



# **Natural Resources, Environment, Climate Change, Land and Water Resources Management Programme**

## **Semi-Annual Budget Monitoring Report**

**Financial Year 2023/24**

**March 2024**

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## ACRONYMS

ADCP	Acoustic Doppler Current Profiler
AFOLU	Agriculture, Forestry and Other Land Use
AMCOW	African Ministers' Council on Water
AWMZ	Albert Water Management Zone
BMAU	Budget Monitoring and Accountability Unit
CBD	Convention on Biological Diversity
CC	Climate Change
CCD	Climate Change Department
CCOs	Certificates of Customary Ownership
CEDP	Competitiveness and Enterprise Development Project
CFRs	Central Forest Reserves
CLAs	Communal Land Associations
CMC	Catchment Management Committee
CORS	Continuously Operating Reference Stations
DLBs	District Land Boards
DRC	Democratic Republic of Congo
DRMS	Domestic Revenue Mobilisation Strategy
DWRM	Directorate of Water Resources Management
EIA	Environmental Impact Assessment
ENR	Environment and Natural Resources
EPF	Environmental Police Force
EPPU	Environmental Police Protection Unit
EPR	Express Penalty Regulations
ESIA	Environment and Social Impact Assessments
EU	European Union
FGDs	Focus Group Discussions
FSSD	Forestry Support Services Department
FY	Financial Year
GCF	Green Climate Fund
GHG	Greenhouse Gas
GoU	Government of Uganda
GW	Ground Water
Ha	Hectares
ICT	Information and Communication Technology
IEC	Information Education Communication
IFMS	Integrated Financial Management System
IFPA-CD	Investing in Forest and Protected Areas for Climate Smart Development Project
INRM	Integrated Natural Resources Management
IPs	Implementing Partners
ISMCWU	Institutional Strengthening for Full Life Cycle Management of Chemicals and Waste in Uganda
ISO	International Standards Organisation
IWRDMP	Integrated Water Resources Development and Management Plan
Kms	Kilometers

KTB	Kenya Top Bar
KWMZ	Kyoga Water Management Zone
LAVMIS	Land Valuation Management Information System
LGs	Local Governments
LIS	Land Information System
LTS	Long-Term Climate Strategy
M&E	Monitoring and Evaluation
MDALGs	Ministries, Departments, Agencies and Local Governments
MDAs	Ministries, Departments and Agencies
MEAs	Multilateral Environmental Agreements
MFPEd	Ministry of Finance, Planning and Economic Development
MLHUD	Ministry of Lands, Housing and Urban Development
MoU	Memorandum of Understanding
MPS	Ministerial Policy Statements
MRV	Monitoring, Reporting and Verification
MUCCRI	Makerere University Center for Climate Change and Innovation
MWE	Ministry of Water and Environment
MZOs	Ministry Zonal Offices
NaLISEP	National Land Information System Enhancement Project
NAP EXPO	National Action Pan Exposition
NBDF	Nile Basin Development Forum
NBI	Nile Basin Initiative
NDC	Nationally Determined Contributions
NDP III	Third National Development Plan
NEAP	National Environment Action Plan
NEMA	National Environment Management Authority
NFA	National Forestry Authority
NIRA	National Identification and Registration Authority
NLIC	National Land Information Centre
NRECCLWM	Natural Resources, Environment, Climate Change, Land and Water Resources Management Programme
NSOER	National State of Environment Report
NTR	Non-Tax Revenue
NTSC	National Tree Seed Centre
NWIS	National Wetlands Information System
NWQMN	National Water Quality Network
NWQRL	National Water Quality Reference Laboratory
OPM	Office of the Prime Minister
PBS	Programme Budgeting System
PIAPs	Programme Implementation Action Plans
PIP	Public Investment Plan
PWDs	Persons with Disabilities
RCMRD	Regional Centre for Mapping of Resources for Development
RECP	Resource Efficiency and Cleaner Production
RED	Reducing Environment Degradation
RIA	Regulatory Impact Assessment

RL	Regional Laboratories
SDG	Sustainable Development Goal
SLAAC	Systematic Land Adjudication and Certification
SMC	Sound Management of Chemicals
SOP	Standard Operating Procedures
SW	Surface Water
ToRs	Terms of Reference
UBOS	Uganda Bureau of Statistics
UgNLIS	Uganda National Land Information System
UGRF	Uganda Geodetic Reference Framework
ULC	Uganda Land Commission
UN	United Nations
UNMA	Uganda National Meteorological Authority
UNRA	Uganda National Road Authority
URA	Uganda Revenue Authority
USD	United States Dollar
UWEWK	Uganda Water and Environment Week
VWMZ	Victoria Water Management Zone
WASH	Water, Sanitation and Hygiene
WASSMO	Water and Sanitation Sector Monitoring
WEC	Water and Environment Cooperative
WED	World Environment Day
WEIS	Water and Environment Information System
WIS II	Water Information System Phase II
WRM	Water Resources Management
ZARDI	Zonal Agricultural Research Development Institute

## FOREWORD

At the start of this Financial Year 2023/24, the Government of Uganda outlined strategies to accelerate the country's economic growth agenda. Some of these strategies centered on enhanced domestic revenue mobilization and collection, and effective implementation of various initiatives to improve the efficiency and effectiveness of government programs and projects.

Within your programmes, I urge you to undertake a comprehensive reflective exercise to find out if indeed the interventions being implemented are achieving the true essence of efficiency and effectiveness. If not, why? How can this situation be remedied? Without efficiency and effectiveness, the impact and the ensuing sustainability from the interventions will not be achieved, thus reducing the opportunities for investment in new and more productive ventures.

The government is concerned that some programmes have stagnated at fair performance over the years, although they receive a considerable amount of their budgets annually. These monitoring findings form a very important building block upon which the programmes can begin the reflective exercise. I will be happy to hear your ideas on how the last-mile service delivery can be improved.

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke extending to the right.

Ramathan Ggoobi

**Permanent Secretary/Secretary to the Treasury**

## EXECUTIVE SUMMARY

### Introduction

The Natural Resources, Environment, Climate Change, Land and Water Management (NRECCLWM) Programme seeks to stop and reverse the degradation of water resources, environment, and natural resources, as well as the effects of climate change on economic growth and livelihood security. The expected results relate to increasing land area covered under forests and wetlands, increasing compliance of water permit holders with permit conditions and enhancing the accuracy of meteorological information. The programme objective is to be achieved through three sub-programmes: Water Resources Management, Environment and Natural Resources Management, and Lands Management.

This semi-annual monitoring report presents findings from monitoring the NRECCLWM Programme budget execution period from 1<sup>st</sup> July 2023 to 31<sup>st</sup> December 2024. The performance is based on the budget commitments, annual planned output targets, and the third National Development Plan (NDPIII) targets within the same financial year (FY).

### Overall Programme Performance

The overall programme performance was rated fair at 57.9%. Under the National Water Quality Monitoring, 7,144 (51%) of the annual target of 14,000 samples were received and analyzed in the National Water Quality Reference Laboratory (NWQRL) in Entebbe and the four regional laboratories (RLs): (NWQRL 4,596, Fort Portal RL 820, Lira RL 745, Mbale RL 665 and Mbarara RL 318). Compliance with Drinking Water Standards was at 58.2% for rural sources (boreholes, shallow wells and protected springs). Compliance with Drinking Water Standards was 78.4% for urban supplies piped water systems). In total, Ug shs 340m was generated, of the projected Ug shs 500m, which was good for the half-year period.

A total of 147 samples (37%) of the 400 annual samples from 100 industries were collected for compliance monitoring to wastewater discharge standards. A total of 45.2% of the samples complied with wastewater discharge standards based on the following parameters: COD, BOD, TSS, TP and TN. A total of 63 water abstractions and wastewater discharge permit holders were monitored for compliance with permit conditions; while 33 water permit applications were assessed and recommended for issuance. However, there were some illegal water abstractors and wastewater dischargers. For example, 20 illegal abstractors were identified in the Albert Management Zones.

Underwater catchments, 28ha of degraded wetlands and 48km of degraded river bank buffer zones were restored. Additionally, 25 small water harvesting and 71km of soil and water management structures were constructed. Late receipt of funds affected the timeliness as some of the planned activities were under implementation during the January/February 2024 monitoring.

To increase tree cover, 510.2ha of commercial tree plantations were established under the National Forestry Authority (NFA) and the rest by other partners with a survival rate of about 70 percent. Some of the restorations included: 80ha in Kibego, 100ha in Muhangi and 200ha in Itwara (Muzizi Range). In Mbarara plantations; 37.8ha were planted in Rwoho; 25.2ha in Bugamba and 139,500 were restored in the Budongo Range. However, money was received when the rainy season was



ending which affected the survival rate. In Mwenge, no slashing was done before planting thus causing high competition with weeds.

A total of 3,154ha were freed from encroachment and protected; 2,946ha of degraded Central Forest Reserves (CFRs) were restored; 863kgs of assorted seedlings were produced and supplied cumulatively by the National Tree Seed Center (NTSC). Overall 10,087,237 seedlings were supplied countrywide. Examples include the Mbarara plantation which raised 250,000 seedlings, the Mwenge plantation 30,000 seedlings and Budongo with 336,080 seedlings.

For environmental compliance, 193 environment compliance and audit inspections were carried out for the management of oil and gas. As a result, a total of 110 prosecutions were undertaken (85 criminal and 35 civil cases). Such cases included evictions from Ndeija wetland in Rwampara and 42 environmental pollution and degradation incidences registered and responded to; 96 environment compliance and audit inspections were conducted. Others were enforcement and field inspections conducted in critical wetlands like Lubigi.

By the end of Q2, the compilation of the National State of Environment Report (NSOER) was in progress. The National Wetlands Information System was installed and operational at the centre. The process of establishing the National Climate Change Information System was also initiated. Finalization of the digital vulnerability map used for the identification of climate risk areas was ongoing.

For weather observation and forecasting, a September-December Seasonal Forecast with advisories to key sectors of the economy for all the 16 climatological zones was issued; 552 Terminal Aerodrome Forecasts, 10 SIGMETs and 17,664 METARs and 4,024 flight folders for different stations given out. Daily forecasts were disseminated to three media houses - Uganda Broadcasting Corporation, Star TV, and Bukedde 1 T.V after the newscasts in Luganda, Swahili and English; the Radar and Windshear Operations were maintained at Lira, Rwampara and Entebbe stations.

To strengthen the capacity of land management institutions (state and non-state actors) 26 District Land Board appointments were reviewed and approved; 15 public sensitizations on land matters were undertaken in 10 districts, and the role of three traditional institutions in land administration strengthened (three clans i.e. Atoro, Palaronya, Lamogi in Amuru under Acholi sub-region). For land security, 24,467 titles were processed and issued and Ug shs 36.06bn was generated. Version 7.0 of the National Land Information System was developed for functionality.

The 60 Land Information System (LIS) users from the Management Zone Offices (MZOs) of Mbale, Moroto, Soroti and Tororo were trained on LIS; six certificates of titles processed for the Ministries, Departments and Agencies (MDAs); 122 court cases managed out of the planned 80, while 405 lease transactions were processed and Ug shs 3.277bn collected from all leases across the country. All 22 MZOs were operated and maintained.

There were a total of 110 land disputes, and 19 blue pages were processed and validated. A total of 22,500 deed plans approved, and 30km of international border surveyed and demarcated between Uganda and Kenya. Jinja city boundary was surveyed and updated, and 8km of two (2) national (inter-district) boundaries in Kyaka affirmed to reduce border disputes and protect the fragile ecosystem. A total of 18 topographic maps for Napak and Moroto districts were updated and disseminated, while 20 surveys and mapping data were rectified across 22 (MZOS), and

29,234 property valuations were carried out, as National Valuation Standards and Guidelines were developed.

### **Challenges**

- i) Exploitation of the existing laws/guidelines by private laboratory operators who carry out water quality testing services thus compromising with the standards in some instances.
- ii) Budgetary constraints caused by non-remittance of quarter one (Q1) funds and late release of Q2 finances which led to late or no implementation of planned outputs and reduced survival rate of seedlings.
- iii) Interference in the natural resource activities sometimes increasing the rate of encroachment and degradation of the environment.
- iv) Accumulation of debts especially on non-paid certified works which are likely to attract interest.

### **Recommendations**

- i) The MWE should expedite the review of the water policy stipulating the water quality testing laws/guidelines governing private practitioners.
- ii) The MWE should lobby for top political support for environment and natural resources protection and enforcement of relevant laws.

## CHAPTER 1: INTRODUCTION

### 1.1 Background

The mission of the Ministry of Finance, Planning and Economic Development (MFPED) is, “*To formulate sound economic policies, maximise revenue mobilisation, and ensure efficient allocation and accountability for public resources so as to achieve the most rapid and sustainable economic growth and development.*”

The MFPED through its Budget Monitoring and Accountability Unit (BMAU) tracks the implementation of programmes/projects by observing how values of different financial and physical indicators change over time against stated goals, indicators and targets (how things are working). The BMAU work is aligned with budget execution, accountability, service delivery, and implementation of the Domestic Revenue Mobilisation Strategy (DRMS).

Starting FY2022/23, the BMAU is undertaking Programme-Based Monitoring to assess performance against targets and outcomes in the Programme Implementation Action Plans (PIAPs)/Ministerial Policy Statement. Semi-annual and annual field monitoring of government programmes and projects is undertaken to verify the receipt and application of funds by the user entities and beneficiaries, the outputs and intermediate outcomes achieved, and the level of gender and equity compliance in the budget execution processes. The monitoring also reviews the coherency in implementing the PIAP interventions; the level of cohesion between sub-programmes; and challenges of implementation.

The monitoring covered the following Programmes: Agro-Industrialization; Community Mobilisation and Mindset Change; Digital Transformation; Human Capital Development; Innovation, Technology Development and Transfer; Integrated Transport Infrastructure and Services; Mineral Development; Natural Resources, Environment, Climate Change, Land and Water Management; Public Sector Transformation; Regional Development; Sustainable Development of Petroleum Resources; and Sustainable Energy Development.

This report presents findings from the semi-monitoring of the Natural Resource, Environment, Climate Change, Land and Water Management (NRECCLWM) Programme for FY2023/24.

### 1.2 Natural Resources, Environment, Climate Change, Land and Water Management Programme

The Natural Resources, Environment, Climate Change, Land and Water Management (NRECCLWM) Programme contributes to the NDPIII objective of “*Enhancing Value Addition in Key Growth Opportunities*”. The programme focuses on reversing environmental and natural resource degradation, ensuring the availability of adequate water resources for national development, containing the effects of climate change and fostering effective land management. The programme was delivered through three sub-programmes namely: (i) Water Resources Management (WRM), (ii) Environment and Natural Resources Management (ENR), and (iii) Land Management.

The lead agency for this programme is the Ministry of Water and Environment (MWE), while the other partner MDAs are National Environment Management Authority (NEMA), Uganda National Meteorological Authority (UNMA), National Forestry Authority (NFA), Local Governments

(LGs), Ministry of Lands, Housing and Urban Development (MLHUD), Office of the Prime Minister (OPM), and Uganda Land Commission (ULC).

### **1.3 Programme Goal**

The Programme's goal is to reduce environmental degradation and the adverse effects of climate change as well as improve the utilisation of natural resources for sustainable economic growth and livelihood security.

### **1.4 Programme Objectives**

The Programme objectives are to: (i) Ensure the availability of adequate and reliable quality freshwater resources for all uses; (ii) Increase forest, tree and wetland coverage and restore and protect hilly and mountainous areas and rangelands; (iii) Strengthen land use and management; (iv) Maintain and/or restore a clean, healthy, and productive environment; (v) Promote inclusive climate resilient and low emissions development at all levels; (vi) Reduce human and economic loss from natural hazards and disasters; and (vii) Increase incomes and employment through sustainable use and value addition to water, forests and other natural resources.

### **1.5 Programme Outcomes**

The Programme outcomes over the NDP III period are: increased compliance to all water permit conditions, enhanced water resources management, increased land area covered by forests and wetlands, high compliance to Environmental and Social Impact Assessment (ESIA) conditions by developers, and improved air quality in cities.

Others are: climate change responsive development pathway established, reliable and accurate meteorological information provided, reduced human and economic loss from natural hazards and disaster, increased titled land, and reduction in land conflicts.

## **CHAPTER 2: METHODOLOGY**

### **2.1 Scope**

This report is based on selected interventions in the Natural Resources, Environment, Climate Change, Land and Water Management (NRECCLWM) Programme based on three sub-programmes: Water Resources Management, Environment and Natural Resources Management, and Land Management. The monitoring covered interventions implemented during the first half of FY 2023/24 (1<sup>st</sup> July-31<sup>st</sup> December 2023). The interventions and respective outputs reviewed under each sub-programme; Ministries, Departments and Agencies (MDAs)/Vote/LGs are listed in Annex 1.

Monitoring involved analysis and tracking of inputs, activities, processes, outputs and in some instances intermediate outcomes as identified in the Programme Implementation Action Plans (PIAPs), Ministerial Policy Statements, annual and quarterly work plans, progress and performance reports of MDAs and LGs.

The selection of interventions to monitor was based on the following criteria:

1. Significant contribution to the programme objectives and national priorities.
2. Level of investment, interventions that had a large volume of funds allocated were prioritized.
3. Planned outputs whose implementation commenced in the year of review, whether directly financed or not. In some instances, multiyear investments or rolled-over projects were prioritized.
4. Completed projects to assess beneficiary satisfaction, value for money and intermediate outcomes.

### **2.2 Approach and Sampling Methods**

Both qualitative and quantitative methods were used in the monitoring exercise. The physical performance of interventions, planned outputs and intermediate outcomes were assessed through monitoring a range of indicators. The progress reported was linked to the reported expenditure and physical performance. A combination of random and purposive sampling was used in selecting sub-interventions and outputs from the Programme Implementation Action Plans (PIAPs), MPS and progress reports of the respective MDALGs for monitoring.

To aid mapping of PIAP interventions against annual planned targets stated in the Vote MPS and quarterly work plans, a multi-stage sampling was undertaken at three levels: i) Sub-programmes ii) Local governments, and iii) Project beneficiaries. The selection of districts and facilities is considered regional representativeness.

## 2.3 Data Collection and Analysis

### Data Collection

The monitoring team employed both primary and secondary data collection methods. Secondary data collection methods included:

- i) Literature review from key policy documents including, MPS FY2023/24; National and Programme Budget Framework Papers; A handbook for implementation of NDPIII Gender and Equity commitments, PIAPs, NDP III, quarterly progress reports and work plans for the respective implementing agencies, quarterly performance reports, Budget Speech, Public Investment Plans, Approved Estimates of Revenue and Expenditure, project reports, strategic plans, policy documents, Aide Memoires and evaluation reports for selected programmes/projects.
- ii) Review and analysis of data from the Integrated Financial Management System (IFMS); Programme Budgeting System (PBS); Budget Portal; and quarterly performance reports.

Primary data collection methods on the other hand included:

- iii) Consultations and key informant interviews with Institutional heads, project/intervention managers, service providers (National Water and Sewerage Corporation; Umbrella Organizations), and service beneficiaries at various implementation levels. Focus Group Discussions (FGDs) were also held in instances of group beneficiaries.
- iv) Field visits to various districts, for primary data collection, observation and photography.
- v) Callbacks in some cases were made to triangulate information.

### Data analysis

The data was analyzed using both qualitative and quantitative approaches.

Qualitative data was examined and classified in terms of constructs, themes or patterns to explain events among the beneficiaries (interpretation analysis) and reflective analysis where the monitoring teams provided an objective interpretation of the field events. Quantitative data on the other hand was analyzed using advanced Excel tools that aided interpretation.

Comparative analyses were done using percentages, averages, and cross-tabulations of the outputs/interventions; intermediate outcome indicators and the overall scores. Performance of outputs/interventions and intermediate outcome indicators was rated in percentages according to the level of achievement against the annual targets. The sub-programme score was determined as the weighted aggregate of the average percentage ratings for the output/intermediate outcomes in the ratio of 65%:35% respectively.

The overall programme performance is an average of individual sub-programme scores assessed. The performance of the programme and sub-programme was rated based on the criterion in Table 2.1. Based on the rating assigned, a BMAU colour-coded system was used to alert the policymakers and implementers on whether the interventions were achieved or had very good

performance (green), good performance (yellow), fair performance (light gold), and poor performance (red) to aid decision making.

**Table 2.1: Assessment Guide to Measure Performance in FY 2023/24**

Score	Performance Rating	Comment
90% and above		Very Good (Achieved at least 90% of outputs and outcomes)
70%-89%		Good (Achieved at least 70% of outputs and outcomes)
50%- 69%		Fair (Achieved at least 50% of outputs and outcomes)
49% and below		Poor (Achieved below 50% of outputs and outcomes)

*Source: Authors' Compilation*

### **Ethical considerations**

Entry meetings were undertaken with the Permanent Secretaries/and Accounting Officers or delegated officers upon commencement of the monitoring exercises. Consent was sought from all respondents including programme or project beneficiaries. All information obtained during the budget monitoring exercise was treated with a high degree of confidentiality and only used in policy making and improving service delivery.

### **2.4 Limitations**

1. Lack of reliable and real-time financial data on donor financing which was not accessible on the IFMS.
2. Lack of disaggregated financial information for specific outputs.
3. Repetitive outputs/activities across the different interventions made it difficult to march finances under the different interventions.

### **2.5 Structure of the Report**

The report is structured into four chapters - Introduction, Methodology, Programme Performance, Conclusion and Recommendations respectively.

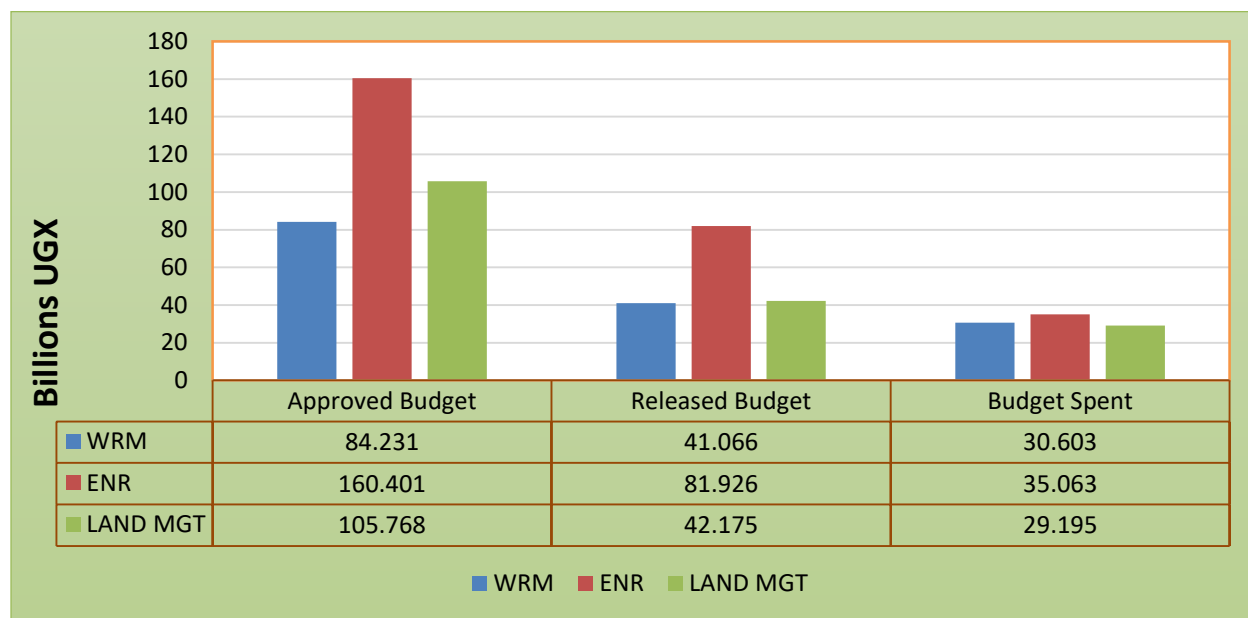
## CHAPTER 3: PROGRAMME PERFORMANCE

### 3.1 Overall Programme Performance

#### Financial performance

The total approved budget for the Natural Resources, Environment, Climate Change, Land and Water Management Programme for FY2023/24 was Ug shs 350.4bn, of which Ug shs 165.167bn (47.1%) was released and Ug shs 94.861bn (27.1%) spent by 31<sup>st</sup> December 2023. This was a good release but poor expenditure performance, although the release was not timely. The FY2023/24 budget is Ug shs 107.49bn (30%) less compared to the previous year. At least Environment and Natural Resources Management (ENR) got a good release of its budget at 50%, followed by Land Management (LM) at 39.9% and Water Resources Management (WRM) at 25% which was poor. The overall expenditure performance was equally poor, the worst spender being LM at 27.6%, ENR at 40.8% and WRM at 35.6% attributed to delayed procurement and finalizing land compensations, G-77 conferences which necessitated all government vehicles to be handed over thus affecting movement of officers, and delays in the submission of invoices by contractors among others. The detailed financial performance is in Figure 1.0.

**Figure 1.0: Semi-annual (FY2023/24) financial performance for the Natural Resources Environment Climate Change Land and Water Management Programme (in Bn. Ug shs)**



*Source: Approved Budget Estimates, IFMS, Vote Work Plans, and Q4 Performance Reports*



## Physical performance

The overall half-year physical programme performance was fair at 57.9%. The performance of each of the three sub-programmes was as follows: The WRM performance scored 65%, NRM 57.15%, and LM 50.8%. The general performance is reflected in Table 3.1. The key output achievements included: water resources data (quantity and quality) collected and assessed to inform decision-making bodies; Complete Water Information System Phase II (WIS II) rolled out at the centre and in the four regions; a total of 5,896 water, wastewater and environmental samples were analysed and non-tax revenue (NTR) amounting to Ug shs 340m generated. The national and regional water quality testing laboratories were kept functional. The Catchment Management Plans for Nyamugasani and Kafu were 100% developed.

Cumulatively 7,144 water, wastewater and environmental samples were analysed. A total of 1,031 Environmental Impact Assessment (EIA) reports were assessed and reviewed; 354 water abstraction permit applications (193 new and 161 renewals) were assessed and as a result, 181 permits (189 new and 125 renewals) issued. Overall, only seven (7) Environmental Audits out of the targeted 20 were assessed and reviewed; two forestry management plans were developed, 13,659ha of degraded CFRs freed from encroachment, 5,981ha restored and 960km of forest boundary was surveyed and marked with pillars. A total of 513ha of plantations were established by NFA with a survival rate of 70% and 13,570 by licensed tree planters at a survival rate of 65%; 467.75km of wetlands were demarcated with pillars and 12,347km restored countrywide. A total of 24,467 land titles were processed and issued to both men and women, while 256 land titles issued in fragile ecosystems (wetlands and forest reserves) were cancelled.

**Table 3.1: The NRECCLWM Programme Performance by 31<sup>st</sup> December 2023**

Sub-program	Performance Rating	Remark
Water Resources Management	65.8	Fair performance
Environment and Natural Resources Management	50.8	Fair performance
Land Management	57.15	Fair performance
<b>Overall programme performance</b>	<b>57.2</b>	<b>Fair</b>

*Source: Authors' Compilation*

## 3.2 Water Resources Management Sub-programme

### Introduction

The Directorate of Water Resources Management (DWRM) under MWE is responsible for managing and developing the water resources of Uganda in an integrated and sustainable manner. The overall objective of the sub-programme is to assure the availability of adequate and reliable quality freshwater resources for all uses. The sub-programme has one intervention that was monitored. That is *improve coordination, planning, regulation and monitoring of water resources at the catchment level*.

The sub-programme NDP III targets to increase water permit holders complying with permit conditions at the time of spot check for groundwater to 79%, surface water to 80% and wastewater discharge permit conditions to 63%. It also targets to increase water samples complying with national standards at the supplies/collection point to 71% in the FY2023/24.

### Sub-programme Performance

By 31<sup>st</sup> December 2023, the sub-programme performance was fair at 65.8%. The only funds received came in late November and by the time of monitoring in January-February most activities were just starting. Major achievements were under multiyear projects and off-budget support. The construction of the National Water Quality Monitoring Reference Laboratory was at 40% progress; the accreditation process of the NWQL to ISO/IEC 17025 2017 at 75%; feasibility studies and detailed designs for Angololo MPP were completed; water resources data (quantity and quality) collected and assessed at the centre and in the four regions. The National Water Quality Reference Laboratory upgrade to ISO certification was ongoing at 75%. Portable water at the point of collection and wastewater permit issuance and monitoring undertaken. A summarised performance of the intervention is given in Table 3.2 and detailed performance in Annex 2.

**Table 3.2: The Overview of the WRM Intervention Performance by 31<sup>st</sup> December 2023**

No	Intervention	Performance Rating (%)	Remarks
01	<i>Improve coordination, planning, regulation and monitoring of water resources at the catchment level</i>	On track	Fair performance as finances were received late and most works were ongoing or had just started.
	<b>Overall performance</b>	<b>65.8</b>	<b>Fair performance</b>

The detailed performance of the monitored interventions is discussed hereafter:

### Intervention Performance

#### 3.2.1 Improve coordination, planning, regulation and monitoring of water resources at the catchment level

This intervention aims to ensure regulated and coordinated use of the water resource sustainably. The key implementer of this intervention is the Ministry of Water and Environment (MWE). The 15 interventions planned and monitored output were: i) Joint transboundary catchment investment projects prepared; ii) Water resources data (quantity and quality) collected and assessed; iii)

National Water Quality Monitoring infrastructure and networks upgraded and functionally; iv) Operational Water information systems at the central level and in the 4 Water Management Zones; v) Operational optimal Surface Water and Ground Water monitoring network in established; vi) Robust E-based Water Resources Information System; vii) Improved water use efficiency for increased productivity in water consumptive programmes (agro-industrialization, manufacturing, mineral development). 2. National water budget to inform equitable and efficient allocation for all water uses determined

Other planned outputs are: viii) Functional gender-sensitive water catchment management committees established ix) Demonstration centres for demonstration of innovative catchment management measures established; Degraded water catchments protected and restored through the implementation of catchment management measures; x) Degraded water catchments protected and restored through implementation of catchment management measures; xi) National Water Quality Reference Laboratory analytical capacity upgraded and regional Laboratories established to address issues related drinking water, pollution and SDGs; xii) Catchment Management Plans in the Water Management Zones; xiii) Increased water storage capacity to meet water resources use requirements; xiv) Water resources compliance monitoring equipment procured and installed; xv) Water management measures implemented in priority sub-catchments. The overall intervention performance was fair at 65.8% achievement of the set output targets.

The status of implementation by the end of December 2023 is illustrated hereafter:

#### **i) Joint transboundary catchment investment projects prepared**

This output focuses on sustainable management and use of catchments and water resources shared between the countries of Uganda, Kenya, the Democratic Republic of Congo (DRC) and Tanzania. The initiatives are in most cases jointly implemented by the countries sharing a given water body. The output performance was good at 91.5% and most activities were on track with the Angololo Multi-Purpose Project (MPP) detailed designs complement and other transboundary activities kept in check.

Under the output, the plans included the following: i) Permanent staff salaries paid and appraised; Four (4) departmental meetings held; Trans boundary projects and programme well managed and coordinated; Contributions to international Organisations effected; ii) Investment Plans for joint management of fragile sections of Trans boundary rivers Semliki, Kagera and Sio systems undertaken; Strategic Trans-boundary monitoring stations/infrastructure rehabilitated; iii) Conduct Joint activities at common borders with our neighboring countries; Kenya, Tanzania, D.R Congo etc., through common project and activities (Angololo MPP, Nyimur MPP, Kagera RBM activities etc.); iv) Joint trans-boundary investment projects prepared and implemented: vi) Feasibility Studies and Detailed designs for Angololo MPP conducted; v) The African Ministers' Council on Water (AMCOW)-Water and Sanitation Sector Monitoring (WASSMO) water, sanitation and hygiene (WASH) data collected, validated and disseminated; vi) The 7<sup>th</sup> Nile Basin Development Forum (NBDF).

Other planned outputs were: vii) Feasibility and designs for the rehabilitation of wastewater ponds and auxiliary activities in the Luzira catchment conducted; viii) Transboundary information and Knowledge management system enhanced and upgraded; ix) Coordination & Participation in the groundwater project for the selected transboundary aquifers; x) Surveillance and Mapping of flooding areas on transboundary river systems conducted; xi) Annual subscription to international

Organizations Nile Basin Initiative (NBI) and AMCOW) effected/paid; xii) Statutory governance meetings/foras for the management of transboundary river basins and transboundary water systems effectively participated in and well-coordinated; xiii) Nile allocation and management tool developed; xiv) Department well managed and administered.

Salaries for Six (06) permanent were paid, all the staff we supervised and appraised, two (02) departmental meetings were held and staff concerns were responded to. Transboundary projects and programmes were well managed and coordinated, also contributions for the Nile Basin Initiative (NBI) and AMCOW were effected. The rehabilitation of three strategic transboundary monitoring stations/ infrastructure in the AWMZ was supported, and 15 transboundary hydromet stations were upgraded with some support from the NBI hydromet project that supplemented GOU funding.

Fieldwork activities to identify managed aquifer recharge sites for Mt. Elgon Aquifer were undertaken in Mbale and for the Kagera Aquifer in Ntungamo and Kyotera districts. Tentative sites were selected and discussed in the regional workshops held in December in Kampala. Pre-feasibility studies for the transboundary project were completed and approved by MFPED-DC for the feasibility stage.

Feasibility studies and detailed designs for Angololo MPP were completed; AMCOW-WASSMO WASH data wasn't collected, validated and disseminated. Preparatory meetings for hosting the 7<sup>th</sup> Nile Basin Development Forum, as well as for the 31<sup>st</sup> Nile Council of Ministers' meeting were conducted. A review of the feasibility study reports for the rehabilitation of wastewater ponds and auxiliary activities in the Luzira catchment was completed. On the other hand, draft Terms of Reference (ToRs) for the design of domestic water supply as well as floating solar panels were developed. These components had not been included in the original project design.

Under the Transboundary Information and Knowledge Management System enhanced and upgraded; a WEIS meeting for the demonstration, sign-off and handover of the WEIS modules was participated in and transboundary information and data were disseminated and shared with key stakeholders. The groundwater project for the selected transboundary aquifers and NBI groundwater project for the selected transboundary aquifers (Mt. Elgon and Kagera aquifers) were held and coordinated where they reviewed and validated the action plans and technical guidelines of reports. Surveillance and mapping field trip of flooding areas on Lake Kyoga was conducted, and subscription to NBI was made to 100%. This enabled Uganda to secure the position of Executive Director for the next two years at the NBI-Secretariat. The annual subscription to AMCOW was effected.

There was effective participation in the UN-prepared Sustainable Development Goal 6 (SDG6)-Policy Support System meeting. This was meant to help in monitoring the progress of achievement of SDG six indicators at the country level. Uganda effectively coordinated and hosted the 7<sup>th</sup> Nile Basin Development Forum that took place in Speke Resort Muyonyo-Kampala. A bilateral meeting with the new German Ambassador to explore avenues for funding for some of the transboundary water resources activities was held.

## **ii) Water resources data (Quantity and Quality) collected and assessed**

The planned activities include 55 stations on Lake Victoria, 8 Kyoga, 7 Albert, 7 Edward and 10 George monitored for compliance to ambient water quality; 50 industries supported to implement

Resource Efficiency and Cleaner Production (RECP) best practices; and 10,000 data records processed. The output performance was good with water quality assessments made (data processing and analysed) and equipment procured.

By the end of Q2, Water Quality Management functions were coordinated and supervised, the Water Quality Department and Laboratories operated and maintained and one (01) supervision and quality assurance visit was undertaken to the Mbale Regional Laboratory.

During the period under review, 55 stations on Lake Victoria, eight Kyoga, seven Albert, seven stations on Lake Edward and 10 stations on Lake George were monitored for compliance with ambient water quality; water quality testing was done to ensure adherence to the national water quality stands; 112 samples were collected from lake monitoring stations and six (06) industries were supported on Resource Efficiency and Cleaner Production (RECP) best practices out of the planned 50 industries to be supported.

A total of 2,315 WQ data records out of targeted 10,000 for data processing were entered in the data management system for water quality, two field visits for NWQMN review were undertaken and field data analysis was still ongoing while 12 staff were trained on data analysis tools. A total of 872 water samples from piped water supplies and point water sources were collected and analysed for compliance with national standards. Overall compliance with national standards for drinking water quality was 60.3%.

### **iii) National Water Quality Monitoring infrastructure and networks upgraded and functional**

In the FY, some of the planned activities under this output were; i) four groundwater and four surface water stations rehabilitated for increased resilience to climate-induced impacts; one water resources assessment undertaken to 100% in (the Mpologoma Catchment); ii) stations files for 16 surface water and 16 groundwater stations updated; 16 monitoring wells flushed; iii) 4,000 boreholes, shallow wells, protected springs and piped water systems monitored, samples collected for compliance to national drinking water standards. Monitoring and evaluation of Project activities and outputs undertaken; iv) Hydromet equipment (5 groundwater, 5 surface water, 2 automatic weather stations supplied and installed; v) 4 surface water quantity assessments for selected rivers undertaken;

Others included: vi) 4 flood assessments establish a threshold for flood-prone rivers undertaken; vii) one gauge readers refresher training course organised and conducted; viii) Special Acoustic Doppler Current Profiler (ADCP) measurements for review of rating curves (4No.Sites) undertaken; ix) 3 water resources assessments (baseline and monitoring data) undertaken) 1000 water samples collected and analysed; xi) 480 water wastewater; xii) 100 water abstraction permit applications assessed and recommended for issuance; xiii) 60 Illegal water abstractors and wastewater dischargers identified and sensitized to acquire permits; xiv) 8 Environmental Impact Assessments (EIAs) reviewed and comments submitted to NEMA. Progress on the planned outputs was poor at 29% as the planned upgrades were not achieved.

The groundwater and surface water stations rehabilitation and flushing of groundwater wells were affected by the late release of funds and the Water resources assessment for the Mpologoma Catchment was at 30% progress out of the planned 100% annual target. Six surface water station files were updated (Nakivubo 6<sup>th</sup> Street, Sezibwa, Mayanja, Kafu, Jinja Pier and Entebbe Pier) and

six groundwater wells were geo-referenced (2 Bugolobi, 3 Wobulenzi and 1 Bombo) basing on stations files for 16 surface water and 16 groundwater stations updated and 16 monitoring wells flushed as planned.

Water samples from 92 boreholes, shallow wells, protected springs and piped water systems were collected and tested for compliance with drinking water standards. The compliance levels were; 58.2% for rural (boreholes, shallow wells and protected springs) and 78.4% for urban (piped water systems). The activity was still ongoing at the time of monitoring due to the late receipt of funds. The Hydromet equipment was delivered to the Directorate of Water Resources Management warehouse as installation and training were waiting for substantial completion of the construction of the monitoring stations.

Only two surface water quantity assessments were carried out on River Mpanga mapping water use and in Kagera catchment looking at the impact different of water demands on the catchment flows and a report produced. Two flood assessment studies out of the planned four were undertaken i.e. for Kafu catchment and Katonga catchment. This was at Katonga Bridge along Sembabule-Maddu road and around L. Wamala. Results showed that the hydrology of the Katonga catchment changed due to recent floods for example the flooding in May 2023 requiring systematic and phased unblocking of road culverts by UNRA to prevent damming effect.

The gauge readers' refresher training course was not conducted, while the ADCP measurements for 16 major rivers<sup>1</sup> and Special ADCP measurements for review of rating curves (10No. Sites) were carried out as planned. Four regional water quality laboratories in Mbarara, Mbale, Lira and Fort Portal were operated and maintained whereas, the three planned water resources assessments (baseline and monitoring data) were affected by resource constraints.

The 1,239 water samples out of the targeted 10,000 (315 drinking water and wastewater, 70 deep wells, 10 shallow wells, 100 client samples, 20 samples for 3 ponds) were collected and analysed. As a result, NTR amounting to Ug shs 340.4m (68%) of the total projected Ug shs 500m was generated. (NWQRL 269,264m; Mbale 16.998m, Lira 30.011m, Fort Portal 19.544m and Mbarara 4.550m).

Overall 582 samples (15%) were collected from boreholes, shallow wells, protected springs and piped water systems. 58.2% of the sources in rural areas and 78.4% of sources in urban areas complied with drinking water standards concerning E.coli. A total of 145 samples (29%) were collected from 14 stations on Lakes Edward and George. The results showed that both lakes Edward and George were experiencing eutrophication due to high nutrient levels. Both lakes had average light penetration levels of 0.5m indicating low productivity of the systems.

The target was to collect 500 water samples from 55 stations on Lake Victoria, 8 Kyoga, 7 Albert, 7 Edward and 10 George monitored for compliance with ambient water quality. However, 809 samples were collected from 156 stations on major rivers (Nile, Kagera, Katonga, Rwizi, Aswa, Mpologoma, Malaba, Lwakhakha, Manafwa, Enyau, Nyarwodho) other rivers and streams. The results indicated increased sediment loading into the water bodies attributed to increased catchment degradation.

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<sup>1</sup> Kafu, Mayanja, Mpanga, the Nile at Para, Sezibwa, Mpologoma, Malaba, Manafwa, Namatala, Sironko, Simu, Sipi, Atari, Agu, Abuket, Awoja and Enget.

The plan was to support 25 industries to implement Resource Efficiency and Cleaner Production (RECP) best practices. By the end of Q2, an assessment was initiated for six (06) industries (24%) for support in the adoption of Resource Efficiency and Cleaner Production (RECP) best practices. Two mobile laboratories were procured and a detailed design for flood control management wasn't undertaken.

A total of 187 water abstraction and wastewater discharge permit holders were monitored for compliance with permit conditions with an average compliance level of 58.3% out of the 480 annual targets. Some of these permit holders monitored were from Busia, Pallisa, Kaberamaido, Kween and Bukwo districts. A total of 42 water permit applications out of 1,000 were assessed and recommended for issuance. These were in areas of (Ibanda-Bwahwa Parish, Rubirizi-Nyamabare Parish, Mbarara-Kash Hardware, Karubanda Parish in Kabale Municipality, Pallisa and Busia districts.

A total of 104 illegal water abstractors out of the annual targeted 60, were identified in areas of Busia, Pallisa and Kalaki. These were sensitized to the benefits of water permits. An assessment of 7 EIA for faecal sludge treatment was made and comments were submitted to the center for compilation.

#### **iv) Robust E-based Water Resources Information System**

The plan to procure 20 water level dippers for groundwater monitoring network supplied and distribute them was initiated and 25km of banks and shorelines for (River Manafwa 10km and eastern Kyoga 5km) were mapped and delineated for gazettelement. A total of 181 permits (groundwater, surface water abstraction, drilling, hydraulic construction, dredging and wastewater discharge) were issued; 203 permit holders were monitored for compliance with permit conditions and 177 applications of drilling, construction, abstraction and wastewater discharge permits assessed. The 14 Environmental Impact Assessments (EIA) for water resources-related projects were also reviewed and comments were sent to NEMA. The output is a repetition of operational Water Information Systems at the central level and in the four WMZs.

#### **v) Operational Water Information Systems at the central level and in the 4 Water Management Zones**

The output aim is to improve the existing water information system to meet customer/stakeholder satisfaction and operationalize the national water management information system. The plan was for the Water Information System Phase II (WIS II) developed and fully rolled out. The WIS II is meant to provide centralised and systematic access to water and environment data, information and knowledge products in the MWE. The WIS II performed at 100% for the first half of the FY.

The MWE plan in the FY is one hydrological modelling undertaken and a report produced, the WISII fully developed and operationalized in Kyoga, Victoria, Upper Nile and Albert WMZs. By the end of Q2, 20% of the hydrological modeling for the Aswa catchment was undertaken for both surface and groundwater and 30% of the Mpologoma catchment was mapped and assessed. The Water and Environment Information System (WEIS II) was fully developed, deployed at the MWE Centre, Entebbe and the 4 Water Management Zones and regional offices and was launched in December 2023.

A Memorandum of Understanding (MoU) between MWE and the National Identification and Registration Authority (NIRA) was signed to support the integration of the WEIS with NIRA

common data. Whereas a draft MoU between URA and MWE was reviewed in December 2023 and will be signed upon adopting the changes proposed for integration of WEIS into URA common data. Approximately 20% of hydro-logical modeling for the Aswa catchment (surface and groundwater) was undertaken and a report was produced.

**vi) Operational optimal Surface Water and Ground Water monitoring network established**

The plan is a hydrological yearbook prepared and published: Configuration and calibration of eight (8); Surface water and eight (8) groundwater telemetric stations undertaken; four (4) surface water telemetric stations were configured and calibrated. R. Manafwa at Mbale-Tororo and R. Mpologoma at Budumba, R. Agu in Ngora and R. Awoja Mbale – Soroti Road, Sezibwa) 1 self-monitoring data/hydraulic statement and report from a major reservoir has been received; 12 monitoring stations five groundwater, five surface water, and two automatic weather stations) constructed to 100%.

By the end of Q2, 69,855 hydrological data records obtained from 38% of the surface water monitoring stations network (49 out of 131 stations) were validated, quality assured and archived. This data is used for water resource management, environmental conservation, public safety and scientific research.

The four surface water telemetric stations were configured and calibrated. (R. Manafwa at Mbale-Tororo and R. Mpologoma at Budumba, R. Agu in Ngora and R. Awoja Mbale – Soroti Road, Sezibwa) 1 self-monitoring data/hydraulic statement and report from a major reservoir received. Surface water stations were constructed to 45% (protective structures, fence, inspection chambers plus conduit laid at Aswa 1 and Pager and pillar gauges at Pager). Groundwater stations constructed to 55% (the stations of Kaliro, Mityana, Arua, and Bullisa were drilled, pump tested, and developed. Construction of a protective house at Kaliro is ongoing). Automatic weather stations are at 20% level of completion (Fabrication of the towers).



**L: A protective structure and fencing for a surface water monitoring station for Aswa 1 in Otuke district; R: A drilled well for a ground water monitoring station in Kaliro District**

The aquifer system for Nakasongola was assessed to 60%. That is Aquifer and Aquitard characteristics to get the status of Ground Water within the area since it lies in the water-stressed zone. This was done by assessing porosity through carrying out geophysical well logging,



Analysing lithological rock formations, and assessing permeability through: pumping tests, and conducting laboratory tests on aquifer rock samples.

**vii) Improved water use efficiency for increased productivity in water consumptive programmes (agro-industrialization, manufacturing, mineral development). 2. National water budget to inform equitable and efficient allocation for all water uses determined**

During the FY, the MWE planned water permit registry and database operated and maintained; four quarterly supervision trips undertaken one newspaper advert on licensed drilling permit holders, registered hydrogeologists and hydrogeological firms issued; water permit registry and database operated and maintained; 4 quarterly supervision trips undertaken.

By 31<sup>st</sup> December 2023, the water permit registry and database were operated and maintained and two quality assurance and supervision trips were undertaken (Victoria and Kyoga Water Management Zones) out of four annual targets. A supervision and quality assurance visit to the Mbale Regional Laboratory was undertaken and two monitoring trips were conducted to Nyamwamba catchment in Albert Water Management Zone and Lwakhakha and lower Awoja sub-catchments in Kyoga Water Management Zone.

**viii) Functional gender-sensitive water catchment management committees established**

The target was eight quarterly meetings for the operationalization of two sub-catchment committees held. Progress by 31<sup>st</sup> December was that the centre and three (3) WMZs coordinated three (3) meetings to present the performance progress of Water and Environment Cooperative Societies. Moreover, the activities and outputs of Water and Environment Cooperative Societies were monitored and repayment of revolving funds was tracked. The output was not performed, affected by low releases.

Catchment Management Committee (CMC) guidelines require that women be elected in at least two key management positions. The Victoria Water Management Zone (VWMZ) held the 14<sup>th</sup> Rwizi catchment management committee meeting at Igongo Cultural Hotel in Mbarara town and new CMC members for Rwizi were elected. The membership of the group comprised 5 females and 26 males. Two groups were identified in the Rwizi catchment to be supported in income-generating activities and alternative livelihood opportunities.

**ix) Demonstration centres for demonstration of innovative catchment management measures established; degraded water catchments protected and restored through implementation of catchment management measures**

The plan was for 14 Water and Environment cooperatives supported to implement income-generating activities; 32 income-generating activities implemented by Water and Environment Cooperatives, 160km of soil and water management structures constructed; 10 small water harvesting and flood control structures constructed; 4 private tree nursery supported to produce tree seedlings; 3 priority actions in the integrated water resources development and management plan (IWRDMP) for Albertine Graben implemented. The output achieved (100%) as there was continued support of WECs in the respective areas.

By the end of the second quarter, Support was given to 14 Water and Environment cooperatives to get established and a revolving fund of USD 630,000 was disbursed to them to manage and lend out to project beneficiaries. Income-generating activities such as fish farming, apiary, poultry,

piggery, goat rearing and cattle among others have been implemented by project-affected persons through borrowing from the 14 established Water and Environment Cooperative Societies that manage the revolving funds.

A case in point was in Ogwete Sub-county, where the Ogwete Water and Environment Committee (WEC) had 18 groups: 11 groups for beekeeping, four (4) for fish farming, two (2) for shear nut production and value addition, and 1 for tree nursery establishment. While some groups such as for the fish had not yet received funds, the group for tree seedlings was facing difficulty with accountability for the funds disbursed. Three members from each group were trained at NGETTA Zonal Agricultural Research Development Institute in Lira District.



**Left: Beehives for Ogwete Water and Environment Cooperative; Right: A restored section of Ogwete wetland in Otuke district formally degraded by some of the WEC members**

Repayment of the revolving fund was ongoing in some of the catchments and the affected persons continue to borrow these funds and invest in environmentally friendly income-generating activities. In total 71km of soil and water management structures were constructed (e.g. infiltration trenches, contours, terraces etc. Under the Albert Water Management Zone (AWMZ), 8km of soil and water management structures were constructed in Rubanda District in Ruhezamyenda catchment, and 15 small water harvesting and flood control structures were constructed in Ruhezamyenda.

Overall 30% of the water management measures implemented in the Albertine Graben and one (02) private tree nurseries in Kamwenge District and Kyoga Water Management Zone (KWMZ) were supported to produce seedlings. However, the planned 25km of small water harvesting structures constructed among others check dams, percolation pits, and gully plugs planned under the Victoria Management Zone (VWMZ) were not implemented due to inadequate finances.

#### **x) Degraded water catchments protected and restored through implementation of catchment management measures**

Catchment management measures provide a broad framework for water resources, land use practices and management decision-making by stakeholders who are dependent on those catchments. The annual planned activities included; 80% of the National Groundwater Management Study to assess available resources and demand undertaken; Catchment management

measures implemented in 6 micro-catchment managements in the refugee settlements; 60ha of degraded forest restored; 60ha of degraded wetlands restored; 120km of degraded river banks demarcated and planted with pillars; One Automatic Weather Station set up at Nadunget Sub-county; one existing Weather Station Upgraded at Matany Sub-county; one early warning information centre including database renovated; 2 community learning centres renovated. The output performance was poor at 21% due to the late release of funds.

200 ha of degraded landscapes restored through the construction of water harvesting, and flood control structures, 200kms of biophysical structures constructed, 3 women and youth groups supported to construct 600 energy-saving stoves; ii) Environmental Social Impact Assessment studies along River Nyamwamba undertaken.

As at 31st December 2023, 40% of the groundwater study to assess available resources and demand was at 70% completion (the inception report, data gap and baseline assessments were completed, groundwater resources availability and demand assessments, and field assessments were undertaken to collect information on the threats and pressures). The report compilation was ongoing at the time of monitoring in January 2024.

The Water Resources Management measures were implemented in the micro-catchments of Ora and Anyau, Nyimur and Mutunda and Laropi and Ayugi in the Refugee Settlements to 40%. Approximately, 30ha of degraded forests were restored in Kamabare and Kibwa parishes of Karangura Sub-county in Mpanga Catchment, Kabarole District; 2ha of degraded wetland system in Kiiha Catchment have been restored; 4km of degraded River Mpanga buffer zone were restored. No pillar installations were yet made in the first half of FY2023/24.

To restore the degraded landscapes, 40km of water harvesting and flood control structures like percolation trenches and pits were desilted and rehabilitated in Mukut-Piyonon in Kween District. In total 178 water resources monitoring stations (45GW and 133SW) were operated and maintained. The stations generate data used to produce information products that assist stakeholders in research by academia, determining the interactions between surface and groundwater, monitoring water levels, decision making etc.

In Nadunget, two (02) sites of the weather stations were fenced to completion. Procurement of a supplier for the weather stations was completed and procurement documents for a contractor to undertake test pumping of the proposed water sources for the irrigation systems were prepared and submitted for no objection. The concept note for the restoration of degraded water catchments to improve recharge was prepared and was under review. The design of water harvesting structures was completed too.

Overall, 40km of water harvesting and flood control structures like percolation trenches and pits were desilted and rehabilitated in Mukut-Piyonon in Kween District. However, no support was registered in support of women to construct energy cooking stoves. A contract for the Environmental Social Impact Assessment studies on River Nyamwamba was signed and the study commenced. Other activities were limited by resources.

#### **xi) National Water Quality Reference Laboratory analytical capacity upgraded and regional Laboratories established to address issues related to drinking water, pollution and SDGs**

The National Water Quality Reference Laboratory (NWQRL) is meant for assessment of pollution in drinking water, wastewater and the environment. The annual plan was: i) 10,000 water,

wastewater and environmental samples analysed in NWQRL and Regional Labs. Chemicals and Reagents procured; Ug shs 500 million NTR generated; ii) National Water Quality Reference Laboratory operated and maintained; iii) National Water Quality Reference Laboratory constructed to 40% for assessment of pollution in drinking water, wastewater and the environment; iii) The NWQRL accreditation to ISO/IEC 17025 2017 undertaken; iv) 100 industries and municipal wastewater establishments monitored for compliance to wastewater discharge standards; v) Mbale, Mbarara and Fort Portal regional laboratories maintained and operated. The output performance was good with all reference laboratories functional and the NWQRL progress at 40%.

A total of 5,896 water, wastewater and environmental samples were analysed in NWQRL and National/Regional Laboratories maintained, chemicals and reagents procured through framework contracts and NTR amounting to Ug shs 212,850,000 generated. The construction works for the National Water Quality Reference Laboratory (NWQRL) had progressed to 40%. The Interim certificate for 35% of the completed work was issued and only 20% of completed certified works was paid. Supervision for the construction of the NWQRL was undertaken. Delayed payment of 30% advance payment and certificates slowed down the progress of the construction work by eight months.

A total of 1,419 water, wastewater and environmental samples was analysed in NWQRL and regional labs. A total of 80 industries were monitored for compliance to wastewater discharge standards and 31 samples were collected from wastewater discharge points countrywide. The accreditation process of the NWQL to ISO/IEC 17025 2017 was at 75% and a review of water quality documentation i.e. quality manual, procedures manual, test methods, and Standard Operating Procedures was completed. Mbale, Mbarara and Fort Portal regional laboratories were maintained and operated.



**Ongoing construction works at National Water Quality Reference Laboratory in Entebbe**

### **xii) Catchment Management Plans in the Water Management Zones Operationalised**

A Catchment Management Plan provides a long-term strategy for sustainable development and utilization of water and related resources. The annual planned activities under this output were:- i) Catchment measures; Soil and Water management conservation; deforested and degraded communal and individual land restored; degraded wetlands, River banks restored; livelihood etc implemented in Lwakhakha, Aswa II, Kochi and Middle Awoja sub-catchments; ii) Two rangelands restoration plans for two micro-catchments prepared; iii) 4 joint quarterly National and

Catchment stakeholder meetings on Early Warning information utilization held; 1 training of staff managing early warning information centres held; iv) Initiate the procurement for consultancy services to develop 2 climate smart WASH and Catchment management plans; v) 2 Climate-smart Water Sanitation and Hygiene (WASH) and Catchment Management plans developed. Good progress at 78% as the zones continued to carry out the catchment management measures.

The progress on implementation of catchment management measures in Lwakhakha, Aswa II, Kochi and Middle Awoja sub-catchments was at 54%. A total of 27 water sources were rehabilitated, 629,843 tree seedlings supplied, 576.12ha of soil and water conservation constructed, 135.5km of the riverbank stabilized, 256.1ha of the degraded wetlands restored, 10 apiaries each with 25 Kenya Top Bar (KTB) beehives established, 1,548 cook stoves constructed in Aswa II. Three fishponds were constructed, stocked with 13,500 fingerlings and under maintenance for growth.

In Awoja sub-catchment in Bukedea and Katakwi districts, 40% was achieved for the implementation of priority catchment management measures. Degraded landscapes were planted with eucalyptus trees: 100ha out of the targeted 1200ha; 80ha were restored with soil and water conservation structures out of 320ha; and 20 water sources out of 35 were protected in Bukedea and Katakwi districts. In Katakwi District three nurseries were supported with 90,000 seedlings of different species such as Mvule, and mahogany, among others of which 88,811 seedlings and distributed, although the survival rate was low (50%) due to the dry weather conditions. One of the nurseries is located in Toroma Town Council, composed of 60 members (45 males and 15 females).



**L: A percolation trench for flood control in Ngariam Parish; R: A degraded landscape planted with Eucalyptus tree seedlings on an acre of land in Aliakamere Parish both in Katakwi District**



**L: A tree nursery in Toroma Town Council where all seedlings were distributed; R: A water source protection by fencing of a borehole in Palam Sub-county, Katakwi District**

A contract has been signed with the consultant to undertake range land management planning. Start-up meetings for the consultant, and reconnaissance field trips were held in sub-catchments and the final inception report for the preparation of the rangeland management plans was submitted and reviewed. Terms of reference (ToRs) for the development of 2 climate smart catchment management plans were developed and undergoing review before submission to the Contract's Committee.

The contract for the consultant to conduct the ground and surface water assessments was signed. Three (03) groundwater sources were protected with fencing, planting of grass inside the fences, planting of trees outside the fence and carrying out soil and water conservation measures in Zone 2. These included Moroto (Longolok borehole), and Napak (Kalotom and Kokorio boreholes). The ToRs for the development of two climate-smart catchment Management plans were developed and underwent review before submission to the Contract's Committee. The delay in grant signature affected the general progress.

### **xiii) Increased water storage capacity to meet water resources use requirements**

To increase water storage capacity, the MWE planned 4 Catchment Management Plans prepared; the Albert Water Management Strategy and Action Plan among others. The output performance was fair as it achieved 59% of the planned outputs. In the first half of the FY, the Catchment Management Plans for Nyamugasani and Kafu were at 80% developed level. (The inception phase, Water Resources Assessment, Strategic Social and Environment Assessment, Stakeholder Engagement and the Scenarios and options evaluation were completed, and the reports were validated by stakeholders in a workshop held in Kasese and Hoima districts).

The Catchment Management Plans for Sezibwa and Okweng were 60% developed. The Inception, Water Resources Assessment, Strategic Social and Environment Assessment, and Stakeholder Engagement phases were completed. The development of the vision and strategic objectives, Evaluation and review of the Scenarios and options phase was ongoing; Over 70% of Albert Water Management Strategy and Action Plan inception phase and diagnostic assessments were

completed and presented to stakeholders. The draft Albert Water Management Strategy and Action Plan was submitted and is being reviewed by the MWE/client for comments or approval.

A total of 178 water resources monitoring stations (45GW and 133SW) were operated and maintained. This led to the generation of data to be used to produce information products that assist stakeholders in research by academia, determining the interactions between surface and groundwater, monitoring water levels, decision making etc. Honoraria for six months from July up to December for surface water monitoring stations was paid.

Cumulatively 1,239 were collected and analysed, 340m NTR was collected and four regional water quality laboratories were operated and maintained. 187 water abstraction and wastewater discharge permit holders were monitored for compliance with permit conditions with an average compliance level of 58.3% out of 480 annual targets. Some were allocated to Busia, Pallisa, Kaberamaido, Kween and Bukwo districts. A total of 42 water permit applications were assessed and recommended for issuance out of 100 planned targets. These were in areas of (Ibanda-Bwahwa Parish, Rubirizi-Nyamabare Parish, Mbarara Kash Hardware, Karubanda Parish in Kabale Municipality, Pallisa and Busia districts etc. Overall, 104 illegal water abstractors out of 60 annual targets were identified in areas of Busia, Pallisa and Kalaki and sensitised on the benefits of having water permits.

#### **xiv) Water resources compliance monitoring equipment procured and installed**

No compliance monitoring equipment was planned and procured. Instead, the MWE planned mapping wetlands for restoration around IMB conducted and consultancy services for preparation of successor project for the IMB undertaken. Procurement for the consultancy services for the preparation of a successor project for the IMB was initiated. Thus the output had no achievement.

#### **xv) Water management measures implemented in priority sub-catchments**

The plan in the FY was to construct one (1) water storage infrastructure; identify and support six women and youth groups to benefit from income-generating enterprises; and undertake four (4) monitoring and supervision trips to the construction of water storage infrastructure. The output performance was poor as 40% of activities had just started.

The water storage infrastructure draft contract was prepared and submitted to the Solicitor General for approval. There were two women and youth groups (1 woman and 1 youth) identified and trained to benefit from income-generating enterprises. Cumulatively 10 hectares of degraded catchments were restored through tree planting, farmer-managed regeneration, and river bank demarcation using live markers around Semajjimbi Wetland in Mpigi and Wakiso districts, i.e Nsooba and Mayanja rivers.

Identification and support for six women and youth groups to benefit from income-generating enterprises wasn't done, while demarcation areas along Lake Wamala were monitored and supervised, and the wetland was naturally regenerating. However, it should be noted that wetland system demarcation around Lake Wamala remained at about 4km, at the Nkonya landing site where the farmers grew tomatoes but the chemicals they use kill the fish in the lake (NRECCLWM Annual Monitoring Report FY2022/23).

The *staffing structure* (Table 3.3) under the Water Resources and Monitoring Department is poor as only 48% with a gap of 52%. The contract staff are the majority holding 63% of the positions

whereas permanent staff take 37%. The staffing gaps are an indicator of a performance constraint in the department where the staff either work for long hours or leave some work unaccomplished.

**Table 3.3: Staffing levels under the Water Resources and Monitoring Department by February 2024**

<b>Establishment (Approved Structure)</b>	<b>Numbers</b>	<b>Percent</b>
Filled	23	48
Vacant	25	52
<b>Total</b>	<b>48</b>	<b>100</b>
<b>Employment Category</b>		
PIP	23	37
Contract	40	63
<b>Total</b>	<b>63</b>	<b>100</b>
<b>Duty Station</b>		
Entebbe	47	75
Mbale	4	6
Lira	4	6
Fort	5	8
Mbarara	3	5
<b>Total</b>	<b>63</b>	<b>100</b>
<b>Gender</b>		
Females	16	25
Males	47	75
<b>Total</b>	<b>63</b>	<b>100</b>
<b>Profession</b>		
Technical	33	52
Support	30	48
<b>Total</b>	<b>63</b>	<b>100</b>

*Source: Water Resources and Monitoring Department*

### **Key sub-programme challenges**

- i) There is inadequate capacity (equipment and personnel) to do water quality testing for all piped systems in the country especially the GFSs which in some cases compromises the quality standards.
- ii) The limited staffing in the WRM Department at 40% constrains the few existing staff yet promotion is difficult because of the limited wage bill.
- iii) The existing laws/guidelines are still exploited by private laboratory operators to offer water quality testing services thus compromising with the standards in some cases.
- iv) Non-release of funds in Q1 impacted field activities and the number of samples collected from department network stations. Most of the samples analysed were from private clients.
- v) Delayed payment of suppliers is impacting the supply of laboratory chemicals, reagents, and supplies. Lack of reagents for analysis and long downtime for equipment may affect a number of clients and subsequently and NTR generation.



### **Sub-programme conclusion**

The sub-programme performance was fair (on track) at 65.8%. Some outputs were lagging (30%), while others were on track in terms of operating within the given resources and given the current FY targets. If the releases continue not to be timely for the remaining part of the FY, the planned outputs may not be achieved. Furthermore, the NDPIII targets one year of FY remaining (FY 2024/25). However, there was still a mix-up of intervention activities in various outputs a reflection of poor planning. In other cases, there were uncoordinated or repetitive activities/outputs which did not contribute to the interventions and outcomes. These include outputs like, “A Robust E-based Water Resources Information System” and Operational Water Information Systems at the central level and in the 4 Water Management Zones; improved water use efficiency for increased productivity in water consumptive programmes, increased water storage capacity to meet water resources use requirements and operational optimal surface water and groundwater monitoring network established. This made analysis quite difficult since expenditures were incurred on unrelated activities.

### **Recommendations**

- iii) The MWE should expedite the review of the water policy stipulating the water quality testing laws/guidelines governing private practitioners.
- iv) The MWE should prioritise filling up staff positions in the approved structure waiting for recruitment after the payroll audit exercise.
- v) The MWE should prioritise procurement of the necessary water quality testing equipment to improve the portable water.
- vi) There is a need to beef up efforts in sensitising communities to cope with climate change mitigation and adaptation measures.
- vii) The MWE should prioritise debt clearance with the suppliers to have a constant flow of reagents for water quality testing since it generates NTR.

## **3.3 Environment and Natural Resources Management Sub-programme**

### **Introduction**

The sub-programme contributes to the NRECCLWM Programme’s goal of reducing environmental degradation and adverse effects of climate change and improving the utilisation of natural resources for sustainable economic growth and livelihood security. The sub-programme objectives are: i) maintain and /or restore a clean, healthy, and productive environment; ii) increase forest, tree and wetland coverage and restore and protect hilly and mountainous areas and rangelands; iii) promote inclusive climate resilience and low emissions development at all levels; iv) reduce human and economic loss from natural hazards and disasters; and v) increase incomes and employment through sustainable use and value addition to water resources, forests, rangelands, and other natural resources. Out of the planned 14 interventions under the sub-programme, 9 (64%) were sampled for monitoring as others had insufficient information to monitor.

The sub-programme is implemented by NFA, NEMA, UNMA, OPM, MWE-Water Resources Department, Wetlands Department, Forestry Support Services Department (FSSD), Environmental Affairs Department and Climate Change Department (CCD).

## Financial performance

The total approved budget for FY 2023/24 was Ug shs 160.401bn, Ug shs 81.9261bn (50%) was released and Ug shs 35.063bn (40.8%) spent by 29<sup>th</sup> February 2024. This was a fair release and poor expenditure performance. The reasons for under expenditures included: delays in the procurement processes, verification by the Chief Mechanical Engineer in instances of vehicle maintenance, compensation of land for construction activities which require valuation reports from the Chief Government Valuer and delays in delivery of supplies.

## Sub-programme Performance

The overall sub-programme performance was fair at 50.8%. The achievements registered included: 4,922ha of commercial tree plantations were established and 510.2ha of commercial tree plantations; procurement of equipment (59 no.) for digitizing forest boundary plans; September-December Seasonal Forecast and Radar and Wind Shear Operations maintained at Lira, Rwampara and Entebbe. A summarized intervention performance is shown in Table 3.4 and detailed performance is attached in Annex 3.

**Table 3.4: Performance of the Interventions Monitored under the Environment and Natural Resources Sub-Programme by 31<sup>st</sup> December 2023**

No	Intervention	Performance Rating	Remarks
01	Strengthen conservation, restoration of forests, wetlands and water catchments and hilly and mountainous areas	On track	Fair performance at 55.3% as 138ha of degraded wetlands were restored; 545.9ha of commercial tree plantations were maintained; 793.95ha of forest Inventories and harvesting plans were updated; 4,922ha of commercial tree plantations were established.
02	Increase investment in value addition to environment and natural resources products and services	Off track	48% performance. Environment Police Protection Unit (EPPU) undertook environment inspection, monitoring and enforcement activities.
03	Promote payment for ecosystem services, biodiversity offsets and benefit sharing arising from use of biological resources	Off track	Not implemented.
04	Develop and implement a framework that reduces adverse per capita environmental impact of cities (air quality and waste management practices)	Off track	33% poor performance with little achievement.
05	Mainstream environment and natural resources management in policies, programmes and budgets with clear budget lines and performance indicators.	Off track	At 27%- poor performance would be a bankable project at the concept level.

No	Intervention	Performance Rating	Remarks
06	Integrate education for sustainable development in national curricula at all levels for an environmentally literate citizenry	Off track	49% is poor performance as activities were just starting.
07	Strengthen enforcement capacity for improved compliance levels	Achieved	99% -procured equipment (59 no.) for digitizing forest boundary plans.
08	Enhance access and uptake of meteorological information	Achieved	89%- September-December Seasonal Forecast produced.
09	Install new and adequately equip and maintain existing automatic weather stations to ensure maximum functionality	Achieved	At 84%, radar and wind shear operations were maintained at Lira, Rwampara and Entebbe.

*Source: Authors' Compilation*

The planned interventions were: - a) Strengthen conservation, and restoration of forests, wetlands and water catchments and hilly and mountainous areas; Increase investment in value addition to environment and natural resources products and services; and c) Promote payment for ecosystem services, biodiversity offsets and benefit sharing arising from use of biological resources; Strengthen enforcement capacity for improved compliance levels.

### **3.3.1 Strengthen conservation, and restoration of forests, wetlands, water catchments and hilly and mountainous areas**

This intervention aims to restore and conserve the environment and natural resources through demarcation, planting, restoring, and maintaining CFRs, wetlands, water catchments, and hilly and mountainous areas. This intervention is mainly contributed to by NFA, NEMA, Wetlands Department, Forest Support Services Department, and Department of Environmental Affairs

The following outputs were planned and assessed under the intervention:

- i) Improve coordination, regulation and monitoring of environment management at both central and local government levels.
- ii) Restoration of critical wetlands; demarcate, gazette and restore 900kms of wetlands; gazette 6 critical wetlands.
- iii) Mobilize stakeholders and develop and implement costed management plans.
- iv) Undertake an inventory of degraded wetlands; restoration of critical wetlands; demarcate, gazette and restore 900kms of wetlands; gazette 6 critical wetlands.
- v) 12,200km of CFRs boundary resurveyed, marked and maintained
- vi) 55 Forest Management Plans prepared and revised
- vii) Forest cover increase (percentage)

The intervention performance was fair at 55%. Performance details are given hereafter:

**i) Improve coordination, regulation and monitoring of environment management at both central and local government levels**

The output aims at smoothening environment management at all levels. Under the output: general staff salaries were paid for July, August and September 2023; vehicles were maintained and serviced; and tyres were procured. Office stationery and small office equipment were procured. The output performance was fair at 59%.

A pre-survey was conducted in three districts in the Sebei sub-region (Kapchorwa, Kween, Bukwo) and mapped out the most vulnerable sub-counties that will inform a detailed baseline assessment for Climate Change (CC). Adaptation interventions under the Global Climate Change Alliance+ project were monitored in various districts<sup>2</sup>. Climate-smart mitigation livestock management practices too were monitored in the districts of Nakasongola and Mbarara both adaptation and mitigation actions were monitored in Awoja Catchment (Bukedea, Bulambuli, Sironko and Kapchorwa).

Development of a sector-specific climate vulnerability index which will be used for training sectors was in the final stages and finalization of the digital vulnerability map used for the identification of climate risk areas was ongoing. Advocacy and awareness of gender and climate change mainstreaming of selected agriculture policies was facilitated. Hands-on training on the use of the national Measurement, reporting (MRV) tool for Agriculture, Forestry and other land use (AFOLU) sectors was conducted for one hundred national and sub-national participants. Training workshop for Transport and Waste sector stakeholders to address Greenhouse Gas (GHG) capacity needs and Nationally Determined Contributions (NDC) tracking for MRV implementation was conducted.

Climate change impacts and vulnerability assessments as the annual target were not established by the end of February 2024. The National Climate Change Information system was developed by the Makerere University Center for Climate Change and Innovation (MUCCRI) together with the knowledge portal.

Nationally Determined Contributions (NDC), and Long-Term Climate Strategy (LTS) communication materials were prepared. The National Climate Change Act (2021) and the updated NDC were disseminated in the districts of Kamuli, Nakaseke, Luweero, Nakasongola, and Kiboga. The process of developing the Climate Change Monitoring and Evaluation Framework was initiated and ToRs for procuring a consultant to develop the system were initiated.

Communities were trained on Climate Smart Agricultural practices to enhance farmer resilience to the impact of climate change in the districts of Rukiga, Rukungiri, Mitooma and Ntungamo. National Action Plan Exposition (NAP EXPO) 2023 was attended and capacity was built for the Climate Change Department (CCD) and emitting sectors on MRV tool i.e. the transport and the waste sectors. Of the 10 LGs and MDAs to be supported in environmental planning including support in the preparation of Environment Action Plans and Budget preparation processes target in the FY, only seven MDAs were supported in environmental planning.

Concept notes for undertaking economic valuation of gazetted river banks, including R. Nile, Wambabya, lakeshores (L. Kwania, and L. Kyoga) and mountain ecosystems including Mt.

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<sup>2</sup> Luweero, Nakasongola, Nakaseke, Sembabule, Kalungu, Gomba, Kiboga, Lyantonde and Mubende

Rwenzori, Mt. Elgon and Mt. Muhavura were prepared still pending release of funds. Profiling of Mt. Rwenzori and Virunga ranges in the districts of Kasese, Ntoroko, Kabarole, Bundibugyo, Kisoro, Kabale and Kanungu and hilly areas in the Eastern region in the districts of Busia, Bugiri, Iganga, Jinja, and Mayuge to inform baseline studies for gazetted river banks was undertaken.

Terms of reference to conduct technical backstopping, monitoring environment and social safeguards and EIA reviews were prepared. These included; IFPA-CD, EBA, LIFE AR, GCF wetlands project, SACRIAC, ICRP and Nexus Green (Western Uganda) projects, monitored for compliance and provided technical backstopping for the implementation of environment and social safeguards.

To make a robust environmental assessment, monitoring and surveillance plan operational in cities/municipalities and countrywide was affected by budgetary constraints. Inspections for compliance with the forest products trade laws were undertaken in Mubende, Wakiso, Mpigi, Hoima, and Mukono.

The ROOTs campaign (MWE initiative to plant 1 million trees across the country in one day) was commemorated at St. Francis Xavier Catholic Church Bweya and one nationwide community sensitization in which an awareness creation exercise was undertaken. International Regional conservation meetings and sessions (COPs, IPBES, etc) were attended. Wetlands Management Department (WMD) staff were adequately supervised and appraised to perform key result areas.

The following annual planned activities were not achieved; The M&E strategy for the project was finalized, and 50 LGs and urban councils inspected, supervised, and coordinated for compliance with approved guidelines. Wetland maps were produced for wetlands management in different districts<sup>3</sup> but were not disseminated.

**ii) Restoration of critical wetlands; Demarcate, gazette and restore 900kms of wetlands; Gazette 6 critical wetlands**

The output performance was poor at 17%. During the first half of the year, communities were trained in Climate Smart Agricultural practices to enhance farmer resilience to the impact of climate change in the districts of Rukiga, Rukungiri, Mitooma and Ntungamo. The Ministry of Defense and Veteran Affairs (MoDVA) was supported to prepare a draft environmental and climate security strategy; procurement processes were initiated for the development of national chemicals guidelines, concept notes for preparation of the five-year National Environment Action Plan (NEAP) and the strategy for management of chemicals were prepared and preparation of the NEAP and the chemical strategy were affected by budgetary constraints. Cleaner production initiatives were promoted in industries in the Soroti and Lira Industrial parks.

The ToRs were prepared for five consultancies to develop chemical documents including the National Strategy for the Sound Management of Chemicals (SMC); update and review of the national action plan for SMC; National guidelines for SMC; National guidelines for the prior informed consent of chemicals and national guidelines for chemicals risk assessment and reduction.

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<sup>3</sup> Nakaseke, Wakiso, Kiboga, Mpigi, Kyankwanzi, Mityana, Kiboga), Lumbuye (Mayuge, Luuka, Kaliro, Jinja, Kamuli, Iganga), and Kibimba (Busia, Bugiri and Namayingo).

The preparation of project proposals targeting global environmental funds did not start. Two environment awareness campaigns were held through the Inter-Religious Council of Uganda and Buganda Kingdom targeting 10 districts within Buganda and Busoga. Also, implementing partners - the EU, Save the Children, World Agro-Forestry, Enable and JEEP created awareness for leaders in refugee-hosting LGs areas of Kiryandongo, Yumbe, Terego, Adjumani and Madi Okollo during the Reducing Environment Degradation (RED) reflection symposium.

Awareness creation on natural resources management including wetlands, forests, range lands, beaches etc. was supported and a National Green School initiative was finalized. Effective engagement and participation in the Multilateral Environmental Agreements (MEAs) and protocols, MEAs Secretariat activities, including reporting to both Cabinet and Parliament were coordinated.

Preparations for gazetting green parks/protected belts in the cities of Soroti, Mbale Gulu, Jinja, Lira, Fort Portal, Mbarara, Arua, and Masaka were underway and stakeholder consultative meetings were held. The water catchment areas of Unyama, Namulu, and Sipi regions were not supported in sustainable conservation and tree planting practices and the ESIA report was not yet approved. Only one out of four gender-responsive community-based wetland management plans for Agu wetland in Eastern Uganda was under implementation, and two wetland-based community enterprises were developed and supported i.e. one on Nyangiriire wetland in Western Uganda and another on Mazuba wetland in Eastern Uganda and the target was achieved.

A total of 138ha of degraded wetlands were restored in Ssezibwa wetland (20ha), Aswa wetland (25ha), Omunyai-Awoja (45ha), Kyambura wetland (48ha) out of the targeted 900ha. All data on wetlands was consolidated and submitted for gazette and the data was awaiting publishing in the gazette. In addition, 46km of wetland boundaries were demarcated along Ishasha wetland in Kanungu (10km), Nchwera wetland in Mitooma (10km), Mayanja wetland in Nakaseke (13km), Tochi wetland in Nwoya (13km) and Ishasha wetland in Kanungu (10km) out of the planned 500km of the degraded wetlands.

The concept note for Integrated Urban Wetlands (eco-parks) was developed, and submitted to MFPED, pending review by the Development Committee for the development of three bankable project concepts on ecological restoration, eco-parks and inventory.

Works for restoration of 112ha of degraded wetland sections in Central-Mayanja wetland (31ha), Northern-Aliro-Tochi wetland (31ha), Western-Kaija-Muziizi (30ha) and Eastern-Kibimba wetland (20ha) started in January due to no Q1 and late release of Q2 funds. Two (2) wetland-wise use models/demonstration sites (fish ponds) were completed in Nakaseke and Minakulu sub-county, Oyam District in Northern Uganda out of three wetland-wise use models annual target. Inventory for the districts of Kabarole, Bunyagabu, Pader and Agago was and detailed ecological assessments for two wetland systems of Lumbuye and Muzizi were completed.

By the end of February 2024, 25 of the planned 50 wetland maps were produced along the 10 project wetland systems of Mpanga and Ssezibwa to guide districts in wetlands management. The concept notes prepared for conducting staff training in wetlands management were pending payment. Implementation of other activities inclusive of monitoring, and inspections around wetlands were either under procurement or affected by inadequate financing.

**iii) Mobilize stakeholders, develop and implement costed management plans**

Local Governments and urban councils of Kanungu, Mitooma and Nakaseke where restoration was undertaken, were technically backstopped and coordinated. This was a poor performance at 20%.

**iv) Undertake an inventory of degraded wetlands; Restoration of critical wetlands; Demarcate, gazette and restore 900kms of wetlands; Gazette 6 critical wetlands**

The output performed poorly at 10%. Preparations for gazetting green parks/protected belts in the cities of Soroti, Mbale, Gulu, Jinja, Lira, Fort Portal, Mbarara, Arua, and Masaka were underway. Consultative meetings were held with the leadership of Mbarara and Masaka City's political and technical leadership.

The Environmental Police Protection Unit (EPPU) carried out several enforcement activities ranging from compliance enforcement, post-restoration monitoring, field operations, etc. The EPPU instituted 76 criminal cases most of which were wetland degradation. Terms of reference and specifications for the procurement of 10 motorcycles to support EPPU activities were prepared and the procurement process initiated on the e-Government Procurement (e-GP) System.

The EPPU carried out several enforcement activities ranging from compliance enforcement, post-restoration monitoring, field operations, etc. About 76 criminal cases were instituted most of which were wetland degradation. Refer to Annex 4 for detailed enforcement operations in the South Western Region.

**v) 12,200km of CFRs boundary resurveyed, marked and maintained**

Cumulatively, 3,154ha were freed from encroachment and protected by the end of Q2. Of the planned 10,000ha of degraded CFRs 2,946ha restorations were undertaken in the nine ranges<sup>4</sup>. For example, in Budongo 110ha were restored, 5ha in Kanolwa Forest Reserve in Masisndi District; 500ha in Bugoma Kikuube District; another 500ha restored in Kagombe-Kagadi District; and 300ha in Kagombe-Kagadi. A total of 385.8km of forest reserve boundaries were maintained.

**vi) 55 Forest Management Plans prepared and revised**

In the FY two (2) Forest Management Plans prepared for Bugoma and Muzizi ranges were planned. However, at the end of Q2, no forest management plan was completed although stakeholder engagements for the review and update of Budongo, Bugoma and Maramagambo forest management plans were completed successfully.

**vii) 1.265mha of CFRs protected and freed from illegal activities/encroachment**

The annual plan was for 100km of fire lines maintained (70km-West Nile Range and 30-Budongo system). In total, 92km of fire lines were maintained cumulatively by the end of Q2.

**viii) 113,000 ha of forest established (13,000ha under NFA and 100,000 ha under licensees on CFRs)**

Cumulatively, 545.9ha of commercial tree plantations were maintained; 793.95ha of forest Inventories and harvesting plans were updated; 4,922ha of commercial tree plantations protected

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<sup>4</sup> Lakeshore, West Nile, Achwa Budongo System, Kyoga, Sango Bay, Karamoja, Muzizi and South West

cumulatively from fires under NFA with survival above 70 percent; 863kgs of assorted seedlings were produced and supplied cumulatively by the NTSC.



**A newly planted bushy areas; the bush on one side was spayed after planting in Mwenge Range, Kyenjojo District**



**Globulous eucalyptus in Bugamba Reserve, Mbarara and seedlings ready for planting in Mwenge, Kyenjojo District**

**ix) Integrated Forest Information Management System developed; Forest databases updated**

Cumulatively, 6,268.4ha for Licensed Tree Planters were updated in Q2 under the different forest reserves: 162.8ha in Mabira CFR; 1,077ha in Kahurukobwire; 5,029ha for 127 Licensed Tree



Framers issued. A total of 113 of the issued licenses were for private tree farmers, 11 licenses to individuals and 3 to companies.

### **3.3.2 Increase investment in value addition to environment and natural resources products and services**

Under this intervention, the following are some of the NDPIII planned outputs; i) Protection and restoration of strategic fragile ecosystems undertaken; ii) 55 Forest Management Plans prepared and revised; iii) 1.265mha of CFRs protected and freed from illegal activities/encroachment; iii) Integrated Forest Information Management System developed; Forest databases updated; and iv) Effective engagement and participation in Multilateral Environmental Agreements (MEAs) and Protocols. The intervention performance was poor at 48%. The status of implementation by the monitoring in February 2024 was thus:

#### **i) Protection and restoration of strategic fragile ecosystems undertaken**

The MWE in collaboration with MFPED initiated the formulation of green bonds that included carbon pricing instruments such as Carbon Markets-Green finance- Greening Central Banks, and Debt/climate/nature swaps development of carbon mechanism was ongoing. National Climate Change Act (2021) was printed, disseminated and updated Nationally Determine Contribution. Awareness raising on the Climate Change Act was conducted in the districts of Kamuli, Nakaseke, Luweero, Nakasongola and Kiboga. Draft popular versions for both the Act and NDC were developed.

Of the five intended forest-based cooperatives, three were formed in Rubanda and Kabale with support from the Worldwide Fund for Nature. The updated National Forestry Plan and amended the National Forestry and Tree Planting Act 2003 awaited approval from the President. The aim was to identify planting sites with marching species, and then identify tree nurseries-certified seedling suppliers across the country.

By the end of Q2, the data about the nurseries was collected and analyzed. Compilation of the report and uploading a list of certified nurseries on the Water and Environment Information System was ongoing. A subsistence allowance was paid to the EPPU to support the day-to-day operations. Enforcement and control of field inspections, investigations, prosecutions, community policing and special operations to support districts, targeting the most affected wetlands like Lubigi wetland and others across the country. Routine data collection and analysis for the Integrated Natural Resources Management (INRM) component was carried out, supervision and monitoring of INRM interventions by DLGs was not supported and an Environmental Audit consultant had not been procured by the end of February.

The plan was to commemorate at least five conservation days (World Wetlands Day, Uganda Water and Environment Week (UWEWK), Wildlife Day, and World Food Day). Preparations for the commemoration of the World Wetlands Day were initiated and four preparatory meetings were held to agree on the venue and to prepare Information Education Communication (IEC) materials.

One World Bank field support mission to monitor and follow up on project activities was conducted and farmers were monitored and prepared for the following tree planting season. The advert for the procurement of a consultant to establish a performance-based forest sector and wood processing subsidy scheme was published in the newspapers and one project steering committee meeting out of the planned two was conducted. Two fieldwork visits on advocacy, sensitization,

and information management for the IFPA-CD project were conducted. Farmers in project target districts and refugee hosting communities were prepared and supported with quality tree seedlings of various species.

A review process for the Wetlands Sector Strategic Plan 2020-2030 was initiated and one meeting held for validation of objectives in the plan including emerging issues. The principles of the wetlands bill were prepared in the process of legal drafting pending presentation to the Cabinet. ToRs for the procurement of a consultant to develop guidelines for brick-making were developed and the procurement process initiated on the e-GP.

Concept notes were prepared to conduct training for strengthening wetland management institutions, including District Environment and Natural Resources Committees and community-based organisations at National, district and community levels pending fund disbursement. Awareness materials including banners, T-shirts, and radio talk shows were prepared/held and disseminated across project areas and four primary schools in Gulu District participated in wetland conservation awareness campaigns in preparation for the World Wetlands Day celebrations.

Linking 50 LGs to the National Wetlands Information System (NWIS) in (Mayanja, Muzizi, Kibimba and Aswa) was at concept notice due to limited financing. In the FY year, the plan was to demarcate 600km of conserved and degraded wetland systems (Awoja, Mayanja, Ssezibwa, Tochi, Aswa and Muzizi wetland systems), 8,615 wetlands gazetted and as a result, 44km of wetland boundaries were demarcated along Aswa wetland system in Lira District and Torchi wetland system in Oyam District (13km), Mayanja wetland system in Nakaseke (12km), Kaija wetland in Kyegegwa Naigombwa wetland in Namutumba (12km), Kibimba wetland in Namayingo (8km). Spatial maps for 780 projects were under review were generated and used for compliance and inspection monitoring.

**x) 365,000ha of non-degraded and restored natural forests (ha)**

The plan was to protect 2,790ha from fires in 16 Management Areas across the country (9 ranges and 7 plantation areas) of West Nile, Karamoja, Achwa River, Sangobay, Muzizi, Budongo system, South-west, Kyoga and lakeshore. Within the first half of the FY 2022/23, 16,372ha had been protected from fires cumulatively and 385.8km of forest reserve boundaries were maintained.

**xi) Forest cover increase (percentage)**

Cumulatively, 2,202,313 seedlings were produced and supplied throughout the country. The breakdown of the seedling production and supply was as: 17,189 in West Nile, 48,000 in Kyoga, 273,000 in Budongo Systems, 50,251 in Sango Bay, 250,000 in Muzizi, 105,000 in South West and 50,808 in lakeshores were supplied to communities. These were from Lendu (13,000 seedlings), Kabale (136,000 seedlings), Mbarara (659,841 seedlings); Mwenge (688,800 seedlings); South Busoga (9,664 seedlings), and the National Tree Seed Center (NTSC). The 426,368 seedlings served 805 clients (male-583, female-146 and institutions-76). The area of commercial tree plantations maintained was 510.2ha as follows: 80ha in Kana-Kasambya in Muzizi Range. Mafuga (40ha), Kirima (40ha), Rwoho (88.8Ha), Bugamba (61.4Ha), Oruha CFR (100ha), South Busoga (100ha).

### **xii) Effective engagement and participation in Multilateral Environmental Agreements and Protocols**

In the FY, there was a plan to install, and operationalize the National Wetland Information System (NWIS) in four regional offices, the Ramsar sites handbook updated and NWIS installed and operational at the MWE/Wetlands Department. The National Environment Authority (NEMA) subscribed to two bodies i.e. Convention on Biological Diversity (CBD) and Minamata. The subscription was partially paid pending payments for other quarters.

#### **A case of Mbarara Plantations**

A total of 328 workers were hired by the contractor (200 males and 128 females). Cumulatively 889.5ha were planted in Rwoho and 61.2ha in Bugamba for commercial tree plantation establishment under NFA with survival above 70 percent. More so, 401 workers were employed by three contractors (265 males, and 136 females). A total of 320 hectares were maintained in Bugamba and 580ha in Rwoho CFR. In Bugamba, 10ha of seed stand of globulous eucalyptus and 60ha of pine caribeeae were planted spot weeded and slashing done. Spot weeding and slashing too were done for the 1-year-old and 2-year-old blocks.

#### **3.3.3 Promote payment for ecosystem services, biodiversity offsets and benefit sharing arising from the use of biological resources**

The intervention had only one output of biodiversity offsets implemented. During the FY, the plan was to have green parks/protected belts gazetted in the cities of Soroti, Mbale, Gulu, Jinja, Lira, Fortportal, Mbarara, Arua, and Masaka however, the activities were not conducted due to budgetary constraints. The intervention scored zero percent.

#### **3.3.4 Develop and implement a framework that reduces adverse per capita environmental impact of cities (air quality and waste management practices)**

The intervention has six outputs which were implemented but the performance was poor at 33% as discussed hereafter:

##### **25 cities/municipalities with functional solid waste/e-waste) management facilities**

Environment Officers in nine out of 25 planned cities and urban authorities and technical officials from 11 DLGs were trained on the process of developing the City State of the Environment Reports. In addition, 30 lead agencies were consulted and trained on the automation of business processes at NEMA.

**Environmental Inspectors, other ENR managers and committees trained on Environmental regulation and enforcement quality standards.** This output was not undertaken.

##### **A legal framework for environment management strengthened**

The five target regulations were under review and drafting. They include: The Express Penalty Scheme, Access to Benefit Sharing Regulations and Policy Proposals, Noise and Vibrations Regulations Express Penalty Regulations (EPR) based on the Economic Charge System Report and Environmental Practitioners Regulation.

**A robust environmental assessment, monitoring and surveillance plan operational in cities/municipalities and country-wide**

The annual plan is to support 12 Environmental Police Force (EPF) operations, and by the end of Q2, 175 EPF operations were supported. These are day and night surveillance activities targeting illegal activities done in fragile ecosystems and other environmental violations. Special operations that targeted the restoration of protected ecosystems, especially the wetlands were undertaken.

**The target of 300 Environmental and Social Impact Assessments (ESIAs) done:** By 31<sup>st</sup> December 2023, 1,031 ESIA reports were available for review (including 692 new submissions and 337 backlog from past period). The reviewed reports were 67%, whereas 85% of the reports were approved and 5% rejected.

### **An environmental enforcement strategy developed and operationalized**

A total of 110 prosecutions were undertaken (85 criminal and 35 civil cases) out of the planned 50 persecutions. The criminal cases mainly emerged out of violation of the National Environment Act 2019 and the attendant regulations.

Identification and gazette of environment inspectors were ongoing. Of the planned 200 Environment Inspectors, 1,033 were scrutinized and recorded for gazette (the gazette shall be by titles and institutions). A total of 42 environmental pollution and degradation incidences were registered and responses taken. The procurement process for PPEs was ongoing at the time of monitoring in February.

### **3.3.5 Mainstream environment and natural resources management in policies, programmes and budgets with clear budget lines and performance indicators**

Under the intervention, the planned outputs were six, and the status of implementation at the end of Q2 was rated at 27% and this is presented hereafter: The Planned National State of Environment Report was not developed; the capacity of cities and urban councils in sustainable urban development (greening, pollution and waste management) not enhanced.

### **Effective engagement with UN and other partners in environmental issues**

The NEMA subscribed to two multilateral bodies i.e. the Convention on Biodiversity and Minamata partly. The authority had several partnership engagements with strategic partners e.g., Makerere University, GIZ, PSFU and Busitema University.

### **Increased funding for non-consumptive uses of natural resources**

Three concepts (i.e. Institutional Strengthening for Full Life Cycle Management of Chemicals and Waste in Uganda (ISMCWU), implementation of the Lead concentration mitigation project in Uganda, and Circular and Persistent Organic Pollutants (Pops)-Free Plastics in Africa were developed and were still seeking for funding.

**The institutional capacity of the relevant institutions to manage and regulate environmental aspects including oil and gas activities enhanced; and partnerships established** were not achieved.

### **3.3.6 Integrate education for sustainable development in national curricula at all levels for an environmentally literate citizenry**

The strategy of developing an environmentally literate citizenry was ongoing at 49% performance and the status of the planned outputs was as follows:

### **Education for Sustainable Development integrated into education curricular**

The NEMA aims to introduce the National Environment School debate to create a platform for school children to discuss environmental issues in the country and create awareness among the public about environmental protection compliance. A network of environment and education managers was established to plan and discuss how best the National Environment School's debate would be organised. Thus consultative meetings were held with District Education Officers, District Natural Resources Officers, District Inspectors of Schools from 10 cities in Uganda, Kampala Capital City and the Chairperson of the National Debate Council.

### **IEC materials on environment developed and translated into local languages**

For environment protection, increased education and awareness to the public; radio and TV audio-visual materials and infomercials were produced; and NEMA started a countrywide awareness campaign on litter and waste management through radio infomercials. The authority started the process of producing documentaries from schools on environmental best practices. The IEC materials including the 2024 calendar, posters, NEMA branded tent quarter one NEMA newsletter, tear/feather drops, pull-up banners, ESIA and NEMA brochures, and exhibition tablecloth were developed to provide information to the public.

### **Public education programs and campaigns on environment-enhanced**

The procurement process for signposts of 11 schools for implementation of greening initiatives was initiated. This will increase NEMA's visibility and good observation of environmental practices in schools hence changing the perception of young people towards environmental protection. NEMA started a countrywide awareness campaign on litter and waste management through radio infomercials; this was carried out on eight radio stations. The '*Yonja Uganda Tour*' in Eastern Uganda and Masaka region was carried out, and IEC materials were developed to increase the visibility of NEMA's work.

**The National State of the Environment Report prepared:** The report was not yet produced but preparations were underway. The report structure was developed, a meeting for the thematic group was held, and the ToR for the lead author developed.

### **Undertake applied research and innovation on sustainable consumption and production to ensure resource use efficiency to reduce domestic material consumption per capita**

The planned outputs were: Research and innovations conducted and by half-year monitoring the status of implementation was as mentioned hereafter:

#### **Research and innovations conducted**

No research or innovation was carried out. The NEMA developed a Research Agenda that is supposed to guide the country's environment research activities.

### **3.3.7 Strengthen enforcement capacity for improved compliance levels**

The main outputs under the intervention are: 1,770 modern forest management infrastructure procured; 750 professional staff recruited at the forest protection level and water resources compliance monitoring equipment procured and installed. The intervention achieved its targets at 99% performance.

Overall 59 number of equipment for digitizing forest boundary plans were procured; 21 assorted ICT equipment comprising 12 laptops and nine GPS machines equipment for digitizing forest boundary plans were acquired. No electronic planning, budgeting and reporting system was procured as planned. There was no recruitment done in support of the planned 750 professional staff recruitment at the forest protection level under the NDIII period instead unrelated activities were implemented. The Water resources compliance monitoring equipment procurement and installation had unrelated planned activities.

### **3.3.8 Enhance access and uptake of meteorological information**

Only one output was planned under the intervention - research on future climate trends and potential impacts undertaken.

The intervention was rated good at 89%. The September-December Seasonal Forecast was issued with advisories to key sectors of the economy for all 16 climatological zones. The National Meteorological Training School was facilitated to provide conducive educational facilities and a concept note was developed to profile the stage pending consideration by the Development Committee of MFPED in preparation for the development of a bankable project. The authority held public awareness engagements on weather and climate issues raised through media digital campaigns and talk shows.

### **3.3.9 Install new and adequately equip and maintain existing automatic weather stations to ensure maximum functionality**

The only planned output was the weather and air pollution monitoring station network expanded and functional. The intervention performance was good at 84%. Overall, 552 Terminal Aerodrome Forecasts, 10 SIGMETs and 17,664 METARs and 4024 Flight folders were issued for Entebbe and Soroti (operating 24hrs); Gulu, Arua, Kasese, Kajjasi, Kabaale, Jinja and Tororo (operating 12hours) Aerodromes. Daily forecasts were disseminated to three media houses of UBC, Star TV, and Bukedde 1 TV in the local languages of Luganda, Swahili and then English. The three Radars and Windshear were well-operated and maintained at Lira, Rwampara and Entebbe stations.

#### **Sub-programme challenges**

1. Uncoordinated planning and budgeting in the different sub-programmes with silo projects leading to wastage of resources
2. The sub-programme still experiences continuous encroachments on both forestlands and wetlands by the community given unclear boundaries aggravated by the lengthy process of cancellation of titles in those places.
3. Climate change with the resultant drought and flush flooding causing further encroach looking for both water and fertile soils in the fragile ecosystems.
4. The misguided use disposal of rubbish especially plastics end up causing blockage in the drainage channel and limited water absorption in the soils.

The sub-programme performance was fair at 65%. There were only three interventions out of nine monitored that achieved their targets, while six were off-track and only one on track. The sub-programme seeks to increase forest and wetland cover which is key for the Programme's objective

of reversing the adverse effects of climate change. To meet the SDG6 and the programme objectives, some recommendations are suggested:

### **Recommendations**

1. The MWE should spearhead coordinated planning through the Programme Working Group meetings to avoid unnecessary duplications.
2. The MLHUD should closely follow up on the pending court cases of the polluters and encroachers of forestlands and wetlands.
3. The NEMA should advocate for climate change adoption and mitigation measures to protect, perverse and reverse the adverse effects of climate change.
4. The NEMA should enhance countrywide campaigns promoting the safe disposal or reuse of plastics.
5. The MWE should advocate for the inclusion of climate change adaptation and mitigation budgets by seeking the issuance of certificates of approval for the Development Plans of both central and local governments.

## **3.4 Land Management Sub-programme**

### **Introduction**

The sub-programme aims at reducing land-related conflicts by 30% and increasing the percentage of titled land from 21% to 40% in the NDP III period thereby contributing to the objective of strengthening land use and management. The key sub-programme implementers are The Ministry of Lands Housing and Urban Development (MLHUD), and Uganda Land Commission (ULC). The sub-programme planned for nine interventions which were all assessed. These are:

i) Fast-track the formulation, review, harmonisation, and implementation of land laws, policies regulations, standards and guidelines; ii) Strengthen the capacity of land management institutions in executing their mandate geared towards securing land rights; iii) Promote land consolidation, titling and banking; iv) Complete the rollout and integration of the Land Management Information System with other systems; v) Promote tenure security including women's access to land;

Others are: vi) Develop and implement a Land Valuation Management Information System (LAVMIS); vii).); viii) Capitalize the Land Fund to ensure access to land by lawful and bona fide occupants, and ix) Undertake a comprehensive inventory of Government land. The sub-programme performance was fair at 57.8%, and highlights of its performance are presented hereafter:

### **Sub-programme financial performance**

The annual sub-programme budget for FY 2023/24 was Ug shs 105.77bn. By 31<sup>st</sup> December 2023, Ug shs 40.95bn (39.9%) was released and Ug shs 29.20 (27.6%) was expended. This was a good release but poor expenditure performance. The low absorption was due to the untimely release of funds. Less money Ug shs 820m (28%) of the budget (Ug shs 2.882bn) was received to complete the rollout and integration of the Land Management Information System with other systems. On the other hand, less money was expended on improving coordination, planning, regulation and monitoring of water resources at the catchment level. Thus, no titling of land under ecologically sensitive areas especially wetlands was undertaken.

## Sub-programme performance

The Land Management Sub-programme performance was fair at 57.2% average achievement on outputs. In the first half of the FY, 24,467 land titles were issued, while 256 titles issued in fragile ecosystems were cancelled. In total, 60 Land Information System (LIS) users from the MZOs of Mbale, Moroto, Soroti and Tororo underwent system training. The role of four traditional institutions (Ankole, Buganda, Bugisu, and Acholi) in carrying out their mandate in land management was strengthened. District Land Officers and Area Land Committees were trained in land management. Land laws, policies, regulations, standards and guidelines were formulated and reviewed, conserved and degraded wetlands demarcated and gazetted was not undertaken. The Lands Management interventions' performance is summarized in Table 3.5 and the detailed performance is presented hereafter. Refer to *Annex 5* for details of sub-programme, intervention, and outputs performance analysis.

**Table 3.5: Overview of the intervention's performance by 31<sup>st</sup> December 2023**

	Intervention	Performance Rating	Remarks
01	Fast-track the formulation, review, harmonization, and implementation of land laws, policies regulations, standards and guidelines	On track	At 66% - LaVMIS was developed. A National Land Policy was drafted; Land regulations were disseminated in eight districts.
02	Complete rollout and integration of the Land Management Information System with other systems	On track	At 73% – good progress. Version 7.0 of LIS was developed and the rest was ongoing.
03	Promote land consolidation, titling and banking	On track	Poor at 42% -24,467 titles were issued; 256 land titles issued in fragile ecosystems were cancelled. The long legal process affects the process.
04	Promote tenure security including women's access to land.	Off track	60%-Fair. 165 court cases facilitated and 11 trustees registered.
05	Develop and implement a Land Valuation Management Information System (LAVMIS)	On track	At 80% good performance; 29,234 property valuations were carried out; National Valuation Standards and Guidelines were developed.
06	Strengthen the capacity of land management institutions in executing their mandate geared towards securing land rights	Achieved	At 98% - It was a very good performance. Trained DLBs, DLOs, area committee member and traditional institutions on their made-in-land administration.



07	Capitalize the Land Fund to ensure access to land by lawful and bona fide occupants.	Off track	At 19% -1129.48 hectares of Land acquired in Buganda Bunyoro, Ankole and Toro.
08	Undertake a comprehensive inventory of Government land.	Off track	48% poor-165 court cases were facilitated and, six certificates were processed for MDAs 405 lease transactions but no laws were formed or revised.
09	Improve coordination, planning, regulation and monitoring of water resources at catchment level	Off track	0%-Tittle for wetlands and other ecologically sensitive areas were not achieved.

*Source: Authors' Compilation*

The Lands Management interventions' performance is summarized hereafter:

### **3.4.1 Fast-track the formulation, review, harmonization, and implementation of land laws, policies regulations, standards and guidelines**

The intervention aims to create an enabling legal atmosphere in the management of land matters. The annual planned output was only land laws, policies, regulations, standards and guidelines formulated and reviewed. Under this output, the planned activities were: four stakeholder consultation engagements to review the National Land Policy conducted and reports produced, Land regulations disseminated in four regions through four regional workshops, the National Gender Strategy on land reviewed, Land Acquisition and Resettlement policy finalized - Land Acquisition, Resettlement and rehabilitation Bill finalized, Land Acquisition and Resettlement policy and Land Acquisition, Resettlement and rehabilitation Bill disseminated to 40 districts across the 4 regions, 10 meetings held to review the Land Act and Guidelines for registration of customary land developed. The performance was fair at 66%.

Cumulatively, three stakeholder consultation engagements to review the National Land Policy were conducted and a report produced. Land regulations were disseminated in eight districts<sup>5</sup> through public sensitization meetings. The National Gender Strategy on land was not reviewed. A Regulatory Impact Assessment (RIA) for the Land Acquisition and Resettlement Policy was drafted; the resettlement and rehabilitation Bill wasn't disseminated to 40 districts across the four regions, and procurement of consultants to prepare the Guidelines for customary land registration was ongoing.

### **3.4.2 Strengthen the capacity of land management institutions in executing their mandate geared towards securing land rights**

The planned annual output was - the capacity of land management institutions (state and non-state actors) strengthened. The target was to review and approve 40 District Land Board (DLB), appointments of which 26 District Land Board appointments were reviewed and approved. Training of four technical staff in specialized short courses on Land Management and Administration plans was not undertaken. A total of 15 public sensitizations on land matters were

<sup>5</sup> Yumbe, Obongi, Isingiro, Terego, Kiryandongo, Ntoroko, Mukono, Kampala and Adjumani

undertaken in 10 districts<sup>6</sup> out of 10 public sensitizations' annual targets. At 98% performance, the intervention achieved most of its targets.

Strengthening four traditional institutions (Ankole, Buganda, Bugisu, and Acholi) in land administration was conducted in three clans (Atoro, Palaronya, and Lamogi in Amuru in the Acholi sub-region). A total of 18 District Land Officers (DLOs) and 18 District Land Boards were supervised, monitored and technically supported<sup>7</sup> out of 20 DLOs and 20 DLBs annual targets respectively. The eight Ministry Zonal Offices (MZOs)<sup>8</sup> were supervised, monitored and technically supported out of 22 annual targets.

Four District Land Boards, four District Land Offices and 23 Area Land Committees in Ntoroko and Omoro districts were trained in land management out of 40 DLBs, 40 District Land Offices and 120 Area Land Committees' annual targets respectively. The Q4 Internal Audit Report for FY2022/23 and Q1 Internal Audit Report for FY2023/24 were prepared. All quarterly payments were verified to ensure compliance with financial management guidelines and procedures. The contract gratuity for the chairperson and secretary was paid as per the terms, and the general office administration undertaken.

All staff on payrolls were paid salaries by the 28th of every month, appraised and performance reports submitted. Quarterly wage bill monitoring reports were submitted to the Ministry of Public Service (MoPS) and reports on the COVID-19 Stand Operating Procedures. Six contract committee reports were prepared out of eight reports and two evaluation committee reports out of 32 produced. The plan was to open 600 new land files and close 20 land files, however, 194 new land files were opened and 29 land files were closed.

Minutes and reports of eight out of 36 regular and timely commission meetings were done. Emoluments and retainer fees for 8 Commission members were paid monthly. In quarters one and two general welfare for all staff and commission members was processed. HIV/AIDS training was conducted and a report was submitted. The Q4 FY2022/23 and Q1 FY2023/24 performance reports were prepared and submitted. Cash limit projections for FY2023/24 Q1 and 2 were prepared and submitted.

### **3.4.3 Complete the rollout and integration of the Land Management Information System with other systems**

The intervention aims at ensuring that the Land Information System (LIS) is automated and integrated with other systems. The planned activities were: i) a data processing centre established; ii) a Land Information System automated and integrated with other systems and iii) Revised topographic maps, large-scale maps and a national atlas. The performance of the intervention outputs was at 73% which is good. The details of the different outputs are given hereafter:

#### **Land Information System automated and integrated with other systems**

The 22 MZOs were monitored and supervised - The LIS was maintained in the 22 MZOs and other LIS sites, and 2,000 pieces of title paper and title covers out of 200,000 planned were procured. Version 7.0 of the National Land Information System which improves the system functionality

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<sup>6</sup> Yumbe, Obongi, Isingiro, Terego, Kiryandongo, Ntoroko, Mukono, Buvuma, Apac and Adjumani.

<sup>7</sup> Lyantonde, Lwengo, Amuru, Kotido, Masaka, Kyotera, Rakai, Rukungiri, Mbarara, Gulu, Lira, Arua, Hoima, Kyenjojo, Kabale, Katakwi, Kaberamaido and Sembabule.

<sup>8</sup> Mbarara, Lira, Gulu, Arua, Masaka, Rukungiri, Kabale and Masindi.

was developed and released. The contract for developed of the Land Valuation Management Information System (LaVMIS) signed. The system, intended to improve the operation of the LIS will be rolled out to other sites.

A contract was signed for the Systematic Land Adjudication and Certification (SLAAC) for Oyam and Apac districts. A total of 2,317 parcels were adjudicated and demarcated and 11,568 titles produced and issued, 300 parish development plans (PDPs) were produced and 181 gazetted out of 72 parishes.

### **Revised topographic maps, large-scale maps and National atlas**

To produce 45,000 deed plans, 22,500 deed plans were approved and the old National Atlas was scanned for revision, 82 sheets were georeferenced and digitization was ongoing. The combined block separation was carried out for Wakiso and Bukalasa and this was planned for 10 combined blocks.

Reconnaissance activities were undertaken for new surveys and boundary opening of the Sango Bay region for the palm oil project; four interstate meetings were held between Uganda and 30km of international border were surveyed and demarcated between Uganda-Kenya against the annual target of 200km. Government Cadastre Data Inventory and consolidation was undertaken for Mawokota and Gomba in Mpigi MZO; a subscription to the Regional Center for Mapping of Resources for Development (RCMRD) was paid. The plan to survey and demarcate the boundaries of four cities/ urban areas (Arua Soroti, Jinja and Mbale) was achieved for only Jinja city.

A total of 8km out of 50km of 2 national (inter-district) boundaries in Kyaka were affirmed to reduce border disputes and protect the fragile ecosystem. One large-scale city map of Jinja was revised out of four large-scale town/city maps (Hoima, Gulu, Mbale and Jinja). The plan was to revise 54 topographic maps for six districts (Napak, Moroto, Hoima, Kikuube, Namayingo, and Namisidwa), only 18 topographic maps for Napak and Moroto districts were updated and disseminated.

### **Data Processing Centre established**

A total of 60 out of the planned 114 IS users from the MZOs of Mbale, Moroto, Soroti and Tororo were trained.

### **3.4.4 Promote land consolidation, titling and banking**

The planned output was land demarcated, surveyed, registered and certified. The following were the annual planned activities i) Ug shs 62.5bn revenue generated; ii) 200,000 physical planning applications approved; iii) 120,000 land conveyances i.e., mortgages, caveats, transfers etc. carried out; iv) 30,000 stamp duty assessments and inspections carried out in 22 MZOs; v) 200,000 titles processed and issued to men and women; vi) 400 affidavits commissioned; vii) 200 land disputes resolved out of which 80 are disputes reported by women; viii) 200,000 new titles registered in the system out of which 80,000 are for women individually or jointly; ix) Land registration activities in 22 MZOs Inspected and supervised; x) 100 Blue pages processed and validated; xi) 100 land titles issued in fragile ecosystems (wetlands and forest reserves) cancelled; and xii) 50,000 Certificates of Customary Ownership (CCOs) processed; xiii) 600 Communal Land Associations (CLAs) formed and registered; xv) 90,000 Land registration files committed into the Uganda National Land Information System (Ug NIL). The intervention performance was poor at 42%.

Achievements by the end of Q2 were as follows: Ushs 36.06bn revenue was generated and 24,467 physical planning applications approved, 80,383 land conveyances i.e., mortgages, caveats, transfers etc. carried out and 10,748 searches completed. A total of 1,697 stamp duty assessments and inspections were carried out in 22 MZOs titles and cleaning services for 22MZO, and guard and security services for 22MZO procured. A total of 265 affidavits were commissioned, 110 land disputes resolved, of which 40 were disputes reported by women and 24,467 titles were processed and issued to men and women to strengthen tenure security of men and women.

Land registration activities in 11 MZOs were inspected and supervised<sup>9</sup>, 19 blue pages processed and validated, and 256 land titles issued in fragile ecosystems (wetlands and forest reserves) were cancelled. A total of 1,017 Certificates of Customary Ownership (CCOs) were issued in Agago, two customary land registries were opened (one in Wol and another in Paimol) and meetings were held in Namutumba and Kaliro districts. Registration of CLAs in the Acholi sub-region was ongoing and 4,552 files were committed into the UgnLIS. The long legal process delays the cancellation of illegal titled land.

### **3.4.5 Promote tenure security including women's access to land.**

The annual planned output was land conflict mechanisms reviewed through 400 court cases facilitated and 20 trustees registered. These were achieved as follows: 165 court cases were facilitated and 11 trustees registered. The intervention performance was rated fair at 60%.

### **3.4.6 Develop and implement a Land Valuation Management Information System (LAVMIS)**

The intervention aims to ensure that a Land Valuation Management Information System (LAVMIS) is developed and implemented. The key planned output in the FY was National Valuation Standards and Guidelines developed and disseminated.

The following were the annual planned targets; i) 30,000 property valuations carried out and supervised; ii) National Valuation Standards and Guidelines developed; iii) Data for Land Valuation databank collected, and databank developed; iv) Property index for taxation and valuation purposes developed and published; v) 60 land acquisitions for Government development projects supervised; vi) Compensation rates for 135 districts reviewed and approved; vii) 22 MZOs sensitized on valuation activities. By the end of Q2, 80% performance was registered.

These were achieved as follows: 29,234 property valuations were carried out and supervised. Market valuation: 159 properties, rental valuation: 104 Premises and Custodian Board Survey: 25 cases, boarding off: 24 cases, asset valuation: 18 cases, probate valuation: 12 cases, terms: 83 cases, mortgage valuation: 02 cases, rating: 1 town council, general compensation: 36 cases, stamp duty assessments: 29,234.

National Valuation Standards and Guidelines were developed, the Alpha version of the databank was prepared, and an MoU with UBOS was reviewed and updated. Preparations for data collection was ongoing, and 116 land acquisitions for government development projects were supervised: UNRA -54, MoWE - 14, MEMD - 12, MoDVA- 04, MoTIC - 03, MoWT - 01, MAAIF - 02,

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<sup>9</sup> Gulu, Wakiso-Busiro, Kampala, Soroti, Mbale, Luweero, Kabale, Kabarole, Mbarara, Mukono and Wakiso-Kyadondo

UETCL - 13, NWSC - 09, UIA - 04, UEDCL - 01, UEGCL - 01, HPP – 01. Seven<sup>10</sup> district compensation rates reviewed and approved, and 22 MZOs sensitized on valuation activities.

The following planned activities were not implemented: Four project management and M&E exercises were carried out and reports prepared, 60 land acquisitions for government projects supervised, blue page register updated, trustee incorporation reviewed and trustees regulation formulated, 50 project contract staff paid salaries, countrywide land market values compiled, land values collection software developed, 20 desktop computers procured for 20 DLBs, Annual Property Index Data 2022/23 compiled, databank for compensation rates updated to promote fair compensation rates and land market for all including the elderly, women and PWDs, financial and technical support provided to 40 District Land Boards, and financial and technical support provided to 22 MZOs.

### **3.4.7 Capitalize the Land Fund to ensure access to land by lawful and bona fide occupants**

The annual planned outputs were: i) 3643.75 hectares of land acquired through compensation to absentee landlords for securing lawful and bonafide occupants in Buganda, Bunyoro, Ankole and Toro (females, males, PWDs, youths and companies); ii) 5,000 subdivision surveys conducted for parcels of land for title processing for lawful and bonafide occupants in Buganda, Bunyoro, Ankole and Toro; iii) eight field sensitizations or consultations meetings conducted for females, males, PWDs, youths and companies occupants. At only 19%, there was poor performance of the outputs.

By December 2023, a total of 1129.48 hectares of land were acquired through compensation to absentee landlords for securing lawful and bonafide occupants in Buganda, Bunyoro, Ankole and Toro (females, males, PWDs, youths and companies). The other outputs were not achieved due to logistical challenges.

### **3.4.8 Undertake a comprehensive inventory of Government land**

The planned outputs were: i) Land laws, policies, regulations, standards and guidelines formulated and reviewed; ii) a comprehensive and up-to-date government land inventory undertaken.

The plan was to table ULC Bill 2017 in Cabinet and Parliament for consideration and approval; 1,000 copies of the Land Fund Regulations and guidelines disseminated to lawful and bonafide occupants in Bunyoro, Ankole, Buganda and Toro (males, females, PWDs, youth and companies). By the end of Q2, these had not been done.

A total of 31 land court cases were managed out of 20 annual targets across the country and all the intended 10 land inspections and sensitizations were done and reports produced. The plan to computerize 25 motor vehicle number plates was not undertaken. Of the 240 certificates of title to be processed for MDAs, only six were processed, 12 land inspection and sensitization reports prepared from 30 land inspection and sensitization reports target.

A total of Ug shs 3.277bn was collected from all leases across the country, and the annual target was Ug shs 4bn, 405 lease transactions were processed countrywide for males, females, PWDs and companies (43% companies, 42% male and 15% female) of the 400 target, and out of 80 court cases 122 were managed.

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<sup>10</sup> Napak, Buvuma, Kalangala, Kaberamaido, Busia, Tororo and Zombo

### **3.4.9 Improve coordination, planning, regulation and monitoring of water resources at catchment level**

The annual plan is to subdivide and title 0.5 square kilometres of wetlands and other ecologically sensitive areas for protection, in partnership with other government institutions mandated to protect wetlands, reserves and open spaces in enforcement of the Law. This was not undertaken in the first two quarters of the FY and forwarded to Q3.

#### **Sub-programme challenges**

1. Understaffing in the MLHUD Survey Department and at the Ministry Zonal Offices compared to the workload, which created a backlog in processing land titles.
2. Inadequate funding for district land boards to perform their duties.
3. The MLHUD lacks guidelines for land compensation processing.
4. Cancellation of titles was affected by the lengthy legal processes which made it remain on paper for a long time. For example, only 3.3% of the existing to be cancelled at the beginning of the FY.
5. Low releases coupled with low absorption under the Competitiveness and Enterprise Development Project (CEDP) occasioned by delays in procuring service providers for implementation yet this is the only project in the sub-programme.

#### **Conclusion**

The sub-programme exhibited a fair performance of 57.2% because a few planned outputs were achieved. Generally, the half-year release was good (40%) and the expenditure poor at 28%. Some of the achievements included: 24,467 titles issued to strengthen tenure security of men and women; 110 land disputes resolved, of which 40 were reported by women; 1,017 Certificates of Customary Ownership (CCOs) issued in Agago; 256 land titles issued in fragile ecosystems (wetlands and forest reserves) cancelled; 165 court cases facilitated. A total of 24,467 titles were processed and issued to men and women. The National Land Policy was under review. More effort is required to speed up work in terms of rescheduling and strict supervision of work so that the targets are achieved.

#### **Recommendations**

1. The MLHUD should ensure that all vacant staff positions in the structure are filled up.
2. The MLHUD should prioritise the allocation of funds to the district land boards to exercise their mandate.
3. The MLHUD should fast-track procurements under CEDP and equip the data processing centre to fast-track land title processing.
4. The MLHUD should develop guidelines for the land compensation processes.
5. The MLHUD should closely follow up on the cancellation of illegal titles in fragile ecosystems.

## CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

### 4.1 Programme Conclusion

The FY2023/24 half-year performance of the Natural Resources Environment, Climate and Climate Change Programme was rated fair at 57.9%, with 47% half-year release which was good. However, the expenditure was poor at 27%. Some of the achievements were the routine works of water quality assessments, seasonal forecasts and multiyear projects that management to increase the tree cover. A total of 510.2ha of commercial tree plantations were established under NFA alone, and 24,467 titles were processed and issued to men and women to strengthen tenure security. The lengthy legal processes affected the number of title cancellations. Otherwise, the release of finances in November 2023 curtailed early implementation of work such that at the time of monitoring in January and February some activities were just beginning. The late releases mainly affected wetland restorations especially those financed by GoU.

Overall, only 21% of the interventions monitored achieved the set targets, whereas 31% were on track and 47% off-track, thus creating a high likelihood of not achieving the annual targets thus affecting the NDPII/SDG 6 targets. Taking this into consideration, the Programme's goal to stop and reverse the degradation of water resources, environment, and natural resources as well as the effects of climate change on economic growth and livelihood security hangs in a balance.

### 4.2 Overall Challenges

1. Inadequate funding affected the timely implementation and number of outputs implemented.
2. Uncoordinated planning and budgeting resulted in duplication of activities/outputs wastage of resources.
3. Indiscriminate disposal of plastics caused blockage of waterways, flooding and destruction of farmland and roads.
4. The lack of clear boundaries for some protected areas made it difficult to protect riverbanks, lake shores and forest areas making them prone to encroachments.
5. Weather/climate vulnerability causes extremely hot or rainy seasons, thus contributing to crop failure as witnessed by some seedlings drying up.

### 4.3 Recommendations

1. The MWE should prioritize the demarcation of riverbanks and forest areas to reduce encroachment on those areas by the neighbouring population.
2. The MWE should initiate a coordinated structured approach of collaborative planning and implementation to avoid duplication of activities and wastage of resources.
3. Engage the private sector and incentivize the scaling up of their investment in water and environment beyond the corporate social responsibility through innovative financing.
4. The local authorities should enact bylaws and increase the enforcement of environmental bylaws to protect the environment by the EPF.

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## ANNEXES

### **Annex 1: Monitored interventions under the NRECCLWM Programme Semi-Annual FY2023/24**

1.	Improve coordination, planning, regulation and monitoring of water resources at catchment level
2.	Strengthen conservation, restoration of forests, wetlands and water catchments and hilly and mountainous areas
3.	Increase investment in value addition to environment and natural resources products and services
4.	Promote payment for ecosystem services, biodiversity offsets and benefit sharing arising from use of biological resources.
5.	Develop and implement a framework that reduces adverse per capita environmental impact of cities (air quality and waste management practices)
6.	Mainstream environment and natural resources management in policies, programmes and budgets with clear budget lines and performance indicators
7.	Integrate education for sustainable development in national curricula at all levels for an environmentally literate citizenry
8.	Strengthen enforcement capacity for improved compliance levels:
9.	Enhance access and uptake of meteorological information
10.	Install new and adequately equip and maintain existing automatic weather stations to ensure maximum functionality
11.	Fast-track the formulation, review, harmonisation, and implementation of land laws, policies regulations, standards and guidelines.
12.	Strengthen the capacity of land management institutions in executing their mandate geared towards securing land rights.
13.	Complete the rollout and integration of the Land Management Information System with other systems
14.	Promote land consolidation, titling and banking
15.	Promote tenure security including women's access to land
16.	Develop and implement a Land Valuation Management Information System (LAVMIS)
17.	Capitalize the Land Fund to ensure access to land by lawful and bona fide occupants
18.	Undertake a comprehensive inventory of Government land
19.	Improve coordination, planning, regulation and monitoring of water resources at catchment level

**Annex 2: Performance of the Water Resources Management Sub-programme by 31<sup>st</sup> December 2023**

Output Performance								Remark
Intervention	Planned Output	Financial Performance			Physical Performance			
		Annual Budget ( Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
Equip and support all lagging primary, secondary schools and higher education institutions to meet the basic requirements and minimum standards	Joint Transboundary catchment investment projects prepared	2,672,464,000	65.5	89	100.00	60.00	91.5	Good performance as designs for Angololo MPP were completed, subscriptions paid, department well-managed.
	Water resources data (Quantity and Quality) collected and assessed	1,098,500,967	35.3	74	100.00	36.00	100.0	Good performance with water quality assessments made (data processing and analysed) and equipment procured.
	National Water Quality Monitoring infrastructure and networks upgraded and functional	3,869,252,751	60.4	97	100.00	18.00	29.8	Poor performance, affected by less and late release of funds.
	Operational Water Information Systems at the central level and in the 4 Water Management Zones	1,272,318,000	69.5	97	100.00	85.00	100.0	Good performance. The Zonal offices were well-operated and maintained.
	Operational optimal Surface Water and Ground Water monitoring network established	401,036,000	36.6	94	100.00	72.00	100.0	Groundwater station construction was at 55%, Automatic Weather Stations at 20% completion and 4

Output Performance								Remark
Intervention	Planned Output	Financial Performance			Physical Performance			
		Annual Budget ( Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
								stations configured and calibrated.
	Improved water use efficiency for increased productivity in water consumptive programmes (agro-industrialization, manufacturing, mineral development). 2. National water budget to inform equitable and efficient allocation for all water uses determined	1,882,498,503	39.6	81	100.00	80.00	100.0	The water permit registry and database were operated and maintained and two (02) quality assurance and supervision trips were undertaken out of 4 planned.
	Functional gender-sensitive water catchment management committees established	1,145,000,000	16.3	99	100.00	0.00	0.0	The planned CMC quarterly meetings in the zones were not held. Affected by low releases.
	Demonstration centres for demonstration of innovative catchment management measures established	7,365,321,695	36.8	85	100.00	60.00	100.0	WECs were funded and 30% of water management measures were implemented.
	Degraded water catchments protected and restored through the implementation of	7,365,321,695	36.8	85	100.00	8.00	21.7	Poor performance, affected by less and late release of funds.

Output Performance								Remark
Intervention	Planned Output	Financial Performance			Physical Performance			
		Annual Budget ( Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
	catchment management measures.							
	National Water Quality Reference Laboratory's analytical capacity upgraded and regional Laboratories established to address issues related drinking water, pollution and SDGs	9,153,720,000	60.8	98	100.00	66.00	100.0	Good performance with the upgrade of NWQRL at 40% completion and all regional laboratories maintained and functional.
	Catchment Management Plans in the Water Management Zones	1,386,180,171	38.0	99	100.00	30.00	78.9	Good performance as catchment management measures were ongoing though works started late due to late releases.
	Increased water storage capacity to meet water resource use requirements	4,454,060,000	67.4	97	100.00	40.00	59.4	CMPs for Nyamugasani and Kafu were at 80% while Sezibwa and Okweng were at 60% completion.
	Water resources compliance monitoring equipment procured and installed	165,537,612	25.0	88	100.00	0.00	0.0	Poor performance. No equipment was procured.

Output Performance								Remark
Intervention	Planned Output	Financial Performance			Physical Performance			
		Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
	Water management measures implemented in priority sub-catchments.	400,000,000	25.0	9	100.00	10.00	40.0	Poor performance because the planned water storage infrastructure had not started.
<b>Average Outputs Performance</b>							<b>65.8</b>	

### Annex 3: Performance of the Environment and Natural Resources Sub-programme by 31<sup>st</sup> December 2023

Outputs Performance								Remark
Intervention	Output	Financial Performance			Physical Performance			
		Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
Strengthen conservation, restoration of forests, wetlands and water catchments and hilly and mountainous areas	Improve coordination, regulation and monitoring of environment management at both central and local government levels	27,949,253,674	51	72	100	30	59	NCD and LTS communication materials produced, training in climate-smart agriculture.
	Restoration of critical wetlands; Demarcate, gazette and restore 900kms of wetlands; Gazette 6 critical wetlands.	562,166,667	59	96	100	10	17	A total of 138ha of degraded wetlands were restored.
	Mobilize stakeholders and develop and implement costed management plans.	80,000,000	25	87	100	5	20	Only 3 LGs and urban councils monitored for compliance.

Outputs Performance								Remark
Intervention	Output	Financial Performance			Physical Performance			
		Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
	Undertake an inventory of degraded wetlands; Restoration of critical wetlands; Demarcate, gazette and restore 900kms of wetlands; Gazette 6 critical Wetlands.	243,333,333	48	97	100	5	10	EPPU carried out several enforcement activities.
	12,200km of CFRs boundary resurveyed, marked and maintained	8,265,300,186	51	87	100	31	61	3,154 ha were freed from encroachment
	55 Forest Management Plans prepared and revised	920,740,000	49	83	100	15	31	Forest Management Plans prepared.
	1.265ha of CFRs protected and freed from illegal activities and encroachment	920,740,000	49	83	100	92	100	1,193,345ha of CFRs protected from illegal activities
	365,000ha of non-degraded and restored natural forests(ha)	920,740,000	49	83	100	42	86	16,372ha were protected from fires.
	Percentage increase in forest cover	520,960,020	58	77	100	45	78	
	113,000ha of forest established (13,000ha under NFA and 100,000ha under Licensees on CFRs)	520,960,020	58	77	100	40	69	545.9ha of commercial tree plantations maintained.
	Integrated Forest Information Management System developed; Forest databases updated	979,001,588	40	34	100	30	76	6,268.4ha of Licensed Tree Planters was updated in the database.

Outputs Performance								Remark
Intervention	Output	Financial Performance			Physical Performance			
		Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
Increase investment in value addition to environment and natural resources products and services	Protection and restoration of strategic fragile ecosystems undertaken	17,688,095,667	54	96	100	30	56	Initiation of green bond and carbon pricing.
	Effective engagement with UN and other partners in environment issues	400,000,000	25	100	100	10	40	Subscription to Convention on Biodiversity and Minamata.
Promote payment for ecosystem services, biodiversity offsets and benefit sharing arising from use of biological resources	Biodiversity offsets implemented	130,000,000	38	80	100	-	-	Not implement.
Develop and implement a framework that reduces adverse per capita environmental impact of cities (air quality and waste management practices)	25 cities/ municipalities with Functional solid waste/e-waste) management facilities	945,286,250	64	65	100	36	56	Capacity building of 30 lead agencies in business processes at NEMA.
	Environmental Inspectors, other ENR managers and committees trained on Environmental regulation and enforcement quality standards.	6,820,000,000	50	100	100	-	-	Not achieved.
	A legal framework for environment management strengthened	945,286,250	64	65	100	5	8	Five target regulations are still under review and drafting.

Outputs Performance								Remark
Intervention	Output	Financial Performance			Physical Performance			
		Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
	A robust environmental assessment, monitoring and surveillance plan operational in cities/municipalities and country-wide	945,286,250	64	65	100	52	81	A total of 175 EPF operations were supported and 1,031 ESIA reports reviewed.
	An environmental enforcement strategy developed and operationalized	945,286,250	64	65	100	50	78	A total of 110 prosecutions undertaken.
Mainstream environment and natural resources management in policies, programmes and budgets with clear budget lines and performance indicators.	Effective engagement with UN and other partners in Environment issues	940,000,000	60	64	100	43	71	Engagement with strategic partners.
	Increased funding for non-consumptive uses of natural resources	12,209,220,776	51	44	100	5	10	Three concepts developed and seeking funding.
	The institutional capacity of the relevant institutions to manage and regulate environmental aspects including oil and gas activities enhanced; and Partnerships established	12,209,220,776	51	44	100	-	-	No capacity built.
Integrate education for sustainable development in national curricula at all levels for an environmentally literate citizenry	Education for Sustainable Development integrated in education curricular	843,333,333	54	29	100	5	9	NEMA initiated the process of introducing the National Environment School debate.
	Information, Education & Communication materials on environment developed and translated into local languages	843,333,333	54	29	100	46	86	Radio and TV audio-visual materials and infomercials on



Outputs Performance								Remark
Intervention	Output	Financial Performance			Physical Performance			
		Annual Budget (Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
								environmental protection produced.
	Public education programs and campaigns on environment-enhanced	843,333,333	54	29	100	43	80	Countrywide campaigns initiated.
	The National State of Environment Report prepared	800,000,000	50	76	100	10	20	Preparatory meetings held.
Strengthen enforcement capacity for improved compliance levels:	1770 modern forest management infrastructure procured	7,998,338,435	50	82	100	50	99	A total of 59 equipment for digitizing forest boundary plans procured.
Enhance access and uptake of meteorological information	Research on future climate trends and potential impacts undertaken	14,133,838,618	50	67	100	45	89	September-December Seasonal Forecast produced
Install new and adequately equip and maintain existing automatic weather stations to ensure maximum functionality	Weather and air pollution monitoring station network expanded and functional.	961,276,462	53	43	100	45	84	Radar and Windshear Operations were maintained at Lira, Rwampara and Entebbe.
<b>Average Output Performance</b>							<b>50.83</b>	

**Annex 4: Performance of the Land Management Sub-programme by 31<sup>st</sup> December 2023**

Output Performance								Remark
Intervention	Output	Financial Performance			Physical Performance			
		Annual Budget ( Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
Fast-track the formulation, review, harmonisation, and implementation of land laws, policies regulations, standards and guidelines.	Land Laws, Policies, Regulations, standards and guidelines formulated and reviewed	27,835,000	50.0	85	100.00	33.00	66.00	Good performance where; National Land Policy drafted; Land regulations were disseminated in eight districts National Gender Strategy on land was not reviewed.
Strengthen the capacity of land management institutions in executing their mandate geared towards securing land rights.	Capacity of Land Management Institutions (state and non-state actors) strengthened	307,161,986	50.0	89	100.00	49.00	98.00	The role of four traditional institutions was strengthened. DLBs, four DLOs and 23 Area Land Committees of Ntoroko and Omoro districts trained.
Complete the rollout and integration of the Land Management Information System with other systems.	Land Information System automated and integrated with other systems	6,201,974,913	52.3	79	100.00	20.00	38.27	LIS was maintained in the 22 MZOs.
	Revised topographic maps, large-scale maps and National atlas.	2,881,855,959	28.5	100	100.00	24.00	84.35	Inter-district boundaries were affirmed and 22,500 deed plans were approved.

Output Performance								Remark
Intervention	Output	Financial Performance			Physical Performance			
		Annual Budget ( Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
	Data Processing Centre established	3,100,987,456	52.3	79	100.00	52.00	99.49	A total of 60 LIS users trained.
Promote land consolidation, titling and banking.	Land demarcated, surveyed, registered and certified	9,105,366,100	54.5	94	100.00	23.00	42.18	A total of 24,467 titles were issued; 256 land titles issued in fragile ecosystems were cancelled.
Promote tenure security including women's access to land.	Land conflict mechanisms reviewed	151,076,780	50.0	62	100.00	30.00	60.00	A total of 165 court cases were facilitated and 11 trustees registered.
Develop and implement a Land Valuation Management Information System (LAVMIS)	National Valuation Standards and Guidelines developed and disseminated	515,821,334	50.0	60	100.00	40.00	80.00	A total of 29,234 property valuations were carried out; National Valuation Standards and Guidelines were developed.
Capitalize the Land Fund to ensure access to land by lawful and bona fide occupants.	Land fund Capitalized and accessed by bona fide and lawful occupants	18,161,960,000	51.8	95	100.00	10.33	19.95	1129.48 hectares of Land acquired in Buganda Bunyoro Ankole and Toro.
Undertake a comprehensive inventory of Government land.	Land Laws, Policies, Regulations, standards and guidelines formulated and reviewed	303,025,673	2.9	100	100.00	0.00	0.00	ULC Bill 2017 was not tabled in parliament and Land Fund Regulations and guidelines were not disseminated.

Output Performance								Remark
Intervention	Output	Financial Performance			Physical Performance			
		Annual Budget ( Ug shs)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical Performance Score (%)	
	A Comprehensive and up-to-date government land inventory undertaken.	1,560,000,000	59.4	65	100.00	58.00	97.60	A total of 165 court cases were facilitated and, six certificates were processed for MDAs 405 lease transactions but laws formed or revised
Improve coordination, planning, regulation and monitoring of water resources at catchment level	Conserved and degraded wetlands demarcated and gazette.	50,000,000	75.0	37	100.00	0.00	0.00	Title for wetlands and other ecologically sensitive areas was not achieved.
<b>Average Output Performance</b>							<b>57.15</b>	<b><i>Fair achievement</i></b>

### Annex 5: Enforcement operation in South Western Region

S/NO	CRB	BRIEF FACTS AND OFFENCE	REMARKS
1	Mbarara CRB: 993/2023	Illegal sand mining	RSA COURT PG, sentenced to community service.
2	Sheema CRB: 626/2023	Wetland degradation	Sentenced To Eight ( 8) months to Sheema Prison on 09 <sup>th</sup> /November/2023.
3	Sheema CRB: 625/2023	Wetland degradation in Kitagata Town Council, the accused persons were arrested and they are still appearing in court.	The matter is at Kagango Magistrates Court for further hearing in Sheema District.
4	Sheema CRB: 594/2023	Wetland degradation	RSA; court; case file is with DPP.
5	Sheema CRB: 648/2023	Wetland degradation, the Accused persons were making bricks at the Kisojo Wetland System in Sheema District.	Convicted and sentenced to 5 months
6	Sheema CRB: 641/2023		RSA Court (Bushenyi chief Magistrates Court) with DPP.
7	Sheema SD REF: 40/05/09/2023	Wetland degradation, the accused persons were making bricks at the Kagango Wetland System in Sheema District.	RSA Court
8	Rwampara CRB:379/2023	Wetland degradation in Rwampara Town Council - the accused person is on the run.	RSA, pending the arrest of JB as advised by RSA.
9	Sheema SD REF: 34/05/09/2023	Wetland degradation, the Accused persons were making bricks at the Kagango Wetland System in Sheema District.	The matter is at Kagango Magistrates Court for further hearing.
10	CRB Sheema: 699/23	Wetland degradation, the accused persons were making bricks at the Kagango Wetland System in Sheema District. They were arrested and taken to court.	
11	Sheema SD REF: 63/03/10/2023	Wetland degradation in Kitagata Town Council, the accused was issued with an improvement notice then later, a case was opened against her at Sheema Police.	Under inquiry (pending the statement of the suspect). She is a UPDF Officer living in Kampala
12	668/2023	Wetland degradation, the accused person was making bricks in Ngoma Cell, Sheema District.	The matter is at Kagango Magistrates Court for further hearing.
13	Rwampara CRB: 417/2023	The matter of Illegal sand mining was registered under Mbarara. CRB reference: 417/2023. The illegal activity was taking place in Kakigani Cell, Kinoni Town Council along river Rwizi in Rwampara District.	The case file is with the Court Prosecutor in Rwampara.

14	Mbarara CRB: 1297/2023	The matter of Illegal sand mining was registered under Mbra. CRB reference: 1297/2023. The illegal activity was taking place in Karora Cell along River Rwizi.	RSA advised that further inquiries be conducted.
15	Mbarara CRB: 1296/2023	The matter of Illegal sand mining was registered under Rwizi Reg. CRB reference: 1296/2023. The illegal activity was taking place in the Lugazi cell along the river Rwizi. The suspect was convicted.	RSA - The accused person was convicted and sentenced to 6 months at Mbarara Main Prison.
16	Rwizi GEF: 051/2023	The matter of Illegal sand mining was registered under Rwizi GEF: 051/2023 and later DPP withdrew charges against the accused persons.	RSA - This case file was opened and handled at the Rwizi Regional Police.
17	Sheema CRB; 782/2023	The matter of Illegal sand mining was registered under Rwizi CRB: 782/2023. This occurred in Ngoma Cell, Sheema District.	The case file was submitted to the DPP.
18	CRB MBRA: 418/2023 ( Rampara Court)	Illegal sand mining and wetland. The matter of Illegal sand mining was registered under Rwizi CRB: 024/2023 and impounded as the driver abandoned it without its ignition keys. investigations into the matter have commenced.	The matter is with the Court Prosecutor Rwampara.
19	Rwampara (Kinoni) SD Ref: 07/08/11/2023	The matter of Illegal sand mining was registered under SD REF; 07/08/11/2023 of Rwampara District.	Under inquiry.
20	Sheema CRB: 888/2023	Wetland Degradation, the accused person was making bricks in a wetland along River Rwizi in Sheema District.	It's in court for further hearing.
21	Sheema CRB: 889/2023	The matter of Illegal sand mining was registered under Sheema SD reference: 889/2023.	The matter is being heard at Kagango Magistrates Court in Sheema District.
22	03/24/12/2023	Illegal sand mining	Under inquiry.
23	Rwampara SD Ref: 24/17/01/2024 (Rwampara Police station)	Wetland Degradation, the developer was constructing a school in a wetland in Kinoni Town Council, Rwampara District. Activities of construction were halted and a criminal case was instituted at Rwampara Police Station.	RSA advised that further inquiries be conducted and thereafter the case file resubmitted for sanctioning.
24	Mbarara SD Ref; 04/20/01/2024	The matter of Illegal sand mining was registered under Mbarara SD reference: 04/20/01/2024 against the owner of UAW 071J. The said vehicle was deregistered and the number plates were exhibited, the vehicle couldn't be impounded as the driver abandoned it without its ignition keys. investigations into the matter have commenced.	The matter is still under inquiry.

25	Mbarara SD Ref: 05/20/01/2024	The matter of Illegal sand mining was registered under Mbarara SD reference: 05/20/01/2024 against the owner of UBK 065Y. The said vehicle was deregistered and the number plates were exhibited.	The matter was under inquiry.
26	Mbarara SD REF; 13/31/01/2024	The matter of Illegal sand mining was registered under Mbarara SD reference: 13/31/01/2024 against the owner of UBN 454V. The said vehicle was impounded and exhibited. The owner later on the 9 <sup>th</sup> /02/2024 paid a fine of Ug shs10,000,000	The matter was settled administratively. A fine of Ug shs 10,000,000 was paid by the complainant.
27	Mbarara SD Ref 42/18/01/2024	The matter of Illegal sand mining was registered under Mbarara SD reference: 42/18/01/2024 against the owner of UBK 327V. The said vehicle was impounded and exhibited. The owner, later on, paid a fine of Ug shs 5,000,000	The matter was settled administratively. A fine of Ug shs 5,000,000 was paid by the complainant.
28	Mbarara SD Ref; 07/19/01/2024	Failure to undertake an environmental and social impact assessment (the developer commenced a project without conducting ESIA in Ruharo Ward, Mbarara City.	The matter is still under inquiry.