THE REPUBLIC OF UGANDA

Annual Budget Monitoring Report

Financial Year 2016/17

October 2017

Ministry of Finance, Planning and Economic Development
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ACRONYMS

AGEBMR	Albertine Graben Environmental Baseline Monitoring Report
AIA	Appropriation in Aid
AIDS	Acquire Immune Deficiency Syndrome
CBMS	Community Based Management System
CCD	Climate Change Department
CDM	Clean Development Mechanisms
CFRs	Central Forest Reserves
CMCs	Catchment Management Committees
COP	Conference of the Parties
CSOs	Civil Society Organizations
DFS	District Forest Services
DLGs	District Local Governments
DWSDCG	District Water and Sanitation Development Conditional Grant
EIA	Environmental Impact Assessment
ENR	Environment and Natural Resources
ESD	Education for Sustainable Development
EU	European Union
FAO	Food Agricultural Organization
FIEFOC	Farm Income Enhancement and Forestry Conservation
FSM	Fecal Sludge Management
FSSD	Forestry Support Department
FY	Financial Year
GHG	Green House Gas
GI	Galvanized Iron
GIS	Geographical Information System
GKMA	Greater Kampala Metropolitan Area
GoU	Government of Uganda
Ha	Hectares
HIV	Human Immune Virus
HW	Hand Washing
ICT	Information Communications Technologies
IDPs	Internally Displaced Persons
IEC	Information, Education and Communication
IFMS	Integrated Financial Management System
ISO	International Organization for Standardization
IT	Information Technology
JICA	Japan International Cooperation Agency
KCCA	Kampala Capital City Authority
Kg	Kilogram
Km	Kilo Meter
KMS	Knowledge Management Systems
LGs	Local Governments
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries

MDAs	Ministries Departments and Agencies
MDGs	Millennium Development Goals
MESA	Monitoring of Environment for Security in Africa
MoFPED	Ministry of Finance Planning and Economic Development
MTEF	Medium Term Expenditure Framework
MLHUD	Ministry of Lands Housing and Urban Development
MWE	Ministry of Water and Environment
NCCP	National Climate Change Policy
NCCR	National Climate Change Resource Centre
NDP	National Development Plan
NDP2	Second National Development Plan
NEF	National Environment Fund
NEMA	National Environment Management Authority
NFA	National Forestry Authority
NGOs	Non-Government Organizations
NPCU	National Project Coordination Unit
NRB	Natural Resources Base
NTR	Non Tax Revenue
NTSC	National Tree Service Center
NWSC	National Water and Sewerage Corporation
NWWTP	Nakivubo Waste Water Treatment Plant
O&M	Operation and Maintenance
PCE	Policy Committee on Environment
Q1	Quarter One
Q2	Quarter Two
Q3	Quarter Three
Q4	Quarter Four
RGCs	Rural Growth Centers
SPGS	Sawlog Production Grant Scheme
SRWSSP	Support to Rural Water Supply and Sanitation Programme
STs	Small Towns
ToTs	Trainer of Trainees
Ug Shs	Uganda Shillings
UNFCCC	United Nations Framework Convention on Climate Change
UNMA	Uganda National Meteorological Authority
URA	Uganda Revenue Authority
WES	Water and Environment Sector
WfP	Water for Production
WfPRC-E	Water for Production Regional Centre East
WQ	Water Quality
WRM	Water Resources Management
WSDF	Water and Sanitation Development Facility
WSDF-C	Water and Sanitation Development Facility Central
WSS	Water Supply System
WUC	Water User Committee

FOREWORD

In line with the second National Development Plan and Vision 2040, the Government budget strategy in FY2016/17 sought to strengthen Uganda's competitiveness for sustainable wealth creation, employment and inclusive growth. Most resources were channeled to sectors that enhance production, productivity, investment and value addition, although the social development sectors also received substantial resources.

The 2016/17 Annual Budget Monitoring Report by the Budget Monitoring and Accountability Unit (BMAU) in the Ministry of Finance, Planning and Economic Development (MFPED) shows that physical performance was generally fair across all monitored priority sectors. Service delivery was enhanced by the rolling out of the Public Financial Management Reforms leading to progressive improvement in the timeliness in release of funds by MFPED; frontloading development funds such that most sectors received their funds by quarter three, and increased allocations and implementation of sector specific strategic interventions.

In order to effectively and efficiently utilize public resources, decision makers and project implementers are urged to address the following constraints to implementation; weak planning and budgeting, inadequate supervision and monitoring of public programmes, inadequate human resources and skills, and staff absenteeism.

Patrick Ocailap
Deputy Secretary to the Treasury

EXECUTIVE SUMMARY

The overall sector performance was fair at 75%. The sector annual budget was Ug shs736.41billion (Appropriation in Aid (AIA) inclusive) and the release by quarter four was Ug shs 464.108billion, of which Ug shs 427.788billion (92% of the release) was spent which was a good budget performance. The annual performance was assessed based on the 17 projects and two programmes under Votes 19, 150, 302 and 10 districts under Votes 501-580. There was a general problem with AIA values in terms of releases and expenditures.

Sector Physical Performance

Good performance was exhibited by projects that implemented works within the available resources to complete most planned outputs. The case in point was the DLGs through the District Water and Sanitation Development Conditional Grant (DWSDCG) at 85%. The DLGs completed construction of water and sanitation facilities, with more sources rehabilitated using the Hand Pump Mechanic Associations (HPMAs), much as level of implementation of software has dropped. The Water and Sanitation Development Facility Central (WSDF-C) at 81% completed six water systems (Ssunga, Kiboga, Katuugo, Nyamarunda systems and rehabilitation of Kakooge and Mijeera). However, the toilets in Mijeera and Kakooge were shunned by the community around for free sanitation facilities around and being located in places where there is almost no privacy. Carried forward funds for the WSDF-C paid for works for the last FY which contributed to performance.

The National Environment Management Authority (NEMA) performance was at 79% and continued ensuring sustainable environment and natural resources management though there still exist weakness in compliance and enforcement measures. Though Climate Change was at 77% which was good, not much was achieved in terms of green gashouse assessments, vulnerability index measures and budgets and plans at both central and local government levels. Water Resources Management (WRM) at 71% continued monitoring catchment based water resources water resources management among others. There were 12 Catchment Management plans made and implementation was on ongoing. The quantity of water monitored increased with the provision of laboratories closer to the users through setting up and equipping regional offices but the number of samples for water quality and only Biological Oxygen Demand (BOD) is tested.

Fair performance was demonstrated under National Forestry Authority (NFA) with 351ha degraded natural forests restored ‘636ha new plantations established. The NFA had AIA which contributed 46% of the budget and yet this was not well reflected in the releases thus affecting the analysis. The Water for Production (WfP) at 69% completed construction of 16 valley tanks and other 96 tanks using the WfP equipment otherwise most of projects were under design. Uganda National Meteorological Authority at 64% - weather forecasts were produced but the radar was not procured due to faulty procurement procedures.

Solar Powered Mini-Piped Water Schemes in Rural Areas achieved 61% as construction of all the planned 35 systems was completed. The Lake Victoria-Kampala Sanitation Program was rated at 68%, as there have been delays in completion of the Nakivubo Waste Water Treatment Plant due to relocation of project site, land wrangles and exaggerated compensations and low financing with non-paid certificates valued at Ug shs 56billion.

Poor performance was noted in Provision of Improved Water Sources for Returned IDPs – Acholi Sub-Region rated at 18%, and Karamoja Small Town and Rural growth Centers Water Supply and Sanitation at 24%, Kampala Water Lake Victoria Water and Sanitation at 33% and Sawlog Production Grant Scheme at 41%. Performance was affected by late procurements, lack of approved designs for the piped systems; ambitious project plans that could not be met and insufficient funds to procure consultancies.

Implementation challenges

i) Failure to realize the AIA obligation affected implementation of works thus less outputs were achieved. The National Forestry Authority implementation stopped in Quarter two because of no releases in the third and fourth quarter for works. The specific AIA releases and expenditures can clearly be indicated.
ii) Slow and late procurement processes delayed works initiation and thus not meeting the targets. Procurement of consultants in Farm Income Enhancement and Forestry Conservation (FIEFOC), Karamoja Small Town and Rural growth Centers Water Supply and Sanitation for Napak/Moroto and then Amudat, Kotido WFP for design of Seretyo Irrigation Scheme in Kween district.
iii) Lack of approved designs slowed down procurement, and project initiation which affected performance of projects
iv) Non-remittance of counterpart funding from government affected progress of works. Case in point is in the construction of Olweny Irrigation Scheme under FIEFOC Project Phase (II) because of slow cash flows from the client the project halted.
v) Continuous environmental degradation with minimum monitoring and enforcement of environmental laws.

Recommendations

i) The NFA/NEMA should budget according to the expected revenues from the AIA given the previous experiences to avoid shortages in the budget.
ii) The MFPED/MDA should prioritize government's obligation for counterpart funds for smooth running of projects.
iii) The NFA/NEMA should adhere to its commitments/role to enforce environmental laws that deter further degradations and encroachment on the ecosystems.
iv) The MDAs should improve planning, putting into consideration procurement plans and budget for projects with approved designs.

CHAPTER 1: WATER AND ENVIRONMENT SECTOR

1.1 Background

The key players in the sector comprise of Ministry of Water and Environment, National Environment Management Authority (NEMA), National Forestry Authority (NFA), National Water and Sewerage Corporation (NWSC) and Uganda National Meteorological Authority (UNMA), Local Governments, Development Partners, Private Sector and the Civil Society Organizations. The Ministry of Water and Environment is a lead institution and is responsible for overall coordination, policy formulation, setting standards, inspection, monitoring, technical back-up and initiating legislation. It also monitors and evaluates sector development programmes to keep track of their performance, efficiency and effectiveness in service delivery. The private sector and Civil Society Organizations (SCO) complements the efforts of the government in the development and mobilization of the resources for service delivery while the donors provide financial and technical assistance.

The mission of the sector is *'To promote and ensure the rational and sustainable utilization, development and effective management of water and environment resources for socio-economic development of the country"*[1]

1.1.1 Sector objectives and priorities

Strategic Objectives

The Ministry is guided by the following strategic objectives in the implementation of the policies and programs;

i. To provide safe water within easy reach and hygienic sanitation facilities based on management responsibility and ownership by users to 79% of the population in rural areas and 95% in urban population by the year 2020 with 80%-90% effective use and functionality of the facilities.

ii. To provide viable urban Water Supply and Sewerage/Sanitation systems for domestic, industrial and commercial uses.

iii. To develop water supply for production/multipurpose use for socio-economic development, modernize agriculture and mitigate the effects of climate change.

iv. To manage the water resources of Uganda in a wise, integrated, sustainable and coordinated manner so as to secure water of adequate quantity and quality to meet all social and economic needs of present and future generation.

v. To promote a sustainable productive Natural Resource Base (NRB) and healthy environment for improved livelihoods, poverty eradication and economic growth.

vi. To develop capacity and promote sustainable harness and use of climate and weather resources for socio-economic development of Uganda.'

[1] Ministerial Policy Statement FY 2014/15

vii. To coordinate and ensure compliance with Government policy, legislation, standards and regulations in the Ministry of Water and Environment and the affiliated agencies/institutions implementing programs related to Water and Environment.'

1.1.2 Sector Outcomes and NDP2 Objectives

The sector has three broad outcomes with specific objectives contributing to NDP2:

i) **Improved access to safe water and sanitation facilities for rural, urban and water for production uses.** The main objective in the NDP2 is to increase access to safe water supply in rural areas from 65 percent to 79 percent by 2020, in urban areas from 70 percent to 95 percent by 2020. Sanitation coverage is to improve from 69 percent to 90 percent for rural areas and 77 percent to 100 percent for urban. In water for production the NDP2 target is to increase access in the cattle corridor from 50 percent to 70 percent and those outside the cattle corridor from 20 percent to 30 percent.

ii) **Improved Water Resources Assessment, Monitoring, Planning, Regulation and Quality Management.** The NDP objective is 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 sustainable use of water resources for economic activities.

iii) **Improved weather, climate, and climatic change management, protection and restoration of environment and natural resources**. The NDP2 objective is to ensure sustainable management of the environment for livelihood security, wealth creation and sustainable economic development.

1.2 Rationale for the Report

Significant improvements have been registered in citizen's access to basic services, their quantity and quality remains unsatisfactory, particularly I the sectors of health, education, water and environment, agriculture and roads. However, the services being delivered are not commensurate to the resources that have been disbursed, signifying accountability and transparency problems in the user entities.

The Budget and Accountability Unit (BMAU) was established in the FY 2008/09 in the Ministry of Finance planning and Economic Development under the Budget Directorate. The Unit is charged with tracking implementation of selected government programmes or projects and observing how values of different financial and physical indicators change over time against stated goals and targets (how things are working). Regular field monitoring exercises to verify receipt and application of funds by the user entities. Where applicable, beneficiaries are sampled to establish their level of satisfaction with the public service.

The BMAU prepares semiannual monitoring reports of selected government programmes and projects. The monitoring is confined to levels of inputs, outputs and intermediate outcomes in the following areas:

- Agriculture
- Infrastructure (Roads and Energy)
- Industrialization
- Information and Communication Technologies
- Social Services (Education, Health and Water and Environment)
- Microfinance
- Public Sector Management

The aim of this report is to access whether the reported expenditures and outputs, in the Ministry of Water of Water and Environment (MWE) Q3 and those planned for Q4 report for the water and environment sector were achieved given the sector targets, goals and objectives.

1.3 Report Outline

This report divided into four chapters. Chapter two provides the scope of the report, data collection methods, and limitations. Chapter three gives the overall physical and financial performance, challenges and analysis while Chapter four has conclusions and recommendations.

CHAPTER 2: METHODOLOGY

2.1 Scope of the Report

The period under review is the FY 2016/17. The monitoring focused on the following Votes: Vote 019- Ministry of Water and Environment (MWE); Vote 150 – National Environment Management Authority (NEMA); Vote 157- National Forestry Authority (NFA); Votes 501- 850 Conditional Grants to Local Governments (LGs); Vote 122- Conditional Grant to Kampala Capital City Authority (KCCA) and Vote 302 - Uganda National Meteorological Authority (UNMA). Table 2.1 gives the list of projects monitored and their geographical locations.

Table 2.1: WES Projects monitored for Annual Performance FY 2016/17

Vote / Vote Function	Project / Output	Location (District)
Vote 019 MWE		
VF 0901: Rural Water Supply and Sanitation	Project 1191: Provision of Improved Water Sources for Returned IDPs-Acholi Sub Region - 30 WUCs trained - 30 Boreholes rehabilitated - Sanitation and Hygiene campaigns conducted in the JICA project area	Mubende Mpigi
	Project 1347: Solar Powered Mini-Piped Water Schemes in rural Areas - Water operators supported in O&M - Construction of mini piped solar water systems completed.	Lwengo Busia
VF 0902: Urban Water Supply and Sanitation	Project 1130: WSDF central - Water operators supported in O&M - Water supply and sanitation systems constructed	Kiboga Kayunga Kibale Nakasongola
	Project 1188: Protection of Lake Victoria-Kampala Sanitation Program - Nakivubo Waste Water Treatment Plant constructed - Nakivubo and Kinawataka sewer network constructed - Kinawataka Pre-treatment plant constructed.	Kampala
	Project 1193: Kampala Water Lake Victoria Water and Sanitation Project - Kampala Water Network improved and extended - A new water treatment plant in Katosi constructed - Institutional support and capacity building conducted	Mukono
	Project 1399: Karamoja Small Town and Rural growth Centers Water Supply and Sanitation - Hygiene education and sanitation promotion campaigns conducted in Napak, Moroto districts - Sanitation baselines conducted in Napak, and Moroto - 3 water supply systems constructed/ rehabilitated in Napak, and Moroto districts.	Napak Moroto

VF 0903: Water for Production	Project 1397: Water for Production Regional Center-East (WfPRC_E) based in Mbale - Iwemba and Nabweye valley tanks in Bugiri district constructed	Mbale Bugiri
	Project 0169: Water for Production - Water surface reservoirs constructed (Mabira dam in Mbarara district) - Rwengaju irrigation scheme in Kabarole district constructed - Valley tanks under Kisozi livelihood project	Mbarara Kabarole Sembabule
VF 0904: Water Resources Management	Project 0165: Support to WRM - 2 Regional Water Quality Laboratories in Fort portal and Mbarara set-up and equipped. - National Water Quality Reference Laboratory in Entebbe operated and maintained.	Mbarara Kabarole Wakiso
	Project 1348: Water management Zones Project - Water monitoring stations maintained and operated - Water Permit holders monitored for compliance	Mbale Busia Lira Mabarara Kabarole Manafwa Oyam
VF 0905: Natural Resources Management	Project 1189: Sawlog Production Grant Scheme Project - Improved skills and knowledge among all project staff and other stakeholders in the forestry sector (Farmers and district staff) - Grant disbursed to private plantation owners for plantations established to standards	Omoro Luwero
	Project 1417: Farm Income Enhancement and Forestry Conservation Project Phase II (FIEFOC II) - Olweny Irrigation scheme rehabilitated	Alebtong
VF: 0906 Weather, Climate and Climate Change	Project 1102: Climate Change Project - Adaptation and mitigation measures - Awareness campaigns on climate change - Baseline surveys undertaken	Ntungamo Kabale
Vote 150 NEMA		
	Programme 01 Administration - Clean Development Mechanisms (CDM) projects verification and marketing of CDM products supported - Critical degraded fragile ecosystems restored and protected (Mpologoma and Limoto wetlands) - Training district staff on E-Waste management Project 1304: Support to NEMA Phase II	Jinja Pallisa Kabale
Vote 157 NFA		
VF: 0952 Forestry Management	Programme 01 Headquarters - New tree plantations established - Central Forest Reserves effectively and efficiently	Kabale Mbarara

	managed.	
	Project 0161 Support to NFA - Maintenance of Mafuga Forest Reserve - Supply of seeds and seedlings raised for sale, own planting and community tree planting - Maintenance of Bugamba Forest Reserve - Tree seedlings raised for Community Tree Planting	Kabale Mbarara
Vote 302 UNMA		
	Project 1371: Uganda National meteorological Authority - Weather monitoring stations maintained and operated	Lira Kabale Pallisa Kyenjojo Jinja Lwengo Wakiso
Votes: 501-850 Local Governments	Project: 0156: District Rural Water and Sanitation Development Conditional Grant (DWSDCG)	10 districts[2]

Source: Authors' Compilation

2.2 Methods

Physical performance of projects and outputs was assessed through monitoring a range of indicators and linking the progress to reported expenditure. Across all the projects and programmes monitored, the key variables assessed included: performance objectives and targets; inputs and outputs and the achievement of intermediate outcomes.

2.2.1 Sampling

A combination of random and purposive sampling methods were used in selecting projects from the Ministerial Policy Statements and progress reports of the respective departments. Priority was given to monitoring outputs that were physically verifiable. In some instances, multi-stage sampling was undertaken at three levels: i) Sector programmes and projects ii) Local governments and iii) Project beneficiaries.

Outputs to be monitored are selected so that as much of Government of Uganda (GoU) development expenditure as possible is monitored during the field visits. Districts are selected so that as many regions of Uganda as possible are sampled throughout the year for effective representation.

2.2.2 Data Collection

Data was collected from various sources through a combination of approaches:

- Review of secondary data sources including: Ministerial Policy Statements for FY2016/17; National and Sector Budget Framework Papers; Sector project documents

[2] Butaleja, Kagadi, Kakumiro, Mityana, Mpigi, Nakasongola, Omoro, Pallisa, Rubanda, Sheema

and performance reports in the Programme Based Budgeting (PBB), Sector Quarterly Progress Reports and work plans, District Performance Reports, the Budget Speech, Public Investment Plan, Approved Estimates of Revenue and Expenditure, and data from the Budget Website.

- Review and analysis of data from the Integrated Financial Management System (IFMS) and Quarterly Performance Reports (Performance Form A and B).
- Consultations and key informant interviews with project managers in implementing agencies both at the Central and Local Government level.
- Field visits to project areas for primary data collection, observation and photography.
- Call-backs in some cases to triangulate information.

2.2.3 Data Analysis

The data was analyzed using both qualitative and quantitative approaches. Comparative analysis was done using the relative importance of the outputs and the overall weighted scores.

Relative importance (weight) of an output monitored was based on the amount of budget attached to it; thus the higher the budget the higher the contribution of the output to the sector performance. This was derived from the approved annual budget of each output divided by total annual budget of all outputs of a particular programme/project. The weight of the output and percentage achievement for each output were multiplied to derive the weighted physical performance. The overall programme/project performance is a summation of all weighted scores for its outputs. On the other hand, the overall sector performance is an average of individual programme performances that make up the sector.

The performance was rated on the basis of the criterion in Table 2.2.

Table 2.0.1: Assessment guide to measure performance of projects monitored in FY2016/17

SCORE	**COMMENT**
90% and above	***Very Good*** *(Most of the set targets achieved and funds absorbed)*
70%-89%	***Good*** *(Some core set targets achieved and funds absorbed to 70%-89%)*
50%- 69%	***Fair*** *(Few targets achieved and funds absorption is 50%-69%)*
Less than 50%	***Poor*** *(No targets achieved and funds absorption is less than 50%)*

2.3 Limitations of the report

The monitoring and reparation of this report was constrained by a number of factors namely:

1) Limited financial information especially AIA releases and expenditures for specific outputs hence performance may have been under or overestimated.

2) There was disparity between financial information from IFMS, Vote performance reports and from different projects especially the DLGs. The financial figures kept changing from time to time.

3) Budgets and releases for sub outputs were not easily available. This made it difficult to analyze for each sub output. Hence the budgets used within the performance tables are for the overall output component.

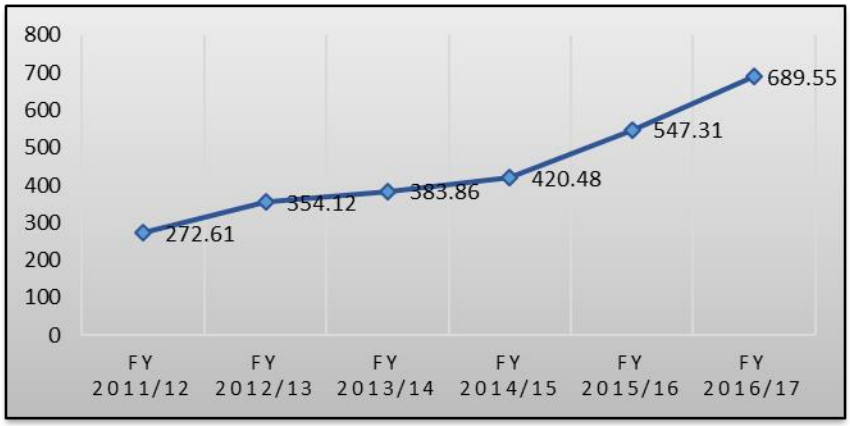
4) Unrealistic percentage targets set under WRM that may not easily be achieved or verified with no clear baselines and targets for specific regions implementing.

CHAPTER 3: METHODOLOGY

3.1 Overall performance

The Overall financial performance was rated good at 75%. The sector funding since the FY 2011/12 is reflected in the Figure 1.The approved budget for FY 2016/17 was 5.8% of the National Budget of Ug shs 12.587 billion allocated to the Ministries Departments, Agencies and Local Governments (MDALGs).

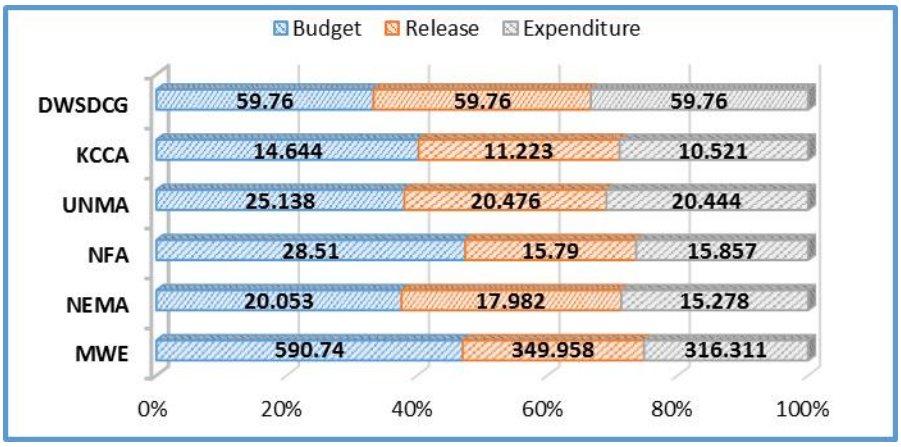
Figure 1: Sector Financing Trend since FY 2011/12 (Including AIA)



Financial Performance

The sector budget allocation for the FY 2016/17 was Ug shs 736.41 billion (AIA inclusive) of which Ug shs 464.108 was released and Ug shs 427.788 spent. The different Vote budgets, releases and expenditures are reflected in Figure 1. The KCCA budget was 14.644 but did not receive any release from the consolidated fund and thus spent the AIA. The NFA AIA budget was Ug shs 21.054 of which Ug shs 9.612 billion received (46% of the AIA budget).The NEMA AIA budget Ug shs 11.081 and all was realized and Ug shs 8.440 spent (76%). Overall there was poor performance of the AIA.

Figure 1: The Annual Financial Performance of the Sector Votes



Source: IFMS, MWE and Vote Q4 Reports

Physical Performance

The performance of the sector was rated at 75% (good performance). A good number of the planned outputs had been achieved. Some projects performed well whereas other performed poorly because of the delayed procurement process initiations, delayed design review process, less releases from the counterpart funding.

3.2 Programme/Project Performance

Ministry of Water and Environment (Vote 019)

Background

The Ministry of Water and Environment is mandated with among others to provide guidance to the local governments, quality assurance, monitoring, regulation and technical assistance. The responsibility for provision of Rural Water Supply and Sanitation Services was decentralized to local governments. However, the implementation of water supply and sanitation services for rural growth centers (with populations between 1500-5000 people) is still being handled at the central level, as the capacity of the District Local Governments (DLGs) is being built. The Support to Rural Water Supply and Sanitation Program (SRWSSP) carries out the ministry role as far as decentralization is concerned in the provision of water to the rural population in Uganda.

Objectives: To support the local governments, NGOs, humanitarian organizations and CBO's to build capacity for efficient and effective service delivery in the water and sanitation sector.

Financial performance

By 30th June 2017, Ug shs 349.958 billion (59.2% of the total budget) was released to Vote 019 and Ug shs 316.311 billion (90.4% of the release) spent. The worst being the donor budget release at 39.9%. The overall financial performance of the Vote is reflected in Table 3.1.

Table 3.1: Financial Performance (in Billions)

Excluding Arrears, Taxes	Approved Budget	Release	Expenditure	% Budget Released	% Releases spent
Recurrent Wage	4.366	4.366	4.457	100	100
Non-Wage	12.494	10.549	10.549	84.4	100
Development GoU	216.750	195.899	112.505	57.3	92.3
Ext. Fin.	357.129	142.375	109.373	39.9	76.8
GoU Total	233.611	207.583	206.938	88.9	99.7
Total GoU+Ext. Fin. (MTEF)	590.740	349.958	316311	59.2	90.4
Arrears	0.085 0	0.085	0.085	100	100
Total Budget	590.825	350.043	316.396	59.2	90.4
A.I.A Total	0.000	0.000	0.0	0.0	0.0
Grand Total	590.825	350.043	316.396	59.2	90.4
Total Vote Budget Excluding Arrears	590.740	349.958	316.311	59.2	90.4

Source: MWE Q4 Report

3.2.1 Provision of Improved Water Sources for Returned IDPs – Acholi Sub Region (Project 1191)

Background

Close to two million people of northern Uganda had been displaced from their homes in to Internally Displaced Persons (IDPs) camps following a two-decade long war. After the insurgency, there was relative peace prevailing in the region. Hence people started to return to their villages which were without adequate improved safe water and sanitation services. In July 2011 the MWE commenced implementation of Project 1191 to provide safe water and sanitation services to the returned IDPs. The project end date is June 2017.

The project objectives are to:

- Construct new water points and piped water supply systems in Rural Growth Centers.
- Increase functionality of water systems through strengthening the Community Based Management Systems (CBMS) by ensuring equal participation of men and women in the management of water systems and training borehole maintenance mechanics.

- Provide technical support and capacity building to districts and the community for effective planning, operation and maintenance of water and sanitation facilities for sustainable development.

Note: As the project period comes to an end, implementations were extended to cover regions of central Uganda and the Lake Kyoga basin with support from JICA.

The planned outputs in FY 2016/17 include: 30 Water User Committees (WUCs) trained;30 Hygiene and Sanitation campaigns conducted in the JICA project areas of central Uganda and 12 in the Lake Kyoga basin;30 Boreholes rehabilitated in Central Uganda;12 Designs for RGCs developed in the Kyoga basin

The project annual budget for the FY 2016/17 was Ug shs 708,000,000 of which Ug shs 650,352,500 (92%) was released and Ug shs 588,560,440 (90.5% of the release) was spent by 30th June 2017.

Performance

The physical performance of the project by end of June 2017 was rated poor at 18% as most of the planned outputs were not achieved. The overall performance is summarized presented in Table 3.2.

Table 3.2: Performance of Improved Water Sources for Returned IDPs-Acholi Sub Region

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity	Weighted Physical Performance Score	Remark
Back up support for O&M of Rural Water 30 Water User Committees trained	30	200,000	0.00	0.00	Only service center was set up in Mubende that comprises of software and hardware consultants.
Promotion of Sanitation and Hygiene education: (30 Hygiene and Sanitation campaigns conducted in the JICA project areas of central Uganda and 12 in the Lake Kyoga basin)	42	60,000	12	33.38	12 hygiene and sanitation campaigns conducted in the L. Kyoga basin. 30 campaigns for JICA not done

Construction of Piped Water Supply Systems (Rural): 30 Boreholes rehabilitated in Central Uganda (in Mubende, Mpigi and Butambala) 12 Designs for RGCs developed in the Kyoga basin	100%	398,000	25%	25	Rehabilitation of boreholes not achieved The design of 3 RGCs was completed but only nine RGCs will be covered by the grant.
Total		**658,000**		**18.2**	

Source: MWE and field findings

Only the outputs of Hygiene and sanitation campaigns were conducted in the Lake Kyoga basin and design of three out of nine intended for the grant was achieved. The other planned outputs had not been achieved pending the obligations of the different stakeholders (GoU, JICA and the district local governments). The roles and responsibilities and the specific areas of operation kept changing thus affecting project start up. So the project did not achieve its objectives.

Challenges of implementation

1) The MWE went into a technical cooperation with the Government of Japan not fully aware of the implementation modalities which keep shifting thus has not been able to meet all its obligations. There seems to be little room for negotiation as JICA sticks to its position which has affected the project schedules.
2) The reintroduction of VAT made the Kyoga project more costly. There is luck of clarity on exemption of VAT on the JICA project which may benefit the international consultants and not the local contractors.
3) JICA (donor) does not declare its financial contributions to the project which makes it difficult to analyze their financial contribution to the project/Sector.

Recommendations

1) The MFPED and MWE should clearly understand the Terms of Reference of the project before its acceptance and initiation and reject variations that affect the implementation.
2) The MWE should note that in accordance with section 3 of the VAT (Amendment) Act 2017, the obligation to budget and pay VAT on supplies received from contractors who execute aid funded projects was removed with effect from 1st July 2017.

3.2.2 Solar Powered Mini-Piped Water Schemes in Rural Areas (Project 1347)

Background

It is estimated that over 80% of Uganda's population resides in rural areas (UBOS) where the predominant safe water supply technology is the hand pump borehole. Rural areas are

characterized by Rural Growth Centers (RGCS) with populations ranging from 1500 to 5000 persons. The hand pump can only extract 700 liters per hour, thereby causing delays, conflicts and time wasting rendering them unreliable for RGCs. Owing to the population increase and large numbers of RGCs in the country, it is recommended that high yielding wells are powered with solar energy to supply multiple stand posts in order to reduce on the challenges associated with hand pumps. Hence the project commenced in July 2015 and the end date is June 2020.

The main objective of the project is to upgrade the service levels of safe water supply in rural communities thereby reducing on risks related to water borne disease and improve livelihood of the rural communities.

The annual approved budget in FY 2016/17 was Ug shs 16,025,000,000 of which Ug shs 14,416,000,000 (90%) was released and Ug shs14356847987 (99% of the release) was spent by end of June 2017.

Performance

The physical performance of the project was rated fair at 60% by the end of June 2017. The performance of the project is reflected in Table 3.3.

Table 3.3: Performance of Solar Powered Mini-piped Water Schemes in Rural Areas

Out put	Annual Planned Quantity or Target	Annual Output Budget (000Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Back up support for O&M of Rural Water: Back up support provided to facilitate O&M for Solar Powered Mini Piped Schemes in 15 communities.	15.00	200,000	15.00	1.25	All activities were carried out as planned and all sites were commissioned
Monitoring and capacity building of LGs, NGOs and CBOs: 15 LGs and communities supervised and coordinated at selected sites of implementation.	15	200,000	15	1.25	All activities were carried out as planned. Though the activities are not related to the major out.
Acquisition of Land by Government: 15 pieces of land purchased for the sites of construction	15	100,000	15	00.00	The sites were provided free by the LGs.

Out put	Annual Planned Quantity or Target	Annual Output Budget (000Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Construction of Piped Water Supply Systems (Rural): Construction of 15 solar powered mini piped water systems completed in the districts of Kiryandongo, Kumi, Otuke, Mpigi, Kaliro, Namayingo, Butaleja, Jinja (2), Ngora, Moroto, Busia, Luweero, Gomba, and Lwengo Feasibility studies and designs for 100 solar mini piped systems carried out	100%	6,000,000	100	18.72	All sites completed with water running on all sites
Construction of Point Water Sources: 200 production wells and boreholes drilled and constructed in selected areas in response to emergencies 200 hydrological surveys conducted in water stressed areas. 300 broken down hand pumps rehabilitated. Promotion of Rain Water Harvesting Strategy	100%	9,525,000	100	39.29	Completed the drilling of 40 production wells and 249 boreholes drilled across the country Hydrogeological surveys done for 10 large diameter wells in Nakasongola district in the sub counties of Nabiswera, Lwampanga, Kabinyonyi& Kakooge. Hydrogeological surveys done for 15 production wells in Wakiso, Luweero, Arua, Omoro, Isingiro, Rakai. Hydrogeological surveys done for 44 point water sources in the 14 districts and 349 broken down hand pumps rehabilitated across the country.
Total		**16,025,000**		**60.5**	

Source: MWE and field findings

Construction of fifteen mini pipes systems were planned and completed in the FY 2016/17. The systems in Butaleja, Lwengo and Busia were functional and appreciated by the beneficiaries. They are solar powered solar powered. The systems have been handed over to the Private Operators under the leadership of the Water User Committees for operation and maintenance. The private operator is paid an agreed percentage from the collection which ranges between 20-

30% of the total collections. The water charges to the beneficiaries differ from place to place for example in Munduya they pay 25 shillings whereas in Lwengo they pay 100 shillings per 20 water liter Jerry can.

The performance was affected by too many point water sources planned for example feasibilities planned (100) that may require more time to achieve. The expenditure on land was also not justified because the land for the sites visited was provided by the local governments and where compensations were made, they are no tittles acquired. Some is said to have been paid the project affected persons in terms of compensation for crops and property that had been damaged in the process of setting up channels and water supply distribution lines and other installments even in other projects.



L: Public water kiosk; Solar array, Pump House and Ecosan toilet for Munduya Water Scheme in Daban sub county Busia district

3.2.3 Water and Sanitation Development Facility Central (Project 1130)

Background

The GoU through the MW, with support from Development Partners established the Water and Sanitation Development Facility – Central as a mechanism for implementation of piped water supply and sanitation infrastructure in in small towns and rural growth centers in the central region of Uganda. The WSDF-C is funded under the water and sanitation program supported by the African Development Bank.

The overall objective of the Water and Sanitation Development Facility (WSDF) Central is to support the development of water supply and sanitation infrastructure in Small Towns (STs) and Rural Growth Centers (RGCs) through a decentralized and demand driven financing mechanism in the central and mid-western regions of Uganda.

The annual approved budget in FY 2016/17 was Ug shs 52.068,948,610 with a supplementary budget of Ug shs 1,259,948,610. The Ug shs 42,888,170,000 was available for expenditure and Ug shs 42,703,410,017 (99.5%) spent by end of June 2017. The project had carried over Ug shs 3,349,170,000 donor funds from the previous financial year which was used to pay ongoing works. So the expenditures included funds from the previous Financial Year (2015/16).

Performance

The physical performance of WSDF-Central by end of FY 2016/17 was rated good at 81.6% because some major outputs were achieved. Table 3.4 shows the summarized performance of the project.

Table 3.4: Performance of Water and Sanitation Development Facility Central

Output	Annual Planned Quantity or Target (%)	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Policies, Plans, standards and regulations developed Environmental catchment protection, sanitation, hygiene policies, Water supply and sanitation asset management plans/policies developed and disseminated in the Central region	100	869,000,000	100%	1.60	Water source / catchment protection activities undertaken in 7 towns of Kakooge, Katuugo, Ssunga, Kiboga, Migeera, Buvuma and Nyamarunda town water supply systems i.e. Planted trees at the sources and community trainings on source / catchment protection. Monitored implementation of site-specific Environment and Sanitation Management Plans for Kakooge, Katuugo, Migeera, Kiboga, Ssunga Nyamarunda, and Buvuma towns
Backup support for Operation and Maintenance: Water operators in Central region trained in water services management through 4 promotional campaigns for effective O&M. Defects liability monitored in 8[3] Water supply systems	100	3,500,000,000	100%	6.44	O&M training of water supply systems was held for communities in Ssunga, Katuugo, Kakooge, Buvuma and Nyamarunda. Refresher training for WSSB conducted in Kakooge. Monitored defects liability in 8 Water supply systems of Kayunga, Ssunga, Kiboga, Kakooge, Katuugo, Migeera, Buvuma and Nyamarunda.

[3] (Ssunga, Kiboga, Kakooge, Katuugo, Kayunga, Buvuma, Migeera and Nyamarunda)

Output	Annual Planned Quantity or Target (%)	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Improved sanitation services and hygiene Hygiene and sanitation Promotion conducted in 10No. Towns under design and construction activities. Community based training on appropriate sanitation and Ecosan technology	100	1,540,000,000	100%	2.83	Conducted sensitization meetings for the communities on the use and management of institutional and public toilets in 5 towns of Kabembe, Kalagi, Nagalama, Gombe and Kyabadaza. Conducted sanitation and hygiene promotion trainings in the communities of Katuugo, Kakooge, Migeera, Kayunga and Kiboga. Conducted community Training on Ecosan Technology (utilization & maintenance) in Buvuma RGC.
Monitoring, Supervision, Capacity building for Urban Authorities and Private Operators Commissioning and ground breaking for water supply and Sanitation systems in 16[4]No. Towns Consultant for Communication / marketing media audit procured	100	840,000,000	60.9%	1.03	3 towns of Katuugo, Kakooge and Migeera supported to establish and train effective O&M structures (WSSB). Commissioned 6 towns of Ssunga, Kiboga, Kakooge-Katuugo, Migeera and Buvuma. Conducted site handover for construction in 16 towns of Gombe, Kyabadaza, Kalagi, Kabembe, Naggalama, Bugoigo, Walukuba, Butiaba, Zigoti, Sekanyonyi, Namulonge, Kiwenda, Kabwoya, Kyakatwanga-Nyamarwa, Kayunga and Busaana. Communication consultant not procured
Acquisition of Land by Government: (Land acquired for Kagadi Water Supply and Sanitation System)	100	50,000,000	0	0.00	Funds were not released or this activity.

[4]Ssunga, Kiboga, Kakooge, Katuugo, Kayunga, Bugoigo, Walukuba, Butiaba, Gombe, Kyabadaza, Kagadi, Nyamarunda, Migeera, Kabembe, Kalagi, Nagalama and Buvuma.

Output	Annual Planned Quantity or Target (%)	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Government buildings and administrative infrastructure (Construction of WSDF-C Office Block Phase II (Water Laboratory, Stores, Dining shed, External building works)	100	500,000,000	0	0.00	Commenced consultancy for construction supervision (inception report and design review and tender documentation completed) though funds were not enough
Purchase of office and ICT equipment including software (IT Equipment supplied and installed for new WSDF-C Office Block).	100	200,000,000	100%	0.00	IT equipment supplied and installation was ongoing (**computers, laptops and printers)**
Purchase of specialized machinery and equipment (Submersible pumps, pipes, fittings and water meters procured for water supply systems).	100	1,000,000,000	100%	1.84	Pipes and fittings were procured

Output	Annual Planned Quantity or Target (%)	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Construction of piped water supply systems (Urban)- Construction of Town water supply systems commenced in 11[5] towns of Construction completed in 7 Towns of Ssunga, Kiboga, Kakooge, Katuugo, Migeera, Nyamarunda and Buvuma. 15 production boreholes drilled in the Central and Mid-western regions. Designs reviewed and construction supervised for 8 water supply systems of Kabembe, Kalagi, Nagalama, Sekanyonyi, Kyabadaza, Bugoigo, Walukuba, Butiaba. Feasibility studies, detailed designs and mobilization for implementation for 4 water supply systems of Butemba, Nalukonge, Kikandwa and Butenga Pre-construction and construction mobilization in implementation towns.	100	38,270,000,000	65%	56.21	Construction work is on-going in 10 out of the planned 11 towns and at various levels; Kabembe- Kalagi-Nagalama (40%), Gombe-Kyabadaza (55%), Zigoti-Sekanyonyi (30%), Bugoigo-Walukuba-Butiaba (10%), Kagadi is yet to start. 26 boreholes drilled in various towns of Kagadi, Kabembe, Zigoti, Lutuku, Migeera, Kyakatwanga, Igayaza, Nyamarwa, Nyamarunda, Kyazanga and Buvuma. Request for proposal for Procurement for consultancy to carry out Design reviews and construction supervision in 10 towns of Butemba, Nalukonge, Butenga-Kawoko, Kikandwa Kakunyu, Kiyindi, Kikandwa, Kasambya, Kiwoko, Butalangu was issued. Pre-construction mobilization activities (advocacy meetings, WSCs selection and follow up on land acquisition) completed in all towns of Kagadi, Gombe, Kyabadaza, Kalagi, Kabembe, Naggalama, Bugoigo, Walukuba, Butiaba, Zigoti, Sekanyonyi, Namulonge, Kiwenda, Kabwoya, Kyakatwanga-Nyamarwa, Busaana and Kayunga.
Construction of sanitation facilities	100	4,060,000,000	71%	8.15	Completed Construction of public water borne toilets in Buvuma (2No)

[5] Kagadi, Bugoigo, Walukuba, Butiaba, Gombe, Kyabadaza, Zigoti, Sekanyonyi, Kabembe, Kalagi, Nagalama.

Output	Annual Planned Quantity or Target (%)	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
(urban): Public sanitation facilities constructed in 12 towns of Kagadi, Nyamarunda, Bugoigo, Walukuba, Butiaba, Zigoti, Sekanyonyi, Gombe, Kyabadaza Kabembe, Kalagi and Nagalama. Construction completion of Kayunga FSM Facility					Kiboga (2), Kakooge (1), Katuugo (1), Migeera (1) Kayunga Fecal Sludge Management Facility was completed. However this was not reflected in the work plan
Total		**54,338,170,000**		**81.6**	

Source: WSDF-Central and field findings

L: Fecal Sludge receiving chamber;

R: Maturation pond in Kayunga district

L-R: A Public Stand Post at Kakooge WSS in Luwero Town Council Luwero district; Generator at Migyeera WSS and pump control in Mijeera Town Council in Nakasongola district

T[illegible] Kiboga, Katuugo, Nyamarunda systems and rehabilitation of Kakooge and Mijeera. Nyamarunda

system was expanded later due to increased demand thus 12 Public Stand Posts from original eight. The piped systems have public water borne toilets in public places and Ecosans at the guard houses. Construction of a Fecal Sludge Management Facility was completed in Kayunga in line with the sector strategic position of improving sewer network in urban piped systems. The construction of Ecosans for public use was only done in Buvuma district. The uptake of the technology was not properly scaled down especially in the public places because of poor operation and maintenance of the systems. However, the completed facilities were still under the defects liability period monitored by the project staff.

The water supply systems are under the Umbrella organization as the overall overseer of operation and maintenance. Kiboga piped water supply system was functional and under the management of the Water Board which had recruited eight staff to operate the system. The water supplies of Nyamarunda, and Katogo systems was on and off as the contractors were minimizing operational costs under the defects liability period. The power supplied by the generator was not enough to meet the demands of the dry spell at the time. Toilets in Kakooge and Mijeera were shunned by the community in preference to free latrines in the neighborhood.

There were delays in commencement of construction of new piped water systems due to delays in procurement thus not much was achieved. Fecal Sludge construction works commenced in Kiboga but the designs for Nakasongola delayed.

Implementation challenges

1) Land owners ask for exorbitant compensation prices for identified land for major installations yet funds/budgets are not readily available at both local and central governments. For example, Kabembe Kalagi, Bigombe Kyabakuza have not been compensated.
2) Absentee landlords, impede timely acquisition of identified pieces of land. Titling processes have been encumbered by absentee land lords/registered proprietors.
3) Delayed completion of design reviews for water supply systems by consultants affects timely commencement of procurement processes.
4) There were procurement delays due to time taken to seek no objection approvals
5) Uncertainty of management arrangements for completed water supply systems.
6) The huge Tax obligations (the Tax debt to the project is 5 billion). The projections have been discussed between MWE and MFPED with no clear way forward.

Recommendations

1) The WSDF-Central should engage beneficiary local governments of water systems early for timely planning, budgeting and acquisition of land for system components.
2) The WSDF-Central should engagement design review consultants early for timely procurement of construction works.
3) The WSDF-C should initiate the procurement process, early enough to avoid delays in implementation.
4) The MWE should follow recommendations of the ongoing study for operation and maintenance of piped systems.
5) The MFPED and MWE allocation for counterpart funding should be substantial enough to meet the pending obligations.

6) The MWE should work in accordance with section 3 of the VAT (Amendment) Act 2017 where, the obligation to budget and pay VAT on supplies received from contractors who execute aid funded projects was removed with effect from 1st July 2017.

3.2.4 Karamoja Small Town and Rural Growth Centers Water Supply and Sanitation (Project 1399)

Background

Though Karamoja region has received a lot of support in the past, these were not targeted towards sustainability but rather on addressing short term effects. There are many Urban Centers relying on point sources rather than piped systems being the standard for Urban Centers and RGCs and key for social economic development of urban and rural settlements. The O&M issues have not been addressed properly in the past. The costs of development of ground water are high and yet it is the main option in the region though with low potential.

The overall project objectives are to improve the socio-economic situation and the opportunities for people living in the Small Towns (STs) and Rural Growth Centres (RGC's) through provision of safe, adequate, reliable, sustainable and accessible water supply and promotion of improved practices of hygiene and sanitation in Karamoja"

The annual approved budget in FY 2016/17 was Ug shs 5 (five) billions of which Ug shs 4.275 billion (85.51%) was released and spent by end of June 2017.

Performance

The overall physical performance of the project was poor at 24.2% because most of the planned outputs were not achieved. Table 3.5 summarizes the performance of the project.

Table 3.5: Performance of Karamoja Small Town and Rural Growth Centers WSS

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Administration and Management Support Contract staff salaries paid Adverts and shortlists for recruitment of staff conducted	100%	118,000,000	75%	1.77	Adverts placed in the local newspapers. Recruitment for contract staff is ongoing
Improved sanitation services and hygiene Hygiene education and sanitation promotion campaigns conducted in Napak, and Moroto	4	100,000,000	2	1.05	Promotion of hygiene education and sanitation in Amudat and Kacheri-Lokona as the planned Hygiene education and sanitation promotion campaign conducted

districts Sanitation baselines conducted in Napak, and Moroto					Conducted Sanitation Baselines for Sanitation intervention for Amudat and Kacheri-Lokona Water Supply Schemes
Monitoring, Supervision, Capacity building for Urban Authorities and Private Operators(Stakeholder consultation/engagement conducted in Napak, and Moroto	2	170,000,000	2	3.40	Stakeholder consultations /engagements, monitoring of ongoing works carried out in Amudat and Kacheri-Lokona as the planned output. 2 meeting carried out with stakeholder in Napak and Moroto
Purchase of Motor Vehicles and Other Transport Equipment Vehicles for contracts staff purchased	2	600,000,000	0	0.00	Contract for supply of motor vehicles was awarded to M/S Toyota and was awaiting for Permanent Secretary signature.
Purchase of Office and ICT Equipment, including Software ICT equipment purchased for project staff operations	100%	30,000,000	100%	0.60	ICT equipment has been purchased and delivered.
Purchase of Office and Residential Furniture and Fittings Office furniture and fittings procured.	100%	50,000,000	0	0.00	Office and residential furniture and fittings to be purchased after deployment of staff to Moroto.
Construction of Piped Water Supply Systems (Urban) 3 water supply systems constructed/ rehabilitated in Napak, and Moroto districts.	100%	3,932,000,000	18.3%	17.33	Designs for Amudat completed and tendered and evaluation finalized. Contract signed and sites handed over to contractor and works commenced in May 2017. Physical works at 7%. Design for Kacheri-Lokona finalized 8 boreholes were drilled, tested and constructed in Matany, Orwamuge, Kalapata, and Tokora.
Total		**5,000,000,000**		**24.2**	

Source: MWE and field findings

The major achievements projects included ICT equipment purchased for project staff operations and stakeholder engagements/consultations and monitoring ongoing works. The construction of

three piped systems in Napak and Moroto districts was changed to Amudat and Kacheri-Lokona in Kotido district due lack of project designs documentation. More still the three planned projects were still at design stage which led to the poor performance of the project.

Challenges

1) Lack of approved designs to commence construction of schemes in the planned areas of operation.
2) Delay to initiate the procurement process for construction of the water supply systems.
3) Delay in recruitment of staff to be based in Karamoja Region to monitor implementation of the project.
4) Delayed procurement of vehicles to be used in executing the activities/monitoring and routine supervision of project activities.

Recommendations

1) MWE should procure design consultants early enough to fit within the project timing.
2) The MWE should initiate the procurement processes early enough to avoid unnecessary changes.
3) The MWE should fast track recruitment of staff for the Karamoja Region
4) The MWE should fast track the procurement of vehicles for monitoring/supervision of the project.

3.2.5 Protection of Lake Victoria-Kampala Sanitation Program (Project 1188)

The Protection of Lake Victoria is part of a broader Kampala Sanitation Program which is being implemented by NWSC in a phased approach. The current Phase I entails construction of three decentralized satellite sewage treatment plants with associated sewer networks located as follows:

- Nakivubo Wetland to serve the central business district of Kampala.
- Kinawataka Wetland to serve the eastern parts of Kampala particularly Nakawa industrial area, Naguru, Kyambogo and neighboring areas.
- Lubigi Wetland to serve the north and north western parts of the greater Kampala namely Mulago, Katanga, parts of Makerere and Kawempe, Nansana, Namungona Bwaise among others. The project start date was 31st March, 2010 and the end date was 30th, June 2018.

The project objectives are:

1) To provide improved urban hygiene, sanitation as well as protection of Kampala's natural environment through expansion of sewer network coverage within the metropolitan Kampala.
2) To provide improved management of sludge from onsite sanitation facilities.
3) To provide hygiene education in informal settlements within Kampala.

The project budget for the FY is Ug shs 48.365 billion (including donor funding of which Ug shs 58.111 billion was released and spent by end of June 2017.

Performance

The performance of the project was fair at 68% as few targeted outputs were achieved. The cumulative progress of Nakivubo waste water treatment plant was 84%, the Nakivubo-Kinawataka sewer network were laid to 75% and construction of Nakivubo pre-treatment plant had just commenced. Table 3.6 shows the performance of the project.

Table 3.6: Performance of Protection of Lake Victoria-Kampala Sanitation Program

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity	Weighted Physical Performance Score	Remark
Construction of Sanitation Facilities (Urban): Nakivubo Waste Water Treatment Plant (NWWTP) constructed 100%. Complete construction of Nakivubo and Kinawataka sewer network works to 90%. Commence construction of Kinawataka Pretreatment plant (30%).	81.70%	48,365,268,520	0.66	0.68	The cumulative progress of NWWTP was at 84% due to delays in URA granting tax exemptions for crucial construction materials The Nakivubo and Kinawataka sewer networks were 75% complete due to site acquisition and compensation challenges Kinawataka 20% complete due to delay in effecting advance payment to the contractor.
Total		**48,365,268,520**		**68**	

Source: NWSC and Field findings

The Sewer network area first had four black spots (Kasokoso, Banda, Nakivubo and Kyambogo valley) with land compensation matters and later Centenary Park racket that slowed down works. The land wrangles caused delay of more than one year. The contractor has unpaid certificated worth Ug shs 56 billion which has affected progress of works. The sewer network coverage under NWSC was at 7% coverage.

L: Anaerobic sludge digester; Kampala

R: coarse screens at NWWTP Bugolobi


L: Grit washer; R: Sludge thickening and watering building at the NWWTP in Bugolobi, Kampala

Implementation Challenges

1) There were delays in completion of the NWWTP attributed to relocation of the project site from Nakivubo swamp to Bugolobi Wampewo.
2) Delays caused by land acquisition and compensation challenges e.g. Centenary Park racket, Compensation of Kasosoko project affected persons. The private land owners request big sums of money for compensation in order to allow access for the sewer networks. Some of these areas such Banda and Kasokoso are in wetlands and have land titles for those pieces of land. This has delayed progress of works.
3) Payment of contractor and consultants' certificates to the tune of Ug shs 56.8 billion with 6 billion expected from GoU
4) Delays in URA granting tax exemptions for crucial construction materials e.g. Sulphate Resistant Cement which cannot be stored for a long time thus frequently imported.

Recommendations

1) The MWE should adequately allocate the GoU Counterpart contribution and release the funds timely to avoid accumulation of interest on delayed payments.
2) The URA should expedite tax exemptions of donor funded projects for the crucial construction materials e.g. Sulphate Resistant Cement which is delicate and expires very fast.

3.2.6 Kampala Water Lake Victoria Water and Sanitation (Project 1193)

This project is aimed at promoting sustainable socio-economic growth and improved health through enhanced access to safe water, thereby contributing to the poverty eradication efforts of Government. The project targets to provide safe water to a population of over 4 million within

the Greater Kampala Metropolitan Area (GKMA) up to the year 2035. The project start date is 07/01/2011 and the end date is 06/30/2018.

The project objective is to increase coverage, reliability and access to clean, affordable and economically viable water supply services for the population of metropolitan Kampala, in particular the urban poor, for sustainable growth until 2035.

The approved budget of the project is Ug shs 47,255,225,000 of which Ug shs 47, 239,006,333 (99.9% of the budget was released) and all spent by June 2017.

Performance

The performance of the project was poor at 33.3% and the project only completed and commissioned Gaba works. The performance of the project is presented in Table 3.7.

Table 3.7: Performance of Kampala Water Lake Victoria Water and Sanitation

Output	Annual Planned Quantity or Target (%)	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity (%)	Weighted Physical Performance Score	Remark
Construction of Piped Water Supply systems (Urban): Kampala Water Network Improvement & Extension made Construction of new water treatment plant in Katosi and associated transmission network and storage facilities completion. Institutional support and capacity building achieved	100	47,255,225	33	33.31	Networks Gaba water works and Namasuba works were substantially completed and commissioned. However, extension of 42 km mains was not carried out. Transmission Main Works Contract signed while evaluation of the Drinking Water Plant is ongoing. Training needs assessments identified and developed Terms of Reference for gaps identified.
Total		**47,255,225**		**33.31**	

Source: NWSC, IFMS and Field findings

The project still far from achieving it objectivities. A number of challenges have been faced which dragged down implementation and they include the following:

The Implementation challenges

1) Delays caused by bureaucracy in the financing packaging among donors French Agency for Development (AFD), German Financial Cooperation (KFW) and European Investment Bank) where all had to approve processes until they chose AFD as lead agency.
2) The lengthened project cycle affected budget estimates initially made in 2011. The budget estimate then was about 212 million euros but in 2017 the estimate came to about 350 million euros. Hence additional funding for the project is required.
3) Ambiguity in the policies on compensation causes unnecessary conflict that leads to delays in implementation and increase in costs.
4) Difficulty in mobilization of different arms of government for coordinated action e.g. NEMA Act forbids issuance of land titles in wetlands and restricts use of the wetlands. However, titles for the wetlands are still being issued by Ministry of Lands Housing and Urban Development to private companies and high costs are incurred by NWSC for their use and compensation.
5) The GoU requires all NWSC's operations to be taxed. Accumulation of funds to finance the tax components on project certificates takes a long time and causes delays in implementation of the projects.
6) High costs of permits e.g. for wetland use, and lengthy approval periods by some government departments e.g. Chief Government Valuer (CGV), NEMA
7) The GoU does not allocate funds for the projects in accordance with its commitments under the various financing agreements which affects the progress of implementation.
8) The payment procedures for projects require that invoices be paid with 56 days. However, delays in payment of certificates forwarded to the Ministry of Water and Environment often leads to high interests on delayed payments.

Recommendations

1) The Government should fast truck reassessment of its policies concerning securing land for installation of public infrastructure.
2) The GoU should consider eliminating taxes from infrastructure projects since there is no value addition in moving taxes from one government department to another.
3) The MWE should create a forum within which infrastructure development can be discussed with a wider stakeholder engagement including Uganda Revenue Authority, National Environment Management Authority, Uganda National Roads Authority, Kampala Capital City Authority and National Forestry Authority. This will quicken approval processes, streamline infrastructure plans and safeguard public assets.
4) The GoU should allocate sufficient funds as detailed in the Mid-Term and other Budget Frameworks for infrastructure development.
5) The MWE should eliminate some of the approval processes for certificates at MWE that are a duplicate of NWSC's processes.
6) The MLHUD should decentralize services of the CGV and change the structure to recruit more staff so that they can speed up evaluations.

The urban water supply NPA target for the FY 2016/17 was 90% coverage. By June 2017, the urban water coverage will be 77% having increased by 6%. This is against the NDP II target of 90%[6] coverage for the FY 2016/17.

3.2.7 Water for Production (Project 0169)

Background

Water for production refers to development of water resources for productive use in agriculture (crop irrigation, livestock and aquaculture), rural industries, wildlife recreation, hydropower generation, transport and commercial uses. Water for production (WfP) is a key area for the successful implementation of the GoU's Plan for Poverty Eradication under the second priority area of PEAP. The implementation framework is derived from recommendations of the subsector reform studies and WfP sector investment plans (2005-2015). The project is among others contributing to the implementation of the Prosperity for All (Bonna Baggaggawale) programme.

The overall objective of the project is to improve the quality of life and livelihoods of the population through provision of water for productive use in irrigation, livestock, domestic, aquaculture and rural industry.

The annual approved budget in FY 2016/17 is Ug shs 32,100,000,000 of which Ug shs 27,517,668,521 (85.7%) was released and spent by 30th June 2017.

Performance

The performance of WfP was good at 70.9% by end of the FY 2016/17. However, the general performance was not good because so many projects were planned and either did not commence or were not completed. Thus there was not much done to increase the cumulative storage capacity of water for production. Table 3.8 shows the summarized performance of the project.

Table 3.8 Performance of Water for Production (Project 169)

[6] Second National Development Plan (NDPII) 2015/16-2019/20

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity	Weighted Physical Performance Score	Remark
Supervision and monitoring of WfP activities: Ongoing and new facilities under WfP; Mabira dam in Mbarara, Rwengaaju Irrigation scheme in Kabarole, Kyabal and Kabingo valley tanks in Sheema district; 9 valley tanks in Gomba and Sembabule districts under Kisozi Livelihoods Improvement Project; Iwemba and Nabweya valley tanks in Bugiri district, Ongole dam in Katakwi district, Akwera pilot irrigation scheme in Otuke district, Wind-powered water supply systems in Karamoja sub region, construction of WfP facilities countrywide using Ministry WfP equipment monitored and supervised.	100%	2,500,000,000	70%	19.49	Supervised and monitored construction valley tanks in Gomba, Sembabule, Bugiri, Ongole dam in Katakwi and windmills in Karamoja. Contract for reconstruction of Mabira, Rwengaju and procurement of contractor for Akwera awaited availability of funds; Supply and installation of windmill-powered watering systems delayed by changes in some sites which were found non-feasible after test pumping.
Acquisition of Land by Government Land for facility development secured where appropriate, land owners compensated for construction of WfP facilities.	100%	200,000	200,000,000	1.75	50 acres were secured in favor of Government through signing agreements of land offer by the land owners for 15 sites
Purchase of Office and Residential Furniture and Fittings: Furniture, AC, Shelves, curtains and internet for the center office procured.		150,900	0	0	Furniture, AC, Shelves and curtains for the center office not procured.
Sustainable Water for Production management systems established Sustainable management and establishment of seven (7) farmer field schools at WfP facilities of Andibo dam in Nebbi, Longoromit dam in Kaabong, Olerepec valley tank in Apac, Ongole dam in Katakwi and Olami-A valley tank in Apac, Leye dam in Kole and Arechek dam in Napak district. Sustainable management and establishment of six (6) farmer field schools at WfP facilities of Mabira	100%	2,214,000	25%	10.9	The procurement of consultants for the establishment of the 13 farmer field schools to sustainable management was ongoing. The process had reached contract signing.

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity	Weighted Physical Performance Score	Remark
dam in Mbarara district, Kakinga dam- Sembabule, Obwonjerero and Kagamba bulk Water supply system – Rakai, Kyabal and Shuku valley tanks in Sheema. Environment protected through watershed management of the areas around WfP facilities. Four facilities protected (Arecheck dam in Napak District, Andibo dam in Nebbi district, Ongole dam in Katakwi District and Mabira dam in Mbarara District). Baseline surveys and performance evaluation of WfP facilities Countrywide carried out.					Environment not protected. This activity awaits establishment of the farmer field schools. Baseline surveys and performance evaluation of WfP facilities Countrywide carried out.
Purchase of Motor Vehicles and Other Transport Equipment 3 Construction equipment, Low bed and Dump truck; 3 Service Trucks for WfP Department procured and Machinery, Equipment and vehicles maintained.	100%	300,000	100%	2.83	The 3 construction equipment, low bed, dam; 3 service trucks were procured.
Construction of Bulk Water Supply Schemes Eight WfP facilities designed: Seretyo irrigation scheme in Kween district, Namata/Nakaale dam in Nakapiripirit district, Geregere dam in Agago district, Ojama dam in Serere district, Ogwete dam in Otuke district, Nabitanga, Buteraniro in Sembabule district and Kenwa in Kiruhura district. Rwengaaju Irrigation Scheme in Kabarole district constructed to 30% cumulative progress.	100%	5,186,000	18.75%	17.57	Three WfP facilities were designed (Nabitanga, Buteraniro in Sembabule district and Kenwa in Kiruhura district). Procurement for design consultants had just been initiated for the remaining five WfP facilities. Seretyo irrigation scheme in Kween district delayed by the procurement process. Design of Ogwete dam in Otuke district and Acanpii dam in Oyam district affected by community resistant. Construction of Rwengaaju Irrigation scheme had not commenced awaiting

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity	Weighted Physical Performance Score	Remark
					payment of advance certificate.
Construction of Water Surface Reservoirs Two WfP facilities designed: Acampii dam in Oyam and Bigasha dam in Isingiro districts. Construction completed at the following dams Andibo dam in Nebbi (100% cumulative progress), Ongole dam in Katakwi (100% cumulative progress), Mabira dam in Mbarara (10% cumulative progress), Wind powered water supply systems in Karamoja (10% cumulative Progress). 15 valley tanks constructed in Nakasongola (3), Kiboga (3), Mubende (3), Luweero (2), Sembabule (2), Nakaseke (2) under Global Climate Change Alliance project (100% Cumulative progress).	100%	21,313,100	50%	18.00	Design of Acanpii dam in Oyam district affected by community resistant. The site has been replaced by Kyenshama dam in Mbarara district. After failing to attract responsive bids, the procurement process for design of Bigasha dam was retendered. Progress was as follows Andibo dam (100%), Ongole dam (100%), 14 windmill powered water systems (15%), Reconstruction of Mabira dam (0%) awaits funds. The procurement process of Mabira dam failed to attract a responsive bidder. The construction of 15 valley tanks was at substantial completion stage (95%).
Total		**28,713,100**		**70.9**	

Source: MWE and field findings

The valley tanks in Gomba and Sembabule districts under Kisozi Livelihoods Improvement Project were completed but had not received enough rains and some were not yet fully operational. The intake at Butugo valley tank and the watering troughs at Lutunku valley tank had cracked. However, the tanks were not yet commissioned. They were under the defects liability thus the cracks should be rectified before handover.

The formation of farmer field schools for sustainable management of facilities had lagged due to delayed initiation of procurement. The design of Ogwete dam in Otuke district and Acanpii dam in Oyam district were affected by community resistance. The sites were replaced by Makokwa and Kyahi dams in Gomba districts and Kyenshama dam in Mbarara district respectively. The project performance has been affected by inadequate funds to initiate procurement of some projects, slow response of bidders and land acquisition to establish projects.

Challenge

1) Failure to attract responsive bidders for some WfP works fail to which delays works for example construction of Bigasha dam in Isingiro district. The bidding quotation for Mabira as too high at Ug shs 6.8 billion compared to estimated cost of one billion Uganda shillings.
2) The construction of bulk water supply systems requires a lot of money which my take a long time given the funding gaps existing in the sector. For example, Rwengaju did not commence due to lack of advance payment.
3) The acquisition of land for big projects is not easy and projects have been either delayed awaiting exorbitant compensations or shifted to other beneficiaries. For example, Ogwete dam in Otuke district and Acampii dam in Oyam district affected by community resistant. The sites have been replaced by Makokwa and Kyahi dams in Gomba districts and Kyenshama dam in Mbarara district respectively.

Recommendation

1) The MFPED should provide more funds to the sector to meet the funding gap for the NDP target of provision of water for multipurpose with irrigation as a mitigation measure against rain fed Agriculture.
2) The government through the Ministry of Lands, Housing and Urban Development (MLHUD) should provide the legal instrument that will ease the process of government acquisition of land for public projects should be instituted.
3) The MWE should rationalize resources and phase projects into short term projects that can have an impact on ground other than scattering projects which take too long to complete.
4) The MWE should fast track use of force on account for projects where feasible to reduce on implementation costs thus eliminating time wastage in retendering projects.

3.2.8 Water for Production Regional Center-East (Project 1397)

Background

The water sector has undertaken significant investments in the water for production since the early 1990's in the cattle corridor districts that stretch from Isingiro in South Western Uganda to Karamoja in North Eastern. Bringing service coverage to 65%, to-date, a sharp increase in demand is being experienced, primarily because of the high population growth, new approaches (force on account) to service delivery and the effects of climate change resulting in water stress in most parts of the Country. The Ministry decentralized its service delivery operations at regional level to bring services closer to the communities.

The overall development objective is to improve the quality of life of the population through provision of water for productive use in livestock, aquaculture and mitigate effects of climate change through modern irrigation technology.

The annual approved budget in FY 2016/17 is Ug shs 5,000,000,000 of which Ug shs 4,999,999,888 (99.9%) was released spent by end of FY2016/17.

Performance

The overall physical performance of the project was very good at 68.4%. Most of the planned half year targets were not achieved. Table 3.9 reflects the performance of Water for Production Regional Center-East.

Table 3.9: Performance of Water for Production Regional Center-East

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Supervision and monitoring of WfP activities On-going and completed works in Ongole dam in Katakwi district, Kajamaka and Kodhukul dams in Kumi district, Arechet, Kobebe, Longoromit, and Windmill powered watering systems in Karamoja, Lodoon dam, Valley tanks constructed in Katakwi district, valley tanks constructed in Teso and Karamoja sub-regions monitored and supervised.	100%	316,000,000	44%	6.67	Supervised construction of: Iwemba and Nabweya valley tanks in Bugiri District (95%), Ongole dam in Katakwi district (100%), 2 Valley tanks using Ministry equipment in Tororo and Soroti. Windmill-powered water supply systems in Karamoja sub-region (25% cumulative progress). Supervised feasibility studies and design of Ngenge Irrigation in Kween District. Atari Irrigation scheme in Bulambuli

Feasibility study and design of strategic dams in Karamoja sub region, design of Ojama dam in Serere district, Ngenge Irrigation Scheme in Kween district and Namatata/Nakale dam in Nakapiripirit and Lodoon dam in Napak district supervised					
Sustainable Water for Production management systems established Consultancy services for sustainable management of WFP facilities in Eastern and Karamoja regions (training/ capacity building, establishment of management structures (No.10) for completed and ongoing works, mobilization and sensitization. Watershed of the areas around constructed WFP facilities managed and protected.	100%	450,000,000	0%	4.75	Contract signed, commencement letter issued and consultant was to start works by end of July, 2017 to carryout Watershed management of Abileng Valley tank in Kumi District.
Acquisition of Land by Government: 15 pieces of land purchased for the sites of construction	15	100,000	15	0.71	Land was acquired for 15 sites to construct the water systems
Construction of Water Surface Reservoirs Construction of Four (04) Community valley tanks using equipment through force account mechanism. Construction of Iwemba and Nabweye valley tanks in Bugiri District (95% cumulative progress) Consultancy services for Condition assessment of WfP facilities in Eastern and Karamoja region and design of at least sixteen (16) valley	100%	3705131977	80%	52.52	Iwemba and Nabyeya valley tanks in Bugiri District constructed up to 95% cumulative progress as planned Final design report submitted for sixteen (16) valley tanks in eight (08) districts of Eastern and

tanks in eight (08) districts of Eastern and Karamoja regions. Consultancy services for Engineering design of a mini irrigation scheme at Ongole dam in Katakwi district.					Karamoja regions Final design report of a mini irrigation scheme at Ongole dam in Katakwi district submitted
Total		**4,471,131,977**		**68.4**	

Source: WfPRC-East and field findings

Consultant's procurement for the establishment of management systems for water for production facilities and facilitating protection of watershed areas around the facilities delayed. The contracts had just been signed. Iwenba and Nabweya valley tanks were completed and functional. The community appreciated the facilities for water stress relief especially during dry spells. A community member in Nabyeya was taking advantage of the protected dam and growing rice using the protected water in the valley tank for irrigation.

L: Pump house, solar panels at Iwemba Valley Tank in Iwemba sub county R: Watering Toughs at Nabweya Valley Tanks in Nabukalu Sub County Bugiri district

Challenges

1) Inadequate staffing. The project covers 38 districts in Eastern Uganda and Karamoja and therefore requires additional technical staff to adequately deliver.
2) High costs involved in acquisition of Land. The land lords get excited over government funded projects and charge high rates for compensation.
3) Inadequate complementary services especially on-farm support services in agronomy.
4) Inadequate funding for the project yet it is supposed to cover a wide area of operation.

Recommendations

1) The MWE build the capacity of district local government in order to strengthen the operation and maintenance of the completed projects to enhance sustainability.

2) The MWE should Increase the staff levels in the regional centers.
3) The DLGs together with the beneficiary communities should meet their obligation to provide land as a contribution for water for production facilities.
4) The MWE should put in place management structures in consideration of provision of funding for payment of care takers for the completed facilities.
5) The MWE should lobby for more funding of the project for it to have meaningful impact.

The project completed 18 valley tanks of 10,000 m^3 capacity and other 96 valley tanks with various capacities using the Ministry equipment. The consultants for setting up management structures for WFP facilities were yet to be procured. There are many projects still under design and procurement. Therefore, there was little contribution to the cumulative quantity of water for production storage capacity for multipurpose use and increasing the functionality and utilization in the FY 2016/17 as the WFP NDP objective.

3.2.9 Support to WRM (Project 0165)

Background

The project aims at improving water services and outputs of water resources management and reporting on compliance with policies standards and regulations. Water resources management is indirectly linked to poverty alleviation in so far as it enables efficient implementation of crucial economic and social infrastructure such as water supply, roads, irrigation and hydropower.

The overall development objective of the project is improved regulation of water abstraction, pollution monitoring and assessment of the water resources, water quality analysis and monitoring network upgraded and operated in an integrated and sustainable manner.

The annual approved budget in FY 2016/17 was Ug shs 6,415,975,981 billion of which Ug shs 6,415,975,981 billion (100%) was released and Ug shs 6,096,237,273 billion (95%) spent by 30th June 2017.

Performance

The performance of the project was good (71.4 %) as a number of planned targets were achieved. Table 3.10 shows the summarized performance of the project.

Table 3.10: Performance of Support to WRM

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Administration and Management support: Amendments of Legal Framework for WRM approved by government	100%	666,206,000	0.67	8.57	ToR has been prepared and Consultant to be hired to undertake finalization of the water policy and water bill.

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
30% establishment of Water Resources Institute Water Policy (WPC) Committee Supported.					Operationalization report for WRI institute completed and actual operationalization planned for next FY 1 Water Policy (WPC) Committee meeting held & 1 strategic meeting to discuss policy recommendations regarding self-supply within gazette areas of NWSC.
Uganda's interests in trans boundary water resources secured Trans boundary catchments identified, mapped and trans boundary sub catchment management plans developed (Middle Malaba, Lower Sio) at 100%. Water allocation Tools for trans boundary River Basins developed at 100%, implemented and regularly maintained. Coordinate preparation of 1 New trans-boundary Project Uganda's interests in regional programmes (IGAD, LVBC, NBI) promoted and secured	100%	676,000,000	0.946	10.82	Trans boundary catchments identified, mapped and trans boundary sub catchment management plans are being developed (Middle Malaba, Lower Sio). Water allocation Tools for trans boundary River Basins developed to 40%. 3 trans boundary projects of Lake Edward and Albert Fisheries (LEAF), Nyimur and Kabuyanda prepared. Implementation is at 100%, 80% and 70% respectively 4 Trans boundary projects coordinated and NBI water Summit held in Uganda
Water resources availability regularly monitored and assessed: 93 surface water monitoring stations operated and maintained. 66 Telemetry stations maintained. 40 new surface water telemetric stations constructed.	100%	939,000,000	0.844	15.03	60 out of 93 surface water monitoring stations were operated and maintained 66 Telemetry stations were maintained. Construction of 40 new surface water telemetric stations ongoing. 42 Groundwater stations were operated and maintained

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
42 Groundwater stations operated and maintained. 8 surface water assessments undertaken to support hydropower development and other development projects. Rating curves for 40 stations reviewed and updated. 3 Databases operated and Maintained. Upgraded the water resources database with a new software. Flood and Drought Management Strategy developed					Construction of 13 new Groundwater Monitoring Stations being finalized 8 surface water assessments were undertaken to support hydropower development and other development projects. Activity was carried out. 4 Databases (water resources, water quality, dam safety, and water permit) were operated and Maintained. Upgrade with Aquarius software done. Flood and Drought Management Strategy was not developed
The quality of water resources regularly monitored and assessed: 2 Regional Water Quality Laboratories in Fort portal and Mbarara set-up and equipped. National Water Quality Reference Laboratory in Entebbe operated and maintained. National Water Quality Database finalized and linked to regional water quality laboratories. A National Laboratory Policy for water, wastewater and environmental quality services implemented.	100%	1,240,000,000	0.77	13.73	1 regional laboratory at Fort portal set up with basic equipment while Mbarara laboratory lacked space. 3 New laboratory equipment installed (high performance liquid chromatography-HPLC, Gas chromatography mass spectrometer-GCMS, and Liquid chromatography mass spectrometer-LCMS). 90% of the National Water Quality Database developed. A national Laboratory policy for laboratory was completed. Implementation awaits completion of the National Drinking water framework study, Bankable Project proposal for implementation of Inner

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Water Quality Management Strategy for Inner Murchison Bay Lake Victoria implemented On-line remote sensing water quality data collection for oil and gas waste monitoring operated and maintained. National Water Quality Status/Outlook report prepared and disseminated. National Framework for drinking water regulation and monitoring developed					Murchison Bay strategy submitted to MFPED for funding On-line remote sensing data collection technique operated and maintained. National Water Quality status/outlook prepared and disseminated as part of the sector performance report Draft Final National Framework for drinking water regulation and monitoring developed.
Water resources rationally planned, allocated and regulated 240 water permits (groundwater and surface water abstraction, drilling, construction, dredging and waste water discharge) issued. 54% of waste water discharge permit holders comply with permit conditions. 75% of water abstraction permit holders comply with permit conditions. 60% of major polluters/ abstractors regulated according to the water laws and regulations. 40 Environmental Impact assessment (EIA) reports	100%	405,485,000	0.9647	2.21	290 water permits issued, both renewal and new ones. 55% of waste water discharge permit holders with permit conditions achieved. 75% of water abstraction permit holders comply with permit conditions. Compliance attributed to the water resources regulation campaign done. 60% of major polluters/ abstractors regulated. 40 Environmental Impact assessment (EIA) reports were assessed and reviewed. These

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
assessed and reviewed. A water permits database redesigned and updated with online facilities. Dam safety and reservoir regulation and management framework developed and operational					are demand driven. A water permits database was redesigned and updated with online facilities. Dam safety and reservoir regulation and management framework were developed.
Catchment-based IWRM established 14 catchment management plans developed and being implemented 30% of the actions in 6 catchment management plans being implemented 11 catchments with established and operational structures for stakeholders' involvement in catchment based water resources management	100%	686,515,000	96.42	10.99	12 catchment management plans developed and being implemented, other two are being finalized 30% of the action plans was implemented as planned Stakeholders Forum, Catchment Management Committees (CMCs)were established in the 11 catchments
Degraded watersheds restored and conserved Annual subscription to intergovernmental bodies such as Nile Basin Initiative (NBI) paid	100%	630,000,000	1	10.08	Annual subscription to intergovernmental bodies such as Nile Basin Initiative (NBI paid.
Purchase of Specialised Machinery & Equipment Laboratory equipment procured	100%	1,003,834,000	0	0.00	Contract for procurement of laboratory fume hoods signed
Total		**6,144,198,054**		**71.4%**	

Source: DWRM and field findings

L- R High performance liquid chromatography; Liquid Chromatography Mass Spectrometer; Gallery plus Spectrometer in Entebbe laboratory Wakiso district

Over the NDPII period the focus of the WRM is on implementing the water resources management reforms and promoting catchment based integrated water resources management and implementing the water resources management reforms. There was continuous water resources monitoring and regulation, water quality management among others. Key to note is the lack of equipment for monitoring, expertise in WRM, inadequate water quality, quantity and component measurements taken.

Implementation Challenges

1) Due to limited funds, many applications for permits are not assessed which affects water quality monitoring difficult.
2) The laboratory operation at Entebbe is uses very expensive chemicals yet its budget is small.
3) There is no follow up on Environmental Impact Assessment recommendations which lead to violations of conditions in some instances.
4) Shortage of manpower due to unfilled structure of the WRM Directorate.
5) The discharge water samples analysis is very small where assessments consider an entity/industry alone thus missing out on the cumulative impact and currently limited to Biological Oxygen Demand (BOD). There are other organic components like phosphorous and nitrates which may be dangerous to the environment like L. Murehe in Kisoro which is highly nitrified from nonpoint source effluent from the big gardens of tea estates.
6) The national water quality network is ambient especially at the receiving end. Case in point is the Muchion Bay, Namanve industrial park do not have a proper discharge network inbuilt. The industries act as individuals whose effluent will end up affect environment.

Recommendations

1) The MWE should seek parliamentary approval to use NTR at source which will supplement the Directorate budget for laboratory consumables. The fund could be piloted as a special fund for regulation purposes to regulate and enforce penalties.
2) The MWE should give priority budgeting to EIA recommendation adherences such that proper follow ups on terms and conditions are made.

3) The MWE should increase the discharge sample size and regularize data water quality analysis (quarterly) to make meaningful results. Other categories especially factory effluent, pesticides, insecticides and herbicides effects should be included.
4) The MWE should develop specific water quality network to address specific areas. An assessment of the flow system of different water bodies and know how much volumes/ flows they can handle and classify them accordingly.

3.2.10 Water Management Zones (Project 1348)

Background

The Water Management Zone (WMZ) offices were established in each of the four WMZs in July 2011 and each is currently staffed by five to eight officers including a WMZ Coordinator. The WMZ teams have continued to engage in raising awareness among the key stakeholders about the need to promote integrated planning, management and development and water resources following a catchment based approach. The WMZs zones are fully established and operationalized and demand for their services in terms of laboratory services, water resources, technical guidance and support to local governments, water users and other stakeholders continues to increase.

The objective of this project is to support catchment based planning, management and development of water resources of Uganda for meeting the socio-economic needs of the present and future generations of Uganda in a sustainable manner.

The annual GoU approved budget in FY 2016/17 for the project was Ug shs 1,370,000,000 of which Ug shs 1,350,000,000 (98.5%) was released and Ug shs 1,349,981,582 (99.9%) spent by 30th June 2017.

Performance

The performance of the project was fair at 58%. The WMZs have achieved most of the planned outputs. However currently they have limited capacity to plan, manage and develop the waters resources in sustainable manner. Table 3.11 reflects performance of the project in the FY.

Table 3.11: Performance of Water Management Zones Project

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remarks
Catchment-based IWRM Established 204 (71 Surface water, 30 Groundwater and 103 water Quality)	91%	1,290,000,000	0.53	55.2	71 Surface water, 30 Groundwater and 103 water Quality monitoring stations were maintained and operated. 380 Water Permit holders were

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remarks
monitoring stations maintained and operated. -360 Water Permit holders monitored for compliance. -100 permit applications assessed. -3 regional water quality laboratories operated and maintained. -4 stakeholder awareness raising workshops held. -4 catchment management plans for Kiha, Katonga, Lokok and Lokere catchments in Albert, Victoria and Upper Nile WMZs developed. -30% of the investments in 6 catchment management plans implemented. -2 catchments in which climate change adaptation measures targeted at reducing vulnerability are implemented 11 catchments with established and operational structures for stakeholders					monitored for compliance 110 permit applications assessed 3 Regional water quality laboratories of Lira, Mbale & Fort portal were operational: 1,898 samples were collected and analyzed; UGX 15.2m NTR was collected. 2 Catchment Management Plans for Lokok and Lokere catchments were completed Preparation of Kiha catchment management plan was at 40% Preparation of Katonga Catchment Management Plan was not achieved due to delays in finalizing the procurement and seeking no objection from the World Bank hence differed to FY 2017/18 35% of the investments in 6 catchment management plans (Rwizi, Mpanga, Semuliki, Aswa, Ruenzamyenda and Awoja) implemented. Climate change adaptation measures targeted at reducing vulnerability were implemented in Awoja and Maziba catchments. Catchment based water resources management structures (Stakeholders Forum, Catchment Management Committee) were established and operational in 12 catchments
Government Buildings and Administrative Infrastructure	100%	80,000,000	50%	2.92	Offices for Water Management Zone in Fort Portal renovated but the Mbarara offices were not

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remarks
Offices for Water Management Zones in Mbarara and Fort portal renovated					renovated
Total		**1,370,000,000**		**58.2%**	

Source: DWRM and field findings

The performance of the Zones was fair in as far as achieving the set targets is concerned. So far 12 catchment management plans developed and being implemented. There are CMCs in place to coordination and oversee catchment management plans implemented. However, the targets may not be easily be measured because they lack a clear baseline and the contribution of each zone is not clear in some instances. There is limited operational water resources monitoring and information management, licensing and regulation at WMZ level, there limited capacity in terms of staffing numbers and facilitation of station operators, equipment for data collection, centralized data bases which affect operations of the zones.

L-R: River Tochi II Monitoring station in Aber sub county, Oyam district. Telemetry station at River Rwizi in Mbarara municipality. Waste water discharge management point at Busia Sugar and Allied Ltd in Busia district

Implementation challenges

1) There are abstractors within the jurisdiction of NWSC who cannot be issued with permits unless NWSC grants them a letter of no objection. Yet NWSC is not ready to do this which calls for review of the Water Policy.
2) Limited staffing in the Zones for example in the Upper Nile Management Zone, there are only two staff to operate the laboratory and carry out field activities.
3) There is limited expertise in Integrated Water Resources Management. This implies that very few consultants respond to works advertised and more so their ability to adequately do the work is limited.
4) Funding for the laboratory equipment is limited, yet operating the laboratories is quite expansion.

5) There is over centralization of roles in the zones which incapacitates the staff on ground. For example, it takes long to get feed on which permits issued because assessment is made at zonal level and issuance at central level which makes follow up difficult.
6) Lack of water level measuring equipment, discharge measuring equipment (River Ray ADCP Machine) at zonal level for quality checking data. There are only two machines which are at the center.

Recommendations

1) The MWE should fast tract the revision of the water policy in line with the sector strategic interventions vis-à-vis the private sector development interests for water abstractors.
2) The MWE should priorities funding equipment e.g. for laboratories as it is critical for quality assurance of the safe water supplies.
3) The MWE should take advantage of the regional integration to tap on the skills of the East African Community by calling expertise from the region for water resources management contractual works.
4) The MWE should decentralize some of the central roles for coordination and ease of work.

3.2.11 Saw log Production Grant Scheme Project (Project: 1189)

Background

Sawlog Production Grant Scheme (SPGS) Phase II was a Government of Uganda project funded by the European Union (EU) and the Government of Norway (GoN). The program supports private sector investors in commercial tree planting throughout Uganda by offering conditional planting and maintenance grants as well as a practical training and technical support in various techniques to establish and maintain profitable forest plantations. The Project period was 01/07/2011 to 30/06/2017.

The overall project objective is to support households to increase income through commercial tree planting.

The annual approved budget for FY 2016/17 was Ug shs 878,000,000 which was all released and spent by end of FY2016/17.

Performance

The performance of the project was 42% which was poor performance as most planned outputs were not carried out as there was a mixture of roles and responsibilities with FAO which affected the set targets (Table 3.12).

Table: 3.12: Performance of Saw Log Production Grant Scheme

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Promotion of Knowledge of Environment and Natural Resources. (10 DFS staff backstopped 200 farmers trained/advised,	100%	50,000,000	100%	5.69	Undertook inspection of Phase II clients and woodlots in 8 districts of North and North Eastern Uganda. Technical backstopping was undertaken for DFS in the 18 districts. Over 330 farmers trained/advised
Restoration of degraded and Protection of ecosystems Support the establishment of community plantations and out grower scheme for all clients	100%	40,000,000	5%	0.21	Held various short trainings with **50** tree farmers on forest management in **3** districts of Lwengo, Masaka and Rakai, however, no forest contractors was certified and no nursery operators was certified. These activities were implemented by FAO/SPGS III.
Capacity building and Technical back-stopping. Improved skills and knowledge among all project staff and other stakeholders in the forestry sector	100%	30,000,000	75%	2.56	Under took technical backstopping advice to 76 farmers and 2 DFS in the districts of Tororo, Mbale, Soroti, Kumi, Serere, Amuria, Bukedea, Hoima and Masindi Inspected forest demonstration sites and gave technical advice to farmers in **6** cattle corridor districts of Nakaseke, Luwero, Nakasongola, Kiboga, Sembabule and Mubende.
Administration and Management Support Administrative overheads for the	100%	608,000,000	26%	17.94	7 staff paid salaries, office sundries, vehicle maintenance, IT support and utilities.

project office supported					
Purchase of specialized machinery and equipment (Specialized tools and equipment purchased for plantations management)	100%	5,000,000	100%	0.57	Procured 1 GPS (GPSMap64) and 1 digital Camera. Though this looks to be on a higher side.
Purchase of Residential Furniture and Fittings (Project office furniture and fittings purchased)	100%	5,000,000	100%	0.57	Procured one (1) filing cabin. Procured one (1) office chair.
Acquisition of Other Capital Assets Grant payments to all private planters for tree plantations established to standards	100%	140,000,000	88%	14.97	The output is done by FAO. So changed to demonstration woodlots. 26.3Ha (88%) of demonstration woodlots were successfully established out of the planned 30Ha.
Total		**878,000,000**		**42.5%**	

Source: Field findings, MWE and IFMS

L: Tree seedlings in Nursery bed for Woodlots at Bugema University in Luwero district R: The overgrown weed cleared in the woodlot in Omoko-kitunge village, Lalogi Sub County, Omoro district

Implementation challenges

1) Delayed issuance of contracts to staff which affected implementation of the project activities.

2) Delayed approval of budget reallocation submitted to MoFPED for SPGS III since SPGS II donor funds ended.
3) Delayed release of means of transport from Food Agriculture Organization (Vehicles under SPGS II) led to little flexibility in transport.

Recommendations

1) The MoFPED should fast-track reallocations as per the request submitted for to bridge the gap in implementation.
2) The MWE should ask FAO to transfer of assets like vehicles to FSSD for implementing SPGS III counterpart activities.

The project performance was affected by the separation of the grant from MWE which is run under FAO as an independent entity. Some of the planned outputs like Grant payments to all private planters for tree plantations established to standards was taken by FAO. The project instead support woodlots and there were no Research and Development activities supported by the project.

3.2.12 Farm Income Enhancement and Forestry Conservation (FIEFOC) Project (1417) - Phase (II)

Background

The FIEFOC – 2 Project seeks to consolidate and expand achievements of the first phase and to address gaps through the development of the irrigation schemes. The government had commissioned feasibility studies for detailed designs of 11 irrigation schemes located in the North, South and Eastern regions of Uganda. This formed a basis for prioritization and selection of proposed sites.

The main objective is to improve household income, food security and climate resilience through sustainable natural resources management and agricultural enterprises development.

The annual approved budget for FY 2016/17 is Ug shs 74,011,724,000 of which Ug shs 17,734,942,576 (23.9%) was released and spent by the end of FY2016/17.

Performance

The project performance was poor rated at 62.8%. The overall performance was affected by late procurements and poor releases to the project which affected the achievement of most the set targets. The summarized performance is given in Table 3.13.

Table 3.13: Performance of FIEFOC Project Phase (II)

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Promotion of Knowledge of Environment and Natural Resources (Three consultants to do: Skills development in climate smart farming in irrigated areas conducted, Needs assessment survey for agri-business potential in water sheds conducted, Fuel saving stoves to reduce fuel wood consumption and carbon emissions promoted	3	727,358,000	00	0.00	Procurement of three consultants to undertake works did not take place
Restoration of degraded and Protection of ecosystems (1000 ha of trees planted, Identify and District Local Government Leaders in three selected districts sensitized)	100%	248,893,000	50%	0.336	Undertook farmer entry meetings in the districts of Butaleja, Kween, Kasese, Oyam and Nebbi with district Technical Team
Policy, Planning, Legal and institutional Framework (Institutional management framework of irrigation schemes developed)	100%	2,429,036,000	00%	2.94	Consultancy for developing Institutional management framework of irrigation schemes is under procurement
Coordination, Monitoring, Inspection, Mobilization and supervision (Monthly technical committee supervision and monitoring meetings in Olweny, Wadelai, Tochi, Mubuku II, Doho II and Ngenge conducted;5 Project inception and awareness meetings held, Hold 2 Joint missions between the African Development Bank and Nordic Development fund)	19	4,713,080,000	11	6.368	5 No. site meetings attended by MWE, MAAIF and Lira district Officials were held for Rehabilitation/Reconstruction of Olweny irrigation scheme

Capacity Building and technical Backstopping (3 study tours for irrigation management committees and staff ; Capacity building, technical backstopping of local government personnel and farmers involved in tree planting undertaken)	100%	1,520,227,000	00%	0.00	Activities differed to FY2017/18
Government Buildings and Administrative infrastructure (Olweny irrigation scheme civil works 100% complete, Construction of civil works and access roads of the 5 irrigation schemes to 5%, Renovation of National Project Coordination Unit Offices (NPCU)	68%	55,701,027,000	27%	51.22	Olweny was halted at 82% due to nonpayment of works' certificates and NPCU offices stopped being in the way for the Standard Gauge Railway (SGR) project
Purchase of Motor Vehicles and Other Transport Equipment (3 station wagons, 7 pickups and 45 Motor cycles procured)	100%	2,222,728,000	00	00	The contract for procurement of vehicles and motor cycles is at solicitor general for approval for the supplier deliver
Purchase of Specialized Machinery (Specialized Agricultural Machinery and equipment procured)	100%	1,074,013,000	00	00	Procurement referred to next FY
Acquisition of Other Capital Assets (Catchment areas of Olweny, Doho, Mubuku and Agoro irrigation schemes rehabilitated through tree planting)	100%	2,918,883,000	25%	1.99	Procured 1,658,793 seedlings that were supplied in catchment areas of the five irrigation schemes. These were planted on approximately 1500 ha
Total		**66,413,634,000**		**62.8**	

L: Valve control house; R: one of the water control gates of Olweny irrigation scheme in Alebtong district

Source: Field findings

There was slow implementation of project works by the end of the FY and the Project did not achieve its objectives. The progress of civil works of Olweny irrigation scheme in Dokolo district was halted at 82% completion level because of nonpayment of the contractor's certificates worth Ug shs 8,554,143,795. There was general delay to procure service providers like consultants and thus services and motor vehicles were not procured. There was expenditures on different line items yet they were not procured for example specialized machinery, motor vehicles and other transport equipment were not procured and but money was spent.

L: A section of a canal filled with water; R: A section of a canal under construction of Olweny irrigation scheme in Alebtong district

Key issues in implementation

1) The construction of Olweny irrigation scheme halted due to nonpayment of the consultant's certificates. The donor funding is mainly off budget and cannot easily be controlled which makes planning and budgeting difficult.
2) There was general late initiation of procurements which affected implementation of works.

3) Vandalism of metallic manholes and theft of construction materials. There was vandalism of manhole covers especially at outlet supply chambers in the scheme. Theft of cement and fuel was reported.
4) There were technical staffing gaps in the project which made it difficult to carryout technical work like initiating procurements early enough and producing reports

Recommendation

1) The MWE should ensure payment of the Contractor outstanding certificates to enable him resume works.
2) The MWE should initiate procurement process early following the procurement plan to avoid delay in implementation.
3) The MWE should recruit technical staff to run the project otherwise not much of the project objectives will be achieved.

3.2.13 Climate Change (Project 1102)

Background

Climate change is one of the greatest challenges facing humanity this century, as the Earth's surface temperatures continue to rise. Climate change is likely to disrupt the Earth's ecological systems and to have serious negative consequences for agricultural production, forests, water supply, health systems and overall human development.

Objectives: The main objective is to strengthen the coordination of Uganda's implementation of the UNFCCC and its Kyoto protocol, as well as coordinate and monitor the implementation of the Uganda's Climate Change Policy, thus increasing the resilience to Climate Change of the Ugandan population.

The project annual budget and release was Ug shs 2,760,414,593 of which Ug shs 2,017333,897 (73.1%) was spent by 30th June 2017.

Performance

The physical performance of the project was rated at 78% which indicates good performance. However, the major achievement was Knowledge Management Online System operationalized and GHG inventory Launched, development and launch of a National Adaptation plan roadmap for climate change. Table 3.14 shows the summary of the project performance.

Table 3.14: Performance of Climate Change Project

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance Score	Remark
Weather and climate change services Knowledge Management System (KMS)	100%	1,259,424,750	75%	35.68	100% knowledge management System developed but not yet fully functional because of limited funds. National Green House Gas (GHG)

developed for the National Climate Change Resource Center (NCCR) National Green House Gas(GHG) Inventory System developed and operationalized					Inventory System developed but not fully operational though CCD has been able to engage 5 sectors of Energy, Agriculture, Forestry, Transport and waste to provide data used for the analysis of the emissions.
Policy legal and institutional framework National Climate Change policy (NCCP) Disseminated and popularized to MDAs and DLGs. National Climate Change(NCC) Law developed, passed by Parliament and popularized	2	82,000,000	1	1.55	National Climate Change policy (NCCP) disseminated to district Local governments during all meeting and popularized in 6 local languages of Swahili, Luganda, Luo, Lumasaba and Lunyakitara The law was not developed
Administration and management support (Annual UNFCCC and Kyoto Protocol subscription paid.	100%	78,216,170	0.833	2.46	Annual UNFCCC and Kyoto Protocol subscription paid.
Adaptation and Mitigation measures 6 Districts of Buhweju, Bushenyi, Rukungiri, Ntungamo, Kiruhura and Rakai supported to mainstream Climate Change in their District Development Plans Baseline survey on Climate Change carried out in 4 district of Amuru, Pader, Lamwo and Kitgum. 6 National institutions (MAAIF, UBOS, MoFPED, NPA, MoLG and OPM) trained on the use of the overall	18	828,222,673	21	31.29	2 districts of Rakai and Rukungiri supported to mainstream Climate Change in their District Development Plans. 11 Baseline surveys conducted in Amuru, Pader, Gulu, Kole, Rukungiri, Ntungamo, Mbarara, Bushenyi, Moroto, Kotido, Nakapiripirit and Kabong The objective was to highlight the Climate Change Impacts of different districts and update the district climate change profiles One workshop held to train 6 National institutions (MAAIF, UBOS, MoFPED, NPA, MoLG and OPM) trained on the use of the overall National Climate Change Performance Measurement

National Climate Change Performance Measurement Framework Climate Change Action Plan developed and National Adaptation Plan(NAP) developed					Framework National Adaptation plan roadmap was developed and a workshop to Launch the NAP held.
Strengthening institutional and coordination capacity Uganda's effective participation in inter - governmental Climate Change Policy Processes Facilitated National climate Change Resource Center Burglar proofed.	1	211,100,000	0.667	5.32	Twelve preparatory thematic group meetings were conducted for the 22nd United Nations Framework Conference on Climate Change Conference of parties that was held between 7th and 19th November 2016 in Marrakech City in Morocco Ugandan government delegation of – members were facilitated to participate in the 22nd United Nations Framework Conference on Climate Change Conference of parties that was held between 7th and 19th November 2016 in Marrakech City in Morocco
Purchase of Motor Vehicles and Other Transport Equipment one motor vehicle procured	1	145,000,000	0	0.00	This was not achieved since the terms and conditions of JPF could not allow for purchase of a motor vehicle
Purchase of Office and ICT Equipment, including Software Two laptops purchased	2	43,000,000	2	1.62	Air conditions installed in only the commissioner's office One laptop and printer procured
Total		**2,603,963,593**		**77.9**	

Source: MWE and Field findings

The Water and Environment Sector aims at increasing the country's resilience to climate change as an NDPII target. The target is Reduction of emissions by 22% by 2030, Mainstreaming Climate change activities in sector budgets and work plan and reducing vulnerability index. This would be achieved through integration and implementation of the National Climate Change Policy (NCCP) and improving climate change legal and institutional framework. The policy was disseminated to LGs however there is to follow up on its implementation in order and whether the country is in line international standards and commitments. However, there was no budget expenditure for climate change adaptation measures of ministries and local governments, change in Uganda's climate change vulnerability index and no measure for change in direct and indirect Greenhouse gas emissions.

Key issues

1) The donor funding is mainly off budget thus there is a mismatch between funding and the annual planned out.
2) The department uses 52.7% of GoU budget to finance salaries for staff which leaves little money for development outputs.
3) The Climate Change Department has a number of activities to deliver however the funds allocated from GOU for the FY have been limited.
4) Lack of the Law of Climate Change that will enable CCD to have the mandate to compel other institutions to address Climate Change.

Recommendations

1) The MWE should stick to the approved work plan despite the source of funding.
2) The MWE should boost the budget allocated to the department for activities to be implemented.

National Forestry Authority (Vote: 157)

Background

The National Forestry Authority (NFA) is mandated to manage 1.26 million hectares of forest land in Central Forest Reserves (CFRs) on a sustainable basis in partnership with private sector and local communities and supply high quality forest related products and services to government, local communities and the public sector. Government of Uganda (GoU) expects NFA to operate in a business-like manner, according to the functions enshrined in section 54 of the National Forestry and Tree Planting Act, 2003. The NFA is mainly charged with managing 506 CFRs totaling 1, 265,742 hectares spread across the country.

Key objectives

Increased supply of quality tree and fruit planting materials for restoration of environmentally sensitive areas such as bare hills, riverbanks, and other degraded forestlands and Forest reserves and establishment of industrial round-wood.

The NFA annual budget for the FY 2016/17 was Ug shs 28.513 billion including Appropriation in Aid (AIA) of Ug shs 21,054,284,000. The total receipts by June 2017 were Ug shs 15.790 billion (55.4% of the budget) of which Ug shs 9.612 billion was internal collections (NEF) and all spent.

3.2.14 NFA Programme 01 Headquarters

The main objective of the programme is to establish systems and procedures for effectively managing the 1.266 million hectares on 506 Central Forest Reserves of permanent forest estate for sustainable development for posterity.

The programme annual budget including AIA was Ug shs 22.7 billion of which Ug shs 14.2 billion (52.3%) was released and Ug shs 14.3 billion (100%) spent by 30th June 2017.

Performance

The programme physical performance was good at 70%. The overall physical performance is given in Table 3.15.

Table 3.15: Performance of NFA Programme 01 Headquarters

Out put	Annual Planned Quantity or Target	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Management of Central Forest Reserves Information Systems Security Management Inventory (ISSMI) covering 500ha carried out in Budongo, Bugoma, Itwara, Kalinzu and Zoka CFRs 203 km of boundaries resurveyed and opened in Kyoga range, Muzizi River Range, Acwa Range, Budongo Systems Range, West Nile Range, South west Range. 627 hectares of forest restored through encroachment/enrichment planting in Apac, Lwankima, Zirimiti & Buvuma, Masaka and Lake Shore Ranges.	100%	14,518,686,000	0.41	36.12	ISSMI covering was carried out in Itwara 100ha and in Mabira. 100ha though Mabira was not planned for. 306km of boundaries were resurveyed and opened in Achwa-4.9Km, Budongo-152Km, 11.3Km, 106.8Km, Muzizi-28Km, South West-1.5Km, West Nile-1Km 351Km hectares of forest were restored through encroachment/enrichment planting in Achwa-30ha, Kyoga-6.3ha, Lake shore 328ha, Karamoja-20ha, Muzizi-103ha, South West-4ha
Establishment of new tree plantations 875 plantations established in L/shore (25ha), Bugamba (150), N/Rwenzori (150), Mwenge (100), Mayuge (20), Mafuga (200), Opit (45), Karamoja (20), Kisindi (40) and Nakwaya (50) 10 maps of newly planted areas done 8 Refresher training course in fire management for	100%	832,204,000	0.44	3.26	635ha of plantations were established in Lendu-120ha, Mafuga-149.5ha, Mbarara-75ha, Mwenge-100ha, South Busoga-20ha, Muzizi-166ha 3 maps of newly planted areas were done in South Busoga, Mafuga, and Lendu

plantation staff undertaken 4 trainings in plantation maintenance conducted					6 trainings were conducted though not in fire management and plantation maintenance.
Plantation Management 4,036 hectares of all newly and old planted crop maintained by slashing and Spot hoeing 1,940 hectares of plantations maintained by thinning (1st and 2nd thinning) 1,940 hectares of plantations maintained by pruning 300 kilometers of roads maintained 243 Km of fire breaks opened and maintained in various plantations	100%	2,670,811,000	0.51	9.89	3,140ha in (Katugo-11ha, Lendu-550ha, Mafuga-450ha, Mbarara-500ha, Mwenge-351ha, North Rwenzori-644ha, South Busoga-300ha, Kyoga-4ha) maintained by slashing and spot weeding 757 hectares of plantations were maintained by thinning in Lendu-60ha, Mafuga-50ha, Mbarara-150ha, South Busoga-350ha, Achwa-44ha 80 hectares of plantations maintained by pruning. Roads were maintained in Mbarara-7Km, Mwenge-30Km, South Busoga-1Km 443 Km of fire breaks were opened and maintained in plantations of Katugo-8Km, Lendu-20Km, Mafuga-40Km, Mbarara-11Km, Mwenge-70Km, North Rwenzori-47km, Opit-40Km, South Busoga-30Km
Forestry licensing 400 M3 cubic meters of pine sawn timber produced in plantations 1,000M3 cubic meters of round wood produced Tropical High Forests 4 ecotourism sites monitored to ensure compliance with licensee fee payments.	100%	992,533,000	0.27	4.21	294m3 cubic meters of round wood was produced in Tropical High Forests (Budongo Lake shore, Muzizi, and West Nile). 4 ecotourism sites of Mpanga. Kalinzu, Mabira and Kaniyo-Pabidi were monitored to ensure compliance with licensee fee payments.

100 Km of trails constructed and maintained 10 renovated Bandas, camping sites and Ecotourism site houses and shower rooms mainly for Mpanga, Kalinzu and Mabira Ecotourism sites.					8 Km of trails were constructed and maintained in South West
Supply of seeds and seedlings 7,269,223 tree seedlings raised for sale at National Tree Seed Center and regional nurseries 894,960 tree seedlings raised for own planting at National Tree Seed Center and regional nurseries. 308 Kg of imported pine seed (pine/Brazil) procured. 10,118 Kg of locally available seed (Eucalyptus grandis, Pine caribaea and other species) procured	100%	3,754,910,000	0.63	16.49	A total of, 406,291 tree seedlings were raised for sale. (NTSC-5,093,678, Katugo-557,000, Mafuga-289,000, Mbarara-325,560, Mwenge-175,000, South Busoga-41,492, Achwa-123,000, Budongo-116,387, Kyoga-245,156, Muzizi-1,115,802 Sango Bay-150,000, West Nile-174,126. Actual seedlings sales-2,079,628). A total of 792,692 tree seedlings were raised for own planting (NTSC-16,665, Lendu-109,000, Mafuga-277,702, Mbarara-233,325, Mwenge-120,000, South Busoga-36,000. 636ha) 150 Kg of imported pine seed were procured (50Kg F2 and 100Kg F1 *Pinus caribaea* var hondnurensis from Brazil)
Total		**22,769,144,000**		**70.0**	

Source: Field findings, NFA and IFMS

The National Forestry Authority is mandated to manage the Central Forest Reserves on a sustainable basis and to supply high quality forestry-related products and services to Government, local communities and the private sector. Under the programme, the NFA continued to preserve, restore degraded natural forests and do maintenance works. However little is done in terms of value addition, restoration of natural forests, sustainable development of commercial forest plantations and industry. The achievements do not match the planned outputs

and it was difficult to get the actual expenditures on specific outputs especially with AIA. This made it difficult to get the actual performance of the project.

L: Tree seedlings in Nursery bed (new) R: The overgrown Eucalyptus for past season Mbarara NFA Region, Mbarara Municipality Mbarara district

Key issues

1) There was low funding under the development budget performing at 55.4% (Ug shs 15.79billion released of the annual budget of Ug shs 28.513 billion); AIA at 44% (Ug shs 9.61 billion of the annual budget of Ug shs 21.054 billion).
2) Encroachment and illegal timber/tree extraction threaten forests in protected areas leading to degradation of natural forests and those planted by private planters on forest reserves. In Mityana private famers cut down over 100ha of private forests in Musamya and Kasa forest reserves in the ongoing land conflicts.
3) Unclear forest boundaries which encourage encroachment of forests and increase the cost of law enforcement and litigation. People hold titled land in forest reserves.
4) Inadequate forest management infrastructure and equipment for example forest roads, staff accommodation and forest management stations limit effective and efficient forest management in all central forest reserves.
5) The Authority operates an old fleet of transport affecting mobility of staff and fuel releases are unreliable. For example, fuel was last received in Q2 which makes it difficult to monitor the forest reserves and make quick responses to emergences.
6) Most of the works are contracted out and payments are made later. The Mbarara office had a debt of Ug shs 122m with the contractors. The unpaid works include spot weeding, thinning and support activities.

7) The unpredictable weather changes have affected the planting seasons especially in North and Eastern part of the country and the survival rates of the seedlings to about 70%. In some cases the planned seedlings were not raised and other cases seedlings had remained in the seed beds because of the long drought which had overgrown for the next planting season. This too affect the expected revenue collections where AIA contributes 74% of the budget.
8) Demotivated support staff who have not been paid. Since Q3 the support staff had not received salaries which makes it difficult to operate.
9) The procurement delays which are not cannot be approved before the financial year begins yet the forest activities are crosscutting into the FYs. For example, the September planting season would require procurements for seedling preparation should begin in March which is not the case.

Recommendations

1) The District Local Governments (DLGs) mobilize and lobby district leaders, communities and development partners to actively support forest conservation and tree-planting efforts and enforce the law. Continue encouraging and support people to plant trees on private and public land
2) The NFA should plan to open up forest boundaries by resurveying and putting up pillars in order to stop encroachment.
3) The NFA should plan to rehabilitate infrastructure and replace equipment e.g. transport (vehicles, boats and motorcycles) and forest stations/offices.
4) Enforcement of laws by deploying police to protect and prosecute the culprits to enforce compliance in trade of forest products and curbing illegal activities in CFRs.
5) The NFA should plan to do procurements in the previous FY for activities that are affected by the seasons. For example, September planting could have procurements made in March which falls in the previous FY.
6) The should review policy (National Forestry Policy 2,000; National Forestry Tree Planting Act 2003) and NFA role in regard to forest conservation which takes a long time to be realised *vis*-à-*vis* revenue making.

3.2.15 Support to National Forestry Authority (NFA) Project 0161

Background

The project was created to support the National Forestry Authority (community Tree Planting Program) was therefore conceived and designed to increase involvement of the population in tree planting, afforestation of bare hills to restore catchments and watersheds and or watersheds that are critically important for agriculture, apiculture, aquaculture and benefit conservation and support rangeland farming systems.

The project objectives are increase supply of quality tree and fruit planting materials, for restoration of environmentally sensitive areas.

The Annual approved budget for the project for the FY 2018/17 was Ug shs 5,743,709,000 of which Ug shs 861,325,744 was released (15% of the budget) and Ug shs 848,419,161 (99% of the release) was spent by the end of June 2017.

Performance

The project annual performance was rated at 70.2% given the little money received. Most of the planned out puts were not achieved. The project only procured Kgs 6,206,900 of seedlings Lake Kyoga and Karamoja Range offices and 110 tyres were procured due to delay in procurement process for the vehicles and Motor cycles.

Votes 501-680 Sector Grants to Local Governments

There are four District Conditional Grants released namely; (i) District Water Development Grant for rural water facilities (DWSDCG), (ii) District Sanitation and Hygiene Grant for district sanitation (DSHG) (iv) Urban Water Supply O& M Conditional Grant to support system expansions, improve on sustainability and (iv) Environment and Natural Resources Conditional Grant provided for Wetlands Management in LGs.

3.2.16 District Water and Sanitation Development Conditional Grant (DWSDCG)

Background

The DWSDCG is disbursed to District Local Governments to implement hardware and software activities/outputs including: boreholes, springs, piped systems, rainwater harvesting tanks and sanitation facilities. The District Local Governments (DLGs) are expected to plan and budget for the outputs based on sector grant guidelines where their budget was divided into recurrent (wage and non-wage) and development budget. The vote performance was exemplified by the 10 district of Butaleja, Kagadi, Kakumiro, Mityana, Mpigi, Nakasongora, Omoro, Pallisa, Rubanda and Sheema which were sampled for annual performance.

The Local Government's development budget for the FY 201617 was Ug shs 59.762 billion, and by June 2017, all the money budgeted had been released.

Performance

The performance was rated good at 85.3%. The DLGs had substantially completed construction works and had a few ongoing software activities by June 2017. Table 3.16 summarizes the grant performance.

Table 3.16: The Performance the DWSDCG

Out put	Annual Planned Quantity or	Annual Output Budget (Ug shs)	Cum. Achieved Quantity	Weighted Physical performance	Remark

	Target			Score	
Stakeholder coordination	126	78,668,518	115	1.69	The meetings reduced because small budget on recurrent non-wage
Office equipment	9	68,832,251	10	1.57	
General Office Operations	117	107,183,070	97	2.36	
Monitoring and supervision	311	112,554,008	315	2.57	
Software	527	107,593,279	480	2.0	Some works were on going through money had been released
Sanitation hardware	6	163,689,960	6	3.74	38% did not plan for this due to lack of land /need to for facilities
Water Supply Facilities (HW)	128	3,570,403,437	137	60.01	Where a saving was made more sources were drilled
Rehabilitation of Water facilities	172	498,566,069	177	10.02	More sources were rehabilitated where HPMAs were used
WQ surveillance	366	38,402,018	299	0.72	
Salaries and wages	16	19,871,610	16	0.45	20% 0f the districts planned for contract staff
Total		**4,378,654,763**		**85.3**	

Source: Field finding and district Q4 reports and MWE

By the end of Q4 the DLGs had utilized all the money released to them. The development grant budget expenditure was 88% while the recurrent shared 12%. All districts had completed construction works because all development budget was received by Q3 which was good. Ongoing works included post construction support for districts which were training Water User Committees formed for the newly constructed sources. One district (Mityana completed construction of the water office whereas Mpigi district planned to renovate their office but did not do so. Out of the 10 districts sampled, there was 56% samples were non-compliant to the national standards for e coli.

L: New Office block for the District Water Office Mityana district; R: New Borehole in Kitegula village Kakumiro district; Rehabilitated borehole at Dog-Lagude village, Lalogi sub-county Omoro district

Key implementation challenges

1) Lack of office space, equipment and transport most especially in the new districts which affected the pace of works as staff operate on mobile offices and it is difficult to produce reports in time. For example Omoro DWO is run by one person.
2) Late initiation of procurement process mainly in the new district local government which lacked procurement committees. They had to use the committees of the mother districts which caused some delays.
3) The political atmosphere after elections slowed down progress of work as new office bearers were getting acquainted with mode of operations and made several changes in the work plans.
4) Conflicts over land in source locations (both water and sanitation) especially in the rural growth centers.
5) There were no sanitation funds released to the newly created districts to carryout sanitation activities. The budgets for the same were made under the mother districts and after separation the releases could not be separated. The outputs planned under sanitation were therefore not carried out.
6) Poor quality materials especially the GI pipes and in some cases the stainless steel on the market which corrode in a short time. This increases the level of non-functionality of sources.
7) Poor quality of water sources especially the old sources.
8) Low potential in some cases which lead to striking dry holes during drilling, for example 75% success rate was achieved in Nakasonga.
9) Low turn up of communities during mobilization stages which is reflected in refusal to contribute to operation and maintenance of water sources thus reduced functionality of water sources.
10) Insufficient means of transport in some districts. Some districts especially new ones lack transport means while others operate old vehicles with high operational costs.
11) Insufficient funds for nonwage where some outputs are forfeited most especially software activities.

Recommendations

1) The MWE should take on the quality of materials with Uganda National Bureau of Standards and standardize/accredit the manufactures/suppliers of material in particular the GI pipes and stainless steel on the market.
2) The DLGs should ensure joint and continuous mobilization and sensitization by politicians and technical staff of communities to participate in the operation and maintenance of water and sanitation facilities.
3) The MWE should allocate sanitation grant to the new districts in the FY 2016/17 to carry out the sanitation activities.
4) The MWE/MFPED should follow the allocation formula in regard to the recurrent and development budget to see the impact on implementation.
5) The MWE should encourage the district water office to take advantage of the regional laboratories and do water quality surveillance to reduce of costs and be able to pick many samples which increases on the quality of water supplied.

The Rural safe water target for the FY 2016/17 was 74%, however the safe water coverage was at 67% on average. The DLGs on average increased by 1% which makes it 68% a shortfall of 6% for NDPII target.

Background

NEMA advises Government and spearheads the development of environmental policies, laws, regulations, standards and guidelines; and guides Government on sound environmental management in Uganda. NEMA's activities are focused on providing support to Government's main goal of ensuring sustainable development through the National Development Plan (NDP); in accordance with the policy framework of the Government of Uganda and the Millennium Development Goals (MDGs).

NEMA's development objective is to create, establish and maintain an efficient mechanism for sustainable environment and natural resources management at the national, district and community levels.

The approved budget of NEMA in FY 2016/17 is Ug Shs 20,052,632,000 including Appropriation in Aid (AIA) of Ug shs 11,081,723,000. The total receipts by end of June 2017 were Ug shs 17,952,809,266 (98.5%) of which Ug shs 11,051,722,000 was internal collections (NEF). Expenditure by end of FY 2016/17 was Ug shs 15,248,932,999 (84.9%).

NEMA implements one recurrent program and one development project. The Annual performance of NEMA is the highlighted below.

3.2.17 Programme 01 - Administration

The objectives of the programe are to: Enhance environmental compliance and enforcement; Integrate ENR into national and local government plans and policies; Enhance access to environmental information; Enhance the institutional capacity of NEMA and its partners; Strengthen national, regional and international partnerships and network.

The approved budget of programme 01 (Administration) in FY 2016/17 was Ug Shs 18,122,632,000 (AIA inclusive) of which Ug shs 16,667,697,469 (91.9%) was released and Ug shs 14,337,260,000 (86%) spent by end of June 2017.

Performance
The physical performance of programme 01 by end June 2017 good (87.5%). A number of planned targets were achieved as detailed in Table 3.17 below.

Table 3.17: Performance of Programme 01 (Administration)

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity	Weighted Physical Performance Score	Remark
Integration of ENR Management at National and Local Government levels 40 CSOs and private Sector institutions, in integrating environmental sustainability measures. 20 LGs supported on effective integration of environmental concerns into plans, budgets and programmes including fragile ecosystems. Capacity building of project staff, monitoring visits and support supervision of 13 CDM projects undertaken all over the country. 13 CDM projects verified and marketing of CDM products supported 4 Urban authorities to establish green belts supported National commitments to CBD and targets implemented Early warning climate change generated and analyzed and disseminated	100%	310,000,000	45%	2.29	Planners, CAOS Information Officers and DEOs were not trained because no funds were released. 11 LGs were supervised and Supported on effective integration of environmental concerns into plans, budgets and programmes including fragile ecosystems. Monitoring visits and support supervision of CDM projects completed in the 16 Municipalities Capacity building conducted in 12 CDMs municipal councils. The challenge is health and safety materials used limited skip loaders, and mixing of non-degradable products like Kaveera in garbage. Only the 9 registered CDMs councils were verified. Kapchorwa Municipality and North Ankole, Emanuel Cathedral in Rushere Town Council, Kiruhura districts were supported to establish green belts, avenue tree planting and a water harvesting unit to support the greenery. Support to Uganda delegation to participate in the High Level Segment on Mainstreaming Biodiversity across sectors. COP decision is guiding development of the Guidelines for

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity	Weighted Physical Performance Score	Remark
					mainstreaming biodiversity Early warning climate change alerts not achieved
Environmental compliance and enforcement of the law, regulations and standards Inspections and inventory of affected land titles (database) undertaken 800 EIAs reviewed and baseline verification with lead Agencies conduced 1200 environmental inspections, audits, post EIA inspections and compliance The ban on polythene carrier bag (Kaveera) enforced. Critical degraded fragile ecosystems restored and protected Cabinet directive on the cancellation of tittles in wetlands in Wakiso, Mukono, Kampala implemented Capacities of environmental compliance monitoring and enforcement enhanced	100%	1,320,000,000	79%	18.95	Technical report on the locations of affected titles within Greater Kampala produced and reviewed by the Policy Committee on Environment (PCE), awaits the decision of the committee. 962 EIAs reviewed and approved for development projects in different locations in Uganda though these are violated amidst A total of 1,341 Environmental inspections and audits carried country wide with focus on the green and brown environment The Ministry Trade and Industry petitioned the Government through the Cabinet against the operationalization of the ban and has proposed for review of the law. 35 square km of Mpologoma-Limoto ecosystem (Wetlands) in Pallisa and Kibuku was undertaken and the wetland system was recovered. Technical report produced and submitted and Cabinet approved the cancellations of land titles in wetlands.

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity	Weighted Physical Performance Score	Remark
Access to environmental information/education and public participation increased 40 TOTs trained on integration of ESD into academic and nonacademic programmes (Tertiary institutions) 40 TOTs trained on integration of ESD into academic and nonacademic Programmes (Schools) Thematic environmental information generated and disseminated NEMA quarterly Newsletter produced and disseminated Environmental literacy enhanced The National State of Environment Reports (NSOERs) produced and disseminated	100%	400,000,000	100%	9.77	46 TOTs in Ndejje University (students and academic staff) were trained on integration of ESD into academic and non-academic programs. 104 Teachers (ToTs) were trained in mainstreaming Environment and Education for Sustainable Development (ESD) into academic and non-academic programmes in Fort portal Municipal Council- Kabarole District (Buhinga Primary School); and Kapchorwa DLG Albertine Graben Environmental Baseline Monitoring Report (AGEBMR) was completed and launched covering five thematic areas of the Albertine Graben, namely: Aquatic; Terrestrial; Physical and Chemical; Society; and Business and Management. 16,000 news letters were produced and disseminated A draft 2016 NSOER was produced

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity	Weighted Physical Performance Score	Remark
National and Regional and international Partnerships and networking strengthened Sound Environmental management promoted; Enhanced domestication of the Multi-lateral Environment Agreements; MEAs project synergies and linkages enhanced and National commitments to the Regional, sub-regional and UN Development Agenda enhanced	100%	990,423,000	100%	5.47	Experiment planting of shea butter trees was carried out in Otuke and Kitgum districts Prepared a Cabinet paper on the outcomes CBD COP13 meeting which took place in December 2016 and its implications for Uganda. The Cabinet paper has been submitted to the Cabinet Secretariat. Organized the Annual meeting of the Oxford University project on Achieving No Net Loss for Communities and Biodiversity in Uganda on 3rd April 2017.
Total		**3,250,423,000**		**87.5**	

Source: NEMA and field findings

L: Solid waste sorting in the Windrow in Walukuba Masese division, Jinja district; R: Sieving compost; sorted plastics at CDM site in Mbale Municipality, Mbale district

The NEMA achieved a number of the set targets but there is little impact on ground. Environmental degradation is on the rise, and enforcement of environmental protection laws still weak. Some annual targets like cancellation of tittles and ban on Kaveera have not been effected and the LGs have not yet integrated environmental issues in their plans and budgets. Poor environmental management contributes to climate change. The country is experiencing adverse effects of climate change and this has had a toll on social economic environment. Thus the role

of NEMA stipulated in the National Environment Act 1995 to manage environment is not yet realized fully.

3.2.18 Support to NEMA Phase II (Project 1304)

The major objective of the project is to create a fully established, equipped and strong institutional set up for the effective management of the environmental impacts of oil and gas development and chemicals.

The approved budget of the project in FY 2016/7 is Ug Shs 1,050,000,000 of which Ug shs 209,739,999 (19.97%) was released and Ug shs 177,436,323 (84.6%) of the release was spent.

Performance

The performance of the project was good at 71%. The project performance is summarized in Table 3.18.

Table 3.18: Performance of Support to NEMA Phase II

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity	Physical Performance Score (%)	Remark
Integration of ENR Management at National and Local Government levels Capacity for climate change responses developed	100%	50,000	30%	41.96	NEMA received a satellite data receiving station under the Monitoring of Environment for Security in Africa (MESA). As a way of building capacity among other institutions, Environmental Information Network (EIN) was trained on the use of this data to track environmental changes in the country.
Environmental compliance and enforcement of the law, regulations and standards Critical degraded fragile ecosystems restored and protected by restoration of at least 2 ecosystems	100%	60,000	20%	29.09	Conducted a follow-up and compliance inspections of sand mining activities in Lwera (Mpigi and Kalungu). Notices were served (to halt activities, restore and submit relevant plans to NEMA) to all sand miners in Lwera who did not comply with permit conditions. Assessment of compliance and assess restoration achievements of the miners with the directives contained in the notices issued in November, 2016 was done.

					Although efforts were being made for restoration of degraded wetlands, in Pallisa district for example, one of the wetlands along L. Lemwa was destroyed by the community for rice planting. Politics aggravates the problem where people are supported in illicit activities.
Total		**110,000**		**71.0%**	

Source: NEMA and field findings

Training of the Environmental Information Network was done to build capacity for climate change responses in the country. Efforts to restore fragile ecosystems were done, for example stopping of sand mining activities in Lwera though this would have been avoided had monitoring for EIA's been followed closely. In Pallisa district, communities had harvested the last season of rice which was given to them and the wetland in Limoto and Lemwa were regenerating.

L-R: Regenerated wetland; fishing cages and children fishing in Limoto Wetland Pallisa district

L: Pillars for demarcating the wetlands in Pallisa district; R: Harvested rice field in the wetland around Lake Kawi in Kawi village, Apopong sub county, Pallisa district

Key issues in NEMA

1) Inadequate staffing at NEMA and the environment sub-sector at large to effectively handle new and emerging environmental issues in the country. The staffing level at NEMA currently stands at 30% of the approved structure.
2) Low funding for environmental management at NEMA, MDAs and Local Governments which leaves environmental issues an attended to thus continuous strain on environment.
3) Environmental degradation by some investors and politicians who think they are above the law and doing all sorts of activities in wetlands e.g. dumping and raising structures there.
4) Lack of institutional coordination among MDAs which results in conflicting roles during implementation. They end up blaming each other and leaves the environment to suffer.
5) Continuous encroachment on wetlands by private developers, settlers and in some cases people holding tittles in wetlands.
6) The general public is indifferent towards management of the environment, thinking it only the role of government. People throw rubbish and emptying toilets during rainy periods into water drainage channels.

Recommendations

1) The MFPED should fast-track wage bill allocation to the NEMA and LGs to support recruitment of necessary personnel in the approved structures.
2) The MFPED should provide conditional grants for the ENRs to supplement the Wetlands grant which is inadequate. In district visited the ENR budget ranges between Ug shs 800,000 to Ug shs 3million. The EIA money should be granted to LGs for environmental management as parliament recommended.
3) The NEMA should increase environmental inspection, audit measures and apply naming and shaming of impunity investors.
4) The NEMA should fast-track cancellation of tittles in wetlands and follow to practice the presidential directive of "No encroachment on wetlands and those already there leave by June 2017"
5) The NEMA should spearhead it coordination role to ensure there is no development at the expense of environment by involving the relevant stakeholders in the whole process to avoid conflicts.
6) The NEMA should be vigilant to produce and disseminate environmental information in a wide spectrum using multimedia existence to sensitize and advocate for environmental protection.

Uganda National Metrological Authority (Vote 302)

Background

The meteorological sub sector has faced significant neglecting the years of civil strife in Uganda leading to vandalism and breakdown of most of the equipment. The efforts in the 1990s and to-

date have yielded positive results including the recent reforms transforming the Meteorology Department into Uganda National Meteorological Authority. Uganda requires advanced technologies on monitoring weather and climate and in processing data, production of various products and display to much with current trends and development needs. This calls for heavy investment on robust modern equipment and systems to much with the challenges of climate change. The current weather monitoring network by UMA is obsolete and needs to be overhauled and automated in line with National Development Plan (NDP2) and Vision 2040.

The strategic objectives of UNMA are: (i) To improve the quantity and quality of meteorological services to customers; (ii) To build a skilled and motivated workforce through good human resource management practices; (iii) To promote greater awareness of the benefits of using meteorological services, information and products; (iv) To improve the accuracy and reliability of forecasts and advisory services to customers; (v) To achieve a sustained increase in revenue generation.

The approved budget of UNMA in FY 2016/7 is Ug Shs 22,612,035,576 of which Ug shs 7,683,870,908 (33.9) was released and Ug shs 3,269,109,278 (42.5%) of the release was spent.

3.2.19 Uganda National Meteorological Authority (UNMA) - Project 1371

The meteorological sub sector has faced significant neglect in the years of civil strife in Uganda leading to massive vandalism and breakdown of most equipment. The efforts in the 1090s and to date have yielded positive results including the recent transformation of the meteorology Department into an Authority. For the authority to perform effectively at the required standards (ISO 9001 2015) the challenges of lack of equipment need to be addressed, train staff to use meteorological information for maximum benefit.

The project annual budget is Ug shs 16,277,000,000 of which Ug shs 11,990,513,044 (33%) was released and Ug shs 1,920,832,296 (35.5 of the release) spent by 31st December 2016.

The performance of the project was rated fair at 64.4%. The project performance was mainly affected by failure to purchase the radar. The project performance is reflected in Table 3.19.

Table 3.19: Performance of Uganda National Meteorological Authority Project

Output	Annual Planned Quantity or Target	Annual Output Budget (Ug Shs '000)	Cumulative Achieved Quantity	Physical Performance Score (%)	Remark
Weather and climate change 4 Consultancy studies conducted 14, 400 Aviation forecasts (flight folders) issued for domestic and international flights 1,000 Marine passengers given mobile weather alerts for lakes Victoria, Albert and Kyoga 200 water vessel operators given marine weather forecasts Aeronautical coordination and support undertaken in aerodromes, airfields, and airports (Gulu, Soroti, Entebbe, Kasese, Arua, Jinja) Quality Management Systems established and compliance with International Civil Aviation Organisation (ICAO) and World Meteorological Organisation (WMO) standards achieved (ISO certification) Improved functionality of existing 80 weather stations (10 Agromets, 10 Hydro mets, 12 synoptic, and 48 automatic weather stations) and 70 rain gauges Improved coverage of net work stations through installation of 100 new rain gauge stations and 40 automatic weather stations Meteorology mainstreamed in	100%	730,000	47%	47.853	3 consultancies carried out for development of a Strategic Investment Plan, Board charter, reviewing of job description 15,718 flight folders were issued for domestic and international flights. No specific messages for marine passengers and water vessels were given but used broader platforms for all stakeholders 8 Aeronautical trips were undertaken to the airfields of Gulu, Soroti and Kasese to provide coordination and support. The Aeronautical Meteorological Services (AeMS) provided by UNMA have been certified ISO-90001: 2008. Functionality of 60 weather stations and 30 rain gauges improved. This affects the accuracy of the information provided

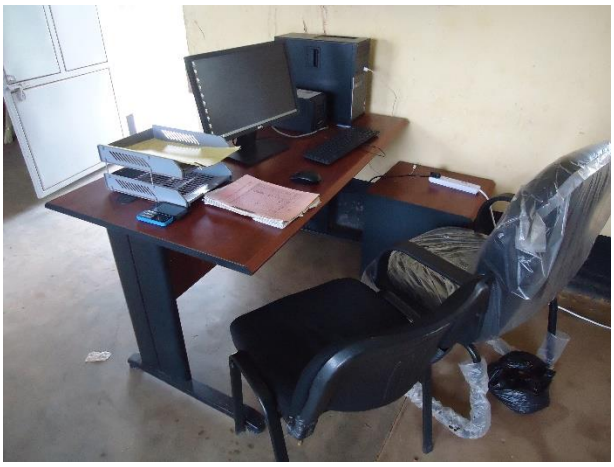
the national budget process of 112 district local governments 4 seasonal climate outlooks and Monthly climate forecasts issued 4 Climate change assessments and studies					No new rain gauges installed. 20 automatic weather stations installed out of the 40 planned. UNMA was represented in the LG Budget Framework Workshops 4 seasonal climate outlooks were issued. Though sometimes these come in late. 12 monthly forecasts were issued to the general public. Climate change assessments and studies not done due limited funds
Government building and administrative infrastructure 18 Meteorological structures built/renovated in the districts	18	100,000	1	2.632	Renovation of structures halted due to land ownership issues.
Purchase of Office and ICT Equipment, including Software(5 computers and 3 printers procured)	100%	80,000	100%	8.147	All equipment procured
Purchase of Specialized Machinery & Equipment Weather radar procured	1	12,000	0	0.002	There were delays in harmonization of sites with C.A.A due to ongoing expansions at the Entebbe airport
Purchase of Residential Furniture and Fittings office furniture procured	1	60,000	0	6.11	6 standard office desks,35 office chairs, 2 tables and 9 filing cabinets were procured
Total		**982,000**		**64.4**	

Source: UNMA and Field findings

General station maintenance was provided to the station including checking installations, testing sensors and cleaning them, upgrading and replacement of accessories. The information on weather and climate change (weather alerts, and forecasts) was provided as planned but the issue of timelines and quality is affected by the quantity and quality of information received.

Building/renovation of metrological structures was done in Buku (Entebbe station) only. The exercise was halted pending clearance on land acquisition issues. The stations are mainly on land that does not belong to the Authority which makes it difficult to renovate/rehabilitate them. The Radar was not procured because of changes of sites by C.A.A with the ongoing airport renovations and late procurement.

The Authority aims at increasing the functionality and usage of meteorological information systems which require refurbishing stations, strengthening Legal and Regulatory Framework, Information sharing and Research. The Authority is operating old equipment and the procurement of the radar was not achieved. Seasonal climate outlooks and Monthly climate forecasts have been issued but little is done on early warnings on climate change, adoption measures and research on climate change and impacts.



L: Supplied office furniture and computer; Automatic weather station at Ngeta Zonal Agricultural Research Development Institute in Lira district

Key Challenges in UNMA

1) Seasonal weather forecasts are issues four times a year in the months of (March, June, September and October). However, due to the effects of climate change, seasons have shifted and some regions receive rains earlier than is expected. This means that the routine forecasts are issued late for the benefit of the nation.
2) Weak dissemination of updates on weather forecasts. Only people with registered emails with the authority are able to get this information. This leaves out a great proportion of people that would benefit from this information.
3) Limited national understanding and appreciation of meteorological science and its benefits. This affects the limits attraction of funding and use of information.
4) Limited and dilapidated infrastructure of some weather monitoring stations which were installed during the 70's and needs overhaul. This renders some weather information not to be recorded.
5) The security of the stations is some cases is not guaranteed. The stations equipment security depends on the security provided by the institution where they are located be it district or any other. There is no burglar proof made for the equipment in place.
6) Tools and equipment for operation are not enough (no radar yet, limited computers, printers); internet connections limited for data sharing; No calibration laboratory to set

instruments accuracy especially thermometers, pressure readings. These have to be sent to Nairobi or Uganda National Bureau of Standards whose capacity too is limited; No automated relaying system for communication to the pilots.

7) There is scanty coverage in terms of weather stations which is a key ingredient for qualitative data. There are only 12 synoptic stations which are supposed to work 24 hours. Due to understaffing weather information is only recorded for 12 hours a day instead of 24 and only Entebbe station does so. Besides the existing staff are few thus working for longer hours and in some cases information gaps are realized with smart phone delays or manual errors which limits the data quality and quantity collected in Uganda compared to other parts of the world.
8) Limited number and demotivated staff with no transport, uniforms, and protective gears for technicians and reflective jackets. The training opportunities are limited.

Recommendations

1) The UNMA should devise a mechanism of issuing early regional forecasts for the benefit of different regions which experience different weather patterns for planning purposes.
2) The UNMA should improve the means of weather forecast information dissemination to the public. The Authority should fast track acquisition of license code to use mobile phones and take advantage of the multimedia network to further disseminate information.
3) The UNMA should create more awareness to the public, legislators and planners on issues of meteorological science.
4) The UNMA should plan to put burglar proof on places where the equipment is kept and provide facilitation for security personnel to provide security in critical circumstances.
5) The UNMA should do routine maintenance and procure modern equipment improve on quantity and quality of data for data capturing, processing, storage and communication.
6) The UNMA should provide mobile calibration for stations outside Kampala. Agromet and Hydromet stations need to be established to supplement the synoptic stations for improved quality of data.
7) The UNMA should plan to procure more Automatic Message System in other stations like Soroti which links observatories by checking errors, system operations and directs messages to other networks where it is supposed to go.

CONCLUSIONS AND RECOMMENDATIONS

The sector performance was good at 75% achievement of planned outputs by the end of the FY. The sector had an approved budget of Ug shs736.41billion (AIA inclusive), of which Ug shs 464.108billion (63%) was released and Ug shs 427.788billion (92%) spent, which was good budget expenditure. The sector had both good and poor performing projects within the different Votes.

Good performance was noted under the District Water and Sanitation Development Grant at 85%, Water and Sanitation Development Facility-Central at 81%, NEMA performance was at 79%, Climate Change at 77% and Water Resources Management performance at 71%. The reasons for good performance included early releases of the development grant to the DLGs, de-concentrated staff on ground in the zones, and utilization of funds on multiyear projects which did not require undergoing procurement.

Poor performance was noted among many projects inclusive of Provision of Improved Water Sources for Returned IDPs – Acholi sub-region rated at 18%, and Karamoja Small Town and Rural Growth Centers Water Supply and Sanitation at 24%. The Kampala Water Lake Victoria Water and Sanitation was rated at 33% and Sawlog Production Grant Scheme at 41%. The poor performance was due to late procurements, lack of approved designs for the piped systems, land conflicts which led to site changes in some case; ambitious project plans that could not be met and insufficient counterpart funds or resources to engage consultants.

The sector is moving towards increased access to and improved functionality of water and sanitation facilities, though the rates of increase are small especially in Water for Production and Urban water supply. In FY2016/17, access to rural water supply is 69% and 77% for urban water supply which are below the second National Development Plan (NDP II) targets of 74% and 90% respectively. The increased restoration of degraded and protection of eco-systems for forest cover is currently (15.2%) and area covered by wetland (10.9%) against the NDPII targets of 15.6% for forest cover and 11.3% for area covered by wetlands. The ecosystems are challenged by lots of degradation.

Other hindrances to implementation included; limited realization of the AIA budgets and releases; limited follow up of Environmental Impact Assessment (EIAs) recommendations by the various stakeholders; continuous encroachment on ecosystems by private developers and settlers; inadequate staffing in central and LGs; low funding for environmental management at NEMA, MDAs and LGs; weak dissemination of updates on weather alerts and forecasts, and dilapidated weather monitoring stations.

Recommendations

i) The MWE plan to implement projects with already approved designs to avoid time loss.
ii) The MWE should fast-track land acquisition before project initiation as a policy guideline and agreement with MFPED.
iii) The MWE should prioritise monitoring the EIA adherences through budgeting and monitoring the various projects given recommendations.
iv) The MFPED should continue enforcing compliance to procurement deadlines by the Accounting officers through sanctions that include suspension of releases to agencies/projects not following procurement plans in the FY.
v) NEMA should fast-track cancellation of tittles in wetlands and put into practice the Presidential Directive of "No encroachment on wetlands and those already there leave by June 2017"
vi) The MFPED should fast-track wage bill allocation to the NEMA and LGs to support recruitment of necessary personnel in the approved structures.
vii) The MWE in consultation with MFPED should provide conditional grants for the ENRs to supplement the Wetlands Grant.
viii) The UNMA should improve on the means of disseminating weather forecast information to the public. The authority should fast track acquisition of a license code to use mobile phones and take advantage of the multimedia network to disseminate information.