



Sustainable Development of Petroleum Resources Programme

Semi-Annual Budget Monitoring Report

Financial Year 2021/22

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

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ABBREVIATIONS AND ACRONYMS

| | |
|---------|---|
| AGRC | Albertine Graben Refinery Consortium |
| CNOOC | Chinese National Offshore Oil Company |
| CPF | Central Processing Facility |
| CWE | China International Waters and Electric Corporation |
| DP | Directorate of Petroleum |
| E&P | Exploration and Production |
| EA | Exploration Area |
| EAC | East African Community |
| EACOP | East African Crude Oil Pipeline |
| EIA | Environmental Impact Assessment |
| EPC | Engineering Procurement and Construction |
| FDP | Field Development Plan |
| FEED | Front End Engineering Design |
| FID | Final Investment Decision |
| GoU | Government of Uganda |
| HGA | Host Government Agreement |
| HSE | Health Safety and Environment |
| JST | Jinja Storage Terminal |
| LPG | Liquefied Petroleum Gas |
| MDAs | Ministries, Departments and Agencies |
| MEMD | Ministry of Energy and Mineral Development |
| MoJA | Ministry of Justice and Constitutional Affairs |
| MLHUD | Ministry of Lands, Housing and Urban Development |
| MPS | Ministerial Policy Statement |
| NDP III | National Development Plan 3 |
| NEMA | National Environment and Management Authority |
| NOGTR | National Oil and Gas Talent Register |
| NOGP | National Oil and Gas Policy |
| NPC | National Pipeline Company |
| NPP | National Petroleum Policy |
| OGTAU | Oil and Gas Training Institutions Association of Uganda |
| PAPs | Project Affected Persons |
| PAU | Petroleum Authority of Uganda |
| PDHs | Physically Displaced Households |
| PEPD | Petroleum Exploration and Production Department |
| PIAP | Programme Implementation Action Plan |
| PIP | Public Investment Plan |
| PPDA | Public Procurement and Disposal of Assets |
| PPP | Public-Private Partnership |
| PSA | Production Sharing Agreement |
| QHSSE | Quality Health, Safety, Security and Environment |
| RAP | Resettlement Action Plan |
| RDP | Refinery Development Program |
| RMP | Reservoir Management Plan |
| ROW | Right of Way |
| SEA | Strategic Environmental Assessment |
| SME | Small Medium Enterprise |

UNBS
UNOC
URHC

Uganda National Bureau of Standards
Uganda National Oil Company
Uganda Refinery Holding Company Limited

FOREWORD

The Government is implementing programmatic planning and budgeting which harnesses synergies from a number of previously independent sectors and avoids duplication of resources, thus enabling us attain efficiency in our development investments.

The Budget Monitoring and Accountability Unit (BMAU) is now undertaking Programme-Based Monitoring to assess performance of the targets and outcomes set in the Programme Implementation Action Plans (PIAPs) of the third National Development Plan (NDPIII), Ministerial Policy Statements, plus the Programme and Sub-Programme work plans.

These BMAU findings are the first Programme assessments we have conducted and I urge you to embrace the findings therein, and fully adopt the recommendations as we strive to ensure compliance to Programme-Based Budgeting.



Ramathan Ggoobi

Permanent Secretary/Secretary to the Treasury

EXECUTIVE SUMMARY

The Sustainable Development of Petroleum Resources (SDPR) Programme aims at attaining equitable value from the petroleum resources and spur economic development in a timely and sustainable manner. The programme is composed of three sub-programmes namely; Upstream, Midstream and Downstream sub-programmes.

The lead MDA in the implementation of the programme is the Ministry of Energy and Mineral Development (MEMD). Other key implementing agencies include Petroleum Authority of Uganda (PAU), Uganda National Oil Company (UNOC), and National Environmental Management Authority (NEMA).

Findings

The semi-annual programme performance for FY 2021/22 was fair at 58%. The budget for the programme for FY 2021/22 is Ug shs 181.16 billion (bn), of which Ug shs 48.60bn (26.8 %) was released and Ug shs 47.05bn spent by 31st December 2021.

The performance of the Upstream Sub-programme was fair at 67.5%. The sub-programme continued with the exploration of petroleum potential in Moroto-Kadam basin and Albertine Graben. A total of 140 line-kms of geophysical data and 297 sq. km of geological and geochemical mapping was undertaken in the Moroto-Kadam basin representing 75% of the basin. The second licensing round for five (5) blocks in the Albertine Graben (Aviv, Omuka, Ngaji, Kasurubani, and Turaco) was also completed and MEMD had commenced negotiation of Production Sharing Agreements (PSAs) with the successful companies.

To enhance the capacity of the sub-programme to undertake exploration activities, construction of phase-3 of the data center, laboratories and offices for the Directorate of Petroleum (PEPD) and PAU was at 97%, and set to be completed in the third quarter of the FY.

On review and update of policies, the East African Crude Oil Pipeline (EACOP) Bill to facilitate the development of the crude oil pipeline was approved by Cabinet, passed by Parliament and assented to by the President. However, implementation of some interventions was affected by limited funding which constrained sub-programme activities, for instance the development of the National Petroleum Data Repository could not progress because no funds were released.

The Midstream Sub-programme performance at half year was fair at 56.1%. Under the intervention meant to undertake the construction of infrastructure projects, the final Front End Engineering Design (FEED) studies for the oil refinery were still under review by the Lead Investor. Preparations for the Final Investment Decision (FID) for the Crude Oil pipe line were also underway and expected to be concluded in Q3 of the FY2021/22. On acquisition of the pipelines corridors, the compensation process for the EACOP and products pipeline (Hoima – Kampala) commenced but was constrained by low funding and only 62 of the 4,270 Project Affected Persons (PAPs) were paid.

Under fast-tracking skilling of Small Medium Enterprises (SMEs) and Ugandans in oil and gas, a total of 40 out of 200 SMEs were trained and 430 Ugandans registered on the National

Oil and Gas Talent Register. Additionally, two vocational institutions in Kiryandongo and Masindi districts were also trained.

The performance of the Downstream Sub-programme was fair at 58.9%. Under the intervention to develop petroleum standards, the development of three standards on petroleum, petrochemical and natural gas industries was ongoing. On petroleum quality, a total of 562 of the 2,138 petroleum depots and outlets were monitored by MEMD, and 52.5% (295) found to be non-compliant and enforcement measures were undertaken.

Restocking of the Jinja Storage Terminal intervention performed poorly with only three of the six million litres restocked in the first half of FY 2021/22.

Challenges

- Insufficient funding hindered the progress of planned activities. For instance, RAP implementation of the refined products pipeline registered slow progress as a result of low release, in addition UNOC needs capitalisation which has not been done by Government.
- The programme continues to suffer from inadequate staffing levels at both the Petroleum Directorate and PAU.

Recommendations

- The MEMD should prioritise allocation of funding to the Oil and Gas Sector to quicken the preparations for oil production.
- The Ministry of Finance, Planning and Economic Development should provide funds to capitalise UNOC so that it can commence commercial activities and contribute its 15% shareholding in the EACOP.

CHAPTER 1: BACKGROUND

1.1 Background

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

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

Starting FY 2021/22, the BMAU is undertaking Programme-Based Monitoring to assess performance against targets and outcomes in the Programme Implementation Action Plans (PIAPs) of the third National Development Plan (NDPIII). Semi-Annual and Annual field monitoring of government programmes and projects is undertaken to verify receipt and application of funds by the user entities and beneficiaries, the outputs and intermediate outcomes achieved, and level of gender and equity compliance in the budget execution processes. The monitoring also reviews the coherency in implementing the PIAP interventions; the level of cohesion between sub-programmes; and challenges of implementation.

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

This report presents findings from monitoring the Sustainable Development of Petroleum Resources Programme for the budget execution period 1st July 2021 to 31st December 2021.

1.2 Programme Goals and Objectives

Sustainable Development of Petroleum Resources (SDPR) Programme contributes to three NDP III objectives which are: Enhance value addition in key growth opportunities; Strengthen the private sector to create jobs; and Enhance productivity & social wellbeing of the population.

The key expected results include: Reducing the volume and value of imported petroleum and petroleum products; increasing revenue from oil and gas industry and its contribution to Gross Domestic Product (GDP) and creating more employment opportunities for Ugandans along the petroleum value chain.

The SDPR Programme aims to attain equitable value from the petroleum resources and spur economic development in a timely and sustainable manner in the implementation of the NDPIII. The Programme key objectives are;

- i. To ensure sustainable production and utilisation of the country’s oil and gas resources;

- ii. Strengthen policy, legal and regulatory frameworks as well as institutional capacity of oil and gas industry;
- iii. Enhance local capacity to participate in oil and gas operations;
- iv. To promote private investment in oil and gas industry;
- v. Enhance Quality Health, Safety, Security and Environment (QHSSE);
- vi. Improve security of supply of refined petroleum products.

1.4 Programme Sub-programmes

The programme is comprised of three sub-programmes, namely:

- i. Upstream Sub-programme covers promotion, licensing, exploration, development and production of petroleum,
- ii. Midstream Sub-programme includes transportation, refining of oil and conversion of gas.
- iii. Downstream Sub-programme petroleum deals with distribution of petroleum products.

The lead implementing MDA for the programme is the Ministry of Energy and Mineral Development (MEMD), assisted by the Petroleum Authority of Uganda (PAU), and Uganda National Oil Company (UNOC).

1.4 Programme Outcomes

The different programme objectives mapped against the expected outcomes is illustrated in table 1.1.

Table 1.1: Mapping the Programme Objectives and Outcomes

| Objectives | Outcomes |
|---|---|
| 1) To ensure sustainable production and utilization of the Country's oil and gas resources | Increased revenue from oil and gas resources |
| | Increased contribution of the oil and gas sector to employment |
| 2) Strengthen policy, legal and regulatory frameworks as well as institutional capacity of oil and gas industry | Increased revenue from oil and gas resources |
| 3) Enhance local capacity to participate in oil and gas operations | Increased revenue from oil and gas resources |
| | Increased contribution of the oil and gas sector to employment |
| | Increased contracts awarded to Ugandan firms in the oil and gas value chain |
| 4) To promote private investment in oil and gas industry | Increased private investment in the oil & gas industry |
| 5) Enhance Quality Health, Safety, Security and Environment (QHSSE) | Improved safety in oil and gas industry |
| 6) Improve security of supply of refined petroleum products | Increased days of Security Stock levels of refined petroleum products |
| | High Quality Supply of Refined Petroleum Products |
| | Increased investment in the downstream |

Source: Author's Compilation

CHAPTER 2: METHODOLOGY

2.1 Scope

This report is based on selected interventions for the three sub-programmes that were allocated funds under the Sustainable Development of Petroleum Resources Programme. A total of 13 out of 31 interventions in the PIAPs were allocated funds in FY2021/22. Of these, 10 interventions (76.9%) were reviewed and monitored for FY2021/22. The monitored interventions are given in Annex 1.

The selection of areas to monitor was based on several criteria:

- Significance of the budget allocations to the interventions within the sector budgets, with the focus being on large expenditure sub-programmes. Preference was given to development expenditure, although some recurrent costs were tracked.
- The sub-programmes that had submitted Q2 progress reports for FY2021/22 were followed up for verification as they had specified output achievements.
- Multi-year sub-programmes that were having major implementation issues were also visited.
- Potential of interventions to contribute to sector and national priorities.

The selected interventions monitored are indicated in table 2.1.

2.2 Approach and Sampling Methods

The physical performance of interventions was assessed through monitoring a range of outputs for the various interventions and linking the progress to reported expenditure. Across all the interventions and sub-programmes monitored, the key variables assessed included: performance objectives and targets and inputs and outputs. Gender and equity commitments were also assessed.

2.2.1 Sampling

A combination of random and purposive sampling methods was used in selecting projects from the Ministerial Policy Statements and progress reports of the respective departments. Priority was given to physically verifiable monitoring outputs.

Outputs to be monitored were selected so that as much of the Government of Uganda (GoU) development expenditure as possible is monitored during the field visits. Regions are selected so that as many areas 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 FY2021/22; National and Sector Budget Framework Paper; Sector project documents and performance reports in the Programme Budgeting System, Sector Quarterly Progress Reports and work plans, Budget Speech, Public Investment Plans, Approved Estimates of Revenue and Expenditure, and data from the Budget Website.

2.2.3 Data Analysis

The programme performance was rated based on the criterion below in table 2.1

Table 2.1: Assessment Guide for Monitored Interventions for Semi-Annual FY2021/22

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

Source: Author's Compilation

2.3 Limitation of the Report

The preparation of the report was constrained by:

- Lack of disaggregated financial information for some programme interventions and outputs.
- The budgeting was not done using the Programme-Based Approach, therefore mapping of the interventions in the budget to those in the PIAP had to be done manually.

CHAPTER 3: PROGRAMME PERFORMANCE

3.1 Overall Programme Performance

Financial Performance

The budget for the Programme was Ug shs 138.957bn but was revised to Ug shs 181.157bn. The release of funds was poor at Ug shs 49.37bn (26.8%) and Ug shs 47.51bn (96.8%) of released funds were expended by 31st December, 2021. The poor release of funds led to delay in implementation of critical activities such as sensitisation of communities and procurement of key equipment for sample analysis. Table 3.1 gives details of the programme half year budget performance.

Table 3.1: Financial Performance of the Sustainable Development of Petroleum Resources Programme by 31st December 2021

| Sub-programme | Approved Budget (Ug. Shs billion) | Revised Budget (Ug. Shs billion) | Release (Ug. Shs billion) | Expenditure (Ug. Shs billion) | Expenditure as a proportion of the release (%) |
|----------------------------|-----------------------------------|----------------------------------|---------------------------|-------------------------------|--|
| Upstream | 30.587 | 34.15 | 7.654 | 6.882 | 89.9 |
| Midstream | 43.375 | 75.06 | 19.112 | 18.518 | 96.9 |
| Downstream | 31.037 | 31.037 | 11.280 | 11.214 | 99.4 |
| Institutional Coordination | 33.958 | 40.91 | 10.557 | 10.435 | 98.8 |
| Overall Performance | 138.957 | 181.157 | 48.603 | 47.049 | 96.8 |

Source: Approved Budget Estimates and Q2 Reports FY2021/22

Physical Performance

The overall semi-annual programme performance for FY 2021/22 was fair at 60.8%. None of the sub-programme exhibited good performance. The Upstream Sub-programme performed fairly at 67.5%, while Downstream was poor at 44.9% due to low release of funds. The poor release hindered progress of different activities like Resettlement Action Plan (RAP) for the refined products pipeline, and acquisition of key equipment for sample analysis. Table 3.2 gives the performance for each sub-programme.

Table 3.2: Overall Performance of the Sustainable Development of Petroleum Resources Programme by 31st December 2021

| | Sub-programme | Overall |
|--------------------------------------|---------------|-------------|
| 1 | Upstream | 67.5 |
| 2 | Midstream | 56.1 |
| 3 | Downstream | 58.9 |
| Overall Programme Performance | | 60.8 |

Source: Author's Compilation

3.2 Upstream Sub-programme

3.2.1 Introduction

The Upstream Sub-programme covers promotion, licensing, exploration, development and production of petroleum resources. The sub-programme effectively monitors all petroleum upstream operations in the country for exploitation of the petroleum resources in an economically and environmentally conducive manner.

The sub-programme comprises of 17 Programme Implementation Action Plan (PIAP) interventions for the five year NDP III period, of which six were planned for this FY. Four of the six planned interventions were monitored. The monitored interventions include:

- Undertake further exploration and ventures of the Albertine Graben
- Undertake construction and operationalisation of infrastructure projects (National Petroleum Data Repository and data repository centre for Petroleum directorate and PAU) to ease monitoring of upstream activities
- Review, update relevant policies, and harmonise conflicting laws and regulations.
- Construct the Central Processing Facilities (CPFs) for Tilenga and Kingfisher projects

Overall Sub-Programme Performance

The sub-programme performance was fair at 67.5%. Construction of the laboratories and offices for the Directorate of Petroleum (PEPD) and Petroleum Authority of Uganda (PAU) was at 97% but behind schedule, while the second licensing round was also underway. The National Oil and Gas Policy was also being reviewed. The programme was grappling with limited funds that hindered procurement of key equipment and maintenance of specialised software packages to aid in analysis of samples collected from exploration activities. Table 3.3 below gives the performance per intervention.

Table 3.3 Performance of the Upstream Sub-programme as at 31st December 2021

| Intervention | Output | Annual Budget (billion Ug shs) | % of budget received | % of budget spent | Annual Target | Cum. Achieved Quantity | Physical Performance Score (%) | Remark |
|--|--|----------------------------------|----------------------|-------------------|---------------|------------------------|--------------------------------|---|
| Undertake further exploration and ventures of the Albertine Graben | New Exploration activities undertaken in the Albertine region and the country. | 11.124 | 21.8 | 95.5 | 100 | 15.000 | 31.90 | Fair performance |
| Undertake construction and operationalization of | Data Repository Center for the Directorate | 11.377 | 7.0 | 20.2 | 100 | 2.000 | 13.53 | Poor performance due to delay to complete construction of |

| Intervention | Output | Annual Budget (billion Ug shs) | % of budget received | % of budget spent | Annual Target | Cum. Achieved Quantity | Physical Performance Score (%) | Remark |
|---|---|----------------------------------|----------------------|-------------------|---------------|------------------------|--------------------------------|---------------------------|
| infrastructure projects | of Petroleum and PAU established | | | | | | | Entebbe building |
| Review and update relevant policies; and fast-track harmonization of conflicting laws and regulations | Conflicting policies, laws and regulations harmonized | 1.510 | 30.4 | 95.6 | 100 | 25.000 | 5.17 | Good performance |
| Construct the Central Processing Facilities (CPFs) for Tilenga and Kingfisher projects | Upstream facilities for Tilenga and Kingfisher projects constructed | 6.979 | 43.0 | 100.0 | 100 | 25.000 | 16.91 | Fair performance |
| | Total | 24.011 | 15.3 | 79.2 | | | 67.5 | Output performance |

Source: MEMD Q2 Reports, Field Findings

Performance on Interventions

3.2.2 Undertake further exploration and ventures of the Albertine Graben

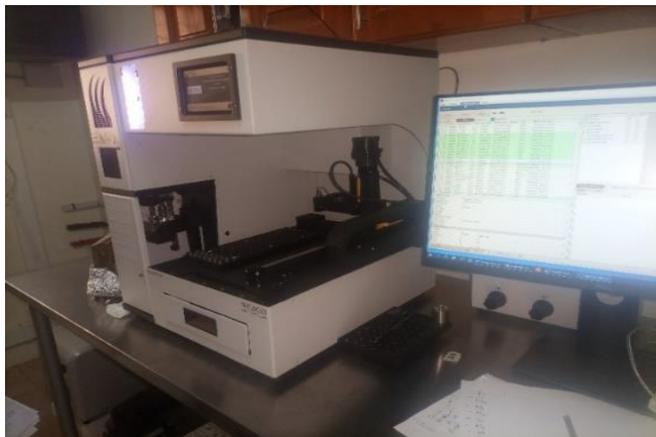
The intervention aims at establishing the petroleum potential in the country through undertaking exploration activities in the Albertine Graben and other additional areas where potential is anticipated.

The outputs for this FY 2021/22 include: Acquire 200 line-km of geophysical data plus geological and geochemical mapping of 400sq. km in Moroto-Kadam basin, complete the second licensing round for exploration and compile the annual resources petroleum report.

The performance of the intervention was fair. A total of 140-line km of geophysical data and 297 sq. km of geological and geochemical mapping data was carried out in the Moroto-Kadam basin representing 75% of the basin. More to that, Petroleum Authority of Uganda (PAU) undertook two basin evaluations for Semliki and Southern Lake Albert basins and prepared the 2021 Annual Resources Petroleum Report. However, the exploration activities were constrained by low staffing levels at both the Petroleum Directorate and PAU.

On promotion of the country's petroleum potential in order to attract ventures for the Albertine Graben, the evaluation of the bid applications for the second licensing round for the five (5)

blocks (Aviv, Omuka, Ngaji, Kasurubani, and Turaco) was undertaken. The MEMD had also commenced negotiation of Production Sharing Agreements (PSAs) with successful companies for two out of five blocks (Kasurubani and Turaco).



A newly acquired Hawk Analyzer for sample analysis at the PEPD Laboratory in Entebbe

Additionally, the PEPD acquired and installed the Hawk analyzer to aid in analysis of samples collected from the exploration activities. However, procurement of renewal for maintenance license for specialised software packages (Petrel and Geosoft) to aid in sample analysis was cleared by the Solicitor General but not concluded due to lack of funds. This therefore is delaying the availability of information that will enable the exploitation of the best opportunities for utilising the country's petroleum potential.

3.2.3 Undertake construction and operationalisation of infrastructure projects to ease monitoring of upstream activities

This intervention output is completion of phase 3 construction of the new office building for the Petroleum Directorate and PAU. The building will house a data center, functional Seismic data tape storage and equipment for the National Petroleum Data Repository and specialised laboratories.

The performance was poor. Construction of phase-3 of the laboratories and offices for the Directorate of Petroleum (PEPD) and PAU was at 97% set to be complete in the third quarter of the FY. The construction was behind schedule by three years.

On equipping of the National Petroleum Data Repository, funds required for completion had not been availed and no progress was registered.



Ongoing exterior works for the new Petroleum Directorate, PAU offices and laboratories in Entebbe

3.2.4 Review, update relevant policies, and harmonise conflicting laws and regulations

In FY 2021/22, the outputs were: Conclude the formulation of the East African Crude Oil Pipeline (EACOP) Bill; review and update the National Oil and Gas Policy (NOGP) and develop two upstream regulations and 5 policies for the midstream petroleum operations.

The intervention performance was good. Stakeholder engagements for the EACOP Bill were concluded, and it was approved by Cabinet, passed by Parliament and assented to by the President. The EACOP Bill aims at facilitating the implementation of Uganda's obligations under the Host Government Agreement (HGA) signed between Uganda, Tanzania and the East African Crude Oil Pipeline Company Ltd.

Additionally, a review of both the Energy Policy 2002 and National Oil and Gas Policy 2008 to formulate the National Petroleum Policy (NPP) was ongoing and the first draft of the NPP was produced. Drafting of the Strategic Environmental Assessment (SEA) for the NPP had commenced. The draft regulations on fiscal metering, tariff, third party access and decommissioning under the oil refinery were also being reviewed by MEMD and other relevant key Government entities.

3.2.5 Construct the Central Processing Facilities for Tilenga and Kingfisher projects

The development of Central Processing Facilities (CPFs) includes well drilling, construction of flow lines connecting the fields (Tilenga¹ and Kingfisher²) to the CPFs, construction of pipeline from the CPF to the Refinery in Kabaale, implementation of Resettlement Action Plan (RAP) for persons affected by the project infrastructure, as well as construction of other supporting infrastructure such as temporary and permanent operation support base camps.

The outputs for FY 2021/22 are: Complete implementation of RAP for the Kingfisher and Tilenga fields, and construction of supporting infrastructure; review, evaluate and approve 10 Field Development Plans (FDPs) and one Petroleum Reservoir Reports (PRRs).

The performance of the intervention was fair. The Environment and Social Impact Assessment and the Front-End Engineering Design studies for the Kingfisher and Tilenga Development Projects and all the necessary commercial agreements were successfully concluded.

A total of 2 (two) Field Development Plans (FDPs) and 2 (two) Petroleum Reservoir Reports were jointly reviewed by MEMD and PAU. On development of the facilities, the Tilenga Industrial site preparations works were at 36% against a target of 65% with construction of one of the operation support base camp underway and drilling ongoing for 6 out of the 7 planned wells. More to that, PAU continued reviewing technical reports, statutory reports, and approving upstream designs and permit applications for construction of drilling support bases and other facilities.

Challenges

- Insufficient funding constrained activities/outputs such as renewal of software licenses and equipping of the National Petroleum Data Repository.
- Inadequate staffing at both the Petroleum Directorate and PAU hindered progress of exploration activities.

¹ The Tilenga field under Total E&P is located in Nwoya and Buliisa districts.

² Kingfisher field under Chinese National Offshore Oil Company (CNOOC) is located in Kikuube District.

Recommendations

- The MEMD should prioritise funding to key sub-programme activities/outputs.
- The MEMD should follow up with Ministry of Public Service to fill the vacant positions in the Ministry structure as a matter of urgency.

Conclusion

The sub-programme continued with the second licensing round and establishing potential in the Albertine Graben and Moroto-Kadam basin through geophysical and geological data acquisition. In a bid to streamline policies and laws in the sub-sector, the National Petroleum Policy was being developed with the first draft produced. On development of infrastructure, the phase-3 construction of the laboratories and offices for PEPD and PAU was at 97%. Additionally, construction for some facilities for the Kingfisher and Tilenga development areas was ongoing, however, some activities were constrained by inadequate funding, these included equipping of the National Petroleum Data Repository which was not done due to insufficient funding, and key licenses for key software to analyse petroleum data were not renewed.

3.3 Midstream Sub-Programme

3.3.1 Introduction

The Midstream Sub-programme covers transportation, refining of oil and conversion of gas. The sub-programme monitors and implement intervention for all midstream petroleum activities in the country. The sub-programme contributes to two of the six NDP III programme objectives: Enhance local capacity to participate in oil and gas operations and promote private investment in oil and gas industry. Furthermore, the Midstream Sub-programme outcomes are: Increased contracts awarded to Ugandan firms in the oil and gas value chain and increased private investment in the oil and gas industry.

The sub-programme comprises of a total of 11 PIAP interventions for the five year NDP III period, of which five were planned for this FY 2021/22. Four of the five planned interventions were monitored. Most of the interventions will be implemented when the construction, EACOP and refined product pipelines commences. The monitored interventions were:

- Undertake construction, operationalisation and RAP implementation of infrastructure projects (EACOP and Oil Refinery).
- fast-track skilling, training and international accreditation of Ugandans for employment and service provision in the development/phase of the oil and gas sector.
- Provide SMEs both technical (training) and financial support to enhance their participation in tendering and of delivery of contracts, and
- Capitalise and/or license UNOC to execute its mandate as an investment arm of government in oil and gas industry.

Overall Sub-Programme Performance

The midstream performance was fair at 56.1% (table 3.4). The RAP implementation for the refinery products and EACOP pipelines had commenced but progress was very slow due to limited funding. Additionally, skilling and training of some Ugandans, vocational institutions and SMEs in oil and gas skills was undertaken.

Table 3.4: Performance of the Midstream Sub-Programme as at 31st December, 2021

| Intervention | Output | Annual Budget (Ug shs) | % of budget received | % of budget spent | Annual Target | Cum. Achieved Quantity | Physical Performance Score (%) | Remark |
|---|---|-------------------------|----------------------|-------------------|---------------|------------------------|--------------------------------|-----------------------------------|
| Undertake construction and operationalisation of infrastructure projects: EACOP, and Oil Refinery | Construction of Oil Refinery, EACOP pipeline and storage facilities | 44.413 | 13.7 | 93.9 | 100 | 8.000 | 34.97 | Fair performance |
| Fast Track Skilling, Training and International Accreditation of Ugandans Provide SMEs both technical (training) and financial support | At least 5 vocational institutions internationally accredited and 50% of local suppliers trained and internationally certified in ISO and related certifications Industry enhancement centre established and operationalised | 10.106 | 29.082 | 97.210 | 100.000 | 9.000 | 4.221 | Poor performance |
| Capitalise and/or license UNOC to execute its mandate as an investment arm of government in oil and gas industry | UNOC capitalised and financing for UNOC operations secured | 19.570 | 50.0 | 100.0 | 100 | 32.000 | 16.91 | Fair performance |
| | | 74.089 | 25.4 | 97.6 | - | - | 56.09 | Overall output performance |

Source: MEMD and PAU Q2 Reports, Field findings

Performance of Interventions

3.3.2 Undertake construction, operationalisation of infrastructure projects: Oil Refinery, Storage terminal, East African Crude Oil and refined products pipelines

Outputs for the FY 2021/22 under this intervention are:

- Review the refinery Front Engineering Design (FEED).
- Implement RAP for the EACOP, refinery and refined products pipeline
- Conduct a total of 41 field monitoring activities for the pipelines and storage facilities.
- Produce a total of four monitoring reports on pre-Final Investment Decision (FID) and EPC activities for EACOP, product pipeline and storage, refinery and processing facilities

The performance was fair. By 31st December 2021, the final Front End Engineering Design (FEED) studies for the Oil Refinery were still under review by the Lead Investor, M/s Albertine Graben Refinery Consortium (AGRC) with progress at 85%.

On the development of EACOP, the Final Investment Decision (FID) was underway. Conclusion of the FEED studies will mark the start of the detailed Engineering, Procurement and Construction (EPC) phase by the Joint Venture Partners.

On compensation for the pipeline corridors, the RAP studies for the EACOP and products pipeline (Hoima – Kampala) were reviewed, approved by government and the payment process commenced. Disclosures were undertaken for 1,686 of the 4,270 PAPs and only 62 PAPs were paid in the districts of Hoima, Kikuube, Kyankwanzi and Kiboga along the refined products pipeline route. Furthermore, construction of resettlement infrastructure for the Oil Refinery was ongoing and access roads with one police station for Hoima District Local Government together with the market stalls in Kyakaboga, Hoima were completed and handed over to the community in August 2021. However, construction of the resettlement infrastructure for the pipelines was yet to start pending availability of funds. RAP implementation was slowed down by the low release of funds for the activity. Although a supplementary budget of Ug shs 30bn was approved for the RAP implementation, only Ug shs 1.16bn (3.9%) was released and all funds were expended.

Approximately 300 acres of land for establishment of the Kampala Fuel Storage Terminals were acquired in Wakiso, and the Environment and Social Impact Assessment (ESIA) for the project was reviewed and submitted to NEMA for approval. Uganda National Oil Company (UNOC) was set to secure a development partner to undertake the works.

3.3.3 Fast-Track Skilling, Training and International Accreditation of Ugandans and Small and Medium Enterprises (SMEs)

For the FY 2021/22, the outputs were: Training and development of capacity for 300 SMEs, Ugandans, National Content staff as well as internationally accrediting at least five vocational training institutions; operationalise the Industry Enhancement Centre, and develop a value additional and marketing strategy for goods and services.

The performance was poor. Only 40 of the annual target of 300 SMEs were trained in ISO 14001 HSE standards. Training of two vocational institutions (Uganda Petroleum Institute Kigumba, Kiryandongo and Uganda Technical Institute Kyema, Masindi) in oil and gas skills was also undertaken.

A total of 430 talents (347 males, 83 female) were also registered on the National Oil and Gas Talent Register (NOGTR) bringing the total number of talents to 5,946. Additionally, seven supplier development workshops for training Ugandans were held in Kingfisher and Tilenga Development areas.

Regional meetings were also held in Hoima and Nebbi to publicise the opportunities available in the oil and gas sector for local companies, and to date a total of 2,084 Ugandans are employed in the oil and gas sector. More Ugandans will be employed in the sector if additional institutions and SMEs are skilled, thus the need to prioritise funding for this output.

3.3.4 Capitalise and/or license Uganda National Oil Company (UNOC) to execute its mandate as an investment arm of government in oil and gas industry

UNOC is mandated to manage: State participation in production licenses; propose new petroleum exploration ventures; develop, own and operate oil refinery, oil pipelines, storage terminals and other related facilities.

Under the Midstream Sub-programme, UNOC executes its mandate through its two wholly owned subsidiaries: Uganda Refinery Holding Company Limited (URHC) which manages oil refinery and the National Pipeline Company (Uganda) Limited (NPC) which manages the EACOP and refined products pipelines.

The output for FY 2021/22 is to provide UNOC with required financing in order to carry out its operations including: Environment Social Impact Assessment (ESIA) for EACOP, Oil Refinery pre-FID activities and other supporting activities.

The performance was fair. UNOC participated in the Tilenga and Kingfisher technical committee meetings, and had commenced the search for a marketing consultant in preparation for a Joint Venture Partner for exploration licenses. However, the Ministry of Finance has not yet availed UNOC's 15% shareholding in the East African Crude Oil Pipeline.

Challenge

Limited funding negatively affected the progress of RAP implementation for the pipelines and other planned midstream infrastructure such as the central processing facilities. Also the government was yet to provide funds to cater for the 15% shareholding in the EACOP.

Recommendation

The MEMD and MFPED should prioritise funding for RAP activities and other key outputs such as capitalisation of UNOC in order to hasten the preparations for oil refinery and pipelines.

Conclusion

The sub-programme performance was fair at 56.1%. The FEED studies for the oil refinery was under review, while the Final Investment Decision (FID) for EACOP was planned for Q3 of FY 2021/22. Additionally, skilling and training of some Ugandans, vocational institutions and local suppliers was undertaken but hampered by funding gaps. More Ugandans were registered on the National Oil and Gas Talent Register. The RAP implementation for the EACOP and refined oil pipelines had commenced but progressing slowly due to low funding.

3.4 Downstream Sub-programme

3.4.1 Introduction

The Downstream Sub-programme deals with distribution, marketing and sale of petroleum products within the country. The sub-programme contributes to one of six objectives for the programme - improve security of supply of refined petroleum products.

The sub-programme has four PIAP interventions for the five year NDP III period, of which two were planned for this FY 2021/22. The two interventions - development of standards for storage infrastructure and other facilities; and Restock and manage Jinja Storage Terminal (JST) were monitored.

Overall Sub-Programme performance

The sub-programme performance was fair at 58.9% (table 3.5). The Uganda National Bureau of Standards (UNBS) was developing standards for petroleum and natural gas industries and the MEMD continued enforcing the standard of petroleum quality in the country. However, the restocking of JST was affected by limited funds.

Table 3.5: Performance of the Downstream Sub-programme as at 31st December 2021

| Intervention | Output | Annual Budget (Ug shs) | % of budget received | % of budget spent | Annual Target | Cum. Achieved Quantity | Physical Performance Score (%) | Remark |
|--|--|------------------------|----------------------|-------------------|---------------|------------------------|--------------------------------|---------------------------|
| Development of standards for storage infrastructure and other facilities | Standards for petroleum storage infrastructure developed and quality of petroleum products monitored | 2.164 | 32.6 | 91.1 | 100 | 28 | 5.98 | Good performance |
| Restock and manage Jinja Storage Terminal | Jinja Storage Terminal (JST) restocked. | 28.873 | 36.6 | 100 | 12 | 2.5 | 52.92 | Fair performance |
| | Total | 31.037 | 36.3 | 99.4 | | | 58.9 | Output performance |

Source: MEMD and PAU Q2 Reports, Field findings

Performance of the Interventions

3.4.1 Development of standards for storage infrastructure and other facilities

The intervention aims at regulating the quality of petroleum products on the market. The outputs for FY 2021/22 are to develop petroleum standards on quality, monitor and enforce compliance of petroleum retail outlets and depots.

The performance was fair and the planned output for FY 2021/22 is to develop five standards for petroleum storage infrastructure. The UNBS was developing a standard on petroleum, petrochemical and natural gas industries. Two additional standards on preparation of steel substrates before application of paints and related products were also being developed.

Under monitoring of petroleum quality, the development of a quality management system in line with ISO standards was ongoing. In line with this, the MEMD planned to monitor 80% (2,138) of the retail outlets in the first half of FY. However, only 562 of the retail outlets were monitored and 295 outlets identified to be noncompliant with respect to fuel quality. Penalties were issued for the non-compliant retail outlets in accordance with the petroleum regulations and they resumed operations after upgrading their fuel quality.

3.4.2 Manage and restock Jinja Storage Terminal

The intervention oversees the rehabilitation, operation and management of the Jinja Storage Terminal (JST) to industry standards to ensure security of petroleum supply. The JST has a storage capacity of 30 million litres. The output for FY 2021/22 is to manage and restock the terminal.

The performance was poor. Only 3 million litres were restocked in the first half of FY compared to the planned target of 6 million litres. The stock levels at the storage facility remained very low for most of the half year period. No strategic volumes were kept in the facility due to funding shortfalls.

On the development of a fuel pipeline and an oil jetty to link the JST to water transport from Kisumu in Kenya, the pipeline route was surveyed with key stakeholders and approved by UNOC. Additionally, a local benchmarking visit to BIDCO Uganda Limited oil jetty was undertaken. There is need to fast track the development of the pipeline and avail more funds for the operation of the JST in order to ensure the supply of petroleum.

One of the major hindrances to achievement of planned outputs was insufficient funding to UNOC and the Petroleum Directorate.

Recommendation

The MFPED should fully capitalise the UNOC to enable it fulfil its commercial functions.

Conclusion

The sub-programme performance was fair at 58.9%. The UNBS and MEMD were developing three standards on petroleum and natural gas industries. Restocking of the JST was undertaken but stock levels were low and target was not achieved due to funding gaps. The pipeline

development to connect JST and Kisumu in Kenya was ongoing with route survey completed. To ensure security of petroleum supply, the MEMD should hasten the development of other regional storage terminals.

CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The overall performance of the programme was fair at 60.8%. Petroleum exploration continued, while development of the midstream infrastructure had not commenced. The programme grappled with limited funds which hindered progress of the various interventions under the different sub programmes. The programme with support from government should quicken the development of the petroleum infrastructure (refinery, pipelines, storage terminals) so that the production phase can start, which will in turn offer more employment opportunities to Ugandans in the sub-sector.

4.2 Recommendations

- The MEMD should prioritise allocation of more funding to the oil and gas sector to quicken the preparations for oil production phase.
- The Government should quicken the completion of the petroleum upstream, midstream and downstream infrastructure.

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Annex 1: Monitored interventions for the Semi-Annual Performance for FY 2021/22 for the Sustainable Development of Petroleum Resources Programme

| Sub-Programme | Intervention |
|----------------------|---|
| Upstream | Undertake further exploration and ventures of the Albertine Graben. |
| | Undertake construction and operationalization of infrastructure projects (National Petroleum Data Repository and Data Repository Centre for the Petroleum Directorate and PAU) to ease monitoring of upstream activities. |
| | Review, update relevant policies, and harmonise conflicting laws and regulations. |
| | Construct the Central Processing Facilities (CPFs) for Tilenga and Kingfisher projects. |
| Midstream | Undertake construction, operationalisation and RAP implementation of infrastructure projects (EACOP and Oil Refinery). |
| | Fast-track skilling, training and international accreditation of Ugandans for employment and service provision in the development/phase of the oil and gas sector. |
| | Provide SMEs both technical (training) and financial support to enhance their participation in tendering and of delivery of contracts. |
| | Capitalise and/or license UNOC to execute its mandate as an investment arm of government in oil and gas industry. |
| Downstream | Development of standards for storage infrastructure and other facilities. |
| | Restock and manage Jinja Storage Terminal (JST). |

Source: Author's Compilation