



Energy Sector

Semi-Annual Budget Monitoring Report

Financial Year 2018/19

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TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS	iii
FOREWORD	v
EXECUTIVE SUMMARY	vi
CHAPTER 1: BACKGROUND	1
1.1 Introduction.....	1
1.2 Sector Outcomes	1
1.3 Sector Priorities.....	2
CHAPTER 2: METHODOLOGY	3
2.1 Scope.....	3
2.2 Methodology	3
CHAPTER 3: SECTOR PERFORMANCE.....	4
3.1 Overall Sector Performance	4
3.1.1 Financial Performance	4
3.1.2 Physical Performance.....	4
3.2 VOTE 017: MINISTRY OF ENERGY AND MINERAL DEVELOPMENT	5
3.2.1 Energy Planning, Management and Infrastructure Development Programme	6
3.2.1.1 Sub-Programme 1212: Electricity Sector Development Project (ESDP)	6
3.2.1.2 Sub-Programme 1025: Karuma Interconnection Project.....	8
3.2.1.3 Sub-Programme 1137: Mbarara-Nkenda/Tororo-Lira Transmission line	10
3.2.1.4 Sub-Programme 1140: Bujagali-Tororo-Lessos/Mbarara-Mirama-Birembo Transmission Project.....	12
3.2.1.5 Sub-Programme 1222: Electrification of Industrial Parks.....	14
3.2.2. The Large Hydro Power Infrastructure Programme	19
3.2.2.1 Sub-Programme 1143: Isimba Hydroelectricity Power Project.....	19
3.2.2.2 Sub-Programme 1183: Karuma Hydroelectricity Power Project.....	21
3.2.3 The Petroleum Exploration, Development, Production, Value addition and Distribution of Petroleum Products Programme	24
3.2.3.1 Sub-Programme 1355: Strengthening the Development and Production Phases of Oil and Gas Sector	25
3.2.3.2 Sub-Programme 1410: Skills for Oil and gas Africa (SOGA)	26
3.2.4 The Mineral Exploration, Development and Value-Addition Programme.....	31

3.2.4.1 Sub-Programme 1353: Mineral Wealth and Mining Infrastructure Development Sub-Programme.....	32
3.2.4.2 Sub-Programme 1392: Design, Construction and Installation of Uganda National Infrasound Network (DCIIN)	33
3.2.4.3 Sub-Programme 1505: Mineral Laboratories Equipping and Systems Development ..	34
3.3: VOTE 123- RURAL ENERGY ELECTRIFICATION AGENCY (REA).....	44
3.3.1 The Rural Electrification Programme	45
3.3.1.1 Sub-Programme 1262: Rural Electrification Project	45
3.3.1.2 Sub-Programme 1354: Grid Rural Electrification Project IDB I.....	46
3.3.1.3 Sub-Programme 1428: Energy for Rural Transformation (ERT) Phase III.....	46
CHAPTER 4: CONCLUSION AND RECOMMENDATIONS.....	60
4.1 Conclusion	60
4.2 Recommendations.....	60
REFERENCES	61
ANNEX.....	62

ABBREVIATIONS AND ACRONYMS

AAS	Atomic Absorption Spectroscopy
AFD	French Agency for Development
AfDB	African Development Bank
A.I.A	Appropriation in Aid
ASM	Artisanal and Small Scale Miners
BADEA	Arab Bank for Economic Development in Africa
CDAP	Community Development Action Plan
CGV	Chief Government Valuer
CNOOC	Chinese National Offshore Oil Company
CWE	China International Waters and Electric Corporation
DGSM	Directorate of Geological Surveys and Mines
DP	Directorate of Petroleum
E&P	Exploration and Production
EA	Exploration Area
EAC	East African Community
EIA	Environmental Impact Assessment
EIPL	Energy Infratech Private Limited
EPC	Engineering Procurement and Construction
EPCC	Engineering Procurement Construction Contractor
ERT	Energy for Rural Transformation
ESDP	Electricity Sector Development Project
EXIM	Export Import
FEED	Front End Engineering Design
FID	Final Investment Decision
GASf	Geological Society of Africa
GIS	Geographical Information System
GIZ	German International Cooperation
GoU	Government of Uganda
HPP	Hydro Power Project
HSE	Health Safety and Environment
HV	High Voltage
IDA	International Development Association
IFMS	Integrated Financial Management System
IPC	Interim Payment Certificate
JICA	Japan International Cooperation Agency
JOGMEC	Japan Oil, Gas and Metals National Corporation
KfW	German Financial Cooperation (KfW Bankengruppe)
KHPP	Karuma Hydro Power Project
KIL	Kilembe Investment Limited
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 II	Second National Development Plan 2
NELSAP	Nile Equatorial Lakes Subsidiary Action Programme
NOC	National Oil Company
NOGP	National Oil and Gas Policy
NTR	Net Tax Revenue
OAGS	Organization of the African Geological Surveys
OE	Owner's Engineer
OFID	OPEC Fund for International Development
OPEC	Organization of Petroleum Exporting Countries
OPGW	Optical Ground Wire
PAPs	Project Affected Persons
PAU	Petroleum Authority of Uganda
PDHs	Physically Displaced Households
PEPD	Petroleum Exploration and Production Department
PGM	Platinum Group Minerals
PIP	Public Investment Plan
PMC	Project Management Consultant
PPDA	Public Procurement and Disposal of Assets
PPP	Public Private Partnership
FID	Final Investment Decision
PSA	Production Sharing Agreements
RAP	Resettlement Action Plan
RDP	Refinery Development Program
REA	Rural Electrification Agency
ROW	Right of Way
SEAMIC	Southern and Eastern Africa Mineral Center
SFD	Saudi Fund for Development
SDR	Special Drawing Rights
SPV	Special Purpose Vehicle
TA	Technical Assistance
UEDCL	Uganda Electricity Distribution Company Limited
UEGCL	Uganda Electricity Generation Company Limited
UETCL	Uganda Electricity Transmission Company Limited
UNBS	Uganda National Bureau of Standards
UNOC	Uganda National Oil Company
VF	Vote Function

FOREWORD

Over the years, the Government has implemented a number of interventions that have led to substantial progress in economic growth and national development which is now projected at 6.3% this Financial Year 2018/19 up from 6.1% attained last Financial Year 2017/18. As Government continues to pursue strategies for sustained growth and development, we should step up efforts in monitoring government programs and projects, to ensure that they are implemented in time and cost and any obstacles identified and addressed.

This report from the Budget Monitoring and Accountability Unit points to fair performance among the sectors monitored. It shows that most sectors achieved between 60%-79% of their planned semi-annual output targets. The fair performance points to the need for proper planning and commencement of procurement processes in time. This has resulted in slow absorption of funds and ultimately inadequate service delivery.

The sectors now have a quarter of the financial year to make good the promises made in terms of output and outcome targets. This is to urge all sectors to review the report and take necessary corrective actions to ensure effectiveness by end of the financial year.

Patrick Ocailap


For Permanent Secretary/ Secretary to the Treasury

EXECUTIVE SUMMARY

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

Programmes selected for monitoring were based on planned annual outputs; regional representation; level of capital investment; and value of releases during half year, Financial Year 2018/19. The methodology adopted for monitoring included literature review of annual progress and performance reports; interviews with the respective responsible officers or representatives; and observations or physical verification of reported outputs. Physical performance was rated using weighted achievement of the set output targets by 31st December, 2018.

Overall performance

The overall approved budget for the Energy and Mineral Development Sector FY 2018/19 inclusive of External Financing, Arrears, and AIA amounts to Ug shs 2,485.198 billion, of which Ug shs 1,487.58 billion (59.9%) was released and Ug shs 222.6 billion (37.9%) spent. The Votes in the sectors that had the lowest absorption of funds were Vote 123- Rural Electrification Agency (REA-19.1%) and 312-Petroleum Authority of Uganda (PAU-33.0%). Low absorption under REA was mainly because construction works on most projects had just commenced and others were concluding procurement processes.

The overall sector performance at half year was fair at 68.5%. Notable among the achievements was the completion of major works and commissioning of two generating units at Isimba Hydro Power Project (HPP) adding 90MW to the national grid, and the two remaining units were to come on line in a month's time.

Highlights of Sector Performance

The Energy Planning, Management and Infrastructure Development Programme physical performance was fair at 63.0%. The Mbarara-Nkenda transmission line construction was completed after long delays. Progress on the works for the Electrification of Industrial Parks had progressed well with the completion of the substations in Iganga, Luzira, Mukono and Namanve. Work on the short transmission line sections to link the substations to the transmission grid was however progressing slowly due to Right of Way (RoW) challenges. Progress on the Karuma-Interconnection Project (KIP) was commendable, and the Karuma-Kawanda section progress was at 75% with 496 out of the 639 towers erected, but RoW challenges affected 110 tower locations. On the Karuma –Lira sections, 109 out of the 156 towers were completed.

Projects still facing implementation challenges include the Lira-Opuyo transmission line and Nile Equatorial Lakes Subsidiary Action Program (NELSAP) (the substations and Bujagali-Tororo line). Works on other projects such as the Masaka-Mbarara Grid Expansion line, Lira-Gulu-Nebbi-Arua transmission line, Mirama-Kabale transmission project, Gulu-Agago transmission project, Opuyo Moroto, Mbale-Bulambuli transmission line, Kampala-Entebbe Expansion Project, Energy and Rural Transformation III had not begun and were at various stages of concluding financing, procurement and compensation. The main challenge affecting

performance was the difficulty in acquisition of RoW which restricted access by project contractors to project sites.

Under the Large Hydro Infrastructure Programme whose main sub-programmes are Karuma, Isimba and Muzizi HPP, overall performance was good at 70.5%. By 31st December 2018, 98% of the works at Isimba were completed. Units 1 and 2 were commissioned and their performance being monitored. The switch yard and transmission line connecting Isimba HPP to Bujaggali Switchyard were completed, commissioned and about 90MW from the HPP was being evacuated to the national grid. The planned completion date for the few remaining works was 30th March 2019.

The overall progress of Karuma HPP was 86% compared to a planned 100%, and project completion date was extended to December 2019. The financial disbursement stood at 81.96% which translates to USD 1,146,363,664. Completed works translate to 73.14% for civil works, 1.91% for hydro mechanical works and 15.95% for electro-mechanical works. Overall progress of the works had improved due to delivery of most electro mechanical/hydro mechanical equipment at site. Highlights from Karuma include completion of the concrete works on the dam structure, and commencement of installation of electro mechanical equipment in units 2 & 3. Civil works were completed in the dam and power Intake, Tail Race Tunnel (TRT) and Tail Branch Tunnel (TBT). Defect repairs in the dam intake continue.

Works on Muzizi HPP had not yet commenced. The process of procuring a contractor for the engineering works was ongoing and Uganda Electricity Generation Company Limited (UEGCL) was undertaking disclosure and consultations with the project affected community.

The Petroleum Exploration, Development, Production, Value Addition and Distribution of Petroleum Products Programme performance was fair at 68.5%. Under petroleum exploration, 200-line km of geophysical data and over 320 sq. km of geological mapping were undertaken in Moroto-Kadam basin, representing 40% coverage. Preparations for the second licensing round were in progress with meetings ongoing in preparation for the launch at the East Africa Petroleum Conference in May 2019. Review of the application for the production licenses for areas of Lyec, Mpyo and Jobi-East was ongoing. The Ministry of Energy and Minerals Development (MEMD) continues to monitor the Resettlement Action Plan (RAP) implementation for Tilenga and Kingfisher projects (Tilenga: RAP1 -98%, RAP2&4 -70%, RAP3&5-45%, Kingfisher -95%).

On the refinery development, the lead investor, M/s Albertine Graben Refinery Consortium (AGRC) commenced the Front End Engineering Design (FEED) studies that will inform the Final Investment Decision (FID) of the Refinery Project. On the East African Crude Oil Export Pipeline (EACOP), negotiations of the Host Government Agreement (HGA) between Government of Uganda and the Joint Venture Partners were progressing.

The Uganda National Oil Company (UNOC) continued with its mandate of stocking Jinja Strategic Tanks, and closing stock by 31st December 2018 was 0.686 million liters.

The construction of Phase-3 of the National Petroleum Data Repository, laboratories and offices for the Directorate of Petroleum, and the Petroleum Authority of Uganda (PAU) continued. Progress was at 62% as opposed to the planned 100%. The programme was constrained by low funding which delayed construction works on the new office building, and acquisition of specialized software packages for analyzing the oil and gas sector data. UNOC

lacked adequate funding for all its activities, and had a shortfall of Ug shs 40 billion for stocking of the fuel reserves in Jinja.

The Mineral Exploration, Development and Value-Addition Programme performance was fair at 66.5%. Under the Mineral Wealth and Infrastructure Development Project, Principles for the Mining and Minerals Bill were developed and submitted to Cabinet on 17th December, 2018. The Regulatory Impact Assessment (RIA) for the Mining and Minerals Bills was finalized and the financial clearance for the principles on the Mining and Minerals Bill obtained from MFPED. The draft final Mineral Laboratory Policy was presented to Sector Working Group and RIA is being developed.

Under the programme, the Geology Directorate continued to monitor and supervise the mining licenses and activities in the areas of Namayingo, Mubende, Busia, Bugiri, Kasese, Kabarole, Buhweju, Rubanda, Ntungamo, Kabale, Kisoro and the Karamoja region. The artisanal miners in Mubende District were re-organized. To reorganize and monitor activities of artisanal miners, procurement of a consultant to undertake biometric registration of the miners was on-going. As part of improving the governance in supervision and monitoring activities in the minerals sector the Mining Cadastre and Registry System software was updated to the e-government system, and the MOU for integration with NITA-U and URA was finalized.

Programme performance was affected by delays in the procurement process due to over centralization of the procurement function at the Ministry Headquarters, poor budgetary allocation, lower staffing levels in the departments, and diversion of funds meant for activities of the directorate.

Rural Electrification Programme performance was good at 74.1%. The number of people accessing the electricity grid increased to 143,461 compared to the target of 120,457. A total of 1049.02Kms of Low Voltage and 1,315.28Kms of Medium Voltage Lines were completed.

Under Islamic Development Bank (IDB) funding, works had begun on grid extension projects in districts of Mayuge, Buikwe, Karamoja, Soroti, Serere, Amolatar, Lira, Mpigi, Wakiso, Tororo, Ngora, Rukungiri, Mbarara, Kabale, Mitooma, Ibanda, Rubanda, Kabarole, Kyenjojo, Kyankwanzi, Kiboga, and Hoima. Works on other grid extension projects under OPEC International Fund for Development (OFID) funding continued in Buyende and Kamuli districts.

Completed projects under the French Agency for Development (AFD) were under defects liability period in districts of South Western Uganda (Ntungamo, Kisoro, Kabale, Isingiro, Bushenyi, Mbarara, Sheema), Western Uganda (Kabarole, Kyenjojo, Kyegegwa, Kasese, Hoima, Kiryandongo), Eastern Uganda (Mbale, Manafwa, Sironko, Tororo) and Central Uganda (Lwengo, Sembabule, Masaka, Buikwe).

Projects where funding was secured from the World Bank (IDA), Kuwait Fund, EXIM Bank of China, Abu Dhabi Fund and African Development Bank were yet to commence, partly due to delays in procurement and meeting effectiveness conditions.

The programme experienced an increase in funding with a total budget of Ug shs 683.164 billion, of which 55.8% was released by Q2 of the FY. However, the programme expenditure was only Ug shs 131.44 billion due to delay in commencement of a number of projects, owing to the elaborate procurement guidelines from the funding agencies.

Key Sector Challenges

- i) Difficulty in acquisition of RoW continued to slow progress of works on all transmission line projects. Works on transmission lines linking the completed substations in the industrial parks suffered severe delays.
- ii) Funding for some critical activities under the Oil and Minerals sub-sectors especially for acquisition of field data, specialized laboratory equipment and software programmes with their licenses was not adequate.
- iii) The slow pace of procurement affected performance of the sector, delaying the commencement of several projects under REA.

Recommendations

- i) The Government should work with courts of law to ease the burden faced by Uganda Electricity Transmission Company Limited (UETCL) in acquisition of wayleaves. Several projects affected persons possess illegal land titles in wetlands, and there were several court injunctions bogging down land acquisition activities.
- ii) The Ministry of Lands, Housing and Urban Development should review the land law to enable quicker acquisition of land for government projects. Implementation of projects in the sector continues to suffer leading to increased expenses.
- iii) The sector should prioritize funding to some of the neglected areas. More funds should be allocated for equipping the mineral and oil laboratories, and the acquisition of the required equipment, software and license for the Oil and Gas sector.

CHAPTER 1: BACKGROUND

1.1 Introduction

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

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

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

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

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

1.2 Sector Outcomes

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

- a) Increased access to affordable and efficient sources of energy

¹National Planning Authority -Second National Development Plan (NDPII) 2015/16 – 2019/20 :101

² MFPED, National Budget Framework Paper FY2018/19(Kampala 2018)

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

1.3 Sector Priorities

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

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

CHAPTER 2: METHODOLOGY

2.1 Scope

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

- Significance of the budget allocations to the votes within the sector budgets, with focus being on large expenditure programmes. Preference is given to development expenditure, although some recurrent costs are tracked.
- The programmes that had submitted Q2 progress reports for FY2018/19 were followed up for verification as they had specified output achievements.
- Multi-year programmes that were having major implementation issues were also visited.
- Potential of projects/programmes to contribute to sector and national priorities.
- For completed projects, monitoring focused on value for money, intermediate outcomes and beneficiary satisfaction.

The monitoring focused on 12 projects implemented by Ministry of Energy and Mineral Development (MEMD), and 3 projects by Rural Electrification Agency (REA). New projects where procurement of contractors and consultants was ongoing were not monitored. Annex 1 shows the monitored projects and the respective locations visited.

2.2 Methodology

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

2.2.1 Sampling

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

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

2.2.2 Data Collection

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

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

CHAPTER 3: SECTOR PERFORMANCE

3.1 Overall Sector Performance

3.1.1 Financial Performance

The approved sector budget totaled to Ug shs 2,485.198 billion (Ministry of Energy and Mineral Development (MEMD)-Ug shs 1,756.7 billion, Rural Electrification Agency (REA)-Ug shs 683.164 billion, Uganda National Oil Company (UNOC)-Ug shs 15.2 billion, Petroleum Authority of Uganda (PAU)-Ug shs 30 billion).

The sector release performance was good with 59.9% of the total sector budget released by half year. However, the sector expenditure was very low by half year with only 37.9% of the budget spent by the end of Q2 of the FY. Only UNOC (Vote 311) had good expenditure by half year because most of its funds are spent on staff salaries. A summary of financial performance for the votes in the sector is presented in Table 3.1.

Table 3.1: Energy and Minerals Sector Financial Performance by 31st December, 2018

Vote	Approved budget (Bn Ug shs)	Release (Bn Ug shs)	Expenditure (Bn Ug shs)	% Budget released	% Budget spent
MEMD-017	1,756.46	1,083.00	792.749	61.7	45.1
REA-123	683.538	381.27	131.443	55.8	19.2
UNOC-311	15.2	8.516	8.516	56.0	56.0
PAU-312	30	14.786	9.888	49.3	33.0
Total	2,485.198	1,487.572	942.596	59.9	37.9

Source: Approved Budget Estimates FY 2018/19

3.1.2 Physical Performance

The overall sector physical performance was fair at 65.8% as noted in Table 3.2. Under Vote 017, there was good performance from the Large Hydro Power Programme where the works on the two large dams was progressing well, and target was completion by the end of 2019. The other programmes under the vote all performed fairly. Under Vote 123, the rural electrification performance was good with the number of connections to date of 143,461 compared to the target of 120,457.

Table 3.2: Energy Sector Overall Performance per Programme by 31st December, 2018

	Programme	Overall performance (%)
1	Large Hydro Infrastructure	70.5
2	Energy planning, Management and Infrastructure Development	63.0
3	Petroleum Exploration, Development , Production, Value Addition and Distribution of Petroleum Products	68.5
4	Mineral Exploration, Development and Value Addition	66.5
5	Rural Electrification	74.2

	Overall average sector performance	68.5
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3.2 Vote 017: Ministry of Energy and Mineral Development

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

MEMD Financial Performance

Overall vote release performance was very good at 61.6% by the end of quarter 2 of FY 2018/19. The GoU release was 67.6% and externally funded release stood at 59.8%. The overall expenditure was good with 73.2% of the released funds spent by the end of quarter 2. (Details in Table 3.3).

Table 3.3: MEMD Financial Performance by 31st December, 2018

		Approved Budget	Cash limits by End Q2	Released by End Q2	Spent by End Q2	% Budget Released	% Budget Spent	% Releases Spent
Recurrent	Wage	6.225	3.112	3.112	2.198	50.0	35.3	70.6
	Non-Wage	85.788	43.527	43.527	42.175	50.7	49.2	96.9
Dev.	GoU	325.227	235.371	235.371	207.335	72.4	63.8	88.1
	Ext. Fin.	1,339.221	800.750	800.750	541.041	59.8	40.4	67.6
	Ext. Fin	1339.221	800.750	800.750	541.041	59.8	40.4	67.6
GoU Total		417.240	282.011	282.011	251.708	67.6	60.3	89.3
Total GoU+Ext Fin (MTEF)		1,756.460	1,082.761	1,082.761	792.749	61.6	45.1	73.2
Total GoU+Ext Fin (MTEF)		1,756.460	1,082.761	1,082.761	792.749	61.6	45.1	73.2
Arrears		0.242	0.242	0.242	0.000	100.0	0.0	0.0
Total Budget		1,756.702	1,083.003	1,083.003	792.749	61.6	45.1	73.2
A.I.A Total		0.000	0.000	0.000	0.000	0.0	0.0	0.0
Grand Total		1,756.702	1,083.003	1,083.003	792.749	61.6	45.1	73.2

Total Vote Budget Excluding Arrears	1,756.460	1,082.761	1,082.761	792.749	61.6	45.1	73.2
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Source: MEMD Performance Report Q2 FY2018/19

MEMD Physical Performance

3.2.1 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 36.5 % of the vote sector budget for FY2018/19. The programme contributes to the first sector outcome of ‘*increased access to affordable and efficient sources of energy*’.

The sector outcome indicators are:

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

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

3.2.1.1 Sub-Programme 1212: Electricity Sector Development Project (ESDP)

Background

The project is financed by a loan amounting to Special Drawing Rights (SDR) 63.374 million from the World Bank through the International Development Association (IDA). The Government of Uganda funded the resettlement action plan for the project. The project development objective is to improve the reliability of, and increase the access to electricity supply in the southwest region of Uganda. It is implemented by the MEMD and Uganda Electricity Transmission Company Limited (UETCL). The main component of this project is the construction of the 220kV Kawanda-Masaka Transmission line and its associated substations.

Sub-Programme Performance

Financial performance

The project budget for FY 2018/19 is Ug shs 62.297billion, of which Ug shs 23.099 billion was Government counterpart funding, and the rest of the budget was funded through the loan. The GoU release by end of Q2 was Ug shs 23.028 billion.

Physical performance

Overall physical performance of this project was good. All the major components under this project have been completed namely:

- i. Kawanda-Masaka transmission line: Transmission was completed and is currently under defects liability monitoring.
- ii. 220kV substations at Kawanda and Masaka: Substations were completed and commissioned and currently under defects liability monitoring.
- iii. Feasibility study for the Lira-Gulu-Nebbi-Arua transmission line: The study was completed and approved by the World Bank. Tendering for works on the transmission line is currently on-going.
- iv. Construction of street lighting in Masaka Municipality: The street lighting was completed and project handed over to the Masaka Municipality for operation.
- v. Grid extensions in areas along Masaka-Kawanda Transmission line in areas of Masaka, Kalungu, Mpigi, Wakiso: Most of the works were completed in Masaka and Kalungu. Works in Mpigi and Wakiso were being finalized.
- vi. 2 Line bays for the 220kV Kawanda-Masaka Transmission line at Bujagali substation: The overall works were at 62% completion. This component was behind schedule and will not be completed by the project end period.

Resettlement Action Plan

To date, 42 out of 45 houses had been completed and handed to the Physically Displaced Persons (PDPs). Construction of the remaining three houses was on-going. The status of the cash compensation for the project affected persons is given in Table 3.4.

Table 3.4: Status of Cash Compensations for the Project Affected Persons by 31st December, 2018

	July-Sept 2018		Oct-Dec 2018	
	Total Number	(%)	Total Number	(%)
Total Transactions	2,638	100	2,638	100
Number disclosed to	2,484	94	2,486	94
Agreement	2,460	93	2,464	93
Number of Households paid	2,345	89	2,360	89
Compensation disputes	24	1	23	1

Source: UETCL; Field Findings



L-R: Completed grid extension schemes in Kaduggala-Kalungu District, Completed Control room at the newly constructed 220 kV Masaka substation

Challenges

The project closed on 31st January 2019, but there were unresolved RAP cases which UETCL was still handling. The pending RAP cases were in the following categories: Deceased PAPs (55), Reassessment (40), Incomplete Title ownership (76), Ready for Disclosure (10), awaiting funds request (21), referred to legal section for advice (7), and incomplete in-kind house (3).

Recommendation

The UETCL should ensure that they completely resolve the pending RAP cases since the Ministry of Finance, Planning and Economic Development released the required funds for completion of the activity.

3.2.1.2 Sub-Programme 1025: Karuma Interconnection Project

Background

The project is funded by jointly by GoU and a loan from Export and Import (EXIM) Bank of China. The total funding for this project is \$289,905,937 with EXIM Bank loan contribution of \$246,419,437 and GoU's contribution \$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 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) Sub-stations
 - 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 total budget for this project in FY 201/19 is Ug shs 29.290billion GoU contribution for RAP implementation. The rest of the funding for the EPC works under the project is budgeted under Karuma hydropower project. 100% of the budgeted GoU funds for RAP were released to UETCL to continue with the compensation of the PAPs.

Physical performance

The sub-programme performance was good. The project progress improved and the contractor mobilized equipment to work on all the substations where work had not yet started by end of FY 2017/18.

Karuma-Kawanda transmission line: Overall progress was at 75% progress with 496 of the planned 638 towers completed. Civil works on other foundations was on-going with so far 548 out of the 638 foundations completed. Right of Way issues affected 50 completed foundations preventing erection of towers at these locations.

Karuma-Lira transmission line: 155 out of the 246 planned foundations were completed and erection of 109 out of the 156 foundations was completed.

Karuma-Olwiyo transmission line: Works were behind schedule and only 2 foundations were completed by January 2019.

Substations: Overall works at Lira, Karuma and Kawanda switchyards were at 44%, 49.4% and 46.3% respectively. Works at Olwiyo had not begun since the review of designs was being finalized.

Resettlement Action Plan (RAP)

There was an improvement in the compensation progress. UETCL had so far received Ug shs 39.65 billion during the first half of FY 2018/19. A total of 50 resettlement houses will be constructed and so far 44 sites were acquired for this activity. By 31st December 2018, 22 houses were completed. The status of RAP implementation is summarized in Table 3.5.

Table 3.5: Status of RAP for Karuma Interconnection as at 31st December, 2018

	KARUMA-LIRA(132kv; 78kms) KARUMA-OLWIYO (400kv; 55kms; 60mwidth)		KAWANDA-KARUMA LINE (400kv; 248km; 60m Width)	
	Total Number	%	Total Number	%
Total Transactions	1,252	100	3124	100
Number Disclosed to	1,124	90	2650	85
Agreements	1,060	85	253	81
Number of Households Paid	873	70	2280	73
Compensation disputes	64	5	111	7

Source: UETCL; Field findings

Challenges

- The progress of RAP implementation on the project improved but was still behind schedule.
- Project works were delayed by RoW issues and over 50 completed foundation locations cannot be accessed for towers to be erected.
- Vandalism of some towers on the project led to delays and increased project cost.

Recommendation

- The project received a better budget funding allocation and releases this FY, therefore UETCL should deploy more manpower resources to quicken the progress of RAP implementation.



L-R: Completed foundation works at Karuma substation, Contractors undertaking tower erection works on the Kawanda-Karuma T-Line

The Government of Uganda (GoU) received funding from African Development Bank towards the implementation of Mbarara-Nkenda & Tororo-Lira Transmission Lines Project. The project is aimed at expanding and strengthening the national transmission grid. This project will boost economic growth in western and eastern Uganda. The total loan amount for the project was Unit of Account (UA) 52.51 million and Ug shs 81.917 billion as GoU contribution for the RAP.

The objective of the project is to evacuate electricity from upcoming power plants and improve electricity access, lower transmission losses, increase power efficiency, reliability, stability and quality of supply to consumers in the country especially the western and north eastern regions.

The project consists of the following components:

- a) Construction of 132kV Transmission 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

The GoU counterpart amount budgeted for FY 2018/19 was Ug shs 10.65 billion, of which 100% was released. The loan disbursement stands at 84% but the loan expired on 31st August 2018, and there has not been a response from AfDB.

Physical performance

Overall performance of this sub-programme was poor. However, there was a key milestone registered with the completion of Mbarara-Nkenda transmission line. On the Tororo-Opuyo-Lira transmission line, little progress was made in the construction works and the only notable achievement was the completion of works on the 13 truncated towers close to Soroti Flying School.

Resettlement Action plan

All the 50 resettlement houses for PAPs on the Tororo-Lira Transmission-Line were completed and handed over to their beneficiaries. A total of 47 resettlement houses on the Mbarara-Nkenda Transmission-line were completed and handed over, while the construction of 3 houses was being finalized. The summary of the cash payments to the PAPS is given in Table 3.6.

Table 3.6: Performance of Cash Compensations as at 31st December, 2018

	Tororo-lira		Mbarara-Nkenda	
Item	Total Number	Percentage	Total Number	Percentage
Total Number of Project Affected Households	4,701	100	1,816	100
Number Disclosed to	4,502	96	1,790	99
Agreements	4,339	92	1,757	97
Number of households paid	4,236	90	1,689	93
Compensation Disputes	163	4	33	2

Source: UETCL; Field Findings

Challenges

- The loan from the AfDB expired on 31st December 2018 and there has not been a response from the funder regarding renewal of funding. This has left the project with a big funding shortfall, yet the construction works were incomplete on the Opuyo-Lira transmission project.
- The project currently has no supervision consultants. The supervision and contract management by UETCL staff on this project was lacking and this would further delay project implementation.
- The RAP implementation process posed a big challenge to the successful implementation of the project. Very little progress was made on RAP during the past two years, and the UETCL RAP team was constrained by the low staff numbers.
- The project had unsettled claims from the contractor totaling up to USD 11 million due to interest on delayed invoices, idling charges due to RoW, and demurrage. Other extras incurred include mobilization and demobilization charges, and prolonged time extension.

Recommendations

- The MFPED should engage AfDB regarding the funding for this project so that the remaining works are completed.
- The UETCL should allocate more staff to this project especially from those projects which were successfully completed. The RAP team in particular should be reinforced and facilitated to do its work.
- The UETCL should be supported by the relevant government ministries (Ministry of Lands, Housing and Urban Development and Ministry of Justice and Constitutional Affairs) and various district leaders (MPs, RDCs, CAOs, district chairpersons, LCs) to engage the PAPs and resolve the impasse in RAP implementation.

3.2.1.4 Sub-Programme 1140: Bujagali-Tororo-Lessos/Mbarara-Mirama-Birembo Transmission Project

Background

The project is funded by the Nile Equatorial Lakes Subsidiary Action Plan Programme (NELSAP) with basket funding from the African Development Bank (AfDB) and Japan International Cooperation Agency (JICA). The principal loan from the AfDB was Unit of Account (UA) 7.59 million, and a supplementary loan of UA 5.84 million and a JICA loan of 5.406 billion Japanese Yen. The planned GoU counterpart funding for implementation of RAP was Ug shs 66.437 billion.

The objective of the project is to improve access to electricity in the Nile Basin Initiative (NBI) countries through increased cross border sharing of energy and power. The project comprises:

- Construction of 220kV double circuit transmission line from Bujagali via Tororo substation to the Uganda/Kenya border, over a distance of 131.25km.
- Construction of 220kV double circuit transmission line from Mbarara North substation in Uganda to the Rwanda border over a distance of 65.55km.
- Extension of a substation at Tororo
- New 220/132/33kV substations at Mbarara and Mirama.

Sub-Programme Performance

Financial performance

The project budgeted for GoU counterpart funding of Ug shs 2.5 billion for land acquisition, which was all released. The funding on the original loan from AfDB was exhausted and a supplementary loan of UA 5.84 million negotiated. The disbursement of the supplementary loan stands at 0.4%.

Physical performance

Overall performance of the project was poor. There was no work undertaken on the Bujagali-Tororo transmission line since a new contractor had not been procured to complete the works. The substation works in Tororo, Mirama and Bujagali had stalled after the contractor was

terminated and a new contractor was yet to be procured. Procurement of a new contractor was being undertaken. UETCL is currently finalizing the remaining substation works at Mbarara substation using staff from the Operations and Maintenance (O&M) department.

Resettlement Action Plan

Little progress was registered in the RAP for the Mbarara-Mirama transmission line. The current status of the RAP process is summarized in table 3.7.

Table 3.7: Compensation of Tororo-Bujagali-Lessos Transmission Line as at 31st December, 2018

BUJAGALI-TORORO-LESSOS LINE	Apr-Jun 2018		Jul-Sep 2018		Oct-Dec 2018		Relative Movement	
	Total number	(%)	Total Number	%	Total Number	%	Total Number	(%)
No. of transactions	3147	100	3144	100	3145	100	1	0
Number Disclosed to	3091	98	3111	99	3111	99	20	1
Agreement	3041	97	3054	97	3054	97	13	1
Number of Payments	2969	94.3	3007	95.6	3025	96	38	1.3
Compensation Disputes	50	2	57	2	56	2	7	0

Source: UETCL and Field Findings

Challenges

- The JICA loan that was cancelled due to slow disbursement created a funding shortfall equivalent to USD 5 million which was not considered at the time of applying for the supplementary loan.
- The project had no contractors for Tororo and Mirama Hills substation works, and the Tororo-Bujagali transmission line after the contracts for the two contractors undertaking project works were terminated.
- The project was grappling with the issue of slow compensation due to disputes with PAPs, especially those that continue to reject the compensation rates offered by UETCL.

Recommendations

- The UETCL should resolve the contract issues for the remaining works. The procurement of new contractors should be handled as a high priority and discussions with AfDB and the NELSAP Secretariat should be finalized.
- The UETCL should allocate more staff to supervise this project especially from other successfully completed projects. The RAP team should be reinforced and better facilitated to do its work.

- The UETCL should be supported by other stakeholders especially MEMD, MFPED, MLHUD, local leaders and the Courts of Law to ensure that the compensation disputes on this project are resolved to prevent further delay.



Partially completed Mbarara substation showing the on-going residual works

3.2.1.5 Sub-Programme 1222: Electrification of Industrial Parks

The GoU established industrial parks in an effort to support industrial development in the country. The industrial parks that were identified need reliable power supply and thus the identified projects to electrify these parks. The project EPC works are 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 to fund the acquisition of land on the project to the tune of Ug shs 55.163 billion.

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

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

Sub-Programme Performance

Financial Performance

The budget for FY 2018/19 is Ug shs 119.582billion, of which Ug shs 25.0billion is GoU funding and Ug shs 94.582billion. The GoU release was good with Ug shs 16.67 billion, of the Ug shs 25.0billion released. Ug shs 83.3billion of the external funding was spent by the project.

Physical performance

The project performance was good and significant progress was registered during the FY.

1. Sub-stations: Works on Iganga, Namanve, Mukono and Luzira the substations were completed but the substations were yet to be energized.

2. Transmission Lines: The overall progress is about 25.5%. Tower structural designs were completed; tower spotting, geotechnical investigations and studies for Namanve South, Iganga and Mukono Transmission Lines routes completed; Tower foundation works for Mukono and Namanve South Transmission Lines ongoing. Tower erection works for Mukono Transmission Line were ongoing.

Status of RAP implementation at 31st December 2018

The RAP implementation for the transmission lines on the project was lagging behind and minimal progress was made during the first half of FY 2018/19. More effort should be given particularly in dealing with the challenging cases like PAPs who have land titles in wetland areas of Luzira-Namanve transmission line. The summary for the RAP implementation for the PAPs in the transmission line corridor is summarized in table 3.8.

Table 3.8: RAP Progress for Electrification of Industrial Parks as at 31st December, 2018

	Q1 July- Sept 2018		Q2 Oct-Dec 2018		Relative Movement	
	Total Number	(%)	Total Number	(%)	Total Number	(%)
Total Number of Project Affected	542	100	542	100	0	0
Number Disclosed to	316	58	316	58	0	0
Agreements	311	57	311	57	0	0
Number of Households Paid	244	45	244	45	0	0
Compensation Disputes	5	1	5	1	0	0

Source: UETCL and Field findings

Challenges

- Works on all transmission line sections linking the industrial park substations to the transmission grid were behind schedule due to failure by UETCL to compensate for the line corridor. Several PAPs hold land titles in the Luzira wetland and a court injunction issued against UETCL prevented work from being undertaken.

- The Uganda Investment Authority (UIA) had not handed over the 30m line corridor in the Namanve Industrial Park as was agreed. This is delaying commencement of work on the transmission line.
- The contractor communicated his intention to calculate extra charges due to delays in handing over the line corridor. The project planned completion date is April 2019 which is unlikely to be achieved.

Recommendations

- The UETCL, MLHUD and NEMA should resolve the issue of land titles in wetlands in order to allow the construction works on the transmission line to proceed.
- The MFPED should engage the UIA management to ensure that they comply with their obligation of providing the land required for the successful completion of the project. Further delay on the project is going incur extra charges from the contractor.



L-R: Completed substation at Mukono Industrial Park, Ongoing construction works on the T-line for Mukono substation

Overall Programme Performance

Overall performance Energy Planning, Management and Infrastructure Development Programme was fair at 63.0% (Table 3.9). The performance of the programme outputs continued to be negatively affected by the poor performance of the NELSAP, and Lira-Tororo/Nkenda-Mbarara projects. Performance of the Karuma interconnection and Electrification of Industrial Parks improved but challenges of acquisition of wayleaves are a major project implementation hindrance. Other projects such as Opuyo-Moroto, Kampala-Entebbe, Mbale-Bulambuli, Grid Expansion and Reinforcement, Masaka-Mbarara, Mirama Kabale had not commenced works yet.

Table 3.9: Performance of the Energy Planning, Management and Infrastructure Development Programme as at 31st December, 2018

Sub-programme	Output	Annual Budget (Bn Ushs)	Cum. Receipt (Bn Ushs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Electricity Sector Development Project	Implementation of Resettlement Action Plan	20.25	20.25	100.00	88.00	2.0	All resettlement houses were completed. Payments to the PAPs was at 87%.
	Construction and supervision of grid extension lines in the transmission line connections and free electricity connections.	2.85	2.85	100.00	80.00	0.0	Grid extension works in Masaka and Kalungu were completed. Works in Mpigi and Wakiso were being finalized.
	Construction of 220kV Kawanda-Masaka transmission line and associated substations(Masaka and Kawanda)	62.30	62.30	100.00	90.00	9.3	Construction works on the transmission line and substations were completed. The contractors were fixing snags.
Mbarara-Nkenda/Tororo Lira Transmission Line	Implementation of Resettlement Action Plan	10.65	10.65	100.00	30.00	0.5	The compensation process was still very slow due to resistance of the PAPs and also low funds for the activity.
	Construction of Mbarara-Nkenda and Tororo-Lira transmission lines and substations	-	36.91	100.00	50.00	3.1	There was very little work done on the Tororo-lira Line since the contractors had suspended works in Jan 2017 and only work resumed

Sub-programme	Output	Annual Budget (Bn Ushs)	Cum. Receipt (Bn Ushs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
							in February 2018
Electrification of Industrial Parks	Construction of Namanve South, Luzira, Mukono and Iganga industrial park substations and associated transmission lines.	94.58	94.58	75.00	75.00	13.9	Substation works were completed. Works on the transmission lines were: Namanve South-Luzira - 10% Namanve North-Namanve South - 26% Mukono T-off - 43% Iganga T-off - 23%.
	RAP Implementation	25.00	16.67	75.00	0.00	0.0	The RAP progress was not good and this affected the EPC works on transmission lines.
Karuma Interconnection Project	RAP Implementation	29.29	29.29	90.00	85.00	4.6	Sufficient funds were not released for this activity during the FY.
	Construction of Karuma-Kawanda, Karuma-Olwiyo, Karuma-Lira transmission lines and associated substations	317.95	317.95	100.00	55.00	29.1	Good progress was registered on the Karuma-Kawanda transmission line with about 40% of the towers now erected. Works on the substations had just commenced.
NELSAP(Bujagali-Tororo/Mbarara-	Construction of Bujagali-Tororo and Mbarara	7.56	7.56	100.00	30.00	0.4	Works on Mbarara-Mirama completed. Work on

Sub-programme	Output	Annual Budget (Bn Ug shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Mirama)	Mirama transmission lines						Mbarara Substation was being finalized. The rest of the project works had stalled.
	RAP Implementation	2.50	2.50	100.00	30.00	0.1	The pending compensations cases were being handled case by case by the UETCL team.
Programme Performance (Outputs)						63.0	This is fair performance

Source: Field findings

3.2.2. 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 is 42.75% of the total vote budget. Sub-programmes monitored for the FY 2018/19 are Isimba Hydropower Project and Karuma Hydropower Project.

3.2.2.1 Sub-Programme 1143: Isimba Hydroelectricity Power Project

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 and the contract sum for the project is US\$ 567.7 million for a period of 40 months. The EPC contractor for the hydropower plant (HPP) and the Isimba-Bujagali interconnection line is China International Water and Electric Corporation (CWE), and supervising consultant is Artelia EUA and Environment in association with KKAT Consult.

Financial Performance

Funds for certificate interim payments up to IPC #16 is USD 401,694,552, GoU funding release for supervision, monitoring and RAP was fair with Ug shs 10.423 billion of the Ug shs 24.937 billion released to UEGCL for project activities.

Physical Performance

Overall progress for dam construction works was good and by January 2019, 98.25% of the project works were complete. Commissioning of units 1 and 2 was completed and the two units were undergoing test run. Reservoir impounding was completed on 31st December 2018. Unit 3 and 4 commissioning is planned for January 2019. The contractor requested for a time extension up to March 2019 to complete the remaining electro-mechanical works and construction of access roads.

The works on the bridge connecting Kayunga and Kamuli had commenced and civil works on the foundations were on-going. There was a delay in procurement of the supervising consultant to supervise works on the bridge and this posed a major risk to the quality of the works.

Progress of the Bujagali-Isimba Interconnection

The works on the switchyard and the 42km transmission line were completed. By January 2019, about 90MW of electricity generated from units 1 & 2 at Isimba was being evacuated to the Bujagali switchyard through the completed transmission infrastructure.

Community Development Action Plan

The community development action plan (CDAP) activities had commenced. Drilling of boreholes in Kayunga and Kamuli districts was ongoing and the ground breaking for the construction of technical school at Lwanyama in Kamuli District was undertaken in November 2018. Other components under the CDAP were awaiting more funds.

Challenges

- Incidents of vandalism on the Isimba-Bujagali transmission line were reported and a case of theft of Optical Ground Wire (OPGW) on tower 9 to 11.
- The works on motor able road for operation and maintenance activities along the transmission line were pending.
- There was a delay in procurement of the consultant to supervise the works on the Isimba bridge which posed a risk to the quality of works on the bridge.



Downstream view of the completed Isimba HPP power house showing the evacuation lines



L-R: Completed planthouse at Isimba HPP showing completed generation units, Levelling works on the parking lot at Isimba HPP with completed switchyard in the background

3.2.2.2 Sub-Programme 1183: Karuma Hydroelectricity Power Project

Background

The GoU is developing Karuma HPP as a public investment to generate 600MW of electricity. The medium term objective of the project is the ultimate development of Karuma HPP and its associated transmission line interconnection. The hydropower plant will contribute to increasing power supply in the country, and possibly in the East African region. The EPC contractor is Sino Hydro Corporation Limited and the supervising consultant is

Energy Infratech PVT Limited. The total cost of the EPC works is USD 1,398,516,747 with EXIM Bank contributing 85% and GoU contributing 15%.

Financial Performance

Financial progress by 31st December 2018 was 81.96% against a planned absorption of 100%. The certified amount released to date is USD 1,146,363,664 out of the contract sum of USD 1,398,516,759. The released funds include the GoU funding component of 15% which was disbursed as an advance payment to the EPC contractor.

Physical performance

Overall progress was at 86%. Civil works were at 66.5%, hydro-mechanical works at 1.15% and electro-mechanical works area at 11.18%. Overall progress of the work was fair and the project remained behind schedule and revised completion date is December 2019.

- Civil works: Concrete works on the dam and power intake were completed. While concreting works were advanced at the main transformer cavern, surge chamber, tail race and head race tunnels was ongoing. Repair works on defective concrete works were ongoing. Works on the control room and auxiliary house was almost complete.
- Hydro-mechanical works: Testing of all gates was undertaken. Erection of thrash rack and the rip- rap is on-going.
- Electro-mechanical works: Installation works continued in the power house and the lowering of rotor for unit 1 was completed and the run-out test completed.

Challenges

- Most of the observed defects in concrete structures especially in the stilling basin and some underground components such as the surge chamber and the Tail Race Tunnel (TRT) were being undertaken.
- The MEMD was yet to pay compensation for land around the reservoir area.

Recommendations

- The UEGCL and the Owner's Engineer should more vigilant and prevail on the EPC contractor to satisfactorily complete the repairs on the identified defects. The project team should also be more vigilant in the supervision of works to prevent further occurrences of shoddy works as we move towards the project completion.
- The MEMD should quickly resolve the issue of compensation in the reservoir area to prevent further delay and complications with the project affected community.

Overall Programme Performance

The overall performance of the programme was good at 70.5 % (Table 3.10). The programme achieved a major milestone of commissioning Units 1 & 2 at Isimba HPP, with major works completed at the project. Units 3 and 4 at Isimba HPP were due to be commissioned by end of January 2019. Works at the Karuma HPP were progressing.



L-R: Electromechanical works in the power house showing a partially completed generator unit, Ongoing works at the power intake



L-R: Installed Log boom at the Karuma HPP intake area, Electromechanical works inside the rotor assembly for Unit 6 at Karuma HPP

Table 3.10: Performance of the Large Hydro Infrastructure Programme by 31st December, 2018

Sub-progr ammes	Output	Annual Budget (Bn Ug shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical perform ance Score (%)	Remark
Isimba HPP	Construction works on Isimba HPP	0.000	37.23	100.00	98.00	5.72	Overall progress at 98.25% of physical works. Reservoir impounding completed by 31 st December 2018. Units 1 & 2 were commissioned.

	Supervision of works on Isimba HPP	16.328	8.62	100.00	95.00	2.48	Supervision of the project improved by acquisition of a new Owner's Engineer (ARTELIA EUA AND KATT Consult) in Jan 2018.
	Implementation of the RAP, CDAP and ESMP	3.609	1.80	100.00	75.00	0.43	Implementation of the CDAP commenced with siting and drilling of boreholes.
Karuma HPP	Construction works on Karuma HPP	576.749	576.75	100.00	67.00	61.84	The overall physical progress of works was estimated at 91.0% against the time spent of 84.7%.
	Supervision of works on Karuma HPP	25.772	12.09	100.00	79.00	3.30	Supervision of the works continued with Energy Infratek pvt.
	Implementation of the RAP, CDAP and ESMP	2.370	1.69	100.00	40.00	0.15	The reservoir area of the project was yet to be compensated by MEMD. The construction of the mosque and church stalled due the expiry of the contracts. Land for resettlement of project affected persons was not been procured.
Overall performance(Outputs)						70.5	This is good performance

Source: Field findings

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

The programme effectively monitors all petroleum operations in the country for the exploitation of the petroleum resource in an economically and environmentally conducive manner. The Directorate of Petroleum in the MEMD is responsible for promoting and regulating the petroleum upstream (exploration, development and production) sub-sector in the country. The directorate is also handling the development of the country's petroleum midstream sub-sector, which involves planning for the development of the refinery and pipelines in the country. The programme contributes to the third sector outcome of "sustainable management of the country's oil and gas resources." The programme took up 3.3% of the total sector budget for FY2018/19. The programme comprises of the sub-programmes below;

- Strengthening the Development and Production Phases of Oil and Gas Sector sub-programme (1355)
- Skills for Oil and gas Africa/SOGA Sub-programme (1410)
- Construction of Oil Refinery sub-programme (1184)
- Midstream Petroleum Infrastructure Development Project sub-programme (1352)

Strengthening the Development and Production Phases of Oil and Gas Sector (1355), and Skills for Oil and gas Africa/SOGA (1410) sub-programmes were monitored. The Lead Investor, M/s Albertine Graben Refinery Consortium (AGRC) for the Oil Refinery commenced the Front End Engineering Design (FEED) studies to inform the Final Investment Decision (FID) of the Refinery Project. On the East African Crude oil export pipeline (EACOP) negotiations of the Host Government Agreement (HGA) between Government of Uganda and the Joint Venture Partners were progressing.

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

Background

The purpose of the project 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).

Financial Performance

The budget for FY2018/19 is Ug shs 16.61 billion. 57.3% of the budget was released by 31st December 2018. Absorption of funds was fair at 60.1%.

Physical Performance

Performance was fair. The sub-programme was granted a one-year extension to be completed by June 2020. 200-line km of geophysical and geochemical data was collected and over 320 sq km of geological mapping was undertaken in Moroto-Kadam basin representing 40% coverage of the basin.

The second licensing round preparations were in progress with meetings ongoing with the launch expected at the East Africa Petroleum Conference in May 2019. Production license applications were being reviewed for the areas of Lyec, Mpyo and Jobi-East.

The construction of Phase-3 of the National Petroleum Data Repository, laboratories and offices for the Directorate of Petroleum, and the Petroleum Authority of Uganda (PAU) was ongoing and progress was at 62%. However, works were behind schedule as opposed to the planned progress of 100%.

The procurement of several equipment for the laboratory and field activities (Gravity meter and GPS sets) was in advanced stages and the servicing of the LECO analysis machine was undertaken.



L-R: Ongoing Phase 3 construction works for building to house Laboratories, Petroleum Directorate and Petroleum Authority of Uganda (PAU) at Entebbe; Some of lab equipment that was serviced at the Petroleum Directorate laboratories, Entebbe

Challenges

- The progress of construction works for the building to house the National Petroleum Data Repository, laboratories and offices for the Directorate of Petroleum, and the PAU, plus acquisition of software packages to analyse oil and gas data was constrained by low funding. Even though the release was good, funding was limited by the budget ceilings.
- The sub-programme was affected by inadequate staffing levels due to some staff being lost to PAU and UNOC.

Recommendations

- The sector should prioritize funding for constructions works on the building to house the National Petroleum Data Repository, laboratories and offices for the Directorate of Petroleum, and PAU.
- The energy sector planning unit should prioritize allocation of adequate funds for equipping the directorate in charge of the oil and gas with the specialized software packages and licenses required to analyze the oil and gas sector data.

3.2.3.2 Sub-Programme 1410: Skills for Oil and gas Africa (SOGA)

Background

The main objective of the sub-programme is to improve access to jobs and economic opportunities for Ugandans around the country's oil and gas sector. It is expected that the number of the Ugandan population in sustainable jobs associated with oil and gas investments will increase by 8,000 (in total 32,000 for all four countries). Out of the 8,000

people, 35% should be women and 40% young people between the age 15 and 24. In addition, the sub-programme will raise the incomes of 60,000 people by 10% (including indirect and induced income increments; in total 240,000 for all four countries). The total GoU sub-programme budget is Ug shs 50bn.

Financial Performance

The sub-programme took 9.3% of the programme budget. The budget of the sub-programme for the FY2018/19 is Ug shs 5.36billion. 63.4% of the budget was released by 31st December 2018. Absorption of funds was very poor at 6.2%

Physical Performance

The sub-programme performance was fair. The programme continued to deliver trainings and workshops to promote employment in oil and gas. Skills workshops with vocational and technical institutions were held in Lira and Gulu, whereas training in local content implementation and compliance was undertaken in Lagos, Nigeria. The Local Content Policy was approved by Cabinet, but yet to be gazetted.

Overall Performance of the Programme

The overall performance of the programme was fair at 68.5% (table 3.9). The construction of Phase-3 of the National-Petroleum Data Repository, laboratories and offices for the Directorate of Petroleum, and the PAU was progressing, but behind schedule due to low funding while the geophysical, geological and geochemical data acquisition and mapping continued in Moroto-Kadam basin. Also preparations for another licensing round were underway.

Table 3.11 shows the details performance of the Petroleum Exploration, Development, Production, Value addition and Distribution of Petroleum Products Programme.

Table 3.11: Performance of the Petroleum Exploration, Development, Production, Value Addition and Distribution of Petroleum Products Programme as at 31st December 2018

	Output	Annual Budget (Bn Ug shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Sub-programme 1355: Strengthening the Development and Production of Phases of the Oil and Gas Sector	Promotion of the Country's Petroleum Potential and Licensing	0.850	0.667	100	62.00	3.06	About 200-line km geophysical and over 320 sq. km of geological and geochemical collected. Procurement of consultancy services to undertake

	Output	Annual Budget (Bn Ug shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
							ESIA assessment for exploration ongoing. 3 steering committee meetings held for the 2nd licensing round.
	Initiate and Formulate Petroleum Policy and Legislation	0.220	0.153	100	45.00	0.65	Populating the M and E database for the NOGP ongoing. Formulation of guidelines postponed pending regulatory impact assessment for the National Oil and Gas Policy.
	Capacity building for the Oil and Gas Sector	5.600	3.327	100	43.00	18.45	One staff completed Masters' degree. Retention allowance for 50 staff was paid. 3 short courses were undertaken by 6 staff.
	Monitoring Upstream Petroleum Activities	0.700	0.467	100	60.00	2.87	Supervision of RAP for Tilenga in Buliisa and Kingfisher in Hoima undertaken.
	Participate in Regional Initiatives	0.900	0.700	100	70.00	3.69	Ministry participated in the EAC

	Output	Annual Budget (Bn Ug shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
							Sectorial Council Meeting held between 15th-19th October, 2018 in Arusha, Tanzania. Four (4) East African Petroleum Conference and Exhibition-2019 (EAPCE) steering committee meetings held.
	Government Buildings and Administrative Infrastructure	4.540	2.310	100	40.00	16.24	Construction of Phase-3 of the National Petroleum Data Repository Laboratories and offices for the Directorate of Petroleum and PAU continued with progress at 62%. Repairs on the White House block and other blocks undertaken.
	Purchase of Motor Vehicles and Other Transport Equipment	0.800	0.400	100	20.00	1.46	Procurement of 4 field vehicles ongoing at bids advertising stage.
	Purchase of Office and ICT Equipment, including	1.200	0.600	100	20.00	2.18	Procurement of maintenance licenses is at bids

	Output	Annual Budget (Bn Ug shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Sub-programme 1410: Skills for Oil and Gas Africa (SOGA)	Software						advertising stage. Antivirus licenses was renewed.
	Purchase of Specialised Machinery and Equipment	1.700	0.850	100	25.00	3.87	LECO Machine was serviced. Procurement of one gravity meter, 2 sets of differential GPS and 2 handheld GPS ongoing at contract clearing stage.
	Purchase of Office and Residential Furniture and Fittings	0.100	0.050	100	50.00	0.46	Some office furniture was procured. Procurement of other office furniture postponed pending completion of the ongoing Data Centre and Office Building complex.
	Capacity building for the Oil and Gas Sector	4.962	3.033	100	40.00	14.78	Skills requirements workshops with Vocational and Technical Institutions held in Masaka, Lira and Gulu districts. Local Content Policy approved by Cabinet but yet to be gazetted. Two

	Output	Annual Budget (Bn Ug shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
							(2) national content staff were trained in Lagos Nigeria.
	Monitoring Upstream Petroleum Activities	0.100	0.067	100	30.00	0.20	Procurement re-tendered and permission to award gotten.
	Purchase of Motor Vehicles and Other Transport Equipment	0.300	0.300	100	50.00	0.68	Procurement of one motor vehicle in final stages.
	Programme Performance (Outputs)					68.58	This is fair performance

Source: Field findings

3.2.4 The Mineral Exploration, Development and Value-Addition Programme

The programme took up 1.4% of the MEMD vote budget. The programme is responsible for the functions under the mineral sector, which involves Mineral Exploration and Investment Promotion. To achieve this objective, the sub-sector undertakes collecting, collating, processing, analyzing, archiving and disseminating geo data, monitor and assist small scale miners and also enforce regulations in the sub-sector. The programme also undertakes airborne geophysical surveys to acquire airborne magnetic, radiometric and some electromagnetic covering the entire country. The outcome of the programme is to have sustainable management of mineral resources for economic development. The programme aims at having increased value of mineral exports as per permits issued, increased value of mineral production and change in revenue of mineral rights.

The programme consists of the sub-programmes below;

- Uganda Geothermal Resources Department sub-programme (1199)
- Mineral Wealth and Mining Infrastructure Development sub-programme (1353)
- Design, Construction and Installation of Uganda National Infrasound Network/DCIIN (1392)
- Mineral Laboratories Equipping and Systems Development (1505)

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

Background

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

Expected results under the sub-programme are:

- Aeromagnetic and radiometric maps of Karamoja
- Mineral certification infrastructure established in Entebbe
- NDP-I 1-6 objectives targets and out puts delivered
- Mineral reserves established for development
- Earthquake research and monitoring facilities constructed and risk management infrastructure restored
- 6. Mineral rich corridors and business centres linked for industrial development
- Four (4) mineral beneficiation centres constructed
- Youth trained in mineral beneficiation technical skills
- Mineral laboratories improved for value addition tests
- A new legal, fiscal and regulatory framework

Financial Performance

The budget for FY2018/19 is Ug shs. 12.75 billion. Release and expenditure were at 64.7% and 52.4% as at 31st December 2018.

Physical performance

The performance for the sub-programme was good. The Principles for the Mining and Minerals bill were developed and submitted to Cabinet on 17th December, 2018. The Regulatory Impact Assessment (RIA) for the Mining and Minerals Bills finalized and the financial clearance for the principles on the Mining and Minerals bill obtained from Ministry of Finance. The draft final Mineral Laboratory Policy presented to sector Working Group and RIA was being developed.

In order to strengthen the regulatory frame work, regulations for online licensing were finalized and review of mining regulations, 2004 was ongoing. The mineral policy that was approved on 7th May 2018 is awaiting gazetting by the minister. Under the licensing function, 104 licenses were granted in the first half of the year and 41 licenses were not renewed.

Under Mineral exploration, different surveys were conducted. Geological and geophysical surveys of iron ore in the areas of Muko, Kisoro, Rukungiri and Kabale were undertaken. 165 tonnes of iron ore are estimated in Muko, Kisoro, Rukungiri and 70 tonnes are estimated in Kabale. Evaluation of Sand deposits at Dimu, Masaka was undertaken and 103,084,159 tons of Silica, Silty and Micaceous sands were established. Geochemical survey of gold and base metals associated with iron ore anomaly in Muko undertaken. Geochemical survey of

uranium anomaly in Katara, Buhweju was also conducted and 249 soil samples, 24 alluvial samples and 27 rock samples were collected for analysis.

Under inspection and monitoring, three location licenses in Mubende, 30 exploration licenses in Mbarara and Kigezi and mining sites in Namayingo and Busia were monitored. A total of 11 associations were registered in Mubende, Namayingo and Ntungamo.

Procurement of a consultant to undertake biometric registration to reorganize and monitor activities of artisanal miners was on-going.

Fencing of land for Moroto Regional Center was ongoing, while procurement for fencing land in Mbarara and Ntungamo was ongoing. Acquisition of land for eastern regional centre in Busia was under procurement.

Capacity building of staff continued. Three (3) staff enrolled for Master of Science degrees in MSc in Mining Engineering in UK, MSc in Analytical Chemistry in UK, and MSc in Geotechnical Engineering in Thailand, whereas one (1) staff enrolled for certificate course in MCSE window server.

Challenges

- Commencement of works on other regional offices was delayed by pending approval of designs made by the consultant by Ministry of Works and Transport team.
- Absorption of funds was low due to delay in the procurement processes.
- There was delay in execution of works due to inadequate staffing levels.

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

Background

The objectives of the project are to Design, Construct and Install Infrasound Network (DCIIN) in Uganda. An infrasound network consists of sensors that measure micro pressure changes in the atmosphere which are generated by the propagation of infrasonic waves created as a result of events such as nuclear explosion, storms, earthquakes, exploding volcanoes and meteors. The technology therefore has considerable potential for disaster prevention and mitigation through early warning. The project aims to:

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

Overall budget for the sub-programme is Ug shs 32billion and this is fully GoU funded.

Financial Performance

The sub-programme budget for FY 2018/18 is Ug shs 3.63 billion. Release as at 31st December 2018 was at 66.6%. However, expenditure performance was poor at 44.2%.

Physical performance

The sub-programme performance was fair. The sub-programme undertook training in infrasound technology and geophysical data from Kiryandongo, Hoima and Bushenyi at sites hit by lightning.

An MoU for establishing an infrasound station in Entebbe was cleared for signature by the Solicitor General and construction works on the first infrasound station commenced.

To map vulnerability of lightning risk, geophysical and magnetic surveys and measurements were carried out in the areas of western, Central, Eastern and North eastern Uganda where fatal lightning strikes have been experienced. A lightning database was put up and information on how to manage lightning risks was disseminated to the vulnerable communities, public buildings and schools.

Challenges

There was inadequate staffing due to a number of unfilled vacancies in the Geological and Mines Department. Most staff were being shared among the three departments and this caused implementation of activities difficult.

Recommendation

The MEMD should follow up with Ministry of Public Service to fill the vacant positions in the Ministry structure as a matter of urgency. These positions have been unfilled for a long time.

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

Background

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

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 remodelled 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 requirements for analytical and value addition laboratory testing
- Systems and capabilities to monitor analytical and mineral value addition operation put in place

Financial Performance

The sub-programme budget for FY 2018/19 is Ug shs 2 billion. Release was at 54.1%, while expenditure performance was very poor at 6.2%.

Physical Performance

The performance of the sub-programme was fair. A team from Ministry of Works and Transport was assigned to provide technical support in designing a modern laboratory building to house all DGSM laboratories. A benchmarking trip to mineral research facilities at University of Cape Town in South Africa was made.

Contract for design, implementation, maintenance and support services of a Laboratory Information Management System (LIMS) for the DGSM Laboratories was signed and consultant was yet to start work.

The procurement of laboratory equipment such as petrology, mineralogy, gemology, sample reception and reagents was initiated and bids were received and opened.

Training of staff on hazardous substances and health, safety and environment and laboratory standards was referred to last half of financial year.

Challenges

- Delays in the procurement process hindered progress in implementation of sub-programme activities.
- There was inadequate funding for acquisition laboratory equipment since most equipment is costly. The conclusion of the procurement process may not be possible with inadequate funds.
- Power supply problems within office and laboratory blocks of the DGSM which have damaged equipment in the past and has not made it possible to install newly acquired equipment

Recommendations

- The MFPED should increase the budget allocation to the sub-programme in order to acquire the costly minerals laboratory equipment.

Overall Performance of the Programme

The performance of the programme was fair at 66.49% (Table 3.12). The Mineral Policy is awaiting gazetting by the Minister, while geological and geophysical surveys to establish the mineral potential were undertaken. Reorganization of Artisanal miners and mapping of lightning risk prone areas was ongoing.

Table 3.12: Performance of the Mineral Exploration, Development and Value-Addition Programme as at 31st December 2018

	Output	Annual Budget (Ug Bn shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Sub-programme 1353: Mineral Wealth and Mining Infrastructure Development	Policy Formulation Regulation	0.500	0.292	100	52.00	2.42	Principles for the mining and minerals bills developed, yet to be submitted to Cabinet. Draft Mineral Laboratory Policy presented to sector working group and Regulatory Impact Assessment (RIA) was being developed. ToRs for Mineral Certification database developed. Regulations for online system finalized.
	Institutional Capacity for the Mineral Sector	2.815	2.041	100	65.00	13.73	Four staff enrolled for Masters level training. One staff enrolled for certificate course in MCSE window server certification. Mining Cadastre and Registry System software updated to e-government system and now hosted in the clouds.

	Output	Annual Budget (Ug Bn shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
	Mineral Exploration , Development, Production and Value-addition promoted	0.836	0.507	100	55.00	4.12	Evaluation of sand at Dimu, Masaka established. Geochemical survey of Uranium anomaly at Katara, Buhweju and geochemical surveys of Gold and iron ore in Kabale undertaken.
	Health Safety and Social Awareness for Miners	0.538	0.409	100	63.00	2.43	Mapping of ASM site in Mubende ongoing. 20 miners in Mubende and 50 miners in Namayingo sensitized. Associations registered were: 2 in Namayingo, 5 in Mubende and 4 in Ntungamo
	Licensing and Inspection	1.315	0.918	100	50.00	5.12	Assessment and due diligence conducted on 82 applications. 104 licenses granted. Illegal mining operations in Ibanda, Karamoja and Kabarole and Kabale districts identified and mineral police deployed.
	Contribution to International	0.350	0.350	100	65.00	1.24	Mineral certification guidelines

	Output	Annual Budget (Ug Bn shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
	al Organisation (SEAMIC)						drafted. Kikagati site inspection done. TOR for mineral certification database developed. Subscription made to AMGC, Mining Magazine, Mineralogical record magazine and Newspapers Magazine and DSTV.
	Acquisition of Land by Government	0.080	0.053	100	40.00	0.26	Procurement for fencing of land in Mbarara and Ntungamo was initiated and under evaluation. Procurement for land in Busia was at contract stage. Fencing of Moroto land was ongoing.
	Government Buildings and Administrative Infrastructure	2.700	1.600	100	27.00	6.69	Procurement initiated for Fort Portal and Ntungamo coordination offices. Procurement was delayed by pending formalisation of MoU with Ministry of Works and Transport.

	Output	Annual Budget (Ug Bn shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Sub-programme 1505: Mineral Laboratories Equipping and Systems Development	Purchase of Motor Vehicles and other Transport Equipment	1.000	0.750	100	45.00	3.26	Procurement for six motor vehicles initiated and clearance from MoPS obtained in December, 2018.
	Purchase of Specialized Machinery and Equipment	2.520	1.260	100	20.00	5.48	Procurement of 2 drilling rigs and geological equipment initiated.
	Purchase of Office and Residential Furniture and Fittings	0.100	0.067	100	25.00	0.20	Procurement for assorted office furniture for Moroto office initiated and at evaluation stage.
	Institutional Capacity for the Mineral Sector	0.228	0.155	100	40.00	0.73	Contract for designing of Laboratory Information Management System underway. Training of technical staff was ongoing.
	Mineral Exploration, Development, Production and Value-addition promoted	0.100	0.068	100	50.00	0.40	Standard Operating Procedure for analytical techniques were developed. Identification of analytical test methods to be acquired from ASTM International underway.

	Output	Annual Budget (Ug Bn shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Sub-programme 1392: Design, Construction and Installation of Uganda National Infrasound Network (DCIIN)	Health Safety and Social Awareness for Miners	0.010	0.007	100	0.00	0.00	Training of staff on health, safety and environment in laboratories scheduled for January 2019
	Government Buildings and Administrative Infrastructure	0.130	0.087	100	35.00	0.37	Procurement of a contractor to refurbish the laboratory building was ongoing.
	Purchase of Specialized Machinery and Equipment	1.532	0.766	100	30.00	5.00	Procurement for laboratory equipment initiated. Bids were received and opened. However, there is need to increase funding since laboratory equipment is costly.
	Policy Formulation Regulation	0.128	0.084	100	50.00	0.53	78 staff trained for 2 days on infrasound technology. Intrusive features on Geophysical data collected from Bushenyi, Hoima and Kiryandongo were validated.
	Institutional Capacity for the Mineral Sector	0.221	0.137	100	50.00	0.97	Field data to pattern of a lightning base map for public institutions was generated. Collected and interpreted geophysical

	Output	Annual Budget (Ug Bn shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
							data form lightening prone areas. Works on first infrasound station was ongoing.
	Mineral Exploration , Development, Production and Value-addition promoted	0.221	0.146	100	40.00	0.73	Data base on lightning risk was built. It was realized that lightning data supports exploration for natural resources and geological mapping of structures such as dykes, faults among others.
	Health Safety and Social Awareness for Miners	0.228	0.149	100	50.00	0.95	Maps were disseminated to benefit the business groups in minerals prospecting and mineral exploration. National Disaster Risk Atlas in the Office of the Prime Minister was prepared. A lightning database was setup.
	Licensing and Inspection	0.250	0.181	100	60.00	1.13	Field investigations carried out in Western, Central, North-Eastern, Karamoja region and Aswan shear rift zones. Monitored facilities dealing

	Output	Annual Budget (Ug Bn shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
							with seismic data collection and carried inspection on vulnerable communities, public buildings and schools.
	Acquisition of Land by Government	0.230	0.153	100	55.00	1.03	An agreement for the Entebbe Infrasound Station was concluded in the established Land acquisition framework for Infrasound Network. Registration of Land housing seismological stations was supported.
	Government Buildings and Administrative Infrastructure	0.990	0.660	100	55.00	4.44	An MoU for establishment of Uganda National Infrasound Network station in Entebbe was cleared for signature by Solicitor General in December 2018. The project Contractor commenced the construction of the Entebbe Infrasound station.
	Major Bridges	0.020	0.013	100	50.00	0.08	The project supported the maintenance of seismological station in Hoima, Kilembe Nakauka,

	Output	Annual Budget (Ug Bn shs)	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
							Mbarara and Aswa shear zone.
	Purchase of Motor Vehicles and other Transport Equipment	0.300	0.200	100	40.00	0.98	One Motor Vehicle procured. Procurement of 2 motor vehicles commenced.
	Purchase of Office and Residential Furniture and Fittings	0.121	0.081	100	50.00	0.49	The project procured two (2) data Servers Eight (8) workstations Computers and six (8) laptops for Infrasound data centre in Entebbe. The procurement of a contractor to renovate office space for Infrasound data centre was initiated.
	Purchase of Specialised Machinery and Equipment	0.790	0.527	100	50.00	3.22	Bid evaluation for 5 Infrasound stations was completed. No bidder met expectations. Contracts committee to re-tender.
	Purchase of Office and Residential Furniture and Fittings	0.020	0.013	100	40.00	0.07	The project procured Office and Residential Furniture and Fittings to host Lightning risk test kits.
	Acquisition of Other Capital Assets	0.110	0.073	100	45.00	0.40	The project initiated procurement of Infra sound

	Output	Annual Budget (Ug shs) Bn	Cum. Receipt (Bn Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
							Network lightning protection systems and noise reduction technologies for stations
	Programme Performance (Outputs)					66.49	This is fair Performance

Source: Field findings

3.3: Vote 123- Rural Energy Electrification Agency (REA)

Introduction

The REA was established as a semi-autonomous agency by the MEMD through Statutory Instrument 2001 no. 75. It seeks to operationalize Government's rural electrification function under a public-private partnership.

Mandate and Mission

The REA is mandated to facilitate provision of electricity for socio-economic and rural transformation in an equitable and sustainable manner. The medium term goal of REA is to achieve 26% rural electrification by June 2022.

Overall Performance

Financial performance

The vote took up to 27.5% of the sector budget. 55.8% of the Vote budget was released by the end of half FY 2018/19. Absorption of funds was poor at 34.5% (Table 3.13).

Table 3.13: REA Vote Financial Performance by 31st December, 2018

REA							
Component		Approved budget (Ug shs billion)	Release (Ug shs billion)	Expenditure (Ug shs billion)	% Budget released	% Budget spent	% Releases Spent
Recurr ent budget	Wage	0.000	0.000	0.000	0.0	0.0	0.0
	Non-wage	0.000	0.000	0.000	0.0	0.0	0.0
Develo pment budget	GoU	101.976	51.778	17.486	50.8	17.1	33.8
	Ext. Fin	534.562	308.384	102.44	57.7	19.2	33.2

GOU Total	101.976	51.778	17.486	50.8	17.1	33.8
Total GoU+ Ext Fin(MTEF)	636.538	360.163	119.926	56.6	18.8	33.3
Arrears	0.000	0.000	0.000	0.0	0.0	0.0
Total Budget	636.538	360.163	119.926	56.6	18.8	33.3
A.I.A Total	46.625	21.107	11.518	45.3	24.7	54.6
Grand Total	683.164	381.270	131.443	55.8	19.2	34.5
Total Vote Budget Excluding Arrears	683.164	381.270	131.443	55.8	19.2	34.5

Source: Approved Budget Estimates FY2018/19

3.3.1 The Rural Electrification Programme

The programme aims at achieving universal access to electricity by 2040. It works in line with the Rural Electricity Strategic Plan II (2013-2022) which aims at increasing electricity access to 26% by June 2022. The sub-programme consists of six sub programmes namely;

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

3.3.1.1 Sub-Programme 1262: Rural Electrification Project

Background

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 in Africa (BADEA), OPEC Fund for International Development (OFID) French Agency for Development (AFD) and Africa Development Bank (AfDB).

Sub-Programme Performance

Financial Performance

The budget for sub-programme for FY 2018/19 is Ug shs 207.34 billion. GoU and donor release were at 58.2% and 55.2% respectively. However, absorption of GoU funds was poor at 36.7%, compared to that of donor funds absorption which was good at 100%.

Physical Performance

Schemes under French Development Agency (AFD) were completed, commissioned and under Defects Liability Period (DLP) while schemes under BADEA/OFID in Kamuli and Buyende were nearing completion with some completed and awaiting commissioning. Under IDB II funding, pole erection was ongoing for both Lot 3A in the districts of Lira, Soroti,

Kole, Tororo and Katakwi and Lot 3B in the districts of Mbarara, Mitooma, Rukungiri, Kabale, Ibanda, Kabarole, Kamwenge, Rubanda, Kisoro, Ntungamo, Kanungu and Kyenjojo.

Under IDB III funding which extends countrywide, pole erection and stringing was under way for the different schemes under Lots 1-6 except in the districts of Nakaseke, Luwero, Namayingo, Bundibugyo, Mbale and Manafwa where construction works were yet to begin.

Challenges

- Delayed delivery of materials such as poles in some project areas hindered project implementation.
- There were some difficulties in acquiring a line corridor in some areas where compensation was demanded by PAPs.

Recommendations

- The REA should fast track delivery of materials to the different sites.
- The REA should conduct more community sensitization in project implementation areas.

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

Background

The sub-programme is financed by the Islamic Development Bank and it aims at promoting sustainable economic growth and improving the standard of living of the rural population in Northern Eastern Region of Uganda by providing access to electricity through extending the national grid.

Sub-Programme Performance

Financial Performance

The budget for FY 2018/19 is Ug shs 83.48 billion. The GoU release was at 54.4%, while donor release was at 54.0%. However, absorption of funds was poor at 22.9%.

Physical Performance

Construction works for Lot 3 in Moroto, Nakapiripirit and Nabilatuk districts were ongoing and pit excavation and pole erection was being undertaken. Works for Amudat under Lot 3 were yet to start. Lot 4 works in Moroto, Kotido and Kaabong districts were more advanced than lot 3 and pole erection was ongoing.

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

Background

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.

Sub-Programme Performance

Financial Performance

The GoU and donor releases were at 57.6%, and 52.4% respectively, however absorption of funds was very poor with GoU absorption at 0%, and donor at 2.4%.

Physical Performance

Construction works had not started. Contracts were signed for four (4) fast tracked Lots, while negotiations for a supervising consultant for other lots were being concluded. The other 17 lines (13 Lots) were under procurement.

Challenge

The delay in the procurement process hindered project commencement.

Recommendations

- The REA should be more vigilant in following up on actions that were requested by the World Bank to expedite the procurement process.
- The REA should complete the recruitment of the required project staff who can dedicate their efforts towards project activities. The project does not have a dedicated project manager and made project implementation difficult.

The progress status of the monitored rural electrification projects under the rural electrification programme is summarized in Table 3.14.

Table 3.14: Status of Monitored Rural Electrification Schemes by 31st December, 2018

Project	Status
Schemes Under BADEA/OFID II Funding	
Buyende Ndolwa - Buyende - Kitukiro - Igwaya – Iyingo Project	Scheme was grouped into sections A, B and C. Section A works were completed awaiting installation of 25 transformers. The HV length is 72km. Works for sections A and B were complete and awaiting commissioning. Stringing works were ongoing in section C. 45 transformers will be installed in section C over HV length of 100km.
Kamuli Kiyunga-Nawantale-Kakunyu– Bugulusi	Buluya-All pole erection was done. Stringing was ongoing. 12 transformers are to be installed.
Nakiwulo and environments	Scheme was completed and awaiting transformer installation. 7 transformers are to be installed.
Lambala –Lulyambuzi – Wankole – Bupadhengo Project	Scheme was completed awaiting commissioning. 16 transformers were installed and 22km of HV were constructed. Villages that benefited include Lulyambuzi, Kasanda, Nawangoma, Kiduwa, Nakulabye and Buwala among others.
Schemes Under IDB I Funding	
Moroto Moroto - Lorengedwat	Pegging, Pit excavation was ongoing. Pole erection had just started. The HV length for the scheme is 26Km.
Moroto – Katikekile, Moroto Cement Factory	Construction works had not yet started.
Nakapiripirit/Nabilatuk Nakapiripirit - Nabilatuk	Pit excavation and pole erection were ongoing. It will benefit the areas of Lonukaf, Loputuku, Kamongole, Katanga as well as Nakapiripirit Technical Institute.
Namalu tee-offs	Construction works had not yet started.
Amudat Amudat District HQ's and Environs	Site line clearance and pegging were completed. Construction works yet to start. Scheme is 25.9Km of HV and 5.94Km of LV.
Schemes Under IDB II Funding	
Lot 3A	
Tororo Mudodo Village	HV pole erection was complete. LV pole erection was at 90. HV pole dressing was ongoing. HV length is 5.82km and 6 transformers to be installed.

Musukire and P'otela in Rubongi Sub county	LV pole erection was complete for the transformer tee-off at Rubongi sub-county headquarters. For tee-off at Musukire, HV pole erection has been completed. LV pole erection is yet to be done. 4 transformers are to be installed.
Agola, Soko Market, Mwello Trading center	HV pole erection for Agola is complete and LV pole erection is at 90% whereas construction works for Soko market and Mwello trading center had not started.
Katerema-Kagwara-Magaro	Pit excavation and pole erection were ongoing
Siwa-Namwanga-Luginga-Pangweki	Pole erection was ongoing. However, project implementation was affected by delay in delivery of poles.
Soroti Ameni Parish.	Scheme had not yet started.
Lot 3B	
Kyenjojo Mpunda, Kyakunta and Kirongo	Pole erection was complete. 4 transformers are to be installed and HV length is 7km
Busanza-Nyabuharwa-Mukabayi	Pole erection was ongoing.
Kabarole Mabale and Mugusu Villages	HV and LV pole erection was completed. 6 transformers will be installed at Mabale, Kyabaranga, Jumanyanja, Karongo, Bushasha and Kabirizi villages.
Kijenga Village	HV pole erection was at 95%. LV pole erection was completed. Schemes consists of 4 transformers.
Ibanda Ishogororo-Kakindo	All pole erection was completed awaiting stringing. 2 transformers will be Kakindo I and II trading centers.
Bihanga - Kitoro and Mukitoro	Pole erection was completed awaiting stringing of the 3.6km of HV. 3 transformers will be installed at Kitoro and Mukitoro villages.
Kasaka - Kihangere - Myirime - Muziza - Katengyeto and Mushunga	Scheme consists of 3 tee-offs; tee-off to Mushunga, Kasaka-Muziza tee-offs and the tee-off to Katengyeto. Pole erection works for tee-off to Mushunga was ongoing whereas works the other 2 tee-off was yet to start.
Omukarere - Kabale and Kagango	All pole erection was completed. 6 transformers will be installed in the villages of Omukarere, Kabale, Kehiho, Waporotura and Kagango.
Mbarara Nyantungu-Rwamuhingi-Nyamiriro-Rukanja trading center in Rubindi	LV pole erection was completed. HV pole erection was ongoing. Scheme consists of 10 transformers.

Bukiro additions (Rwanyamahembe Nyakayojo – Kakerere Cell)	– LV pole erection was completed. HV pole erection was ongoing at 65%. Scheme is 23km of HV and 20 transformers were to be installed. However, there was a delay in implementation of project due to delay in delivery of poles.
Nyabugando - Nshozi - Rwentondo	LV pole erection was completed. HV pole erection was nearing completion with progress at 95%.
Mitooma Bitereko Sub county headquarters – Kalisizo	All pole erection was done awaiting stringing of 5km of HV and installation of 5 transformers.
Akisemiti-Oruyuta-Rwetaramo-Kirera and Nyakatete	HV pole erection was completed. LV pole erection was at 50%. 7 transformers will be installed.
Katenga-Nyaruzinga	HV and LV pole erection were at 70% and 50% respectively. 8 transformers will be installed to benefit the villages of Omukabira, Rutaka, Nyakasharara, Omukayanga, Kayanga, Ngomba and Nyaruzinga.
Rukungiri Keitumura Cell	Pole erection was at 95%.
Buyanja Environments	LV pole erection was completed. HV pole erection was at 90%.
Nyarushanje Sub county areas	Pole erection was ongoing. Scheme consists of 15km HV, 7km of LV and 13 transformers.
Nyakishenyi Environments	HV pole erection was at 25%. LV pole erection was yet to start.
Kyamakanda areas	All pole erection was at 95%.
Kabale Nyamasiizi-Nyakanengo-Kashonga	LV pole erection had just started. HV pole erection was yet to start.
Ikumba-Bulimbe-Nyamabaale	Pole erection was at 70%.
Kyasano and Rutundwe Villages	Scheme is 600 meters of HV. HV pole erection was complete and LV pole erection was at 50%. 1 transformer will be installed.
Bucundura and Rugoma trading centers.	Pole erection was at 35%.
NARO Kabale – Kagarama I – Kagarama II – Hakakomo	Scheme had just started and pit excavation was ongoing.
Nyabugando and Akenyanya Trading Centers	HV pole erection was completed. LV pole erection was at 60%.
Schemes Under IDB III Funding	
Lot 1	

Kabarole Nyasozi, Bukolekore, Kabahango	HV pole erection was completed. LV pole erection and HV stringing were ongoing. 6 transformers were to be installed and scheme consists of 6.5 km of HV
Kitumba Cell, Karumanga, Kateebwa SDA	HV pole erection was completed. LV pole erection was ongoing. HV stringing was ongoing for the 6km of HV and 6 transformers.
Kabale Kacwekano-Kakomo trading center-Kabira-Bukoora-Hamuganda-Habushasha	HV pole erection was ongoing. LV erection had not yet started. 6 transformers were to be installed and scheme is 10.5km of HV.
Bugongi, Akahatojo-Kabimbiri-Habitoma-Kaharo-Nyakahita Kanjoba TC-Kamunyogwire-Maziba tech institute Kandago-Nyamishenyi-Rwenshakara Nabitembe, Nturagye-Hamushenyi, Kibanga, Kisegwe, Bacungi	Pole excavation and pole erection had just commenced.
Hoima Kihemba – Kanenakubira John Baptist and Nyatale Primary Schools	Pole erection was ongoing.
Bundibugyo Bussu TC, Bussu Church, Bussu 2, Kasili TC	Scheme had not yet started.
Kasese Busunga Village and Water Pump – Nzirambi Orphanage – Queen’s Elizabeth info. Centre – Hamukungu Maliba Youth Centre, St. Luke COU, Maliba Village	Schemes had not commenced.
Lot 2	
Gulu Wii-Layibi Village, Palenga-Aywee trading center, Atoo Radar Hill	Surveying was completed awaiting design approval.
Lira Ogur-Okwer-Barlonyo-Abala	HV Pole erection for Ogur-Okwer was completed and LV pole erection ongoing. The HV length for Ogur-Okwer tee-off is 9km and 5 transformers will be installed. For the Barlonyo-Abala tee-off, HV and LV pole erection were at 80% and 20% respectively. Tee-off is 13km long and 4 transformers

	were to be installed.
Agweng Trading center-Angolocom	Pole erection was ongoing at 95%. 13 transformers were to be installed.
Punu Oluru-Olah-Skyland School with tee-off to Adwoa and Amuca trading center	HV pole erection is complete. LV pole erection is at 80%. The tee-off to Adwoa and Amuca trading centers is 3km long and 3 transformers will be installed at Amuca Village and Legacy Primary School.
Amolatar Achengryen-Ayamawele-Cegwen-Abeja Landing Site	Scheme includes 28km of HV and 9 transformers. Pole erection was ongoing at 90%.
Namasale-Biko HC	HV Pole erection was completed and LV pole erection ongoing. 10 transformers will be installed.
Kitgum Tumangu Nodding Health Center	Surveying had just been completed.
Lot 3	
Kamwenge Kiyagala-Kyakarafu	All pole erection was completed. Stringing was ongoing. Scheme is 28km of HV and 10 transformers are to be installed.
Bisozi-Kateebe	All pole erection was completed and stringing was ongoing. Scheme will benefit the villages of Bisozi, Bihanga, Kabingo, Kateebe and Rwensikisa.
Rwenshama-Damasco	Pole erection was completed awaiting stringing. Scheme consists of 9km and 3 transformers.
Buikwe Namengo-Kigali	HV pole erection was at 90%. LV pole erection and HV stringing were ongoing. 6 transformers will be installed in the villages of Luyanzi, Kitutu, Kiteredde, Kissu, Kiteza, Nsenya, Namaliga and Kigali.
Kikkati-Kisoga	Pole erection was ongoing.
Nsavu	HV pole erection was done. LV pole erection yet to start. 1 transformer to be installed.
Najja-Bulama-Wakwale-Mpogo	HV pole erection was at 90%. HV length for scheme is 7km and 4 transformers are to be installed.
Mityana Namutamba, Seed faith Ministries, Kabungo, Kabubu, Kitemu, Sangala-Bombo.	All HV pole erection was completed. LV pole erection had not started.
Bulera, Lwamba, Kibogo, Lusanja, Kamanje, Mutetema, Kikube, Kiryokya, Kiryamuli, Kyamusisi.	All HV pole erection and HV pole dressing were completed. HV stringing was ongoing with progress at 40%. 15 transformers to be installed. LV pole erection for 4 transformer zones was completed.

Katwe	Scheme is 1 transformer tee –off of 1.2 Km HV length. HV pole erection is complete and LV pole erection has not started.
Kibuto	HV pole erection was completed. 1 transformer to be installed.
Lot 4	
Mpigi Kavule and Nakabiso	Both HV and LV pole erection were ongoing. 2 transformers are to be installed
Katwe-Kibuye	Pole erection was ongoing. Scheme is 3.6km of HV and 2 transformers are to be installed at Katwe and Kibuye trading centers.
Mugungu Trading center and environments	Pole erection was completed awaiting stringing.
Butoolo-Nsansa-Nsumba	Pole erection was completed awaiting stringing. 7 transformers will be installed.
Lot 5	
Nakaseke Nakasete-Wakyato-Nabisojjo and Butalangu Mulungiomu - Mbukiro Lule Trading Centre, Komamboga Zone, Kikondo T/C, Nsaka Village Kubah Petro Station, Nabisojjo, Bugogo, Kiyina, Butalangu Offices	Surveying was completed. Project awaited design approval from REA.
Kiboga Kateera-Mukati-Jokero-Muwanga	HV Pole erection was completed and LV pole erection ongoing. Scheme consists of 9km and 8.8km of HV and LV line length respectively. 5 transformers will be installed.
Kitutumura and Lunnya, Bamusuuta, Lwamata Upper and Lower Kiwawu TC	All pole erection was done. Stringing yet to begin. 3 transformers are to be installed.
Kikooba Community in Mataagi	Both HV and LV Pole pit excavation and erection was ongoing. It consists 6km of HV and 6 transformers are to be installed.
Bukomero-Bugabo-Dwaniro-Kyamukwenya	Schemes consists of 57.5km of HV and 11 transformers. Both HV and LV pole erection was ongoing. However, there is need to consider installing transformers and extending the LV network to connect trading centers along the HV Line that had not been included in the original scope.

Luwero Nakusubuyaki Trading Center, Kidukulu Semyungu I&II Trading Centers, Buligwe, Kyamuwooya, Makulibita and Bwetyaba Villages Makulibita Seed SS, Waluleta Trading Center, Bakijulura Trading Center Kasozi Health Centre III, Bukekete Trading Center	Surveying was completed. Construction works were yet to start.
Kyankwazi Kyenda-Byerima	HV pole erection was ongoing. Scheme is 25km long and 6 transformers are to be installed.
Katanabirwa-Ntunda	All pole erection was completed awaiting conductor stringing. Scheme consists of 10 transformers and 33km of HV.
Lot 6	
Ngora Akisim trading center and Environs & Agiu trading center	HV pole erection and LV excavation was ongoing
Mukura-Komolokima-Olekai, Koloin TC	Scheme had not yet started.
Serere Kyere-Kamusala-Inningo-Kateta	Pole erection was at 85%. HV length is 18.7km and 9 transformers are to be installed.
Alungar-Atamaisi-Juba-Abuket	Pole erection was at 90%. HV length is 25km and 12 transformers were to be installed
Soroti Omodoi tee off	HV length is 15km. Pole erection was at 90%.
Mayuge Wakalendo, Kyebando, Lwerere, Nkombe, Kitovu	Pole erection was at 60%.
Bifulubi-Kabale	HV and pole erection were 95% and 60% respectively. 2 transformers to be installed.
Nondwe-Bukose-Kasozi-Bunalwenyi	HV pole erection was completed. LV pole erection was at 75%. 3 transformers to be installed.
Igamba Ward, Baliita trading center	Pole erection was ongoing.

Mbale Lwagoli Trading Centre, Buwalasi and Lwaboba Lower Mbale CRO Stadium Bubetsye and Nyanya Villages, Bufukula HC II	Schemes had not yet started.
Manafa Sisuni Village and environments Mutongo – Sibanga – Namirama	
Bukedea Kosire trading center, Kidongole trading center-Nalubaga, Nangaiza, Manfara	Schemes had not yet started.
Kumi Mukongoro-Ocaapa-Oladot, Kadami	
Namayingo Bumooli – Buswale – Mukorobi Tanganyika – Mawa – Nanjala and Buloha Buyongo Primary School Lufudu – Simase - Nakodi	
Bugiri Kimbale TC, Mifumi PS, Kyemeire HC III, Budhaya HC II Nankoma Trading Centre Jinja Nailinaibi – Kinabirye – Ntianda	

Source: Field Findings

Overall Performance of the Rural Electrification Programme

The programme performance was good at 74.1% (Table 3.15). Absorption of funds by the programme was poor at 34.5%. Schemes under French Development Agency (AFD) were completed in FY2017/18 and were now under Defects Liability Period monitoring. The poor performance was contributed to by the delay in implementation of sub-programmes IDB I which started this financial year after long delays and ERT III which is still under procurement and no construction works had not started.

Table 3.15: Performance of the Rural Electrification Programme as at 31st December 2018

	Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Sub-programme 1262: Rural Electrification Project	Construction of Rural Electrification Schemes	117	93	207.34	2257.04	52.75	1,217.65 Km of medium voltage and 1,039.39 Km of Low Voltage lines were constructed. Most projects under AFD funding were completed. Most works under IDB II funding for both Lot 3a and Lot 3b in northern, western and south western areas had begun and were under pole erection. Most Works under IDB III funding which are being done country wide for Lots 1, 2, 3, 4, 5 and 6 were also under pole erection. Lot 3 works in Luwero and Nakaseke were yet to begin while most schemes Under BADEA/OFID II Funding in Kamuli and Buyende completed and awaiting commissioning.
Sub-programme 1354 Grid Rural Electrification Project IDB I - Rural Electrification	Construction of Rural Electrification Schemes	83	45	194.22	106.84	21.40	Construction works in Karamoja in the districts of Moroto, Nakapiripirit, Amudat, Nabilatuk, Kotido and Kaabong

							commenced. Pegging, Pit excavation and pole erection was ongoing for both Lot 3 and 4.
Sub-programme 1428 Energy for Rural Transformation (ERT) Phase III	Construction of Rural Electrification Schemes	99	52	249.04	0.00	0.00	Procurement was ongoing. Contracts for Lots 1 and 2 were signed. Lot 3 for West Nile and Moyo was under review of the engineering design.
Programme Performance (Outputs)						74.15	This is good performance

Source: Field findings



L-R: A completed scheme at Lulyambu Health Center III in Kamuli District; Partially completed grid extension scheme in Kiryokya, Mityana District



L-R: Ongoing erection of concrete poles in Lorengdwat-Moroto under IDB I funding, Grid extension scheme awaiting a transformer at the Kyakaboga resettlement houses in Buseruka, Hoima



L-R: Pole dressing works by Megger Technical Services Contractors at Kiyagara in Kahunge sub-county, Kamwenge, A section of erected concrete poles at Kateta trading center, Serere

Challenges

- i) The slow pace of procurement within the sector continues to affect the performance. Several projects under REA had not commenced due to delayed procurement.
- ii) Delay in delivery of project materials such as poles hindered construction works in some project areas.
- iii) The rate of rural electrification still remains low due to the high upfront costs of connection.

Recommendations

- iv) The REA should enhance staffing levels for project implementation, and ensure better follow up of the required processes necessary to conclude project activities.
- v) The REA should support the various contractors to ensure more timely delivery of the required site materials.
- vi) The GoU through the REA should continue to implement more initiatives and subsidies for connection costs such as the Free Connection Policy to attract more connection to the grid by the rural communities.

Overall Vote Performance

Overall performance of the Rural Electrification Programme was good at 74.1%. The budget for the vote for FY2018/19 is Ug shs 683.164 billion 55.8% of the vote budget was released by 31st December 2018. Absorption of the released funds was poor at 34.5% due to delay in project commencement. Schemes under AFD funding were completed and under Defects Liability Period monitoring.

CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The overall sector performance at half year was fair at 68.5%. Notable among the achievements was the completion of major works and commissioning of two generating units at Isimba Hydro Power Project (HPP) adding 90MW to the national grid, and the two remaining units were to come on line in a month's time.

Good performance was exhibited by the Large Hydro Programme (70.5%). The Rural Electrification Programme also exhibited good performance scoring 74.1%. A total of 1,049.02km of low voltage distribution lines and 1,315.28 km of medium voltage distribution lines were completed and commissioned under AFD (French Development Agency) funding in areas of Eastern, Central, South Western and Western Uganda.

Other the programmes performed fairly namely: Energy Planning, Management and Infrastructure Development (63.0%); Petroleum Exploration, Development, Production, Value Addition and Distribution of Petroleum Products (68.5%); Mineral Exploration, Development and Value Addition (66.5%).

The performance of some programmes and sub-programmes in the sector could be better if the following implementation challenges that continue to hinder sector performance are overcome: difficulty in acquisition of RoW especially for the transmission line projects, poor allocative efficiency leading to non-prioritization of some critical activities under the Oil and Minerals sub-sectors, and slow procurement pace, especially for projects under REA.

Other impediments to service delivery include; delayed conclusion of procurement, and inadequate staffing levels.

4.2 Recommendations

- i) The Government should work with the courts of law to ease the burden UETCL is facing in acquisition of wayleaves. Several projects affected persons possess illegal land titles in wetlands and there are several court injunctions that are bogging down the land acquisition activities.
- ii) The Ministry of Lands, Housing and Urban Development should review the land law to enable quicker acquisition of land, to fast-track implementation of projects.
- iii) The sector should prioritize funding to some of its neglected areas, like equipping mineral and oil laboratories, and the acquisition of the required equipment, software and licenses for the Oil and Gas sub-sector.

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Annex

Annex 1: Energy Sector Projects Monitored for FY 2018/19 by 31st December, 2018

Project Code and Name	Location/ Areas visited
Vote 017: Ministry of Energy and Mineral Development	
0301 Energy Planning, Management and Infrastructure Development programme	
Electricity Sector Development (Project 1212)	Wakiso, Mpigi, Masaka, Kalungi
Karuma Interconnection Project (Project 1025)	Luwero, Nakasongola, Kiryandongo, Lira, Nwoya
Electrification of Industrial Parks	Iganga, Mukono, Namanve, Luzira
Mbarara- Nkenda/Tororo-Lira (Project: 1137)	Mbarara, Kasese, Tororo, Lira
Nile Equatorial Lakes Subsidiary Action Program-(NELSAP):Bujagali-Tororo-Lessos/ Mbarara- Mirama-Birembo (Project 1140)	Jinja, Tororo, Mbarara, Ntungamo
0302 Large Hydropower Infrastructure programme	
Isimba Hydropower Plant (Project 1143)	Kayunga
Karuma Hydropower Plant (Project 1183)	Kiryandongo, Nwoya
0303 Petroleum Exploration, Development Production, Value Addition and Distribution programme	
Strengthening the Development and Production Phases of Oil and Gas sector (Project: 1355)	Entebbe
0305 Mineral Exploration, Development and Production programme	
Design, Construction and Installation of Uganda National Infrasound Network (DCIIN)-(1392)	Entebbe
Mineral Wealth and Mining Infrastructure Development (Project: 1353)	Entebbe, Moroto
Vote 123: Rural Electrification Agency	
03 51 Rural Electrification programme	
Rural Electrification (Project:1262)	Ntungamo, Rukungiri, Mbarara, Bushenyi, Rukungiri, Kabale, Hoima, Kyenjojo, Kabarole, Kamwenge, Buyende, Kayunga, Sheema, Masaka, Mpigi, Mityana Wakiso, Mukono, Buikwe, Kamuli, Iganga, Buyende, Jinja, Hoima, Kyenjojo, Kibaale, Kabarole, Kasese, Kisoro, Kiryandongo, Masindi, Moroto, Nakapiripitt, Lira, Soroti, Serere, Mpigi, Amolatar, Kiboga, Kyankwanzi, Hoima,
Energy for Rural Transformation- ERTIII(Project 1428)	
Grid Electrification Project IDB I(Project 1354)	

Source: Authors' Compilation