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THE REPUBLIC OF UGANDA

MINISTRY OF WATER, LANDS AND ENVIRONMENT

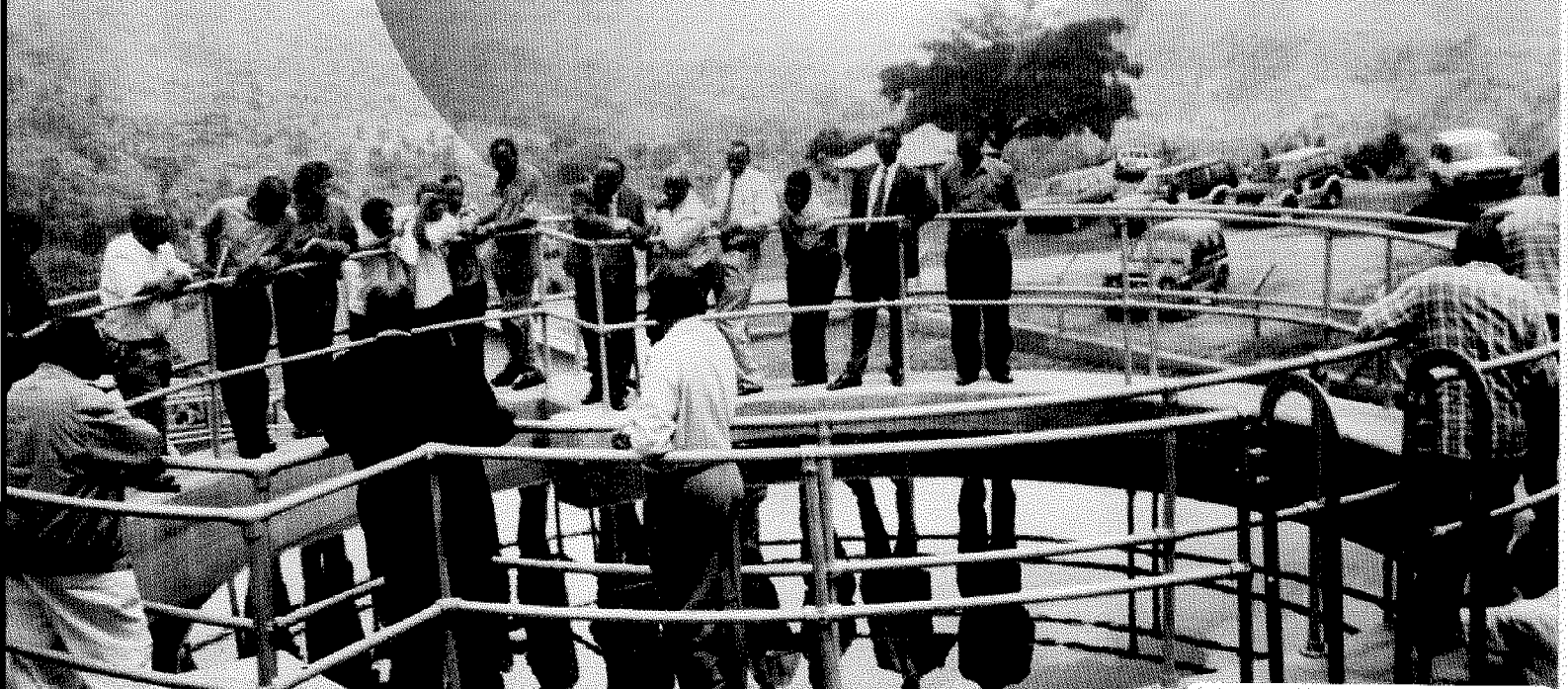
Directorate of Water Development

INFORMATION BOOKLET

July 2000 - June 2003
PERFORMANCE REVIEW

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Foreword by the Minister



Welcome to the second issue of the Information Booklet, a publication of the Directorate of Water Development of the Ministry of Water, Lands and Environment. The booklet is part of efforts by the Directorate to publicise goals, key strategies, programmes, policy reforms and achievements of the water and sanitation sector on an annual basis.

The Water and Sanitation Sector is one of the Government of Uganda's priority areas that is vital for poverty eradication and sustainable development. Provision of sustainable safe water supply and sanitation services, their proper management and utilisation are necessary conditions for improved health and economic development of the populace. The government plans to provide access to safe and clean water for all by the year 2015 if the required inputs are availed and the current performance trends are maintained and monitored.

The vision of the Directorate of Water Development under the Ministry of Water, Land and Environment is to have sustainable utilization of water resources for poverty eradication. Access to water and sanitation is a necessary precursor to development at all levels. I am happy to mention that achievements to this end have been tremendous. Currently service delivery in terms of national water coverage stands at 56 per cent from 8 per cent in 1986. Water Sector strategic interventions through expansion of economic opportunities have contributed to an increase in household disposable income thereby significantly impacting on poverty reduction. I commend the DWD, development partners and all stakeholders for their participation in making this vision a reality.

I would also like to commend DWD for spearheading such a publication. It is through such initiatives that policy makers, development partners, stakeholders, private service providers and the public are kept informed of what is happening in the sector. This not only increases awareness but also provides for accountability and acceptability of programmes within the sector.

I wish to thank DWD for this continued effort and to thank those that have made the production of this issue possible.

Hon. Mrs. Maria Mutagamba
Minister of State for Water

From the Director's Desk



The first Information Booklet was published in July 2000. This is a second information booklet and it reviews the progress made in the last three financial years (FY 2000/01 to FY 2002/03).

The Government of Uganda through the Directorate of Water Development (DWD) is mandated to manage and develop the water resources of Uganda. This calls for the involvement of all stakeholders so that the provision of adequate quantity and quality water for social and economic needs, is sustained both for the present and future generations. This Information Booklet will serve to update readers with information on the progress in this direction.

Uganda's water and sanitation sector has undergone major changes in the last 10 years that have seen the sector take new dimensions in the delivery of water and sanitation services to users in the rural and urban areas. The Poverty Eradication Action Plan (PEAP) introduced by government in 1997 necessitated review of existing policies, strategies and programmes. The sector continues to undergo major reforms since 1997 all aimed to improve delivery of water and sanitation services and set a new agenda in the 21st century.

The evolving Sector Wide Approach to Planning (SWAP) which is part of the current reforms in the sector and decentralisation have brought about changes in the way DWD and other relevant institutions operate within the sector. Local governments through the districts are now responsible for implementation of sector programmes while DWD is concerned with monitoring this arrangement, sector planning and setting policy and guidelines. The important role played by NGOs in the sector planning is better recognised. Private sector participation is also being actively encouraged particularly in the construction and operation of water facilities in the urban sub sector.

Although provision of safe water and sanitation facilities still remains a challenge, I think the biggest hurdle the sector is facing today is ensuring that the existing facilities operate at full potential and are properly maintained to ensure sustainability. For example there are currently over 63 piped schemes serving urban and rural growth schemes outside the 15 large towns served by National Water and Sewerage Corporation (NWSC) that are managed by local governments and are performing poorly. The Directorate is working closely with local governments to involve private operators in management of these schemes.

With the current performance trends, availability of funds and the participation of all key stakeholders, I believe that government's goal of providing water and sanitation facilities all urban and rural communities by 2015 shall be achieved. I thank all those who have contributed to the production of this publication and hope that our readers enjoy reading this issue.

P.O. Kahangire

Introduction

The water and sanitation sector is one of the priority areas of the Government of Uganda where adequate, clean and safe water is considered to be a vehicle for social and economic development, hence poverty reduction. Water and sanitation contributes to the achievement of government's poverty reduction targets, particularly in relation to pillar 3 (increased incomes of the poor) and pillar 4 (improved quality of life of the poor) of the Poverty Eradication Action Plan (PEAP).

Key Institutions

The Ministry of Water, Lands and Environment (MWLE) has the overall responsibility for initiating the national policies and for setting national standards and priorities for water development and management. There are three central institutions in the Ministry of Water, Lands and Environment that are responsible for interventions in the water and sanitation sector.

I. National Water and Sewerage Corporation (NWSC), an autonomous parastatal entity established in 1972 is responsible for the delivery of water supply and sewerage services in 15 large urban centres. The centres include Kampala, Jinja/Njeru, Entebbe, Tororo, Mbale, Masaka, Mbarara, Gulu, Lira, Fort Portal, Kasese, Kabale, Bushenyi/Ishaka, Soroti and Arua.

II. The Directorate of Water Development (DWD) is the government sector lead agency responsible for managing water resources, co-ordinating and regulating all sector activities. DWD also provides support services to Local Governments and other service providers.

The Directorate is headed by a Director and has been reorganised to comprise three departments namely:

- *Rural Water Supply Department (RWSD)*
The Rural Water and Supply Department is responsible for Rural Water and Sanitation and Water for Production sub sectors and is responsible for developing of water facilities such as piped water, boreholes, protected springs, shallow wells, gravity flow schemes, rainwater tanks, dams and valley tanks to ensure adequate supply of water for human, animals and other use in rural areas.

- *Urban Water and Sewerage Department (UWSD)*
The Urban Water and Sewerage Department is responsible for developing water facilities in small towns and planning of urban water and sewerage activities. It is also in charge of regulation and quality assurance, sewerage and management of national programs.

- *Water Resources Management Department (WRMD)*
The Water Resources Management Department is responsible for managing the water resources of Uganda

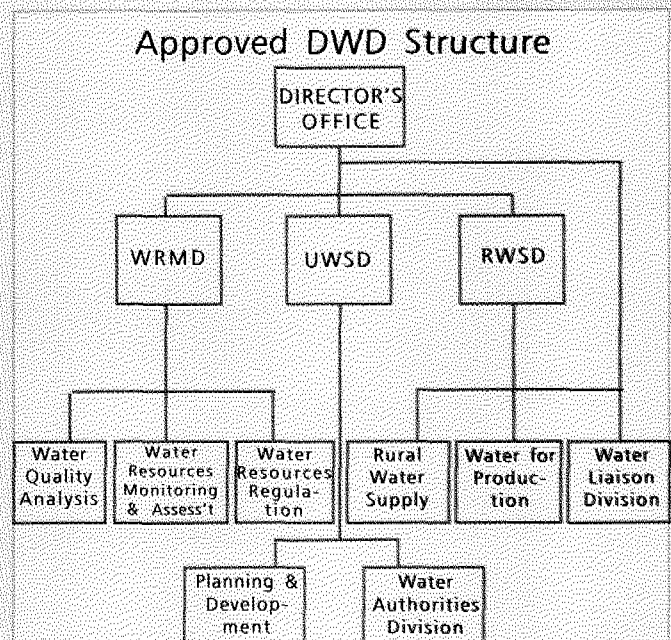
in an integrated and sustainable manner in order to secure and provide water of adequate quantity and quality for all social and economic needs for the present and future.

In addition, the Directorate has four functional divisions, three of which came in place in the new structure.

- Water Liaison Division is responsible for sector coordination, monitoring and reporting functions.
- Water Authority Division is responsible for providing technical support to town councils.
- Water Permit Division oversees fulfillment of the water resources regulation requirements.
- Finance and Administration Division.

The two institutions work in liaison with the following ministries and institutional arrangement in implementation of activities in the water and sanitation sector.

- I. The Ministry of Finance, Planning and Economic Development (MoFPED) with the role of allocating funds, general mobilisation of funding and co-ordination of donor inputs.
- II. Ministry of Health (MOH) with the responsibility for hygiene promotion and household sanitation.
- III. Ministry of Education and Sports (MOES) with the responsibility for hygiene promotion and sanitation in schools.
- IV. Ministry of Gender, Labour and Social Development (MGSD) with the responsibility for gender responsive development and community mobilisation.
- V. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) with the responsibility of spearheading agriculture development, including some aspects of Water for Production.
- VI. Local Governments (LG) including districts, towns and other lower local government units and communities are responsible for implementing, operating and maintaining water supply and sanitation facilities in their areas of jurisdiction except in large urban centres under NWSC.



Sector Mission, Goals, Policies & Key Strategies

Government through the Directorate of Water Development (DWD) of the Ministry of Water, Lands and Environment (MWLE), is mandated to manage and develop the water resources of Uganda. This is achieved by an approach that seeks to involve all stakeholders and communities in order to ensure that the provision of adequate quantity and quality of water for social and economics is sustainable.

Mission

"Integrated and sustainable management, development and use of water resources in Uganda for the present and future generations."

Sector Goals

- To promote co-ordinated, integrated and sustainable water resources and provision of water for all social and economic activities.
- To promote development of sustainable safe water supply and sanitation facilities based on management responsibility and ownership by the users.
- Within easy reach of 65% of the rural population and 80% of the urban population by the year 2005 with an 80% to 90% effective use and functionality of facilities. Then eventually increase reach to 100% of the urban population by 2010 and 100% of the rural population by the year 2015.
- To promote development of water supply for agricultural production in order to modernise agriculture and mitigate effects of climatic variations on rain-fed agriculture.

Key Sector Policies and Strategies

The Directorate of Water Development (DWD) is dedicated to offering equitable water and sanitation service based on the principle of "Some for All and Not More for Some." There are a number of strategies guiding the implementation of activities in the water sector.

- ◆ Demand Responsive Approach (DRA)
This approach allows users to decide on the type of facilities they want, pay their share of the construction costs and manage the operation and maintenance of the facilities.
- ◆ Decentralized Approach
Funds for implementation of facilities are channelled directly to districts as conditional grants with the ministry being responsible for sector coordination, setting standards, preparing guidelines, monitoring, sector reporting, sector research and development.
- ◆ Adoption of Sector-Wide Approach to Planning (SWAP)
This is mechanism for government and donor collaboration to achieve improvement in sector performance, increased resource flows and more efficient use of resources.
- ◆ Integrated Approach
This is a "package" approach that not only involves construction and installation but also provision of software aspects associated with water supply namely mobilisation, community based planning and monitoring, hygiene education including promotion of household sanitation, gender awareness and capacity building.



A boy cleans a protected spring. DWD is encouraging involvement of user communities in maintenance of water facilities such as these.

- ◆ Sustainability
This is the prime objective of all water and sanitation interventions. Sustainability considerations will guide regulations and policies, technology and design options and standards as well as guide implementation arrangements, capacity building strategies and ultimately the speed of achieving sector targets.
- ◆ Financial Viability
This is derived from the community demand driven and extension management users are in principle responsible for operation and maintenance of water and sanitation facilities. The communities are trained in cost recovery collection systems, simple repairs and contracting the private sector for spare parts and more specialised services.
- ◆ Private Sector Participation
The government commitment to the privatisation process in all process including provision of specialised technical services for operation and maintenance of water and sanitation facilities in form of consultants and contractors in the design and construction.
- ◆ Facilitation by the central government
The involvement of government and local authorities to monitor, regulate and facilitate the performance of the private sector and user communities in operation and maintenance. Government will support the cost of major rehabilitation expenses in the interim. It is expected that communities will increasingly co-finance and ultimately take over these expenses in the long term.

Policy and Legal Framework

The management of the water sector is guided by a comprehensive regulatory framework. The sector policy and legal framework includes the Constitution of the Republic of Uganda (1995), the Local Government Act (1997), Uganda Water Action Plan (1995), the National Water Policy (1999), Water Statute (1995), The Water Resources Regulations (1998), The Water Supply Regulations (1999), The Water (Waste Discharge) Regulations (1998), The Sewerage Regulations (1999). Others include: The Environment Management Statute (1995), Land Act (1998), National Health Policy and Health Sector Strategic Plan (1999) and The National Gender Policy (1997).

Sector Reforms, Programmes and Achievements

General Sector Issues and Reforms

Water Sector Reforms

The water sector has been undergoing reform since September 1997 to ensure that services are provided with increased performance and cost effectiveness and in turn decrease the government burden while maintaining the government's commitment to equitable and sustainable water sector services in Uganda. The water reform studies were undertaken under four components studies:

a) Rural Water and Sanitation

The sub-sector reform study was completed in 2000 and strategies and investment plans prepared. Implementation of the rural water sub-sector reform in ongoing and the investment plans are being used to guide the allocation of the District Water and Sanitation Development grants to districts. A strategy for provision of piped water systems in rural growth centres was prepared.

b) Urban Water and Sanitation

The sub-sector reform study was completed in 2000 and the strategies and investment plan prepared. Implementation of the urban water reform has commenced with technical assistance from the German government through German Technical Cooperation (GTZ). The hiring of transaction advisor services for the urban water reform in is advanced stages.

c) Water for Production

The Water for Production Reform Study commenced in May 2002. A draft report was submitted in May 2003 and is being discussed by major stakeholders including line ministries, local governments and development partners. The final study report is due for completion.

d) Water Resources Management

The Water Resources Management Reform Study commenced in July 2003 and will be completed in April 2004.

Institutional Reforms

a) Directorate of Water Development

The Institutional and Organizational Study including the functional analysis of the Directorate for Water Development (DWD) was undertaken from June 2002 to June 2001. The study made recommendations for the re-organization and staffing of DWD which were approved by the Ministry of Public Service in March 2003. The new structure established a new department, Urban Water and Sewerage and four new divisions, Water for Production, Water Authorities, Water Sector Liaison and Water Resources Regulation in addition to some changes in the old structure. Re-organization of the Directorate has commenced.

b) District Water Offices

About 70 per cent of the required staff at district water offices have been recruited and are in place. This follows

a recommendation to the ministries of Local Government and Public Service to guide districts to establish posts and recruit key personnel with relevant qualifications. The staff includes one senior engineer/water officer, one engineer/water officer, one borehole maintenance officer and one county water officer.

c) Value for Money/Technical Audits and Tracking Studies

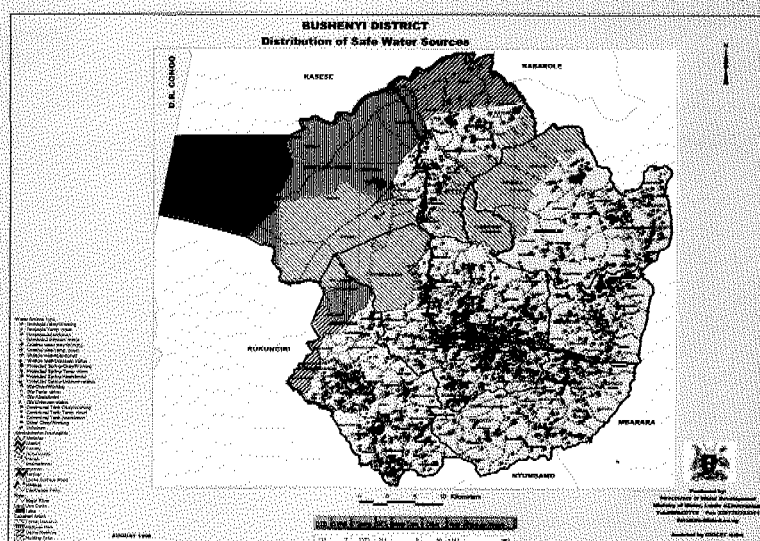
Value for Money and Technical Audits have been conducted in 55 districts and tracking studies done in 10 districts and six towns with the aim to evaluating the efficiency and cost effectiveness of services provided by Local Governments. The studies revealed areas of weaknesses within the local government systems and recommended remedies.

d) Management Information Systems (MIS) Initiatives

As water resource coverage expanded and the administrative units of government became decentralised, the need for a comprehensive Management Information System (MIS) to assist managers at all levels to allocate water sources became critical. An MIS to assist local councils make informed decisions was set up in 1997 with the support of UNICEF. The MIS continues to be developed and established.

Achievements in this area over the past three-year period include:

- Commissioning of five (5) operational databases including Financial Management Information Systems (FMIS).
- The Geographical Information System (GIS) baseline data and mapping of rural water supply and sanitation facilities countrywide is nearing completion. Maps showing available water and sanitation facilities up to parish level are now available at DWD. Only 3 districts (Gulu, Kitgum and Pader) remain to be done.
- Establishment of decentralized MIS/GIS in 10 districts has been finalized. Ten (10) computers with relevant accessories and software have been installed and training carried out in the beneficiary districts.



A sample of a map showing distribution of water sources produced by the GIS mapping unit of DWD



Drilling and borehole construction in Kiboga District

Rural Water Supply and Sanitation

• Safe water coverage and facilities

The goal of the Rural Water and Sanitation sub-sector is to provide basic water supply and sanitation facilities to 65 per cent of the rural population by the year 2005 with an 80 to 90 per cent effective use and functionality of facilities.

The minimum target is to supply 20 litres of safe and clean water per person per day within easy reach. The objective is to reduce the walking distance to the water supply sources to 1.5 kilometres. This will allow the population a chance to devote the time saved into increasing their incomes as well as improving the quality of their lives and reduce poverty.

There has been a remarkable increase in the number of people gaining access to water over the period June 2000 to June 2003. Rural safe water coverage has registered a 9 per cent growth over the same period from 49 per cent in June 2000 to 58.8 per cent in June 2003. By June 2003 11.9 million rural people had access to clean safe water within easy reach compared to 9.3 million in June 2000.

• Sanitation and Hygiene

The sub sector recognises that provision of safe water will not yield results without improvements in hygiene and sanitation. Very often safe water gets re-contaminated during collection, transportation and storage or during use at household level. There is therefore continued effort to educate and sensitise the communities and households on hygiene and sanitation.

Through intensive mobilisation and concerted hygiene education campaigns in the rural areas, household sanitation service coverage has increased from 50 per cent in June 2000 to 52 per cent in June 2003.

In addition there has been improved environment sanitation and the safe water chain. Ecosan toilets were introduced in and are being promoted throughout the country. A total of 7,755 pit toilets and 3,078 rainwater tanks have been constructed in rural schools countrywide through District Water Supply and Sanitation Development (DWSSD) Grant and Ministerial Rural Water Development Programmes by DWD.

In addition to the above 43 gravity flow schemes with 941 public taps of approximately 527.4 kilometres and benefiting about 210, 483 people have been constructed under the Gravity Flow Schemes (GFS) Development Programme through collaborative arrangements between the Directorate of Water Development (DWD), various NGOs and external support agencies. They include Kebisoni (10.5 km), Kihanga (20 km), Kabutega (2.5 km), Nyakagyeme (6.7 km), Rwamarengye (10 km), Karunoni (20 km), Mugyera (35 km), Itemba (15 km), Kyatoko (4.6 km), Mpangango (27 km), Kambuga (12 km), Kanyantorogo (30 km), Rugyeyo (14.5 km), Rurama (9 km), Rutenga (4.5 km), Kabashaki (13.6 km), Isule (0.9 km), Mughete (4.8 km), Kitabu (8.9 km), Katokye (16 km), Nyabirongo (22 km), Bunyandiko (14 km), Buhaura (18.7 km), Kisanga (0.8 km), Karugutu (12 km), Ndugutu (25 km), Nyatigo (0.7 km), Nadiket (6.5 km), Amaler (8.2 km), Lia (8.2 km), Nakapiripirit (6.9 km), Logbudutu (3.9 km), Gbulgbula (3.8 km), Ohjo (3.5 km), Lore Eyi (9.5 km), Bukuku (20 km), Mugusu (45.3 km), Kichenche (19.6 km), Kapetero (12 km), Nyakisi (5 km), Nganiko (4 km), Kabuga (8 km), Kahunge (4.3 km).

• Operation and Maintenance

The principles of the Community Based Maintenance System (CBMS) have been adopted. This system allows user communities to take full responsibility for the operation and maintenance of water supply facilities with the following as the guiding principles.

- ❑ Community demand driven operation and management: The users are in principle responsible for operation and maintenance of water and sanitation facilities. The communities are trained in cost recovery collection systems, simple repairs and contracting the private sector for spare parts and more specialised services.
- ❑ Private Sector involvement: The private sector is in principle responsible for provision of specialised technical services for operation and maintenance of water and sanitation facilities including provision and distribution of spare parts.
- ❑ Facilitation by the central government: The role of the government and local authorities is mainly to guide, monitor, regulate and facilitate the performance of the private sector and user communities in operation and maintenance.

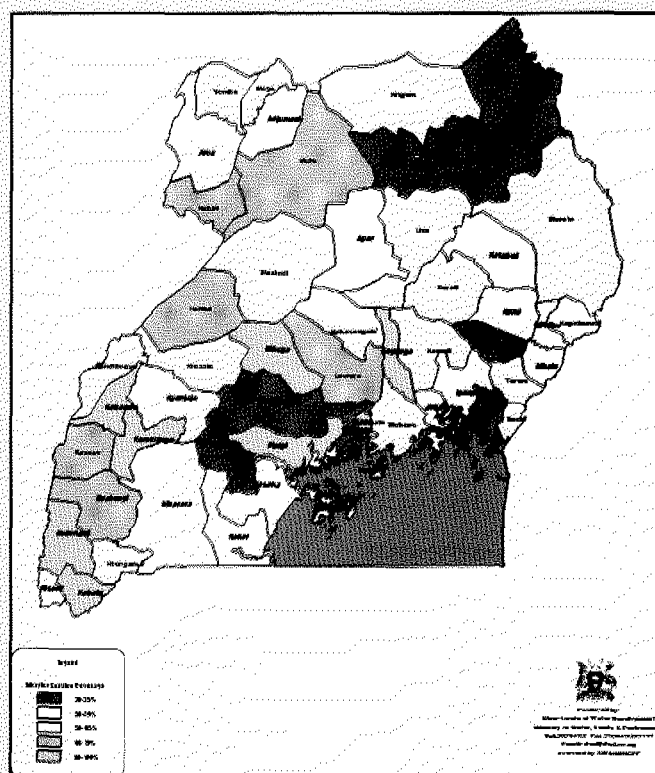
Operation and Maintenance has however proved to be a challenge in the provision of sustainable rural water supply and sanitation facilities. To counter this challenge the sub sector is encouraging districts to prepare an approved O & M plan for the sustainability of a completed facility prior to commencement of construction.

SUMMARY OF RWSS ACHIEVEMENTS

Activity	2000/ 2001	2001/ 2002	2002/ 2003
Protected Springs	771	905	1251
Shallow Wells	880	977	1315
New Boreholes Constructed	246	293	459
Boreholes Rehabilitated	662	418	258
GFS (Public Taps)	14(280)	19(380)	45(541)
Rainwater Tanks for primary schools	548	522	214
Ecological Demo Sanitation Units	-	-	2
Valley Tanks	8	44	12
Rural Growth Centres designed	42	22	4
School Latrines	1466	1037	30
Public Latrines in RGCs	82	90	120
Population served	966,764	841,043	828,085
Coverage (Water)	49.6%	54.4%	58.8%

Source: Rural Water Division

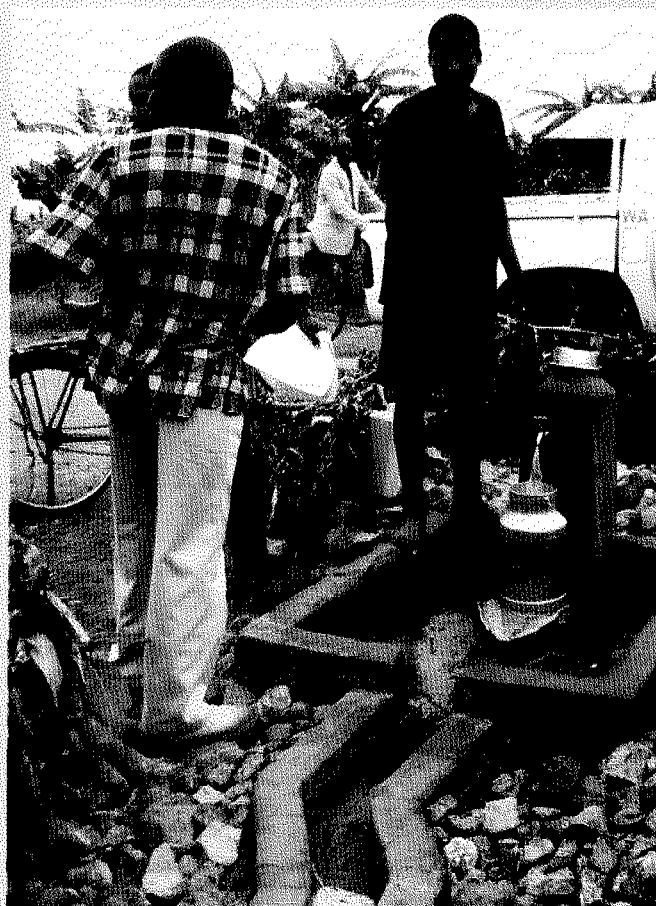
STATUS OF RURAL WATER COVERAGE (JUNE 2003)



• Rural Water and Sanitation Programmes

Services in the rural water sub-sector over the period June 2000 to June 2003 have mainly been delivered through five (5) programmes namely:

- 1) The UNICEF funded Water and Environmental Sanitation (WES) project implemented in 35 out of 45 districts (1998-2002). The components of the project included mobilization of sanitation, construction of water supply facilities and spreading of latrines.
- 2) The DANIDA - assisted Rural Water Supply (RUWASA) project implemented in 10 other districts not covered by WES programme (1989-2002).
- 3) The Japan International Cooperation Agency (JICA) funded project in the districts of Mubende, Mpigi and Kiboga (1998-2000). The programme is expected to be renewed in this financial year.
- 4) The EU/SNV supported national Gravity Flow Schemes (GFS) programme implemented in 13 districts (1998-2003). The programme aimed at exploiting the gfs potential in the target districts as an entry point to other activities.
- 5) The SIDA, DANIDA, DFID, SNV and Austria funded Support to Rural Water (STRW) programme (2000-ongoing). The programme is being implemented in all districts with the aim of supporting districts in implementation of water and sanitation activities through Technical Support Units (TSUs).



DWD staff conduct a GFS mapping of Matsyoro I Gravity Flow Scheme in Bushenyi District.

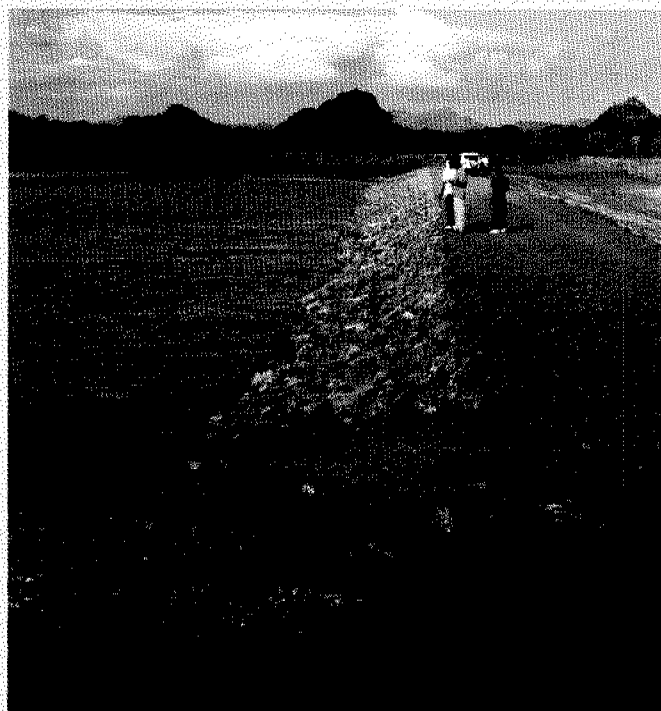
Water For Production Sub-Sector

In collaboration with the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), the Water for Production sub-sector works to provide water for agricultural production, including water for irrigation, water for livestock, aquaculture and water for rural based industry. Achievements this sub-sector include:

- Completion of ten (10) large dams/valleys in the districts of Kotido, Moroto and Nakapiripit, in FY 2000/2001. Four (4) of the dams (Kailong, Kulodwong, Poroo and Tutui) are to be reconstructed.
- Rehabilitation of Mabira dam in Mbarara District in FY 2001/2002.
- Rehabilitation of Kigabagaba dam in Mbarara District in FY 2001/2002.
- Construction of 6 remaining valley tanks in the districts of Kotido, Moroto and Nakapiripit, in FY 2002/2003.
- Installation of 11 windmills in for pumping water from the constructed dams/valley tanks reservoirs to cattle watering troughs in the districts of Moroto, Kotido and Nakapiripit, in FY 2002/2003.
- Designs for construction completion of 15 dams/valley tanks formerly under Livestock Services Project in the Ministry of Agriculture, Animal Industry and Fisheries in FY 2002/2003.
- Procurement of contract for Consultancy Services for construction of 51 parish level valley tanks in six districts of Mbarara, Rakai, Sembabule, Nakasongola, Luweero and Masindi, in FY 2002/2003.
- Designs and Procurement of contract for construction of 51 parish level valley tanks in six districts of Mbarara, Rakai, Sembabule, Nakasongola, Luweero and Masindi, in FY 2002/2003.
- Designs and Procurement of contract for the Rehabilitation of Kodukhul dam in Kumi district has been procured in FY 2002/2003.
- Consultancy agreement for feasibility study for water supply to pastoral areas of northern, northeast and eastern Uganda funded by BADEA, in FY 2002/2003.



A senior engineer, Water for Production Unit, attesting embankment slopes during construction inspection of Longoritopoj dam, Jie County, Kotido District in 2002.



Construction inspection of Longoritopoj Dam in Jie County, Kotido District in 2002

Water for Production Medium Term Performance (Source: Third Joint Water Sector Review WFP presentation)

Description of Benchmark	2000/2001			2001/2002			2002/2003		
	F'cast	Actual	% +/-	F'cast	Actual	% +/-	F'cast	Actual	% +/-
No. of Dams & Valley tanks (% increase in coverage)	15	6	0.4	6	0	0	56	6	0.107142857
Large Dams Constructed	1	1	100.00%	0	0	0.00%	0	0	0.00%
Small Dams Constructed	4	2	50.00%	2	1	50.50%	0	1	
Old Dams Rehabilitated	2	0	0.00%	16	1	6.25%	0	1	0.00%
Large Valley Tanks Constructed	2	2	100.00%	6	0	0.00%	6	5	83.33%
Small Valley Tanks Constructed	0	0	0.00%	50	0	0.00%	50	0	0.00%
Water Storage Created (1000 cubic metres)	967	617	63.81%	4349	0	0.00%	4013	200	4.98%
No of Wind powered Boreholes							20	0	4.98%
Number of animals served		649,841			0			713,333	

Urban Water Supply and Sanitation

The goal of the UWSS department is to improve water service levels and expand service coverage by ensuring that 100 per cent of the population have access to safe water and appropriate sanitation by the year 2015 based on the principle of "Some for all not more for some."

The target is to provide 20 litres of safe and clean water per person, per day and the water source should be located within a distance of 500 metres from households through the following underpinning approaches:

- I. The achievement of efficiency and commercialised operations through the participation of private sector in service delivery
- II. Investment planning and management of assets through Public bodies with professional personnel and
- III. Regulation by an independent Regulator

Government through the Directorate of Water Development's Small Town Water Supply and Sanitation sub-sector has continued to undertake substantial rehabilitation of existing facilities and support the construction of new ones under a number of projects.

Because of these interventions, urban water service coverage in towns under DWD/local governments has increased from 54 per cent in the financial year 2000/2001 to 60 percent in 2002/2003.



SSTWSP: Construction of sedimentation tank for Ibanda Water Supply System



SSTWSP: Construction of the main reservoir for the Ibanda water supply system.

Small Town Water Supply and Sanitation sub-sector

The Small Towns Water Supply and Sanitation sub-sector is defined to include district headquarters, established town councils and trading centres with populations above 5,000 people. It includes towns that will be under the jurisdiction of the Assets Holding Authority (AHA) but currently outside the National Water and Sewerage Corporation.

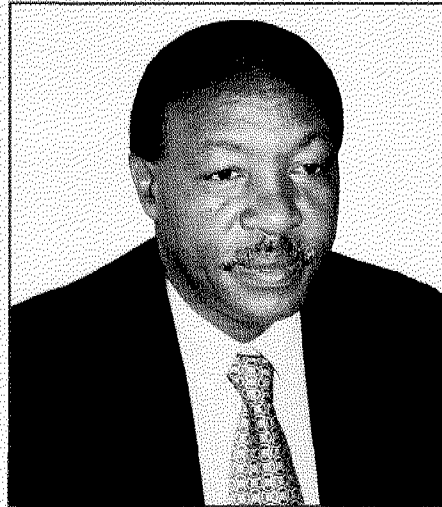
Sub-sector interventions by project from the financial year 2000/2001 to 2002/2003 include the following:

◆ Small Towns Project (IDA)

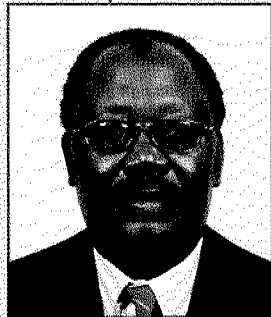
The project is a component of the Rural Towns Water and Sanitation programmes jointly funded by the government of Uganda and the International Development Agency (IDA) at a cost of US \$ 22.9 million. The project is intended to provide safe, clean and sustainable water and sanitation facilities in the 11 towns of Rukungiri, Ntungamo, Lyantonde, Rakai, Kyotera, Kalisizo, Busia, Malaba, Lugazi, Luwero and Wobulenzi.

- ❖ Ten (10) piped water supply systems have been constructed in the towns of Wobulenzi, Luweero, Lugazi, Busia, Malaba, Kalisizo, Rakai, Lyantonde, Ntungamo and Rukungiri. In addition a total of 177-point sources have been protected in the fringe areas of the project towns. An estimated 200,000 people in the project towns have access to clean and safe water.
- ❖ Water systems in seven (7) towns of Lugazi, Busia, Malaba, Lyantonde, Kalisizo, Ntungamo and Rukungiri were commissioned and handed over to the communities for Operation and Maintenance in FY 2000/2001.
- ❖ Five (5) additional distribution pipe works were constructed in Rakai town in the FY 2000/2001.
- ❖ On the sanitation side, a total of 43 public toilets, 14 kilometres of storm drain and 45 refuse bankers have been constructed.
- ❖ Under institutional support, DWD has constructed 11 town water offices.

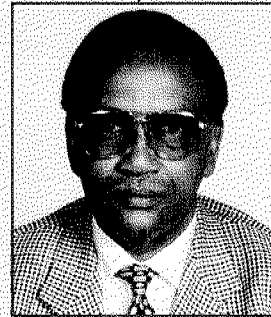
DWD Management Team



Mr. P. O. Kahangire
Director, DWD



Mr. Ssenfuma Nsubuga
Commissioner,
Water Resources Management



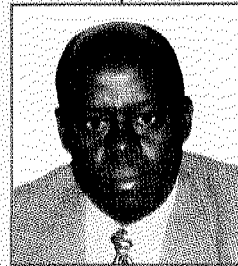
Eng. S. M. Bomukama
Commissioner,
Water Supply



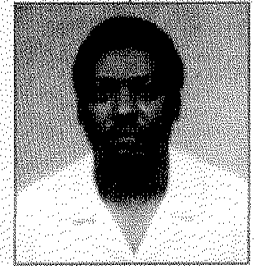
Ms. Florence Adongo
Asst. Commissioner
Water Quality Analysis



Dr. Ntale Kayondo
Asst. Commissioner
Water Resources Management

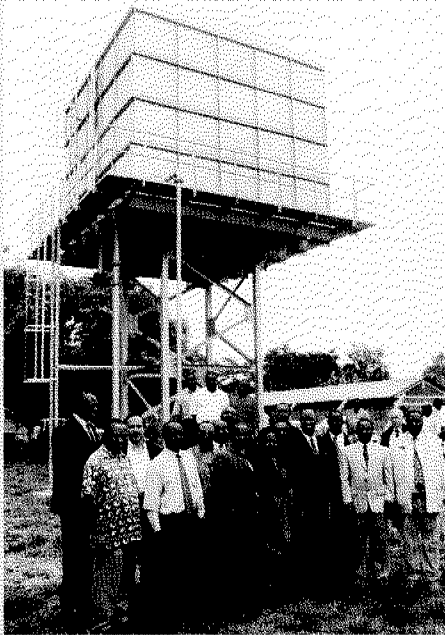


Eng. M. Shilling
Asst. Commissioner,
Rural Water Supply



Eng. P. K. Kagoro
Asst. Commissioner,
Urban & Institutional
Water Supply

Achievements in pictures



Minister of State for Water Ms. Maria Mutagamba, area MPs and DWD staff during the political commissioning of the reservoir for Kalangala Water Supply



School children participating in the inspection and commissioning of a borehole in Kiboga District



A worker prepares a concrete cast for the installation a borehole in Mpigi District under the JICA funded project



A woman fetches water from one of the public taps installed by the GFS project in Bushenyi District



Residents queue for water at a rural public stand installed by DWD



Minister of State for Environment Lt. Gen. Odong appreciates heavy metal analysis for control of environmental pollution at the national water quality laboratory



Ministers of State for Water, Animal Industry and Karamoja Affairs, MPs from Karamoja Region, and DWD Officials during a Joint Inspection of Construction Works at Komosing Valley Tank Site, in Jie County Kotido District

◆ Eastern Centres Project (DANIDA)

The project was a component of the DANIDA Phase I Water Sector Program Support (WSPS I) covering 11 towns Lwakhakha in Mbale District, Budadiri in Sironko District, Budaka and Pallisa in Pallisa District, Kaliro and Kamuli in Kamuli District, Busolve in Tororo District, Bugiri in Bugiri District, Busembatya in Iganga District, Buwenge in Jinja District and Kayunga in Kayunga District. It was jointly funded by the government of Uganda and the Danish government. The agreement between the two governments however ended on December 2002

Achievements

- ❖ Construction of piped water schemes in the core areas of Budadiri, Lwakhakha, Kayunga, Buwenge, Busolve, Kaliro and Busembatya are 100 per cent substantially completed. The completed systems together with the point sources currently serve 171,000 people.
- ❖ Construction of Bugiri water supply was substantially completed in September 2002. The systems are currently under defects liability period.
- ❖ Expansion of distribution networks were effected in Budadiri and preliminary surveys carried out in the 10 other towns in FY 2001/2002.
- ❖ Urban water office blocks were constructed in 10 schools and six latrines in health centres.
- ❖ Nine (9) water authorities and boards were formed in 2001/2002
- ❖ Procurement for private operators to manage the piped water schemes has been completed in all 11 towns. The private operator for Bugiri town water supply system was appointed in the FY 2002/2003 and the rest in 2001/2002.
- ❖ Defects liability period ended in the towns of Kayunga, Pallisa, Buwenge, Kamuli, Busembatya and Kaliro in FY 2002/2003.

◆ South Western Towns Project (Austria)

The project is funded by the Government of Uganda with support from the Austrian government. It implements water and sanitation activities in 49 towns of Kisoro Town Council, Bunagana, Cyanika, Rubuguri in Kisoro District. Katuna, Muko, Muhanga, Kabirizi, Ryakarimira, Karukara/Hamurwa, Bukinda and Kamwezi in Kabale District. Rwenshama, Bikuruga, Buhunga, Bwanga/Kiyenje, Rwerere, Nyakagyeme, Kambuga, Kanunugu, Kihiihi, Bugangari, Buyanja, Kebisoni, Kisiizi in Rukungiri District. Rwashamaire, Rubare, Rwentobo, Rwenanura, Rukoni, Kitwe, Mirama Hills, Rwamabondo and Nyamunuka in Ntungamo District. Itendero/Kabwohe, Mitoma, Kashenshero, Butare, Rwentuha, Katerera, Katunguru and Bugongi in Bushenyi District and five other towns in Mbarara District.

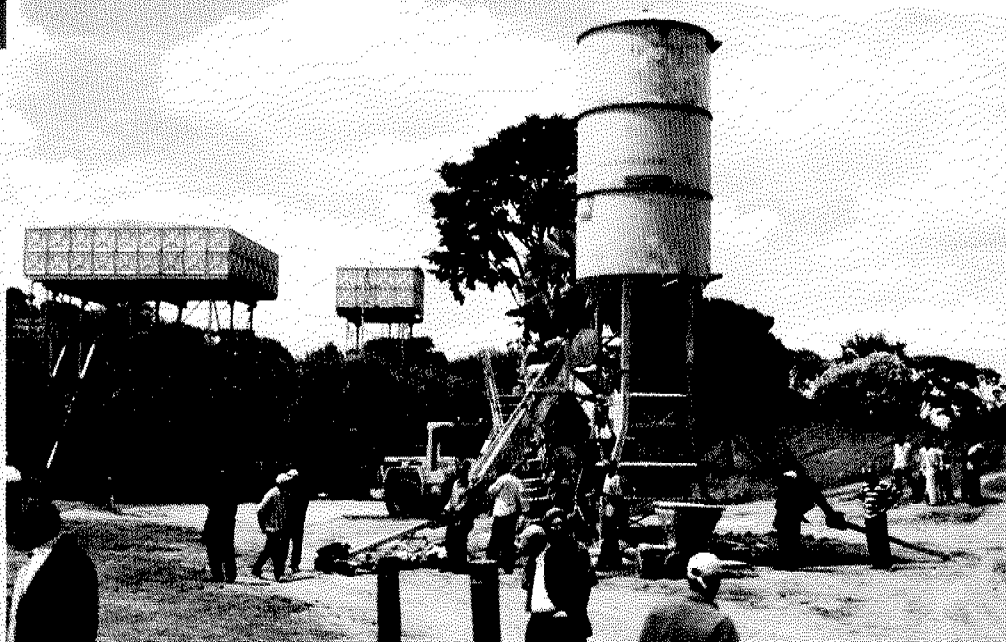
Achievements

- ❖ Water supply systems for five town councils of Kisoro, Kebisoni, Buyanja, Kambuga and Hamurwa/Karukara were completed in the year 2000/2001
- ❖ Water and sanitation services including yard water supply connections and 10 sewer connections were extended to 102 new homes in Kisoro Town Council in the FY 2000/2001.
- ❖ Construction for water supplies in the towns of Kihiihi, Ishasha, Kisiizi and Muko was completed in the financial year 2001/2002.
- ❖ Preparatory activities in four towns of Rwenshama, Rwerere, Rubaare and Kabwohe under the SWTWSP - II to allow for continuity and an overlap for the two funding phases of the project started in FY 2001/2002.
- ❖ Detailed designs for the extension of the Kisoro town water supply to surrounding parishes were completed in FY 2002/2003.



ECWSP: Commissioning of the Water Supply System at Lwakhakha, Mbale

- ❖ Construction of Rubuguri town water supply system in Kisoro District and Muhanga, Ryakarimira, Kabirizi, Hamurwa/Karukara and Muko in Kabale District were completed in FY 2002/2003. Construction activities on Bunagana water supply started in the same period and are expected to be complete by the end of this financial year.
- ❖ Construction works of the water supply and sanitation facilities in Rwashamaire in Ntungamo District were completed on FY 2002/2003. The scheme is being test run and waits commissioning.
- ❖ Construction of water supply systems in the towns of Bugangiri, Buyanja, Kebisoni and Kisiizi in Rukungiri District and Kihiihi and Kambuga in Kanungu District were completed and commissioned in 2002/2003.



MWTWSP: Clearing of the site for the construction of Masindi Water Supply

◆ Mid-Western Towns Project (EU)

The project aims at the improvement of water supply and sanitation facilities in the three towns of Hoima, Masindi and Mubende through rehabilitation and expansion of the existing infrastructure. The project is co-funded by the government of Uganda and the European Union.

The project is also undertaking feasibility studies and designs for the water and sanitation schemes for the satellite towns of Bujenje, Bwijanga, Kakumiro, Kiganda, Kibaale, Kigorobyia and Kyatiri through the GoU funding. Funds for the implementation will be solicited from Government of Uganda capital development budget and development partners starting with 2004/2005 FY.

Achievements

- ❖ Construction for the rehabilitation and extension of Masindi town water supply system is underway. This will be completed in FY 2003/2004.
- ❖ Drilling for the ground water sources for Hoima and Mubende is underway. Construction of the rest of the components of the water supply schemes in these towns will commence in March 2004 and will end in March 2005.
- ❖ Designs for the sewerage infrastructure for Hoima, Masindi and Mubende town core areas will be completed in December 2003. Construction will be done concurrently with the water supply systems.
- ❖ Institutional improvement through training of identified stakeholders, community needs assessment, mobilisation and support to the newly established Water and Sewerage Authorities are being undertaken. This will run throughout the duration of the project.
- ❖ Awareness and hygiene campaigns in the project area are ongoing.
- ❖ A private operator (contractor) has been engaged to

manage the existing water supply systems in the main project towns. The benefits of the private sector participation are already bearing fruits of improved reliability of water supply and revenue collection.

- ❖ The feasibility studies for water supply and sanitation facilities in the 7 satellite towns of Bujenje, Bwijanga, Kakumiro, Kiganda, Kibaale, Kigorobyia and Kyatiri, have been finalised. Detailed designs for the agreed options from the feasibility are ongoing.
- ❖ Drilling for the ground water sources in the 7 satellite towns is underway. This will enable the consultants to finalise the designs in December 2003.
- ❖ Construction of urban water offices in the three main project towns were completed in 2003.

◆ Mid-Southern Towns Project (France)

This is a Government of Uganda (GoU) Project with assistance from the French Government. The Project was officially launched in September 2000 and is to benefit a total of 80,119 people in the towns of Nansana, Wakiso, Kakiri (in Wakiso District), Lukaya, Kinoni, Mbirizi, Kyazanga, Bukomansimbi, Kalungu (in Masaka District) and Sembabule (in Sembabule District). Project towns will be provided with piped water systems and improved sanitation facilities

Achievements

- ❖ Water resources were confirmed for the project towns by May 2002, with Nansana town to be connected to NWSC system, Sembabule town to be supplied by surface water and the rest of the 8 towns to be supplied by powered boreholes.
- ❖ Detailed engineering designs were completed for all the ten towns by January 2003.
- ❖ Construction works for the piped water systems in Nansana, Kakiri and Wakiso towns commenced in December 2002 and is scheduled for completion by October 2003.

- ❖ Construction works of the piped water systems for Lukaya, Kalungu, Bukomasimbi, Kyazanga, Mbirizi and Kinoni towns commenced in October 2003 and is scheduled to be completed by the end of May 2004.
- ❖ Performance Contracts and Beneficiary Agreements have been signed for all towns and nine of the ten towns have been declared water supply areas with Nansana being declared part of Kampala Water Supply Area where National Water and Sewerage Corporation is the appointed operator in September 2002.
- ❖ Members on the Water Supply Boards for the towns of Wakiso, Kakiri, Lukaya, Kinoni, Mbirizi, Kyazanga, Bukomansimbi and Kalungu were in January 2002 selected.
- ❖ Procurement of private operators to manage the Water Supply Systems for Wakiso and Kakiri towns is being finalized and is soon to start for the rest of the six Project Towns of Lukaya, Kalungu, Bukomansimbi, Kyazanga, Kinoni and Mbirizi.
- ❖ Designs for water supply system for the satellite towns of Kakiri Barracks near Kakiri town and Katovu town were completed in 2001/2002.
- ❖ The procurement of a contractor for the construction of the piped water system for Kakiri barracks is being finalized.
- ❖ Plans are underway to construct sanitation facilities in the towns and installation of hand pumps on boreholes drilled in fringe areas.

❖ Small Towns Water and Sanitation Project (ADB)

The project was launched in the financial year 2000/2001 to provide water and sanitation services in seven (7) towns of Apac, Iganga, Kigumba, Mityana, Mpigi, Nebbi and Pakwach beginning with a study. It is co-financed by the African Development Bank and the government of Uganda.

Achievements

- ❖ The initial work consisting of procurement of an international consultant to carry out the study, setting up of the coordination offices, setting up of steering and technical committees to oversee the study and preparation of baseline maps of the study towns was done in FY 2000/2001.
- ❖ Designs and tender documents for an emergency mini water supply scheme for Apac town were done in the FY 2001/2002 while awaiting implementation of the main project. The system was constructed and completed in FY 2002/2003.
- ❖ As part of the water resources evaluation process, 45 test boreholes were drilled and test pumping of 70 existing boreholes was completed in the towns during FY 2002/2003.
- ❖ Leakage assessment was carried out on the existing water supply system for Iganga town to establish its integrity.
- ❖ The Study has reached strategic development plan level.

❖ North Eastern Towns Project (BADEA)

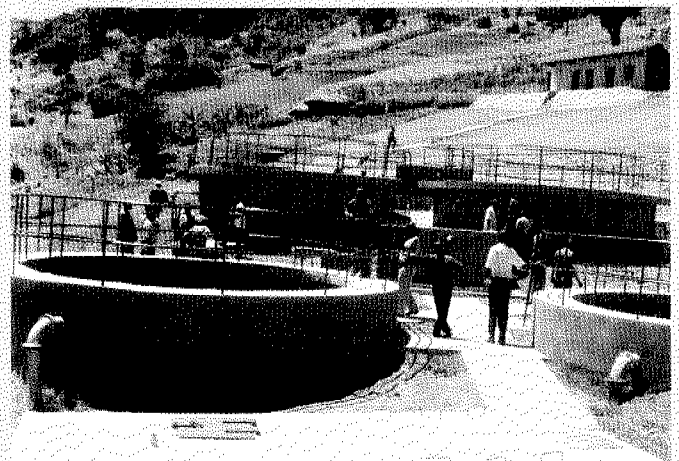
The project focuses on the small towns in the North East of Uganda and consists of two components.

Component A of the project covers the three towns of Soroti, Kaberamaido and Sironko. The part of the project aims at rehabilitating and expanding the existing water supply systems in the three towns.

Component B addresses the eight towns of Kumi, Ngora, Moroto, Kotido, Kaabong, Abim, Suam and Namalu. It also focuses on a feasibility study and preliminary design of water supply and sanitation in the project component towns.

Achievements

- ❖ The major part of the financial year 2002/2003 mainly involved project preparatory activities prior to effective take-off of implementation. This included:
 - a) Signing of the Loan Agreement between the government of Uganda and the Arab Bank of Economic Development in Africa (BADEA) in July 2002. BADEA secured loan effectiveness in October 2002.
 - b) Procurement of consultancy services for implementation, planning, design and construction supervision of water supply and sanitation for Soroti, Kaberamaido and Sironko. Final approval, award and signing of contract were accomplished by October 2003.
 - c) Presentation and approval by BADEA of the grant for feasibility study and preliminary designs of water supply and sanitation in Kumi, Ngora, Katawi, Moroto, Kotido, Kaabong, Namalu and Nakapiripit was accomplished in March 2003. Procurement of consultancy services for the study commenced in June 2003 with the invitation for expression of interest of firms to be pre-qualified and short-listed for the assignment.
 - d) Provided support to the emergency restoration of existing Kaberamaido town water supply, design and



SSTWP: Final inspection of the Kapchorwa water treatment plant

surveys, provision and installation of transmission pipes and construction supervision.

◆ Support to Small Towns Project

The project started in the FY 1998/99 and is fully financed by the government of Uganda. It aims to support the completion of new central water supply systems in the small towns which have no external donors and develop appropriate piped water systems in the administrative towns of the new districts.

Achievements

- ❖ Two new large diameter boreholes were drilled in an effort to expand the capacity in Nakaseke Town Water Supply system. One of the wells had a low yield so a third borehole was drilled.
- ❖ Construction of extension of water from Kachonga to Nabiganda started in September 2001. A 50 cubic metre tank reservoir was installed at Bukedi College, 6.07km of pipeline to serve the trading centre and sub-dispensary were laid and a total of 89 no. consumer connections were made. The system was commissioned and handed over to National Water and Sewerage Corporation - Mbale for operation and maintenance.
- ❖ A consultant to undertake the detailed design and construction supervision for extension of water from Seeta to Mukono was procured in 2001. The designs are still under review.
- ❖ Construction of Nakasongola town water supply system was completed in December 2002. The system comprises of 16km of transmission line, 90m³ steel reservoir tank installed on dwarf walls, 10km of distribution line, 2 pumps, 5 water kiosks and 168 no. consumer connections. An extension was made to the Army Barracks and it involved construction of 6km of transmission line, rehabilitation of 800m³ tank, 10km of distribution line and 9 no. tapstands. Also a town water office was built.
- ❖ Kapchorwa Town Water Treatment System was constructed during the FY 2002/2003. Technical commissioning is expected to be done this financial year. The completed system comprises of two clarifiers, two slow sand filters, inlet and outlet chambers.
- ❖ Kalangala Town Water System was completed and commissioned in January 2003. Intake works involved protection of a spring. A 60 cubic metre balancing tank was installed, 1.5 km transmission mains laid, 100 cubic meter water reservoir was erected and 10 km of distribution network were constructed with 110 connections.
- ❖ Katakwi Town water system is under construction by Pearl Engineering Ltd. Already five production wells were drilled and a town water office constructed. The expected outputs are 4no. fully installed boreholes with pump houses, 8.4km of transmission, 100m³ pressed steel reservoir elevated at 12m, 6.7km of distribution and two public toilets each of 8 stance.
- ❖ Kyenjojo Town water supply is under construction by Dott



Construction of a booster station (sump) and reinforcement fixing under the MSTWSP project in Nansana town.

Services and the expected outputs are 4.3km of transmission, 4.58km of distribution, 5no. boreholes equipped with submersible pumps and control panels, 2no 17m³ sumps installed with 4no. high lift pumps, 2no. chlorination units, 160m³ reservoir tank and 200m³ reservoir tank and 50no new consumer connections.

- ❖ Five new construction contracts which have been awarded and these are Bwizibwera Town water supply system, Biharwe Town water supply system, Kaberebere Town water system. In these three towns, the sites have already been handed over and construction will commence before end of December 2003. The design reports have already been presented to the beneficiaries and their roles have been spelt out. Contracts for construction of Laropi town water system and Aduku town water system have also been awarded and signed.
- ❖ Hiring of consultancy services is being done to carry out the feasibility study, detailed design and construction supervision for the towns of Yumbe, Koboko and Paidha as one package and feasibility study, detailed design and construction supervision for Kamwenge, Mayuge, Rwimi and Hima as another package. Rwimi and Hima have already been designed and the consultant will only review the designs and thereafter construction will commence.

Operation and Maintenance of Small Towns

- ❖ In line with the Water Statute 1999, 58 Urban Water Supply Authorities have been created to manage the towns water and sanitation system since FY 2000/2001.
- ❖ In order to provide effective to management of water and sanitation services 24 Urban Water Supply Authorities have contracted the running of their systems to private operators on a commercialised and cost recovery principles.
- ❖ 50 water authorities have established Water Supply Boards all of which have received training.
- ❖ The rate of unaccounted for water has reduced to 20 per cent and the average operational cost of water fell from UShs. 955/m³ to UShs. 907m³.

Water Resources Management

The Water Resources Management Department aims to promote and ensure the rational and sustainable utilization, development, effective management and safeguard of water resources for social and economic welfare and development as well as the equitable sharing and adequate protection of trans boundary water resources. Achievements here in the past three-year period include:

Provision of Water Resources Data

Four data storage, processing and modelling facilities for surface water, groundwater, water quality and water permits established in FY 2000/2001 continue to be operational. The databases have been upgraded and are now compatible with the Management Information System (MIS) design. Water resources data has been provided on request to consultants, government departments and the private sector for use in planning and implementation of water related projects.

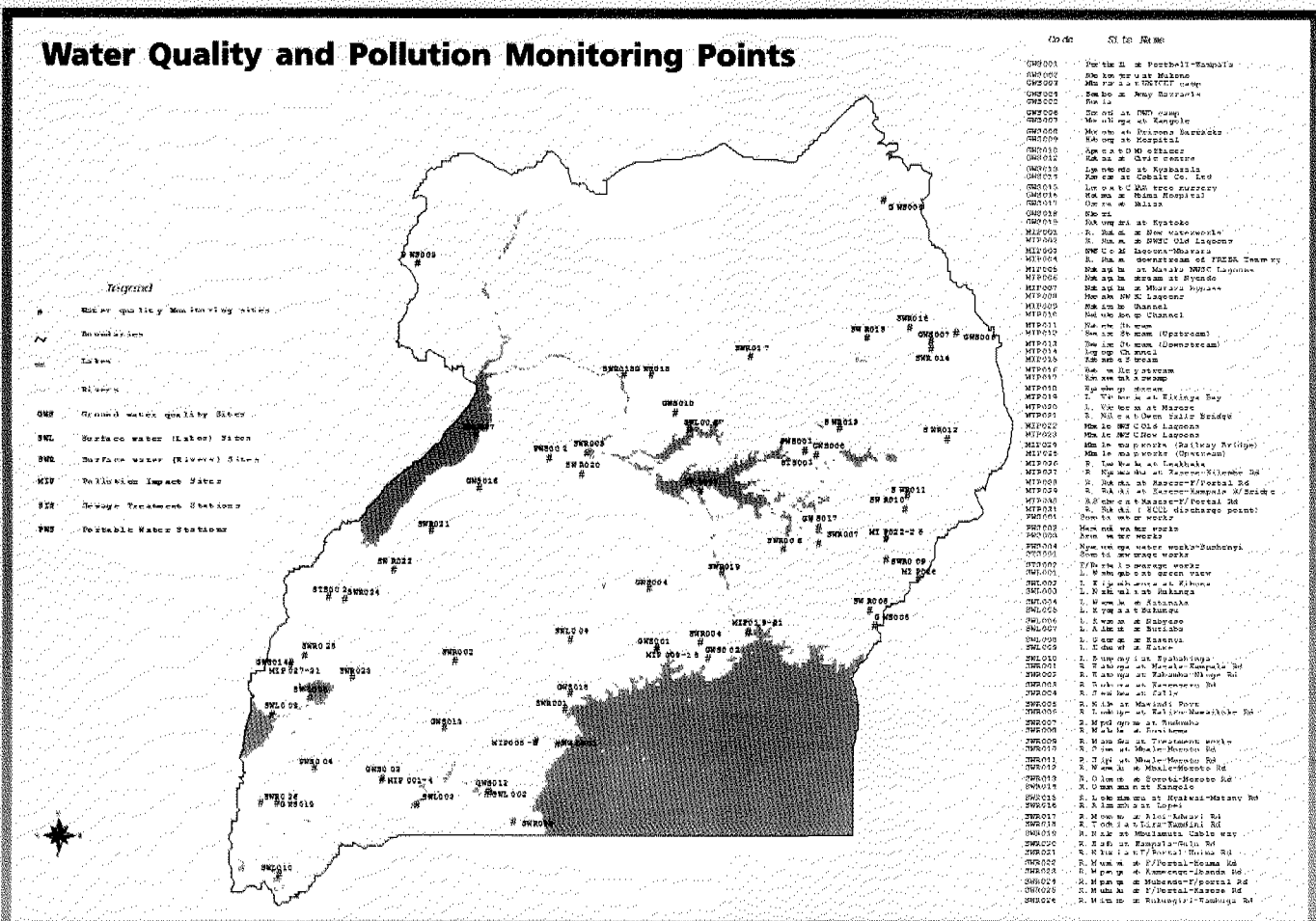
Monitoring Water Resources

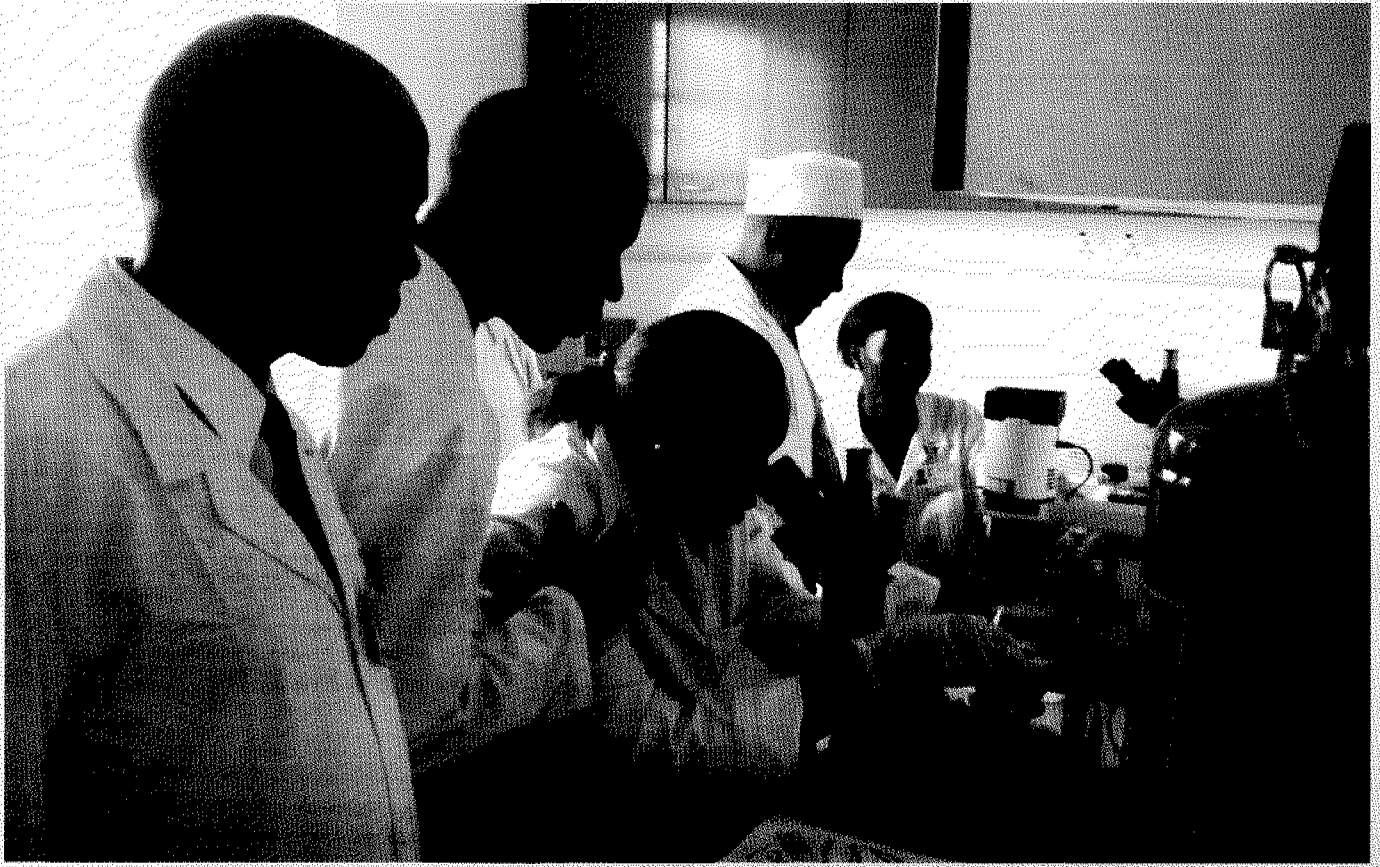
A network of 70 surface water stations, 18 climatic stations, 18 groundwater observation wells and 119 water quality-sampling sites have been established countrywide.

- A total of 1168 surface water, 176 groundwater and 3674-water quality data was collected, process and stored in the national water resources databases. This data is used in planning of water resources related activities.
- A total of 966 water quality, 3024 hydrodynamic and 104 riverine sediment load data sets for Lake Victoria were analysed and archived.
- Four (4) new monitoring stations have been established to continuously monitor and provide advice on Lake Kyoga floods.
- Three surface water resources assessment studies have been completed and are due to be published namely: Hydro Climatic Study, Regional Flood Study for South-west Uganda and a Low Flow Study. The Water Resources Modelling and Wetland Hydrology studies are still being undertaken. Two ground water assessment studies namely: Wobulenzi Groundwater Assessment Study and Kasese Groundwater Contamination Study were also completed.

Regulation of Water Use and Pollution Control

- Users manual for ground water permits, surface water permits and application forms were developed and printed.
- A total of 289 permit applications have been received since the setting up of a permits unit. Out of the appli





Water quality experts analysing samples at the national water quality laboratory in Entebbe

cations received, 198 permits representing 68.9 per cent have been issued including 82 groundwater, 45 surface water, 39 drilling, 31 wastewater and 2 hydraulic works construction.

- ❖ More than US\$ 120 million has been generated in revenue from the administration of the water permits system.

◆ **International and Regulation Collaboration**

- ❖ There has been remarkable achievement in international and regional collaboration with riparian states under the Nile Basin Initiative and Lake Victoria Environmental Management Programme. The two programmes which now offer a great opportunity for sustainable management of the water resources.
- ❖ At the International Consortium for Cooperation in the Nile Basin, the riparian countries obtained US \$122 million for implementation of the basin wide capacity building projects and US \$21 million for implementation of investment oriented projects in the Nile Equatorial Lakes region.
- ❖ The legal and institutional framework for the Nile River Basin has been completed. Government of Uganda accorded the Nile Basin Initiative Secretariat a legal status.

◆ **National Water Quality Laboratory**

- ❖ The water quality division laboratory was upgraded with two new state of the art machines. The machines, an atomic absorption spectrophotometer for toxic heavy

metal analysis and the gas chromatography for pesticide analysis were acquired with support from DANIDA. The machines have boosted the laboratory's capability to monitor pollution of highly toxic substances. Analyses, which were hitherto sent to laboratories abroad, can now be carried out at the laboratory in Entebbe.

- ❖ The National Water Quality Laboratory Quality Assurance System was reviewed and standardisation of its operations completed to conform to the International Organisation for Standardisation/International Electrochemical Commission (ISO/IEC 17025) requirements.
- ❖ The laboratory has applied for approval of South African National Accreditation System (SANAS). With the SANAS status, the laboratory will gain accreditation for complete physico-chemical and microbiological analyses.



One of the new modern equipment at the national water quality laboratory

● Joint Water Sector Reviews

The GoU/Donor Joint Sector Review was introduced in September 2001 with the aim of assessing the performance in the sector and providing policy guidance in support of a participatory, user-controlled and rapid expansion of water and sanitation services in Uganda. GoU officials, development partners and sector stakeholders meet every year to assess progress in relation to policies, resources and previous undertakings, seek policy guidance in strategic areas and agree on key strategic undertakings for the next financial year. The water sector has registered remarkable achievements resulting from the co-operation between the GoU and development partners.



Former Deputy Head of Mission at the German Embassy, Ms. Karin Stoll, Minister of State for Water, Mrs. Maria Mutagamba and the Director, DWD, Mr. Patrick Kahangire, at the first Joint Water Sector Review at the International Conference Centre.

● Water and Sanitation Sector Working Group (WSSWG)

Coordination and consultations among sector stakeholders have improved substantially through establishment of the Water and Sanitation Sector Working Group (WSSWG) in 2001. The WSSWG has become an efficient forum for strategic decision making within the sector. The sector working group is supported by five sub sector working groups.

- ⊕ The General Sector Issues and Reform Sub Sector Working Group;
- ⊕ The Rural Water Supply and Sanitation Sub Sector Working Group;
- ⊕ The Urban Water Supply and Sanitation Sub Sector Working Group;
- ⊕ The Water for Production Sub Sector Working Group;
- ⊕ The Water Resources Management Sub Sector Working Group.

There are two special events to enhance the work of the sector working group, one being the joint sector reviews, which are normally held in September and the other being the Joint Technical Review (JTR). The JTR is held six months after the joint sector review to follow up on progress relating to sector undertaking and general development. The first joint technical review was held in March 2003.

● Water Sector Reforms

The Water Sector Reforms initiated by the Ministry of Water, Lands and Environment through the Directorate of Water Development (DWD) in 1998 will continue to be implemented. The reforms are being implemented under four component studies:

- I. Rural and Water Sanitation
- II. Urban Water and Sanitation
- III. Water for Production
- IV. Water Resources Management

The Water Sector Reforms were initiated in response to the need for a holistic approach, common strategies and concerted efforts involving all partners, including the private sector to participate in the sector development.

● The SWAP Approach

The Sector Wide Approach to Policy Reforms and Investment Planning (SWAP) implementation process has begun well and has been recognised as a major step forward for the water sector. The SWAP that was introduced after the first Government of Uganda and Donor Joint Water Sector Review in 2001 will continue to be refined and consolidated.

The SWAP is a mechanism where government and development partners agree on a strategy to achieve improvement in sector performance, increased resource flows, more effective use of resources through programmes other than projects. Government is to ensure that donors are fully involved in this process and that they have confidence in funding the sector through the government budget. The move towards SWAP calls for government and donors to promote uniform disbursement rules, uniform and stronger accountability rules, common indicators, joint appraisals and reviews.

In May 2002, the Directorate of Water Development established Technical Support Units (TSUs) to supplement district personnel in the management of water and sanitation services.

TSUs are based in eight districts of Arua, Lira, Soroti, Mbale, Kampala, Fort Portal, Masaka and Kabale. Each base coordinates water and sanitation activities in approximately six other districts. TSUs are instrumental in assisting, guiding and monitoring district administration in handling water and sanitation facilities. There continues to be improved procurement, planning and management of goods and services by district officers.

The establishment and eventual operationalization of TSUs has provided an integrated and co coordinated planning approach needed for a balanced development of the least developed areas.

◆ Rural Water and Sanitation

The rural water supply and sanitation reform study put the investments requirements for the sub-sector at US \$ 600 million and US \$950 million to achieve the targets of 77 per cent and 95 per cent service coverage by 2015.

◆ Water for Production

The Water for Production reform study has estimated investment requirements in the sub-sector to be US \$168.3 million in the next 12 years until 2015. The implementation has been subdivided into 4 phases, with investment requirements of US \$ 36.6 million for Phase I (2003-2006), US \$ 31.3 million for Phase II (2007-2009), US \$ 45 million for Phase III (2010-2012) and US \$ 55.3 million for Phase IV (2013-2015).

◆ Urban Water and Sanitation

The investment plan for urban water supply and sanitation has been revised to provide 100 per cent coverage by 2015. In order to achieve this the total capital expenditure required over the next 12 years for basic service provision is estimated at US \$381.4 million i.e. an average of US \$31.8 million per year. The capital costs include: new facilities, rehabilitation and expansions to both water supply and sanitation services.

Current funding levels stand at about US \$20 million per year and thus a financial gap of US \$11.8 million per year. Government therefore needs to allocate more funds to the sub-sector or seek more support from development partners.

◆ Water Resources Management

The current funding level includes US\$ 1.8 billion from the government of Uganda and US \$5 million from development partners per year. The reform study that is yet to be completed will derive the investment requirements for the department up to 2015.

Funding to the sector has increased over the past few years, from US\$ 47.41 billion in FY 1996/97 to US\$ 126.05 billion in FY 2002/2003. Government has obtained support for the water sector from various development partners including Sweden, Denmark, Germany, Austria, France, BADEA, European Union (EU), African Development Bank (ADB), IDA, DFID, UNICEF, World Bank, Japan.

SUMMARY OF DONOR FUNDING

DONOR	2002 / 3 (US\$m)	2003 /04 (US\$m)
Germany	13.50	10.00
Sweden	4.70	4.00
Denmark	5.90	5.10
Austria	2.10	2.00
France	2.20	.59
Dfid	1.00	2.70
BADEA	1.30	3.30
EU	6.30	14.50
ADB	1.40	0.72
FAO	1.40	1.40
IDA	3.70	3.90
UNICEF	0.00	2.30
TOTAL	43.50	50.51

Source: MFPED draft expenditure & revenue estimates 2003/2004

Publications

Directorate of Water Development of the Ministry of Water, Lands and Environment
Publications for the period July 2000 - June 2003

- Water and Sanitation in Uganda - Measuring Performance for Improved Service Delivery (2003)
- Water Sector Gender Strategy (2003)
- National GIS Publication/Atlas (2002)
- Building Ecological Sanitation in Uganda (2002)
- Handpump Installation and Maintenance Manual (2002)
- Decentralisation - District Human and Financial Resource Appraisal, published with support from the World Bank Water and Sanitation Program (2001)
- Rural Water Supply and Sanitation Handbook Vol. 1- Published in conjunction with the Ministry of Labour and Social Development, Ministry of Health and UNICEF (2000)
- Rural Water Supply and Sanitation Handbook Vol. 2- Published in conjunction with the Ministry of Labour and Social Development, Ministry of Health and UNICEF (2000)
- The Annual Year Book of the Water Resources Management Department published with the support of Support to Water Resources Management Department - SWRMD (2000)
- Water Supply Design Manual (2000)



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