

ENERGY AND MINERALS DEVELOPMENT SECTOR

ANNUAL BUDGET MONITORING REPORT

FINANCIAL YEAR 2019/20

NOVEMBER 2020

Ministry of Finance, Planning and Economic Development P.O. Box 8147, Kampala www.finance.go.ug





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ABBREVIATIONS AND ACRONYMS

AAS	Atomic Absorption Spectroscopy
AFD	French Agency for Development
AfDB	African Development Bank
A.I.A	Appropriation in Aid
ASM	Artisanal and Small Scale Miners
BADEA	Arab Bank for Economic Development in Africa
CDAP	Community Development Action Plan
CGV	Chief Government Valuer
CNOOC	Chinese National Offshore Oil Company
CWE	China International Waters and Electric Corporation
DGSM	Directorate of Geological Surveys and Mines
DUSIN	Directorate of Petroleum
E&P	Exploration and Production
EA	Exploration Area
EAC	East African Community
EIA	Environmental Impact Assessment
EPC	Engineering Procurement and Construction
EPCC	Engineering Procurement Construction Contractor
ERT	Energy for Rural Transformation
ESDP	Electricity Sector Development Project
EXIM	Export Import
FEED	Front End Engineering Design
FID	Final Investment Decision
GASf	Geological Society of Africa
GIS	Geographical Information System
GoU	Government of Uganda
HPP	Hydro Power Project
HSE	Health Safety and Environment
HV	High Voltage
IDA	International Development Association
IFMS	Integrated Financial Management System
IPC	Interim Payment Certificate
JICA	Japan International Cooperation Agency
JOGMEC	Japan Oil, Gas and Metals National Corporation
KfW	German Financial Cooperation (KfW Bankengruppe)
KHPP	
KIL	Karuma Hydro Power Project Kilembe Investment Limited
KIP	Karuma Interconnection Project kilo Volts
kV	
LV	Low Voltage
MDAs MEMD	Ministries, Departments, and Agencies
MEMD	Ministry of Energy and Mineral Development
MoJCA	Ministry of Justice and Constitutional Affairs



MLHUD	Ministry of Lands, Housing and Urban Development
MoU	Memoranda of Understanding
MPS	Ministerial Policy Statement
MV	Medium Voltage
MW	Mega Watts
MWMID	Mineral Wealth and Mining Infrastructure Development
NDP II	Second National Development Plan 2
NELSAP	Nile Equatorial Lakes Subsidiary Action Programme
NOC	National Oil Company
NOGP	National Oil and Gas Policy
NTR	Net Tax Revenue
OAGS	Organization of the African Geological Surveys
OE	Owner's Engineer
OFID	OPEC Fund for International Development
OPEC	Organization of Petroleum Exporting Countries
OPGW	Optical Ground Wire
PAPs	Project Affected Persons
PAU	Petroleum Authority of Uganda
PDHs	Physically Displaced Households
PEPD	Petroleum Exploration and Production Department
PGM	Platinum Group Minerals
PIP	Public Investment Plan
PMC	Project Management Consultant
PPDA	Public Procurement and Disposal of Assets
PPP	Public Private Partnership
FID	Final Investment Decision
PSA	Production Sharing Agreements
RAP	Resettlement Action Plan
RDP	Refinery Development Program
REA	Rural Electrification Agency
ROW	Right of Way
SEAMIC	Southern and Eastern Africa Mineral Center
SFD	Saudi Fund for Development
SDR	Special Drawing Rights
SPV	Special Purpose Vehicle
TA	Technical Assistance
UEDCL	Uganda Electricity Distribution Company Limited
UEGCL	Uganda Electricity Generation Company Limited
UETCL	Uganda Electricity Transmission Company Limited
UNBS	Uganda National Bureau of Standards
UNOC	Uganda National Oil Company
VF	Vote Function



FOREWORD

The Financial Year 2019/20 strategy focused on stimulating import substitution and export promotion, and incentivising private sector development. The government prioritised agriculture and agroindustrialisation, manufacturing, and mineral development to ensure inclusive growth and the creation of jobs, while promoting development of other key primary growth sectors. The economy grew despite the challenges experienced during the year. The wellbeing of Ugandans, and infrastructure necessary for development also improved considerably.

The above achievements notwithstanding, majority of the second National Development Plan (NDPII) outcome indicators were not achieved. This report by the Budget Monitoring and Accountability Unit (BMAU) shows that majority of the sectors monitored posted a fair performance, despite receiving a substantial amount of their budgets.

I encourage all government institutions, the private sector, development partners, and other key players in the development of this country, to harness the strengths coming with Programme Based Budgeting (PBB), and take cognizant of the lessons learnt during the NDPII to improve service delivery during this NDPIII period.

Kuhallamz.

Keith Muhakanizi

Permanent Secretary/Secretary to the Treasury



EXECUTIVE SUMMARY

Introduction

This report reviews selected key programmes and sub-programmes within the Energy and Minerals Development Sector, based on approved plans and significance of budget allocations to the Votes. Attention is on large expenditure programmes including both development expenditure and recurrent costs.

Programmes selected for monitoring were based on planned annual outputs; regional representation; level of capital investment; and value of releases in Financial Year(FY) 2019/20. The methodology adopted for monitoring included literature review of annual progress and performance reports; interviews with the respective responsible officers or representatives; and observations or physical verification of reported outputs. Physical performance was rated using weighted achievement of the set output targets by 30th June, 2020.

Financial performance

The approved sector budget totaled up to UGX 3,007.76bn (Ministry of Energy and Mineral Development (MEMD)-UGX 1,865.25bn, Rural Electrification Agency (REA)-UGX 1,060.84bn, Uganda National Oil Company (UNOC)-UGX 31.47bn, Petroleum Authority of Uganda (PAU)-UGX 50.199bn). The sector budget release was fair with 65.4% of the total budget released, although the release during the fourth quarter was very poor. The overall sector expenditure was poor at 49.7%.

Highlights of Sector Performance

Overall sector performance

The overall annual sector performance was fair at 59.2%. The performance declined in the second half of the FY owing to the negative impact of the coronavirus. Poor achievement of the sector outputs meant that most outcomes could not be achieved.

Energy Planning, Management and Infrastructure Development Programme: Overall physical performance was fair at 68%. In regard to the programme indicators, programme scored 30% against a target of 28% for the number of households connected to the grid, and a grid loss level of 16% compared to the set target of 15%. The performance of the programme outputs was also fair.

Works for the Electrification of Industrial Parks at Mukono and Iganga were commissioned during the first half of the FY. Works on the transmission segment connecting Namanve South to Namanve North substation was hindered by Right of Way challenges with only 20 of the planned 27 towers completed. The corridor for the Namanve-Luzira transmission line was handed over to the contractor in February 2020 after resolution of the court case that had delayed commencement of works.

Works on the Karuma-Interconnection Project were advanced, with 215km of the planned 248km for the Kawanda-Karuma Transmission Line completed, representing 95% of the works. Other transmission lines under this project were at 93% for the Karuma-Olwiyo section, and 70% for the Karuma-Lira section. Most works on the substations were completed with Kawanda at 93%, Karuma at 92%, Lira at 90%, and Olwiyo which commenced last recorded good progress of 55%. Plans to commence the pre-commissioning of Kawanda and Karuma substations were underway.



Works on the Opuyo-Moroto Transmission Project had progressed well during the first half of the FY, but shipping of equipment was affected by logistical challenges following the COVID-19 pandemic. Overall progress on the transmission line was at 78.3%, with 305 of the planned 622 monopoles towers erected. The overall works on Moroto and Opuyo substations works were at 61%, with most civil works completed at the Moroto Substation but civil works at Opuyo were at foundation level. Under the regional interconnection, the pending works on the Nile Equatorial Lakes Subsidiary Action Program (NELSAP) were yet to be completed, and the new contractor for the stalled Bujagali-Tororo Transmission Line was yet to commence works.

Overall progress on Entebbe-Mutundwe Transmission Project was low with the substation works at 42% after almost two years, and the transmission line works at 50%. Progress on the NELSAP project was poor, although a contractor to complete the Tororo-Bujagali line was procured. The Tororo-Lira Transmission Project which has also historically struggled registered some good progress with the completion and energizing of the Tororo-Lira segment, although Right of Way challenges continued on the rest of the project. The Masaka-Mbarara Transmission Project, Mirama-Kabale Transmission Project, Agago-Gulu Transmission Line, and Lira-Gulu-Nebbi-Arua Transmission Project were at early stages of implementation. The main challenge affecting performance of this programme was the difficulty in acquisition of Right of Way which constrained the contractors' work.

Large Hydro Infrastructure Programme: Overall performance was fair at 51.4%, and works did not progress well during the second half of the FY due to restrictions imposed by COVID-19. Correction of snags at Isimba Hydro Power Plant (HPP) continued during the defects liability period with 96% of the identified snags rectified by the end of the year. Construction of the bridge at Isimba was ongoing with overall works at 67%, and most of the major civil works such as casting of the 78 concrete piles and fabrication of the 140 concrete box girders completed. Implementation of the Community Development Action Plan activities in the Isimba community advanced well for the selected schools and health centers in Kamuli and Kayunga districts. All the structures under construction were at final finishing works, while some like St. Andrews Primary School, Kiyunga were completed.

The overall progress of Karuma HPP remained at 97.83% as there was little progress during the second half of the FY. The financial disbursement of the project stood at 92.8% which translated to US\$1,298,966,702 at the end of the FY. Civil works at the dam intake stood at 99.9% with the only major pending works being reinstallation of the damaged floating boom and repairs on the spill way and dam intake. Final works on the control room at the switchyard were underway with the application of paste mortar. Painting works were ongoing in the powerhouse for the walls, stair cases, and hatch rooms. Works on the permanent road network at the project site were ongoing with the laying and compaction of the sub-base layer and drainage works.

Works on the Nyagak III project did not progress much due to lack of funds, and only works on the dam access road and excavation of the power intake were undertaken. The GoU did not meet its financial obligations as per the signed Public Private Partnership (PPP) which also delayed disbursement of funds from the lenders.

One key challenge under the programme was reduction of key personnel due to the COVID-19 travel restrictions which meant that expatriate staff could not return from abroad, and the number of local personnel had to be drastically reduced to meet the Government Standard Operating Procedures (SOPs).



Petroleum Exploration, Development and Production Programme: Performance was fair at 56.6%. The programme did not meet the targets for any of its three indicators namely: number of Ugandan professionals employed in the oil and gas sector, level of growth in downstream infrastructure, and number of exploration licenses issued. About 250-line km of geophysical data and over 320 sq. km of geological and geochemical mapping were undertaken in Moroto–Kadam. The second licensing round for five blocks (Aviv, Omuka, Ngaji, Kasurubani, and Turaco) was ongoing. On the refinery development, the lead investor, M/s Albertine Graben Refinery Consortium was yet to conclude the Front End Engineering Design studies that will inform the Final Investment Decision of the Refinery Project.

Several equipment and specialized software packages were procured to aid in the analysis of samples. The software included PETREL and GEOSOFT, and one gravity meter. Construction of phase-three of the National Petroleum Data Repository, Laboratories and offices for the Directorate of Petroleum, and Petroleum Authority of Uganda was progressing slowly and was at 80%.

Mineral Exploration, Development and Value Addition Programme: Performance was fair at 65.5%. The performance of programme outcome indicators which included the value of mineral exports issued was UGX 15bn, change in mineral rights was UGX 13bn and the value of the mineral production during the FY was UGX 150bn. These represented 125%, 153% and 36% respectively of the targets set for FY 2019/20.

Under the Mineral Wealth and Mining Infrastructure Development Project, the Mining Regulations 2019 were published and five regional consultations on the Mining and Mineral Bill undertaken, while the national stakeholder consultations were deferred due to the COVID-19 pandemic.

For mineral exploration, 33 geological maps for Artisanal Small-scale Miners (ASM) sites in Kasanda and Mubende districts, and 209 soil samples and 39 rock samples were collected for analysis from Bukusu carbonatite complex. As part of licensing and inspection, over 726 ASMs from Amudat, Busia, Bushenyi, Gulu, Kaabong, Ntungamo and Wakiso districts were sensitised and granted 66 location licenses. Additionally, 733 licenses were operational in the FY and 70% of the licenses were reviewed.

The construction of the mineral beneficiation centers in Ntungamo and Fort-Portal was ongoing at 50% and 30% progress respectively. The center in Ntungamo was at roofing level for the main laboratory block, and the staff hostels whereas the works in Fort Portal were at the ring beam of the first storey.

Under the Mineral Laboratories Equipping and Systems Development Project, the Laboratory Information Management System was installed on the main Directorate of Geological Survey and Mines (DGSM) server and five work stations were set up. Works to rewire the electricity distribution system for the DGSM building were ongoing, and as a result some of the newly acquired equipment such as the planetary ball mill and the Bench Top had been installed. The acquisition of other equipment and the supply of the drilling rig were delayed by the COVID-19 outbreak and funding constraints.

The programme was affected by low allocation of funds to the sub-programmes and low staffing levels. Additionally, COVID-19 delayed implementation of the sub-programmes.

Rural Electrification Programme: Overall performance was fair at 54.5% and a total of 2,596.5km of low voltage, 2,550km of medium voltage were completed by 30th June, 2020. A total of 154,198 new consumers were connected to the national grid under the Free Connections Initiative.



Under Islamic Development Funding (IDB I), schemes in the Karamoja region covering the districts of Moroto, Nabilatuk, Kotido, Kaabong, and Abim were at 86.5% overall progress.

Under Islamic Development Funding (IDB II) funding, works in the eastern region (Tororo, Soroti, Katakwi) were completed, while those in the northern region (Lira, Dokolo, Agago, Pader, Kole, Kitgum) were nearing completion. Similarly works in the Western and South Western (Mitooma, Rubirizi, Kyenjojo, Kabarole, Kisoro, Kabale, Mbarara, and Isingiro) were in advanced stages.

Under IDB III funding, all schemes were completed, commissioned and were under the defects liability period. These were in the central, eastern, northern, western and south western regions covering the districts of Hoima, Kabarole, Kasese, Sheema, Kisoro, Kabale, Kiruhura, Lira, Gulu, Dokolo, Amolatar and Kitgum, Mityana, Wakiso, Mpigi, Nakaseke, Luwero, Kiboga, Kyankwanzi, Mayuge, Namayingo, Mbale, Manafwa, Kapchorwa, and Sironko among others.

Construction works under the Energy for Rural Electrification (ERT III) fasttracked lines was ongoing. Line 1 works in Mbarara were completed, and line 2 works in Mubende were nearing completion. However, lines 3 and 4 in West Nile delayed and were still at design review stage.

Projects financed by the GoU had commenced countrywide and pole erection was ongoing except in eastern (Kamuli, Buyende, Mayuge, and Tororo) and western (Mbarara, Ntungamo, Bushenyi, Sheema, Isingiro, Buhweju, Rubirizi, and Kabale) where contracts were awarded but works had not yet started.

The rural electrification schemes financed by the Kuwait Fund in western, south western, northern and West Nile regions commenced and were at pole erection.

Under the Uganda Rural Electrification Access Project, works in Iganga, Luuka, Bugweri, Luwero, and Nakasongola were at 47.5%. Design review and surveying were ongoing in Kaliro and Alebtong districts.

The initiative to electrify 170 sub-counties country wide under the bridging the demand gap through the accelerated rural electrification programme funded by the China EXIM Bank is progressing slowly with only 28% achieved and deployment of subcontractors was still ongoing.

The Rural Electrification Programme continues to face the challenges of slow procurement, poor contract management, and lack of close supervision by REA personnel. Several projects monitored were found with poor quality and undersize wooden poles. The programme also continued to experience the negative impacts of the COVID-19 pandemic which continued to delay project execution especially delivery of equipment.

Key Sector Challenges

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- Difficulty in acquisition of Right of Way continues to slow progress of works on the transmission line projects. Some cases like those on the Luzira-Namanve T-line were resolved after a long wait in the courts of law, but others like those on the Lira-Karuma T-line, and Lira-Tororo line continue to prevent implementation of works.
- 2. A high occurrence of vandalism was observed on the rural electrification projects in eastern and on the transmission projects in eastern and central parts of Uganda.



3. The COVID-19 pandemic affected progress of works on most projects. Projects suffered delays due to failure to ship materials from overseas owing to restrictions worldwide imposed following the outbreak of the pandemic. Staff from project implementing agencies could not travel overseas to undertake the required Factory Acceptance Tests and contractors could not fully deploy staff to undertake and supervise the works.

Recommendations

- 1. The Courts of Law should expedite handling of land cases on the ongoing Government projects to prevent persistent delays in project implementation. Other alternatives such as depositing compensation money in escrow accounts should be explored to avoid an impasse during compensation disputes.
- 2. The security agencies should support the sector to curb the increasing vice of vandalism of infrastructure which is making the implementation of projects costlier, and also disadvantaging the intended project beneficiaries.

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CHAPTER 1: BACKGROUND

1.1 Introduction

The mission of the Ministry of Finance, Planning and Economic Development (MFPED) is, "To formulate sound economic policies, maximize revenue mobilization, ensure efficient allocation and accountability for public resources so as to achieve the most rapid and sustainable economic growth and development". It is in this regard that the ministry gradually enhanced resource mobilization efforts and stepped up funds disbursement to Ministries, Departments, Agencies and Local Governments in the past years to improve service delivery.

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

The Budget Monitoring and Accountability Unit (BMAU) was established in FY2008/09 in MFPED to provide comprehensive information for removing key implementation bottlenecks. The BMAU is charged with tracking implementation of selected government programmes or projects and observing how values of different financial and physical indicators change over time against stated goals and targets (how things are working). This is achieved through semi-annual and annual field monitoring exercises to verify receipt and application of funds by the user entities. Where applicable, beneficiaries are sampled to establish their level of satisfaction with the public service.

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

- Accountability
- Agriculture •
- Infrastructure (Energy and Roads)
- Industrialization •
- Information and Communication Technology •
- Social services (Education, Health, and Water and Environment) •
- Public Sector Management; and •
- Science, Technology and Innovation •

1.2 Sector Outcomes

The Energy and Minerals Sector contributes to the second objective of the National Development Plan II (NDP II): to Increase the stock and quality of strategic infrastructure to accelerate the country's competitiveness.¹ The contribution of the sector to the NDP II objective is done through the pursuance of the sector outcomes. These are,²

a) Increased access to affordable and efficient sources of energy

National Planning Authority -Second National Development Plan (NDPII) 2015/16 – 2019/20 :101 MFPED, National Budget Framework Paper FY2018/19(Kampala 2018)



- b) Sustainable management of minerals resources for development
- c) Sustainable management of the country's oil and gas resources

1.3 Sector priorities

In the medium term 2015/16 -2019/20, the sector continues to focus on the key priority areas; these are:³

- Increase electricity generation capacity and expansion of the transmission and distribution networks
- Increase access to modern energy services through rural electrification and renewable energy development
- Promote and monitor petroleum exploration and development in order to achieve local production
- Develop petroleum refining, pipeline transportation, and bulk storage infrastructure
- Streamline petroleum supply and distribution
- Promote and regulate mineral exploration, development, production and value addition
- Inspect and regulate exploration and mining operations
- Promotion of efficient utilization of energy, and
- Monitoring geotectonic disturbances and radioactive emissions



CHAPTER 2: METHODOLOGY

2.1 Scope

This report is based on selected programmes in the Energy and Minerals Development Sector. Selection of areas to monitor is based on a number of criteria:

- Significance of the budget allocations to the votes within the sector budgets, with focus being on large expenditure programmes. Preference is given to development expenditure, although some recurrent costs are tracked.
- The programmes that had submitted Q4 progress reports for FY2019/20 were followed up for verification as they had specified output achievements.
- Multi-year programmes that were having major implementation issues were also visited.
- Potential of projects/programmes to contribute to sector and national priorities.
- For completed projects, monitoring focused on value for money, intermediate outcomes and beneficiary satisfaction.

The monitoring focused on 12 projects implemented by the Ministry of Energy and Mineral Development (MEMD), and 6 project by Rural Electrification Agency (REA). New projects where procurement of contractors and consultants was ongoing were not monitored. Table 3.2 shows the monitored projects and the respective locations visited.

2.2 Methodology

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

2.2.1 Sampling

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

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

2.2.2 Data Collection

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

• Review of secondary data sources including: Ministerial Policy Statements for FY2018/19; National and Sector Budget Framework Papers; Sector project documents and performance reports in the Output Budgeting Tool (OBT), Sector Quarterly Progress Reports and work plans, District Performance Reports, Budget Speech, Public Investment Plans, Approved Estimates of Revenue and Expenditure, and data from the Budget Website.



3.1 Overall Sector Performance

3.1.1 Financial Performance

The overall sector performance was fair at 59.2%. The approved sector budget totaled up to UGX 3,007.76billion (MEMD-UGX1,865.25billion, REA-UGX 1,060.84billion, UNOC-UGX 31.47billion, PAU-UGX 50.199billion). The sector budget release was fair with 65.4% of the total budget released by end of the FY 2019/20. However, the release of funds in quarter 4 of the FY was very poor. The overall sector expenditure was poor with 49.7% of the budget spent due to restrictions that affected most sectors during the COVID-19 lockdown from March 2020 to June 2020.

Vote	Approved budget (Bn Ug Shs)	Release (Bn Ug Shs)	Expenditure (Bn Ug Shs)	% Budget released	% Budget spent
MEMD-017	1,865.25	1,235.88	979.439	66.30	52.50
REA-123	1,060.84	658.291	443.809	62.10	41.80
PAU-312	50.199	43.616	42.687	86.90	85.00
UNOC-311	31.47	29.403	29.403	93.40	93.40
Total	3,007.76	1,967.19	1,495.34	65.40	49.72

Table 3.1: Energy and Minerals Sector Financial Performance

Source: Approved Budget Estimates and Q4 reports FY2019/20

Scope

The chapter presents the annual financial and physical performance of selected energy and minerals sub programmes in FY 2019/20 selected basing on:

- Large budget allocations
- Projects previously monitored but having major implementation issues
- Regional geographical representativeness
- Projects with objectively verifiable outputs on ground

The monitoring focused on the development component of the sector budget. A total of 18 projects were monitored and these included 12 projects implemented by the Ministry of Energy and Mineral Development (MEMD) and 6 project implemented by the Rural Electrification Agency (REA). There was no development component in the budgets for votes 311 and vote 312. Projects where procurement was ongoing were not monitored. Table 3.2 shows the monitored projects and the respective locations visited.

 Table 3.2: Energy Sector Projects Monitored for FY 2019/20

80 0							
Project code and Name	Location/ Areas visited						
Vote 017: Ministry of Energy and Mineral Development							
0301 Energy Planning, Management and Infrastructure Development programme							
Kampala-Entebbe Expansion Project (Project 1259)	Wakiso, Kampala						
Karuma Interconnection Project (Project 1025)	Luwero, Nakasongola, Kiryandongo, Lira, Nwoya						
Mbarara- Nkenda/Tororo-Lira (Project: 1137)	Tororo, Kumi, Lira						
Electrification of Industrial Parks(Project 1222)	Wakiso, Kampala						
0302 Large Hydropower Infrastructure programme							
Isimba Hydropower Plant (Project 1143)	Kayunga, Kamuli						



Project code and Name	Location/ Areas visited
Karuma Hydropower Plant (Project 1183)	Kiryandongo, Nwoya
Nyagak Hydropower Plant (Project 1351)	Zombo
0303 Petroleum Exploration, Development Production, Value Addit	tion and Distribution programme
Strengthening the Development and Production Phases of Oil and Gas sector (Project: 1355)	Entebbe
0305 Mineral Exploration, Development and Production programm	e
Mineral Wealth and Mining Infrastructure Development (Project: 1353)	Entebbe, Ntungamo, Kabarole
Minerals Laboratories Equipping and Systems Development(1505)	Entebbe
Vote 123: Rural Electrification Agency	
03 51 Rural Electrification programme	
Rural Electrification (Project:1262)	Nebbi, Arua, Lira, Agago, Dokolo, Amolatar, Pader,
Energy for Rural Transformation- ERTIII(Project 1428)	Gulu, Kole, Oyam, Aleptong, Kiryandongo, Masindi,
Grid Electrification Project IDB I(Project 1354)	Nwoya, Nakasongola, Luwero, Nakaseke, Wakiso,
Construction of the 33KV Distribution Lines in Kayunga, Kamuli and Kalungu service Stations (1516)	Mukono, Buikwe, Mpigi, Luuka, Iganga, Bugweri, Mayuge, Mbale, Tororo, Manafa, Sironko, Soroti,
Bridging the Demand Through the Accelerated Rural Electrification-TBEA(Project:1517)	Kiboga, Kyankwanzi, Hoima, Kibaale, Mityana, Mubende, Kyenjojo, Kabarole, Kasese, Masaka,
Uganda Rural Electricity Access Project-UREAP(Project:1518)	Mbarara, Ntungamo, Mitooma, Rubirizi, Buhweju, Bushenyi, sheema, Kitagwenda, Bunyangabo

Source: Authors' Compilation

3.2 Vote 017: Ministry of Energy and Mineral Development (MEMD)

The mandate of the Ministry of Energy and Mineral Development (MEMD) is to "*Establish, promote* the development, strategically manage and safeguard the rational and sustainable exploitation and utilization of energy and mineral resources for social and economic development"

The MEMD comprises of six programmes, of which five were monitored and these include: Energy Planning; Management and Infrastructure Development; Large Power Infrastructure; Mineral Exploration Development and Production; Petroleum Exploration, Development and Production, Petroleum Supply; Infrastructure and Regulation.

MEMD Financial Performance

Overall vote budget release performance was very good at 97.5% by the end of FY 2019/20. The GOU release was 123.7%, and externally funded release stood at 91.7%. The overall expenditure was fair with only 72.7% of the budgeted funds spent by the end of quarter 4. (Details in Table 3.3).

		Approved Budget	Released by End Q 4	Spent by End Q4	% Budget Released	% Budget Spent	% Release Spent		
	Wage	6.225	5.029	5.029	80.8	80.8	100.0		
Recurrent	Non-Wage	64.493	41.798	40.949	64.8	63.5	98.0		
	GoU	460.789	282.213	278.67	61.2	60.5	98.7		
Devt.	Ext. Fin.	1,333.167	906.261	654.365	68.0	49.1	72.2		
GoU Total		531.506	329.04	324.648	61.9	61.1	98.7		
Total GoU+	Ext Fin (MTEF)	1,864.672	1,235.301	979.012	66.2	52.5	79.3		
Arrears		0.578	0.578	0.427	100.0	73.8	73.8		
Total Budget		1,865.250	1,235.879	979.439	66.3	52.5	79.3		
A.I.A Total		0	0	0	0.0	0.0	0.0		
Grand Total		1,865.250	1,235.879	979.439	66.3	52.5	79.3		

Table 3.3: MEMD Financial Performance

Source: MEMD Performance Report Q4 FY2019/20



MEMD Physical Performance

Energy Planning, Management and Infrastructure Development Programme

The programme is responsible for promoting; increased investment in power generation, renewable energy development, rural electrification, improved energy access, energy efficient technologies, and private sector participation in the energy sector. The programme took up to 50.4 % of the vote budget for FY2019/20. The programme contributes to the first sector outcome of *"increased access to affordable and efficient sources of energy"*.

The sector outcome indicators are:

- i. The percentage of losses in the distribution network
- ii. Generation capacity of plants in MW under construction added to the grid
- iii. Percentage of the population with access to electricity

Under this programme various power transmission line projects with their associated sub-stations are under implementation in various parts of the country in line with the country's plans to increase electricity generation, transmission capacity and energy access. The GoU and Development Partners (World Bank, Africa Development Bank (AfDB), Islamic Development Fund (IDB), AFD, Japan International Development Agency (JICA), KfW, China EXIM Bank) are jointly funding projects in this sector.

3.2.1 Sub-Programme 1259: Kampala-Entebbe Transmission Expansion Project

Background

The Government of Uganda (GoU) through the MEMD received funding from KfW towards the implementation of Mutundwe-Entebbe 132KV Double Circuit Transmission Line and Associated Substations. The funding from KfW is a grant of EUR 6 million and loan of EUR 15 million. The objective of the project is to provide transmission capacity to supply reliable and quality power to Entebbe town and environments.

The project consists seeks to construct a new double circuit 132kV transmission line from the existing Mutundwe substation to a new substation in Entebbe. The project scope also involves extension of the existing Mutundwe substation, Resettlement Action Plan (RAP) implementation for the line corridor and project management.

Sub-Programme Performance

Financial performance

The total budget for the FY was UGX 75.411bn (GOU-UGX 28.911bn and KfW-UGX 46.5bn). The project received UGX 2.425bn counterpart funding and the disbursement on the loan by end of June 2020 was 0.61% for the loan, and 77.4% for the grant.

Physical performance

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The sub-programme performance was poor. The civil works at Mutundwe and Entebbe substation were ongoing, and both the plant and communication houses at Mutundwe and Entebbe were at roofing level. All the foundations for erection of equipment in the substation were complete.



Work on the transmission lines was ongoing and 50 out of the planned 74 tower foundations were completed. All line equipment except the tower materials were received. Works on the T-line are being slowed by the difficulty in accessing the line route in Nambigirwa wetland.

Resettlement Action Plan (RAP)

Paid transactions were 824 (78%) of the 1,062 transactions required for the 23.6km corridor. The RAP implementation was slow during the FY 2019/20 due to delayed valuation by the Chief Government Valuer (CGVs) office. The RAP implementation was suffered from lack of a RAP consultant and procurement of one was ongoing. Progression of the RAP implementation is presented in table 3.4.

General Overview	Q1 FY2019/20		Q2 FY2019/20		Q3 FY2019/20		Q4 FY2019/20	
	Coverage	%	Coverage	%	Coverage	%	Coverage	%
Total Transactions	1,062	100	1,062	100	1,062	100	1,062	100
Disclosures	982	92	986	93	986	93	986	93
Agreements	927	87	931	88	931	88	927	87
Compensation Disputes	55	5	55	5	55	5	56	5
No. of Payments	812	76	837	78	843	79	824	78

Table 3.4: Status of RAP for Kampala-Entebbe Transmission Expansion Project in FY2019/20

Project challenges

- The outbreak of the COVID-19 pandemic significantly hindered RAP implementation. Government Standard Operating Procedures (SOPs) such as transport regulations, mandatory use of safety masks, and others have complicated interaction with Project Affected Persons (PAPs).
- The continued absence of the RAP consultant continues to hinder the progress of RAP implementation for the transmission line corridor and that of Entebbe substation access road especially regarding assisting PAPs with acquiring vital documents such as title search statements, powers of attorney, and completing livelihood restoration activities, etc.
- The delay in RAP implementation implies that the contractor does not have the full line corridor for construction works, which further adds to delay of the project.



L-R: Civil works in progress at Entebbe substation; One of the completed tower foundations for the Mutundwe-Entebbe Line



3.2.2 Sub-Programme 1025: Karuma Interconnection Project

Background

The project is funded jointly by GoU and a loan from Export and Import (EXIM) Bank of China. The total project funding is US\$289,905,937 with EXIM Bank loan contribution of US\$246,419,437 and GoU's contribution US\$43,486,500. The objective of the project is to evacuate power produced from Karuma Hydropower Plant in Northern Uganda to load centres, which include Lira and Olwiyo in Northern Uganda and Kawanda in Central Uganda.

The project scope consists of the following components:

- a) Construction of 400kV and 132kV Transmission lines
- Construction of 248km, 400kV, Double Circuit Karuma-Kawanda transmission line.
- Construction of 78km, 132kV, Double Circuit Karuma-Lira Transmission Line.
- Construction of 55km, 400kV, Double Circuit Karuma-Olwiyo transmission Line, which will be initially operated at 132kV.

b) Substations

- Karuma substation: a new green field 400/132kV substation interconnecting with Karuma HPP and 400kV line bays.
- Kawanda substation: a new 400kV/220kV substation with two (2) new incoming 400kV line bays to interface with the existing Kawanda 220/132kV substation.
- Lira substation: two (2) new incoming 132kV line bays to interface with the existing Lira 132/33kV substation.
- Olwiyo substation: a new green field 132/33kV substation.

Sub-Programme Performance

Financial performance

The project had no GoU funds budgeted under FY 2019/20, however Uganda Electricity Transmission Company Limited (UETCL) continued to undertake compensation of PAPs using funds in the RAP ESCROW account. Funding for the engineering, procurement and construction (EPC) works under the project is budgeted under Karuma Hydropower Project. By the end of Q4, the project had disbursed an accumulative total of US\$219,405,439(89%) of the contract price of US\$289,905,220.

Physical performance

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The sub-programme performance was good. On the Karuma-Kawanda transmission segment, overall progress was at 95% with 624 of the planned 639 towers completed. Stringing of 215.7km of the 248km transmission line was completed. The works on the Karuma-Olwiyo line were also advanced with 149 towers, of the planned 154 completed and 47.6km of the planned 54.25km line stringing completed.

The Karuma-Lira T-line works were delayed by Right of Way (RoW) issues with 26 tower spots affected by ongoing court cases. The contractor demobilized from this section of the project and little progress was registered during the year. The status of the works stood at 206 of the 246 towers erected, and 12km



of the planned 76km of stringing completed.

Works had progressed well on all the substations, with the following done:

- *Karuma substation:* 92% of the works were completed. All civil and electromechanical works were completed in the substation. Pre-commissioning of the equipment was ongoing.
- *Kawanda substation:* Overall progress was at 93%, with civil and electro-mechanical works completed. Pre-commissioning testing of the equipment was ongoing.
- *Olwiyo substation:* Construction of equipment foundations was completed, erection of equipment support structures was ongoing, civil works on the control building were at 81%.
- *Lira substation:* All equipment was installed. Completion of the access roads was ongoing in the substation, and testing of the substation equipment was being conducted. Road works and fencing of the substation were pending.

Resettlement Action Plan

Total cash payments during the FY 2019/20 were UGX 18.5bn and the cash balance in the RAP ESCROW account was UGX 3.671bn. The outstanding RAP cases were being handled on a case by case to enable continuation of works. A total of the 50 resettlement houses will be constructed by the project. By the end of June 2020, only 26 houses were completed on the Karuma-Kawanda section, and 18 houses were completed on the Karuma-Lira-Olwiyo section. The status of cash compensation is summarised in Table 3.5.

	KARUMA-LIRA(132kv; 78kms) KARUMA-OLWIYO (400kv; 55kms; 60mwidth)			KAWANDA-KARUMA LINE (400kV; 248km; 60m width)				
	Q3 FY 20)19/20	Q4 FY 2019/20		Q3 FY 2019/20		Q4 FY 2019/20	
Total Transactions	1,228	100%	1,230	100%	2,957	100%	2,993	100%
Number Disclosed to	1,167	95%	1,170	95%	2,704	91%	2,750	92%
Agreements	1,102	89%	1,106	90%	2,619	89%	2,669	89%
Number of Households Paid	1,073	85%	1,083	88%	2,494	84%	2,558	85%
Compensation disputes	65	5%	64	5%	85	3%	81	3%

Table 3.5: Status of RAP for Karuma Interconnection as at 30th June, 2020

Source: UETCL; Field findings

Project challenges

- The progress of RAP implementation was slow and affected works on the T-Line.
- Continued vandalism of completed structures on the transmission line has caused an increase in cost of the project. Procurement of the replacement parts for the towers was underway.
- Due to the COVID-19 travel restrictions, there was a delay in shipping some of the project materials because the factory acceptance tests (FATs) on the materials could not be witnessed by the project team.



Recommendations

- The UETCL should continue engaging other Government departments to ensure timely resolution of the difficult RAP cases, to avoid further delay to project implementation.
- There should be increased cooperation with security agencies and local leaders in districts along the line corridor to control the occurrences of vandalism.



L-R: Completed 400kV substation at Kawanda; Completed section of the Karuma-Karuma T-Line



On-going civil and electromechanical works at the 400kV Olwiyo substation

3.2.3 Sub-Programme 1137: Mbarara- Nkenda/Tororo-Lira Transmission line

Background

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The objective of the project is to evacuate electricity from upcoming power plants and improve electricity access, lower transmission losses, increase power efficiency, reliability, stability and quality of supply to consumers in the country especially the Western and North Eastern regions. The project funding was through a loan amount of Unit of Account (UA) 52.51million from AfDB and UGX 81.917bn as GoU contribution for the RAP.



The project consists of the following components:

- a) Construction of 132kVTransmission lines
 - Construction of 260km, 132 kV, Double Circuit Tororo-Opuyo-Lira Transmission line
 - Construction of 160km, 132 kV, Double Circuit Mbarara-Nkenda Transmission Line

a) Substations

- Construction of two 132kV bay extensions at Mbarara North and Nkenda substations.
- Construction of a new 2x32/40MVA, 132/33kV Fort Portal Substation.
- Extension of Opuyo substation including 132kV line bays
- Construction of 132kV line bays at Tororo and Lira
- a) Reactive Power Compensation
 - The installation of 15MVAR, 132kV Reactor at Opuyo Substation and 15MVAR, 132kV Reactor at Nkenda Substation.

Sub-Programme Performance

Financial Performance

The GoU counterpart budgeted for FY 2019/20 was UGX21.95bn. All the budgeted funds were released and transferred to UETCL by the end of Q4.

Physical performance

Overall performance was fair, and the pending component of this project is the construction of the Tororo-Opuyo-Lira transmission line. However, the Opuyo-Lira Line section of the project was completed and energized in April 2020. Overall, 669 of the 724 planned towers on the line were completed. Works on the Tororo-Opuyo section were struggling with 16 tower foundations not yet done, and 48 completed foundations pending erection works. Of the pending 16 foundation spots, the 14 in Tororo were affected by ongoing court case. Out of the 263km of the line, 19 km had been strung.

Resettlement Action Plan

Three resettlement houses on the Mbarara-Nkenda T-line had not been completed. The cash compensation progressed slowly during the FY but the CGV's office was engaged to carry out revaluation on the remaining cases. The summary of the cash payments to the PAPs is given in table 3.6.



	Q3 FY 2	019/20	Q4 FY	Q4 FY 2019/20		
Tororo-Lira Line	Total Number	(%)	Total Number	(%)		
Total Number of Project Affected Households	4,705	100	4,706	100		
Number Disclosed to	4,502	96	4,514	96		
Agreements	4,455	95	4,469	95		
Number of households paid	4,364	93	4,369	93		
Compensation Disputes	46	4	45	4		

Table 3.6: Performance of Cash Compensations as at 30th June 2020

Source: UETCL; Field Findings

Challenges

- Slow implementation of the RAP process continued to affect the ability of the contractor to undertake the remaining works on the project. The court case by 14 PAPs in Tororo District where an injunction was issued against the project is yet to be resolved.
- Continued vandalism of existing tower structures is further affecting the progress of the project and it will take time to order the replacement tower parts. This is also increasing the cost of the project.

Recommendations

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- The UETCL legal team should engage the relevant government ministries (Ministry of Lands, Housing and Urban Development (MLHUD), Ministry of Justice and Constitutional Affairs (MoJCA) and various district leaders (legislators, resident district commissioners, chief administrative officers, district chairpersons, and local councils) to resolve the ongoing impediments to land acquisition.
- The UETCL should engage the security agencies and leaders in districts traversed by the line to ensure that the project materials are protected from rampant vandalism.



Ongoing tower stringing works on the Tororo-Lira line in Kumi



3.2.4 Sub-Programme 1222: Electrification of Industrial Parks

The GoU established industrial parks in an effort to support industrial development in the country. The industrial parks identified will need reliable power supply and thus the projects to electrify these parks. The project EPC works are being funded by a loan from the EXIM Bank of China (85%) and GoU counterpart (15%) with total cost of US\$99,975,885.34. The GoU is also funding the acquisition of land on the project to the tune of UGX119.590bn.

The project seeks to provide adequate transmission capacity to cater for the projected demand from the industrial areas. It comprises of construction of the following:

- Luzira Industrial Park 132/33kV Substation and Transmission Line Project (15km)
- Mukono Industrial Park 132/33kV Substation and Transmission Line Project (5km)
- Iganga Industrial Park 132/33kV Substation and Transmission Line Project (10km)
- Namanve Industrial Park 132/33kV Substation and Transmission Line Project (5km)

Sub-Programme Performance

Financial Performance

The budget for FY 2019/20 was UGX147.187bn, of which UGX47.939bn was GoU funding, and UGX 99.247bn was funded externally. The GoU release was good with all the GoU funds released by Q4, and loan amount of UGX99.247bn was disbursed to the contractor.

Physical performance

The project performance was fair. The progress of works was greatly hampered by failure to acquire all the land for the remaining transmission line works. However, RoW issues on the Namanve to Luzira T-Line were resolved to enable physical works start.

1. Substations: All substations were completed and commissioned except the one at Luzira Industrial Park.

2. Transmission Lines: Pending works on the transmission line connecting Namanve North to Namanve South substations were ongoing with 20 of the planned 27 towers completed, and 67% of the planned 5.2km of conductors strung. Works were hindered by the lockdown in March 2020. Geo-technical studies on the Namanve–Luzira T-line commenced after the line corridor was handed to the contractor in February 2020.

RAP implementation as at 30th June 2020

The Namanve North-Namanve South T-line faced RoW challenges on two tower locations around Buto. The RoW court case on the Namanve to Luzira T-line was resolved and UETCL was ordered to deposit UGX 28.852bn into an Escrow Account. The summary for the RAP Implementation for the PAPs in the transmission line corridor is summarized in table 3.7.



	Q1 FY 2	Q1 FY 2019/20		Q2 FY 2019/20		Q3 FY 2019/20		2019/20
	Total No.	(%)	Total No.	(%)	Total No.	(%)	Total No.	(%)
Total Number of PAP	705	100%	705	100	707	100	707	707
Number Disclosed to	476	68%	485	69	485	69	485	485
Agreements	472	67%	470	67	470	66	470	470
No. of Households Paid	385	55%	416	59	416	59	416	416
Compensation Disputes	4%	1%	15	1	15	2	15	15

Table 3.7: RAP Progress for Electrification of Industrial Parks in FY2019/20

Source: UETCL and Field findings

Challenges

- Implementation of the RAP was challenging especially for the PAPs with illegal land titles in wetlands.
- The water levels in the Namanve wetland are very high and this affected progress of the ongoing works in the wetland.



L-R: Completed Luzira Substation works pending commissioning; Completed sections of the Namanve South-Namanve North transmission segment

Overall programme performance

Overall performance of the Energy Planning, Management and Infrastructure Development Programme was fair at 68.0% (table 3.8). There was good progress on the Karuma Interconnection Project especially on the Karuma-Kawanda and Karuma-Olwiyo T-Lines. The substation works at Kawanda and Karuma were also substantially complete. Works at Olwiyo substation that commenced late had also progressed well. The remaining works for the electrification of industrial parks progressed slowly due to RoW challenges, although works on the Namanve-Luzira T-Line had finally commenced. Works on the Kampala-Entebbe Expansion Project and the Lira-Tororo T-line progressed slowly. There was minimal work on the NELSAP substations and a contractor to complete remaining works on the Tororo-Bujagali T-line had just been procured. Works on the Lira-Gulu-Nebbi-Arua, Masaka-Mbarara, Mirama-Kabale transmission projects had not commenced yet.



Table 3.8: Performance of the Energy Planning, Management and Infrastructure DevelopmentProgramme by 30th June, 2020

Sub- programme	Output	Annual Budget (Bn Ug shs)	Cum. Receipt (Bn Ug shs)	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Kampala- Entebbe Expansion Project	Construction of the Entebbe Kampala 132kV transmission line and associated substations	50	50		3.93	All equipment foundations at Mutundwe and Entebbe were complete. Plant houses were pending roofing. 50/74 of the tower foundations were completed.
	RAP Implementation	26	1	0.00	0.00	78% of the PAPs were compensated, although the process was slow.
Mbarara- Nkenda/ Tororo Lira Transmission	Implementation of Resettlement Action Plan	6	6	30.00	0.31	Payment of PAPs was at 93% and there was still a pending court injunction by PAPs in Tororo.
Line	Construction of Tororo-Lira transmission lines and substations	16	16	50.00	1.23	A total of 669 out of 725 towers were completed and stringing of 193km out of the 263km was done. The Opuyo-Lira section of the line was energized.
Electrification of Industrial Parks	Construction of Namanve South, Luzira, Mukono and Iganga industrial park substations and associated transmission lines.	123	123	60.00	11.72	Geotechnical studies on Luzira-Namanve line commenced. Works on Namanve south- Namanve North line are in final stages with 20/27 towers completed.
	RAP Implementation	24	24	50.00	2.03	Court resolved the compensation dispute on the Namanve-Luzira line.
Karuma Interconnection Project	RAP Implementation	26	26	60.00	2.44	85% of the PAPs were paid on the Karuma- Kawanda T-line. 88% PAPs were paid on the Karuma-Olwiyo-Lira segment.
	Construction of Karuma- Kawanda, Karuma-Olwiyo, Karuma-Lira transmission lines and associated substations	359	359	70.00	39.95	Karuma substation:Civil works werecompleted andprecommisioning testswere being undertaken.Lira Substation: Onlyroad works were pendingKawanda Substation:All major civil andeletromechanicalworks were completed,precommisioning ofequipment was ongoing.Olwiyo substation: All



Sub- programme	Output	Annual Budget (Bn Ug shs)	Cum. Receipt (Bn Ug shs)	Cum. Achieved Quantity	Physical performance Score (%)	Remark
						equipment foundations were completed, and equipment erection had started. Works on control building was at 81% <u>Transmission lines</u> : Stringing of 215.7km of the Kawanda-Karuma T-line were completed with 624/639 towers erected. The Olwiyo- Karuma line was also advanced with 47.6km of the 54.25km of the line completed. Works on the Karuma-Lira line did not progress due to RoW issues.
Programme Pe	rformance (Output	ts)			61.61	

Outcome Performance Analysis			
Outcome Indicator	Annual Target	Achieved	Outcome Performance (%)
% of reduction of losses in distribution network	15	16.5	66.67
% of household connected to the National Grid	28	30	93.33
Average Outcome performance			80
Overall Programme performance			68.0

Source: IFMS, UETCL, MEMD Q4 Reports FY 2019/20, Field Findings

The Large Hydro Power Infrastructure Programme

The programme is intended to support development of large hydropower generation facilities in the country. The programme objective is to ensure adequate generation capacity for economic development and it contributes to the sector outcome of "*increased access to affordable and efficient sources of energy*". The total budget allocation for the programme was 40.47% of the total vote budget. Sub-programmes monitored for the financial year were Isimba Hydropower Project, Karuma Hydropower Project, and Nyagak III Hydropower Project.

3.2.5 Sub-Programme 1143: Isimba Hydroelectricity Power

Background

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The project is an 183MW hydropower plant funded jointly by a loan from China EXIM Bank (85%) and GoU (15%). The contract was signed in September 2013 and the contract sum for the project is US\$ 567.7 million for a period of 40 months. The EPC contractor for the hydropower plant (HPP) and the Isimba-Bujagali interconnection line is China International Water and Electric Corporation (CWE), and supervising consultant is Artelia EUA and Environment in association with KKAT consult.



The scope of the project consists of:

- 183 MW hydropower dam and 132kV switchyard
- 132kV transmission line (42.5km) connecting the Isimba switchyard to Bujagali substation.
- Public Bridge(890m) and Access roads to the bridge

Sub-Programme Performance

Financial Performance

Funds for the certificate interim payments up to IPC #19 were US\$525,267,122.71. GoU funding for supervision, Community Development Action Plan (CDAP), and RAP was good with the UGX 33.585bn of the budgeted UGX48.035bn released to MEMD and UEGCL.

Physical Performance

Overall performance of the project was good with works at 99.9% for the hydropower plant, and 73% for the works on the bridge and access roads.

Isimba Hydropower Plant: All major civil and electromechanical works in the right and left embankment dams, spillways, power house and switchyard were complete. Civil works in the powerhouse, spillway and switchyard were substantially completed. The power plant has been in operation since March 2019. By the end of Q4, the overall physical progress of works at Isimba was estimated at 99.9% with the work breakdown summarized in table 3.9.

Table 3.9: Summary of Physical Progress of Isimba HPP (Component 1)

	Dam	Spillway		Power House		TL & Switchyard	
LED1	RED2	Civil Works	E/M3 Works	Civil Works	E/M Works	Civil Works	E/M Works
100%	100%	99.99%	99.6%	99.9%	99.7%	100%	100%
Overall Physical Progress = 99.9%							

Fixing of snags continued during the FY2019/20 with 96% of the 775 identified snags rectified. With 14 months of the Defects Liability Period (DLP) completed, key snags notably; re-commissioning of the firefighting system integration and automation, installation of floating boom, rainwater drainage system, construction of visitor's center and helipad, among others, were still outstanding.

Public Bridge and Access Roads: Works on the bridge and access roads progressed very well with progress at 73%. On the 1st section of the bridge, all 40 concrete piles were cast and all 68 concrete box girders fabricated. On the 2nd section of the bridge, all 38 concrete piles were cast and all the 72 concrete box girders fabricated. The access and approach roads to the bridge were being constructed. Works on the approach and access roads to the bridge were at the level of crushed stone base. Acquisition of land for the 2.2km of the connection road on the Kamuli side was still pending by MEMD.

Community Development Action Plan

Works for the CDAP activities for the schools and health centers progressed. Procurement of the remaining components (grid extensions and water supply system in Kamuli) was being undertaken by UEGCL.



Table 3.10: Scope and progress of Isimba CDAP by 30th June, 2020

Lot No.	Scope	Progress
Lot 2.1	Busaana Secondary School: 4 classroom block, one five stance VIP latrine and 4 staff houses and rain harvesting tanks. Nakakandwa Primary school: 4 classroom block, one five stance VIP latrine and 4 staff houses and rain harvesting tanks Nakatooke Primary school: 4 classroom block, One five stance VIP latrine and 4 staff houses and rain harvesting tanks	Overall progress was at 86%.
Lot 2.2	Busaana HCIII: General ward, maternity ward and one VIP latrine and one staff house Maternity ward, One VIP latrine with 5 stance and One Staff house. Bukamba HCIII: General ward, maternity ward and one VIP latrine and one staff house Maternity ward, One VIP latrine with 5 stance and One Staff house. Namusaala: Maternity ward	Overall progress was at 89%
Lot 2.3	Nankandulo Primary School: 2 Classroom blocks of 3 classrooms and 4 classrooms, together with a one 5 stance lined VIP latrine. St. Andrews Kiyunga Primary School: 4 class rooms each including rain water harvesting tanks, one 5 stance lined VIP latrine, and one Staff House.	Overall progress was at 95%.
Lot 2.4	Mbulamuti HCIII: One General ward, one 5 stance lined VIP latrine, and one staff house Nankandulo HCIV: One General ward Kiyunga HCII: General ward, one 5 stance lined VIP latrine, and one staff house	Overall progress was at 80%.
Lot 2.5	Workshop block and staff quarters at Lwanyama Technical Institute	Overall progress was at 99%.

Source: Field findings

Challenges

- Time lost during the COVID-19 lockdown implies that most of the ongoing time lines for completion of works had to be extended as per the force majeure clauses in the contracts.
- The uncertainty surrounding funding and the insufficient release of funds for CDAP had greatly hindered the implementation of some of the planned works.
- The MEMD had not acquired the required land for the contractor to connect the bridge to the existing road network on the Kamuli side and this affected the works.



Ongoing civil works on the bridge at Isimba HPP





L-R: Completed workshop building at Lwanyama Technical Institute; Ongoing final works on the general ward at Nankandulo Health Centre

3.2.6 Sub Programme 1183: Karuma Hydropower Project

Background

The GoU is developing Karuma Hydropower Plant as a public investment to generate 600MW of electricity to contribute to the planned increase in the country's electricity generation capacity. The EPC contractor is SinoHydro Corporation Limited and the current supervising consultant is AF Consults. The total cost of the EPC works is US\$1,398,516,747 with EXIM Bank contributing 85%, and GoU contributing 15%.

Sub-Programme Performance

Financial Performance

At the end of FY 2019/20, the gross certified payments were at 92.8% of the total contract amount (US\$ 1,298,966,702 out of US\$1, 399,343,321) including amount of fully recovered advance payment. The budgeted GoU amount was UGX 39.896bn and UGX 28.9bn was released to the project for supervision, RAP, and construction of the workers' camp.

Physical performance

The overall physical performance of the project was fair. Progress of works was estimated at 97.80%. Time progress was 78 months of the original 60 months' contract duration with the planned completion date of 30th November 2020. The project is delayed by 18 months according to the original time schedule. It is anticipated that the prevailing COVID-19 outbreak will again cause another extension to the current project completion dates.

Civil works: Civil works for the dam and intake were at 99.9%, while the major outstanding work was the re-installation of the floating boom, spillway repairs, heightening of stilling basin training walls. Civil construction works within the headrace & tailrace branch tunnels were completed, awaiting water filling ahead of wet commissioning of Units 3# and 2#. This activity was delayed as water filling of HRTs and TBTs for Units $1\# \sim 3\#$ had not yet started. Paint repairs in the turbine pit and the other affected areas were ongoing before the water filling works.

Hydro-mechanical/Electro-mechanical works: The ongoing electro-mechanical and hydro-mechanical



works were mainly the mechanical tests and inspections plus electrical tests, commissioning and rectification works.

Construction of the Employers camp

The works on the employer's facilities were complete for Lots 1-4 (canteen, laboratory, office building, Karuma complex building, staff houses, hostel block, and visitor's centre) and the contractors were completing the correction of snags. Works on Lots 5A-5E (waste water disposal, electricity supply and lighting, water supply system, road network and landscaping) were yet to begin.

Resettlement Action Plan and Community Action Development Plan

The land for the reservoir had not been acquired as yet. MEMD engaged a consultant (Air Water Earth Ltd/AWE) to conduct the reservoir social, environmental assessment, and RAP. The Environmental and Social Impact Assessment (ESIA) was completed, while preparations for the RAP were pending confirmation of the reservoir extents. MEMD is expected to provide the coordinate's data of the reservoir extent to AWE for them to proceed with their assignment. Some PAPs were not compensated because they could not be traced by MEMD.

Land for resettlement houses for the affected families was acquired, but construction had not commenced, yet the project was in its later stages. Completion of the church at Karuma was delayed and works on the mosques had not resumed.

Challenges

- The travel restrictions due to the COVID-19 pandemic hindered the progress of the project during the second half of the FY. About 70 of the 238 Chinese workers were unable to return to the project site from China. The Owners Engineer (OE) was also unable to fully deploy personnel to the project site.
- Resources to commence implementation of the CDAP were availed during the FY although payments were not done, thus causing anxiety in the communities.
- According to the local leaders, 15 PAPS were not compensated because they were not available during the compensation process. Failure to resolve the issue of these PAPs is bound to lead to delay in the impoundment of the reservoir to the required level.

Recommendations

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- The MEMD should prioritise completion of land acquisition, and expedite the planned resettlement houses.
- Release of funding for the Karuma CDAP should be prioritised. Commencement of the CDAP is behind schedule by over two years.





L-R: Substantially completed switchyard at Karuma HPP; Completed spillway, fish ladder and power intake structures at Karuma HPP

3.2.7 Sub-Programme 1351: Nyagak III Hydropower Project

Background

Nyagak III is one of the projects being supported under the programme "*Efficient and Sustainable Energy Supply in Uganda*" developed by the Government of Uganda (GoU) through the Ministry of Energy and Mineral Development (MEMD). The project is being developed as a Public Private Partnership (PPP) by a Special Purpose Vehicle (Genmax Nyagak Limited) formed between UEGCL and a private sector partnership consortium of Hydromax Limited and Dott Services Limited.

The project scope involves:

- Construction of 2x2.75MW Nyagak III small hydropower plant.
- Constructed of 5km of 33kV interconnection line terminating at Nyagak I switch yard.

Sub-Programme Performance

Financial Performance

• The total budget for the sub-programme in the FY was UGX 2.293bn, of which UGX 0.860bn was released.

Physical performance

- The project performance was poor, as works had not progressed well due to shortage of funds. The GoU contribution to the project was not effected and the private partners had not secured financial closure for the loan financing.
- Pipe conduit; excavation was ongoing for penstock was ongoing.
- The remaining excavation works at dam site and river diversion was pending the completion of the downstream cofferdam due to cultural site issues which had since been resolved.
- Slope protection for the excavated dam access road was ongoing to prevent land and rock slides on the steep slope.



Challenge

• The UEGCL did not provide its share of funding to the project because Government did not release the funds. This is also making it harder for the private partners to obtain loan financing.



L-R: Slope protection works along the dam access road; Deep excavation at the dam site for Nyagak III HPP

Overall programme performance

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The overall performance of the programme was fair at 51.4% due to the constant delays that continued to affect the planned completion date for Karuma HPP. This means the sector outcome target of increasing generation capacity by 884.5MW was not achieved (table 3.11). Works at Isimba were substantially completed, and fixing of identified snags/defects was ongoing, while works on the bridge and its access roads had progressed well. The works on Nyagak III struggled especially in the last half of the FY due to the low budget release and failure by the private partners to secure loan financing.



Table 3.11: Performance of the Large Hydro Infrastructure Programme by 30th June 2020

Sub-pro- grammes	Output	Annual Budget (Bn Ug	Cum. Receipt (Bn Ug	Cum. Achieved Quantity	Phys	sical perfor- ce Score (%)	Remark
Isimba HPP	Construc- tion works on Isimba HPP	shs) 106	shs) 106	75.00	10.45		Identified snags were being fixed on the HPP which is currently in opera- tion, and 96% progress was registered. The works on the bridge and its access road progressed well during the FY.
	Supervision of works on Isimba HPP	23	17	60.00	2.49		Supervision of the works to fix the snags was ongoing. The UNRA team continued with supervision of the bridge and road works.
	Implemen- tation of the CDAP and ESMP	15	9	50.00	1.70		Progress on the works at the schools and health centers were in advanced stages. Procurement of contractors to undertake the water supply system for Kamuli and grid extensions in project area was ongoing. Most CDAP works were delayed by the COVID-19 lock- down period.
Karuma HPP	Construc- tion works on Karuma HPP	563	563	80.00	59.20		Overall physical progress was at 97.8%. All the civil works at the dam intake, spillway, head race, tail race branch tunnels, surge chamber were completed and repairs to defects in the concrete and shotcrete were on-going. Road and drainage works were ongo- ing for the permanent roads.
	Supervision of works on Karuma HPP	27	19	79.00	2.97		The current OE (AF consult) continued with supervision of the works in con- junction with UEGCL site personnel.
	Implemen- tation of the RAP, CDAP and ESMP	15	10	20.00	0.83		CDAP consultant was procured and studies undertaken. Implementation could not begin due to lack of funds to undertake the planned outputs
	Construc- tion works on Nyagak III HPP	1	0.21	15.00	0.06		Excavation works for the penstock and the dam access road had progressed. Progress greatly hampered by failure by Government through UEGCL to provide its share of the equity funding.
Nyagak III HPP	Supervision of works on Nyagak III HPP	1	0.29	15.00	0.06		Supervision of the works continued.
	Implemen- tation of RAP	1	0.36	40.00	0.13		RAP for evacuation line not yet began. Issues of the cultural site at the dam site had been resolved.
Overall outp	ut performa	nce			74.64		
	Outcome Performance Outcome Indicator		Annual Tar- get(MW)	Achieved	Score (%)	Outcome Per- formance (%)	Remarks
Generation c MW under co the grid		ded to	884.5	72	8.1	8.1	Very poor due to the delay in the com- missioning of Karuma HPP
	gramme Perf					51.4	
Over all 110g	, annue I el l	ormance				51.1	

Source: IFMS, UEGCL, MEMD Q4 Report, Field Findings



Petroleum Exploration, Development, Production, Value addition and Distribution of Petroleum Products Programme

The programme effectively monitors all petroleum operations in the country for the exploitation of the petroleum resource in an economically and environmentally conducive manner. The Directorate of Petroleum in the MEMD is responsible for promoting and regulating the petroleum upstream (exploration, development and production) sub-sector in the country. The directorate is also handling the development of the country's petroleum midstream sub-sector, which involves planning for the development of the refinery and pipelines in the country. The programme contributes to the third sector outcome of "sustainable management of the country's oil and gas resources." The programme aims at increasing the number of Ugandans with professional jobs in the oil and gas sector and also increasing the level of growth of investment in petroleum downstream infrastructure.

The programme took up 4.3% of the total sector budget for FY2019/20. The programme comprises of the following sub-programmes: Strengthening the Development and Production Phases of Oil and Gas Sector (1355), Skills for Oil and Gas Africa (1410), Construction of Oil Refinery (1184) and Midstream Petroleum Infrastructure Development Project (1352) sub-programmes and the Strengthening the Development and Production sub-programme was assessed.

Under the programme, the Lead Investor, M/s Albertine Graben Refinery Consortium (AGRC) for the Oil Refinery was conducting the Front End Engineering Design (FEED) studies to inform the Final Investment Decision (FID) of the Refinery Project. On the East African Crude Oil Export Pipeline (EACOP), the Host Government Agreement (HGA) between GoUand the Joint Venture Partners was signed and awaiting the Final Investment Decision.

On compensation of the corridor for the pipelines, the RAP study for both the products pipeline from Hoima to Buloba, and the EACOP were completed. Compensation rates for the EACOP pipeline were approved by the Chief Government Valuer (CGV), while the products pipeline compensation rates awaited approval by the CGV.

3.2.8 Sub-Programme 1355: Strengthening the Development and Production Phases of Oil and Gas Sector

The purpose of this sub-programme is to put in place institutional arrangements and capacities to ensure well-coordinated and results oriented resource management, revenue management, environmental management and Health Safety Environmental (HSE) management in the oil and gas sector in Uganda in order to contribute to the achievement of the objectives of the National Oil and Gas Policy (NOGP).

Performance

Financial Performance

The sub-programme budget for FY 2019/20 was UGX38.53bn, of which UGX18.57bn was released and UGX18.09bn spent by 30^{th} June, 2020.

Physical Performance

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The sub-programme performance was fair. Details performance is highlighted in table 3.12.



Challenges

- The sub-programme was affected by inadequate staffing levels. A number of staff were lost to PAU and UNOC due to the better remuneration in these organisations.
- The construction works for the building to house the PEPD/PAU offices, data repository and specialized laboratories were affected by limited funding to the sub-programme. These critical facilities should be completed before the country begins the oil production phase.

Recommendations

- The MEMD should follow up with Ministry of Public Service to fill the vacant positions in the ministry structure as a matter of urgency.
- The MEMD should prioritize funding to the sub-programme for completion of the Petroleum Directorate Building.

Overall Programme Performance

The overall performance for the programme was fair at 56.6% (table 3.12). The programme did not meet the outcome targets for any of its three indicators namely: number of Ugandan professionals employed in the oil and gas sector, level of growth in the downstream infrastructure, and number of exploration licenses issued.

Sub Programme	Out put	Annual Budget (Billion Ug shs)	Cum. Receipt (Billion Ug shs)	Physical performance Score (%)	Remarks
Sub- Programme 1355: Strengthening the Development and Production Phases of Oil and Gas Sector	Promotion of the country's petroleum potential and licensing	5.728	3.774	6.77	Approx. 250-line km of geophysical data and over 320 sq. km of geological and geochemical mapping were undertaken in Moroto-Kadam Basin representing 60% of data collection of the basin. After the launch of the second licensing round for five blocks (Aviv, Omuka, Ngaji, Kasurubani, and Turaco), three (3) road shows were held in London, Houston and Dubai in October 2019. The review for the applications for production licenses in respect of Mpyo and Jobi-East discoveries in Exploration Area 1 was also ongoing. The submission of applications in the Pre- qualification stage was extended from 31st March 2020 to 30th September 2020 due to the COVID-19 outbreak.
	Initiate and formulate petroleum policy and legislation.	0.142	0.074	0.32	Population of M and E database for the NOGP was at 50%. Draft terms of reference for coordination and consultancy services to carry out a Regulatory Impact Assessment (RIA) for the National Oil and Gas Policy (NOGP) were formulated.
	Capacity building for the oil and gas sector	8.940	5.394	18.07	Three new staff were hired. One staff member commenced M.Sc. In International Energy studies. Three short courses were conducted and six staff participated.

Table 3.12: Performance of the Petroleum Exploration, Development, Production, Value Addition and Distribution of Petroleum Products Programme as at 30th June, 2020

2h



Sub Programme	Out put	Annual Budget (Billion Ug shs)	Cum. Receipt (Billion Ug shs)	Physical performance Score (%)	Remarks
	Monitoring upstream petroleum activities	0.230	0.081	0.42	The RAP for the Tilenga development projects in Bullisa and Kingfisher in Hoima was at 71% and 95% respectively.
	Participate in Regional Initiatives	2.430	1.319	4.65	One EAC preparatory meeting for EAPCE'21 held from Uganda. Two staff participated in a capacity building study visit to Equatorial Guinea, while two staff participated in the meeting on Harmonization of petroleum policies with EAC member countries in Juba, Sudan.
	Government buildings and administrative infrastructure	1.160	4.400	14.69	Construction of phase 3 of the National Petroleum Data Repository, Laboratories and Offices for the Directorate of petroleum and PAU was at 80%. Maintenance of office buildings was undertaken. Progress of construction works was affected by funding short falls.
	Purchase of office and ICT equipment including software	3.800	2.097	6.26	Procurement of maintenance licenses for specialized software package, GEOSOFT and PETREL was concluded. Procurement of other equipment was ongoing.
	Purchase of specialized machinery and equipment	6.000	1.408	6.64	Procurement was ongoing for PPE, Hawk Analyzer and gravity meter. The department procured two (2) differential GPS sets.
	Purchase of office and Residential furniture and fittings	0.100	0.025	0.00	No furniture was procured.
Overall output	-			57.82	

Outcome performance							
Outcome Indicator	Annual Target	Achieved	Score (%)	Remark			
Number of Ugandans employed as professionals in the oil and gas sector	500	400	80.00	Not achieved			
Level of growth of Investment in downstream infrastructure	12	10	83.33	Not achieved			
Number of exploration licenses issued	2	0	0.00	Not achieved			
Programme Performance (Outcomes) 54.4							
Overall Programme Performance 56.6							

Source: IFMS, MEMD Q4 Reports, Field Findings

The Mineral Exploration, Development and Value-Addition Programme

The programme took up 1.05% of the MEMD vote budget. The programme is responsible for the functions under the mineral sector, which involve Mineral Exploration and Investment Promotion. To achieve this objective, the sub-sector undertakes collecting, collating, processing, analyzing, archiving and disseminating geo data, monitoring and assisting small scale miners and also enforcing regulations in the sub-sector.



The programme also undertakes airborne geophysical surveys to acquire airborne magnetic, radiometric and some electromagnetic covering the entire country. The outcome of the programme is to have sustainable management of mineral resources for economic development. The programme outcome indicators are increased value of mineral exports, increased value of mineral production and increasing revenue from mineral rights.

The programme consists of the following sub-programmes:

- Uganda Geothermal Resources Development (1199)
- Mineral Wealth and Mining Infrastructure Development (1353)
- Design, Construction and Installation of Uganda National Infrasound Network/DCIIN (1392)
- Mineral Laboratories Equipping and Systems Development (1505)
- Airborne Geophysical Survey and Geological Mapping of Karamoja (1542)

All the sub-programmes except the Uganda Geothermal Resources Development were assessed.

3.2.9 Sub-Programme 1353: Mineral Wealth and Mining Infrastructure Development

This sub-programme is housed under the Directorate of Geological Surveys and Mines (DGSM) that is composed of three (3) departments: Geological Surveys; Mines; and Geothermal Resources. The mineral sub-sector must deliver socio-economic transformation with inclusive economic growth in the development process. Since 2011-2014, at least 26.5% of the population was employed directly and indirectly in the mineral sub-sector more especially as Artisanal and Small Scale Miners (ASM) and quarrying industrial minerals, such as salt, clay, sand, aggregates stones and slates (UBOS 2011, NDP-1).

Performance

Financial Performance

The sub programme budget for FY 2019/20 was UGX17.05bn, of which UGX7.75bn (45.5%) was released and UGX7.71bn spent by 30^{th} June 2020.

Physical performance

The sub-programme performance was fair. Under policy formulation, five regional consultations on the Mining and Mineral Bill 2019 were undertaken in Kampala, Mbarara, Mubende, Tororo and Moroto and the response was fed into the draft Minerals and Mining Bill 2019. On the International Conference of Great Lakes' Region (ICGLR) certification, the regulations on regional certification mechanisms were completed and forwarded to Ministry of Foreign Affairs (MoFA) for gazetting.

On mineral exploration, a geological, geochemical and geophysical exploration for uranium was undertaken in Sembabule District. Overall, 131 soil samples were collected in Boma, while 33 samples were collected in Lwensakala for analysis with a portable XRF. A survey of Rare Earth Elements (REE) and iron ore was undertaken in the Rwenzori and Bukusu in Manafwa respectively and a report was compiled.

Under Licensing and Inspection, the online e-government mineral licensing system was launched on 1st October 2019 and total of 733 licenses granted. Of these, 516 were for spatial mineral rights; exploration, location, mining, and retention, 170 were prospecting licenses, while 47 were mineral dealers. Added to



that, a 70% of these licenses were reviewed. Furthermore, a 62 licenses were inspected (20 in Karamoja; 20 in Tororo, Busia, Kapchorwa; 40 in western and south western; Kilembe mines and Sukulu Phosphate Project).

To promote health and safety of the artisanal miners, a gender awareness, health and safety campaign was undertaken in Kasanda District. Over 876 ASMs across the country were trained in health, safety and biometric registration (78 in Amudat, 80 in Busia, 103 in Bushenyi, 105 in Gulu, 225 in Kaabong, 85 in Ntungamo, and 110 in Wakiso among others). In addition, 66 location licenses were granted to ASM registered groups with two associations in Buhweju being granted a prospecting license.

On establishment of regional beneficiation centres, the contract for construction for Fort Portal office was awarded to BMK contractors and works were ongoing at 30% progress, whereas the construction work for Ntungamo office was being undertaken by Tecno 3 at 50% progress. The scope for the Ntungamo center includes construction of; senior staff quarters, plant and office blocks, canteen and kitchen, multipurpose halls, male and female dormitories. Additionally, the land in Busia was secured.

Challenges

- Delay in execution of works due to inadequate staffing levels.
- Sub-programme performance was delayed by procurement and approval processes.
- Insufficient release of funds to the sub-programme leading to delay and suspension of some works.

Recommendations

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- The MEMD should follow up with Ministry of Public Service to fill the vacant positions.
- The MEMD should expedite the installation of weigh bridges in the mining areas to ascertain accurate values of mineral production.
- The MEMD should prioritize funding to the sub-programme to enable completion of project activities



L-R: Construction works at Fort Portal Regional Center; A view of construction works for plant and office block at Regional Center at Rwengoma, Ntungamo Center

3.2.10 Sub-Programme 1392: Design, Construction and Installation of Uganda National Infrasound Network (DCIIN)

The objectives of the project are to Design, Construct and Install Infrasound Network (DCIIN) in Uganda. An infrasound network consists of sensors that measure micro pressure changes in the atmosphere which are generated by the propagation of infrasonic waves created as a result of events such as nuclear



explosion, storms, earthquakes, exploding volcanoes and meteors. The technology therefore has considerable potential for disaster prevention and mitigation through early warning. The project aims to:

- Establish Infrasound Network Infrastructure in line with the Uganda Vision 2040;
- Build human resources' capacity in infrasound research for social economic development and population's security.
- Enable vulnerable communities install corrective measure against lightning strikes; advise government on a comprehensive national strategy for adaptation and mitigation systems.

Overall budget for the sub-programme is UGX 32bn and it is fully GoU funded.

Sub-Programme Performance

Financial Performance

The budget for the sub programme for FY 2019/20 was UGX 2.13bn. The release was very poor at 27.7% (UGX0.59bn), and absorption of the released funds was good at 93.2% (UGX0.55bn).

Physical performance

The sub-programme performance was poor. Stakeholders in the vulnerable communities in the north eastern region which is usually affected by lightning were sensitised. Mapping of lightning risk and impact in the vulnerable communities also continued. The terms of reference for a national strategy to mitigate the loss of school children by lightning were drafted.

On the establishment of the infrasound stations, the construction of the Entebbe Infrasound Station continued, while collaboration was ongoing with the National Forestry Authority for the planned infrasound array stations after land in the forest areas was identified, but acquisition was delayed by the COVID-19 lockdown.

Challenges

- Inadequate staffing due to a number of unfilled vacancies in the Geological and Mines Department. Most staff were being shared among the three departments, which caused implementation of activities difficult.
- Commencement of some sub-programme activities was constrained by the low budget allocation.

Recommendations

- The MEMD should urgently follow up with Ministry of Public Service to fill the vacant positions in the ministry structure. These positions have been unfilled for a long time.
- The MEMD should prioritize funding to the Minerals sub-programme.

3.2.11 Sub-Programme 1505: Mineral Laboratories Equipping and Systems Development

The Government of Uganda had prioritized the mineral sector in the Second National Development Plan II (NDP II). The sub-programme therefore is meant to equip the minerals laboratories and develop systems for sustainable analytical and mineral value addition test services. Overall budget for the sub-programme was UGX 24.115bn.



The expected outputs from the sub-programme include;

- Project administration and management in place
- Analytical and mineral value addition equipment, accessories and consumables acquired
- Physical structure of the laboratories and systems to support the required analytical and value addition capacity remodeled and refurbished
- Training and skills development in analytical and mineral value addition achieved
- Mechanisms put in place for the mineral laboratories to meet international standards (ISO Certification) and requirement s for analytical and value addition laboratory testing
- Systems and capabilities to monitor analytical and mineral value addition operation put in place

Performance

Financial Performance

The sub programme budget for FY 2019/20 was UGX7.4bn, of which only 19.4% (UGX1.433bn) was released, however, absorption of funds was good at 83.4%.

Physical Performance

The sub-programme performance was fair. On policy formulation and sensitization, the draft safety laboratory policy and draft Regulatory Impact Assessment (RIA) for the National Mineral Laboratory Services Policy were developed. Additionally, miners in eastern Uganda, Isingiro and Ntungamo were sensitized on services available at mineral laboratories.

The Laboratory Information Management System (LIMS) was installed on the main DGSM server and five (5) computer work stations for use by the LIMS were delivered and installed.

On upgrading of the laboratory, the minimal electrical installation works to improve earthing, lightning protection and cable sizes were completed and the newly acquired equipment which included; ICP-OES, Planetary Ball Mill and the Bench top oven equipment installed.

On acquisition of other laboratory equipment, the procurement for the mine water, carbon, sulfur and precious metal analysis equipment were deferred due to unavailability of funds.

Challenges

- Insufficient funding hindered the procurement of laboratory equipment.
- The ban on international air travel caused by the COVID-19 pandemic affected the progress of some activities, such as procurement for consultancy services on refresher training of new laboratory equipment.





The newly installed Inductively Coupled Plasma – Optical emission Spectrometry (ICP-EOS) for analysis of mineral samples

3.2.12 Sub-programme 1542: Airborne Geophysical Survey and Geological Mapping of Karamoja

The Karamoja region is endowed with both metallic and industrial minerals due to the diversity of its geology. The aim of the sub programme is to carry out airborne geophysical surveys, geological mapping, geochemical sampling and mineral assessment of the region. This will guide the investment in mining activities to transform the wellbeing of the people of Karamoja for greater social and economic benefits.

The rest of the country (80%) was surveyed between 2004 and 2008. Therefore, the sub-programme will complete the 20% of airborne geophysical and geological mapping through magnetic, radiometric, gravity and electromagnetic surveys.

The total budget for the sub-programme is UGX97.341bn and is scheduled to last three financial years (FY 2019 /20 - FY 2021/22).

Performance

The budget for the sub-programme for FY 2019/20 was UGX12.00bn, of which UGX2.46bn was released. Absorption was good at 99.4%.

The sub-programme performance was fair. Stakeholders were engaged in project promotion and sensitization to finalize the external financing arrangements and finalization of procurement under export credit terms and conditions. Training of key staff on technologies to be used in ground geological, geochemical and geophysical mapping was also carried out.

Overall programme performance

The overall performance of the programme was fair at 65.5% (table 3.13). Release of funds to the subprogramme was very poor at 31.7%. Although the programme did not meet all the three outcome targets, some key outputs such as the launch of the Laboratory Information Management System (LIMS) on the DGSM server to ease laboratory operations were achieved. Additionally, preparations for an airborne survey for Karamoja were underway to ascertain the region's mineral reserves.



Table 3.13: Performance of the Mineral Exploration, Development and Value-Addition Programmeas at 30th June, 2020

	Output	Annual Budget (Bn Ug shs)	Cum. Re- ceipt (Bn Ug shs)	Annual Target	Physical performance Score (%)	Remark
	Policy For- mulation	1.100	0.712	100	1.982	Five regional consultations on the Mining and Minerals Bill were undertaken in Mbarara, Mubende, Moroto, Tororo and Kampala and comments were fed into the draft Mineral and Mining Bill 2019. Mining Regu- lation 2019 was published. Also, regulations on regional mineral certification mechanisms was fi- nalized awaiting endorsement by MoFA.
	Institutional Capacity for the Mineral Sector	2.770	1.999	100	6.466	Two information systems were upgraded and maintained (Online e-government mining cadaster and integrated geological and mining system). Three staff trained at post graduate level, while request for contract staff was submitted to MoPS.
Sub-programme 1353: Mineral Wealth and Mining Infra- structure Devel- opment	Mineral Exploration, Devel- opment, Production and Value Addition	1.275	0.592	100	3.305	Geological, geophysical ad geo- chemical exploration of uranium was undertaken in Sembabule District and 164 samples were collected for analysis. A report was compiled for mineral deposits of Rare Earth Elements (REE) in Rwenzori region and iron ore in Bukusu in Manafwa. Brochure for mineral targets in Rwenzori, Kigezi, Karamoja, Bunyoro and Buganda regions among other also was compiled.
	Health, Safety and Social Awareness for Miners	0.730	0.328	100	1.474	A total of 33 geological maps pro- duced for Kasanda and Mubende sites, and ASM base map was updated. Gender, health and safety awareness undertaken in Kasanda district. Over 876 ASMs across the country were trained in health and safety. Land identification for pilot demonstration of environ- mental friendly mining methods initiated in Busia.
	Licensing and Inspec- tion	1.380	0.755	100	1.961	E-Government mineral licens- ing system was launched on 1/10/2019. A total of 733 licenses were operational and 70% of them were reviewed.
	Contribution to Interna- tional Or- ganization (SEAMIC)	0.400	0.172	100	0.964	Payment for Annual contributions was remitted to AMGC to facili- tate research, information sharing and promotion of Uganda's min- eral sector.



	Output	Annual Budget (Bn Ug shs)	Cum. Re- ceipt (Bn Ug shs)	Annual Target	Physical performance Score (%)	Remark
	Acquisition of Land by Government	0.068	0.025	100	0.144	Land in Busia was secured. Fencing of land in Ntungamo and Mbarara was also concluded.
	Government Buildings and Admin- istrative Infrastruc- ture.	3.461	2.774	100	6.715	The contracts for the construction of mineral beneficiation centers in Fort Portal and Ntungamo were awarded to BMK contractors and TECNO 3 respectively. The works in Fort Portal and Ntungamo com- menced in August 2019 and Sep- tember 2019 and progress was at 30% and 50% respectively. The rewiring of the DGSM blocks was also ongoing.
	Purchase of Office and ICT Equipment, including Software	0.370	0.038	100	0.934	Voice and data components were procured and installed in the new building in Moroto. A printer and drone were also procured while other ICT equipment were await- ing delivery.
	Purchase of Specialized Machine and Equip- ment	5.400	0.330	100	11.451	The contract for supply of the drilling rig was concluded, while the procurement for other equip- ment was deferred due to lack of funds.
	Purchase of Office and Residential Furniture and Fittings	0.100	0.029	100	0.000	Procurement was suspended due to insufficient funding.
	Policy For- mulation	0.045	0.022	100	0.095	Site visits were held to assess adaptation and mitigation tech- nologies against loss of life and property due to lightning in the vulnerable communities.
Sub-susses	Institutional Capacity for the Mineral Sector	0.045	0.016	100	0.082	Public awareness against light- ning was conducted. The ground surveys were conducted using induced polarization and mag- netics geophysical techniques at three locations where lightning struck schools.
Sub-programme 1392: Design, Construction and Installation of Uganda National Infrasound Net- work (DCIIN)	Mineral Exploration, Devel- opment, Production and Value Addition	0.129	0.067	100	0.225	Suitable sites for the infrasound stations in forested zones were identified and owners of land identified. Securing of the land was disrupted by COVID-19 outbreak. Scientific research on detection of low frequency infra- sound signals from sources was also ongoing.
	Health, Safety and Social Awareness for Miners	0.050	0.025	100	0.091	An issues paper for use in the de- velopment of the national strategy on lightning adaption to mitigate the loss of school children by lightning was generated.
	Licensing and Inspec- tion	0.040	0.014	100	0.059	The project supported the sensiti- zation of stakeholders in vulnera- ble communities affected by light- ning in North Eastern Uganda.



	Output	Annual Budget (Bn Ug shs)	Cum. Re- ceipt (Bn Ug shs)	Annual Target	Physical performance Score (%)	Remark
	Acquisition of Land by Government	0.050	0.011	100	0.088	Partnered with National Forestry Authority for the planned infra- sound array stations.
	Government Buildings and Admin- istrative Infrastruc- ture.	0.200	0.072	100	0.288	Infrasound network designs were generated, equipment layout configuration plan and a training center. Procurement of a provider to maintain Nakawuka station was ongoing.
	Purchase of Office and ICT Equipment, including Software	0.040	0.011	100	0.008	Procurement of data analysis soft- ware was deferred.
	Purchase of Specialized Machine and Equip- ment	1.500	0.339	100	0.344	The procurement of specialized equipment for Entebbe infrasound Station was re-initiated.
	Purchase of Office and Residential Furniture and Fittings	0.030	0.009	100	0.005	Procurement was of data analysis software was deferred.
	Policy For- mulation	0.080	0.054	100	0.169	Draft laboratory safety policy developed. The draft Regulatory Impact Assessment (RIA) for National Mineral Laboratory Services Policy was prepared. Implementation framework for the National Mineral Laboratory was reviewed.
Sub-programme 1505: Minerals Laboratories Equipping and	Institutional Capacity for the Mineral Sector	0.725	0.405	100	1.345	Five computer workstations for LIMS were procured. LIMS was installed on the DGSM server. Four staff were trained in lab- oratory skills. Procurement for consultancy services on refresher training of new laboratory equip- ment was affected by the ban on international air travel due to COVID-19.
Systems Devel- opment	Mineral Exploration, Devel- opment, Production and Value Addition	0.519	0.306	100	0.912	The ToRs for procurement of an accreditation body to offer ac- creditation services to the Mineral Laboratories of the Directorate of Geological Survey and Mines in Entebbe was finalized. Four labo- ratory staff were trained on good laboratory practice and ISO/IEC 17025:2017 requirements.
	Health, Safety and Social Awareness for Miners	0.208	0.141	100	0.437	Miners in eastern Uganda, Isingi- ro and Ntungamo were sensitized on services available at mineral laboratories. The procurement for supply of laboratory waste man- agement equipment and utensils was evaluated and recommended



Sub-programmed Gophysical Sub-programmed Sub-programmed Sub-programmed Sub-programmed Sub-programmed Sub-programmed Sub-programmed Sub-programmed Sub-programmed Gophysical Sub-programmed Governanta (2000) (SEAMIC) 0.013 0.013 100 0.063 0.063 Contracted Contribution Construction (SEAMIC) Government (SEAMIC) 0.600 0.233 100 1.201 Procurement was initia evaluation or interest fi of new laboratory built undertaken. The minim cal installation works to earthing were conclude the (CP-CSE). Planetary and benchico over were and benchico over were and benchico over were and benchico and software Purchase of Office and Equip- ment. 0.358 0.187 0.100 0.622 Procurement selayed freed due to the inpace COVID-19 outbreak. Purchase of Office and Residential Functione and Equip- ment 0.050 0.018 100 0.622 Procurement was in earthing were conclude the (CP-CSE). Planetary COVID-19 outbreak. Sub-programmed Gophysical Survey und Geo- Office and Residential Functione Droubed 0.050 0.018 100 0.000 The procurement was in earticle outbreak and funding c outbreak and funding c outbreak and funding c orosultation and proma- project to be legislation and geological, geo and geol		Output	Annual Budget (Bn Ug shs)	Cum. Re- ceipt (Bn Ug shs)	Annual Target	Physical performance Score (%)	Remark
Sub-programme ISAL-AIROP ganization (SEAMIC)0.600 0.2330.2331001.201 1.201Standards for non-from products; analytical ch for metals, ores, and re terials; soil and rock; and policities and policities and Admin- istrative lure ture.0.600 0.2330.2331001.201Procurement was india evaluation of interest fi evaluation of interest fi evaluation of interest fi evaluation or							for re-tendering. Refresher train- ing on health and safety were also held.
Buildings and Admin- istrative Infrastruc- ture.Buildings and Admin- istrative Infrastruc- ture.Buildings and Admin- istrative Infrastruc- ture.evaluation of interest fo of new laboratory build undertaken. The minim cal installation works to earthing were conclude the ICP-OES, Planetary and benchtop oven wer for Office and ICT Equipment, including Software0.3580.1871000.622Procurements delayed i ferred due to the impace COVID-19 outbreak.Purchase of Specialized Machine and Equip- ment4.8300.0761007.956The contracts for suppl stallation of mineral lat equipment were not sig unavailability of fundsPurchase of Office and Residential Furmiture and Fittings0.0500.0181000.000The procurement was i not concluded due to C outbreak and funding cSub-programme IS42: Airborne Geophysical Survey and Geo of Karamoja12.0002.46310015.153Project carried out stak consultation and promo project to the legislator project to the legislator project to the legislator project to the legislator project was carried 	to tic ga	Interna- onal Or- anization	0.030	0.013	100	0.063	Contract for supply of ASTM Standards for nonferrous metal products; analytical chemistry for metals, ores, and related ma- terials; soil and rock; and water for the Mineral Laboratories of DGSM in Entebbe was underway, and payment was made to the supplier.
Sub-programme I S42: Airborne Geophysical Survey and Geo- logical Mapping of KaramojaMineral L2.00012.0002.46310015.153Project carried out stak consultation and promotion and Key staff were ground geological, geo and geophysical mapping of Karamoja12.0002.46310015.153Project carried out stak consultation and promotion and geophysical mapping of KaramojaSub-programme (Sub-programme (Secolal Mapping of Karamoja12.0002.46310015.153Project carried out stak consultation and promotion and Value Addition PromotedSub-programme (Sub-programme (Secolal Mapping of Karamoja12.0002.46310015.153Project carried out stak consultation and promotion cal and Key staff were ground geological, geo and geophysical mappi tivity analysis in prepara full scale security fram the project was carried financing agreements w ceived in April 2020. R	Bu an ist In	uildings nd Admin- trative nfrastruc-	0.600	0.233	100	1.201	Procurement was initiated and evaluation of interest for design of new laboratory building was undertaken. The minimal electri- cal installation works to improve earthing were concluded hence the ICP-OES, Planetary Ball mill and benchtop oven were installed.
Sub-programme I 542: Airborne Geophysical Survey and Geo- logical Mapping of KaramojaMineral L 12.00012.0002.463100100100The procurement was in not concluded due to C outbreak and funding cSub-programme I 542: Airborne Geophysical Survey and Geo- logical Mapping of KaramojaMineral L 2.46310015.153Project carried out stak consultation and promotedSub-programme I 542: Airborne Geophysical Survey and Geo- logical Mapping12.0002.46310015.153Project carried out stak consultation and promotedSub-programme I 542: Airborne Geophysical Survey and Geo- logical Mapping12.0002.46310015.123Project carried out stak consultation and promotedSub-programme I 542: Airborne Geophysical Survey and Geo- logical Mapping of Karamoja12.0002.46310015.123Project carried out stak consultation and promotedSub-programme I 542: Airborne Geophysical Survey and Geo- logical Mapping of Karamoja12.0002.46310015.123Project carried out stak consultation and promotedSurvey and Geo- logical Mapping of Karamoja12.0002.46310015.123Survey and Geo- 	of an Ec in	f Office nd ICT quipment, cluding	0.358	0.187	100	0.622	Procurements delayed and de- ferred due to the impact of the COVID-19 outbreak.
Office and Residential Furniture and FittingsNot concluded due to C outbreak and funding cMineral Exploration, Devel- opment, Production and Value Addition Promoted12.0002.46310015.153Project carried out stak consultation and promo- project to the legislator cal and Key staff were to ground geological, geo and geophysical Survey and Geo- logical Mapping of Karamoja12.0002.46310015.153Project carried out stak consultation and promo- project to the legislator cal and Key staff were to ground geological, geo and geophysical mappi 	Sp M an	pecialized Iachine nd Equip-	4.830	0.076	100	7.956	The contracts for supply and in- stallation of mineral laboratory equipment were not signed due to unavailability of funds
Exploration, Devel- opment, Production and Valueconsultation and promo- project to the legislator cal and Key staff were ground geological, geo and geophysical mappi full scale security fram- the project was carried financing agreements w ceived in April 2020. R sance for security fram- the aerial survey and for	Oi Re Fu	ffice and esidential urniture	0.050	0.018	100	0.000	The procurement was initiated but not concluded due to COVID-19 outbreak and funding constraints.
	-programme 2: Airborne physical vey and Geo- cal Mapping	xploration, evel- pment, roduction nd Value ddition	12.000	2.463	100	15.153	Project carried out stakeholder consultation and promotion of the project to the legislators. Techni- cal and Key staff were trained in ground geological, geochemical, and geophysical mapping. Sensi- tivity analysis in preparation for a full scale security framework for the project was carried out. The financing agreements were in re- ceived in April 2020. Reconnais- sance for security framework of the aerial survey and field studies were undertaken.



Outcome Performance							
Outcome Indicator	Annual Target	Score (%)	Remark				
Value of Exports as per Permits Issued (Ug Shs Bn)	12	100.00	Achieved				
Change in Value of Mineral Rights (Ug Shs Bn)	20	65.00	Not achieved				
Value of Mineral Production (Ug Shs Bn)	410	36.59	Not achieved				
Outcome performance		67.2					
Overall performance		65.5					

Source: IFMS, MEMD Q4 Report, Field Findings

3.3 Vote 123: Rural Energy Electrification Agency (REA)

Introduction

The REA was established as a semi-autonomous agency by the MEMD through Statutory Instrument 2001 No. 75. It seeks to operationalize Government's rural electrification function under a public-private partnership. The REA is mandated to facilitate provision of electricity for socio-economic and rural transformation in an equitable and sustainable manner. The medium term goal of REA is to achieve 26% rural electrification by June 2022.

Overall Performance

REA Financial performance

The vote took up to 35.3% of the sector budget for FY 2019/20 compared to 27.5% in FY 2018/19. 62.1% of the budget was released by 30^{th} June 2020 and 67.4% of released funds spent.

		Approved budget (Ug shs billion)	Release (Ug shs billion)	Expenditure (Ug.shs billion)	% Budget released	% Budget spent	% Releases Spent
Recurrent	Wage	15.813	15.813	10.439	100	66.0	66.0
budget	Non-wage	22.802	15.244	13.620	66.9	59.7	89.3
Dev't	GoU	128.139	54.638	54.236	42.6	42.3	99.3
budget	Ext. Fin	894.088	572.595	365.514	64.0	40.9	63.8
GOU Total		166.755	85.695	78.295	51.4	47.0	91.4
Total GoU + Fin(MTEF)	Ext	1,060.843	658.291	443.809	62.1	41.8	67.4
Arrears		0.000	0.000	0.000	0.0	0.0	0.0
Total Budge	t	1,060.843	658.291	443.809	62.1	41.8	67.4
A.I.A Total		0.000	0.000	0.000	0.0	0.0	0.0
Grand Total		1,060.843	658.291	443.809	62.1	41.8	67.4
Total Vote B Excluding A	0	1,060.843	658.291	443.809	62.1	41.8	67.4

Table 3.14: REA Vote Financial Performance by 30th June, 2020

Source: Approved Budget Estimates FY2019/20, IFMS

The Rural Electrification Programme

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This programme aims at achieving universal access to electricity by 2040. It also works in line with the Rural Electricity Strategic Plan II (2013-2022) which aims at increasing electricity access to 26% by June 2022 and displacement of Kerosene lighting in all rural Ugandan homes by 2030. The sub-programme consists of six sub programmes namely;



- The Rural Electrification sub-programme (1262)
- Grid Rural Electrification Project IDB I Rural Electrification sub-programme (1354)
- Energy for Rural Transformation (ERT) Phase III sub-programme (1428)
- Construction of the 33KV Distribution Lines in Kayunga, Kamuli and Kalungi Service Stations (1516)
- Bridging the demand gap through the accelerated rural electrification Programme/TBEA subprogramme (1517)
- Uganda Rural Electrification Access Project /UREAP sub-programme (1518)

3.3.1 Sub-Programme 1262: Rural Electrification Project

The sub-programme contributes to the objectives of the Rural Electricity Strategic Plan II (RESP II) by undertaking construction of rural electrification projects. It is jointly funded by GoU and Development partners who include Islamic Development Bank (IDB), Saudi Fund for Development (SFD), The World Bank (IDA), Arab Bank for Economic Development in Africa (BADEA), OPEC Fund for International Development (OFID), French Agency for Development (AFD), and Africa Development Bank (AfDB), and Kuwait Fund for Arab Economic Development.

Performance

Financial Performance

The sub-programme budget for the FY 2019/20 was UGX396.23bn (UGX124.14bn was GoU and UGX 272.09bn donor). The overall release to the sub-programme was poor at 51.2%, whereas absorption of the released funds was good at 80%. The GoU and donor releases were at UGX51.09bn (41.2%) and UGX151.95bn (55.8%) respectively. Additionally, the GoU funds absorption was good at 98.3%, while the donor absorption was fair at 73.9%.

Physical Performance

The sub-programme performance was good. A total of 1,197.3km of medium voltage and 1,280km of low voltage lines were constructed by the end of the FY 2019/20.

Under Islamic Development Bank funding (IDB II lot 3a), most schemes in the districts of Tororo, Soroti, Katakwi were completed and commissioned and the remaining schemes were pre-commissioned awaiting hand over to the network operators. Works in Lira, Dokolo, Pader, Agago, Kitgum and Kole were also advanced and nearing completion. Additionally, schemes under IDB II Lot 3b in the districts of Ibanda, Isingiro, Kabale, Kisoro, Kamwenge, Mbarara, Kabarole and Rubirizi, Mitooma were completed and commissioned, while works in Kanungu, Rukungiri, Ntungamo and Kyenjojo were being finalized at 90% progress.

Schemes under IDB III Lots 1-6 were completed and commissioned. They are being monitored under the Defects Liability Period (DLP). These extended the grid to villages and trading centers in the districts of Hoima, Kibaale, Kagadi, Kyenjojo, Kabarole, Bunyangabu, Kasese, Sheema, Bushenyi, Kabale, Rubanda, Rukiga, Kisoro, Mityana, Kyegegwa, Lira, Gulu, Kitgum, Lamwo, Dokolo, Amolatar, Wakiso,



Mpigi, Sembabule, Lwengo, Kiruhura, Nakaseke, Kiboga, Kyankwanzi, Luwero, Mbale, Manafwa, Sironko, Serere, Budaka, Bukedea, Kibuku, Pallisa, Mayuge, Namayingo, Ngora, Kumi, Bugiri, Jinja and Kapchorwa.

Under Kuwait Fund for Arab Economic Development, pole erection was ongoing in Western region (Kiryandongo, Masindi, Kibaale, and Kasese), South Western (Bushenyi, Rukungiri, Mitooma) and Northern regions (Gulu, Nebbi).

Projects financed under GoU funding had commenced in the different areas countrywide and pole erection was ongoing, with overall progress was at 30%. However, schemes in the Eastern region (Kamuli, Buyende, Mayuge, and Tororo) and Western region (Mbarara, Ntungamo, Bushenyi, Sheema, Isingiro, Buhweju, Rubirizi, Kabale) had not yet started, pending contract awarding.

Challenges

- Delayed procurement and delivery of key materials such as poles hindered progress of works in the western region.
- The rate of connection of communities to the completed schemes by the service providers was very slow due to stock out of key connection materials and suspension of the free connections by some utility companies especially UMEME which has the largest customer footprint.

Recommendations

• The REA should fast track delivery of key materials to project sites.

3.3.2 Sub-Programme 1354: Grid Rural Electrification Project IDB I

This sub-programme is financed by the Islamic Development Bank and it aims at promoting sustainable economic growth and improving the standard through enhancing the rural population electricity access in the North Eastern Region of Uganda in the districts of Amudat, Napak, Nakapiripirit, Amuru, Kotido, Kaabong and Moroto. The project will construct 293 km of Medium Voltage lines, 45km of Low Voltage lines and install 49 distribution transformers to serve 56 trading centers with a target of over 1,000 last mile connections at commissioning.

Performance

Financial Performance

The budget for the sub-programme for FY 2019/20 was UGX18.71bn. All funds were released and absorption was good at 88.5%.

Physical Performance

Progress of construction works was advanced at 87%. Under IDB I lot 3 in Moroto, Nakapiripirit, Amudat and Nabilatuk, schemes to Tororo Cement Factory in Nakapiripirit and projects in Namalu were completed and commissioned. For schemes in Nabilatuk, transformers were installed and construction works were also nearing completion.

Under lot 4, pole erection in Kotido was completed. MV and LV stringing was ongoing at advanced stages.



Challenges

- Progress of the works in the region was affected by the heavy rains which made roads impassable.
- Construction works on some project sites was halted due to insecurity in the region.

3.3.3 Sub-Programme 1428: Energy for Rural Transformation (ERT) Phase III

The objective of the third phase of the Energy for Rural Transformation Program Project is to increase access to electricity in rural areas of Uganda. Funding for the project is through a loan from the World Bank (IDA) to a tune of US\$135 million and a grant from the Global Environment Facility (GEF) Trust Fund of US\$ 8.2 million. There are three components to the project:

- i. On-grid energy access. This component includes four sub-components: grid extension and associated connections, grid intensification and associated connections, household connections from existing lines, and implementation support for on-grid energy access. Beneficiary areas will include West Nile, North-western, Central-North, Eastern, Central, Rwenzori, Mid-Western and South Western service territories of Uganda.
- ii. Off-grid energy access. This component covers off-grid energy access, including the installation of solar PV systems for public institutions in rural areas; business development support; provision of credit facilities to enhance electricity access; and quality standards enforcement support.
- iii. Institutional strengthening and impacts monitoring. This component will finance transaction advisor (TA) and capacity development required to accelerate electricity access. It will also support the Government to carry out an impact monitoring and evaluation of ERT-2. TA provided under this component will finance the necessary consultancy services, capacity building activities, and operations costs. This component will be implemented by the MEMD, in collaboration with the ERA, and the MFPED.

Performance

Financial Performance

The sub-programme budget for FY 2019/20 was UGX70.45bn. All the donor funds budgeted for the FY were released, and spent.

Physical Performance

The overall performance of the sub-programme was poor. The fast tracked Lot 1 schemes in Mubende were nearing completion and stringing was in advanced stages with overall progress at 95%. On the other hand, Lot 2 schemes in Mbarara and Kiruhura were completed, commissioned and handed over to Umeme and UEDCL for network operation. Additionally, contracts for the other fast tracked Lots 3 and 4 for West Nile region (Arua, Yumbe, Moyo, and Adjumani) were awarded and engineering design reviews were ongoing.

The contracts for the remaining 17 Lots were signed and engineering designs and surveying ongoing. Construction works had not yet started and this project is behind schedule by three years.



Challenges

- Material delivery was slowed down by the outbreak of COVID-19 pandemic in China.
- Delay in the procurement process hindered project commencement.

Recommendation

• The REA should be more vigilant in following up on actions that were requested by the World Bank to expedite the procurement process.



Completed works for a scheme in Byanamira Trading Center, Kiruhura



Left: A transformer installation at Rwobuhura, Kiruhura Right: Household connections to a commissioned scheme at Kyensama trading center, Mbarara



3.3.4 Sub-Programme: 1516 Construction of the 33KV Distribution Lines in Kayunga, Kamuli and Kalungu Service Stations

The sub-programme is jointly financed by GoU, Arab Bank for Economic Development in Africa (BADEA), OPEC Fund for International Development (OFID) and Abu Dhabi Fund for International Development. The sub-programme aims at providing electricity to around 123 villages with a total of 51,033 customers (46,881 households, 2,429 commercial centers and 1,723 government, health and educational centers). A total of 1,064km of medium voltage, 834km of low voltage will be constructed





and 350 distribution transformers installed with a target of 50,000 initial last mile connections at commissioning.

Performance

Financial Performance

The sub programme budget for FY 2019/20 was UGX 50.19bn, of which UGX40.77bn was released and UGX 38.94bn expended by 30th June, 2020.

Physical Performance

The sub-programme performance was good. The original scope for schemes under BADEA and OFID funding in Kayunga, Mukono, Buikwe and Jinja were completed and under Defects Liability Period (DLP). Commissioning of variation works in these districts was ongoing.

Under Abu Dhabi financing, construction works in Masaka were completed and awaiting commissioning, while schemes in Kalungu were also close to completion at 98% progress.

3.3.5 Sub-Programme: 1517 Bridging the demand gap through the accelerated rural electrification Programme (TBEA)

The sub-programme aims at speeding up the progress of rural electrification through accelerating access to clean and modern electricity in the unserved sub-counties nationwide. The total budget for the sub programme is UGX832.5bn.

The sub-programme intends to construct power distribution infrastructure for the electrification of 287 sub-county headquarters and surrounding areas that are not connected to the grid in 13 service territories of 111 districts of Uganda that is: Central, Central Northern, Eastern, Mid- Western, North Eastern, North Western, North Western, Northern, Southern, South Western and Western regions. The sub-programme targets: construction of over 3,900km of medium voltage and 6,000 of low voltage lines; connection of 168,335 single phase and 4,254 three phase customers and installation of 3,401 distribution transformers.

Performance

Financial Performance

The budget for the sub programme for the FY was UGX287.78bn. All funds budgeted under GoU (UGX4bn) were released and expended. However, the donor release and absorption of funds were both fair at 56.8% and 58.0% respectively.

Physical Performance

Construction works were yet to start. General project progress was slow and deployment of subcontractors was ongoing at 28% progress.



3.3.6 Sub-Programme 1518: Uganda Rural Electrification Access Project (UREAP)

The sub-programme is jointly funded by GoU and African Development Bank (AfDB) and aims at promoting sustainable economic growth and improving standards of living of the rural communities in Central, Eastern, North Eastern, North Western, Central North and North Western in the districts of Nakasongola, Luwero, Kalangala Island, Kiryandongo, Serere, Soroti, Ngora, Bukedea, Alebtong, Amuria, Kaliro, Iganga, Luuka, Gulu and Nwoya.

The project aims at construction of a total of 1,427km of medium voltage lines, 1,170.7km of low voltage lines, and installation of 500 transformers and a 33kVsubmarine cable to connected Bugala Island in Kalangala District to the main grid. The project also targets 10,739 last mile connections at commissioning.

Performance

Financial Performance

The budget for the sub-programme for FY 2019/20 was UGX198.87bn, of which UGX129.44bn (65.1%) was released and absorption poor at 23.4%.

Physical Performance

The performance was poor. Construction works in Nakasongola, Kiryandongo and Luwero had started and pole erection and pole dressing was ongoing at 50% progress. Construction works for schemes in Northern region (Gulu, Nwoya, Lira, Alebtong, and Amuria) and Eastern region (Soroti, Mbale, Manafwa, Serere, Ngora, Bukedea) had not started as expected and engineering design review and surveying was ongoing. Factor Acceptance Tests (FATs) were also ongoing for local materials for the above mention schemes.

For schemes in Bugweri, Iganga and Luuka, pole erection and excavation was advancing at 45% progress in the respective sub-counties of Buyanga, Bukanga and Waibuga.

Challenges

- Delayed mobilization of project teams led to delayed commencement of works and thus poor absorption.
- There was difficulty in acquiring line corridors by the affected communities leading to frequent line diversions. This affected progress of works.
- Delivery of key project materials from Wuhan Province, China was affected by the travel ban due to the outbreak of COVID-19.

Recommendations

- The REA should follow up with the contractor to ensure faster mobilisation of project teams.
- The REA should increase community engagement and sensitization for the project affected communities so to appreciate the benefits the project will bring to their communities.





L-R: The contractors yard with the delivered materials at Namadope, Luuka; Ongoing stringing works at Bumana Trading Center, Luuka

The progress status of the monitored rural electrification projects under the rural electrification programme is summarized in table 3.15.

Scheme	Status
Schemes under AfDB Funding	
UREAP Lot 5	
Contract Sum: US\$ 4,205,622.85	
Contractor: China Henan Internationa	al Cooperation Co. Ltd
Luuka	
Kiyunga – Kimono	All pole erection and MV stringing was completed. LV stringing was ongoing at 80% progress. The grid was extended to the villages of Bumana, Bulongo, Kamwirugu, and Kimanto.
Kyamawundo – Lwanika	MV pole erection was completed and LV pole erection ongoing. LV stringing had started, while MV pole stringing had not started. MV length of the scheme is 17.6Kms. A total of 15 transformers will be installed in the respective villages.
Butimbwa – Mawuno	All construction works were completed. The scheme was awaiting commissioning. Five transformers were installed at Butimbwa, Bukodyo, Namadope, Kakumbi and Mawuno trading centers.
Buwala – Bugaga and Bugomba	MV pole erection and MV stringing were completed. LV pole erection and stringing were ongoing. A total of 11 transformers will be installed in the different villages in Bukanga sub-county.
Bugweri	Construction works in Bugweri had started and pole erection was ongoing.
Schemes under ERT III- IDA(World B	ank)funding
ERT III Lot 1	
Contract Sum: UGX 2,820,423,697.14	, US\$ 4,128,037.16
Contractor: Bruhan Engineers Limited	1
Mubende	
Kiganda - Kyenda withT.Offs to Kibyamilizi, Katabalanga and Kisenyi.	Construction works were in advanced stages with MV and LV pole erection nearing completion. The MV length is 62.2Km and a total of 28 transformers will be installed in the different areas.
Nkonge - Lusalira, Mile 16 - Butawata	Pole erection was nearing completion. MV and LV stringing was also nearing completion. The MV length is 20.7km
ERT III Lot 2	
Contract Sum: UGX 93,220,338.98, US	\$\$ 4,024,280.85
Contractor: Megger Technical Services	3
Kiruhura, Mbarara	
Ruhumba – Kashwa	The schemes were completed and commissioned. A total of 125km of MV line
The Kyenshama Circuit	were constructed and 57 transformers installed
Rwatsinga – Rwebishuri	
Kakyungobe - Rwatsinga	

Table 3.15: Status of Monitored Rural Electrification Schemes by 30th June, 2020



Scheme	Status
ERT III Lot 3	
Contract Sum: Lot 3: UGX 15,455,028,	424.00, US\$ 6,645,170.33
Contractor: China Jiangxi	
Wandi – Yumbe – Moyo	The engineering design reviews were ongoing.
ERT III Lot 4 Contract Sum: UGX 2,829,587,398.00, 1	US\$ 1,319,849.52
Contractor: C and G Andies Arua	
Onduparaka – Odramachu – Abiria	The engineering design reviews were ongoing.
Schemes under KUWAIT funding	The engineering design reviews were ongoing.
Kuwait Lot 1a	
Contract Sum: US\$ 4,269,801	
Contractor: Ontrack Technical Services	s Limited
Kiryandongo	
Bweyale - Karuma	MV pole erection and MV stringing were ongoing. The grid will be extended to areas between Bweyale and Karuma. MV length is 55kms and 19 transformers will be installed.
Nebbi	
Kangu – Ocanya – Alamwa trading Centers	Both MV and LV pole erection were ongoing.
Kuwait Lot 1b Contract Sum: USD 4,778,666.18	
Contractor: Rocktrust Contractors Lin	nited
Kasese	
Kabirizi- Kihenge – Kanyonya – Kyarumba, Karusanda – Kibuga	MV and LV pole erection were completed. Stringing was yet to start.
Bushenyi	1
-	
Mukatafali – Birimbi - Kahungye	Both MV and LV pole erection were ongoing.
Schemes under GoU Funding GoU Lot 1 Contract Sum: UGX 9,920,442,231.79 Contractor: Muttico Technical Services	
Mubende	
Kassanda – Kabulubutu – Kikandwa with t-off to Binikira	Pole erection was ongoing.
GoU lot 2 Contract Sum: UGX 10,586,415,432.58	
Contractor: Global - Comolo JV	
Rakai	
Kageye TC in Kooki Subcounty Kiyoza TC in Kooki Subcounty	Pole erection was ongoing
Masaka	
Lwannunda – Mazinga	Pole erection and stringing was ongoing.
Kyanjovu – Kyera - Karugondo	
GoU Lot 3 Contract Sum: UGX 18, 25,815,852.33 Contractor: Consortium of Diesel and N	Notor Eng. PLC and Aster Private Limited
Mbarara, Sheema, Buhweju, Bushenyi	Surveying of schemes was completed. The contractor was mobilizing to start
,,,,,,,	construction works.
GoU Lot 6 No Contracts had been awarded	
Tororo, Mayuge, Buyende, Kamuli	The schemes in these districts had not started. The signed contracts were cancelled due to whistleblowing claiming unfairness in contract awarding. Contract awarding awaited for a no objection from court.
GoU Lot 8 Contract Sum: UGX 19,756,014,498.70 Contractor: Dott Services Limited	· · · · · · · · · · · · · · · · · · ·



Scheme	Status					
Mukono						
Gilinya trading center and environments	MV pole erection was ongoing.					
Namyoya – Busabala – Nabalanga –	The MV pole erection was completed while the LV pole erection was ongoin					
Kabawala						
Intensifications in Nakifuma	Both MV and LV pole erection were ongoing in the trading centers of Naki					
	Ndwadde Mutwe, Nanga and Busenya.					
Buikwe						
Ssugu - Kirangira & Nakatyaba areas	Pole erection was ongoing.					
Nakaseke						
Kyayunga village, Balengera village and						
Kasana						
Sseggalye village to Kyambogo village	Pole erection in the different trading centers and villages in these areas.					
Bulega village to Seeta village,						
Lwetunga and Toggo						
Schemes Under IDB I Funding						
IDB I Lot 3						
Contract Sum: USD 4,469,331	And find the Connect The test					
Contractor: Nanjing Daji Steel Tower N						
Moroto Moroto-Tororo Cement Factory	The scheme was completed and commissioned. MV and LV Pole erection was completed. Three transformers were installed and					
Moroto- Katikekile	scheme was close to completion with stringing a few areas pending.					
Amudat	Scheme was completed.					
Amudat – Ngoshom, Amudat - Acustom	Scheme was completed.					
Schemes Under IDB II Funding						
IDB II Lot 3a						
Contract Sum: USD 16,375,126.55						
Contractor: Ceylex Engineering Ltd						
Tororo						
Schemes in Musukire TC						
Schemes in Musukire IC	Scheme was completed and handed over to Umeme for operation. It had extended the grid to Rubongi sub county headquarters, Rubongi A and B					
	Villages and Musukire trading center. HV length was 3.2km and 6 transformers					
	had been installed.					
P'otela TC and Agola TC	Schemes were completed and commissioned. Four transformers were installed					
	in the trading centers of Potela, Agola and Pokuotho I, II and III.					
Katerema - Kagwara - Magoro –	All construction works were completed. Scheme was commissioned except for					
Katakwi, Mulanda TC and Mwello TC	areas in Magoro, Kagwara, Mwello 1 and Katerema A where schemes were					
	being precommissioned but not yet handed over to Umeme. A total of 15					
	transformers where installed.					
Lwala, Migana TCs	Construction works were completed and scheme pre commissioned.					
Nangogera Town Council – Maundo	Scheme was completed, and commissioning done except in Wowulera, Were 1					
Parish – Were, Okwira and Technical	and two areas where pre commissioning was underway.					
Institute, Senda Village and environs						
Mudodo Village	Scheme was completed and commissioned, and six transformers were installed					
	in Mudodo village, Mailo III and Nyakesi trading centers.					
Sere community, Kyafu TC and	Schemes were completed, pre-commissioned and awaiting handover to the					
Koitangoro schemes	network operators.					
Aukot and Kalait Schemes	Schemes were completed, commissioned and handed over to Umeme for					
	operation.					
Lira						
Corner Amach – Armach – Pango	Construction works were ongoing. All pole erection and HV stringing					
Opelo – Adolo – Amachi – Adyel - Iwop	were completed. LV stringing was ongoing. HV length is 80.7kms and 25					
	transformers installed.					
Opem Primary School and Environs	Scheme was completed and commissioned.					
Ocan Community Health Center	Schemes were completed and commissioned in the villages of Ocan and Bar					
Bar Apwo Community	Apwo.					
Can Uganda at Barr TC						
Lira Mixed Farm	Construction works were completed and commissioning done.					
Kole						
Apii Trading Center	Construction works were completed and scheme commissioned.					



Scheme	Status
Nubi – barlwala – Wipip, Abongodero	Scheme was completed and handed over to Umeme.
Hill and Aruba, Farm View Hotel, Abeli	
Girls SS and Luka Memorial PS	
IDB II Lot 3b	
Contract Sum: USD 18,232,169	
	g Cooperation, Nari Group Corporation
Kyenjojo	
Nyamango – Mbale with t-off to	All pole erection was completed. HV and LV stringing ongoing. HV length
Mirongo and Kabirizi	is 25.8km and 13 transformers were to be installed. Grid will be extended to
	the villages of Nyamango, Buhisi, Kibamu, Ruhoko, Mukaswa, Nyabuharwa,
N. 1. TO	Kaigoro, Mbale, Mirongo, Nyabugorogoro and Kabirizi.
Nyakisi TC	Construction was completed and scheme commissioned.
Butiti-Nyamango	The scheme was completed and commissioned.
Busanza-Nyabuharwa-Mukabayi	Scheme was completed and handed over to UEDCL for network operation.
Mpunda, Kyakunta and Kirongo	Scheme was completed, commissioned and handed over to UEDCL. Four
	transformers were installed with HV length of 6.6 km.
Kabarole	
Mabale and Mugusu Villages	Works were completed and scheme commissioned.
Kijenga Village	Works were completed and 2 transformers installed.
Kijura – Omukarere – Mukentomi	Scheme was completed and awaiting commissioning. four transformers were installed
Nitooma	แหลแซน
Mitooma	All construction montro more completed Calcure 1, 1, 1, 1
Katenga – Omukabira – Nyakasharara with t-off to Kirembe – Rubumba,	All construction works were completed. Scheme had also been pre commissioned.
Omukayanga – Nyaruzinga	commissioned.
Karambi – Karebo – Kirera	Construction works were in advanced stages. Scheme was delayed by wayleaves
	acquisition of some sections.
	Scheme was completed, commissioned and handed over to Umeme.
Kanyabwanga - Kitebiko	Scheme was completed, commissioned and handed over to Umeme. Four
, ,	transformers were installed.
Bitereko – Kalisizo	Scheme was completed.
Rubirizi	
Rubirizi - Kikumbo	The Rubirizi – Kikumbo scheme was commissioned and handed over to
Katungu & Kinoko Villages	Umeme, while for pre-commisioning for Katungu and Kinoko villages had just
5	been completed.
Isingiro	
Birere TC and environments	Scheme was completed, commissioned and handed over to UMEME. A total of
	11 transformers were installed within Birere sub-county in the villages of Kyera
	and Rwenkwera among others. This scheme also extended the grid to Kyera
	Agricultural College, Kyera Vocational Center, Rukoma and Birere Primary
	Schools.
Ruhimbo TC	Works were completed and scheme commissioned.
Schemes Under IDB III Funding	
IDB III Lot 1	
Contract Sum: USD 14,012,187	
Contractor: Haso Engineers	
Hoima	1
	The scheme was completed, commissioned and handed over to Umeme. Four
Kanenankumba and Kihemba	transformers were installed in the villages of Kihemba, Kihanga, Kanenkumba
	and Bwikya.
Kyakaboga Hoima Resettlement	Scheme was completed, commissioned and handed over to UEDCL. Two
	transformers were installed at Kyakaboga village and Kyakaboga resettlement
Kisaliza Villago	houses. The scheme was commissioned and handed over to Umeme. Grid was extended
Kisaliza Village	to Kisaliza market, Kisaliza Health Center II and Kisaliza trading center.
Kabarole	
Rwimi TC and environments	All works were completed and scheme handed even to Umeres Total HV 1
Kwinin TC and environments	All works were completed and scheme handed over to Umeme. Total HV length was 8.5km and five transformers were installed. The scheme consisted of 2
	t-offs. First t-off connected the villages of Nyabwina and Gatyanga to the grid
	while the second t-off connected Mirambi and Hakintusi villages.



Scheme	Status						
Nyasozi, Bukolekore and Kabahango	The scheme was commissioned						
Kitumba Cell, Karumanga, Kateebwa SDA and Kateebwa NRM Monument in Nyakigumba, Kasenda and Mukimya	The scheme was commissioned.						
Kisomoro	Scheme was completed and one transformer installed at Kisomoro Technical Institute. The scheme was handed over to network operator.						
Bundibugyo Nyahuka – Bussu	All construction works were completed and the scheme commissioned with five transformer installations in the trading centers of Bussu, Kalera and Kasili.						
Kasese							
Maliba Subcounty	Scheme was completed and commissioned with four transformer installations.						
Kirembe – Kahokya and environments	Scheme was commissioned and handed over to Umeme. The grid was extended to the villages of Kirembe, Kahokya, Kihalimu and Wasenaba.						
Busunga-Nzirambi-Queen's Pavillion- Hamukungu	The scheme was completed and commissioned with a total HV length of 11.9km and five transformer installation at Busunga and Hamukungu villages, Nzirambi Orphanage, Queen Elizabeth info center and Western Uganda Baptist theological college.						
Sheema							
Kabwohe, Nyakashambya, Nyamiku – Rwakitura and Environs Electrification of villages in Migina sub- county from Rweicumu - Kyegando Electrification of Bwoma, Ryakituha, Nyakatete – Kitagata sub-county Kabale	The construction works were completed and the schemes handed over to the utility companies for operation.						
Kashaki – Nangara - Nyamweru	The scheme was completed and handed over to Umeme in August 2019. The Hv						
Kashaki – Mangara - Myaniweru	length was 17.38 km and 8 transformers installed.						
Bugongi Upper – Kaziniro – Bugungiro, Kaharo – Nyakahita – Ahatojo Kacwekano – Bukoora – Habushasha Kyobugombe – Rwesasi - Kitohwa	The schemes were completed and commissioned. A total of 17 transformers were installed and 22.5km of HV constructed.						
IDB III Lot 2 Contract Sum: USD 8,959,317 Contractor: Tetra Technical Services Li	imited						
Gulu							
Tochi Youth Center and Palenga –Aywee Trading Center	Scheme was completed and commissioned with one transformer installation at Aywee trading center. However, the transformer installation at Tochi Youth Center that had been scoped under this scheme had already been done under a different scheme.						
Atoo Radar Hill Construction works were completed and commissioned and five to were installed at Loroo, Pageya, Ofanya Agricultural farm, Atoo r Kidere trading center. A total HV length of 17km was constructed							
Lira							
Punu Oluru – Olaha - Skyland School	Construction works were completed and commissioning of the scheme was done with three transformer installations at Punu Oluru, Olaka Annex and Skyland Secondary School.						
Amuca and Legacy	Scheme was completed and commissioned.						
Ogur – Okwer – Barlonyo – Abala with t-off to Adwoa	Construction works were completed and scheme commissioned. Seven transformers were installed.						
Agweng trading Center - Angolocom	HV length was 40km. The scheme was completed, commissioned and handed over to the service provider.						
IDB III Lot 4 Contract Sum: USD 7,924,459 Contractor: STEG International Servic Bukomansimbi							
Bigasa _ Bulenga Kitara	All construction works were completed and commissioned. A total of 21						
Bigasa – Bulenga – Kitera	All construction works were completed and commissioned. A total of 21 transformers were installed with a total Hv length of 30.8 km. The grid was						
Buyoga – Butayunja	extended to the trading centers of Bulenge, Bigasa, Kitera, Kabaale and villages of Kitera, Lugazi and Kyansi among others. Scheme was completed, commissioned and one transformer installed.						



Scheme	Status						
Lwengo							
Kyanzanga – Kakooma	Works were completed and scheme commissioned. It extended the grid to the trading centers of Kitahuruzi, Nkokonjeru, Bijaaba and Kakooma among othe						
Kiruhura							
Kakinga, Kaliba and Migina Villages	Schemes was completed and commissioned.						
Wakiso							
Bwalula – Kitalya Prison	All construction works were completed and commissioned. The grid was extended to the trading centers of Davula, Kitemu, Lugombe, and Gamba and also to Kitalya Prisons.						
Kasanje – Sundiyata and t-off to Kikakala TC	All construction works were completed and commissioned. MV length is 23.213km and 18 transformers were installed.						
Mende – Kaliiti TCs	The scheme was completed and commissioned.						
Mende	The scheme was completed and commissioned.						
	Electrical, Industrial Projects Company and Dott Services Limited						
Nakaseke							
Nakaseke - Nsaka and Kikondo	Construction work was completed and commissioning done. Scheme is comprised of two (2) tee-offs at Kikondo trading center in Semuto sub county.						
Nakaseke - Wakyato - Nabisojjo and Butalangu	The scheme was completed and commissioned. A total of 15 transformers were installed.						
Katooke – Kisonga	Schemes was completed and commissioned. Two transformers were installed.						
Kalege – Namusiga and Banda Villages	Construction works were completed and one transformer installed.						
Mulungiomu – Mbukiro, Komamboga and Bulyana Trading Centers	Construction works were completed and schemes commissioned.						
Luwero Makulubita Trading Center	Construction works were completed and scheme commissioned. Scheme extended the grid to the villages of Maggwa, Bukekete, Bulamba, Kyaamuwooya, Buligwe and Nakusubyaki among others. A total of 17 transformers will be installed in these villages						
Kiboga							
Bukomero-Bugabo-Dwaniro- Kyamukwenya	Works were completed and scheme handed over to Umeme. HV length was 57.5km. A total of 11 transformers were installed in the villages of Bajikuba, Dwaniro, Kyakinzi, and Kindeke among others, and also extend to Bugabo Health Center and Dwaniro sub-county headquarters.						
Kateera-Mukati-Jokero-Muwanga	Works were completed and scheme commissioned. Scheme extended grid to the villages of Mukati, Jokero and Muwanga in Muwanga sub-county.						
Kitutumura and Lunnya, Bamusuuta, Lwamata Upper and Lower Kiwawu TC Kikooba Community in Mataagi	Works were completed and scheme commissioned. A total of 13 transformers were installed.						
IDB III Lot 6							
Contract Sum: USD 19,252,692 Contractor: Tetra Technical Services Li	mited						
Mbale							
Mbale CRO Stadium, Makhuyu – Busambwa villages, Luyekhe village and	The schemes were completed and commissioned. A total of six transformers were installed in the respective villages and trading centers						
environments							
Budaka							
Schemes in Lyama Sub county	All construction works were completed. The scheme was commissioned and handed over to Umeme. MV length was 32.4kms and 16 transformers were installed.						
Nalado and Nalwaya	The scheme was commissioned with one transformer installation at Kasozi trading center						

Source: REA reports and Field Findings



Overall Performance of the Rural Electrification Programme

The overall performance of the programme was fair at 54.5% (table 3.16). A total of 154,198 new consumers were added to the grid and a number of grid lines financed by IDB, BADEA and OFID completed within the financial year. Similarly, some ERT III schemes in western region were completed. Other schemes under GoU and Kuwait funding were in their early stages. However, the programme was still grappling with delay in procurement process which delayed commencement of some projects under World Bank and China Exim Bank funding. Additionally, there was insufficient funding partly due to the impact of the COVID-19 pandemic which led to slow progress of various projects.

Subpro- gramme	Output	Annual Budget (Ug shs)	Cum. Re- ceipt (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical perfor- mance Score (%)	Remark	
Subpro- gramme 1262: Rural	Construction of Medium volt- age (MV) lines	237.737	121.824	100	40	18.15	A total of 1,197.3km of medium voltage and 1,280km of low voltage	
Electrifica- tion Project	Construction of Low voltage (LV) lines	158.492	81.216	100	40	12.10	lines were constructed	
Subpro- gramme 1354: Grid Rural Elec-	Construction of Medium volt- age (MV) lines	11.226	11.226	80	75	1.03	The overall progress was at 87%. Some schemes in Moroto, Nakapiripirit, Amudat	
trification Project IDB I - Rural Elec- trification	Construction of Low voltage (LV) lines	7.484	7.484	80	75	0.69	and Nabilatuk were completed whereas the remaining works were in advanced stages. Schemes in Kotido, Kaabong were ongoing and stringing being finalised.	
Subpro- gramme 1428: Energy for Rural Transforma- tion (ERT)	Construction of Medium volt- age (MV) lines	42.270	42.270	100	50	2.07	Schemes for Lot 1 in Mubende were ad- vanced at 95% general progress, whereas Lot 2 works in Kiruhura and Mbarara were complet-	
Phase III	Construction of Low voltage (LV) lines	28.180	28.180	100	50	1.38	ed. Works on remaining schemes had not yet commenced.	
Sub-pro- gramme 1516: Con- struction of	Construction of Medium volt- age (MV) lines	30.114	30.114	100	100	2.95	The original scope for schemes under BADEA and OFID funding in Kayunga, Mukono,	
the 33KV Distribution Lines in Ka- yunga,	Construction of Low voltage (LV) lines	20.076	20.076	100	100	1.96	Buikwe, Mukono and Jinja were completed and were under Defect Liability Period	
Kamuli and Kalungu Ser- vice Stations							(DLP) and variation works were also near- ing completion. Under Abu Dhabi funding, schemes in Kalungu, Masaka were almost complete at 98% pro- gress.	

Table 3.16: Performance of the Rural Electrification Programme as at 30th June, 2020

Energy and Minerals Development Sector: Annual Budget Monitoring Report - FY 2019/20



Ministry of Finance, Planning and Economic Development

Subpro- gramme	Output	Annual Budget (Ug shs)	ceij	m. Re- pt (Ug shs)		nnual arget	Cum. Achieved Quantity		Physical perfor- mance Score (%)	Remark
1517 Bridg- ing the demand gap through the accelerated	Construction of Medium volt- age (MV) lines	172.668	172.668		40		10		4.22	Construction works had not yet started. Deploy- ment of contractors was ongoing. Progress of
rural electrification Programme (TBEA)	Construction of Low voltage (LV) lines	115.112	1	15.112	40		10		2.82	deployment of sub-con- tractors was at 28%.
u	Construction of Medium volt- age (MV) lines	119.322	119.	119.322		20			2.92	Under Lot 1 in Naka- songola and Luwero works were at 50%. Lot 5, works in Luuka and
	Construction of Low voltage (LV) lines	79.548	79.5	548	80		20		1.95	Bugweri were at 45%. Works on other Lots 2, 3, 4 and 6 in Kalangala, Northern and Eastern regions had not yet started.
	Total	1,022.229	829	9.040					52.2	
Performance of	f Outputs								52.2	
Outcome Perfo	ormance									
Outcome Indicator Annual T		Annual Target	t Achieve		ed Score		(%)	Remarks		
Number of Concessing electric		262,500 154,198		58.74			Not achieved, there were no funds to su tain implementation.			
Programme Performance (Outcomes)				58.74						
Overall Progra	mme Performanc	e				54.5				

Source: REA Q4 Reports, Field findings

Challenges

- a) Slow procurement pace within the sector continues to affect the performance. Woks on a number of projects under REA had not commenced due to delayed procurement.
- b) The low release of funding for connections led to a reduced number of connections on completed schemes low despite the rolling out of the free connections policy. This caused stock out of connection materials by the service providers and led to UMEME suspending connections under the initiative because of sum of large arrears which REA failed to clear.

Recommendations

- a) The REA should enhance staffing levels for project implementation, to ensure better follow up of project activities and monitoring/supervision of on-going works.
- b) The REA should prioritize funding for free connections in order to accelerate the rate of annual household connections and funds for the initiative should be ring-fenced to avoid accumulation of big arrears.

Overall Vote Performance

The overall programme performance for the vote was fair at 54.5%. The budget for the FY 2019/20 was UGX1,060.84bn, of which 64.1% was released (fair performance) and absorption was poor at 41.8%.



Several schemes under IDB, BADEA and OFID funding were completed, whereas various projects funded by GoU, Kuwait, IDB, ERT III was ongoing. The vote performance was affected by funding constraints and slow procurement processes that delayed commencement of projects under ERT III and TBEA for electrification of sub-counties. In addition, lack of connection materials and the suspension of the free connection policy by some utility companies saw fewer customers than had anticipated connect to the completed grid lines.



CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

Conclusion

The overall performance of the sector was fair at 59.2%. The performance declined in the second half of the FY due to reduction in release of funds and the effects of COVID-19 which stifled activities in the sector. None of the programmes exhibited good performance. All the programmes exhibited fair performance and there was a big decline in performance of the Large Hydro and the Rural Electrification programmes. The key constraints that affected the sector programmes were: difficulty in acquisition of wayleaves, delayed conclusion of procurement, and inadequate funding during the FY.

	Programme	Overall performance (%)		
1	Large Hydro Infrastructure	51.4		
2	Energy planning, Management and Infrastructure Development	68.0		
3	Petroleum Exploration, Development, Production, Value Addition and Distribution of Petroleum Products	56.6		
4	Mineral Exploration, Development and Value Addition	65.5		
5	Rural Electrification	54.5		
	Overall Average Sector Performance	59.2		

Table 3.17: Overall Performance of the Energy Sector per Programme in FY2019/20

Recommendations

- The Courts of Law should expedite handling of land cases on the ongoing Government projects to prevent persistent delays in project implementation. Other alternatives such as depositing compensation money in escrow accounts should be explored to avoid an impasse during compensation disputes.
- The security agencies should support the sector to curb the increasing vice of vandalism of infrastructure which is making the implementation of projects more costly, and also disadvantaging the intended project beneficiaries.



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