

Sector: Water and Environment

Sector Summary

S1: Sector Overview

This section provides an overview of Sector Expenditures and sets out the Sector's contribution to the NDP, its policy objectives, and key performance issues.

(i) Snapshot of Medium Term Budget Allocations*

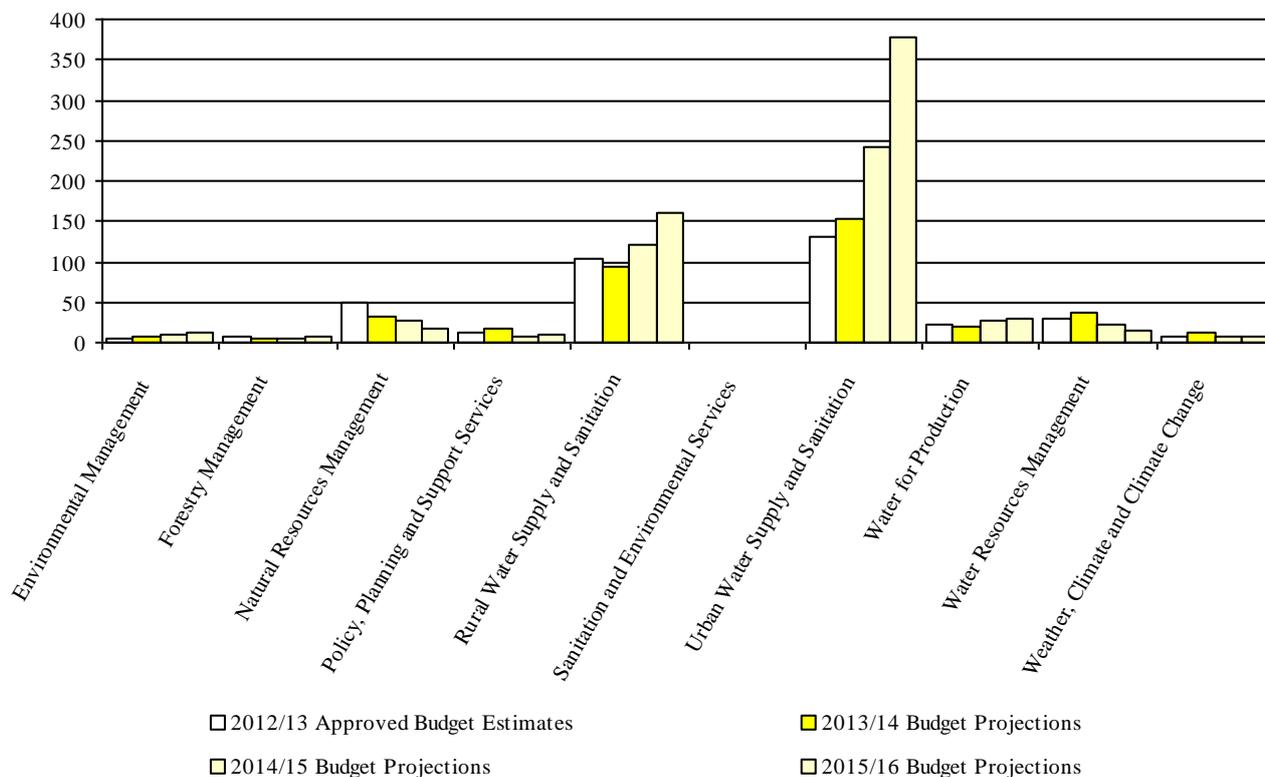
Table S1.1 and Chart S1.1 below summarises the Medium Term Budget allocations for the Sector:

Table S1.1: Overview of Sector Expenditures (US\$ Billion, excluding taxes and arrears)

		2011/12 Outturn	2012/13 Approved Budget	Spent by End Dec	MTEF Budget Projections		
					2013/14	2014/15	2015/16
Recurrent	Wage	5.640	9.751	3.883	9.751	11.702	13.456
	Non Wage	16.325	11.863	6.601	11.878	13.067	18.206
Development	GoU	112.245	206.073	67.061	209.495	251.746	321.750
	Ext. Fin**	18.608	126.438	17.111	151.133	197.994	281.720
GoU Total		134.209	227.687	77.545	231.124	276.514	353.413
Total GoU+Donor (MTEF)		152.818	354.125	94.656	382.257	474.508	635.133
<i>Non Tax Revenue</i>		<i>0.000</i>	<i>25.541</i>	<i>5.762</i>	<i>17.199</i>	<i>27.370</i>	<i>13.173</i>
Grand Total		152.818	379.665	88.894	399.456	501.878	648.306

* Excluding Taxes and Arrears

Chart S1.1: Medium Term Budget Projections by Vote Function (US\$ Billion)*



* Excluding Taxes and Arrears

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(ii) Sector Contributions to the National Development Plan

Sector Outcome 1: Improved access to quality safe water and sanitation facilities for rural, urban and water for production uses

The main NDP Objectives are to increase access to safe water supply in rural areas from 63 per cent to 77 per cent by 2015, in urban areas from 60 per cent in 2008 to 100 per cent by 2015, Increase access to improved sanitation from 69 per cent to 80 per cent for rural and 77 per cent to 100 per cent for urban, Increase supply of Water for Production in the cattle corridor from the current 36 per cent to 50 per cent and those outside the cattle corridor from 21 per cent to 30 per cent, Increase water supply systems for rural industries to facilitate agro-processing and other industrial activities.

Strategies and interventions to accomplish these include; Construct, maintain and operate the water supply systems in rural and urban areas; Improve functionality of water supply systems; Reduce unaccounted for water in NWSC systems in Greater Kampala Metropolitan Area (GKMA) from 40 per cent to 18 per cent; Promote good sanitation and hygiene practices in households, communities and rural growth centres and urban areas; improve the policy, legal and regulatory framework; Strengthen the institutional structures and systems; Enhance the involvement of private sector players in water infrastructure development and provision of water services; Construct valley dams and valley tanks and set up reliable O&M structures and systems; Equip the existing valley dams/tanks to facilitate easy livestock watering; Build capacity of the private sector players to construct and maintain valley dams/tanks; provide water for production supply systems to key industrial areas; increase water supply for multi-purpose use in water stressed areas of the country; Construct bulk water supply schemes.

Sector Outcome 2: Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management

The main NDP objectives are to: ensure that Uganda fully utilizes its water resources for development and guarantees her water security; ensure sustainable utilization of water resources to maximize benefits for the present and future generations; support the sustainable exploitation of water resources for economic activities

Strategies and interventions to accomplish these include: Promote cooperation for equitable and sustainable utilization of shared water resources of the Nile and Lake Victoria Basins; Monitor the quantity and quality of water resources in the country; foster partnerships with relevant agencies to ensure proper use and protection of catchments to minimize degradation of water resources; cost effective planning and development of water resources; strengthen the national data and Management Information System (MIS) for water resources management and development; decentralize the management of water resources to the lowest appropriate scientific level (water management zones, catchments and or basins); Strengthen national and regional capacity for water quality analysis; improve regulation and management procedures of large and small hydraulic works; strengthen the management and use of water reservoirs for fisheries, hydropower and lake transport; strengthen regulation of water use and waste water discharge to safeguard the water resources from over exploitation and pollution; promote use of water resources to increase the per capita withdraw target.

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Sector Outcome 3:-Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources

The main NDP objectives are to: restore Forest Cover from 3,604,176 ha as of 2005 to 4,933,746 ha (1990 levels) by 2015; restore degraded natural forests in forest reserves and private forests; to reduce pressure on forest cover as a source of wood fuel and wood construction material; promote forestry-based industries and trade; restore degraded ecosystems (wetlands, forests, range lands and catchments) to appropriate levels; ensure sustainable management of environmental resources and minimize degradation; identify and address emerging environmental issues and opportunities; develop national capacity for coordination and implementation of climate change adaptation and mitigation activities in the country in support of social welfare and national development; ensure climate proof development planning; promote Low Carbon economic development path; provide modern meteorological services to effectively and efficiently support the various sectors of the economy; Enhance the sustainable use of wetlands in order to achieve the optimum, ecological value and socio-economic benefits for development

Strategies and interventions to accomplish these include: Re-forestate and afforestate 1,266,000 ha in 698 forest reserves and 730,000 ha in national parks and game reserves; Greening along and around public infrastructure and establishments; Promotion of commercial tree-planting on private land; increase involvement of the population in tree planting; Support R&D in development of new high-yield and appropriate tree varieties; Strengthening the capacity of relevant sector institutions to effectively enforce forest and environmental laws and regulations; Improve low stocked natural forests using the landscape approach; investment in the promotion of R&D for alternative energy sources; promote efficient use of timber in the Construction and Furniture industries; regulating forestry activity on private land in line with the land use policy; promote forest habitat-based livelihoods and products (e.g. Apiculture, natural medicines, etc); promote Eco-tourism; restore the forest cover to 1990 levels; other strategies include: Restore of wetlands, rangelands and monitor restoration of all eco systems; conserve the biodiversity value of wetlands; enhance the ecological value of wetlands; ensure sustainable use of wetlands for economic purposes; support environmental improvement initiatives; integrate environmental concerns in all development initiatives; strengthen the policy, legal and institutional framework to support environmental, laws, regulation and management; increase and enhance access to environmental information for investment and environmental management; sustainable management of chemicals, Oil and Gas resources; provide and promote incentives for clean development.

Enhanced implementation of the Climate Change Convention; create awareness and promote use of meteorological services; strengthen the policy, legal and institutional framework for meteorological services;

(iii) Medium Term Sector Policy Objectives

The sector objectives which guide medium term outputs and resource allocations are:

a) To provide safe water within easy reach and hygienic sanitation facilities, based on management responsibility and ownership by users, to 77% of the population in rural areas and 100% of the urban population by the year 2015 with an 80%-90% effective use and functionality of facilities

b) To provide viable urban water supply and sewerage/sanitation Systems for domestic, industrial and commercial uses.

c) To develop water supply for production/multi-purpose use for socio-economic development,

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modernise agriculture and mitigate effects of climatic change.

d) To promote coordinated, intergrated and sustainable water resources management activities to ensure balanced conservation of water resources and provision of water of adequate quantity and quality for all social and economic activities.

e) To empower communities to sustainably harness/Use Natural Resources.

f) To attain and maintain a clean, healthy and productive environment.

g) To increase the productivity of the natural resources base.

(iv) Priority Sector Outcomes and Key Outputs Planned to Influence Them

The following table sets out the outcomes which the sector wishes to improve, and the key outputs which are likely to contribute towards those improvements:

Table S1.2: Sector Outcomes and Key Sector Outputs

Sector Outcome 1:	Sector Outcome 2:	Sector Outcome 3:
<i>Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses</i>	<i>Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management</i>	<i>Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources</i>
Vote: 019 Ministry of Water and Environment		
Vote Function: 09 01 Rural Water Supply and Sanitation		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:
<i>Outputs Provided</i>	None	None
090103 Promotion of sanitation and hygiene education		
<i>Capital Purchases</i>		
090180 Construction of Piped Water Supply Systems (Rural)		
090181 Construction of Point Water Sources		
090182 Construction of Sanitation Facilities (Rural)		
Vote Function: 09 02 Urban Water Supply and Sanitation		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:
<i>Outputs Provided</i>	None	None
090204 Backup support for Operation and Maintainance		
090205 Improved sanitation services and hygiene		
090206 Monitoring, Supervision, Capacity building for Urban Authorities and Private Operators		
<i>Capital Purchases</i>		
090280 Construction of Piped Water Supply Systems (Urban)		
090281 Energy installation for pumped water supply schemes		
090282 Construction of Sanitation Facilities (Urban)		

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Sector Outcome 1:	Sector Outcome 2:	Sector Outcome 3:
<i>Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses</i>	<i>Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management</i>	<i>Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources</i>
Vote Function: 09 03 Water for Production		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:
<i>Outputs Provided</i>	None	None
090306 Sustainable Water for Production management systems established		
Capital Purchases		
090380 Construction of Bulk Water Supply Schemes		
090381 Construction of Water Surface Reservoirs		
Vote Function: 09 04 Water Resources Management		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:
None	<i>Outputs Provided</i>	None
	090403 Water resources availability regularly monitored and assessed	
	090404 The quality of water resources regularly monitored and assessed	
	090405 Water resources rationally planned, allocated and regulated	
Vote Function: 09 05 Natural Resources Management		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:
None	None	<i>Outputs Provided</i>
		090501 Promotion of Knowledge of Environment and Natural Resources
		090502 Restoration of degraded and Protection of ecosystems
Vote Function: 09 06 Weather, Climate and Climate Change		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:
None	None	<i>Outputs Provided</i>
		090601 Weather and Climate services
Vote: 122 Kampala Capital City Authority		
Vote Function: 09 08 Sanitation and Environmental Services		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:
None	None	None
Vote: 150 National Environment Management Authority		
Vote Function: 09 51 Environmental Management		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:
None	None	<i>Outputs Provided</i>
		095102 Environmental compliance and enforcement of the law, regulations and standards
Vote: 157 National Forestry Authority		
Vote Function: 09 52 Forestry Management		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:

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Sector Outcome 1:	Sector Outcome 2:	Sector Outcome 3:
<i>Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses</i>	<i>Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management</i>	<i>Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources</i>
None	None	<i>Outputs Provided</i> 095201 Mangement of Central Forest Reserves 095202 Establishment of new tree plantations 095205 Supply of seeds and seedlings
Vote: 500 501-850 Local Governments		
Vote Function: 09 81 Rural Water Supply and Sanitation		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:
None	None	None
Vote Function: 09 82 Urban Water Supply and Sanitation		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:
None	None	None
Vote Function: 09 83 Natural Resources Management		
Key Outputs Contributing to Outcome 1:	Key Outputs Contributing to Outcome 2:	Key Outputs Contributing to Outcome 3:
None	None	None

S2: Past Sector Performance and Medium Term Plans

This section describes past and future performance, in terms of sector outcomes, key sector outputs, costs and plans to address key sector performance issues.

(i) Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses

Status of Sector Outcome

To supplement water development activities in the rural water supply and sanitation vote function the MWE has constructed 8 piped water schemes in various Rural Growth Centres; finalized rehabilitation and extension of Bunyaruguru large Gravity Flow Scheme and commenced construction of Manafwa/Tororo GFS. Under the emergency floods programme 180 hand pump boreholes (deep wells) were rehabilitated in North eastern region; 81 new deep wells (boreholes) were drilled and fitted with hand pumps; installed 400 rain water harvesting tanks in Bushenyi and Isingiro districts.

In the Urban Water Supply and Sanitation vote function the sector constructed 10 new piped water supply systems in western region creating new service facilities for over 100,000 people involving a new distribution/service pipe length of 186.7km, 45 public stand posts and at least 1,151 new household connections. Finalized the restoration of major components of 08 town piped water supply schemes. Under NWSC, the sector upgraded mains outlet from Naguru reservoir to Ntinda Trading centre and installed online booster system as well as expansion of the water supply mains at Gayaza road/northern by-pass round-about areas.

Under water for production the sector completed the following dams; Kailong, Leye, Bwanalaki, Rubaare Valley Tank and Mayikalo Dam creating at least 2.1 Million Cubic Metres (MCM) of new/additional storage capacity. Other facilities constructed under sector are Kagango dam, Obwengyerero and Kagamba valley tanks in Isingiro district and extension of a piped water scheme in Sembabule district

Table S2.1 Outcome 1: Sector Outcome Indicators

Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses

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Outcome and Outcome Indicator	Baseline	2013/14 Target	Medium Term Forecast
Pupils to latrine/toilet stance ratio in schools (and hand washing facilities)	68 (2007/08)	72	77 (2013/14)
No. of permit holders complying to permit conditions for water discharge*	40 (2007/08)	49	55 (2013/14)
No. of permit holders complying to permit conditions for water abstraction (Surface and Ground)*	65 (2007/08)	70	75 (2013/14)
Cumulative water for production storage capacity developed in Cubic (Million Cubic Metres MCM)	17 (2007/08)	22	26 (2013/14)
% of urban people with 0.2Km of an improved water source.	61 (2007/08)	67	66 (2013/14)
% of rural people within 1.5km of an improved water source.	63 (2007/08)	65	67 (2013/14)
% of people accessing hand washing with soap facilities*	68 (2007/08)	24	50 (2013/14)
% of people accessing hand washing with soap facilities* soap facilities*	68 (2007/08)	24	50 (2013/14)
% of households with access to safe and effective sanitation	64 (2007/08)	72	77 (2013/14)
% of water storage capacity to total water demand	2.5 (2007/08)	4.2	4.7 (2013/14)

2011/12 Performance

Rural Water Supply and Sanitation:

To supplement water development activities undertaken by LGs using the Conditional Grant, the MWE using funds under this vote function embarked on construction of 8 piped water schemes in the following Rural Growth Centres; Anyara (Apac), Adwari (Lira), Lugore (Gulu), Madi-Opei (Kitgum), Magoro (Katakwi), Minakulu (Oyam), Orum (Lira) and Gulu Youth Centre (Gulu).

Rehabilitation and extension of Bunyaruguru large Gravity Flow Scheme in Bushenyi district was completed and management arrangements under the Public Private Partnerships model were put in place after lengthy consultative and participatory processes involving all stakeholders. In addition, design reviews of Tororo GFS covering 3 sub-counties in Manafwa district and 2 sub-counties in Tororo district were completed.

Under the emergency floods programme 180 handpump boreholes (deep wells) were rehabilitated in Sironko, Bukedea, Kumi, Amuria, Katakwi, Kaberamaido, Dokolo, Moroto, Nakapiripirit and Kotido districts. Furthermore 81 new deep wells (boreholes) were drilled and fitted with handpumps as follows; 31 in the above flood affected areas, 4 for the cholera affected areas in the east and 46 in the rest of the country as a response to emergency needs.

The Vote function also procured and put in place management arrangements for 2 water tankers to serve the public in water stressed areas/emergencies. In addition, 120 HDPE tanks of 10,000 litre capacities were procured and supplied to the 18 districts of Bukwo, Kapchorwa, Mbale, Bududa, Amuria, Manafwa, Sironko, Kumi, Bukedea, Kaberamaido, Katakwi, Soroti, Oyam, Apac, Dokolo, Amolatar, Lira and Pader.

Coordination and support to NGOs, CBOs and other stakeholders was undertaken with focus on promotional training for community mobilization, hygiene promotion and rain water harvesting. For example 400 rain water harvesting tanks were installed in Bushenyi and Isingiro districts during the year. The Ministry, under the Vote Function, established and supported the first ever appropriate technology

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centre in the country located in Mukono, where research and training in rain water harvesting as well as other technologies will be promoted.

Urban Water Supply and Sanitation:

Under this Vote Function, construction work for 10 new piped water supply systems were completed in the following towns: Kyabugimbi, Kamwenge, Kitagata, Kyotera, Mutara/Kyeibare, Bikurungu, Rugaaga, Omugenyi, Kabira & Kibale. This created new service facilities for over 100,000 people involving a new distribution/service pipe length of 186.7km, 45 public standposts and at least 1,151 new household connections. Expansions, rehabilitation and extension works were done for systems in the towns of Kapchorwa, Kalaki, Atiriri and Otuboi resulting in addition of 40.7km of new pipe length and 2,447 new connections.

Construction commenced in at least 16 towns viz: Amuria, Koboko, Mutukula, Rwenanura, Bugoye, Hima, Rugendabara, Kibiito, Kicucu, Rwimi, Nyakigumba, Kasuganyanja, Rubona, Kabale (Kasese), Kamdini and Ibanda (Kabarole). Preparatory mobilization and design activities were undertaken for 50 town water supply and sanitation schemes countrywide.

Technical back up support, guidance, monitoring and supervision of 67 Urban Councils water supply and sanitation systems was provided of which 51 of them were supported to enter into management contracts with private operators and 16 guided on options for in-house management of the facilities. In addition to the above 64 Town Boards (with piped water systems) were supported/guided, with 13 of these successfully achieving conditions for gazettement as Water Supply Areas (hence Town Board appointed as Water Authority). Management of these systems is also through management contracts (08No.) with the Town Boards (the Authorities) and the rest by individual private operators.

Under NWSC, major achievements included the following; upgrading of the mains outlet from Naguru reservoir to Ntinda Trading centre and installation of an online booster system as well as expansion of the water supply mains at Gayaza road/northern by-pass round-about areas. A high level reinforcement main along Jinja Road from lugogo to Kireka was added to boost supply to areas of Kireka, Namugongo and Bweyogerere.

The initiatives for pro-poor interventions resulted in: construction of 9kms of mains, 25 prepaid metres and 10 public toilets constructed in kagugube zone; installation of 390 prepaid metres, 13 public toilets with shower bathing facilities and 1,200 connections in Ndeeba-Kisenyi areas and additional 35 household toilets and 2,500 connections made in other poorer communities/areas in Kampala.

Water for Production:

Under this Vote Function, the major achievements during 2008/09 FY included completion of: Kailong Dam (Kotido), Leye Dam (Apac), Bwanalaki Dam (Sembabule) Rubaare Valley Tank (Ntungamo) and Mayikalo Dam (Sembabule) creating at least 2.1 Million Cubic Metres (MCM) of new/additional storage capacity.

Construction works advanced in the following sites: Kawomeri Dam in Abim district (50%), Olelpec Valley tank in Apac district (80%), Olamia Valley tank in Apac district (80%), Obwongyerero Valley tank in Isingiro district (80%), Kagamba Valley tank in Isingiro district (80%) and Kagango Dam (80%). Preparatory work for the design of 40 other WfP facilities countrywide commenced.

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A framework for rehabilitation of old/existing WFP facilities was prepared through a participatory process and development of institutional and community structures for management of the facilities at all levels commenced.

A bulk water transfer strategy was completed in the 2008/09 FY and detailed feasibility studies and designs were completed for commencement of construction of the Rakai Pilot Bulk water transfer scheme.

Performance for the first half of the 2012/13 financial year

Rural Water and Sanitation Vote function-During the period of July-December 2011 of the FY 2011/12, several activities aimed at increasing safe water coverage and accessibility in rural areas were carried out. These included setting up management structures in the RGCs of Jezza and Muduma; completed the construction of piped water supply systems in Adwari, Madiopei and Orum and they are now waiting for commissioning. Ayara and Magoro are also in their final stages and only awaiting commissioning while construction of Lugore is still on-going. Constructed bore holes various districts namely Nakaseke (4), Mukono (3), Wakiso (3), Manafwa (1), Lira (2), Masindi (1), and Mityana (1) while 12 were installed in the Kyoga basin. With respect to sanitation, a home improvement campaign was carried out on the Tororo/Manafwa project.

The detailed engineering designs for Ongino, Luanda and Kabamba were completed and submitted. The Bukwo design is at a stage where the topographic surveys along the proposed pipeline routes were done. The proposals for consultancy services (feasibility and engineering designs) for Bwambara, Rwebisengo and Ngoma were received, evaluated and report submitted for approval.

Under Urban Water and Sanitation vote function - The technical commissioning of the Lefori water supply scheme and trainings were held in Nakasongola, Kigorobya, Kangulumira, Bombo, Nkokonjeru, Nakifuma, Kibibi, Buikwe, Buliisa, Semuto, Bweyale, Migeera and Nakawuka. At least 151 Technical Operators were trained for 16 ERTI schemes. Construction of Rwene, and Kagango water supply were completed. Construction continued in the 5 RGCs of Kazo (80%), Kiruhura (90%), Kakuto (30%), Kayanga (60%) and Lyantonde (30%). On sanitation, 9 ecological sanitation toilets were constructed while 03 communities training were conducted in sanitation and hygiene. Other 2 public sanitation facilities were completed in Tirinyi and Kibuku.

Functionality of major components of town piped water supply schemes was restored through supply of pumps in Kamuli, Kyenjojo, Butogota, Katwe - Kabatooro, and Nakasongola. 366 Water Meters supplied to all 3 Umbrella organisations. 2 new Water Boards trained in Tirinyi and Kubuku and the existing Water Boards trained for 11 towns. Replacement of submersible pumps was carried out in Busia, Ngongera, Kinoni, Lubirizi, Kamulu (2), Kyenjojo (3), Katwe Kabatooro (2), Busolwe, Nkokonjeru and Kaliro.

Under WSDF-E, the construction of 8 ecosan toilets is ongoing in Karenga (2), Luuka (2) and Bukedea, Bugadde, and Nakapelimoru (2). Completed design of Kagaa water supply while designs of Kapelebyong, Suam, Irundu, Kadungulu water supply systems are on-going. The construction works for Tirinyi-Kibuku (80%), Kaabong and Abim WSS are still ongoing and at the same time construction of 2 public sanitation facilities were completed in Trinyi-Kibuku. In addition, 11 hygiene and sanitation trainings were also held in Kaabong (2), Abim (2), Namalu (2), Buwuni, Nakipelimoru, Mbulamuti, Kapelebyong and Kaaga.

Under WSDF-SW, 02 demonstration ecosan toilets in Kikagati (Isingiro) and Gasiza (Kisoro) were constructed while 3 sanitation trainings in Kakyanga, Kiruhura, Kakuto were undertaken.

Under WSDF-N, constructions works at Adjumani (90%), Oyam (75%), Amolatar (60%) and Koboko extension is at full completion stage. The Kamdini, Kitgum and Pader are on going. Construction of the regional office block at Lira has reached 30% completion level. Carried out hygiene and sanitation

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promotions in Adjumani town council conducted 2 sanitation surveys in Kitgum and Pader, construction of public flush toilets in Adjumani, Amolata and Oyam is still on-going. Reservoir tanks and pipe-lines were secured for Omega and Agweng. Alebtong town council the former IDP camp water scheme was re-instated to functionality.

Under WSDf-C, Construction of Nakaseke Water Supply and Sanitation System is estimated at 95% completion level. Completed construction of 4 demonstration household ecosan toilets in Nakaseke plus 3 separate public ecosan toilets. Gazetting process for Nakaseke Town Water Supply Authority was completed. Completed designs for Kasanje and Kako new water supply systems, and rehabilitation/improvement works in Wakiso and Kakiri. In addition, production boreholes in Kasanje (2), Ntwetwe (3) were drilled, while sanitation baseline conducted in Kasanje.

With respect to National Water and Sewerage Corporation, (NWSC), substantive progress has been registered in cleaning and un-blocking of 11.5km gravity sewers and 10km of siphons on Jinja Rd, Kitante and Dewinton Rd. Structures for Rubigi WWTP and faecal plant was completed with laying of about 9km new sewers pipes.

Water for Production Vote Function - During the first half of the FY 2011-12 the following were achieved: Completed construction of Longorimit dam in Kaabong district, Kobeibei and Arechek dams in Moroto district, Lutunku valley tank & Kisozi valley tank in Sembabule district, completed the extension of a piped water scheme in Sembabule district. At least 46 valley tanks of average capacity of 1,200m³ were constructed in Lyantonde District and 4 valley tank (of capacity 10,000m³) were constructed in Moroto District and 3 valley tank (of capacity 10,000m³) in Napak District. In addition, 28 valley tanks of average capacity 2,000m³ were constructed in Kiruhura district. Other achievements include: Re-established, trained and created awareness at 28 facilities for Nshenyi valley tank in Ntungamo District, Betelehem in Rakai District, Olamia valley tank in Apac District, Loptuk, Nawanatau, Rupa, Lopey and Lokopo dams in Moroto District, Nabilatuk, Mamalu, Amudat, Nakobekobe windmill, Kalengengopoch windmills in Nakapiripiriri and Lokali and Lodoi windmill committees in Mororo District, Kopopwa and Angaro windmills in Napak District.

Re-fresher trainings were carried out for Leye and Akwera dams, Olelpec and Olamia Valley tanks in Apac District. Established bye-laws for Kagango dam, Obwengerero and Kagamba valley tanks. Created awareness for drip irrigation for the following dams: Longoromit in Kaboong District, Akwera in Lira District, Leye in Apac District, Kagango in Isingiro District and Kakinga in Sembabule District

Table S2.2 Outcome 1: Key 2013/14 Outputs Contributing to the Sector Outcome*

<i>Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses</i>			
<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
Vote: 019 Ministry of Water and Environment			
<i>Vote Function:0901 Rural Water Supply and Sanitation</i>			
Output:090103	Promotion of sanitation and hygiene education		

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Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses

<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
<i>Description of Outputs:</i>	Conduct sanitation promotion and hygiene improvement campaigns in Tororo-Manafwa GFS supply area, Jezza-Muduma and Katende gravity flow schemes and Bududa, Ongino, Luanda, Kabumba, Kanyampanga and Lirima GFSs. Nabweya gravity flow scheme	Conducted sanitation and hygiene promotion in Kamengo RGC; Supervision visits were made to the districts of TSU 3 in Nakapiripirit and, Moroto, TSU 6 in Gomba and Mityana, Butamabala, and Mukono in TSU 5. Tororo and manafa in TSU 4.	Conduct sanitation promotion and hygiene improvement campaigns in Alwi, Kabumba and Kahama pipe water systems; Conduct campaigns to improve household sanitation in the constructed solar powered systems
<i>Performance Indicators:</i>			
No. of national sanitation and hygiene campaigns undertaken**	9	4	9
No. of LG staff trained in Sanitation and Hygiene	120	63	120
<i>Output Cost (US\$ bn):</i>	1.396	0.279	0.279
Output: 090180	Construction of Piped Water Supply Systems (Rural)		
<i>Description of Outputs:</i>	Engineering designs for Large Gravity Flow scheme developed in water stressed areas of ;Isingiro, Bukonzo Lwamata in Kiboga. 20% Bududa-Nabweya, Lirima, 50% Luanda, 100% of Kabumba, 50% of Ongino and Kanyampanga Gravity flow schemes	1st Phase of Tororo-Manafa Completed. Mobilization in areas for extra-work done. Construction is at various levels of completion as follows: Lwanda (30%) Kabumba (50%) Kanyampanga (30%), Ongino (25%) Nebbi district, procured consultancy serv	Construction of 2 Solar power Water systems and set up management structures in Amuru; Extension of Tororo Manafwa Water supply scheme (100%), upto 50% completion of Bududa-Nabweya and Lirima in Manafa district. Luanda/Rakai (100%), Commence constructi
<i>Performance Indicators:</i>			
No. of piped water systems/GFS constructed in rural areas**	6	1	5
No. of piped water supply systems designed in preparation for commencement of construction**	5	3	5
<i>Output Cost (US\$ bn):</i>	31.221	3.402	25.222
Output: 090181	Construction of Point Water Sources		

Sector: Water and Environment

Sector Summary

Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses

<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
<i>Description of Outputs:</i>	Construction of Water piped systems and management structures in the 4 RGCs of Lamwo, Pader, Agago and Nwoya. Construction of boreholes in selected rural areas in response to emergencies and water stressed areas.	A total of 24 boreholes were drilled in various districts including Namayingo (6), Lira (1), Mubende (1), Apac (1), Oyam (2), Kaliro (1), Butaleja (3), Luwero (1), Namutumba (2), Kumi (2), Ngora (1), Kaberamaido (3). Drilled and installed 3	Drilling and construction of production wells and boreholes in selected areas in response to emergencies. Domestic rainwater harvesting tanks supplied and constructed
<i>Performance Indicators:</i>			
No. of LG staff trained on Operations and Maintenance	60	0	70
No. Boreholes constructed	100	51	100
<i>Output Cost (US\$ bn):</i>	1.194	1.352	1.194
Output: 090182	Construction of Sanitation Facilities (Rural)		
<i>Description of Outputs:</i>		Nil	Construct 2 line pit latrines in the RGCs
<i>Performance Indicators:</i>			
No.masons constructed		0	0
No. of eco-san toilets constructed		0	2
<i>Output Cost (US\$ bn):</i>	0.000	0.081	0.060
<i>Vote Function: 0902 Urban Water Supply and Sanitation</i>			
Output: 090204	Backup support for Operation and Maintenance		
<i>Description of Outputs:</i>	Establishment of central umbrella organization; Water operators in Central region trained in water services management, 10No. promotional campaigns for effective O&M conducted 6 Water supply systems commissioned	Completed and submitted the Draft Design Manual to the Ministry, held two workshops in Fort portal and Gulu to train water boards, Marketing strategy services and trainings were carried out in the towns of Bokomansimbi, Kayunga, Rakai, Lukaya and Kyazanga	Establishment of structures essential for sustainable operation and maintenance of piped water supply systems in towns; Test running of completed water supply and Sanitation Systems Implementation of framework for Operation and Maintenance Support to pip
<i>Performance Indicators:</i>			
Length of water supply pipeline extensions made		0	
<i>Output Cost (US\$ bn):</i>	1.120	0.533	1.323
Output: 090205	Improved sanitation services and hygiene		

Sector: Water and Environment

Sector Summary

<i>Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses</i>			
<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
<i>Description of Outputs:</i>	Hygiene and sanitation promotion improved in 07 towns: Opit, Omugo, Agweng, Paidha, Kitgum & Pader. Support LGs in Construction of 25 house ecological sanitation toilets in 5 towns	supported LGs in construction of 5 house ecological sanitation toilets in 3 towns of Karenga, Bugadde and Bukedea; Continued procurement of Consultant for Regional Sanitation and Socio-economic baseline survey and a contractor in Karenga town to implement	Promotion of improved hygiene and sanitation through designing of small town behavior change and communication system; Sanitation and socio-economic baseline surveys completed and disseminated in the 10 towns; Community level trainings covering sanitatio
<i>Performance Indicators:</i>			
No. of masons trained to construct toilet facilities	105	43	150
No. of hygiene promotion campaigns (Urban)	190	97	200
<i>Output Cost (US\$ bn):</i>	1.573	0.839	1.570
Output: 090206	Monitoring, Supervision, Capacity building for Urban Authorities and Private Operators		
<i>Description of Outputs:</i>	New Water Board Members and Urban Water Officer trained to use the Business Planning Tool and the Performance Monitoring software. Support to umbrella Organisations including general O & M monitoring of piped water supplies	Supported 3 towns of Kaabong, Moroto and Abim in in the process of applying for private connection (03), supervision and construction of water and supply systems through site meetings and field inspections. Bidding document and procurement for consultancy	Support to Urban Authorities in monitoring and supervision of feasibility study, detailed design and documentation of urban piped water systems in selected towns ; Monitoring and support supervision of Urban Water Authorities and Private Operators in fu
<i>Performance Indicators:</i>			
No. of water boards /Operators staff trained and equipped	120	63	120
<i>Output Cost (US\$ bn):</i>	4.026	0.874	3.228
Output: 090280	Construction of Piped Water Supply Systems (Urban)		

Sector: Water and Environment

Sector Summary

Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses

<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
<i>Description of Outputs:</i>	Complete construction of Kasanje and Kako town supply systems. Complete rehabilitation works Various town Water supply systems under urban vote function. Commence construction of various Town water supply systems	Rehabilitation works in Wakiso Water supply to 80% completion (Pumping house completed, 3.6km transmission pipe laid and fittings), Kakiri water supply to approx. 71% completion (4km transmission pipe rehabilitated, 1.8 km distribution line laid and power	Complete construction of ongoing . Town water supply systems in all the Water and sanitation Development Facilities Commence construction of new town water supply systems ; Commence extension works on Pakwach to Pacego and Lira to Amach town water supp
<i>Performance Indicators:</i>			
No. of sewage connections made*	1	0	1
No. of piped water supply systems designed in urban areas**	26	16	20
No. of piped water supply systems constructed in urban areas**	16	12	16
No. of designs completed in preparation for commencement of construction**	20	11	10
<i>Output Cost (US\$ bn):</i>	42.151	11.550	31.738
Output: 090281	Energy installation for pumped water supply schemes		
<i>Description of Outputs:</i>	supply and installation of solar energy packages for water supply schemes in the following small towns and rural growth centers of Lagoro, Paloga, Madi-Opei, Palabek-Ogili and Namokora	The contractors in the sites of Lagoro, Paloga, Madi-Opei, Palabek Ogili and Namokora have started works. The civil works are near completion (70%).	Grid power extensions to production wells in 4No. towns Dokolo, Ovujo, Patongo, Purongo, Opit , Ibuje, Oyam and Adjumani; Extension of power line to Sembabule, Kyotera and Mutukula; National Grid: Sanga, Rwenkobwa, Kasagama, Kinuka, Kikagati, Matete, Gasi
<i>Performance Indicators:</i>			
No. of energy packages for pumped water schemes installed	7	4	15
<i>Output Cost (US\$ bn):</i>	0.050	0.017	7.416
Output: 090282	Construction of Sanitation Facilities (Urban)		

Sector: Water and Environment

Sector Summary

<i>Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses</i>			
<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
<i>Description of Outputs:</i>	85 household Ecosan toilets for demonstration constructed. 10 Public sanitation facilities Constructed, 10 School sanitation promotional facilities constructed; Design and construction supervision for sanitation facilities conducted	On Construction of Lubigi Sewage System, Concrete blinding and placing reinforcement steel bars on the upper sides of the ponds was done for the anaerobic ponds Construction of pump house is ongoing, Power supply poles were installed, and Procurement of	178 No. Ecosan and demonstration toilets in all the selected towns 44 No. Public sanitation facilities (public places including schools, markets etc) in constructed in Towns Design and construction supervision for sanitation facilities conducted. "Constr
<i>Performance Indicators:</i>			
No. of sanitation facilities constructed (ecosan and ecological toilets)	85	20	140
<i>Output Cost (US\$ bn):</i>	65.470	1.960	93.993
<i>Vote Function:0903 Water for Production</i>			
Output:090306	Sustainable Water for Production management systems established		
<i>Description of Outputs:</i>	Piloting Drip Irrigation for Effective Utilization of Water on Completed Water for Production Facilities; Establishment of appropriate Management Structures of Water for Production Facilities at all the ongoing and completed projects	Established and trained 5 management committees for Katukeyang, Loslag, Nakapirimerom, Kamongol and Lomogol parish level valley tanks in Kotido District; Mobilized and sensitized community members on access and use of the WIP construction equipment in 2 s	Installation of Drip Irrigation for Effective Utilization of Water on Completed Water for Production Facilities (drip irrigation, aquaculture, e.t.c) at selected sites countrywide, Improving the environment through Watershed management), Establishment of
<i>Performance Indicators:</i>			
No. of water management committees formed	10	5	12
<i>Output Cost (US\$ bn):</i>	1.028	0.332	0.989
Output:090380	Construction of Bulk Water Supply Schemes		
<i>Description of Outputs:</i>	Continuation of construction of a bulk water scheme in Rakai district, Construction supervision and monitoring and appraisal of the bulk water construction by the Consultants and civil servants	Rakai bulkwater supply scheme is 32% cumulative level of construction; construction supervision and monitoring and appraisal of the bulk water scheme by the Consultants and civil servants to satisfactory levels Advertised for consultancy services for des	Completion of Nyakiharo water supply system in Kabale district Construction of a bulk water scheme in Rakai district up to 80% cumulative progress
<i>Performance Indicators:</i>			
No. of Bulk Water supply systems completed	1	0	1
<i>Output Cost (US\$ bn):</i>	5.141	1.239	3.000
Output:090381	Construction of Water Surface Reservoirs		

Sector: Water and Environment

Sector Summary

Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses

<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
<i>Description of Outputs:</i>	Construction of Kajodi, Nyamiringa & Nakakabala v.ts, Rehabilitation of windmills in Karamoja region, Kajodi vt, Nakakabala and Nyamiringa V.T's, Rehabilitation of old dams & VTs, Construction of WfP facilities Countrywide using WfP equipment	Payment of retention monies on Arechet dam, construction of Kajodi v.tank (5%) in Mityana district, Nyamiringa (5%) and Nakakabala (50%) v.tanks in Kiboga district, Rehabilitation of windmills in Karamoja region (30%), Advertisement for consultancy f	Design of Alidi dam and Adwari dam Kole district and Otuke district respectively Continue construction of Rwengaaaju Irrigation scheme (up to 40% cumulative progress), Kikatsi, Sanga, Kanyaryeru bulk water scheme in Kiruhura (up to 30% cumulative progres
<i>Performance Indicators:</i>			
Numer of Valley Tanks Constructed	3	0	6
No. of Dams Constructed	2	1	2
<i>Output Cost (US\$ bn):</i>	10.834	4.033	10.545

* Excludes taxes and arrears

2013/14 Planned Outputs

Rural Water and Sanitation Vote Function

The allocation under this vote function is Ushs 80.017bn of which Ushs 23.437bn is for activities coordinated in the centre, Ushs 2.0bn for the District Sanitation Grant and the District Water Supply Grant is Ushs 54.58bn. It is estimated that an additional 820,000 people will be served by the end of FY 2012/13. The key outputs for FY 2012/13 will be as follows:

Continue construction of Bududa-Nabweya, Lirima, Luanda, Kabumba, Ongino and Kanyampanga Gravity flow schemes; Construction of 100 boreholes in selected rural areas in response to emergencies and water stressed areas; Carryout sanitation promotion campaigns and set up management structures for major GFS under construction; Collect baseline information for rainwater harvesting in Kyegegwa, Kyankwanzi, Buyende and Bugiri; Carryout capacity building in appropriate technologies like Iron removal plants and rainwater harvesting; Carrying out Identification, feasibility studies and engineering designs for large gravity flow scheme for development of water supply in water stressed areas; Construction of Water piped systems and management structures in the 4 RGCs of Lamwo, Pader, Agago and Nwoya under the JICA support

Set up management structures for Tororo-Manafwa, Jezza-Muduma and Bunyaruguru gravity flow schemes; Conduct sanitation promotion and hygiene improvement campaigns in Tororo-Manafwa GFS supply area, Jezza-Muduma and Katende gravity flow schemes and Bududa-Nabweya gravity flow scheme

Urban Water Supply Vote Function

A total of Ush 184.769 consisting of Ushs 183.269bn for the DWD and NWSC and the Conditional Grant for Operation and Maintenance subsidy of Ushs 1.50bn to be disbursed to selected Town Councils.

The vote function will in the FY 2012-13 , Set up O&M structures in 04 former IDP camps of Bobi, Apala, Pabbo and Barr; Commence construction works of 05 water offices in the towns of Moyo, Kalongo, Ibuje,

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Purongo & Ovujo ; Complete construction of piped water systems in the 5 towns of Paidha, Patongo, Opit, Omugo and Agweng; Commence construction of piped water systems in the 5 towns of Moyo, Ibuje, Kalongo, Purongo & Ovujo; Convert and resize 10 former IDP camps in the north viz: Amugu, Abako, Omoro, Abia, Awere, Bata, Paicho, Patiko, Lamogi and Alokolum; Start construction of 35 household Ecosan toilets for demonstration as follows (05 in each town) of Kitgum, Pader, Paidha, Patongo, Opit, Omugo & Purongo; 02 regional sludge beds completed in Agwata & Kitgum; Continue with Establishment and support of the Central Umbrella Organization; Commence construction of WSDf-C headquarters in Wakiso, 3 Urban water offices in the towns of Ntventwe (Kyankwanzi), Kasanje (Wakiso), and Ziobwe (Luwero); Complete construction of Nakaseke town water supply system; Drill 10 production boreholes and start construction of 3 town water supply systems in Ntventwe (Kyankwanzi), Kasanje (Wakiso), and Ziobwe (Luwero); Restoration of 3 existing water supply system in Kakiri, Bukomansimbi and Wakiso towns;

Design of 15 new town water supply Systems; Construct 30 ecosan demonstration toilets in 3 towns of Ntventwe (Kyankwanzi), Kasanje (Wakiso), and Ziobwe (Luwero); Complete Construction of Kaabong town water supply system, Abim Town Water supply System, Start Construction of Namalu Town Water Supply System, Expansion of Bukedea Town Water Supply System, Completion of Busiu & Kapchorwa Water Supply Systems, Construction of Karenga Town Water Supply System, Expansion of Katakwi Town Water Supply System, Construction of Tirinyi-Kibuku Water Supply System; Start Construction of 25 house ecological sanitation toilets in 5 towns of Suam, Kapelebyong, Mbulamuti, Buwuni and Ocheru, Start construction of Town Water Supply systems of Mbulamuti, Suam, Ocheru, Kapelebyong, and Buwuni town water supply.

Other planned outputs under the vote function will include: Support to renewals of existing dysfunctional water supply systems in the towns of; Matany, Serere, Kachumbala, Namutumba, Kaliro, Busia, and Bumbo; Complete design of 10 water supply systems, namely; Moroto Municipality (Moroto), Ikumbya (Luuka), Bugobi (Namutumba), Namung'alwe (Iganga) and Kibaale (Namutumba), Lokadeli (Kotido), Tubur (Soroti), Kacheri-Lokona (Kotido), Acowa (Amuria) and Mutufu (Sironko); Continue with Establishment of O&M structures in towns where construction will be completed (Kaabong, Abim, Namalu, Matany, Kangole, Nakapelimoru) to ensure sustainability of the completed facilities,

Construction of school sanitation facilities in Mayuge, Ntungamo, Bukakata; Construction of solid waste management facilities in Mayuge town; Design of communal toilet facilities in Mayuge, Kayabwe and Buwama, Bukakata and Ntungamo. Conducting Support supervision to construction of Mayuge water system, Sanitation facilities in Mayuge, Kayabwe and Buwama, Bukakata and Ntungamo; Construction of Mayuge Water Supply; Commence designs of Kayabwe and Buwama, Bukakata and Ntungamo; Undertake Design 5 Water Supply and Sanitation Systems in the towns of Butare-Mashonga, Nyahuka, Nyakashaka, Kyabi, Lwemiyaga, Complete Construction works in 6 RGCs, Kyempene, Kikagati, Matete, Kahunge, Kabuga, Kinoni-Mbarara.

Under the National Water Sewerage Cooperation

Construction of Lubigi Waste Water Treatment Plant (WWTP), Lubigi Network, rehabilitation of Bugolobi and Network systems; Construction of Nakivubo and Kinawataka Waste Water Treatment Plant (WWTP) Achieve 40% of the works for construction of 200 private low cost demonstration latrines; Achieve 60% of construction works for emergency rehabilitation and upgrading measures for Ggaba I & II to increase water production capacity by an additional 50,000m³/d; Achieve 60% construction works for a 4,000 m³ reservoir at Namasuba Hill and associated water distribution network improvements; Water network modeling and master planning completed; Study and design for major rehabilitation and optimisation works in Ggaba

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water treatment complex; Achieve 40% of construction works for 3,000 public water points and yard taps with electronic prepaid meters; Water quality monitoring programme and limnology studies for Lake Victoria completed. Lake Victoria catchment investigation programme for pollution sources that discharge in the project area of Lake Victoria developed

Water for Production Vote Function

A total of Ushs 22.340bn is allocated to this vote function to undertake among others the following key outputs: Supervision of construction of the following projects Kikatsi-Sanga-Kanyaryeru bulk water scheme in Kiruhura district, Andibo dam in Nebbi district, Pilot bulk water scheme in Rakai; Rehabilitation of windmills in Karamoja region, Kajodi Valley Tank in Mityana district, Nakakabala and Nyamiringa Valley Tanks in Kiboga district; Design of Rwengaju irrigation scheme in Kabarole district, detailed design for Kulwodong dam in Abim district; Piloting Drip Irrigation for Effective Utilization of Water on Completed Water for Production Facilities (drip irrigation, aquaculture); Continue with construction of a bulk water scheme in Rakai district; Construction completion of Kawomeri dam in Abim and Kailong dam in Kotido district, Kajodi Valley Tank in Mityana district, Nyamiringa and Nakakabala Valley Tanks in Kiboga district,

Construction of Water for Production facilities countrywide using Water for Production equipment.

Table S2.3 Outcome 1: Past and Medium Term Key Sector Output Indicators*

<i>Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses</i>						
<i>Vote Function Key Output Indicators and Costs:</i>	2011/12 Outturn	2012/13 Approved Plan	2012/13 Outturn by End Dec	MTEF Projections		
				2013/14	2014/15	2015/16
Vote: 019 Ministry of Water and Environment						
<i>Vote Function: 0901 Rural Water Supply and Sanitation</i>						
Output: 090103	Promotion of sanitation and hygiene education					
No. of LG staff trained in Sanitation and Hygiene	85	120	63	120	130	130
No. of national sanitation and hygiene campaigns undertaken**	12	9	4	9	20	30
Output: 090180	Construction of Piped Water Supply Systems (Rural)					
No. of piped water supply systems designed in preparation for commencement of construction**	6	5	3	5	3	2
No. of piped water systems/GFS constructed in rural areas**	7	6	1	5	4	4
Output: 090181	Construction of Point Water Sources					
No. Boreholes constructed	77	100	51	100	125	130
No. of LG staff trained on Operations and Maintenance		60	0	70	80	85
Output: 090182	Construction of Sanitation Facilities (Rural)					
No. of eco-san toilets constructed	30		0	2	2	2
No. masons constructed	13		0	0	0	0
<i>Vote Function: 0902 Urban Water Supply and Sanitation</i>						
Output: 090204	Backup support for Operation and Maintenance					
Length of water supply pipeline extensions made			0			

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Output: 090205		Improved sanitation services and hygiene				
No. of hygiene promotion campaigns (Urban)	44	190	97	200	210	220
No. of masons trained to construct toilet facilities	13	105	43	150	150	150
Output: 090206		Monitoring, Supervision, Capacity building for Urban Authorities and Private Operators				
No. of water boards /Operators staff trained and equipped	55	120	63	120	125	130
Output: 090280		Construction of Piped Water Supply Systems (Urban)				
No. of designs completed in preparation for commencement of construction**	23	20	11	10	10	15
No. of piped water supply systems constructed in urban areas**	02	16	12	16	16	17
No. of piped water supply systems designed in urban areas**	16	26	16	20	15	10
No. of sewage connections made*		1	0	1	1	1
Output: 090281		Energy installation for pumped water supply schemes				
No. of energy packages for pumped water schemes installed	01	7	4	15	15	16
Output: 090282		Construction of Sanitation Facilities (Urban)				
No. of sanitation facilities constructed (ecosan and ecological toilets)	23	85	20	140	140	140
<i>Vote Function: 0903 Water for Production</i>						
Output: 090306		Sustainable Water for Production management systems established				
No. of water management committees formed	24	10	5	12	14	15
Output: 090380		Construction of Bulk Water Supply Schemes				
No. of Bulk Water supply systems completed	01	1	0	1	1	1
Output: 090381		Construction of Water Surface Reservoirs				
No. of Dams Constructed	4	2	1	2	4	6
Numer of Valley Tanks Constructed	56	3	0	6	6	4

Medium Term Plans

Rural Water Supply and Sanitation vote function- During the MTEF period this vote function will continue with provision of technical support to all LGs, support supervision will be provided in the on-going construction sites for piped water schemes plus setting up O&M management structures for RGCs and large GFSs. Continue with construction of Bududa-Nabweya, Lirima, Luanda, Kabumba, Ongino and Kanyampanga large GFS. Embark on construction of 100, boreholes, continue with construction of the completed designs of Bukwo, Ngoma, Ntoroko, Bwambara and Bugangari water supply and sanitation facilities. Continue with the promotion of sanitation and hygiene education in selected project areas and construction of eco-san facilities in 110 districts. Emphasis will be provided in capacity building for the appropriate technologies especially domestic rain water harvesting in the selected districts.

Urban Water Supply and Sewerage vote function- During the period 2012/13-2014/15 key planned outputs will include setting- up O&M structures in 04 former IDP camps of Bobi, Apala, Pabbo and Barr; Commence construction works of 05 water offices in the towns of Moyo, Kalongo, Ijuje, Purongo & Ovujo ; Complete construction of piped water systems in the 5 towns of Paidha, Patongo, Opit, Omugo and Agweng; Commence construction of piped water systems in the 5 towns of Moyo, Ijuje, Kalongo, Purongo and Ovujo; Start construction of 35 household Ecosan toilets for demonstration as follows (05 in each

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town) of Kitgum, Pader, Paidha, Patongo, Opit, Omugo & Purongo; 02 regional sludge beds completed in Agwata and Kitgum; finalize construction of WSDFs headquarters and Urban water offices in the towns of Ntventwe (Kyankwanzi), Kasanje (Wakiso), and Ziobwe (Luwero); Complete construction of Nakaseke town water supply system; Drill 10 production boreholes and start construction of 3 town water supply systems in Ntventwe (Kyankwanzi), Kasanje (Wakiso), and Ziobwe (Luwero);

Complete Construction of Kaabong town water supply system, Abim Town Water supply System, Start Construction of Namalu Town Water Supply System, Construction of Karenga Town Water Supply System, Expansion of Katakwi Town Water Supply System, Construction of Tirinyi-Kibuku Water Supply System; Start Construction of 25 house ecological sanitation toilets in 5 towns of Suam, Kapelebyong, Mbulamuti, Buwuni and Ochero, Start construction of Town Water Supply systems of Mbulamuti, Suam, Ochero, Kapelebyong, and Buwuni town water supply.

Undertake construction of school sanitation facilities in Mayuge, Ntungamo, Bukakata; Design of communal toilet facilities in 5 districts. Construction of Mayuge Water Supply; undertake designs 9 Water Supply and Sanitation Systems, Complete Construction works in 6 RGCs, of Kyempene, Kikagati, Matete, Kahunge, Kabuga, Kinoni-Mbarara. Construction of Lubigi Waste Water Treatment Plant (WWTP), Lubigi Network, rehabilitation of Bugolobi and Network systems; Construction of Nakivubo and Kinawataka Waste Water Treatment Plant WWTP and expanding of Gaba Water works.

Water for Production Vote Function- During the period 2012/13-2014/15 key planned outputs for this vote will include construction of various projects such as Kikatsi-Sanga-Kanyaryeru bulk water scheme in Kiruhura district, Andibo dam in Nebbi district, Rehabilitation of windmills in Karamoja region, Kajodi Valley Tank in Mityana district, Nakakabala and Nyamiringa Valley Tanks in Kiboga district; Design of Rwengaju irrigation scheme in Kabarole district, detailed design for Kulwodong dam in Abim district; Piloting Drip Irrigation for Effective Utilization of Water on Completed Water for Production Facilities (drip irrigation, aquaculture); Continue with construction of a bulk water scheme in Rakai district; finalization of construction of Kawomeri dam in Abim and Kailong dam in Kotido district, Kajodi Valley Tank in Mityana district, Nyamiringa and Nakakabala Valley Tanks in Kiboga district.

Actions to Improve Outcome Performance

Under Rural Water and Sanitation

The issues at hand are increased unit costs for service delivery at the district level. The Rural Water and Sanitation VF Ministry is planning to address it through improvement in contract management at Local Government level through continued supervision by Technical Support Units (TSUs), reducing fiduciary risks through expediting implementation of large scale area based programmes for water stressed areas and conducting value for money trucking studies as a tool for improved financial management and follow up on value for money study recommendations.

Another issue is low functionality of water facilities mainly boreholes, springs, RWTs, GFS and Rural Growth Centers. To address this issue, during FY 2012/13 the Rural Growth Centers Schemes shall continue to be registered under the established umbrella organizations to enable pooling of resources to facilitate collective operation and maintenance. Continue with revitalization of Community Based Management Structures as well as implementing the national borehole rehabilitation programme. Regarding the low staffing levels and high staff turnover in District Water Offices issue, the Ministry will step up back up support and supervision of districts through Technical Support Units (TSUs).

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Urban Water Supply and Sanitation

The performance issue is inadequate cost recovery in UWSS as a result of VAT in tariffs and chronic accumulation of arrears. The priority Vote Actions for FY 2012/13 therefore will be popularizing the Business Planning Tool for Water Authorities to guide in project water supply revenues and operations. Continue lobbying for waiving of VAT on water consumption in the small towns and strengthen monitoring of Water Authorities to ensure regular payment of operational dues especially electricity bills. The VF will develop a checklist/scorecard for independent water supply inspectors, plus rewarding, lobby waiving of VAT on water consumption in small towns in the medium term.

Another issue is low functionality of urban water and sanitation/sewerage facilities as a result of old age, energy problems and management issues. To address problem the VF will develop a strategy for rehabilitation and replacement of pumping and other electromechanical equipment in water supplies with aging facilities in addition to strengthening the capacity building and support functions of the Ministry to Town Water Authorities. The VF will also support the creation of new Umbrella Organizations in Northern and Central Uganda, while at the same time also strengthening operations of the existing three Umbrella Organizations in South West, West and Eastern Uganda

With regard to lack of a coherent regulation and monitoring framework for water and sewerage services especially implementation of the pro-poor strategy in urban areas, the VF plans to strengthen the Water Regulation Unit of the MWE to carry out its functions, pilot pro-poor implementation starting with Kobobo Town Council and in new piped water supplies, ensure that all Water Supply Authorities sign new Performance Contracts with MWE and phase out of the old contracts, conduct semi-annual Performance Review of small towns Water Authorities and assess compliance levels.

Water for Production

The performance issues under Water for production include inadequate policy and regulation framework for all the users, low sustainability of facilities particularly in water stressed areas and low sustainability of facilities due to management issues, low community involvement and limited capacity at LGs. The Vote Actions for FY 2012/13 will include engaging a consultant to come up with a policy and regulation framework for monitoring the performance of the WfP facilities. Secondly, the VF will also promote revitalization of the water user committees to ensure effective management of the facilities while at the same time continue with sensitization of all stakeholders especially LGs to ensure proper handling and management of the facilities.

Table S2.4 Outcome 1: Actions and Medium Term Strategy to Improve Sector Outcome

<i>Sector Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses</i>			
2012/13 Planned Actions:	2012/13 Actions by Dec:	2013/14 Planned Actions:	MT Strategy:
Vote: 019 Ministry of Water and Environment			
Vote Function: 09 01 Rural Water Supply and Sanitation			
Procure specialised equipment to respond to emergency borehole rehabilitation at the centre.Promote latrine construction together with handwashing with soap.	A framework contract for construction of ecological sanitation toilets signed in the quarter	Procure specialised equipment to respond to emergency borehole rehabilitation at the centre.Promote latrine construction together with handwashing with soap.	Procure more specialised equipment to respond to emergency borehole rehabilitation at the centre.Promote latrine construction together with handwashing with soap.

Sector: Water and Environment

Sector Summary

<i>Sector Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses</i>			
2012/13 Planned Actions:	2012/13 Actions by Dec:	2013/14 Planned Actions:	MT Strategy:
Review the entire CBMS and improve on the availability of spare parts, monitor the quality of construction of facilities for compliance to BoQs, involve communities in planning and design of facilities	Formation and operationalization of Handpump mechanics associations in districts continued in the quarter to improve availability of handpump spares	Review the entire CBMS and improve on the availability of spare parts, monitor the quality of construction of facilities for compliance to BoQs, involve communities in planning and design of facilities	Continue with monitoring of the quality of construction of facilities for compliance to BoQs, involve communities in planning and design of facilities
Vote Function: 09 02 Urban Water Supply and Sanitation			
Continue to provide CG to selected urban water supply systems. Continue to lobby for removal of VAT from the tariff and clearance of arrears owed to WA's.	The Conditional Grant (CG) funds have been provided to deserving Water Authorities according to the allocation formula. The issue of VAT is still being resolved since from the Ministry's position, VAT is not supposed to be charged. However, URA still insists that VAT must be paid.	The Regulation Unit will be strengthened through training, appointment of addition staff and acquisition of regulatory tools to ensure effective regulation of the water and sewerage services and the implementation of the pro-poor strategy.	Continue to provide CG to selected urban water supply systems. Continue to lobby for removal of VAT from the tariff and clearance of arrears owed to WA's.
provide alternative energy efficient pumping systems. Train technicians and members of the Water Authorities in respective areas. Strengthen the capacity building and support functions of the Ministry to Town Water Authorities and Umbrella Organizations	The Regulation unit is making comparisons on the different pumping systems and ways in which the existing pumping systems can be optimized such as pumping during off-peak hours Few trainings of technicians and capacity building interventions have been undertaken	Rehabilitation of water supply and sewerage facilities to restore functionality. Solar powered pumps will be installed where feasible and capacities of Water Supply Services Boards will be strengthened to improve service delivery.	Continue with Training of technicians and members of the Water Authorities in respective areas. Strengthen the capacity building and support functions of the Ministry to Town Water Authorities and Umbrella Organizations
Develop checklist for independent water supply inspectors, develop reward & sanctions Catalogue. Continue Lobbying for waiving of VAT on water consumption in small towns & Strengthen monitoring of WAs to ensure regular payment.	Proposal are being discussed to ensure that the Right TORs are developed for the proposed consultancy Monitoring and supervision of WAs has continued for some towns.	Business Planning Tool is to be updated to ensure that derived tariffs cover operation & maintenance costs & replacement of components with lifespan of less than ten years. Water Authorities will be closely monitored and supervised	Continue Lobbying for waiving of VAT on water consumption in small towns & Strengthen monitoring of Was to ensure regular payment.
Vote Function: 09 03 Water for Production			
Revitalization of WUCs to ensure effective management of the facilities, Reconstruction and improvement of the abstraction systems and Fencing off of the facilities by using chain link, Rectification of all the defects on the facilities	Revitalization of WUCs to ensure effective management of the facilities, Reconstruction and improvement of the abstraction systems and Fencing off of the facilities by using chain link ongoing	Revitalization of WUCs to ensure effective management of the facilities, Reconstruction and improvement of the abstraction systems and Fencing off of the facilities by using chain link, Rectification of all the defects on the facilities	Continue with revitalization of WUCs to ensure effective management of the facilities, Reconstruction and improvement of the abstraction systems and Fencing off of the facilities by using chain link, Rectification of all the defects on the facilities
Continue with sensitization of all stakeholders to ensure proper handling and management of the WfP facilities.	sensitization of all stakeholders to ensure proper handling and management of the WfP facilities still ongoing	Continue with sensitization of all stakeholders to ensure proper handling and management of the WfP facilities.	Continue with sensitization of all stakeholders to ensure proper handling and management of the WfP facilities.

Sector: Water and Environment

Sector Summary

Sector Outcome 1: Increased access to quality safe water and sanitation facilities for rural, urban and water for production uses

2012/13 Planned Actions:	2012/13 Actions by Dec:	2013/14 Planned Actions:	MT Strategy:
strengthen Technical Support Units (TSUs) with WfP personel to support Districts especially in O&M, Finalise development of policy & regulatory framework and commence implementation.	Technical Support Units (TSUs) with WfP personnel to support Districts especially in O&M strengthened	strengthen Technical Support Units (TSUs) with WfP personel to support Districts especially in O&M, Finalise development of policy & regulatory framework and commence implementation.	Continue with strengthening Technical Support Units (TSUs) with WfP personel to support Districts especially in O&M, Finalise development of policy & regulatory framework and commence implementation.

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Sector Summary

(ii) Outcome 2: Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management

Status of Sector Outcome

Assessment of the water resources availability and demand in the Lake Kyoga basin was completed. In addition, mapping of existing water use and all waste-water discharging establishments as well as current and future water demands and pollution loads in Lake Victoria and Albertine Water Management Zones was initiated in order to improve and guide regulation of water use and pollution and harmonized sharing to minimize conflict over the use of the resource.

A total of 132 new permit applications were received of which 72 fully met the necessary and sufficient conditions and were approved and issued in addition to 73 renewals that were issued. A total of 265 different permit holders (representing 36%) were inspected.

During the period under review, 97 surface water, 30 groundwater and 103 water quality monitoring stations were operated and maintained, 4 databases for surface water, groundwater, water quality and water permits operated and maintained, climate change adaptation strategy for water sector finalized and integrated into the national water resources assessment and strategy for enforcement and compliance monitoring of water laws and regulations developed. Furthermore, compliance monitoring and assessment to 50 industries and companies was conducted while 41 new water abstraction permits and 5 new effluent discharge permit were processed and issued. In addition 4 equipment verification exercises for various technologies and innovations from private sector were undertaken.

In addition, 48 abstraction permit, 04 wastewater discharge permit were issued and 20 drilling permits renewed, 780 water samples received and analyzed, 7 EIAs reviewed, 01 framework for Catchment based WRM finalized, 04 Catchment Management Organisations (Rwizi, Mpanga, Albert and Semliki) supported, 01 draft Catchment Management Plan for Mpanga prepared, 85% of the national water resources assessment completed, 01 water resources basic plan for Lake Kyoga Basin comprising of 38 districts developed and 20 groundwater monitoring stations constructed in the Lake Kyoga Basin

Table S2.1 Outcome 2: Sector Outcome Indicators

<i>Outcome 2: Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management</i>			
Outcome and Outcome Indicator	Baseline	2013/14 Target	Medium Term Forecast
No. of permit holders complying to permit conditions for water discharge*	40 (2007/08)	49	55 (2013/14)
No. of permit holders complying to permit conditions for water abstraction (Surface and Ground)*	65 (2007/08)	70	75 (2013/14)
% of water quality and hydrometric stations operational	85 (2007/08)	100	100 (2013/14)
% of permit holders (abstraction and discharge) complying with permit conditions	65 (2007/08)	64	63 (2013/14)
% of catchments with management plans	62 (2007/08)	72	72 (2013/14)
% os samples complying with national water quality standards	61 (2007/08)	70	80 (2013/14)

2011/12 Performance

Water Resources Management:

Assessment of the water resources availability and demand in the Lake Kyoga basin was completed. In addition, mapping of existing water use and all waste-water discharging establishments as well as current and future water demands and pollution loads in Lake Victoria and Albertine Water Management Zones was initiated in order (once completed in 2010) to improve and guide regulation of water use and pollution

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and harmonized sharing to minimize conflict over the use of the resource.

A total of 132 new permit applications were received of which 72 fully met the necessary and sufficient conditions and were approved and issued in addition to 73 renewals that were issued. This process involved a thorough assessment including field verifications, sample testing, measurements of water levels, EIAs review and premises validation/suitability tests among others.

Regarding monitoring compliance to permit conditions, a total of 265 different permit holders (representing 36%) were inspected (compared to 188 - representing 26% in the previous year). Compliance, as revealed in the results of the inspections increased during the 2008/09 FY but overall is still very low with many permit holders still lacking the necessary equipment and facilities for use as required by Law.

Out of the 1,290 water samples received at the national/central water quality laboratory 1,073 (representing 83%) were analyzed within 10 working days and their results communicated with the respective clients. WQMD enhanced stakeholder awareness, knowledge and understanding of deteriorating water quality, causes, effects and their impacts to socio-economic development. Information, education and communication materials were developed, knowledge shared and information disseminated to key stakeholders. The Department engaged both national and international stakeholders (Cabinet Ministers, Legislators, Development partners, Permanent Secretaries and senior Government officials, heads of institutions, Local governments, private sectors, NGO's, inter-governmental organizations, the Media and community representatives in water quality challenges through exhibitions (in Adjumani Uganda and Stockholm Sweden), Visit of the Water Policy Committee to the Albertine Graben and performance report presentation at the Joint Sector Review 2010

Performance for the first half of the 2012/13 financial year

Under Water Resources Management vote function- By the end of December 2011, a number of outputs were realized that include Flood management strategy developed for flood districts in eastern Uganda; 11 drilling permits renewed, 4 new drilling permits issued, 26 new water abstraction permit processed, 7 new effluent discharge permits processed, 13 environmental Impact Assessment reports reviewed and 5 applications for hydraulic works permit processed; Identified Littoral zone hotspots sustainably and was managed and rehabilitated by communities; One quality assurance trip to the Sio-Malaba-Malakisi trans-boundary project was undertaken with an objective of coming up with issues in the hotspot areas for inclusion in the catchment management plan. 4 Trans-boundary water resources monitoring networks operated and 2 supervision trips were taken to Upper Nile and Kyoga Water Management zones.

Data from 104 surface water monitoring stations operated and maintained. 4 monitoring and quality assurance trips on both surface and ground water stations carried out. 3 databases for surface water, ground water and GIS operated and maintained, Data was collected from 75 surface water stations and 28 ground water stations 3 quality assurance and supervision trips were taken in Albertine region, Mbale region and Eastern region; 662 water samples were received and analysed. Strategy for catchment based water resources management through WMZs completed and its full operationalisation started with opening of 4 WMZ offices in Mbale for Kyoga WMZ, Lira for Upper Nile WMZ, Mbarara for Upper Nile WMZ and Fort Portal for Albert WMZ. Regulation and regular safety inspections performed on 3 major dams (Owen, Nalubaale), Dam safety plans for the development of unit 1 of Bujagali HEP facility finalized. Regulation and regular safety inspections performed on 4 existing small hydropower dams of Mpanga, Bugoye, Kilembe and KCCL. Compiled data from 8 dams in preparation for dam safety regulations development and 60% Dam safety framework developed.

Water resources information properly stored and managed on 3 databases (surface water, groundwater and GIS). 438 monthly charts for groundwater and rainfall data collected. Draft water quality maps produced for Amuru, Gulu, Pader, Kitgum, Lamwo, Nwoya, Otuke, Alebtong, Dokolo, Kaberamaido, Kasese,

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Kamwenge and Kabarole.

Table S2.2 Outcome 2: Key 2013/14 Outputs Contributing to the Sector Outcome*

<i>Outcome 2: Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management</i>			
<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
Vote: 019 Ministry of Water and Environment			
<i>Vote Function: 0904 Water Resources Management</i>			
Output: 090403	Water resources availability regularly monitored and assessed		
<i>Description of Outputs:</i>	97 surface water monitoring stations operated and maintained; 32 groundwater monitoring stations operated and maintained; 16 new surface water monitoring, 10 ground water stations, 6 hydro metrological stations constructed; 40 surface water monitoring sta	19 surface water stations in Albert Water Management Zone Operated and maintained Monitored & supervised the construction of 4 new surface water monitoring stations. Supervised the construction of 4 telemetry stations (Sipi, Simu, Kafua & Masindi Por	97 surface water monitoring stations operated and maintained. 32 groundwater monitoring stations operated and maintained. 16 new surface water monitoring, 10 ground water stations, 6 hydro metrological stations constructed. 40 surface water monitoring
<i>Performance Indicators:</i>			
No. of hydrological monitoring stations that are operational and used	165	150	169
<i>Output Cost (US\$ bn):</i>	4.910	1.209	5.508
Output: 090404	The quality of water resources regularly monitored and assessed		
<i>Description of Outputs:</i>	Upgraded Water Quality Analytical National Reference and Regional Laboratories' infrastructure to match the challenge; Undertake full understanding of nation's water quality characteristics, pressures/threats, process information and design appropriate in	Installation of Laboratory equipment Inductively Coupled Plasma; Optical Emission Spectrometer (ICP-OES) and Ion Chromatograph; (IC) was installed. Training of 4 staff was done; Troubleshooting of Liquid Water Isotope Analyzer (LWIA Call-off order submitt	Compliance monitoring and enforcement of water permit conditions undertaken for 300 permit holders 1 National Water Quality Reference Laboratory and 4 Regional Laboratories infrastructure developed and upgraded to match emerging water quality challeng
<i>Performance Indicators:</i>			
% of permit holders monitored for compliance to permit conditions to permit conditions(water discharge)*		51	90
% of permit holders monitored for compliance to permit conditions to permit conditions(water abstraction)*	80	58	90
<i>Output Cost (US\$ bn):</i>	2.795	0.549	2.725
Output: 090405	Water resources rationally planned, allocated and regulated		

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<i>Outcome 2: Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management</i>			
<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
<i>Description of Outputs:</i>	Water use and demands determined in 2 catchments ; 80 new water permits applications assessed and permits issued ; 105 existing water permits renewed and issued ; Compliance monitoring and enforcement of water permit conditions undertaken for 180 permit h	Water demand determined in two catchments in Victoria Water Management Zone and Albert Water Management Zone; 42 new water permits applications assessed and permits issued; Compliance monitoring and enforcement of water permit conditions undertaken for	Activities to implement a compliance and enforcement strategy upscaled with special focus on in Inner Murchison Bay to reduce pollution Standards and procedures for improving water resources regulation (waste water discharge, borehole drilling, dam sa
<i>Output Cost (US\$ bn):</i>	1.637	0.506	0.949

* Excludes taxes and arrears

2013/14 Planned Outputs

Water Resources Management Vote Function

Under this VF a total of Shs 42.902 billion is allocated to be utilized to during the 2012/13 period in order to support integrated water resources management (through the catchments based model) specifically achieve the following outputs: Establishment of the 04 Water Management Zones countrywide, Monitoring and categorization of wastes from oil and gas activities, Baseline Water Quality assessment/studies of the Albertine Graben, Design of network infrastructure for impacts monitoring 06 months before production & refinery; Establish communication system and remote sensing/telemetry for online - Water Quality monitoring (Lab and field); Water Quality models and Information system designed, developed, tested and run; National Oil spill contingency plan developed; Undertake oversight function and performance assessment of drinking water supplies facilities and water testing laboratories; Exploration of alternative source of water for drinking, treatment technologies for localized mineralized areas ; Review of Water Quality standards and guidelines and develop protocols for safe drinking water provision and management; Enforcement of compliance to Water Quality standards and guidelines; Conduct baseline diagnosis, establish pollution inventory and develop industries/municipal pollution manual for wastewater; Develop Resource efficient cleaner production (RECP) industry/municipal wastes manual; Develop Water Quality and pollution inventory models and restoration program;

Other planned outputs under the vote function will include : Promotion of best practices, pollution prevention strategies and enforce compliance; Review, design, operate and maintain national and trans-boundary Water Quality monitoring network (120 national, 19 Lake Victoria & 10 Nile basin); Better water resources data on Lake Victoria basin eco-system developed; Waste water treatment facilities rehabilitated in two selected sites; Identified Littoral zone hotspots sustainably managed and rehabilitated by communities

Capacity of communities to plan, implement and monitor water shed management interventions in targeted sub-catchments enhanced; Upper Katonga sub-catchment sustainably managed/ rehabilitated by the communities; Water allocation tool for Nile Hydropower systems developed and operationalised; Water use plans to guide developments in view of increased water scarcity developed; Regulation and allocation of water resources for optimum and sustainable hydropower generation improved Compliance and enforcement of water laws undertaken; Standards and procedures for improving water resources regulation (waste water discharge, borehole drilling, dams & reservoirs) developed and operationalised; A regulatory framework for dams and reservoirs developed and operationalised

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Water sector EIA guidelines operationalised; Legal capacity for regulation of water resources use and waste water discharge developed; Compliance assistance to water users and waste water dischargers provided; National Water Resources Development and Management strategy developed; Water resources development and management strategies and action plans developed for one WMZ; Detailed catchment management and investment plans including strategies for adaptation to the impacts of climate change developed for 2 Catchments; Central and regional level institutions for effective water resources management strengthened and priority sector policy reforms and institutional modernization supported

Table S2.3 Outcome 2: Past and Medium Term Key Sector Output Indicators*

<i>Outcome 2: Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management</i>						
<i>Vote Function Key Output Indicators and Costs:</i>	2011/12 Outturn	2012/13 Approved Plan	2012/13 Outturn by End Dec	MTEF Projections		
				2013/14	2014/15	2015/16
Vote: 019 Ministry of Water and Environment						
<i>Vote Function: 0904 Water Resources Management</i>						
Output: 090403 Water resources availability regularly monitored and assessed						
No. of hydrological monitoring stations that are operational and used	130	165	150	169	170	180
Output: 090404 The quality of water resources regularly monitored and assessed						
% of permit holders monitored for compliance to permit conditions to permit conditions(water abstraction)*	42	80	58	90	100	100
% of permit holders monitored for compliance to permit conditions to permit conditions(water discharge)*			51	90	100	100
Output: 090405 Water resources rationally planned, allocated and regulated						

Medium Term Plans

Under Water Resources Management vote function- the Mid-term planned outputs are: 32 groundwater monitoring stations operated and maintained, 6 hydrometrological stations constructed, 40 surface water monitoring stations rehabilitated. Information on surface and ground water resources disseminated to stakeholders, 1 rapid assessment on surface water quantities, demands and issues completed, 1 rapid assessment on groundwater availability, demands and issues completed, 3 databases for surface water and groundwater and GIS operated and maintained. Utilization of maps and reports assessed in 16 districts, groundwater maps prepared for 18 districts and disseminated and 100% of strategy for management and maintenance of water bodies completed. The Policy, legal and regulatory framework within the LVB updated and harmonized and better water resources data on Lake Victoria basin eco-system developed. Waste water treatment facilities rehabilitated in two selected cities, Upper Katonga sub-catchment sustainably managed/ rehabilitated by the communities, trans-boundary water resources monitoring networks operated in 10 districts, 08 data loggers procured and operated, 15 technical staff trained in data logger operations, data retrieval and maintenance. Comprehensive geo referenced database for the Nile Basin in Uganda updated and 05 water resources information products (maps, reports) produced

Actions to Improve Outcome Performance

The problem to address is deteriorating water quality and the vote action is to improve issuance of waste water discharge permits to control the nature of pollution into the environment, increased water monitoring, laboratory and analytical capacity, improvement in catchment protection to control non point source pollution and awareness campaigns.

Another performance issue under Water Resources Management VF is limited integrated water resource management and this will be addressed through; implementation of catchment based IWRM that includes WRM de-concentration to Water Management Zone level which will allow coordinated and integrated

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water resources development and management, development of tools for optimization and use in water allocation among different water users which will bring together different water users and sustainably improve economic water outputs.

In the medium term period a strategy for combined management of aquatic weeds will be developed bringing together the private sector, community and government; and continue supporting the Water Policy Committee to enable it provide strategic guidance in the development and management of the country's water resources and awareness campaigns

To address low compliance to water abstraction and waste water discharge permit conditions the VF plans to: implement the recently developed strategy that includes, awareness raising and promotion, compliance assistance, enforcement measures, partnerships and stakeholder involvement de-concentration of the WRM to Water Management Zones. The issue of low functionality of water facilities particularly in water stressed areas will be addressed through: revitalization of the water user committees to ensure effective management of the facilities, reconstruction and improvement of the abstraction systems and fencing off of the facilities by using chain link and rectification of all the defects on the facilities.

Table S2.4 Outcome 2: Actions and Medium Term Strategy to Improve Sector Outcome

<i>Sector Outcome 2: Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management</i>			
2012/13 Planned Actions:	2012/13 Actions by Dec:	2013/14 Planned Actions:	MT Strategy:
Vote: 019 Ministry of Water and Environment			
Vote Function: 09 01 Rural Water Supply and Sanitation			
Gradually roll out to provide piped water systems to rural areas in a new paradigm shift to replace the simple borehole/handpump technology which often gets surpassed/overwhelmed by population growth. Procure specialised drilling equipment at the centre	A procurement of consultancy services for solar water pumping pilot was initiated in the quarter Two Institutional solar water pumping systems identified for implementation in Amuru district	Gradually roll out to provide piped water systems to rural areas in a new paradigm shift to replace the simple borehole/handpump technology which often gets surpassed/overwhelmed by population growth. Procure specialised drilling equipment at the centre	Continue with providing piped water systems to rural areas in a new paradigm shift to replace the simple borehole/handpump technology which often gets surpassed/overwhelmed by population growth. Procure specialised drilling equipment at the centre
Vote Function: 09 04 Water Resources Management			
Implementation of catchment based IWRM. Development of Tools for optimization, water allocation among water users, Strategy for combined management of aquatic weeds	Not done	Upscale implementation of catchment based IWRM, promote implementation of catchment planning and water source protection guidelines .	Implementation of catchment based IWRM. Development of Tools for optimization, water allocation among water users, Strategy for combined management of aquatic weeds
Improved issuance of waste water discharge permits, water monitoring, laboratory & analytical capacity Improvement catchment protection to control none point source pollution and Awareness campaigns	Draft Inventory of industries in Inner Murchison Bay prepared. Baseline water quality information on lake water quality, bathymetry, waste discharges, streams, sediments, springs and bottled water undertaken. Pollution maps prepared.	Improved issuance of waste water discharge permits and compliance monitoring, improved laboratory & analytical capacity, improvement of catchment based WRM, implementation of water source protection guidelines, improved awareness raising campaigns	Improved issuance of waste water discharge permits, water monitoring, laboratory & analytical capacity Improvement catchment protection to control none point source pollution and Awareness campaigns
Vote: 157 National Forestry Authority			
Vote Function: 09 52 Forestry Management			

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<i>Sector Outcome 2: Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management</i>			
2012/13 Planned Actions:	2012/13 Actions by Dec:	2013/14 Planned Actions:	MT Strategy:
30Km of Forest Reserve boundaries resurveyed and marked with concrete pillars, 353Km re-opened in highly threatened CFRs.107Km maintained. Sensitization meetings held with forest edge communities to voluntarily leave the CFRs	54 Km of boundary re-opened and surveyed	1.Sensitization of local leaders on need to remove encroachers from CFRs 2.Restoration planting of degraded CFRs for ecological/environmental functions 2.Establish plantations resource base for industrial production & sustainable supply of forest products	1.Sensitization of local leaders on need to remove encroachers from CFRs 2.Restoration planting of degraded CFRs for ecological/environmental functions 2.Establish plantations resource base for industrial production & sustainable supply of forest products

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(iii) Outcome 3: Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources

Status of Sector Outcome

During the period under review, 4,567,063 tree seedlings of various species were distributed in 20 out of 50 project districts, 488km of hedgerows established in 24 districts, 38 soil and water conservation demonstrations were established, 8,896 tree farmers were trained in plantation establishment and maintenance while 126 ha of private natural forests had plantation enrichment completed including training of 15 private natural forest owners on sustainable management of natural forests.

Other outputs included; 24 community watershed management groups formed and registered in Karamoja region; 6.6 km of access roads to project planting sites maintained in Soroti and Amolator districts; 1,373.9 ha of woodlots and plantations planted

A total of 7,677 Synops and Metars were transmitted through Global Telecommunications System (GTS), daily Public weather forecasts issued and quarterly returns done, 926 Aviation Route Forecasts and International flight Folders documents issued as per the WMO/ICAO Regulations. Agro meteorological information updated and uploaded to web site regularly. Agro meteorological bulletins prepared and disseminated through web site and UBC radio.

Table S2.1 Outcome 3: Sector Outcome Indicators

<i>Outcome 3: Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources</i>			
Outcome and Outcome Indicator	Baseline	2013/14 Target	Medium Term Forecast
% of uganda land area covered by wetlands	10 (2007/08)	13	13 (2013/14)
% of uganda land area covered by forests (tree cover)	17 (2007/08)	23	23 (2013/14)
% of national weather stations coverage (no. of stations established against requirement)	100 (2007/08)	200	400 (2013/14)
% of municipal solid waste that is disposed of safely	65 (2007/08)	70	80 (2013/14)
% meteorological rainfall observation network coverage in the country	()		()

2011/12 Performance

Under Natural Resources Management Vote Function, the achievements realized by the end of December 2011 include; 4,771,909 seedlings supplied, about 4,148.9ha under the FIEFOC project planted. 131farmers were reported reached with this planting 16 demos selected (15 farmers and 2 institutions) in Rukungiri and Kasese districts 3 farmers in Rukungiri identified with 15ha to establish 35 Makerere University students supported to conduct Research activities. 1,540.9 ha of degraded watersheds have planted with trees by 1,174 farmers in 25 districts, 1021 ha of woodlots and plantations have been established in local forest reserves and other private on-farm establishments in 21 out of 43 districts. 322.8 km of contour hedges established in 9 districts and over 2000 farmers potential farmers trained on hedgerow establishment and importance.

15 agro-forestry demonstrations were established in the district of 5 districts of soroti, Jinja, Kaliro, Masaka, and Iganga and 245.3 Ha of the existing demonstration sites maintained by 32 districts. 5,285 farmers out were trained on plantation tree pruning practices, plantation establishment (lining out, pitting/staking, planting), disease and pest control, fanya juu & fanya chini, contour design and alignment and hedgerow planting. 339Ha of 24 privately owned natural forests were enriched and 54 forest owners in other districts sensitized. 95.5 Ha of eucalyptus, pine, oranges, mangoes & avocados and other avenue trees have been planted by schools, municipalities and or urban centres.

Sensitized 30 PNFOs in the districts of Kiboga, Hoima, Kamwenge, Ibanda, Isingiro, Mbarara, Kisoro,

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Kabale, Rukungiri, and Ntungamo 3 institutions planted 41ha comprising 2450 seedlings (Fruit trees and Eucalyptus and Pines). 198ha of LFRs comprising 277,196 seedlings used in the districts of Soroti, Arua, Mbale, Adjumani, and Ibanda 5 PPAPS review was reported in Mbarara and Ibanda 16 KMS of avenues planted in Arua and Kasese districts planted with 6300 seedlings. Buffer zone for Kalagala Offset conducted in Kayunga, Buikwe and Jinja, 150 EPFs have been provided for guarding and protecting surveying team during demarcation process. Gazette instruments for Kampala wetland demarcation provided and draft L. George Ramsar site wetland management plan developed. Initiated processes to reactivate inter district wetland management committees for Okole wetland in the north and Rwizi wetland.

The Weather, Climate and Climate Change vote function recorded progress in various areas which include 35827 Synops and Metars observed and transmitted on GTS. 3800 International Aviation Route Forecasts prepared and issued. 12 Synoptic, 8 Agro meteorological, 6 Hydro meteorological and 100 rainfall stations maintained. All rainfall stations in districts of Kaberamaido, Apac, Amolatar, Lamwo, Agago, Kitgum, Pader, Amuru, Gulu, Nwoya, Iganga, Bugiri, Namutumba, Jinja and Mayuge were inspected and rehabilitated. Talk shows on Weather and Climate carried out on UBC radio during IPCC Session in Kampala; Sensitization on impacts of climate change, mitigations and adaptations carried out in media and in several districts. Agro meteorological data base updated by three months, conducted 20 Radio Talk shows; 3monthly agro-meteorological bulletins prepared and disseminated. prepared and disseminated 12 Dekadal updates through 20 Radio programs to end users.

Regional Climate Change capacity building was undertaken and Sector heads at district level (Production/Agriculture, Environment, Community Development, Information, Planning and education in 10 districts in Busoga region sensitized to integrate NAPA implementation. Climate change Awareness was raised for Bundibugyo Sub-county chiefs and Agriculture service providers; Curriculum Development centre (NCDC) Primary level subject panelists; and National level stakeholders on climate change negotiations. Climate change Adaptation and Mitigation options identified by Subject specialists at National curriculum development Centre, Ministry of Sports and Education. Uganda delegation effectively participated in COP8.

Performance for the first half of the 2012/13 financial year

Under Natural Resources Management Vote Function, the achievements realized by the end of December 2010 include drafting of the TORs for preparation of the concepts paper for DESS 5-year Strategic Plan. 02 national programs and projects monitored and inspected for ENR management compliance. Various assessments and reviews in the forestry sector affirmed many findings of the review of the National Forest Plan; recommended strengthening and operationalisation of the Ministry's arm (FSSD) and the District Forest Services (DFS) in Local Governments; speedy operationalisation of the Tree Fund, acquisition of long term financing to commercial forestry, funding to community forestry; and observed that strengthened and operational forest institutions will go along way in addressing governance issues. Support to the Nyabyeya Forestry College taken on board.

Other achievements to note were; 5,283.8 ha of degraded watersheds, local forest reserves and municipalities planted by individual farmers, government institutions (schools, prisons) and faith based institutions with 4,567,063 tree seedlings of various species distributed in 20 out of 50 project districts; 487.9km of hedgerows established in 24 districts, 38 soil and water conservation demonstrations established; 8,896 farmers trained in 13 districts in plantation establishment and maintenance; 125.6 ha of private natural forests enriched; 15 private natural forest owners trained on sustainable management of natural forests.

Other outputs realized are; 24 community watershed management groups formed and registered in Karamoja region; 6.6. km of access roads to project planting sites maintained in Soroti and Amolatar districts; 1,373.9 ha of woodlots and plantations planted by individuals farmers, government, institutions,

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faith based organizations and urban planting.

A regional meeting on Ramsar sites conducted, 06 Billboards for Kampala wetlands developed and commissioned at Kinawataka to promote wetlands awareness, District Wetland Action Plans for Gulu, Ntungamo, Mityana and Mubende developed and integrated into DDPs, Supported the formulation of District ordinances in Gulu and Pallisa and Kaliro. Reviewed and evaluated 66 EIAs for compliance, 05 wetland cases recorded in police. Conducted technical back-stopping visits to Ibanda, Isingiro, Kanungu, Butaleja, Amuria, Serere, Bukedea, Apac, Oyam, Mukono, Masaka, Wakiso, Mbarara, Ibanda, Kamwenge, Kyenjojo and Ntungamo for districts for compliance to guidelines

The Weather, Climate and Climate Change vote function recorded progress in various areas which include conducting of 02 regional sectoral Climate Change and NAPA sensitization seminars held for 100 district officials (including teachers, CSOs members and opinion leaders) from 20 districts in West Nile and Karamoja/Teso region. The office block offered to the Climate Change Unit by NFA was also rehabilitated. Similarly; the Meteorology Department inspected and rehabilitated rainfall stations in Iganga, Bugiri, Tororo, Luwero, Nakasongola, Nakaseke, Kasese, Bushenyi, Kabale, Mbarara, Kisoro, Bundibugyo and Kabarole, Arua, Masindi, Nebbi, Wadelai, Bushenyi, Mbarara and Kabale, Pachwa Agro meteorological Station, Lira Agromet Station while a number of rain gauges were replaced in Eastern and central region districts.

Installed weather instruments in Kakooge Agromet station, Gulu weather station; evaporation pans in synoptic and rainfall stations were installed in Bushenyi, Mbarara, Kyenjojo, Kyembogo and Kabale.

Other achievements include; staff training; 7,677 Synops and Metars observed and transmitted through Global Telecommunications System (GTS), daily Public weather forecasts issued and quarterly returns done. 926 Aviation Route Forecasts and International flight Folders documents issued as per the WMO/ICAO Regulations. Agro meteorological information updated and uploaded to web site regularly. Agro meteorological bulletins prepared and disseminated through web site and UBC radio. Sensitization workshop to farmers from drought prone areas on impacts of La Nina 2010/11 held

The Policy, Planning and support Services vote function By the end of December 2010, this VF recorded the following outputs; prepared and submitted Q1 and Q2 progress reports, revised Q3 and Q4 work plans and procurement plans for FY 2010/11 to MFPEP; issues paper for LGBFP consultation regional consultation workshops for FY 2011-12 prepared; Joint Sector Review (JSR-2010) conducted and MWE newsletter published; prepared the final accounts for 2009/10 and first Quarter accounts for 2010/11; 04 Cabinet Memorandum prepared; Water Atlas finalized and printed. Other outputs include coordination of Uganda's participation in Conference of Parties (COP16), conducted Joint Sector Monitoring and findings presented at the JSR in October 2010; recruited 15 fresh graduate trainees; capacity building workshop held for TSUs on HIV mainstreaming; finalized preparation of Water and Sanitation SIP and over 300 copies of SIP distributed to various stakeholders; finalized detailed scheme designs and drawings for the MWE office block; staff trained on SIM model; provided internet and email services to the MWE and upcountry/regional offices(WSD and TSUs)

Table S2.2 Outcome 3: Key 2013/14 Outputs Contributing to the Sector Outcome*

Outcome 3: Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources

Sector: Water and Environment

Sector Summary

<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
Vote: 019 Ministry of Water and Environment			
<i>Vote Function:0905 Natural Resources Management</i>			
Output:090501	Promotion of Knowledge of Environment and Natural Resources		
<i>Description of Outputs:</i>	Economic valuation of Lutembe RAMSAR site wetland.Complete the development of Guideline for detailed assessment of wetlands.Awareness and sensitization on Oil and Gas environmental issues created among the public	ToR for Economic valuation studies has been prepared and submitted to PDU to initiate the process for procuring the Consultant. Print media, Radio and TV Talk shows information on topical wetland issues developed and awaiting procurement to implementation	Wetland performance baseline indicators prepared and disseminated to stakeholders. National Wetland Information System linked to all WMD offices and 4 RTSUs. National Wetland Inventory update plan developed and disseminated to 112 districts Econ
<i>Performance Indicators:</i>			
No. of Natural resources valuation studies disseminated	2	1	2
<i>Output Cost (US\$ bn):</i>	1.340	0.139	0.462
Output:090502	Restoration of degraded and Protection of ecosystems		
<i>Description of Outputs:</i>	Complete demarcation of boundaries of 5 critical Municipal wetlands (Jinja, Mbale, Gulu, Lira & Bushenyi Complete the demarcation of Kalagala, Itanda Falls buffer zone, River Nile banks, Namavundu CFR in Jinja and Buikwe	A total of 4,711.3Ha, 6,677.3 Ha and 4,743.2 Ha were approved for 1st, 2nd and 3rd instalments respectively. This is equivalent to 79.6% progress to date; 307.5 ha were planted under woodlot support for 27 beneficiaries; Encroachers were evicted from kyet	120 Kms of the boundaries of 4 critical municipal wetlands in Arua, Iganga, Masindi and Mukono; and 02 rural wetlands in Bulambuli and Kaliro demarcated and gazetted. 66Ha of the degraded sections of 11 wetlands in Kampala, Gulu, Mbale, Bushenyi, Jinja
<i>Performance Indicators:</i>			
No. of forest/wetlands ecosystems with management plans	18	10	20
Length of ecosystems boundary demarcated (Km)	230	64	250
Area of the degraded ecosystem restored under wetlands and forests(Ha)	2300	308	2500
<i>Output Cost (US\$ bn):</i>	1.770	0.869	1.900
<i>Vote Function:0906 Weather, Climate and Climate Change</i>			
Output:090601	Weather and Climate services		

Sector: Water and Environment

Sector Summary

Outcome 3: Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources			
<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
<i>Description of Outputs:</i>	Uganda's capacity and coordination for undertaking climate change activities strengthened; Climate change has been integrated into Ugandan national, district and sector policies, strategies, plans and budgets; Awareness of climate change raised at different	Uganda's capacity and coordination for undertaking climate change activities strengthened by carrying out a technical workshop conducted for district local government officers, teachers and civil society from the Islands with peculiar circumstances	20 Radio telephones repaired and upgraded 20 Stations power supply stabilized 250 Stations provided with Postage and Courier services 50 Computer facilities repaired and upgraded 50 Station Internet Data connectivity improved 10 Stations provided with
<i>Performance Indicators:</i>			
No. of seasonal forecasts and advisories issued	4	2	4
No. of active Weather and Climate Stations throughout the year	200	180	300
<i>Output Cost (US\$ bn):</i>	0.330	0.195	3.183
Vote: 150 National Environment Management Authority			
<i>Vote Function: 0951 Environmental Management</i>			
Output: 095102	Environmental compliance and enforcement of the law, regulations and standards		
<i>Description of Outputs:</i>	Inspection & surveillances on restored wetlands; 2 Municipal Solid Waste Composting (MSW) plants supported; Legislative review to oil, gas & waste management conducted; 20 new Districts supported on formulation/enforcement of Ordinances	621 inspections were carried out 402 EIA reports were reviewed and approved out of the 600 received	NEMA field office in the Albertine Graben Equipped and operated Lake Victoria Shoreline Fragile Ecosystems restoration project commenced 10 restoration activities/micro projects conducted around High level inspections and train environ
<i>Performance Indicators:</i>			
No. of restoration activities/micro projects conducted	10	0	05
No. of environmental inspections and audits conducted	1200	621	900
No. of EIA reports reviewed and approved	800	402	480
<i>Output Cost (US\$ bn):</i>	1.221	0.791	2.195
Vote: 157 National Forestry Authority			
<i>Vote Function: 0952 Forestry Management</i>			
Output: 095201	Management of Central Forest Reserves		

Sector: Water and Environment

Sector Summary

<i>Outcome 3: Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources</i>			
<i>Vote, Vote Function Key Output</i>	Approved Budget and Planned outputs	2012/13 Spending and Outputs Achieved by End Dec	2013/14 Proposed Budget and Planned Outputs
<i>Description of Outputs:</i>	122km forest boundaries resurveyed & marked with concrete pillars. 353Km reopened.107Km maintained.961ha encroached land replanted.114ha bamboo planted. 247 patrolmen employed &150 armed Environmental Protection Police	313 patrolmen employed &50 armed Environmental Protection Police deployed in areas where illegalities are rampant. 115 of formerly encroached land planted in Bugoma CFR and Lakeshore range and 54 Km of boundaries re-opened.	118 hectares of formerly encroached land planted, 20 km forest boundaries resurveyed & marked with concrete pillars. 196 Km of boundary reopened.107Km maintained.961ha encroached land replanted. 247 patrolmen employed &150 armed Environmental Protection
<i>Performance Indicators:</i>			
No. of Patrol personnel employed	247	313	381
Distance (Km) of forest boundary resurveyed and marked	122	54	196
Area (Ha) of formerly encroached planted	961	115	118
<i>Output Cost (US\$ bn):</i>	9.448	2.056	10.802
Output: 095202	Establishment of new tree plantations		
<i>Description of Outputs:</i>	1,386ha of plantation plantations established in various Central Forestry reserves.	323 hectares of new plantations established in Mafuga Plantation, West Nile, Kyoga range and Mbarara plantation.	883 hectares of new plantations established in various Central Forestry reserves.
<i>Performance Indicators:</i>			
Hectares newly planted forests with trees (Farm Income Enhancement and Forest Conservation)	0	0	0
Area(Ha) of degraded forests replanted	0	0	0
Area (ha) of Forest Plantations Established by National Forestry Authority**	1386	349	765
<i>Output Cost (US\$ bn):</i>	1.625	0.223	0.554
Output: 095205	Supply of seeds and seedlings		
<i>Description of Outputs:</i>	9,968,156 tree seedlings, 101,720 grafted Fruit seedlings produced from 270Kg of pine seed imported) & 12,799Kg of indigenous& Eucalyptus seed collected from local seed stands.	2,747,985 tree and fruit seedlings produced from 260 Kg of imported pine seed and 4,007Kg of local seed	12,329,095 tree seedlings and 150,000 grafted Fruit seedlings produced from 200Kg of pine seed imported) & 8,717 Kg of indigenous& Eucalyptus seed collected from local seed stands.
<i>Performance Indicators:</i>			
No. of tree Seedlings raised	9968156	2692272	9107743
No. of fruit seedlings raised	101720	55713	150000
<i>Output Cost (US\$ bn):</i>	2.809	0.742	2.704

* Excludes taxes and arrears

Sector: Water and Environment

Sector Summary

2013/14 Planned Outputs

Natural Resources Management Vote Function

This Vote Function is allocated Ush 36.322 billion in 2012/13 FY and the following key outputs are planned to be achieved: 1500 ha of degraded watersheds re-vegetated; 1000 km of contour hedges established and planted; 700,000 seedlings for woodlot and plantation establishment procured; Construction of 3 Irrigation schemes: Doho, Mobuku and Agoro; 120Ha of seed stands managed and maintained according to signed MoUs supported; 1500 ha of degraded watershed planted with trees; 500 beneficiary farmers provided with extension services; 20 Private forest owners trained on sustainable management of private natural forests.

1000 women and men trained on recommended practices for management of plantations, agro-forestry and soil and water conservation technologies; Demarcation of boundaries of 05 boundaries in Kalagala, Itanda falls buffer zone, river Nile banks, Namavundu CFR in Jinja and Buikwe completed and degraded sections restored; Demarcation of 05 critical municipal wetlands in Jinja, Mbale, Gulu, Lira and Bushenyi boundaries completed and degraded sections restored.

Other outputs will include development of Management plans for 02 critical wetlands in Kampala for Nakivubo and Kansanga ; 01 management plans of boundary of urban wetlands in Masaka municipality demarcated and restored; 04 Ramsar site management committees for lakes George, Nabugabo, Mabamba and Lutembe established and functional; Sub-county wetlands action plans in 32 districts up graded; Oil and Gas exploration, production, development and marketing activities monitored in Albertine Graben (Kanungu, Hoima, Rubirizi, Ntoroko, Nwoya, Amuru, Arua, Moyo).

Weather, Climate and Climate Change Vote Function

The allocation for this Vote Function is Ushs 6.682bn and the following key outputs will be achieved: Climate Change Policy and implementation strategy developed, launched and popularized; Country Participation in the COP18; Operationalisation of NAPAs; Develop national capacity for coordination and implementation of climate change adaptation and mitigation activities and to ensure a climate change policy is in place and is being implemented to ensure low emission; Uganda's interests incorporated into the international climate change policy frameworks; Domestication of the UNFCCC and its KP finalized Climate change mainstreaming guidelines and education content in place; Increased Climate Change awareness and understanding at various levels; NAPA pilots projects rolled out in two ecosystems Sectoral Climate Change issues, adaptation and mitigation options identified; 10 RANET Centers maintained, four upgraded and 4 new ones established; 74,860 SYNOPS and METARS produced, and exchanged on the GTS (Global Telecom System)

The vote function will also prepare 5,475 Aviation forecasts and documents for international and national flights, 732 daily forecasts, 36 Dekadal bulletins, 12 monthly weather updates and 4 season rainfall forecasts produced and disseminated; 20 Weather observatories and 200 rainfall stations rehabilitated and 1 observatory upgraded to regional level; 48 inspections/monitoring programs for Weather Observatories conducted; 12 School weather and climate awareness, and 12 climate change sensitization programs carried out; 3 students for MSc, 10 BSc Meteorology, 5 Postgraduate Diploma in Meteorology trained, and 15 staff upgraded to Class III Meteorological Level; Research program and strategy developed and implemented

Table S2.3 Outcome 3: Past and Medium Term Key Sector Output Indicators*

Outcome 3: Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources

Sector: Water and Environment

Sector Summary

Vote Function Key Output Indicators and Costs:	2011/12 Outturn	2012/13 Approved Plan	2012/13 Outturn by End Dec	MTEF Projections		
				2013/14	2014/15	2015/16
Vote: 019 Ministry of Water and Environment						
<i>Vote Function:0905 Natural Resources Management</i>						
Output:090501 Promotion of Knowledge of Environment and Natural Resources						
No. of Natural resources valuation studies disseminated	1	2	1	2	2	2
Output:090502 Restoration of degraded and Protection of ecosystems						
Area of the degraded eco-system restored under wetlands and forests(Ha)	1800	2300	308	2500	2500	2500
Length of ecosystems boundary demarcated (Km)	60	230	64	250	300	350
No. of forest/wetlands eco-systems with management plans	44	18	10	20	25	30
<i>Vote Function:0906 Weather, Climate and Climate Change</i>						
Output:090601 Weather and Climate services						
No. of active Weather and Climate Stations throughout the year	170	200	180	300	300	300
No. of seasonal forecasts and advisories issued	4	4	2	4	4	4
Vote: 150 National Environment Management Authority						
<i>Vote Function:0951 Environmental Management</i>						
Output:095102 Environmental compliance and enforcement of the law, regulations and standards						
No. of EIA reports reviewed and approved	304	800	402	480	512	512
No. of environmental inspections and audits conducted	541	1200	621	900	900	900
No. of restoration activities/microporjects conducted	8	10	0	05	05	05
Vote: 157 National Forestry Authority						
<i>Vote Function:0952 Forestry Management</i>						
Output:095201 Mangement of Central Forest Reserves						
Area (Ha) of formerly encroached planted	175	961	115	118	150	200
Distance (Km) of forest boundary resurveyed and marked	35	122	54	196	220	250
No. of Patrol personnel employed	392	247	313	381	385	385
Output:095202 Establishment of new tree plantations						
Area (ha) of Forest Plantations Established by National Forestry Authority**	1287.5	1386	349	765	1500	1890
Area(Ha) of degraded forests replanted	3113	0	0	0	0	0
Hectares newly planted forests with trees (Farm Income Enhancement and Forest Conservation)	0	0	0	0	0	0
Output:095205 Supply of seeds and seedlings						
No. of fruit seedlings raised	95679	101720	55713	150000	160000	165000
No. of tree Seedlings raised	10115780	9968156	2692272	9107743	9500000	10000000

Medium Term Plans

To ensure sustainable use Natural Resources, clean, healthy and productive environment as well as

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Sector Summary

increased productivity of the Natural Resources Base (NRB), the Natural Resources Management VF will continue with focus on the provision of wetlands guidelines, wetlands atlas, carry out monetary valuation of wetlands contributions to GDP, demarcation critical wetlands. Under Forestry, over 12.54 million tree seedlings and 400 kgs of seeds will be distributed to farmers to establish 8,870 ha of woodlots and plantation forests in degraded watersheds, degraded private natural forests and in farmlands of schools and municipalities. Over 4,000 km of contour hedgerows to control soil and water movements will be established and 14,700 farmers trained and backstopped to establish and manage quality agroforestry technologies, woodlots and plantation forests. In addition, Oil and Gas resources will be sustainably managed. Local Governments and institutions (MDA) monitored and inspected for compliance environmental and mainstreaming.

Under Weather, Climate and Climate Change vote function, in the Medium term the VF will maintain and expand RANET centers upcountry, issue aviation route forecasts and daily weather forecasts sent to TV, Radio stations, emails and other users issued, renovation/rehabilitation of existing dilapidated infrastructure/observatories at various stations, sensitized sector to re-orient their activities to integrate NAPA implementation including climate change issues. Finalize development of Climate Change Policy and strategy, Continue with effective participation in COPs.

Policy, Planning and Administration vote function – Ensures that final accounts is prepared; continue with sector BFP and MPS preparations for MTEF period (2012/13-2014/15) , conducting of Joint Sector Monitoring and Sector Performance Reviews jointly with donors; coordinated all departments in the ministry for compliance with Civil Service standing orders and regulations; 100% staff establishment attained and maintained, undertake baseline survey for ENR Performance Key Performance Indicators (KPIs), international organizations subscription made; contribution to International Organizations and commence construction of new Ministry Block.

Actions to Improve Outcome Performance

Under the sector outcome 3 (Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources), the first vote function performance issue is inadequate framework for comprehensive operationalisation of the Environment polices and regulation, and the planned action to address is to develop an integrated Environment Management Policy starting with FY 2012/13.

The second performance issue is inadequate measures for adaptation to climate change and this will be addressed by strengthening the collaboration with relevant institutions, recruit staff to beef up capacity at national and Local Government levels

Table S2.4 Outcome 3: Actions and Medium Term Strategy to Improve Sector Outcome

<i>Sector Outcome 3: Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources</i>			
2012/13 Planned Actions:	2012/13 Actions by Dec:	2013/14 Planned Actions:	MT Strategy:
Vote: 019 Ministry of Water and Environment			
Vote Function: 09 05 Natural Resources Management			

Sector: Water and Environment

Sector Summary

<i>Sector Outcome 3: Improved Weather, Climate and Climate Change Management, Protection and Restoration of Environment and Natural Resources</i>			
2012/13 Planned Actions:	2012/13 Actions by Dec:	2013/14 Planned Actions:	MT Strategy:
Continue with the review & implement new reforms for environmental management	A project to improve policies and strategies for sustainable ENR and Climate risk management is being implemented by DEA through UNDP Funding. ENR institutional mapping on-going with support from UNDP- Aimed at reviewing ENR institutional Roles, Responsibilities and functions	Review of policies and regulations for environmental management undertaken	Continue with the review & implement new reforms for environmental management
continue with Strengthening collaboration with relevant institutions, recruit staff to beef capacity of existing staff at national district and sub-county levels	EIC materials on Climate Change produced and disseminated Climate change policy in place	Continue with Strengthening collaboration with relevant institutions, recruit staff to beef capacity of existing staff at national district and sub-county levels	continue with Strengthening collaboration with relevant institutions, recruit staff to beef capacity of existing staff at national district and sub-county levels
Revegetate more acreage of degraded ecosystems	Demarcation of wetland boundaries started on and is ongoing to cover 8 urban authorities	Restoration and protection of critical/ fragile ecosystem	Revegetate more acreage of degraded ecosystems
Vote: 150 National Environment Management Authority			
Vote Function: 09 51 Environmental Management			
Equipping and strengthening the NEMA field office in the Albertine graben	Environment Protection Force (EPF) trained, equipped and operationalised	Continue equipping and strengthening the NEMA field office in the Albertine graben	Establishment of public-private sector-Civil Society partnerships in the management of emerging environmental issues/challenges
Vote: 157 National Forestry Authority			
Vote Function: 09 52 Forestry Management			
990ha replanted by NFA in harvested areas in Mafuga (300ha),Rwoho&Bugamba (390ha),Lendu(100ha),Opit-Abera (200ha)&7500ha planted by licensed tree famers in CFRs.50ha demo, ensure future supply of timber from plantations&reduce pressure on natural forests	323 hectares of new plantations established in Mafuga Plantation, West Nile, Kyoga range and Mbarara plantation.	Continued increase of land under forest cover by NFA own planting and private sector planting under license on CFRs	Continued increase of land under forest cover by NFA own planting and private sector planting under license on CFRs
150 Environmental Protection Police deployed countrywide together a small unit of UPDF at HQS assisting Law enforcement staff to carry out patrol. A Police Liason officer and 6 crime investigators deployed at NFA.	50 Environmental Protection Police deployed countrywide together a small unit of UPDF at HQS assisting Law enforcement staff to carry out patrol. 331 patrol men have also been deployed to beef supplement to forest protection services	Expansion of collaborative forest management arrangements to more groups	Expansion of collaborative forest management arrangements to more groups

(iv) Efficiency of Sector Budget Allocations

Sector: Water and Environment

Sector Summary

Table S2.5: Allocations to Key Sector and Service Delivery Outputs over the Medium Term

Billion Uganda Shillings	(i) Allocation (Shs Bn)				(ii) % Sector Budget			
	2012/13	2013/14	2014/15	2015/16	2012/13	2013/14	2014/15	2015/16
Key Sector	193.1	211.5	305.2	440.5	62.1%	64.1%	74.6%	85.5%
Service Delivery	183.8	199.9	299.2	437.8	59.2%	60.6%	73.1%	85.0%

Table S2.3: Key Unit Costs of Services in the Sector (Shs '000)

Unit Cost Description	Actual 2011/12	Planned 2012/13	Proposed 2013/14	Costing Assumptions and Reasons for any Changes and Variations from Plan
Vote: 019 Ministry of Water and Environment				
<i>Vote Function:0901 Rural Water Supply and Sanitation</i>				
Cost of borehole construction		18,140	18,140	Escalating cost of materials and inflation as well as contractual management
<i>Vote Function:0902 Urban Water Supply and Sanitation</i>				
Per Capita Investment Cost (PCIC)		228		Extensions and expansions of water supply systems are excluded. Increasing technology options based on surface water treatment and long pipeline transmission distance. Moderate price increases in tandem with inflation.
<i>Vote Function:0903 Water for Production</i>				
Valley tanks		1,000	333,333	Small capacity valley tanks constructed.
Dams		300,000	4,000,000	Larger storage capacities and construction costs in an insecure area(Karamoja)
Bulk water supply scheme		6,221,175	2,000,000	The delivery and the designs are site specific and determine the overall project cost.
<i>Vote Function:0904 Water Resources Management</i>				
Construction of monitoring station		15,000		escalation of cost of materials and labour and cost of aquisition of land
<i>Vote Function:0905 Natural Resources Management</i>				
Restoration of degraded watersheds , LFRs, natural forests and farm lands		1,869	1,869	Increase in seed price/ unit price per seedling, labour costs, transportation costs
Restoration of 1 sq.km of degraded wetland		20,000,000	20,000,000	Increase in cost of tools/equipment, transport and labour costs
Vote: 150 National Environment Management Authority				
<i>Vote Function:0951 Environmental Management</i>				
Environmental compliance and enforcement		70,000	42,000	Funds released as planned and 100% utilization

Table S2.6: Allocations to Capital Investment over the Medium Term

Billion Uganda Shillings	(i) Allocation (Shs Bn)				(ii) % Sector Budget			
	2012/13	2013/14	2014/15	2015/16	2012/13	2013/14	2014/15	2015/16
Consumption Expenditure(Outputs Provided)	94.0	83.7	100.7	82.0	30.2%	25.4%	24.6%	15.9%
Grants and Subsidies (Outputs Funded)	7.3	19.4	7.5	8.5	2.3%	5.9%	1.8%	1.7%
Investment (Capital Purchases)	209.5	227.1	300.8	424.5	67.4%	68.8%	73.5%	82.4%
Grand Total	310.8	330.2	409.1	515.0	100.0%	100.0%	100.0%	100.0%

(v) Sector Investment Plans

Table S2.7: Major Capital Investments

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote: 019 Ministry of Water and Environment			
Vote Function: 0901 Rural Water Supply and Sanitation			
<i>Project 0158 School & Community Water-IDPs</i>			
090180 Construction of Piped Water Supply Systems (Rural)	Feasibility studies and engineering designs for large GFS and piped water supply systems in water stressed areas Ngoma-Wakyato (Nakaseke), Rwebisengo-Kanara (Ntoroko), Rwamata-Kiboga and Bwambala-Bugangari (Rukungiri) undertaken	Received designs carried out by Nebbi district, procured consultancy services to carry out the review and siting of production boreholes for towns in Alwi corridor Advert to secure consultants that will carry out detailed studies and engineering designs was run. Activity	Completion of detailed engineering designs for Large GFSs and piped water supply in water stressed areas of Ngoma-Wachato (Nakaseke), Rwebisengo-Kanara (Ntoroko), Lwamata-Kiboga and Bwambala-Bugangari (Rukungiri) undertaken.
	Design review, drilling of production wells and construction of Alwi dry corridor water systems		Carry out detailed engineering designs for 2 large GFSs in Northern Uganda.
	Design and commence construction of Kahama GFS in Ntungamo district		Complete construction of Wadelai, Singila and Akworo piped water systems in Alwi dry corridor.
			Completion of construction of Phase 1 Kahama GFS in Ntungamo district.
			Carry out extension of the Jezza Muduma piped water systems.
Total	11,250,000	1,078,465	10,427,000
<i>GoU Development</i>	<i>11,250,000</i>	<i>1,078,465</i>	<i>10,427,000</i>
<i>Donor Development</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Project 0163 Support to RWS Project</i>			
090175 Purchase of Motor Vehicles and Other Transport Equipment		Nil	Purchase of 8 vehicles for the TSUs.
Total	300,000	0	960,000
<i>GoU Development</i>	<i>300,000</i>	<i>0</i>	<i>960,000</i>
<i>Donor Development</i>	<i>0</i>	<i>0</i>	<i>0</i>

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0901 Rural Water Supply and Sanitation			
090181 Construction of Point Water Sources	<p>Drilling and construction of production wells and boreholes in selected areas in response to emergencies.</p> <p>Domestic rainwater harvesting tanks supplied</p>	<p>A total of 24 boreholes were drilled in various districts including Namayingo (6), Lira (1), Mubende (1), Apac (1), Oyam (2), Kaliro (1), Butaleja (3), Luwero (1), Namutumba (2), Kumi (2), Ngora (1), Kaberamaido (3).</p> <p>Drilled and installed 33 boreholes detailed as Apac(02), Amuru(03), Iganga(01), Kumi(01), Mpigi(01) Jinja(01), Mukono(4), Kayunga(10), Pallisa(01), Wakiso(02), Butaleja(02), Lwengo(01) Kaliro(03) and Tororo(01)</p>	<p>Drilling and construction of production wells and boreholes in selected areas in response to emergencies.</p> <p>Domestic rainwater harvesting tanks supplied</p>
Total	1,194,088	1,351,837	1,194,088
<i>GoU Development</i>	<i>1,079,088</i>	<i>670,445</i>	<i>1,079,088</i>
<i>Donor Development</i>	<i>115,000</i>	<i>681,392</i>	<i>115,000</i>
090180 Construction of Piped Water Supply Systems (Rural)	<p>Completion of Tororo Manafwa Water supply scheme (100%), upto 30% completion of Bududa-Nabweya and Lirima in Manafa district.</p> <p>Luanda/Rakai (100%), Kabumba/Ntungamo(80%), Ongino/Kumi at 100% and continued construction of Kanyampanga Gravity flow scheme at 70% completion</p> <p>Feasibility studies for large GFSs, in Mt. Elgon region, South and Mid- west, West Nile, Central and Northern Uganda</p>	<p>1st Phase of Tororo-Manafa Completed. Mobilization in areas for extra-work done. Design presentation for Kabumba RGC to stakeholders Contracts for construction of Iwanda & Kabumba signed. Construction to commence in Jan 2013. Construction of Kanyampanga is ongoing.</p>	<p>Extension of Tororo-Manafwa Water supply (100%), upto 50% completion of Bududa-Nabweya and Lirima in Manafwa district.</p> <p>Luanda/Rakai (100%), Commence construction of Bukwo(20%), complete construction and expansion of Ongino (RGCs) 100% and continued construction of Kanyampanga GFS at 100% completion.</p> <p>Designs for large GFSs, in Mt. Elgon region, South and Mid-West, West Nile, Central and Northern Uganda prepared.</p> <p>Detailed designs for the extension and rehabilitation of the large GFSs.</p>
Total	19,501,000	2,279,587	14,445,000
<i>GoU Development</i>	<i>13,525,000</i>	<i>967,347</i>	<i>11,469,000</i>
<i>Donor Development</i>	<i>5,976,000</i>	<i>1,312,240</i>	<i>2,976,000</i>
Vote Function: 0902 Urban Water Supply and Sanitation			
<i>Project 0124 Energy for Rural Transformation</i>			

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0902 Urban Water Supply and Sanitation			
090281 Energy installation for pumped water supply schemes	Supply and installation of solar energy packages for water supply schemes in the following small towns and rural growth centers of Lagoro, Paloga, Madi-Opei, Palabek-Ogili and Namokora	The contractors in the sites of Lagoro, Paloga, Madi-Opei, Palabek Ogili and Namokora have started works. The civil works are near completion (70%). Supply and installation of solar energy packages has been completed for the water supply schemes in the following small towns and rural growth centers of Lagoro, Paloga, Palabek-Ogili and Namokora excluding Madi-Opei.	Replacement of system components i.e. inverters, variable speed pumps and regular maintenance of schemes under a framework contract
Total	50,000	16,902	2,135,100
<i>GoU Development</i>	<i>50,000</i>	<i>16,902</i>	<i>135,100</i>
<i>Donor Development</i>	<i>0</i>	<i>0</i>	<i>2,000,000</i>
Project 0160 South Western TWSP - Austria			
090280 Construction of Piped Water Supply Systems (Urban)	5 Water Supply and Sanitation Systems designed for Butare-Mashonga, Nyahuka, Nyakashaka, Kyabi, Lwemiyaga Construction works commenced in 9 RGCs Kyempene, Kikagati, Matete, Kahunge, Kabuga, Kinoni-Mbarara, Rutokye, Nyarubungo, Gasiiza Construction works completed in 3 RGCs Kyempene, Kikagati, Matete Applications received for construction of 6 Town water supply schemes for Sanga, Kinuka, Kasagama, Nyahuka, Kainja, Butare-Masonga	Complete construction works in Kiruhura(95%), Kazo(92%), Kakuto(70%), Kakyanga(80%), Lyantonde(80%)	Designs for 3 RGCs will be completed in Kyabi, Nyakashaka and Lwemiyaga Facility staff will mobilize, sensitize and follow up communities to enable the communities in 8 RGCs (Nyahuka, Butare-Mashonga, Nyakashaka, Kasensero, Nyeihanga, Kinoni-Kir, Kyabi and Lwemiyaga) fulfill their obligations and apply for construction. Construction works will start in 9 RGCs of Sanga, Kasagama, Kinuka, Rwenkobwa, Lyantonde II, Gasiiza, Nyarubungo, Kainja and Muhanga Construction will be completed in 12 RGCs of Kyempene, Kikagati, Matete, Nyarubungo, Rutokye, Kahunge, Kabuga, Kinoni-Mbr, Rwenkobwa, Sanga, Muhanga, and Gasiiza
Total	7,702,400	1,403,597	2,545,000
<i>GoU Development</i>	<i>805,000</i>	<i>529,102</i>	<i>440,000</i>
<i>Donor Development</i>	<i>6,897,400</i>	<i>874,495</i>	<i>2,105,000</i>
Project 0164 Support to small town WSP			

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0902 Urban Water Supply and Sanitation			
090277 Purchase of Specialised Machinery & Equipment	10,000 domestic metres and 100 bulk metres, pumps and generators and laboratory fitting for Small Towns procured	<p>Pumps continued and installations were done in the towns of Nakasongola, Kalungu, Wobulenzi, Rakai, Kinoni, and Mbirizi.</p> <p>Generator was installed in Minakulu.</p> <p>Pump installations were done in the towns of Yumbe, Moyo, Bunagana.</p> <p>A total of about 75 Bulk metres were delivered to the towns. The Central Umbrella got 12, South West Umbrella got 30 bulk meters. In addition, Bwera got 11, Luwero got 5, Rubirizi (Bunyaruguru) got 11, and Kabwohe (Itendero) got 6 bulk meters.</p> <p>Payments for the eight UPS machines was made.</p>	<p>5,000 domestic metres</p> <p>Purchase of 500 bulk meters</p> <p>Replacement of 2 pumps - Kigumba & Buikwe</p> <p>Pipes for extensions procured for small towns Ngetta, Makanga, and supplementary for Mpigi and Mityana</p>
	Total	645,000	955,915
	<i>GoU Development</i>	<i>645,000</i>	<i>703,235</i>
	<i>Donor Development</i>	<i>0</i>	<i>252,679</i>
			730,000
			<i>730,000</i>
			<i>0</i>
090280 Construction of Piped Water Supply Systems (Urban)	<p>Power line extended to Kyotera and Mutukula water supply pumping stations</p> <p>Consultancy services for WB project preparation procured</p> <p>Pipes for extensions procured</p>	<p>Advert for the consultancy services for the WB Project was carried.</p> <p>The procurement for the extension of power to Kyotera and Mutukula was initiated.</p> <p>The contract for power extension to kyotera and Mutukula has not yet been awarded.</p> <p>The EoIs were evaluated and the short list approved by the World Bank and the contract for consultancy is yet to be awarded.</p>	<p>Construction of 1 Additional Water Sources - Kinoni/Rugadu</p> <p>Extension of piped water system to Kinoni/Rugadu</p>
	Total	1,368,000	1,487,912
	<i>GoU Development</i>	<i>398,000</i>	<i>385,238</i>
	<i>Donor Development</i>	<i>970,000</i>	<i>1,102,674</i>
			3,070,000
			<i>2,100,000</i>
			<i>970,000</i>
Project 1074 Water and Sanitation Development Facility-North			

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0902 Urban Water Supply and Sanitation			
090280 Construction of Piped Water Supply Systems (Urban)	<p>04 town water systems completed; Paidha/ Zombo, Opit/Gulu, Omugo/ Maracha-Terego, Agweng/Lira</p> <p>04 town water systems procured; Ibuje, Dokolo, Patongo & Ovujo</p> <p>02 satellite towns of Amach and Barr connected to Lira NWSC</p> <p>03 existing systems: Nebbi, Aduku and Nyapea supported</p>	<p>Carried-out monitoring, supervision & site meeting in active active towns of Adjumani and Oyam.</p> <p>Contract documents for the construction of the 03 towns of Paidha, Omugo and Agweng have been cleared by the Solicitor General. Construction works will start in QII.</p>	<p>Complete construction of 3No. Town water supply systems of Agweng, Paidha and Omugo</p> <p>Commence construction of 6No. town water supply systems in Dokolo, Opit, Ovujo, Patongo, Purongo and Ibuje.</p> <p>Commence extension works on Pakwach to Pacego and Lira to Amach town water supply systems</p> <p>Design of 08N. Town water supply systems in Loro, Okokoro, Bibia, Pabbo, Acholibur, Agago TC, Rackoko, Namsale</p> <p>Hydrogeological investigations, siting and drilling of 30No. production wells in 15No. towns in Ovujo, Opit, Kalongo, Purongo, Patongo, Okokoro, Ibuje, Moyo, Barr, Pajule, Amach, Loro, Acholibur, Agago TC, Pabbo, Bibia)</p> <p>With-Holding Tax arrears (GoU counterpart funding)</p> <p>Retention releases on Oyam, Adjumani, Amolatar</p>
Total	6,765,130	2,921,847	5,916,000
<i>GoU Development</i>	<i>529,670</i>	<i>197,850</i>	<i>302,000</i>
<i>Donor Development</i>	<i>6,235,460</i>	<i>2,723,997</i>	<i>5,614,000</i>

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0902 Urban Water Supply and Sanitation			
090282 Construction of Sanitation Facilities (Urban)	8 Ecosan units constructed in 4 primary schools (boys- 4 & girls- 4)	Nil	30No.(5 in each town), Household demonstration toilets in Dokolo, Ovujo, Patongo, Opit, Purongo and Ibuje
	4 public toilets constructed in Pader, Lamwo, Kitgum, Gulu		5No. Public sanitation facilities (public places including schools, markets etc) in constructed in 6No. Towns of Dokolo, Ovujo, Patongo, Purongo Opit and Ibuje
	20 demonstration household ecological sanitation toilets constructed; (5 in each town)		Detailed Integrated Sanitation Systems in Kitgum, Paidha and Dokolo
	1 regional sludge beds completed in Yumbe		10 institutional sanitation facilities(2No in each town)Dokolo, Ovujo, Patongo, Opit and Ibuje
	20 H/H Ecosan demonstration toilets constructed (2 in each centre)		
Total	772,000	236,000	724,000
<i>GoU Development</i>	<i>472,000</i>	<i>236,000</i>	<i>224,000</i>
<i>Donor Development</i>	<i>300,000</i>	<i>0</i>	<i>500,000</i>

Project 1075 Water and Sanitation Development Facility - East

Sector: Water and Environment

Sector Summary

Project	2012/13	2013/14	
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	
	Approved Budget, Planned Outputs (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)	
Vote Function: 0902 Urban Water Supply and Sanitation			
090280 Construction of Piped Water Supply Systems (Urban)	<p>LGs supported in construction of small town water facilities in Kaabong(1 pump station, Submersible pumps and Generator, 150m³ reservoir, 25km pipe work, urban water office, chlorination unit, 150 connections), Abim(2 pump stations, Submersible pumps and Generator, 175m³ reservoir, 17km pipe work, urban water office, chlorination unit, 150 connections), Namalu(1 pump station, Submersible pumps and Generator, 80m³ reservoir, 8.4km pipe work, urban water office, chlorination unit, 100 connections), Karenga(2 pump stations, Submersible pumps and Generator, 85m³ reservoir, 10.2km pipe work, urban water office, chlorination unit, 100 connections), Bukedea(1 pump station, Submersible pumps and Generator, 100m³ reservoir, 18km pipe work, chlorination unit, 150 connections), Katakwi(2 pump stations, Submersible pumps and Generator, 100m³ reservoir, 17km pipe work, chlorination unit, provision of power to pump stations), Kapchorwa(1 Generator, intake works, fencing works, Chemical dosers, attendant house, other civil works), Busiu(27 km of distribution pipe work and associated fittings), Ochero(1 pump station, Submersible pumps and Generator, 50m³ reservoir, 7km pipe work, urban water office, chlorination unit, 100 connections), Suam(1 intake works, treatment works, 15km of pipe work, 75m³, water office, 100 connections), Mbulamuti(1 pump station, Submersible pumps and Generator, 50m³ reservoir, 8km pipe work, urban water office, chlorination unit, 100 connections), Emergency water supply for Kumi town Water Supply support for renewal of existing</p>	<p>2 No site meetings were held in Kotido</p> <p>Technical & Political commissioning of piped water supply system in Kitido.</p> <p>Kapchorwa and Katakwi town sites were handed over to the contractor</p> <p>In Karenga town board, construction works progressed to 12 % of 3% of contract period</p> <p>In Bukedea town the progress of works construction completed was at 30% in 6% of the contract period.</p> <p>The commencement letter for construction works in Namalu town was issued. The contractor commenced mobilizing.</p> <p>Design for Suam town water supply has been approved</p> <p>Escrow account has been opened in Abim town by water authorities that was trained by WSDf-E</p> <p>Construction of the piped water system in Kaabong town progressed to 60%.</p> <p>WSDf-E conducted Selection exercise of the WSSB and conducted a training of the leadership of Kaabong town on Operation and maintenance of water supply and sanitation facilities.</p> <p>The overall progress of construction works in Abim moved to 65%. Overall there has been great improvement of speed on the side of the contractor.</p> <p>The feasibility studies and preliminary design for Kachumbala town on going aimed at increasing the production capacity of the system progress at 45%</p>	<p>"Feasibility study and design of 6 Urban piped water supply systems in the towns of Ikumbya, Acowa (Amuria), Kibaale (Namutumba), Tubur(Soroti), Bugobi and Namugalwe (Iganga) shall Commence and progress to 50%</p> <p>Feasibility study, detailed design and documentation of water supplies for Moroto, Kotido, Kacheri-Lokona, and Bugadde towns shall progress to 90% completion"</p> <p>"Construction of piped water supply systems shall be completed in the towns of Namalu, Karenga, Kapchorwa, Busiu, Katakwi and Bukedea towns</p> <p>Construction works of piped water systems in Ochero, Suam, Matany, Kachumbala, Mbulamuti and Namutumba shall progress to 80% completion and construction works are expected to commence in Buwuni, Kapebyong and Nakapiripit, Bukwo and Bulegeni. Works shall progress to 30% completion</p> <p>Construction of 20 production boreholes in selected urban centres"</p>

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0902 Urban Water Supply and Sanitation	water supply systems in the towns of Matany (repair of solar pumping system), Kachumbala (1 pump station and 2km pipe work), Namutumba (drilling 1 borehole, 1 pump station and 1 km of pipe work), and release of retention for construction of Tirinyi-Kibuku water supply system		
Total	8,570,000	1,967,229	7,631,000
<i>GoU Development</i>	<i>1,249,000</i>	1,024,500	<i>701,000</i>
<i>Donor Development</i>	<i>7,321,000</i>	942,729	<i>6,930,000</i>
Project 1130 WSDf central			
090272 Government Buildings and Administrative Infrastructure	Continue construction of WSDf-C headquarters in Wakiso.	Draft designs (architectural and structural designs) completed and reviewed	Continue construction of WSDf-C regional office block in Wakiso.
		Procurement process for consultant for construction supervision continued (Evaluation of technical bids completed).	
		Procurement of Contractor for construction works commenced (advert run in media)	
Total	500,000	250,000	700,000
<i>GoU Development</i>	<i>500,000</i>	250,000	<i>700,000</i>
<i>Donor Development</i>	<i>0</i>	0	<i>0</i>
090282 Construction of Sanitation Facilities (Urban)	50 Ecosan demonstration toilets in 5 towns (Kasanje, Ntwetwe, Zirowwe, Kako and Bweyale) constructed	Design of standard household and public sanitation facilities and tendered documentation completed.	70No. Ecosan demonstration toilets in Kagadi, Kakumiro, Kiboga, Kiganda, Zigoti, Nkoni, Kyamulibwa, Gombe, Kanoni, Najjembe, Kinogozi, Kabembe, Nakirebe, and Bugoyingo
	12 Public sanitation facilities in the 4 Towns of Kasanje, Zirowwe, Ntwetwe and Byeyale constructed.	Procurement process for the contractors near completion (Draft contracts submitted to Solicitor General for clearance).	28No. Public sanitation facilities (public places including schools, markets etc) in constructed in 7No. Towns of Kyamulibwa, Gombe, Nkoni, Kiganda, Kagadi, Kakumiro and Kinogozi.
	Design and construction supervision for sanitation facilities conducted.		Design and construction supervision for sanitation facilities conducted.
	Community mobilisation and sensitisation for sanitation		
Total	790,000	20,000	1,420,000
<i>GoU Development</i>	<i>40,000</i>	20,000	<i>0</i>
<i>Donor Development</i>	<i>750,000</i>	0	<i>1,420,000</i>

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0902 Urban Water Supply and Sanitation			
090280 Construction of Piped Water Supply Systems (Urban)	<p>Construction of Kasanje and Kako town supply systems completed.</p> <p>Rehabilitation works on Kakiri and Wakiso town water supply systems completed.</p> <p>Construction commenced in 3 Town water supply systems (Ntwetwe, Zirowbe and Bweyale).</p> <p>Supervision of 5 Town water supply systems (Ntwetwe, Zirowbe, Bweyale, Kako, Kasanje, Kakiri and Wakiso) conducted.</p> <p>Designs for rehabilitation of 3 water supply systems in Bukomansimbi, Kasambya and Buliisa finalised</p> <p>Continue design and community mobilisation in 15 Towns (Kagadi, Kakumiro, Kiboga, Kiganda, Zigoti, Nkoni, Kyamulibwa, Gombe, Kanoni, Najjembe, Kinogozi, Kabembe, Nakirebe, Bweyale, Bugoyingo</p> <p>Hydro geological investigations, drilling activities, community mobilisation and engineering designs commenced in 15 Towns (Busiika, Kifampa, Kyabadaza, Butenga, Kabwoya, Lwengo, Sekanyonyi, Kakunyu-Kiyindi, Nakirebe, Buvuma, Katuugo, Budongo, Busana, Lukaya and Kiwoko)</p>	<p>Rehabilitation works in Wakiso Water supply to 80% completion (Pumping house completed, 3.6km transmission pipe laid and fittings)</p> <p>Rehabilitation works in Kakiri water supply to approx. 71% completion (4km transmission pipe rehabilitated, 1.8 km distribution line laid and power connection restored)</p> <p>Pre-feasibility assessments conducted in Kebembe, Bugoigo, Nakirebe and Kinogozi towns.</p> <p>Construction of Kasanje Water Supply and Sanitation System to 20% completion</p> <p>Construction of Kako Water supply extension completed to 75%. Verified 138 yard tap connections.</p> <p>Wakiso Water supply improvement constructed to 99% completion.</p> <p>Kakiri water supply improvement constructed to 95% completion and 40 yard taps connected</p> <p>Continued procurement process for construction contractors for Ntwetwe, Zirowbe, and Bweyale (Draft contracts submitted to Solicitor General for clearance)</p> <p>Continued procurement process for consultant for construction supervision for Ntwetwe, Zirowbe, and Bweyale (Technical proposal evaluated and financial bids opened)</p> <p>Continued Designing Lot 2 towns (Zigoti, Nkoni, Kyamulibwa, Najjembe, Kanoni and Gombe) by M/s Alliance Consultant (Inception report approved).</p> <p>Commenced Lot 1 towns designs (Kagadi, Kakumiro, Kiboga, Kiganda) by M/s Cowi (U) Ltd (Inception report approved).</p> <p>3 No. hydro-geological</p>	<p>Complete construction of 3No. Town water supply systems of Ntwetwe (Kyankwazi), Zirowbe (Luwero) and Bweyale (Kyiryandongo)</p> <p>Commence construction of 7No. Town water supply systems in Kyamulibwa (Kalungu), Gombe (Butambala), Nkoni (Lwengo), Kiganda (Mubende), Kagadi (Kibaale), Kakumiro (Kibaale) and Kinogozi (Hoima)</p> <p>Commence rehabilitation works on Kasambya, Bukomansimbi and Bulisa town water supply systems</p> <p>Design of 20N. Town water supply systems in Busiika, Kifampa, Kyabadaza, Butenga, Kabwoya, Lwengo, Namulonge-Kiwenda, Kakunyu-Kiyindi, Kikandwa, Katuugo-Kakooqe, Budongo, Busana, Lukaya, Kiwoko, Butalangu, Katovu, Buvuma, Butemba, Nalukonge-Lusozi and Ssunga</p> <p>Hydrogeological investigations, siting and drilling of 60No. Production wells in 20No. towns.</p> <p>Community mobilisation for design and construction through advocacy and drama</p> <p>With-Holding Tax arrears (GoU counterpart funding)</p> <p>Retention releases on Kasanje and Kako water supply systems</p>

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>UShs Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0902 Urban Water Supply and Sanitation		<p>investigations done in Butemba, Zigoti and Ngoma.</p> <p>Drilled 6No. boreholes wells in 1No. Kyamulibwa (1No.), Ngoma (2No.), Najjembe (1No.) Zigoti (5m3/hr) and 1No. in Ngoma (2m3/hr)</p> <p>1 No. feasibility study & design done for Lukalu gravity flow scheme (Butambala).</p> <p>Test-pumped 4 No. borehole wells 1No. Wakiso (10.8m3/hr), 1No. Kakiri (8m3/hr), 1 No. Kyamulibwa (9m3/hr), and 1 No. Najjembe (5m3/hr).</p>	
Total	15,515,000	3,597,706	11,573,000
<i>GoU Development</i>	<i>2,584,000</i>	<i>2,240,294</i>	<i>1,423,000</i>
<i>Donor Development</i>	<i>12,931,000</i>	<i>1,357,412</i>	<i>10,150,000</i>
Project 1188 Protection of Lake Victoria-Kampala Sanitation Program			

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0902 Urban Water Supply and Sanitation			
090282 Construction of Sanitation Facilities (Urban)	<p>Construction of Lubigi WWTP, Lubigi Network, rehabilitation of Bugolobi and Network systems (Urban)</p> <p>Construction of Nakivubo Waste Water Treatment Plant(WWTP) (Urban)</p> <p>Construction of Kinawataka Waste Water Treatment Plant(WWTP)</p> <p>Laying of Nakivubo and Kinawataka Sewers</p> <p>Compensation for property on project sites and along pipe routes completed;</p> <p>Commissioning of the Treatment plant and networks ;</p> <p>Attendance to snags;</p> <p>Payment of retention;</p> <p>UGAVAC demonstration programme.</p>	<p>On Construction of Lubigi Sewage System, Concrete blinding and placing reinforcement steel bars on the upper sides of the ponds was done for the anaerobic ponds</p> <p>Construction of pump house is ongoing</p> <p>Construction of Administration buildings is 70% completed</p> <p>Power supply poles were installed</p> <p>Procurement of equipment for sewage system operations and maintenance, laboratory and workshop tools & materials is ongoing.</p> <p>General Trench excavations, supply and laying of Sewer pipelines of various sizes in Lubigi, Katanga, Kibuye/Makindye areas is 85% completed.</p> <p>For Nakivubo WWTP, Geotechnical investigations by contractor were completed and findings presented to stakeholders</p> <p>Construction of stabilized earth work platform ongoing.</p> <p>Implementation of the Environmental management Plan ongoing</p> <p>Construction of access roads was completed</p> <p>Contractor in process of procuring equipment, materials and tools approved for the works</p> <p>For Kinawataka WWTP, the tender evaluation report was submitted to AfDB for a No</p>	<p>Rehabilitation and Modifications of existing Sewer network</p> <p>Construction of a new advanced Waste Water Treatment Plant (45,000m³/day) in Nakivubo Wetland</p> <p>Construction of a new advanced waste water treatment plant in Kinawataka wetland with an initial capacity of 4,500m³/day</p> <p>Construction of Nakivubo Sewer System with;</p> <p>Trunk sewer line of length 11km with diameter ranging from 384mm to 1500mm.</p> <p>feeders to trunk sewer, total length 5.8km with diameter ranging from 200mm to 600mm.</p> <p>200 No. chambers and manholes.</p> <p>tie-in works between the existing sewer and new works</p> <p>Conversion of siphons to gravity sewers</p> <p>Construction of Kinawataka Sewer System with;</p> <p>Trunk sewer line, total length 13km with diameter ranging from 200mm to 600mm.</p> <p>200 No. chambers and manholes.</p> <p>tie-in works between the existing sewer and new works</p>

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0902 Urban Water Supply and Sanitation			
		Objection to proceed and invite the best evaluated bidder for negotiations.	
		For Nakivubo & Kinawataka Sewers, Secured KfW and Contract Committee approvals for Technical evaluation report	
		Financial bids were opened and bid evaluation is in progress	
Total	48,943,000	0	58,551,000
<i>GoU Development</i>	<i>30,290,000</i>	<i>0</i>	<i>30,019,000</i>
<i>Donor Development</i>	<i>18,653,000</i>	<i>0</i>	<i>28,532,000</i>
Project 1192 Lake Victoria Water and Sanitation (LWATSAN) Phase II Project			
090280 Construction of Piped Water Supply Systems (Urban)	Construction of Mayuge Water Supply.	The procurement of the contractor for Mayuge was initiated. Tender documents are being received and evaluations will be done in the next quarter.	Completion of Construction of Mayuge Water Supply.
	Commence designs of Kayabwe and Buwama, Bukakata and Ntungamo	The designs have been completed for Kayabwe and Buwama, Bukakata and Ntungamo water supply systems and the draft report was submitted for review.	Construction commencement of Bukakata, Kayabwe, Buwama and Ntungamo
Total	380,000	39,137	802,500
<i>GoU Development</i>	<i>60,000</i>	<i>39,137</i>	<i>218,500</i>
<i>Donor Development</i>	<i>320,000</i>	<i>0</i>	<i>584,000</i>
Project 1193 Kampala Water Lake Victoria Water and Sanitation Project			

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>UShs Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0902 Urban Water Supply and Sanitation			
090282 Construction of Sanitation Facilities (Urban)	Achieve 40% of the works for construction of 200 private low cost demonstration latrines Feasibility study, environmental impact assessment, and design of a new water treatment plant east of Kampala completed	Terms of Reference completed and Prequalification of preferred consultants to undertake the feasibility studies was done. Invitation for prequalified consultants to submit technical and financial evaluations was sent out and Prequalification of preferred Feasibility Study consultants completed as well as Invitation for prequalified bidders to submit technical and financial bids sent out	provision of Chemical Dozing facilities, rehabilitation of filters, improvement of pumping regimes, installation of lamella plates, and replacement of clarifier valves Reconfiguration of Rubaga/Namasuba main, construction of new reservoir at Namasuba, reconfiguration Muyenga reservoir tanks and replacement of sections of Naguru main Water Network Model for Kampala Water & Sanitation Master Plan for Kampala Accompanying measures (e.g. asset management, water quality studies, capacity building) Katosi WTP – Feasibility Study & Design and Build Development of an appropriate sanitation concept, review of water supply aspects in informal settlements & feasibility study Detailed Engineering Design, Tendering and Construction Supervision
Total	14,840,000	1,678,550	30,117,000
<i>GoU Development</i>	<i>14,840,000</i>	<i>1,678,550</i>	<i>9,374,000</i>
<i>Donor Development</i>	<i>0</i>	<i>0</i>	<i>20,743,000</i>
Vote Function: 0903 Water for Production			
Project 0169 Water for Production			
090377 Purchase of Specialised Machinery & Equipment	Purchase of Construction Equipement Unit	Bids were received and evaluated, however best evaluated bidder to be awarded contract in 3rd quarter of FY 12/13	Purchase of Construction Equipement Unit
Total	3,750,000	356,370	4,000,000
<i>GoU Development</i>	<i>3,750,000</i>	<i>356,370</i>	<i>4,000,000</i>
<i>Donor Development</i>	<i>0</i>	<i>0</i>	<i>0</i>

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0903 Water for Production			
090381 Construction of Water Surface Reservoirs	<p>Payment of retention monies on Arechet dam, construction of Kajodi v.tank (100%) in Mityana district, Nyamiringa (100%) and Nakakabala (100%) v.tanks in Kiboga district, Rehabilitation of windmills in Karamoja region (70%), commencement on construction of Andibo dam (30%) in Nebbi district, Acanpii dam (30%) in Oyam district and Namalu dam (30%) in Nakapiripirit district, Irrigation off-farm for both public and private enterprises</p> <p>Construction supervision of the following WfP facilities: Andibo dam in Nebbi district, AcanPii dam in Oyam district, Namalu dam in Nakapiripirit district, Rehabilitation of windmills in Karamoja region, Kajodi valley tank in Mityana district, Nakakabala and Nyamiringa V.T's in Kiboga district,</p> <p>Design of Rwengaaju irrigation scheme in Kabarole district, Detailed design of Namalu dam in Nakapiripirit district</p> <p>Construction of Water for Production facilities countrywide using Water for Production equipment</p> <p>Design review of WfP facilities in the districts of Mubende, Mityana, Kibale, Oyam, Nebbi, Kaabong, Moroto, Katakwi, Kiruhura, Kamwenge, Kyenjojo, Hoima, Bushenyi, Kayunga, Iganga, Pallisa, Budaka, Bugiri, Kapchorwa and Isingiro districts</p>	<p>Payment of retention monies on Arechet dam, construction of Kajodi v.tank (5%) in Mityana district, Nyamiringa (5%) and Nakakabala (50%) v.tanks in Kiboga district, Rehabilitation of windmills in Karamoja region (30%),</p> <p>Advertise for consultancy for Design review of WfP facilities in the districts of Mubende, Mityana, Kibale, Oyam, Nebbi, Kaabong, Moroto, Katakwi, Kiruhura, Kamwenge, Kyenjojo, Hoima, Bushenyi, Kayunga, Iganga, Pallisa, Budaka, Bugiri, Kapchorwa and Isingiro districts</p>	<p>Design of Alidi dam in Bala Subcounty, Kole district and Adwari dam in Otuke District</p> <p>Feasibility study and design of bulk water systems countrywide</p> <p>Construction of Rwengaaju Irrigation scheme (up to 40% cumulative progress)</p> <p>Construction of Andibo dam in Nebbi up to 50% cumulative progress</p> <p>Construction of Acanpii dam in Oyam District up to 50% cumulative progress</p> <p>Construction of Namatata dam in Nakapiripirit district (up to 30% cumulative progress)</p> <p>Construction of four (4) multipurpose valley tanks in Kyenjojo and Pallisa Districts</p> <p>Rehabilitation of Six (6) valley tanks in selected districts of the Country</p> <p>Completion of installation of windmills in Karamoja region</p> <p>Completion of Nakakabala v.tank in Kyankwanzi district, Nyamiringa v.tank in Kiboga district and Nyamiringa v.tank in Kiboga district (5% retention)</p> <p>Construction supervision of ongoing WfP facilities (includes payments to consultants and supervision allowances for staff)</p> <p>Installation of Drip Irrigation Kits on 4 new selected sites countrywide</p> <p>Rehabilitation of Mabira dam in mbarara district</p> <p>Performance improvement of Kagamba VT in Isingiro district</p>
Total	10,833,947	4,032,989	10,544,600
<i>GoU Development</i>	<i>10,533,947</i>	<i>3,890,537</i>	<i>10,544,600</i>
<i>Donor Development</i>	<i>300,000</i>	<i>142,452</i>	<i>0</i>

Sector: Water and Environment

Sector Summary

Project	2012/13		2013/14
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0903 Water for Production			
090380 Construction of Bulk Water Supply Schemes	Detailed design of Kikatsi Sanga Kanyaryeru bulk water scheme and Nyakiharho water supply system in Kabale district Construction of Nyakiharho water supply system in Kabale district up to 100% Continuation of construction of a bulk water scheme in Rakai district to 60% cumulative progress construction supervision and monitoring and appraisal of the bulk water scheme and piped water scheme construction by the Consultants and civil servants	Rakai bulkwater supply scheme cumulative level of construction: 32% construction supervision and monitoring and appraisal of the bulk water scheme by the Consultants and civil servants to satisfactory levels Advertised for consultancy services for design and construction supervision of Nyakiharho GFS	Completion of Nyakiharho water supply system in Kabale district Construction of a bulk water scheme in Rakai district up to 80% cumulative progress Construction supervision and monitoring and appraisal of the bulk water scheme and piped water scheme construction by the Consultants and civil servants (AAW, Allowances, etc)
Total	5,140,653	1,238,722	3,000,000
<i>GoU Development</i>	<i>5,140,653</i>	<i>1,238,722</i>	<i>3,000,000</i>
<i>Donor Development</i>	<i>0</i>	<i>0</i>	<i>0</i>
Vote Function: 0904 Water Resources Management			
<i>Project 0137 Lake Victoria Envirn Mgt Project</i>			
090472 Government Buildings and Administrative Infrastructure	Rehabilitation of office block	Not done	Project offices renovated
Total	582,733	0	532,733
<i>GoU Development</i>	<i>50,000</i>	<i>0</i>	<i>0</i>
<i>Donor Development</i>	<i>532,733</i>	<i>0</i>	<i>532,733</i>
Vote Function: 0905 Natural Resources Management			
<i>Project 0947 FIEFOC - Farm Income Project</i>			
090572 Government Buildings and Administrative Infrastructure	Construction of irrigation schemes for Doho, Agoro and Mobuku	At least 96% of the on-going rehabilitation of Agoro irrigation schemes has been achieved. The rehabilitation of all the three irrigation scheme is substantially complete	Three rehabilitated Irrigation scheme water reservoirs fenced and additional infrastructure provided Civil works to rehabilitate Olweny Irrigation scheme Rehabilitation of Olweny Irrigation scheme supervised NPCU Office maintenance
Total	15,750,000	10,564,257	13,770,732
<i>GoU Development</i>	<i>15,750,000</i>	<i>10,564,257</i>	<i>13,770,732</i>
<i>Donor Development</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Project 1189 Sawlog Production Grant Scheme Project</i>			
090579 Acquisition of Other Capital Assets	Establishment of tree plantations and woodlots	Nil	Provision of tree seedlings to communities
Total	6,070,000	190,000	8,861,000
<i>GoU Development</i>	<i>760,000</i>	<i>190,000</i>	<i>61,000</i>
<i>Donor Development</i>	<i>5,310,000</i>	<i>0</i>	<i>8,800,000</i>
Vote Function: 0949 Policy, Planning and Support Services			

Sector: Water and Environment

Sector Summary

Project Vote Function Output <i>US\$ Thousand</i>	2012/13		2013/14
	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by December (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
Vote Function: 0949 Policy, Planning and Support Services			
<i>Project 0151 Policy and Management Support</i>			
094972 Government Buildings and Administrative Infrastructure	Commence the construction of the Ministry headquarters	Contractor was secured but funds not available Funds are yet to be secured for the initial deposit to the contractor to commence construction.	Commence the construction of the Ministry headquarters
Total	843,000	222,391	9,310,000
<i>GoU Development</i>	<i>843,000</i>	<i>222,391</i>	<i>9,310,000</i>
<i>Donor Development</i>	<i>0</i>	<i>0</i>	<i>0</i>

(vi) Off-Budget Activities

(vii) Contributions from other Sectors

S3 Proposed Budget Allocations for 2013/14 and the Medium Term

This section sets out the proposed sector budget allocations for 2013/14 and the medium term, including major areas of expenditures and any notable changes in allocations.

Table S3.1: Past Expenditure and Medium Term Projections by Vote Function

	2011/12 Outturn	2012/13		Medium Term Projections		
		Appr. Budget	Spent by End Dec	2013/14	2014/15	2015/16
Vote: 019 Ministry of Water and Environment						
0901 Rural Water Supply and Sanitation	17.990	37.818	6.368	30.613	34.466	34.692
0902 Urban Water Supply and Sanitation	11.982	122.421	18.447	152.470	239.942	375.764
0903 Water for Production	21.357	21.714	6.873	20.050	27.280	30.550
0904 Water Resources Management	3.600	27.444	5.182	38.086	23.379	15.739
0905 Natural Resources Management	5.916	44.319	13.697	29.426	24.718	11.892
0906 Weather, Climate and Climate Change	3.628	6.590	2.047	13.038	8.390	6.837
0949 Policy, Planning and Support Services	5.405	11.466	2.800	16.215	8.387	8.801
Total for Vote:	69.878	271.772	55.414	299.898	366.561	484.274
Vote: 122 Kampala Capital City Authority						
0908 Sanitation and Environmental Services	0.006	14.470	0.000	5.010	14.471	0.012
Total for Vote:	0.006	14.470	0.000	5.010	14.471	0.012
Vote: 150 National Environment Management Authority						
0951 Environmental Management	4.860	5.500	3.251	8.390	9.597	11.170
Total for Vote:	4.860	5.500	3.251	8.390	9.597	11.170
Vote: 157 National Forestry Authority						
0952 Forestry Management	5.867	19.017	9.583	16.858	18.424	19.564
Total for Vote:	5.867	19.017	9.583	16.858	18.424	19.564
Vote: 500 501-850 Local Governments						
0981 Rural Water Supply and Sanitation	51.500	64.292	30.004	64.384	87.216	126.082
0982 Urban Water Supply and Sanitation	1.384	1.504	0.711	1.504	2.629	2.629
0983 Natural Resources Management	0.716	3.112	1.453	3.413	2.980	4.574

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Sector Summary

	2011/12 Outturn	2012/13		Medium Term Projections		
		Appr. Budget	Spent by End Dec	2013/14	2014/15	2015/16
Total for Vote:	53.600	68.907	32.169	69.301	92.825	133.285
Total for Sector:	134.209	379.665	100.417	399.456	501.878	648.306

* Excluding Taxes and Arrears

(i) The Total Budget over the Medium Term

The overall MTEF allocation to the Sector in 2012/13 is Ushs 354.12bn, Ushs 382.26 bn for FY 2013/14 and 474.44 bn for FY 2014/15 excluding Non- Tax Revenue.

(ii) The major expenditure allocations in the sector

The major sector expenditure allocations are under the Urban Water Supply majorly due to the construction of new advanced Waste Water Treatment Plants in Nakivubo and Kinawatake wetlands

(iii) The major planned changes in resource allocations within the sector

Table S3.2: Major Changes in Sector Resource Allocation

* Excluding Taxes and Arrears

S4: Challenges and Unfunded Outputs for 2013/14 and the Medium Term

This section sets out the major challenges the sector faces in 2013/14 and the medium term which the sector has been unable to address in its spending plans.

Table S4.1: Additional Output Funding Requests

Additional Requirements for Funding and Outputs in 2013/14	Justification of Requirement for Additional Outputs and Funding
<i>Vote Function:0980 Rural Water Supply and Sanitation</i>	
Output: 0901 80 Construction of Piped Water Supply Systems (Rural)	
Funding Requirement (US\$ Bn) 46.351	In order to increase service coverage and functionality of the existing water sources, there is urgent need for specialized equipment for overhauling of boreholes in support of Community Based Management Systems (CBMS) in addition to drill replacement of boreholes especially in water stressed areas including enormous Presidential/pledges.
Continue with Drill replacement boreholes especially in water stressed areas/pledges, Specialized equipment for overhaul of boreholes in support of CBMS, construction and rehabilitation of large Gravity Flow Schemes	
Output: 0901 81 Construction of Point Water Sources	
Funding Requirement (US\$ Bn) 0.000	This is for rolling out the demonstration programs initiated in all districts for rain water harvesting
Rain Water Harvesting	
<i>Vote Function:0980 Urban Water Supply and Sanitation</i>	
Output: 0902 80 Construction of Piped Water Supply Systems (Urban)	
Funding Requirement (US\$ Bn) 17.500	There is also a need to facilitate phased implementation of H.E the President pledges in addition to construction of piped water systems to district Head quarters.
Construction piped water systems in Urban	
<i>Vote Function:0981 Water for Production</i>	
Output: 0903 81 Construction of Water Surface Reservoirs	
Funding Requirement (US\$ Bn) 13.000	A total of Shs. 75.669bn additional funds is required under this Vote Function to undertake rehabilitation of old dams in phases countrywide, clear backlog and fast track construction of already designed facilities, strengthening of community management for improved use. This is to enable supplementary irrigation under the Joint Programme Required for specialized equipment for hire by communities.
Continue with rehabilitation of old dams to increase on functionality, construction of new reservoirs and establishment of community systems as well as procurement of additional equipments	
<i>Vote Function:0904 Water Resources Management</i>	
Output: 0904 04 The quality of water resources regularly monitored and assessed	
Funding Requirement (US\$ Bn) 9.984	A general decline in quality of the nation's water resources has been registered and will become worse if unabated mainly due to unregulated conflicting national and trans-boundary human activities, climate
Deconcentration of WRM to the 4 WMZs, procurement of portable equipment for oil and gas	

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Sector Summary

Additional Requirements for Funding and Outputs in 2013/14	Justification of Requirement for Additional Outputs and Funding
<p>spillages regulation and development of a water regulation tool for the Nile River system to optimize HEP and initiation of water hyacinth management</p>	<p>variability, and natural courses. Oil and gas exploration production and transportation management, accidental spillages provide additional challenge. Increased urbanization and modernization, the types and complexity of pollutants from trade have presents a daunting task as the current equipment can no longer cope. Further in view of the pending construction of the dams for electricity power generation there is need to develop a tool at a cost of Shs. 1.5 billion to enable the sector determine operational discharge values for the permits issued by the Government under the Water Act (1995) to Uganda's hydro-electric power (HEP) station operators on the Nile river to optimize hydropower production and minimize negative downstream impacts. The sector requires 13 billion additional resources for the deconcentration of WRM to the 4 WMZs, procurement of portable equipment for oil and gas spillages regulation and development of a water regulation tool for the Nile River system to optimize HEP and initiation of water hyacinth management.</p>
<p><i>Vote Function:0902 Natural Resources Management</i></p>	
<p>Output: 0905 02 Restoration of degraded and Protection of ecosystems</p>	
<p>Funding Requirement (US\$ Bn) 12.490 Identify, prepare and implement one small scale carbon offset to offset the carbon footprint of the project activities by supporting selected communities with about 300,000 indigenous/agro forestry seedlings annually supporting selected communities with about 300,000 indigenous/agro forestry seedlings annually</p>	<p>The additional funds are required in support of tree planting on bare hills, river banks, watersheds, to promote integrity and safety of the wetland resource, to enhance community management approaches and creation of forest conditional grant as recommended by cabinet retreat in December 2011.</p>
<p><i>Vote Function:0903 Weather, Climate and Climate Change</i></p>	
<p>Output: 0906 03 Administration and Management Support</p>	
<p>Funding Requirement (US\$ Bn) 0.000</p>	<p>Acquisition of transport and other equipment required by the CCU, facilitate the country to attain international certification, wind shear, instrument calibration lab, conventional weather instruments and operationalisation of the approved Agency</p>
<p><i>Vote Function:0902 Environmental Management</i></p>	
<p>Output: 0951 02 Environmental compliance and enforcement of the law, regulations and standards</p>	
<p>Funding Requirement (US\$ Bn) 4.343 Capacity in sustainable oil and gas development and monitoring enhanced, Lake Victoria Shoreline Fragile Ecosystems restoration project, Implementation of Rio+20 commitments</p>	<p>Oil and gas is an emerging environmental issue and is an opportunity where capacity is inadequate. The restoration of Lake Victoria shoreline fragile ecosystem, which contributes to objective 1 of the NDP, page 311, is however not funded under the current MTEF.</p>