threatened by the external influences being brought to bear. However, it is largely dependent upon external parties for its budgetary requirements.

Government resources are limited to 10 - 15 per cent of total resources needed for the development of the rural water supply sector. To reach the 75 per cent coverage figure, the Government will need to secure substantial additional funds. It is justifiably concerned about a return to the past forms of governance, yet the political structures it embraces do not satisfy many of the influential donors. Therefore, it walks a fine line between what it feels is right from a national security point of view and what is requested of it by influential outsiders.

## **Lack of integration**

Because of its dependence on external support, the rural water supply sector lacks integration. Activities are parcelled into projects and programmes — these sometimes trigger inter-agency competition and inadequate collaboration. The three-way alliance between donors/NGOs, public sector institutions and local communities is proving effective. The Government appreciates the role played by the various external support agencies and NGOs. However, with an ever increasing number of such organisations operating in the country, co-ordination and regulative issues remain a topic of concern.

The DWD faces a challenge in dealing with the increasing number of agencies wishing to enter the sector. It also finds itself in the position of handing over much of its traditional responsibility to private contractors, many of which are new and have never before played a major role in the rural water sector in Uganda. Over time, the sector should benefit from the combined energies of all participants but, at the present time, the DWD must ensure that inputs are orchestrated to maximum effect. This presents it with a significant challenge.

## 8 Towards 2000

In the next four years to the millennium, the Government of Uganda has set itself high targets for supply of water to its people. It hopes to reach fully three quarters of its population with clean, safe drinking water by the turn of the century. The challenge is enormous but the signs are positive. Since 1986, the Government has made better progress on rural water supply implementation than mere coverage records would suggest. It needed to overcome a huge legacy of political, economic and social problems before it could even begin to advance the sector. To its credit, it has not sought a quick solution or an easy answer. Instead, it has re-evaluated the entire process of governance and public administration within the country — and with it the methods by which it will cater for the basic needs of its rural population.

The Government has stepped well beyond parroting the opinion of various external agencies. It has endorsed the international policies it believes to be appropriate to its circumstances, rejected others on the grounds that they are unsuitable at this time and proposed a host of innovative new ideas. Although very much in line with current development thinking, its economic policies stand in their own right. Its policies on decentralisation appear correct for Uganda at this time and place. Its support for the private sector should bring the results it seeks. Its reform of Uganda's political structures is steady and pragmatic. To determine if these policies are ultimately successful we must wait; time will tell. However, for now, most observers agree that the start is a positive move in the right direction.

For the water sector, enactment of the new Water Statute and preparation of the Water Action Plan mark a major step forward. Together, these documents and the forthcoming National Water Policy paper create a rational framework for the sustainable use of the nation's water resources. Institutionally, the new legislation is significant in that it makes the Water Action Plan the binding plan regarding water resources. However, the statute, policy and plans of themselves will not bring about results in the field — they will not 'put pumps in the ground'. Therefore, it is time to shift away from the rhetoric, to the reality, of capacity building, enhancement of sustainability, and genuine popular participation. The emphasis must move from project design measured by the amount of donor inflows to project implementation measured by successful project execution in terms of project outputs, results and impacts. All this depends on the establishment of policies based on popular support and accountability right down to the community level.

Instead of further programme expansion, there is a need to focus on physical asset management and maintenance. The community-financed maintenance system will assist. Early signs that local communities will rise to the challenge are starting to emerge. The Government sees the development of diversified and dispersed centres of power as a way of providing rural people with a say in their future. It will help them to find a more sustainable means to de-



mand — and get — a better rural water supply. Its public institutions will help, rather than hinder, their aspirations. At district level, all the participants will co-operate and collaborate.

It is often alleged that donors have dictated the strategy and content of policy priorities in Uganda and, therefore, excessively influenced the future direction of the country. The Government denies the claim. It says that the future of Uganda is in the hands of Ugandan people — "they will decide what is right for Uganda for themselves". They will make Uganda not just what it used to be, but what it can become — a thriving economic centre, fully capable of supporting itself. Its rural people will benefit from a political environment that takes from the best of African tradition and rejects the worst. The major innovations that are putting the Government at the forefront of social engineering and management around the world indicate that it may be right.

Uganda's emerging decentralised decision-making structure offers an opportunity for establishment of appropriate rural water supply management structures at all levels — national, district and community. The success of the rural water supply programme both affects and is affected by the success of decentralisation. As an example of the good that can come out of Africa, the proposed decentralised system of rural water supply management and development in Uganda stands with the best. It is participatory and integrates into existing social and political systems. It provides for greater inputs of local resources — physical, managerial and financial. It should bring greater benefits where it counts, at the grassroots. Whether it is fully sustainable without outside assistance will take some years to determine. However, the framework has been developed for the eventual transfer of all responsibility for the rural water supply sector to those most in need — the rural people themselves.

The Uganda Water Action Plan is a major component of the Government's emerging framework for rural water supply sustainability. If frequently updated — with new actions added as contexts change and requirements develop or progress falls below expectations — the Water Action Plan will stand the test of time. Conversely, if it exists as a mere paper exercise — large on rhetoric and small on practical application — the sector stands to lose its reputation and the rural population its basic human right. The Government has devoted so much time and attention to the development of an appropriate framework that it deserves to succeed. In the drive towards sustainability, the Water Action Plan stands as a guiding light. It remains to be seen whether it provides sufficient illumination, but the future for rural water supply in Uganda looks brighter now than at any time in a generation.

To fulfil the promise of the Water Action Plan, the Ugandan Government will require support. It is simply unable to fund the expenditure necessary to accomplish its water supply targets without an inflow of donor funds. Given the encouraging results that the Government has achieved in a few short years, external parties appear justified in increasing their financial support. If all participants can

further strengthen their emerging partnership, the rural population of Uganda stands to gain the most. Reaching the target of 75 per cent access to safe drinking water throughout the country by the year 2000 will no longer be a distant hope to them; it will be a firm reality.