

ENERGY AND MINERALS DEVELOPMENT SECTOR

SEMI-ANNUAL BUDGET MONITORING REPORT

FINANCIAL YEAR 2020/21

APRIL 2021

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





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ABBREVIATIONS AND ACRONYMS

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
DP	Directorate of Petroleum
E&P	Exploration and Production
EA	Exploration Area
EAC	East African Community
EIA	Environmental Impact Assessment
EPC	Engineering Procurement and Construction
ERT	Energy for Rural Transformation
EXIM	Export Import
FEED	Front End Engineering Design
FID	Final Investment Decision
GASf	Geological Society of Africa
GERP	Grid Extension and Reinforcement Project
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
KfW	German Financial Cooperation (KfW Bankengruppe)
KHPP	Karuma Hydro Power Project
KIP	Karuma Interconnection Project
kV	kilo Volts
LV	Low Voltage
MDAs	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 III	Second National Development Plan 3
NELSAP	Nile Equatorial Lakes Subsidiary Action Programme
UNOC	Uganda National Oil Company
NOGP	National Oil and Gas Policy
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

This Financial Year 2020/21 marks the first year of implementation of the third National Development Plan (NDPIII), within which we aim to achieve inclusive growth, employment and wealth resulting from sustainable industrialisation. It is hoped that the newly adopted coordinated programmatic approach with be a springboard to enabling government achieve its development objectives.

The semi-annual findings by the Budget Monitoring and Accountability Unit (BMAU) show that sectors still posted a fair performance. Whereas the Ministries, Departments, Agencies (MDAs), and Local Governments (LGs) should have adopted Programme Based Budgeting (PBB) this Financial Year, this is yet to be fully embraced as evidenced from the BMAU findings where entities are still operating and reporting achievements in sector format.

It is imperative that the lead agencies under all programmes ensure that all their constituent entities shift to the new development approach for us to harness its collective gains.

Patrick[/]Ocailap

Ag. Permanent Secretary/Secretary to the Treasury



Introduction

This report reviews selected key programmes and sub-programmes within the Energy and Minerals Development Sector, based on approved plans and the 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 during the half year, Financial Year 2020/21. The methodology adopted for monitoring included a 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 the weighted achievement of the set output targets by 31st December 2020.

Financial Performance

The approved sector budget totaled to UGX 2,564.26Billion (Ministry of Energy and Mineral Development (MEMD)-UGX 1,827.81bn, Rural Electrification Agency (REA)-UGX 674.72bn, PAU-UGX 61.73bn). The sector budget release was poor with 31.69% of the total budget released by half-year FY2020/21. The sector release was affected by the slow absorption on several externally funded projects, among these the power transmission projects and Karuma Hydropower Project.

Highlights of Sector Performance

The Energy and Minerals Development Sector overall semi-annual performance for FY2020/21 was fair at 53.1%. Several activities were behind schedule, therefore the outputs to which they are linked were not achieved.

The Energy Planning, Management and Infrastructure Development Programme: The overall programme physical performance was poor. Majority of the ongoing project works did not progress much during the first half of the FY; there was a delay in the commencement of works on new projects for which contracts were awarded. Pending works for Namanve South to Namanve North transmission segment was finally completed but works on the Namanve South to Luzira transmission segment was way behind schedule, with none of the planned 58 towers erected.

Works on the Karuma-Interconnection Project (KIP) were advanced with 245.5km of the planned 248km of the Kawanda-Karuma Transmission line completed, representing over 98% of the works. Under the same project, the Karuma-Olwiyo T-line was also at 97% completion with 54.15km of the planned 54.25km completed. The Lira-Karuma T-Line works continued to suffer from delays as a result of pending Right of Way (RoW) issues. Pre-commissioning



testing was completed on the Karuma and Kawanda substations and the identified snags were being handled by the contractor. Pre-commissioning of the Lira substation was yet to commence. Works on the Olwiyo substation were at 88% by the end of December 2020, and notable progress was observed in completion of the control building and equipment erection in the switchyard.

On the Opuyo Moroto Transmission Project, works on the transmission line were completed with all the planned 623 monopole towers erected and 160.7km of the line strung. The pending works included the new Moroto substation at 79% completion due to a delay in the commencement of manufacturing of equipment for the project.

Overall progress registered on the Entebbe-Mutundwe Transmission Project was low with works on the substations at 48% and the transmission line works at 50% by 31st December 2020. The tower works were delayed by RoW issues and the design change required for the Nambigirwa wetland section. Works on the substations at Mutundwe and Entebbe were progressing slowly

Works on the previously stalled Bujagali-Tororo-Lessos T-Line resumed after procurement of a new contractor, but works were only at 62% by half year and continue to face RoW challenges in the Tororo area including the pending court injunction. The remaining works at Tororo, Mirama, and Bujagali and new Mbarara substations could not be completed due to missing equipment that needed to be procured.

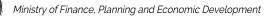
The Masaka-Mbarara Transmission Project, Mirama-Kabale Transmission Project, Agago-Gulu Transmission Line Project, and Lira-Gulu-Nebbi-Arua Transmission Project were at the early stages of implementation.

The main challenge affecting performance was the difficulty in acquisition of RoW which constrained the work of contractors, leading to vandalism of completed infrastructure and delayed delivery of equipment to some projects.

Large Hydro Infrastructure Programme: Overall performance under the programme was poor and the progress of work was slow especially for Karuma HPP whose completion date remained unclear.

On the Isimba HPP, correction of pending defects under the Defects Liability Period (DLP) was in advanced stages and the generation plant continued to supply power to the national grid. Construction of the public bridge at Isimba was completed at the end of December 2020, after which the Uganda National Roads Authority (UNRA) undertook the necessary technical tests on the bridge structure. Implementation of the Community Development Action Plan (CDAP) activities in the Isimba community was completed for the selected schools and health centres in Kamuli and Kayunga. The handover of the completed infrastructure to the beneficiary communities was undertaken by Uganda Electricity Generation Company Limited (UEGCL).

The overall progress of Karuma HPP was estimated at 98.7% by the end of December 2020. The project's financial disbursement stood at 93.9% which translated to US\$1,302,706,631



by 31st December 2020. Civil works at the dam intake, tailrace tunnel, surge chamber were completed with the only major pending works being reinstallation of the damaged floating boom. Works in the switchyard were completed and installation of the protective guard rails was being undertaken throughout the project site. 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 progressing. However, several defects notably with electrical and hydro-mechanical installations were identified by the Owners Engineer and fixing of these snags was going to further delay the planned commissioning of the project.

The works at the Nyagak III Project continued during half of FY 2020/21 and progress was curtailed by the low release of funds by the Government of Uganda (GoU), and a delay in securing loan financing by the private partners. Notable achievements at the project site included completion of the dam access road, and excavation at the dam location, plus the commencement of excavation works for the water pipe conduit. The Nyagak III project was mainly hindered by GoU failure to meet its financial obligations as per the signed PPP.

Petroleum Exploration, development and production programme: The programme performance was generally poor. A total of about 60 line kilometres of geophysical data and 300 sq. km of geological and geochemical mapping were acquired in Moroto-Kadam. The second licensing round for five (5) blocks (Aviv, Omuka, Ngaji, Kasurubani, and Turaco) was ongoing and bids were being received. On the Refinery Development, the Lead Investor, M/s Albertine Graben Refinery Consortium (AGRC) continued with the Front End Engineering Design (FEED) studies for the Oil Refinery Project. The planned completion date for the FEED study is June 2021. Additionally, a review of the valuation reports for compensation of the refined products pipeline corridor was ongoing by the Chief Government Valuer (CGV).

The construction of phase-three of the National Petroleum Data Repository, laboratories and offices for the Directorate of Petroleum, and Petroleum Authority of Uganda (PAU) was progressing very slowly with completion at 90%. The construction is overdue by two years.

Mineral Exploration, Development and Value Addition Programme: The programme performance was fair. To improve regulation in the mining sector, the Mining and Minerals Bill was prepared and awaited presentation to Cabinet, while reviews of the Mining Regulations, 2004 and the Regulation for Minerals Certification were ongoing. Under the same programme, a total of 7,663 Artisanal Small Scale Miners (ASMS) in Mubende, Ntungamo, Isingiro, Busia, Namayingo and Karamoja were mapped, profiled and trained in health and safety.

To decentralise regulation of the sector, construction works for the mineral beneficiation centres in Ntungamo and Fort Portal were ongoing. The works at Ntungamo Centre were at 80% progress with roofing completed and installation of electrical and plumbing fittings ongoing. Works at the Fort Portal Centre were lagging at 50% completion, and the main block yet to be roofed.

Under the Mineral Laboratories Equipping and Systems Development Project, the Mining



and Minerals Bill for the establishment of an Accredited Laboratory was presented to Cabinet. Procurement of the drilling rig was concluded, but procurement of other laboratory equipment was behind schedule despite funds being available.

The major challenge noted under the programme was the slow pace of procurement which left most of the funds unspent by the first half of the FY.

Rural Electrification Programme: The performance of the programme was fair and a total of 2,105.2km of low voltage, 1,358.5km of medium voltage were completed by 31st December 2020 with only 9,186 new connections made.

Under Islamic Development Funding, works under IDB II Lot 3a (Katakwi, Agago, Lira, Pader, Dokolo, Kitgum, Kole, Apac, Tororo) and IDB II Lot 3b (Kabale, Kisoro, Kanungu, Rukungiri, Ntungamo, Ibanda, Isingiro, Mbarara, Mitooma, Kyenjojo, Kabarole, Kamwenge, Rubirizi), as well as schemes under IDB III(Lots 1 to 6) in the different regions countrywide, were completed, commissioned and handed to the respective service providers and were now under DLP. Furthermore, some works under IDB I in the Karamoja region in the districts of Amudat and Nakapiripirit were completed, while works in the remaining districts were also nearing completion.

Under the Government of Uganda funding - Lots 1 to 8 had progressed slowly at 55% and pole erection was ongoing in most districts countrywide. The major delay was due to the COVID-19 outbreak which slowed the carrying out of Factory Acceptance Tests (fats) for key equipment. This meant that the shipping of materials such as transformers and conductors did not proceed in time.

Construction works for the ERT III fast-tracked lines were ongoing and schemes in Mubende were completed and commissioned. Also, pole erection works in the West Nile region in the districts of Arua, Yumbe and Moyo were ongoing. Works under the Energy for Rural Transformation (ERT III) Lots 1-3 in areas of Masaka, Rakai, Mukono, Gomba, Butambala, Kibaale Kagadi, Kamwenge, Rwampara, Ntungamo, Rukungiri, Kanungu, Ibanda, Ntoroko and Soroti had commenced with surveying and pegging.

Under the Kuwait Fund, projects in the districts of Nebbi, Kiryandongo and Kibaale were nearing completion at 95%, while the schemes in the South-Western region (Kasese, Bushenyi, Rukungiri, Mitooma) were under pole erection due to delay in acquisition of transformers and stringing materials.

Under the Uganda Rural Electrification Access Project (UREAP), works in Nakasongola were nearing completion with some schemes being completed and commissioned, while works in Iganga, Luuka, Bugweri, Gulu, Nwoya and Luwero were progressing at 50%. The design review for the marine cable works to extend the grid to Kalangala Island was ongoing.

Under bridging the demand gap through the Accelerated Rural Electrification Programme (TBEA) project financed by China Exim Bank, constructions work for TBEA Phases I to

VI started during the FY in 60 out of the planned 106 districts. Transformer installations and stringing were completed for some schemes in Kibaale, Kakumiro, Isingiro, Lyantonde, Lwengo, Bukomansimbi, Mityana, Mubende, Kumi, Bukedea, Butaleja, Budaka and Tororo.

The performance of new connections for customers to the existing grid remained low due to the suspension of the implementation of the Electricity Connection Policy (ECP). The Rural Electrification Agency was in the process of securing funds for procurement of materials to resume the new connections.

Persistent challenges

- The increased level of vandalism of completed electricity infrastructure (transformers, conductors, towers) is driving up the cost of ongoing projects.
- Delays in the completion of technical and design changes hinder the timely implementation of REA and UETCL projects.
- Delayed land acquisition continues to plague the implementation of transmission projects, and this is further aggravated by the limited capacity of the Chief Government Valuer's Office.
- Low prioritisation of funding for the new connections is perpetuating the low access to electricity, especially in the rural areas even after the construction of many new lines.

Recommendations

- Project implementing agencies should engage the security agencies and mobilize local leadership to curb the increasing trend of vandalism of electricity infrastructure.
- Parliament needs to revisit the law regarding how land acquisition for Government funded projects should be undertaken to prevent the persistent occurrence of the Government failing to make use of borrowed funds,
- Prioritisation of allocation of funding for the new electricity connections to avoid overreliance on the development partners.



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 remain 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 the 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 third, fourth and fifth objectives of the National Development Plan III (NDP III): Consolidate and increase stock and quality of Productive Infrastructure; enhance the productivity and social wellbeing of the population and Strengthen the role of the State in development. The contribution of the sector to the NDP III objectives is done through the pursuance of the sector outcomes. These are,

- a) Increased access to affordable and efficient sources of energy
- 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, the sector continues to focus on the key priority areas; these are:

- 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 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 sector. The selection of areas to monitor is based on several criteria:

- Significance of the budget allocations to the votes within the sector budgets, with the focus being on large expenditure programmes. Preference is given to development expenditure, although some recurrent costs are tracked.
- The programmes that had submitted Q2 progress reports for FY2020/21 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 14 projects implemented by the Ministry of Energy and Mineral Development (MEMD) and five projects by the Rural Electrification Agency (REA). New projects where the procurement of contractors and consultants was ongoing were not monitored. Annex 1 shows the monitored projects and the respective locations visited.

2.2 Methodology

The 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 physically verifiable monitoring outputs. In some instances, multi-stage sampling was undertaken at three levels: i) Sector programmes ii) Local governments and iii) Project beneficiaries.

Outputs to be monitored are selected so that as much of the 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 FY2020/21; 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.



CHAPTER 3: SECTOR PERFORMANCE

3.1 Overall Sector Performance

3.1.1 Financial Performance

The overall sector performance was fair at 53.1%. The approved sector budget totaled up to UGX 2,564.26 Billion (MEMD-UGX 1,827.81Bn, REA-UGX 674.72Bn, PAU-UGX 61.73Bn). The sector budget release was at 31.69% of the total budget released by half of FY 20120/21 was poor.

The Uganda National Oil Company (UNOC) previously under the Energy Sector was transferred as a subvention under the Ministry of Finance, Planning and Economic Development (MFPED). The budget release was fair for GoU funding but was negatively affected by the low disbursement on the externally funded projects, mainly due to the slow progress of works on the transmission and generation projects.

Vote	Approved budget (Bn Ug. Shs)	Release (Bn Ug. Shs)	Expenditure (Bn Ug. Shs)	% Budget released	% Budget spent
MEMD	1,827.81	362.05	333.49	19.8	18.2
REA	674.72	423.11	231.59	62.7	34.3
PAU	61.73	27.37	22.75	44.3	36.9
TOTAL	2,564.26	812.53	587.83	31.69	72.35

Table 3.1: Energy and Minerals Sector Financial Performance by 31st December 2020

Source: Approved Budget Estimates and Q2 reports FY2020/21

3.1.2 Scope

The chapter presents the annual financial and physical performance of selected energy and minerals sub-programmes in FY 2020/21 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 19 projects were monitored, and these included 14 projects implemented by MEMD and five projects under REA. There was no development component in the budgets for Vote 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 Half-Year FY 2020/21

Project Code and Name	Location/ Areas visited			
Vote 017: Ministry of Energy and Mineral Development				
0301 Energy Planning, Management and Infrastructure Development Program	nme			
Kampala-Entebbe Expansion Project (Project 1259)	Wakiso, Kampala			
Karuma Interconnection Project (Project 1025)	Nakasongola, Kiryandongo, Lira, Nwoya			
Mbarara- Nkenda/Tororo-Lira (Project: 1137)	Tororo, Kumi, Lira			
Electrification of Industrial Parks(Project 1222)	Wakiso, Kampala			
Opuyo-Moroto Transmission project(Project 1221)	Moroto, Soroti			
0302 Large Hydropower Infrastructure Programme				
Isimba Hydropower Plant (Project 1143)	Kayunga, Kamuli			
Karuma Hydropower Plant (Project 1183)	Kiryandongo, Nwoya			
Nyagak Hydropower Plant (Project 1351)	Zombo			
0303 Petroleum Exploration, Development Production, Value Addition and Dis	stribution programme			
Strengthening the Development and Production Phases of the Oil and Gas Sector (Project: 1355)	Entebbe			
Petroleum Exploration and Promotion Frontier Basins (Project: 1611)	Entebbe			
0305 Mineral Exploration, Development and Production Programme				
Mineral Wealth and Mining Infrastructure Development (Project: 1353)	Entebbe, Ntungamo, Kabarole			
Minerals Laboratories Equipping and Systems Development(Project: 1505)	Entebbe			
Design, Construction and Installation of Uganda National Infrasound Network DCIIN (Project: 1392)	/ Entebbe			
Airborne Geophysical Survey and Geological Mapping of Karamoja (Project: 1542)	Entebbe			
Vote 123: Rural Electrification Agency	·			
03 51 Rural Electrification Programme				
Rural Electrification (Project:1262)	Buyende, Luuka, Bugweri, Mbale, Butaleja Kimi, Bukedea, Iganga, Mbarara, Bushenyi			
Energy for Rural Transformation- ERT III (Project 1428)	Mitooma, Rubirizi, Kyenjojo, Kabarole, Sheema, Masaka, Buikwe, Kabarole Kamuli,			
Grid Electrification Project IDB I (Project 1354)	Bugweri, Iganga, Buyende, Kyenjojo,			
Bridging the Demand Through the Accelerated Rural Electrification-TBEA (Project:1517)	Kibaale, Kabarole, Kasese, Kisoro, Masindi, Moroto, Nakapiripirit, Lira, Oyam,			
Uganda Rural Electricity Access Project-UREAP (Project:1518)	Bukedea, Kumi, Budaka, Manafwa, Mbale, Namisindwa, Luuka, Iganga, Mpigi, Kiboga, Kyankwanzi, Nakaseke, Luwero.			

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 five programmes of which four were monitored. The programmes which were monitored include Energy Planning, Management and Infrastructure Development; Large Power Infrastructure; Mineral Exploration Development and Production and Petroleum Exploration, Development and Production.



MEMD Financial Performance

Overall vote budget release performance was poor at 19.9% by end of December 2020. The GoU release was 59.2% and the externally funded release stood at 9.8% of the budget which was all spent. Reasons for the low release were the low disbursement on the externally funded projects such as the transmission lines and Karuma HPP due to delayed works. (Details in table 3.3).

		Approved Budget	Released by End Q2	Spent by End Q2	% Budget Released	% Budget Spent	% Releases Spent
Recurrent	Wage	6.225	3.112	2.628	50.0	42.2	84.4
	Non-Wage	70.358	41.112	39.475	58.4	56.1	96.0
D /	GoU.	293.779	175.044	148.615	59.6	50.6	84.9
Devt.	Ext. Fin.	1,457.448	142.776	142.776	9.8	9.8	100.0
GoU Total		370.361	219.269	190.718	59.2	51.5	87.0
Total GoU+Ext Fin (MTEF)		1,827.810	362.045	333.494	19.8	18.2	92.1
Arrears		1.183	1.183	0.069	100.0	5.9	5.9
Total Budget		1,828.993	363.228	333.563	19.9	18.2	91.8
A.I.A Total		0	0	0	0.0	0.0	0.0
Grand Tota	al	1,828.993	363.228	333.563	19.9	18.2	91.8

 Table 3.3: MEMD Financial Performance by 31st December 2021

Source: MEMD Performance Report Q2 FY2020/21

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 35.7% of the Vote budget for FY2020/21. 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 substations are under implementation in various parts of the country in line with plans to increase electricity generation, transmission capacity and energy access. The GoU and Development Partners (World Bank, AfDB, IDB, AFD, JICA, KfW, China EXIM Bank) are jointly funding projects in this sector.



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

The Government of Uganda (GoU) under the Ministry of Energy and Mineral Development (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 a loan of EUR 15 million. The project seeks to provide transmission capacity to supply reliable and quality power to Entebbe town and its environments.

The project consists of the construction of a new double-circuit 132kV transmission line from the existing Mutundwe Substation to a new one in Entebbe. The project scope also involves an 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 22.11 Bn (GoU- UGX 2 Bn and KfW-UGX 20.11 Bn). The project received UGX 1.920 Bn counterpart funding and the disbursement on the KfW funding (loan and grant) by end of December 2020 was UGX5.32 Bn.

Physical performance

The sub-programme performance was poor and all the works are behind schedule. The civil works at Mutundwe and Entebbe substation were still ongoing. The plant house and communication house at Mutundwe was roofed and the equipment foundations had been completed. Roofing of the plant house and communication building at Entebbe substation was completed and all the equipment erection had been completed.

The works on the transmission lines were on-going slowly and 57 out of the planned 74 tower foundations had been completed. Of the completed foundations, 36 towers had been erected. Works on the T-line have been slowed down by the difficulty in accessing the line route in Nambigirwa wetland. The redesign proposal for the towers in the swamp was under review by Uganda Electricity Transmission Company Limited (UETCL). Other line locations continue to be affected by Right of Way (ROW).

Resettlement Action Plan (RAP)

Paid transactions were 840 (79.1%) of the 1052 transactions required for the 23.6km corridor. The RAP implementation for the project did not progress. Some of the approved payments were nullified and the other cases were awaiting the revaluation report from the Chief Government Valuer (CGV). The report received and disclosure to the affected Project Affected Persons (PAPs) was to commence. The RAP implementation has been set back by the delay in procurement of a dedicated consultant to handle the issues that are arising. The delayed RAP is combining with other factors to delay the works on the project. The progression of the RAP implementation is presented in table 3.4.

Q1 FY2	2020/21	Q2 FY2020/21					
Coverage	%	Coverage	%				
1,052	100	1,052	100				
947	93	947	92.8				
915	88	915	87.7				
55	5	32	5.2				
820	79	820	79.1				
	Coverage 1,052 947 915 55	1,052 100 947 93 915 88 55 5	Coverage%Coverage1,0521001,052947939479158891555532				

Table 3.4: Status of RAP for Kampala-Entebbe Transmission Expansion Project by 31st December, 2021

Source: UETCL; Field findings

Project challenges

- The COVID-19 outbreak significantly hindered works on the project, and when they resumed in May 2020, it was at reduced capacity.
- 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.
- There was significant delay in payment of the project contractors. No contractor invoice was paid except the advance payments made to the contractor at the end of the project.



L-R: Ongoing civil and electromechnical works at Mutundwe substation; Completed tower and access road at Kitovu Village

3.2.2. Sub-Programme 1025: Karuma Interconnection Project

The project is funded jointly by Government of Uganda and a loan from Export and Import (EXIM) Bank of China. The total funding for this project 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 the FY 2020/21, however UETCL continued to undertake compensation of PAPs using funds in the RAP Escrow account. Funding for the EPC works under the project is budgeted under Karuma Hydropower Project. By the end of Q2 FY 2020/21, the project had disbursed a cumulative total of US\$224,524,020 (77.4%) of the contract price of US\$289,905,220. During the FY UGX 4.08bn was spent on compensation from the RAP Escrow account.

Physical performance

The sub-programme performance was fair. On the Karuma-Kawanda transmission segment overall progress was at 99% progress, with all the 639 towers completed. Stringing of 245.5km of the 248km transmission line was completed. The works on the Karuma-Olwiyo line were also advanced with all 154 towers completed and 54.14km of the planned 54.25km line stringing completed.

The Karuma-Lira T-line works were heavily delayed by RoW with 17 tower spots affected by ongoing court cases. The contractor demobilised from this section of the project and no progress was registered during the FY. The status of the works remained at 222 of the 246 towers erected and 15.23km of the planned 76km of stringing completed.



Works had progressed well on all the substations and the works done are as follows:

- *Karuma substation:* 98% of the works were complete, so were the civil and electromechanical works in the substation, and pre-commissioning of the equipment.
- *Kawanda substation:* Overall progress was at 98% with civil and electro-mechanical works completed, plus pre-commissioning testing of the equipment
- *Olwiyo substation:* Overall progress was at 90%. Construction of equipment foundations was complete, so was erection of equipment in the switchyard, while cabling was ongoing and the control building was at 96% completion.
- *Lira substation:* Completion was at 95% and all equipment erected. Precommisioning of equipment was yet to commence.

Resettlement Action Plan (RAP)

Total cash payments during the FY 2020/21 were UGX4.8bn with 89% of the PAPs paid on the Karuma-Lira section, and 85% on Kawanda-Karuma section. Fifty resettlement houses will be constructed by the project. All resettlement houses on the Karuma-Lira-Olwiyo section of the project were completed, while the Karuma-Kawanda section was left with three houses. 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			
	Q1 FY2020/21 Q2 FY2020/21			Q1 FY202	0/21	Q2 FY2020/21		
	Coverage %		Coverage	%	Coverage	%	Coverage	%
Total Transactions	1,231	100%	1,231	100	2,993	100	3,016	100
Number Disclosed to	1,178	96	1,183	96	2,750	92	2,786	92.4
Agreements	1,114	90	1,124	90	2,670	89	2,715	90
Number of Households Paid	1,092	89	1,103	89	2,559	85	2,591	85.9
Compensation disputes	64	5	59	5	80	3	71	2.4

Table 3.5: Status of RAP for Karuma Interconnection as at 31st December 2020

Source: UETCL; Field findings

Project challenge

• Continued vandalism of completed structures on the transmission line has increased the cost of the project. Procurement of the replacement parts for the towers is being undertaken.

Recommendation

• The UETCL should liaise with local authorities and area security officials to implement a comprehensive strategy to prevent further vandalism and theft of project materials.



L-R: On-going elcteromechanical works a t the 400kV Olwiyo substation; Completed sections of the Olwiyo-Karuma T-line

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

The objective of the project is to evacuate electricity from upcoming power plants and to 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) 52.51 Million from AfDB and UGX81.917bn 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
- b) 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
- c) Reactive Power Compensation
- The installation of 15MVAR, 132kV Reactor at Opuyo Substation and 15MVAR, 132kV Reactor at Nkenda Substation.

Sub-Programme Performance

Financial Performance

No GoU counterpart funds were budgeted for the project during the FY because the funding was frontloaded during FY2019/20 after the loan funding expired and was not renewed.



Physical performance

The only pending component of this project was the construction of the Tororo-Opuyo- Lira Transmission Line and overall performance was poor. However the project managed to energise the section from Opuyo substation to AP 14 in Tororo leaving an incomplete section of 35km to Tororo substation. Overall, 682 of the 724 planned towers on the line were completed, and 228.2km of the 263km line was strung. Completion of the remaining 35km was hampered by the court injunction in the Tororo area.

Resettlement Action Plan

The cash compensation progressed slowly during the FY but the CGVs 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.

	Q1 FY2	20/21	Q2 FY20/21		
	Total Number	(%)	Total Number	(%)	
Total Number of Project Affected Households	4,683	100	4,684	100	
Number Disclosed to	4,515	96	4,515	96	
Agreements	4,473	96	4,474	95	
Number of households paid	4,399	94	4,400	94	
Compensation Disputes	42	1	41	4	

Table 3.6: Performance of Cash Compensations as at 31st December 2020

Source: UETCL; Field Findings

Challenges

- The slow implementation of the RAP process continued to affect the contractor's ability to undertake the remaining works on the project. The court case by 14 PAPs in Tororo where an injunction was issued against the project was yet to be resolved although the court appointed consultant had prepared his report and presented findings to UETCL Management for further action.
- The continued vandalism of existing tower structures was affecting the progress of the project and will take time to order the replacement tower parts. This is driving up the cost of the project.

Recommendation

• The security agencies and local leadership in the districts traversed by the line should be continuously engaged by UETCL management to ensure that the project materials are protected from rampant vandalism.



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 indentified industrial parks will need reliable power supply and thus the need for projects undertake this. The project Engineering, Procurement and Construction (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 objective of the project is provision of adequate transmission capacity to cater for the projected demand from within the industrial areas. The project 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

There were no funds budgeted for the project in this FY because all the funds were released to the contractor in the previous FY against a guarantee because the loan would expire on 20th April 2020.

Physical performance

The project performance during FY 2020/21 was poor. The project managed to complete and commission the Namanve South-Namanve North transmission segment. The remaining component of the project is the Namanve South – Luzira transmission segment where the progress of works had previously been delayed by RoW issues which were resolved. Geotechnical studies were ongoing and one tower foundation out of the planned 58 was completed. The progress of the works was affected by the rise in the water levels in the Luzira wetland section of the line corridor.

Status of RAP implementation as at 31st December 2020

The Luzira court case that affected line works was resolved when court directed UGX28.852bn into an Escrow account. However, the rate of compensation still remained very low due to undisclosed cases and other court injunctions. The RAP implementation for the PAPs in the transmission line corridor is summarised in table 3.7.



	Q1 FY2	020/21	Q2 FY2020/21		
	Total No.	(%)	Total No.	(%)	
Total Number of PAPs	707	100	709	100	
Number Disclosed to	486	69	486	69	
Agreements	471	67	472	67	
No. of Households Paid	416	59	418	59	
Compensation Disputes	15	2	14	2	

Table 3.7: RAP Progress for Electrification of Industrial Parks as at 31st December 2020

Source: UETCL and Field findings

Challenge

The water levels in the Luzira wetland are very high and this is affecting the progress of the ongoing works and soil investigation tests for the tower spots



L-R: Completed and commissioned Namanve South substation; Completed Namanve South-Namanve North transmission line

3.2.5. Sub-Programme 1221 Opuyo-Moroto Interconnection project

The Government of Uganda (GoU) received funding from the Islamic Development Bank (US\$ 80.62m) towards the implementation of the Opuyo-Moroto Interconnection Project. The project is aimed at extending power to the Karamoja region to supply townships, settlements and the proposed cement factory in Moroto and the surrounding areas. The project consists of the following components:

- Construction of a 160km, 132kV double circuit transmission line on steel monopole structures from Opuyo 132/33kV substation to the proposed new 132/33kV Moroto substation
- Construction of the proposed new 132/33kV 2X32/40 MVA Substation at Moroto
- Addition of two (2) new 132kV line feeders at Opuyo 132/33kV Substation

Sub-programme Performance

Financial performance

The project financial performance was good. The project budget was UGX21.19bn (UGX19.19bn from IDB and UGX2.0bn from GoU) and it had spent UGX19.7.99bn (GoU-UGX 1.8bn and IDB –UGX17.9bn) by half year.

Physical performance

Overall physical works progressed well and the 160km Moroto-Opuyo Transmission Line was completed pending commissioning. Works on Moroto substation were at 90%, and Opuyo substation were at 85%.

Resettlement Action Plan (RAP)

The project was in the final stages of resettlement of PAPs, by half year the payments stood at 96%. The detailed summary of the RAP progress is indicated in table 3.8.

Table 3.8: Summary of the Resettlement Action Plan for the Opuyo-Moroto Interconnection Project

	Q1 FY	2020/21	Q2 FY 2020/21		
	No.	No. % coverage		% coverage	
Total number of PAPs	1,355	100	1,355	100	
Disclosures	1,312	97	1,325	99	
Agreements obtained	1,302	96	1,317	99	
Disputes	10	1	8	1	
Payments	1,277	94	1,279	96	
Outstanding Disclosures	43	3	30	1	

Source: UETCL; Field findings

Challenge

• The contractor has not effectively deployed resources for the substations works which are behind schedule.

Overall Programme Performance

Overall performance Energy Planning, Management and Infrastructure Development Programme was poor at 46.1% by 31st December, 2020 (table 3.9). Final works on the Karuma-Kawanda and Karuma-Olwiyo T-Lines under the Karuma Interconnection were being undertaken. The substations at Kawanda and Karuma were at precommisioning and works at Olwiyo substation had also progressed well. The Opuyo-Tororo Line was completed and works on the substations were at over 85% completion. The remaining works for the Electrification of Industrial Parks progressed very slowly on the Namanve-Luzira T-Line. Works on the Kampala-Entebbe Expansion Project progressed slowly due to RoW and financial challenges faced by the

contractor. Works on the Lira-Tororo T-line and Bujagali-Tororo progressed very slowly due to RoW challenges in the line corridor. The remaining works on the new Mbarara North, Tororo and Mirama substations were not completed, while the Masaka-Mbarara, Mirama-Kabale transmission projects had not commenced works yet.

Table 3.9: Performance of the Energy Planning,	Management	and	Infrastructure
Development Programme by 31st December, 2020			

Sub-programme	Output	Annual	Cum.	Physical	Remarks
		Budget (Bn Ug.Shs)	Receipt (Bn Ug.Shs)	performance Score (%)	
Kampala-Entebbe Expansion Project	Construction of the Entebbe Kampala 132kV transmission line and associated substations	20	20	9.16	Works on the plant house at Entebbe were at roofing level and all equipment was erected, including power transformers. Plant house at Mutundwe Substation was almost completed and excavation for earthing was ongoing.
	RAP Implementation and monitoring of works	2	2	0.12	78% of the PAPs were compensated which is a 6% increase during the first half of the FY2020/21.
Mbarara-Nkenda/ Tororo Lira Transmission Line	Implementation of Resettlement Action Plan for Tororo-Lira T-Line	1	1	0.00	The percentage of the PAPs paid on the Tororo-Lira T-line only improved by 1% to 94%.
	Tororo-Lira transmission line and substations	13	13	3.04	682 out of 724 towers were completed and stringing of 228.2km of the 263km was done.
Electrification of Industrial Parks	Construction of Namanve South, Luzira, Mukono and Iganga industrial park substations and associated transmission lines	-	-	0.00	Works on the Namanve South-Namanve North t-line were completed. Works on the Namanve Luzira T-Line commenced and one tower foundation were completed. Works currently delayed due to increased water levels in the wetland.
	RAP Implementation and supervision of works	-	-	0.00	The court case affecting the Namanve-Luzira Tline was resolved and works commenced. One tower foundation was complete.



Sub-programme	Output	Annual Budget (Bn Ug.Shs)	Cum. Receipt (Bn Ug.Shs)	Physical performance Score (%)	Remarks
Karuma Interconnection Project	RAP Implementation	4	4	1.87	Payments were at 89.9% for the Karuma-Lira Line and there was a pending court case in Lira which has affected the RAP. The compensation on the Karuma-Kawanda T-Line was at 85.9%.
	Construction of Karuma-Kawanda, Karuma- Olwiyo,Karuma- Lira transmission lines and associated substations	25	25	17.35	Substation works: Works were completed at Kawanda, Karuma, Lira, while those at Olwiyo were advanced. The completed substations were pre-commissioned. <u>T-Lines:</u> The Karuma- Kawanda and Karuma- Olwiyo lines were almost complete at 95%. The Karuma-Lira T-Line works were behind schedule due to difficulty in acquiring RoW.
Opuyo-Moroto transmission project	Construction of the Opuyo-Moroto transmission line and associated substations	19	19	13.47	The Moroto-Opuyo T-Line was completed. The substation works remained pending at 90% and 85% respectively for Moroto and Opuyo substations.
	RAP implementation	2	2	1.40	Payments were at 96%. Only 2% progress during half of the FY.
Programme Perform	ance (Outputs) %			46.41	Poor performance

Source: IFM	IS, UETCL,	MEMD 02 Re	ports FY 2020/21,	Field Findings
	-~,,	2	p • • • • • • • • • • • • • • • • • • •	

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 of this programme was 54.5% of the total vote budget. Sub-programmes monitored for the financial year 2020/21 were Isimba Hydropower Project, Karuma Hydropower Project and Nyagak III Hydropower Project.

3.2.6. Sub-Programme 1143: Isimba Hydroelectricity Power

Background

The project is an 183MW hydropower plant funded jointly by loan from China EXIM Bank (85%) and GoU (15%). The contract was signed in September 2013 at a sum of 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 certificate interim payments up to IPC #19 were US\$525,267,122.71 by 31st December 2020. GoU funding for supervision, Community Development Action Plan CDAP and RAP was UGX11.5bn of the budgeted UGX18.93bn released to MEMD and UEGCL.

Physical Performance

Overall performance of the project was good. Overall progress of the works was at 99.9% for the hydropower plant. Fixing of snags continued during the FY2020/21 with 742 of the 775 identified snags rectified. However the following issue, 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 during the FY 2020/21. The bridge and its access road were completed and the project commissioned in December 2020. It is currently being monitored under the defects liability period.

Community Development Action Plan

Works for the CDAP activities for the selected schools and health centers¹ was completed and the projects commissioned during the FY. The status of the remaining components under CDAP is summarised in table 3.10.

Busaana Secondary School, St. Andrews Primary School-Kiyunga, Lwanyama Technical Institute, Nakandwa Primary School, Nakatooke Primary School, Nakatooke Primary School, Busaana HC III, Namusala HC II, Bukamba HC II, Mbulamuti HC III, Nakanduro HC IV, Buluya HC II



No.	Activity	Procurement Status
1.	Electricity grid extension and reticulation project in Kisozi, Magogo and Mbulamuti Sub counties, Kamuli District; Busaana and Nazigo in Kayunga District	Evaluation ongoing, clarifications sought from bidders. Expected to be completed in November 2020.
2.	Borehole drilling	Contract signed, contractor taken to site. Works expected to commence in November 2020.
3.	Construction of Multipurpose block at St. Peter's Kibuzi SS	Designs and BoQs approved by UEGCL and tendering launched New cost at 6,100,000,000. Tenders were issued and bids were received by UEGCL. Evaluation was scheduled for January 2020.
4.	Buzaaya Secondary School buildings	This is one of the unfunded priorities for FY 2020/21. Designs and BoQs delivered by the consultant. Procurement of a contractor is subject to availability of funds for FY 2020/21.
5	Consultant costs-design of infrastructure, supervision of works -Kibuzi SS buildings, Buzaaya SS buildings	Contract awarded and signed for design reviews. Additional funds required to procure a consultant for construction supervision.
6.	Consultant costs: Electrification and water supply	REA was engaged to support completion of designs, tendering process and project supervision.
7.	Contractor for water supply system- Kamuli District	Designs were submitted to the Ministry of Water and Environment (MWE) for approval. A formal request was placed requesting for procurement and implementation support as well.
		Borehole required for Kamuli side as part of the design; Contractor procurement subject to availability of funds
8.	Equipping Lwanyama Technical College, Buzaaya and Kibuzi Secondary School	Supplier procurement subject to availability of funds; Request for specifications sent to Minsitry of Education and Sports.
9.	Tourism Centre	Preliminary design provided by Consultant; Contractor procurement is subject to availability of funds
10.	Agriculture and fisheries - skills, technologies, tools, landing sites, fishing gear	Non-consultancy services procurement did nit commence due to lack of funds
11.	Tree planting Phase 1	Evaluation of bids completed.
12.	Tree Planting Phase 2-reservoir tree planting taken from O and M budget	Planting of up to 20,000 seedlings received from NFA completed. Trees now under maintenance for the next 6 months to ensure establishment.

Table 3.10: Status of remaining CDAP components under Isimba HPP

Source: UEGCL; Field findings

Challenges

- There is uncertainty in the release of funds to undertake the remaining CDAP interventions which is affecting planning by the UEGCL team.
- The facilities for the Operations and Maintenance staff at Isimba HPP are inadequate to accommodate the number of staff required for the smooth operation of the power plant.



Completed public access road and bridge at Isimba HPP

3.2.7. Sub-Programme 1183: Karuma Hydroelectricity Power

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 Sino Hydro 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 - 15%.

Sub-Programme Performance

Financial Performance

By 31st December 2020, the gross certified payments were at 93.09% of the total contract amount (US\$ 1,302,706,631 out of US\$1,399,343,321) including amount of fully recovered advance payment. The budgeted GoU amount was UGX29.0bn and by half year FY 2020/21, UGX14.9bn was released to the project for supervision, RAP, CDAP and construction of the workers camp.

Physical performance

The overall physical performance of the project was poor. Progress of works was estimated at 98.70% at half year 2020/21 compared 97.83% at the end of FY 2019/20, which represented a change of only 0.9%. Time progress was 84 months of the original 60 months' contract duration with the planned completion date of 30th November 2020. The project is now delayed by 24 months according to the original time schedule. Most of the civil, electromechanical and hydro mechanical works were completed but there are very many defects and no-conformities in

the completed works that the project needs another 18 months to rectify. The summary of the progress of the ongoing works are as follows:

Dam & Intake Area

Installation of handrails and guardrails at the Dam and Intake El.1032 was underway. Installation of handrails, installation of access to the trunnion platforms, and external finishing works for the hoist rooms were also being undertaken. Final decoration works, including roof insulation, coping for the parapet walls at the roof, floor tiling and door and window installation completed for the diesel generator, switching and hoist rooms. Repairing works on external plaster were completed including external painting. The new design for the floating boom was submitted and under review but debris from the damaged one was yet to be retrieved from the reservoir bed.

Tail Basin Tunnel (TBT) and Head Race Tunnel (HRT)

Civil construction works within the Headrace Tunnels were completed, awaiting water filling ahead of wet commissioning of Units 3# and 2#. Drainage construction around the operation room of the dewatering system was 92.8% completed. Concrete railing around the outfall pool was completed. Construction of protective railings on top of the outfall slope had commenced.

Powerhouse

Installation of roof liner in the Main Powerhouse resumed, and majority of works were completed. Handrail installation works were underway at Main Power House & Auxiliary Power House staircases and Erection Bay Staircase. Placement of granite tiles around the hatch cover openings at the machine hall floor was underway. Installation of wall cladding between crane beams and beams for the support of the roof truss was ongoing.

Main Transformer Cavern

Repair for defective plaster works, along with application of putty and painting works were ongoing at different locations of the Main Transformer Cavern.

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, visitor's centre, and canteen) and the contractors were completing the correction of snags. Works on the roads and storm water disposal, water supply system and waste water disposal system were ongoing. The works on the electric power supply distribution and landscaping were yet to commence.

Resettlement Action Plan (RAP) and Community Action Development Plan (CDAP)

The Resettlement Action Plan was ongoing, payment for PAPs was at 98%. Resettlement of vulnerable PAPs in Lapono Village, Nwoya District was ongoing and the land was acquired for construction of houses. An interim report was submitted by the consultant and plans for



conducting an Environment and Social Impact Assessment (ESIA) were underway pending submission of Terms of References (ToRs) to National Environment Management Authority (NEMA) for approval.

Under CDAP, the procurement of a contractor to construct the education infrastructure was ongoing and the bidding process had commenced. One primary school from each of the three host districts was identified to benefit from this first phase. The facilities to be established at each school include; two classroom blocks, four teachers' housing units, and a five-stance drainable VIP latrine.

Challenges

- The slow progress of the CDAP due to lack of funding is creating negative sentiments among the leaders in the surrounding communities especially Kiryandongo.
- The project continues to face delays due to defective works by the contractor. The contractor continues to flout the agreed methodology and applicable standards in regards to installation of electrical and electromechanical equipment. Several defects and non-conformities were identified by the Owners Engineer and communicated to the contractor for his action.

Recommendations

- The release of funding for the Karuma CDAP should be prioritised. Commencement of the CDAP is behind schedule by over two years and local leadership should be kept updated on the progress and measures being undertaken.
- The Owners Engineer (OE), MEMD and UEGCL project management teams should be more vigilant to ensure that all the defective works undertaken by the contractor are identified and rectified as early as possible to prevent further delays to the completion of the project.



L-R: Installed guard rails at the Karuma HPP power intake; Raised water level at the Karuma Dam Intake



Ongoing finishing works on the hoists at the Karuma HPP

3.2.8. 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 for the FY is UGX12.9bn, of which UGX7.80bn was released by half year. UEGCL awaited clearance from the Solicitor General for the shareholding agreement between UEGCL and the private partner in order to begin disbursements to GENMAX Nyagak Limited.



Physical performance

The performance of the project was fair and there was reasonable progress with the works at the project site. Excavation works for the dam site and the access road to the dam were completed. Excavation work was ongoing for penstock (Pipe conduit). The river diversion was completed and slope protection for the excavated dam access road ongoing to prevent land and rock slides on the steep slope. Procurement of contractors for the hydro mechanical and eletromechanical works was ongoing.

Challenge

• The UEGCL was not able to provide its share of funding to the project because as it awaited clearance from Solicitor General (SG). This is affecting the progress of works since the private partner had already spent close to US\$5 million on the project.

Recommendation

• The UEGCL should closely follow up with SG office so that clearance can be obtained to enable disbursement of Government funds to the shareholding.



L-R: Slope protection works on dam access road; Completed excavated dam site

Overall Programme Performance

The overall performance of the programme was poor at 45.08% due to continued delay of the completion date for Karuma HPP works. The remaining works on the Isimba HPP which included the public access road and bridge were completed. Works on Nyagak III progressed slowly due to funding constraints. Works on the proposed Muzizi HPP had not commenced due to the delayed conclusion of procurement of the contractors.



Table 3.11: Performance of the Large Hydro Infrastructure Programme at 31st December2020

Sub-	Output	Annual	Cum.	Physical	Remark
programmes		Budget (Bn UGX)	Receipt (Bn UGX)	performance Score (%)	
Isimba HPP	Construction works at Isimba HPP and Bridge	165	165	0.00	All major works on the hydropower plant were completed. Rectification of defects was ongoing at 96%. Works on the Isimba Bridge were completed and it was commissioned.
	Supervision of works on Isimba HPP	7		4.15	The operation and running of the power plant was being monitored and the supervising consultant continues to monitor the correction of snags/ defects.
	Implementation of the CDAP and ESMP	100	6.61	2.73	CDAP activities were undertaken and all projects commissioned and handed over. The second phase of the CDAP which includes electrification of the surrounding communities, Kamuli water supply and equipping of Lwanyama Technical Institute was yet to commence.
Karuma HPP	Construction works on Karuma HPP	655	655	38.20	Overall progress at 98.7% but the project missed the planned completion date. Final finishing works were being undertaken and major civil works completed. However there were several defects identified with the electrical and electromechanical works that need to be corrected.
	Supervision of works on Karuma HPP	23	12	7.06	Supervision of works was ongoing.
	Implementation of the RAP, CDAP and ESMP	6	3	1.91	Procurement of a contractor to undertake the construction works at the three selected schools was underway.
Nyagak III HPP	Construction works on Nyagak HPP	10	6	6.39	Works progressed fairly and excavation of the dam site was completed. private partner awaited UEGCL financial contribution to the equity funding of the project.
	Supervision of works on Nyagak III HPP	2	1		Supervision consultants for both the private partner and UEGCL were on site.
	Implementation of RAP, ESMP	1	1	0.05	site were resolved.
Overall perfor	mance			45.08	Poor performance

Source: IFMS, UEGCL, MEMD Q2 Report, Field Findings



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 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*." It also 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, which took up 2.9% of the total sector budget for FY2020/21 comprises of the following sub-programmes; Strengthening the Development and Production Phases of Oil and Gas Sector (1355), Midstream Petroleum Infrastructure Development Project (1352), Skills for Oil and Gas Africa (1410), Construction of Oil Refinery (1184), Liquefied Petroleum Gas (LPG) Supply and Infrastructure Intervention (1610), and Petroleum Exploration and Promotion Frontier Basins (1611). The Strengthening the Development and Production Phases of Oil and Gas Sector (1355), and Petroleum Exploration and Promotion Frontier Basins (1611).

Under the programme, the Lead Investor, M/s Albertine Graben Refinery Consortium (AGRC) for the Oil Refinery continued with the Front End Engineering Design (FEED) studies scheduled for completion by June 2021. This will inform the Final Investment Decision (FID) of the Refinery Project.

On compensation of the corridor for the pipelines, a review of the valuation reports by the Chief Government Valuer (CGV) was ongoing.

3.2.9. 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 2020/21 is UGX10.53bn, of which UGX5.41bn (51.4%) was released and UGX 4.59bn spent by 31st December, 2020.



Physical Performance

The review for the Tilenga Reservoir Management Plan together with the petroleum reservoir reports for Kasamene–Wahirindi, Kigogole–Ngara and Nsoga production licenses was ongoing.

On policy formulation, the draft report on Regulatory Impact Assessment (RIA) for the National Oil and Gas Policy was being prepared by MEMD in consultation with the respective stake holders.

The RAP for the Tilenga development projects in Bullisa and the Kingfisher Central processing Facility in Hoima were at 98%.

The construction of phase-three of the National Petroleum and Repository, laboratories and offices for the Directorate of Petroleum, and the Petroleum Authority of Uganda (PAU) was ongoing with progress of construction works at 90%. On acquisition of laboratory equipment, one gravity meter was procured.

Challenge

• 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.

Recommendation

• The MEMD should follow up with Ministry of Public Service to fill the vacant positions in the Ministry structure urgently.



Phase three construction works for the new office building for the Petroleum Directorate and Petroleum Authority of Uganda (PAU)



3.2.10. Sub-Programme 1611: Petroleum Exploration and Promotion Frontier Basins

This sub-programme aims to establish petroleum resources in the frontier basins and the unexplored part of the Albertine Graben for sustainability of petroleum production and revenue generation through acquisition, processing, and interpretation of geological, geochemical, geophysical and speculative seismic data. The total budget for the sub programme is UGX101.2bn.

Performance

The budget for the sub-programme for the FY 2020/21 is UGX5bn, of which UGX2.44bn was released and UGX1.77bn spent.

About 60 line kilometers of geophysical data and 300 sq. km of geological and geochemical mapping was undertaken in the Moroto-Kadam basin. On licensing, four companies were qualified and issued with the required bidding documents. Evaluation of the five blocks (Aviv, Omuka, Ngaji, Kasurubani, and Turaco) commenced. On acquisition of software, the procurement to upgrade and maintain the petrel license had commenced but was not completed due to insufficient funds. Additionally several office equipment (20 desk top computers, 12 laptops, eight surface pros and 1 heavy duty photo copier) was acquired.

Overall Programme Performance

The overall performance for the programme was fair at 54.9% (table 3.12). The programme commenced evaluation of blocks in the second licensing round and continued establishing potential in the Moroto-Kadam basin through geophysical and geological data acquisition. Phase-three construction works for the building to house the Petroleum Directorate and PAU was at 90%, but still behind schedule. However compensation for the corridor for the crude oil and products pipelines had not started because it awaited approval of the valuation reports by the Chief Government Valuer (CGV).

Table 3.12: Performance of the Petroleum Exploration, Development, Production, Value Addition and Distribution of Petroleum Products Programme as at 31st December, 2020

	Output	Annual	Cum.	Physical	Remarks
		Budget (Billion Ug.Shs)	Receipt (Billion Ug.Shs)	performance Score (%)	
Sub-Programme 1355: Strengthening the Development and Production Phases of Oil and Gas Sector	Promotion of the countryls petroleum potential and licensing	1.180	0.308	7.71	Procurement of a consultant to undertake the feasibility study for National Petroleum Laboratory was underway. Compilation of the annual resources report for period 2019/20 was at 70%. The directorate reviewed the petroleum reservoir reports for Kasamene-Wahirindi, Kigogole-Ngara and Nsoga production licenses.
	Initiate and formulate petroleum policy and legislation	0.500	0.050	3.27	The draft report on Regulatory Impact Assessment (RIA) for the National Oil and Gas Policy was prepared.
	Capacity building for the oil and gas sector	4.400	2.583	18.11	Retention Allowance for 50 staff was paid.
	Monitoring upstream petroleum activities	0.200	0.099	0.92	The RAPs for Tilenga and Kingfisher were monitored for the sites for camps, pipelines and Central Processing Facility.
	Participate in Regional Initiatives	1.477	0.471	0.00	No regional sectorial committee meetings were held due to the pandemic and guidance on the country's preparations for EAPCE-21 awaited Cabinet approval.
	Government buildings and administrative infrastructure	0.580	0.580	1.89	Phase three construction works for the new office building for the Petroleum Directorate and PAU were at 90%. Maintenance repairs were undertaken.
	Purchase of motor vehicles and other transport equipment	0.750	-	0.00	Procurement of two motor vehicles had commenced.
	Purchase of specialized machinery and equipment	1.300	1.300	3.40	One gravity meter was acquired, while procurement for other equipment was ongoing.
	Purchase of office and Residential furniture and fittings	0.100	0.020	0.16	Procurement postponed due to insufficient funds.
Sub-Programme 1611: Petroleum Exploration and Promotion Frontier Basins	Promotion of the countryls petroleum potential and licensing	2.319	0.756	13.93	A total of 60 line-km of geophysical and 300 sq. km line of geological data were acquired in Moroto - Kadam basin. For the second licensing round, four companies were qualified and issued with the required bidding documents. The draft ToRs for consultancy for model agreements for the speculative surveys were ongoing.



	Output	Annual Budget (Billion Ug.Shs)	Cum. Receipt (Billion Ug.Shs)	Physical performance Score (%)	Remarks
	Capacity building for the oil and gas sector	0.828	-	0.00	No funds were released. However, two staff continued online training in petroleum geology, while one staff completed a M.Sc. in International Energy Studies.
	Purchase of Office and ICT equipment, including software	1.680	1.680	5.49	Assorted ICT equipment were procured (20 desk top computers, 12 laptops, 8 surface pros and 1 heavy duty photo copier)
Overall Performance	e %		~	54.87	Fair Performance

Source: IFMS, MEMD Q2 Reports, Field Findings

The Mineral Exploration, Development and Value-Addition Programme

The programme took up 4.3% 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, analysing, archiving and disseminating geo data; monitoring and assisting small scale miners and 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. Thus the sub-sector must deliver socio-economic transformation with inclusive economic growth in the development process. 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 sub-programmes below;

- 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 were assessed.

3.2.11. Sub-Programme 1353: Mineral Wealth and Mining Infrastructure Development

This sub-programme aims at putting in place new legal fiscal and regulatory framework to monitor mining activities thus improving livelihood of more than 26.5% of the population which is employed directly and indirectly in the mineral sub-sector more especially Artisanal and Small Scale Miners (ASMa) who mostly work under poor conditions.



Performance

Financial Performance

The sub-programme budget for FY 2020/21 is UGX13.35bn which was revised to UGX12.70bn, of which UGX6.69bn (52.7%) was released and UGX2.84bn (42.5%.) spent by 31st December, 2020.

Physical performance

The sub-programme performance was fair. Under policy formulation, a review of the Mining Regulations 2004 was ongoing, while the Mining and Minerals Bill was prepared and awaiting presentation to Cabinet.

On mineral exploration, a base map of potential at Bukusu was produced. More to that, a feasibility study on Iron and steel development in Uganda was undertaken by the DGSM in partnership with the National Planning Authority (NPA).

To promote health and safety, a total of 7,663 artisanal small scale miners (2,249 in Mubende; 800 in Isingiro and Ntungamo; 3,000 in Karamoja and 1,614 in Busia and Namayingo) were profiled, mapped and trained. However, integration of the ASM and National Identification and Registration Authority (NIRA) data bases had not commenced pending delivery of the biometric machine.

Under Licensing and Inspection, 36 licenses were inspected in Kigezi, Ankole, Central and Karamoja regions. Overall, 35% of mineral rights were monitored and enforcement notices issued. However, the online mineral licensing system was operational but awaiting integration with other e-government systems.

To decentralise regulation of the sector, the construction of the mineral beneficiation centres in Ntungamo and Fort Portal was ongoing. The works at the Ntungamo center were 80% progress with roofing works completed and installation of electrical and plumbing fittings ongoing, while works at the Fort Portal center lagged behind at 50% completion and roofing of the main block was yet to be done. Progress for the construction of Fort Portal centre was slow due to the low capacity of the contractor. This in turn led to low absorption of funds.

Challenge

• The delay in approval of the proposed Mining and Mineral Bill is affecting the regulation of activities in the sector.

Recommendation

• Cabinet and Parliament should make passing of the new minerals bill a priority to improve the viability of the sector.





L-R: A view of works at the plant house and multipurpose halls at the Ntungamo Mineral Beneficiation Centre; Progress of construction works at Fort Portal Beneficiation Centre

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

The objectives of the project are to design, construct and install an infrasound network array 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 measures 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 this is fully GoU funded.

Performance

Financial Performance

The budget for the sub programme for FY 2020/21 is UGX 4.13bn. All funds were released and none absorbed.



Physical performance

The sub-programme performance was poor. Construction of the infrasound station at Entebbe had stalled pending delivery and installation of the infrasound equipment. Procurement for the equipment for the four array sites at the Entebbe Infrasound Station was stuck at the bidding process.

Challenge

• Delay in finalising the procurement of equipment is constraining completion of the Entebbe Infrasound Station.

Recommendation

• The MEMD should fast track acquisition of new equipment to complete construction of the infrasound station.

3.2.13. Sub-Programme 1505: Mineral Laboratories Equipping and Systems Development

The Minerals Sub-Sector is one of the Government's key priority areas under the third National Development Plan III (NDPIII). This sub-programme aims at equipping the minerals laboratories and developing systems for sustainable analytical and mineral value addition test services. Overall budget for the sub-programme is UGX24.115bn.

The expected outputs from the sub-programme include;

- Project administration and management is 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 2020/21 is UGX7.4bn, of which UGX5.1bn (68.9%) was released and only UGX 0.34bn spent by 31st December, 2020.



Physical Performance

The sub-programme performance was poor. Upgrading of the laboratory, electrical installation works to improve earthing, lightning protection and cabling were completed and the newly acquired equipment which included; Inductively Coupled Plasma Spectromter, Planetary Ball Mill and the Bench Top Oven equipment were installed.

On acquisition of other laboratory equipment, 20 cathode lamps and laboratory gases for analytical equipment were procured. Additionally, the contract for supplying mineral beneficiation test, exploration sample preparation and density determination equipment worth UGX2.67bn had been signed while the procurement for most equipment such as swing mill, hydro cyclone test rig, magnetic separator and particle size analyzer among others was underway.

Challenge

• The sub-programme was negatively impacted by the lengthy procurement processes.

Recommendation

• The MEMD should fast track procurement of laboratory equipment.

3.2.14. 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 Karamoja region. The project funding is a loan of Euros 20.6 million (equivalent to UGX83.6bn) from the Corporate Internationalisation Fund of Spain and a GoU contribution of 15%. 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 FY2020/21 was revised to UGX11.39bn from UGX9.1bn. The release was at UGX5.11bn and UGX4.46bn was spent by 31st December 2020.

The sub-programme performance was fair. The sensitisation of stakeholders was undertaken in the districts of Kaabong, Kotido, Abim, Moroto, Nakapiripirit, Amudat, and Napak in preparation for the surveys meant to collect geological and geochemical data. The permission to have aircrafts acquire geophysical data was granted by the relevant authorities.

Overall programme performance

The programme performance was fair at 59.3% (table 3.13). In a bid to improve the regulation in the Mining Sub-Sector, the Mining and Minerals Bill was prepared and awaited presentation to Cabinet. The programme continued establishing mineral potential in the different areas

countrywide. Several artisanal miners were profiled and trained in health and safety but the biometric registration was yet to commence. The newly acquired laboratory equipment was installed at Entebbe. The construction of the mineral beneficiation centers in Ntungamo and Fort Portal was also progressing at 80% and 50%. However, the programme was still grappling with the slow pace of procurement. The equipment for the infrasound station at Entebbe together with the mineral laboratory equipment and accessories had not yet been acquired due to delayed procurement.

Sub- programme	Output	Annual Budget (Bn.Ug.Shs)	Cum. Receipt (Bn. Ug.Shs)	Physical performance Score (%)	Remarks
	Policy Formulation	0.195	0.072	0.447	The Mining and Mineral Bill was prepared and awaiting presentation to Cabinet. Review of the Mining Regulations 2004 was ongoing.
	Institutional Capacity for the Mineral Sector	1.128	0.386	3.179	A review of the designed draft tool on the communication strategy was ongoing. 10 RCM staff were recruited. The GMIS was uploaded and MCRS systems was maintained
Sub-Programme 1353: Mineral Wealth and Mining Infrastructure Development	Mineral Exploration, Development, Production and Value Addition	0.795	0.267	2.003	Geological reports and maps to ascertain Bukusu mineral potential were reviewed and 1 base map produced.
	Health, Safety and Social Awareness for Miners	0.445	0.113	1.254	A total of 7,663 ASMs were mapped, profiled and trained in healthy and safety awareness (2,249 in Mubende; 800 in Isingiro and Ntungamo; 3,000 in Karamoja and 1,614 in Busia and Namayingo). The biometric registration had not started pending delivery of the machines.
	Licensing and Inspection	2.096	0.568	5.907	A total of 36 licenses were inspected in Kigezi, Ankole, Central and Karamoja regions. The online mineral licensing was fully operational but yet to be integrated with other e-govt systems.
	Enforcement and Compliance	0.200	0.067	0.507	35% of mineral rights were monitored. Online enforcement notices and reports were issued.
	Contribution to International Organisation (SEAMIC)	0.100	0.000	0.000	No funds were released
	Government Buildings and Administrative Infrastructure.	5.900	3.500	12.613	The construction of the mineral beneficiation centres in Ntungamo and Fort Portal were at 80% and 50% respectively. Rewiring of the Directorate of Geological Survey and Mines (DGSM) building at Entebbe was completed.

 Table 3.13: Performance of the Mineral Exploration, Development and Value-Addition

 Programme as at 31st December, 2020



Sub-	Output	Annual	Cum.	Physical	Remarks
programme		Budget (Bn.Ug.Shs)	Receipt (Bn. Ug.Shs)	performance Score (%)	
	Purchase of Specialised Machine and Equipment	1.838	1.717	2.773	The drilling rig was procured but awaited tax clearance at Namanve ICD bond and delivery of more accessories.
Sub-Programme 1392: Design, Construction and Installation of Uganda National Infrasound Network (DCIIN)	Purchase of Specialised Machine and Equipment	4.129	4.129	3.491	Procurement for the equipment to establish the first infrasound station at Entebbe was ongoing. Contracts had not yet been awarded.
	Policy Formulation	0.097	0.035	0.000	The draft National Mineral Laboratory Policy was yet to submitted to Cabinet.
	Institutional Capacity for the Mineral Sector	0.857	0.150	2.416	Two staff undertook a short online training, while other two staff enrolled for Masters courses. The Laboratory Management Information System (LMIS) was rolled out and in use upon completion of user training. The procurement of insurance coverage of DGSM Laboratories in Entebbe was underway.
	Mineral Exploration, Development, Production and Value Addition	0.257	0.046	0.613	The contract for services of an accredited body to offer ISO/IEC 17025:2017 certification to the DGSM Laboratories in Entebbe was awarded to Kenya Accreditation Service (KENAS)
Sub-Programme 1505: Minerals	Health, Safety and Social Awareness for Miners	0.166	0.043	0.288	Health awareness campaigns were held
Laboratories Equipping and Systems Development	Contribution to International Organisation (SEAMIC)	0.030	0.000	0.000	No funds were released
	Government Buildings and Administrative Infrastructure.	0.520	0.350	1.306	The procurement of consultancy services for design of the proposed Strategic Minerals Research Facility (SMRF) at DGSM was at bidding stage. Additionally, the rewiring of laboratory and DGSM office blocks in Entebbe was concluded and new equipment installed.
	Purchase of Motor Vehicles and Other Transport Equipment	0.730	0.000	0.000	Procurement of one specialised motor vehicle, one double cabin pickup truck, and one multitalented sports utility vehicle for field sampling was ongoing.
	Purchase of Office and ICT Equipment, including Software	0.075	0.027	0.089	Procurement for the supply and installation of an access control system for the DGSM Laboratories in Entebbe was at bid evaluation.



Sub- programme	Output	Annual Budget (Bn.Ug.Shs)	Cum. Receipt (Bn. Ug.Shs)	Physical performance Score (%)	Remarks
	Purchase of Specialised Machine and Equipment	4.500	4.447	4.492	The laboratory gases and a total of 20 cathode lamps were procured and delivered. Additionally, the procurement of a mineral beneficiation test, exploration sample preparation and accessories for the chemistry and Environmental Laboratory (CEL) was ongoing.
	Purchase of Office and Residential Furniture and Fittings	0.041	0.003	0.077	Procurement of office furniture was ongoing.
Sub-Programme 1542: Airborne Geophysical Survey and Geological Mapping of Karamoja	Mineral Exploration, Development, Production and Value Addition Promoted	11.386	5.110	17.874	The sensitization of the stakeholders was undertaken in the districts of Kaabong, Kotido, Abim, Moroto, Nakapiripirit, Amudat, and Napak. The geophysical survey by the aircrafts was cleared by the relevant authorities.
Overall Performan	ce %			59.3	Fair performance

Source: IFMS, MEMD Q2 Reports, Field Findings

Overall MEMD Vote Performance

The overall MEMD Vote performance was poor at 51.4%. The budget for the FY 2020/21 is UGX1,828.99bn, of which only UGX363.23bn (19.9%) was released. The key achievements were the completion of Opuyo – Moroto Transmission Line and the Isimba public access bridge linking Kayunga and Kamuli districts. Other transmission lines such as Karuma –Kawanda T-line and Karuma – Olwiyo under the Karuma Interconnection Project neared completion. Additionally, fixing of snags for the Isimba HPP continued. However, the construction works for Karuma dam had progressed but were still behind schedule with no clear completion date. Right of Way (RoW) challenges delayed the completion of Tororo–Lira, Bujagali–Tororo, Namanve South–Luzira and Kampala–Entebbe transmission lines. The slow pace of procurement delayed acquisition of key laboratory equipment and commencement of Muzizi HPP.

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 operationalise Government's rural electrification function under a public-private partnership. 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 26.4% of the sector budget for FY 2020/21, and 62.7% of the budget was released by 31^{st} December 2020, and 54.7% spent (table 3.14).

		Approved budget	Release	Expenditure	% Budget	% Budget	% Releases
		(Bn UGX)	(Bn UGX)	(Bn UGX)	released	spent	spent
Recurrent	Wage	15.813	7.907	5.298	50.0	33.5	67.0
budget	Non-wage	22.503	8.931	6.981	39.7	31.0	78.2
Dev't budget	GoU	128.139	80.650	45.225	62.9	35.3	56.1
	Ext. Fin	508.267	325.620	174.084	64.1	34.3	53.5
GOU Total		166.456	97.488	57.504	58.6	34.5	59.0
Total GoU + I	Ext Fin(MTEF)	674.723	423.108	231.588	62.7	34.3	54.7
Arrears		0.000	0.000	0.000	0.0	0.0	0.0
Total Budget		674.723	423.108	231.588	62.7	34.3	54.7
A.I.A Total		0.000	0.000	0.000	0.0	0.0	0.0
Grand Total		674.723	423.108	231.588	62.7	34.3	54.7

 Table 3.14: REA Financial Performance by 31st December, 2020

Source: Approved Budget Estimates FY2020/21, IFMS

The Rural Electrification Programme

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 programme consists of six sub programmes namely;

- Rural Electrification (1262)
- Grid Rural Electrification Project IDB I Rural Electrification (1354)
- Energy for Rural Transformation (ERT) Phase III (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 (1517)
- Uganda Rural Electrification Access Project /UREAP (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 2020/21 is UGX174.23bn (UGX118.14bn GoU and UGX 56.09bn external funding). The overall release to the sub-programme was 68.2%, whereas absorption was fair at 71.3% of the released funds. The GoU and external releases were at 63.4% and 78.4% respectively.

Physical Performance

The sub-programme performance was fair. A total of 183.5km of Medium Voltage (MV) and 408.1km of Low Voltage (LV) were constructed in the first half of the FY 2020/21.

The completed schemes under French Agency for Development (AFD) funding were under Defects Liability Period (DLP) monitoring. Under Islamic Development Bank (IDB) funding, the IDB III Lots 1 to 6 schemes in the various districts countrywide were completed and commissioned. In addition, works under IDB II Lot 3a (Katakwi, Agago, Lira, Pader, Dokolo, Kitgum, Kole, Apac, Tororo) and IDB II Lot 3b (Kabale, Kisoro, Kanungu, Rukungiri, Ntungamo, Ibanda, Isingiro, Mbarara, Mitooma, Kyenjojo, Kabarole, Kamwenge, Rubirizi) were also completed, commissioned, handed to the respective service providers but monitoring under DLP continued.

The schemes under GoU funding (Lots 1, 2, 3, 4, 5, 7 and 8) had progressed slowly from 30% progress as at the end of FY 2019/20 to 55% by 31st December 2020. Pole erection was in advanced stages in most districts countrywide. However, stringing and transformer installation had not started. The major delay was due to the COVID-19 outbreak which slowed down carrying out of Factory Acceptance Tests (FATs) for key equipment. This meant that shipping of materials such as transformers and conductors did not proceed in time. The procurement for GoU funded Lot 6 for Eastern (Buyende, Mayuge, Kamuli, Tororo) was cancelled due to whistleblowing and the process awaited a no-objection from Public Procurement and Disposal of Assets (PPDA).

Under the Kuwait Fund, projects under Kuwait Lot 1a in the districts of Nebbi, Kiryandongo and Kibaale were nearing completion at 95% with transformer installation works ongoing. Furthermore, Pole erection under Kuwait Lot 1b for the schemes in the South Western region (Kasese, Bushenyi, Rukungiri, Mitooma) were completed and works had come to a halt due to a delay in acquisition of transformers and stringing materials.

Challenges

- Delayed delivery of key materials caused by the COVID-19 pandemic hindered progress of works.
- The slow procurement process has led to delay in commencement of works in the Eastern 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 the procurement and delivery of materials for the project.



L-R: Advanced works under Kuwait Funding at Kamunana trading center, Kiryandongo; A completed scheme at Najjoki Village, Nakaseke District under IDB III Lot 5

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 targets over 1,000 last mile connections at commissioning.

Performance

Financial Performance

The budget for the sub-programme for FY 2020/21 is UGX5.7bn. All funds were released and absorption was good at 70.5%.

Physical Performance

Progress of construction works was advanced at 98%. All works under original scope for Lot 3 in Moroto, Nakapiripirit and Moroto and Lot 4 in Kotido, Kabong, Kotido and Abim were completed and commissioning of schemes ongoing. A total of 618km and 201.7km of MV and LV lines were constructed respectively. Overall, 90 transformers were installed in the various communities to electrify educational institutions, health centres, prisons, army barracks, trading centres, villages and markets among others.

The variation works in these districts were also ongoing but in early stages. Pole erection and procurement of local and imported materials were underway. A total length of 108km of MV, 88.4km of LV and 42 transformers will be installed.

Challenges

- Progress of 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. The 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 2020/21 is UGX173.15bn, and 49.4% of the funds were released, while absorption was fair at 65.3%.

Physical Performance

For the four fast-tracked schemes, the one in Mubende was completed in November of FY 2021 to add to the Mbarara-Kazo-Kiruhura scheme which had been completed in the previous



FY. Construction works for the third scheme in Wandi, Arua, Moyo and Yumbe, and scheme four in Arua were ongoing and pole erection was at 30% overall progress.

Other works under ERT III Lots 1-3 in the districts of Masaka, Rakai, Mukono, Gomba, Butambala, Mubende, Rwampara, Ntungamo, Ntoroko and Ibanda had started, with pole erection ongoing. However, engineering surveys and Factory Acceptance Tests (FATs) for projects in Kibaale Kagadi, Kamwenge, Lira, Alebtong, Agago, Otuke, Dokolo, Kaberamaido, Soroti and Amuria were ongoing and construction works had not yet started. The sub-programme was behind schedule by three years.

Challenges

- Material delivery was slowed down by the outbreak of COVID-19 pandemic.
- Severe flooding led to delay in commencement of schemes in Ntoroko thus need for a new scope.

Recommendation

• The REA should fast track the design approval for the change in scopes for districts affected by severe weather.

3.3.4. 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 UGX 832.5bn.

The sub-programme intends to construct power distribution infrastructure for the electrification of 287 sub-county headquarters and surrounding areas that were 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 2020/21 is UGX122.09bn, of which UGX99.10bn was released. The absorption of funds was poor at 39.7%.



Physical Performance

Works for Phases I to VI in 60 districts had commenced. Various schemes under the different phases in the districts of Kumi, Bukedea, Budaka, Butaleja, Kibaale, Kagadi and Mubende were completed and awaited commissioning. Projects in other districts were yet to start.

Challenge

• There was a delay in commissioning of the completed schemes due to lack of harmonisation of construction standards between REA and UMEME. This delay created an opportunity for vandalism of the infrastructure.

Recommendation

The REA should fast track resolution of the difference in construction standards with the existing service providers to hasten the commissioning of completed schemes.



L-R: A completed scheme at Mbaare trading centre, Mbarara; Delivered materials at contractor's yard, Mbale

3.3.5. 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 projects 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 2020/21 was UGX157.41bn, of which UGX91.82bn (58.3%) was released by 31st December 2020, and absorption was poor at 33.5%. The low absorption was due to a delay in commencement of schemes hence low utilisation of externally released funds.

Physical Performance

Construction works in Nakasongola were completed and precommisioning of the schemes ongoing. Several schemes in the Eastern region (Iganga, Luuka and Bugweri) had also progressed at 70%. Additionally, stringing works and pole erection were ongoing in Central (Luwero, Wakiso), Eastern (Kaliro) and Northern (Gulu, Nwoya, Lira, Alebtong, and Amuria).

However, works to extend the grid to Kalangala had not started and review of the engineering designs for the schemes was ongoing.

Challenges

- Delayed mobilisation of project teams deffered commencement of works and thus poor absorption.
- Material delivery for key project materials from affected by the travel ban due to the COVID-19 pandemic.

Recommendations

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



A completed scheme at Kiwanyi trading centre, Bugweri District



The progress status of the monitored rural electrification projects under the Rural Electrification Programme is summarised in table 3.15.

Scheme	Status			
Schemes under AfDB Funding				
UREAP Lot 1				
Contract Sum: USD 3,269,782.9	UGX 18,100,888,521			
Contractor: Mohan Energy Corpo				
Nakasongola	All construction works were completed and precommissioning tests done.			
Kibira - Kyabaganga	A total of 41 transformers were installed in the different villages and trading centers in Lwampanga, Kakooge and Lwabyata sub-counties.			
Kabbala - Buyamba	Scheme were completed and three transformers installed at Kabbala, Njeru and Buyamba trading centers in Nabiswera sub-county.			
UREAP Lot 5				
Contract Sum: USD 4,205,622.85				
Contractor: China Henan Internat	tional Cooperation Co. Ltd			
Luuka				
Kiyunga - Kimanto	All works were completed and awaiting commissioning. The scheme extended the grid to the villages of Bumana, Bulongo, Kamwirugu, and Kimanto and five transformers were installed.			
Butimbwa - Mawuno	All construction works were completed in the FY 2019/20 but the scheme had not yet been commissioned. Five transformers were installed at Butimbwa, Bukodyo, Namadope, Kakumbi and Mawuno trading centres.			
Budhabangula - Kibuuto	The schemes were completed and awaiting commissioning.			
Kiyunga - Namalemba				
Kyamawundo - Lwanika	All MV works were completed. LV stringing works were ongoing. MV length of the scheme is 22.9km. A total of 17 transformers will be installed in the respective villages.			
Buwala - Bugaga and Bugomba	All pole erection and MV stringing were completed. LV stringing was ongoing at 40%. The scheme is extending the grid to various villages of Bukanga sub- county.			
Bugweri	•			
Busesa - Lubira	Scheme were completed and 13 transformers installed. A total of 26.3km of MV and 61.3km of LV were constructed. Beneficiary villages included Buyanga, Buwooya, Bulunguli, Kalalu, Kiwanyi and Bupala among others.			
Bunyantole - Nakibembe	All pole erection and MV stringing were completed. LV stringing was ongoing.			
Idudi - Mufumi Village	Pole erection works was completed. Both MV and LV stringing were at 90%			
Idudi - Buyebe Village				
UREAP Lot 7				
Contract Sum: USD 2,499,255.55	5 UGX 18,937,436,531.42			
Contractor: China Henan Internat				
Gulu, Lira, Nwoya	Schemes in these districts had started and were under pole erection.			
Schemes under World Bank fu	· · · · ·			
ERT III Line 1				
Contract Sum: UGX 2,820,423,697.14, USD 4,128,037.16				
Contractor: Bruhan Engineers Limited				
Mubende				
	The scheme was completed and precommissioned. The MV length is 62.2km			
	and 28 transformers installed in the different villages which included Nabakazi,			
Kisenyi.	Kirumbi, Kasambya, Busenya and Bugonzi among others.			
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Table 3.15: Status	of Rural Electrification	Projects as at 31 ^s	^t December, 2020
Table 5.15. Status	VI IXUI AI LICCUIIICAUVI	I I Ujecto ao at JI	Determoting 2020

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Scheme	Status
Nkonge - Lusalira, Mile 16 -	The scheme was completed. The MV length is 20.7km and a total of 20
Butawata	transformers were installed.
ERT III Line 3	
Contract Curry, LICX 15 455 029	404 00 LICD C C4E 470 22
Contract Sum: UGX 15,455,028,	424.00, USD 6,645,170.33
Contractor: China Jiangxi Corpor	ation
Wandi - Yumbe - Moyo	Overall progress was at 25%. Surveying was completed. Pit excavation and
	pole erection were ongoing at 35% and 20% respectively. The total MV length is 340km and 92 transformers will be installed in the different trading centers and villages of Arua, Yumbe, Koboko and Moyo districts.
ERT III Line 4	and vinages of Arda, Turnbe, Roboko and Woyo districts.
Contract Sum: UGX 2,829,587,39	08 00 USD 1 319 849 52
Contractor: C and G Andijes Grou	
Arua	Pit excavation and pole erection were ongoing. MV pole was at 40%, while
	LV pole erection was at 30%. The project will extend grid to trading centers
Onduparaka - Odramachu -	of Onduparaka, Oria, Andilegu, Pajulu and Odramacaku among others with a
Abiria	total HV and LV length of 41km and 61km respectively.
ERT III Lots 1, 2 and 3: Lines 11	
Package B	
	ervices Ltd for Line 11; MBH Power Ltd for Line 12; Datpo Investments Ltd for
Line 13	, , , , , , , , , , , , , , , , , , ,
Lot 1B for line 11 in Masaka and	Pole erection was ongoing at 75% and overall progress was at 50%
Rakai;	
Kyabadaza - Masankwa,	
Nyanama, Mpenja - Maseruka,	
Kiriri - Kasasa, Mpenja -	
Nsambwe - Kanoni - Mamba -	
Mawuki:	
	Pole erection was ongoing. Overall project progress was at 30%
Nakifuma - Nagojje, Walusubi	r ole credion was ongoing. Overall project progress was at 00 %
- Katogo Mbaliga - Namele &	
Nakasajja - Kyampisi	
	MV and LV pole erection were at 15% and 10% respectively
Butambala: Mitemula - Nakiyaga	···· •··· -· · · · · · · · · · · · · · ·
- Nkuke - Kyanamukaka	
Package C	
-	ices Ltd for Line 14; Megger Technical Services Ltd for Line 15
Lot 1C for line 14 in Mubende,	
Kagadi and Kibaale: Mubende	Marke for exhause in this perform had not started. Engineering designs and
- Kyabayanga - Ngangi with tee-	Works for schemes in this package had not started. Engineering designs and
off Kibaale and Kagadi	Factory Acceptance Tests (FATs) were ongoing.
Lot 2C for line 15 in Kamwenge	
Package D	
	td for Lines 16 and 17; Steg International Services Ltd for Lines 17 and 18
	Pole erection was ongoing at 50% and overall completion was at 36%.
in Rwampara, Ntungamo,	
Rukungiri and Kanungu;	
Lot 2D for line 18 in Ntoroko:	Works were suspended due to flooding and a new scope for rerouting was
	being undertaken.
1	



Scheme	Status
Line 19 in Ibanda: Kagongo -	Pole erection was at 80%
Rweshuri	
Package E	
Contractors: C&G Andijes Group	Ltd for Line 20; Sagem Com Energy & Telecom SAS for Line 21
Lot 1E for line 20 in Lira,	The construction works had not started. Engineering designs and Factory
Alebtong, Agago and Otuke	Acceptance Tests (FATs) were ongoing.
Lot 2E for line 21 in Dokolo,	
Kaberamaido, Soroti and Amuria	
Schemes under KUWAIT fundi	
Kuwait Lot 1a	
Contract Sum: USD 4,269,801	
Contractor: Ontrack Technical Se	rvices Limited
Kiryandongo	
Bweyale - Karuma	The scheme will extend the grid to trading centers and villages between
	Bweyale and Karuma towns. The trading centers included Diima, Chopelwo, Kichabugingo, Nanda, and Nyamahasa among others. Construction works were completed and transformer installation works were in advanced stages. A total of 19 transformers will be installed.
Kisirizi Excellence Center and	The scheme was completed awaiting commissioning. Eight transformers were
Environments	installed at Kaduku, Kinyonga, Mailo Kumi trading centers among others.
Kibaale	
Buruuko - Kyabacwamba -	All works were completed and the scheme was precommissioned. Four
Karuuko	transformers were installed in some villages of Nalweyo sub-county.
Kinunda - Kiriisa - Kitaihuka - Kiinga - Kiramago - Kyamujundo	The works for the original scope were completed and six transformers were installed. LV stringing works for an additional scope of two transformer zones had just started.
Nebbi	· •
Kangu - Ocanya - Alamwa trading Centers	The scheme will extend the grid to trading centers within Nebbi Municipality. Works on the tee-off at Kasuku to St. Mary Medical Centre and Angiri Primary School were completed and transformers installed. Additionally. Works on the tee –off to Okeou, Makor, Canyaira, Akesi trading centers were completed pending transformer installations at Okeou Village and Okeou Health Centre.
Kuwait Lot 1b	
Contract Sum: USD 4,778,666.18	
Contractor: Rocktrust Contractors	s Limited
Kasese	
Kabirizi- Kihenge - Kanyonya - Kyarumba Karusanda - Kibuga	Both MV and LV pole erection were completed. Stringing had not started due to lack of materials.
Rukungiri	
Ndere - Rwoya Villages Kakamba - Rukonkoma Villages Bushenyi	All pole erection was completed. Works had stalled due to lack of materials to
	start pole dressing and stringing.
Mukatafali - Birimbi - Kahungye Schemes under China Exim Ba	nk funding
TBEA Phase I	
Kumi	
Nyero - Moruikara - Moruita - Ominai - Ogooma - Atekwa in Ogooma sub county	Works were completed and the scheme was precommissioned. Five transformers were installed.



Scheme	Status
Kiboga	
0	
	All works were completed and scheme awaited commissioning.
Kikalala - Kigattansi in Lwamata	
Town Council	
Kagadi	1
	All pole erection, stringing and transformer installation was completed and the
Kikonda - Nyaisamba A -	
	tee off. Ten transformers were installed to electrify the various villages within
- Kihigana B - Kihagana A -	
Kiduuma in Kiryanga sub-county	
Mambugu - Kirongo -	All MV pole erection were completed and LV pole erection was ongoing.
	The MV stringing was also at 80%. MV length was 8.9km and a total of six
- Ibanda - Kambogo / Kasoga in	transformers will be installed.
Muhorro town council	
Kasebere - Nsyambya A -	All construction works were completed and the scheme awaited commissioning.
Kenga A - Kenga B - Nsugasugi	
- Kikumbya - Busirabo -	
Rwamabare in Kagadi town	
council	
Kibaale	
Nyamarunda - Kabaale -	
Kabaale PS - Rwenkunda in	All works were completed.
Nyamarunda sub county	All works were completed.
Bukonda - Bukijurura - Kitembe	
- Rubona / Kyakazihire in	
Bubango sub county	
Isingiro	
	The scheme was completed and awaited commissioning.
- Mbaare Ind Mbaare II in	
Mbaare sub county	
	The scheme was precommissioned.
1 - Kyebikara in Kabingo sub	
county	
Rwambaga - Buhunga - Buhunga	
- Nyamarungi - B - Nyamarungi -	5
Bwiizi in Nyamarungi sub county	precommissioning.
Gayaza - Rwambaga -	
Kamwema Ind Kamwema	
- Kamwema Custom in Endiizi	
sub county.	
	The works on 34.12km of MV were completed and 12 transformers were
Rubindi Ind Rubindi TC -	installed in the various trading centers and villages.
Karerabana - Rwajogyera A	
(Karerabana) - Rwanjogyera B	
(Kanyegyayegye) - Rwakasasiira	
- Dyango - Lwabaganda - Nyungu	
(Kyabuzare) - Karunga PS -	
Karunga - Nyanga I - Nyanga II	
- Kamutiganzi in Rushasha sub	
county.	



Scheme	Status			
Ntungamo				
 Katabege - Kitokye - Kamuhozi Kinyombwa in Rubaare sub county 				
Namutumba				
Kaiti - Matyama PS - Kalamira - Buyange - Magada HC II - Magada - Kategere - Mulemba / Nawanzali In Magada sub county	Works were completed and precommissioning done.			
TBEA Phase II				
Kamuli				
zone - Kasaka PS - Kasaka TC - Bulondo Bukaibale - Nyagwenyi PS In Bulopa sub county Bukaya - Busige-Budugu -	Works had just commenced. Pit excavation and pole erection were ongoing.			
Bulubandi in Kasozi sub county				
Bukomansimbi				
Kikuta B - Kitemi - Lusaka - Nsoloolo (Kyaziza) in Bukango sub county	Works were completed and scheme precommissioned.			
Lyantonde				
Rwamabara - Bikolola A - Bikolola B in Mpumudde sub county	Works were completed and scheme precommissioned. Two transformers were installed.			
Lwengo				
Kitovu TC - Kalagala in Malongo TBEA Phase III	Works were completed and scheme precommissioned.			
Butalejja				
Nampologoma - Mawanga - Muhula - Kagondo - Muhula - Doho in Kachonga sub county Mubende	All pole erection was completed. Line earthing works and stay works were ongoing. Transformers were yet to be installed.			
Ngabano - Kazirangoma / Kabale - Kichuchulo - Kawololo - Kisagazi - Buganyi - Nsanvu in Butoloogo sub county TBEA Phase IV	All works were completed and schemes awaited precommissioning.			
Mbarara				
Karuhaba - Kanyeganyege - Nakasero - Bugarama in Rubindi sub county	Pole erection was ongoing.			



Scheme	Status
Budaka	
Kamonkoli - Bumamwera - Bwikomba in Migiti sub county	Works were completed and awaiting commissioning.
Iganga Bubogo - Bunyiiro - Mawagala -	Pole erection was ongoing.
Mawagala HC II - Bunyiiro PS - Nawanyingi TC - Nawankonge - Nawankonge PS - Nawankonge in Nawanyingi sub county	
Nakalama - Bukyaye - Bukyaye - Lwerera - Buwongo - Bupala -Nakalama HC	Works had not yet started.
TBEA Phase V	
Buyende	
Kaguru to Buyumba Ilundu TC - Butegere - Buganza Masaba Igalaza - Mulali	Works were completed and schemes awaited commissioning.
Bukedea	
	Scheme was completed and awaited commissioning. The delay in commissioning the scheme had led to illegal connection by the communities.
Mukono	All TBEA schemes had not yet started in Mukono
Schemes under GoU Funding	
GoU Lot 1 Contract Sum: UGX 9,920,442,23 Contractor: Muttico Technical Ser	
Kyegegwa, Kassanda	Pole erection was nearing completion.
GoU lot 2 Contract Sum: UGX 10,586,415,4 Contractor: Global - Comolo JV	432.58
Rakai, Masaka, Gomba, Butambala, Lwengo, Kiruhura	Pole erection was ongoing
GoU Lot 3 Contract Sum: UGX 18, 25,815,8 Contractor: Consortium of Diesel	52.33 and Motor Eng. PLC and Aster Private Limited
Mbarara, Sheema, Buhweju, Bushenyi, Rubirizi, Kabale, Ntungamo, Isingiro	Surveying of schemes was completed. The scheme was under pole erection
GoU lot 4 Contract Sum: UGX 16,182,151,2 Contractor: Haso Engineers	294.97
Gulu Temuyeme – Palalar – Loyo Alero – Pabwo	All pole erection was completed. The contractor had demobilised due to lack of materials to continue with works. The MV for the scheme is 42km long.
GoU Lot 6 No Contracts had been awarded	



Scheme	Status				
Tororo, Mayuge, Buyende, Kamuli	The schemes in these districts had not started. The contracts were awarded in FY 2019/20 but were later cancelled citing unfairness in procurement by a whistleblower. The procurement process now awaits a no-objection from the Public Procurement and Disposal of Assets (PPDA).				
GoU Lot 7 Contract Sum: UGX 17,927,414,4 Contractor: On Track Technical S					
Kiboga Nakaziba Trading Centers and Environments	All pole erection was completed awaiting commencement of pole dressing and stringing works. Beneficiaries included Nakaziba village, Kisagazi and Kawasa trading centers.				
Kalokola - Mutoma	Pole erection works were complete.				
Kibaale					
Schemes in Kibaale Town Council	Pole erection for these schemes was nearing completion.				
Kabasekende - Kigoro, Kabasekende - Kikumbya					
GoU Lot 8 Contract Sum: UGX 19,756,014,4 Contractor: Dott Services Limited					
Mukono					
Gilinya trading center and environments	MV pole erection was completed.				
Namyoya - Busabala - Nabalanga - Kabawala					
Intensifications in Nakifuma	Both MV and LV pole erection were completed.				
	All pole erection in the trading centers of Nakibano, Ndwadde Mutwe, Nanga and Busenya were completed.				
Buikwe					
Ssugu - Kirangira & Nakatyaba areas	Pole erection was complete.				
Nakaseke					
Kyayunga village, Balengera village and Kasana	Pole erection in the different trading centers and villages in these areas were completed.				
Sseggalye village to Kyambogo village					
Bulega village to seeta village, Lwetunga and Toggo					
Schemes Under IDB I Funding					
IDB I Lot 3 Contract Sum: USD 5,483,455.7 Contractor: Nanjing Daji Steel Tower Manufacturing Company Limited					
· · · ·	The schemes in the original scope were completed. Three transformers were				
Amudat: Amudat - Ngoshom, Amudat - Acustom					
Nakapiripirit: Mwanakolo Village					
Nabilatuk: Loyaraboth - Meturori Police barracks ,Cement Factory					

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Scheme	Status					
IDB I Lot 4						
Contract Sum: USD 12,918,479.4						
Contractor: Nanjing Daji Steel Tower Manufacturing Company Limited						
Napak						
Lopei PS - Napak District Office Block Kotido	Works in the original scope were completed and commissioned. A total of 455km of MV, 140km of LV and 56 distribution transformers were installed. However, pole erection for additional works had just started and progress was					
UPDF at Nakapelimoru - Locirang Army Barracks Kaboong	at 15%.					
Koputh Sub-county/ Sidok TC -						
Schemes Under IDB II Funding						
IDB II Lot 3a Contract Sum: USD 16,375,126 Contractor: Ceylex Engineering I						
Tororo						
	All construction works were completed. Scheme was commissioned. A total of 15 transformers were installed.					
Sere community, Kyafu TC and Koitangoro schemes	Schemes were completed and commissioned.					
Lira						
Opelo - Adolo - Amachi - Adye - Iwop	All construction were completed. HV length was 80.7kms and 25 transformers were installed					
IDB II Lot 3b Contract Sum: USD 18,232,169 Contractors: Avic International Ho	olding Cooperation, Nari Group Corporation					
Kyenjojo Nyamango – Mbale with t-off to Mirongo and Kabirizi	All works were completed. The total MV length was 25.8km and 13 transformers will be installed in the villages of Nyamango, Buhisi, Kibamu, Ruhoko, Mukaswa, Nyabuharwa, Kaigoro, Mbale, Mirongo, Nyabugorogoro and Kabirizi.					
Kabarole						
Kijura – Omukarere – Mukentomi	The scheme was completed and works commissioned. Four transformers were installed					
Mitooma						
Katenga – Omukabira – Nyakasharara with t-off to Kirembe – Rubumba, Omukayanga – Nyaruzinga	All construction works were completed, and the scheme was commissioned.					
Karambi – Karebo – Kirera	Construction works were completed.					
Schemes Under IDB III Funding IDB III Lot 5 Contract Sum: USD 9,074,033						
Contractor: Joint Venture of High	Dam Electrical, Industrial Projects Company Services Limited and Dott					
Nakaseke Nakaseke - Nsaka and Kikondo	All construction works were completed and precommissioning done. Scheme is comprised of two (2) tee-offs at Kikondo trading center in Semuto sub-county.					
Source: REA, Field Findings						

Source: REA, Field Findings



Overall Performance of the Rural Electrification Programme

The programme performance was fair at 60.4% (table 3.16). A total of 2,105.2km of low voltage, 1,358.5km of medium voltage was completed by 31st December 2020 with only 9,186 new connections made. Schemes under IDB II and IDB III were completed and under the DLP whereas works in the original scope under IDB I in Karamoja were completed. Several works under the African Development Bank funded UREAP in Iganga, Bugweri, Luwero and Nakasongola were also nearing completion with some schemes in northern and eastern in early stages.

The ERT III schemes in Mubende were completed, while other ERT III projects in central (Masaka, Rakai, Mukono, Gomba, Butambala) and South Western (Rwampara, Rukungiri, Kanungu, Ntoroko, Ibanda) had commenced. Additionally, the China Exim Bank funded projects under TBEA had also commenced in 60 out 106 districts with some schemes in Eastern and Western Uganda completed. However, the Government and some Kuwait funded projects had not progressed much because key materials such as transformers were not acquired.

Sub programme	Output	Annual Budget (Ug.Shs)	Cum. Receipt (Ug.Shs)	Physical performance score (%)	Remarks
Sub-Programme 1262: Rural Electrification Project	Construction of Medium voltage (MV) lines	104.538	71.310	10.90	A total of 183.5km of MV and 408.1km of LV were constructed. Schemes under IDB II and IDB III were complete and under DLP while Kuwait funded projects in Northern and western were also nearing completion.
	Construction of Low voltage (LV) lines	69.692	47.540	7.27	However, Kuwait projects in South Western and GoU schemes registered slow progress due to lack of materials.
Sub-Programme 1354: Grid Rural Electrification	Construction of Medium voltage (MV) lines	3.420	3.420	0.54	The schemes in the original scope were completed, and additional works almost completed. Commissioning of schemes
Project IDB I - Rural Electrification	Construction of Low voltage (LV) lines	2.280	2.280	0.36	was ongoing.
Sub-Programme 1428: Energy for Rural Transformation (ERT) Phase III	Construction of Medium voltage (MV) lines	103.890	51.324	6.65	A total of 46.6km of MV and 77.8km of L were constructed. Line 1 works I Mubenc were complete and under DLP. Lines 3 ar 4 works in West Nile were also underwa and general progress was at 20% Additionally, works for Packages B and
	Construction of Low voltage (LV) lines	69.260	34.216	4.43	had commenced while designs reviews and Factory Acceptance Tests (FATs) for Packages C and E were ongoing.
Sub-Programme 1517: Bridging the demand gap through the	Construction of Medium voltage (MV) lines	73.254	59.460	5.35	A total of 797.8km of MV and 1,368.7 km of LV were constructed in 60 districts and most of the works in the remaining district were yet to commence. Some scheme
accelerated rural electrification Programme (TBEA)	Construction of Low voltage (LV) lines	48.836	39.640	3.57	in Western and Eastern were completed and precommissioned. However, commissioning of schemes was pending harmonisation of construction standards between REA and Umeme.

Table 3.16: Performance of the Rural Electrification Programme as at 31st December, 2020



Sub programme	Output	Annual Budget (Ug.Shs)	Cum. Receipt (Ug.Shs)	Physical performance score (%)	Remarks
Sub Programme : 1518 Uganda Rural Electrification Access Project (UREAP)	Construction of Medium voltage (MV) lines Construction of Low voltage (LV)	94.446 62.964	55.092 36.728	12.80 8.53	Works in Nakasongola were complete and commission of the schemes ongoing. Schemes in Iganga, Luuka and Bugweri were at 70%. Furthermore, pole erection and stringing works for schemes in Northern (Gulu, Nwoya, Lira, Aleptong, Amuria), Central (Luwero, Wakiso) and
	lines				eastern (Kaliro) were ongoing but schemes were behind schedule. Additionally, the design review for the project to extend the grid to Kalangala was ongoing and no works had yet started.
Overall Performance %			60.39	Fair performance	

Source: REA Q2 Reports, Field findings

Challenges

- The slow procurement pace affected performance as works took long to commence despite funds being available.
- Lack of funding for connections led to a reduced number of connections on completed schemes. Some of the service providers continued to suspend free electricity connections due to large sums of arrears which REA failed to clear.

Recommendations

- The REA should enhance staffing levels for project implementation to ensure better follow up of project activities and monitoring/supervision of ongoing works.
- Government and REA should prioritise funding for the free connections in order to avoid over dependence on development partners who have been supporting the initiative.

Overall REA Vote Performance

The overall programme performance for the vote was fair at 60.4%. The budget for the FY 2020/21 is UGX 674.72bn, of which UGX 423.11bn (62.7%) was released. Absorption of funds was fair at 54.7%. Schemes under IDB I, IDBII and IDB III were completed, while those funded by China Exim Bank (TBEA) and World Bank (ERT III) commenced within the FY. However, projects funded by GoU and Kuwait had slow progress due to delayed procurement of key project materials. The vote performance was affected by funding constraints which led to suspension of the Free Connection Policy thus fewer customers connected to the completed rural electrification lines.

CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The overall performance of the sector was fair at 53.1%, posting a decline in the first half of the FY 2021/21 compared to that at the end of FY 2019/20. This is because the sector was still recovering from effects of COVID-19 which delayed some sector activities. None of the programmes exhibited good performance, while the Large Hydro; and Energy Planning, Management and Infrastructure Development programmes exhibited poor performance. Difficulty in acquisition of wayleaves, delayed procurement of works, and contract management challenges negatively affected sector performance.

 Table 4.1: Overall Performance of the Energy and Minerals Development Sector Per

 Programme

	Programme	Overall Performance (%)
1	Large Hydro Infrastructure	45.0
2	Energy Planning, Management and Infrastructure Development	46.4
3	Petroleum Exploration, Development, Production, Value Addition and Distribution of Petroleum Products	54.8
4	Mineral Exploration, Development and Value Addition	59.3
5	Rural Electrification	60.3
	Overall Sector Performance	53.1

4.2 Recommendations

- Project implementing agencies should engage the security agencies and mobilize local leadership to curb the increasing trend of vandalism of electricity infrastructure.
- Parliament needs to revisit the law regarding how land acquisition for Government funded projects should be undertaken to prevent the persistent occurrence of the Government failing to make use of borrowed funds,
- Prioritisation of allocation of funding for the new electricity connections to avoid overreliance on the development partners.

REFERENCES

- 1. Uganda Electricity Generation Company Limited (2020) Isimba Hydropower project status report up to December 2020
- 2. Uganda Electricity Generation Company Limited (2020) Karuma Hydropower project status report up to December 2020
- 3. Uganda Electricity Generation Company Limited (2020) Karuma Hydropower project status report up to December 2020
- 4. Uganda Electricity Generation Company Limited (2020) Nyagak III Hydropower project status report up to December 2020
- 5. Ministry of Energy and Mineral Development (2020), Ministerial Policy Statement, Vote; 017, 311 and 123
- 6. Ministry of Energy and Mineral Development (2020), Quarter 1 and 2 FY 2020/21 reports
- National Planning Authority (2020), Third National Development Plan (NDPIII) 2020/21 - 2024/25
- 8. Rural Electrification Agency (2020), Quarter 1 and 2, FY 2020/21 Performance report
- 9. Petroleum Authority of Uganda (2020), Quarter 1 &2 FY 2020/21 Performance report
- 10. Uganda Electricity Transmission Company Limited (2020), Mbarara-Nkenda and Tororo-Lira transmission line and associated substations, Progress report up to Dec 2020
- 11. Uganda Electricity Transmission Company Limited (2020) *Electrification of Industrial* Parks Progress report up to Dec 2020
- 12. Uganda Electricity Transmission Company Limited (2020), Karuma Interconnection Project Progress report up to Dec 2020
- 13. Uganda Electricity Transmission Company Limited (2020), Entebbe Kampala Transmission Expansion Project progress report up to Dec 2020
- 14. Uganda Electricity Transmission Company Limited (2020), Opuyo Moroto Transmission Project progress report up to Dec 2020





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