

MINERAL DEVELOPMENT PROGRAMME

Annual Budget Monitoring Report

Financial Year 2023/24

October 2024

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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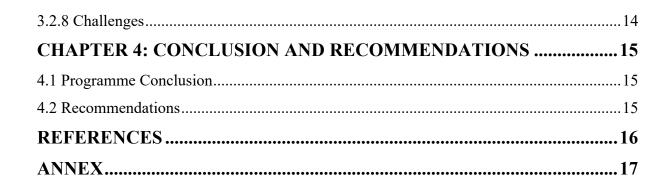
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ABBREVIATIONS AND ACRONYMS

| ACEMP | Africa Center for Energy and Mineral Policy |
|-----------|--|
| ASM | Artisanal and Small-Scale Miners |
| BGR | German Federal Institute for Geosciences and Natural Resources |
| BMAU | Budget Monitoring and Accountability Unit |
| DGSM | Directorate of Geological Surveys and Mines |
| DRMS | Domestic Revenue Mobilization Strategy |
| EAGER | East African Geothermal Energy Resources |
| ERA | Electricity Regulatory Authority |
| ESIA | Environmental Social Impact Assessment |
| GIS | Geographical Information System |
| GMIS | Geological and Mineral Information System |
| GoU | Government of Uganda |
| HSE | Health Safety and Environment |
| ICGLR | International Conference on the Great Lakes Region |
| ICP - EOS | Inductively Coupled Plasma Optical Emission Spectrometry |
| IFMS | Integrated Financial Management System |
| ISO | International Organization for Standardization |
| LMIS | Laboratory Management Information System |
| MCRS | Mineral Cadaster and Registry System |
| MDAs | Ministries, Departments and Agencies |
| MEMD | Ministry of Energy and Mineral Development |
| MFPED | Ministry of Finance, Planning and Economic Development |
| MoJCA | Ministry of Justice and Constitutional Affairs |
| MLHUD | Ministry of Lands, Housing and Urban Development |
| MPS | Ministerial Policy Statement |
| MW | Mega Watts |
| MWAMID | Mineral Wealth and Mining Infrastructure Development |
| NEMA | National Environment Management Authority |
| NDP | National Development Plan |
| OSH | Occupational Safety and Health |
| PBS | Program Budgeting Software |
| PGM | Platinum Group Minerals |
| PIP | Public Investment Plan |
| PPE | Personal Protective Equipment |
| REE | Rare Earth Element |
| SEAMIC | Southern and Eastern Africa Mineral Center |
| SDR | Special Drawing Rights |
| SMRF | Strategic Minerals Research Facility |
| TGH | Temperature Gradient Holes |
| UIA | Uganda Investment Authority |
| UNBS | Uganda National Bureau of Standards |
| OTOS | Oganua manonai Durvau di Stanuarus |



FOREWORD

At the start of the Financial Year 2023/24, the Government of Uganda outlined strategies to restore the economy back to the medium -term growth path and improve competitiveness. The strategic interventions that were prioritized under various programmes included: roads under Integrated Transport; electricity under the Sustainable Energy Development; irrigation under Agro-Industrialization; Industrial parks under Manufacturing; support to medical schools and science-based research and development under Human Capital Development; as well as oil and gas among others.

Annual programme assessments have been made, and it has been established that performance was fairly good. This implies that programmes are on track, but with a lot of improvements required. To that effect, I urge you to critically review the findings of the performance reports with a view to improving effectiveness in implementation of activities going forward. These monitoring findings form a very important building block upon which programmes can commence the reflective exercises.

The government has embarked on the 10-fold growth strategy that demands for enhanced efficiency and effectiveness within programmes. We cannot afford to have fair performance scores hence forth, as this will jeopardize the prospects of doubling the economic growth rates in the medium term.

Ramathan Ggoobi Permanent Secretary/ Secretary to the Treasury



The overall annual performance of the Mineral Development Programme for the Financial Year (FY) 2023/24 was fair at 66.2%. The programme budget was Ug shs 57.33 billion. The Government of Uganda (GoU) release was fair at 53.6% (Ug shs 22.24 billion) with good absorption at 85.9% (Ug shs 19.095 billion). The release of external financing was good at 70.8% (Ug shs 11.205 billion). There was an increase in the value of mineral production and Non-Tax Revenue (NTR) by 13% (Ug shs 378.24 billion) and 123.9% (Ug shs 25.08 billion) respectively as compared to the previous FY 2022/23. The mineral exploration and formalization of artisanal miners on the other hand registered poor progress.

Performance

One key achievement during the FY2023/24, was conclusion of the first phase of the biometric registration with a total of 1,276 Artisanal and Small-Scale Miners (ASMs) equivalent to 30% of target in the mining areas of Kassanda, Busia, Namayingo and Buhweju registered bringing the cumulative total to 7,945. Additionally, a total of 1,716 miners and mineral license holders were also sensitized. The progress was poor due to inadequate funds which hindered field activities and the procurement of additional biometric information equipment kits.

Closely related to the regulation of artisanal mining activities, MEMD drafted the ASM Mining and Minerals regulations and also undertook zoning of ASM areas of operations in order to operationalize the new Minerals and Mining Act, 2022. Sensitizations on the new regulations were undertaken in the different ASM zoned areas.

As part of licensing and regulation, MEMD processed applications for mineral beneficiation licenses for goldsmith and mineral smelting. The mining and production of phosphate fertilizer in Sukulu, Tororo commenced while the license holder for Wagagai gold mine in Busia was setting up a pilot gold processing plant. The requests for proposals for the re-development of Kilembe copper mines were at evaluation stage before a license is awarded.

Under the Karamoja airborne geographical survey project, data acquisition for phases one and two were completed using the gravity, magnetic and radiometric techniques. The phase three data interpretation from the magnetic, radiometric and gravity surveys was at 80% using electromagnetic surveys and geological mapping. However, the survey was behind schedule having been negatively affected by the insecurity in the Karamoja sub region. Related to quantifying the country's mineral potential, the exploration and survey of the estimated 640 million tonnes of Rare Earth Elements (REE) deposits in Bugiri, Bugweri and Mayuge districts was ongoing with core drilling programs in Iganga and Mayuge completed.

In the Mineral Infrastructure development project, the sites for installation of 6 weighbridges were identified in Bulambuli, Sironko, Katakwi and Napak districts; and the designs/geotechnical investigations were also complete. The procurement of land for installation of two of the weigh bridges in Bulambuli and Napak was ongoing but behind schedule. Twelve more sites earmarked for weighbridge installations were mapped in areas with bulk minerals (marble, pozzolana) and the lawful land owners across the country were identified to enable the land acquisition. Additionally, procurement of four mobile weigh bridges for use in the mining areas was at contract signature stage.



- i. Low funding to the Mineral Development programme is affecting the ability to undertake important activities such as training, inspection, and acquisition of the necessary equipment/tools which are required to better regulate the sector and undertake further minerals exploration.
- ii. The mining industry continues to be dominated by artisanal miners whose production levels are low due to use of unsafe and rudimentary techniques for mining.

Recommendations

- i. The MEMD should prioritize funding to the Mineral Development programme so that the relevant departments are adequately equipped, staffed, trained and facilitated to undertake further mineral exploration and regulation.
- ii. The Government should focus on attracting large-scale mining companies so that there is increased investment in the sector. This will create more jobs and also increase the revenue from the mining sector.







CHAPTER 1: BACKGROUND

1.1 Background

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

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

Commencing FY 2021/22, the BMAU began undertaking Programme-Based Monitoring to assess performance against targets in the Programme Implementation Action Plans (PIAPs)/Ministerial Policy Statement. Semi-annual and Annual field monitoring of Government programmes and projects was undertaken to verify receipt and expenditure of funds by the user entities and beneficiaries, the outputs and intermediate outcomes achieved, and the level of gender and equity compliance in the budget execution processes. The monitoring also reviewed the level of cohesion between sub-programmes and implementation challenges.

The monitoring covered the following Programmes: Agro-Industrialization; Community Mobilization 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 the annual monitoring of selected interventions under the Mineral Development Programme for the budget execution period from 1st July 2023 to 30th June 2024.

1.2 Programme Goal and Objectives

The Mineral Development Programme contributes to the first objective of the National Development Plan (NDP III) which is to "Enhance Value Addition in Key Growth Opportunities". The goal of this programme is to increase the exploitation and value addition to selected resources for job-rich industrialization. Its objectives are to:

- 1. Increase exploration and quantification of priority minerals and geothermal resources across the country;
- 2. Increase adoption and use of appropriate and affordable technology along the value chain;
- 3. Increase investment in mining and value addition; and
- 4. Expand mineral-based processing and marketing.
- 5. Strengthen the legal and regulatory framework as well as the human and institutional capacity.



1.3 Programme Sub-Programme

The Mineral Development Programme is comprised of one sub-programme - Mineral Exploration, Development and Value Addition.

The lead entity for the implementation of this programme is the Ministry of Energy and Mineral Development, other key ministries, departments and agencies (MDAs) include: The National Environmental Management Authority (NEMA), Ministry of Trade and Industry (MoTIC), Ministry of Works and Transport (MoWT), and Uganda Investment Authority (UIA).

1.4 Programme Outcomes

The programme outcomes are: increased investment in the sector, increased contribution of the mineral sector to GDP and a competitive mining sector.



CHAPTER 2: METHODOLOGY

2.1 Scope

This monitoring report is based on selected interventions in the Mineral development programme. The monitoring covered interventions implemented during the FY 2023/24.

Monitoring involved the analysis and tracking of inputs, activities, processes, and outputs in the Ministerial Policy Statements and Annual and Quarterly work plans, progress and performance reports of MEMD.

A total of seven (7) interventions were reviewed. The monitored interventions translated into 93.3% coverage of the approved budget for FY2023/24.

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

- 1) Significant contribution to the programme objectives and national priorities.
- 2) Levels of investment, with interventions that had a large volume of funds allocated prioritized.
- 3) Planned outputs whose implementation commenced in the year of review, whether directly financed or not. In some instances, multiyear investments or rolled-over projects were prioritized.

2.2 Data Collection and Analysis

2.2.1 Data Collection

Both qualitative and quantitative methods were used in the monitoring exercise. The physical performance of interventions and planned outputs were assessed through monitoring a range of indicators. The progress reported was linked to the reported expenditure and physical performance.

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

- Literature review from key policy documents including, Ministerial Policy Statements (MPS) FY 2023/24; National and Programme Budget Framework Papers; Reprioritized Programme Implementation Action Plans (PIAPs), quarterly progress reports and work plans for the respective implementing agencies, Quarterly Performance Reports, Budget Speech, Public Investment Plans, Approved Estimates of Revenue and Expenditure, project reports, strategic plans and policy documents.
- ii) Review and analysis of data from the Integrated Financial Management System (IFMS); Programme Budgeting System (PBS) and Quarterly Performance Reports.

Primary data collection methods on the other hand included:

- i) Consultations and key informant interviews with institutional heads, project managers at various implementation levels.
- ii) Field visits to various districts, for primary data collection, observation and photography.
- iii) Callbacks in some cases were made to triangulate information.

2.2.2 Data Analysis

The data was analyzed using both qualitative and quantitative approaches.

Qualitative data was examined and classified in terms of constructs, themes or patterns to explain events among the beneficiaries (interpretation analysis) and reflective analysis where the monitoring teams provided an objective interpretation of the field events.

Quantitative data on the other hand was analyzed using advanced Excel tools that aided interpretation. Comparative analyses were done using percentages, averages, and cross-tabulations of the outputs/interventions; intermediate outcome indicators and the overall scores. Performance of outputs/interventions and intermediate outcomes was rated in percentages according to the level of achievement against the annual targets. The sub-programme score was determined as the average percentage ratings for the outputs/intermediate outcomes in the ratio of 65%:35% respectively.

The overall programme performance was the sub-programme score assessed. The performance of the programme and sub-programme was rated based on the criterion in **Table 2.1**. Based on the rating assigned, a BMAU colour-coded system was used to alert the policymakers and implementers on whether the interventions were achieved or had very good performance; (green), good performance (yellow), fair performance (light gold), and poor performance (red).

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

Table 2.1: Assessment guide to measure performance for FY 2023/24

Source: Author's Compilation

Ethical considerations

Introduction letters from the Permanent Secretary/ Secretary to Treasury were issued to the respective MDAs monitored. Entry meetings were held with the Accounting Officers or delegated officers upon commencement of the monitoring exercise. Consent was sought from all respondents including programme or project beneficiaries. All information obtained during the budget monitoring exercise was treated with a high degree of confidentiality.

2.3 Limitation

Lack of disaggregated financial information for some of the outputs.

2.4 Structure of the Report

The report is structured into four chapters. These are: 1) Introduction; 2) Methodology; 3) Programme Performance; and 4) Conclusion, and Recommendations respectively.



CHAPTER 3: PROGRAMME PERFORMANCE

3.1 Overall Programme Performance

Financial Performance

The programme budget was revised from Ug shs 47.33 billion to 57.33 billion. The Government of Uganda (GoU) release was fair at 53.6% (Ug shs 22.24 billion) with good absorption at 85.9% (Ug shs 19.095 billion). The release of external financing under the Karamoja Airborne project was good at 70.8%. The programme was affected majorly by low staffing levels and poor release of GoU funds which constrained the progress of key activities.

Physical Performance

The overall performance of the Mineral Development Programme was fair at 66.2%. The performance was on account of good (73%) outcome and fair (61%) output performances. The proportion of licenses adhering to requirements was good at 70%. The percentage contribution of mining sector to GDP was 1.9% against the target of 2.5% hence a good (76%) performance.

There was an increase in the value of mineral production by 13% (Ug shs 378.24 billion) and Non-Tax Revenue (NTR) by 123.9% (Ug shs 25.08 billion) in comparison with the previous FY 2022/23. The first phase of biometric registration of Artisanal Small Scale Miners (ASMs) was achieved with a cumulative total of 7,495 registered. A total of 1,343 ASMs were sensitised on best mining practices and anti-money laundering. Additionally, drafting of the Mining and Mineral Artisanal Mining; and the Geoscientific services regulations was under review.

The Karamoja airborne survey progressed and was nearing completion with both phase 1 and 2 completed. The new mineral exploration regional centres in Fort Portal and Ntungamo were not operationalized awaiting recruitment of staff and procurement of office and laboratory equipment.

The MEMD acquired six weigh bridges. However, the installation of weigh bridges in the did not progress due to delayed land acquisition of the sites. The Programme was majorly affected by low staffing and low level of funding which constrained some of the key programme activities.

3.2 Mineral Exploration, Development and Value Addition Sub-programme

The sub-programme is responsible for the mineral exploration and investment promotion functions. The sub-programme contributes to four programme objectives: explore and quantify priority mineral and geothermal resources across the country; increase adoption and use of appropriate and affordable technology along the value chain; increase investment in mining and value addition; and expand mineral processing and marketing.

The planned interventions for FY 2023/24 under the sub-programme that were monitored were:

- i. Undertake a detailed exploration and quantification of minerals and geothermal resources in the country;
- ii. Establishment and equipping of a dedicated exploration unit, with access to functional laboratories;
- iii. Organize, formalize and regulate the artisanal and small-scale miners;
- iv. Strengthen the capacity to monitor, inspect and enforce health, safety and environmental provisions;



- v. Strengthen the capacity to undertake mineral certification, trading, testing, inspection, regulation and enforcement;
- vi. Review of the Mining Act, 2003 and develop other relevant laws and regulations; and
- vii. Establish and strengthen earthquake, landslides and other geo-hazard monitoring systems.

Performance

The overall performance of the sub-programme was fair at 61.0%. Table 3.1, shows the performance of the interventions within the Mineral Exploration, Development and Value Addition Sub-programme. Details of performance are in **Annex 1**.

| Table 3.1: Performance of the Mineral Explorati | on, Development and Value Addition |
|---|------------------------------------|
| Sub-programme as at 30 th June 2024 | - |

| No. | Intervention | Performance Rating (%) | Remarks |
|-----|---|---------------------------|--|
| i | Undertake a detailed exploration and quantification of minerals and geothermal resources in the country | 66.8 | Fair performance. Karamoja airborne survey continued. Exploration of iron ore prospects in south western advanced. |
| ii | Establishment and equip a dedicated exploration unit, with access to functional laboratories | 42.7 | Poor performance. Some IT equipment were procured. The centres were not yet operational with recruitment of staff pending. |
| iii | Organize, formalize and regulate the artisanal and small-scale miners | 54.7 | Fair performance. A total of 7,495 ASMs were cumulatively registered. |
| iv | Strengthen the capacity to monitor, inspect and enforce health, safety and environmental provisions | 83.8 | Good performance at 83.8%. Monitored 62% of licenses. NTR achieved was Ug shs 25.3 billion. |
| V | Strengthen the capacity to undertake mineral certification, trading, testing, inspection, regulation and enforcement | 65.7 | Fair performance. Mineral systems and equipment were maintained but the weigh bridges were not installed pending payment of land. |
| vi | Review of the Mining Act 2003 and develop other relevant laws and regulations | 43.8 | Poor performance. The new Minerals and Mining Act, 2022 was yet to be operationalised pending development of the ASM regulations. |
| vii | Establish and strengthen earthquake, landslides and other geo-hazard monitoring systems | 69.6 | Fair performance. A total of 12 seismological stations were maintained. |
| | Overall Intervention Output Performance | 61.0 | Fair Performance |

Source: Author's Compilation

3.2.1 Undertake a Detailed Exploration and Quantification of Minerals and Geothermal Resources in the Country

Under the intervention, mineral exploration is undertaken through collecting, collating, processing and analysis of mineral samples in the different regions of the country. The intervention also explores the geothermal and Mineral potential in the country through geological, geophysical and geochemical surveys.

The planned output for FY2023/24 was: mineral; and geothermal reserves established in the country.



Performance

The performance of the intervention was fair at 66.8%. The achievements under the different outputs are discussed below.

a) Establishment of Mineral Reserves

Under this output, the targets were:

- i) Complete the Karamoja and Lamwo Airborne Survey
- ii) Additional mineral targets identified, mineralization models developed, drilling plan designed and data integration undertaken of the anomalous zones undertaken
- iii) Development of mineral processing infrastructure

i) Airborne Geophysical Survey and Geological Mapping of Karamoja and Lamwo

The Karamoja Airborne Survey project aims at achieving 100% of country's mineral survey. This will be achieved by completing survey in the Karamoja sub-region and Lamwo district. The project uses Gravity, Magnetic and Radiometric techniques to survey covering an approximate distance of 350,000 to 378,957 line-kilometres.

The survey consists of three phases namely. Phases one identifies the target areas in the region to undertake additional activities. Phase two aims at undertaking a detailed survey of 40% of the potential areas explored in phase one. Phase three involves undertaking the sub-region's ground geological and geochemical mapping and sample analysis to confirm the anomalies.

The overall cumulative progress of the survey was at 83%. Phases one and two for all the airborne magnetic, gravity and radiometric surveys were completed. The magnetic surveys were for magnetic minerals (iron ore), gravity surveys for high density minerals (gold) and radiometric survey for conductive minerals (copper) and radioactive minerals (Uranium). Figure 3.1, highlights the geographical coverage for phases 1 and 2 completed areas in Karamoja (Block A) and Lamwo (Block B).

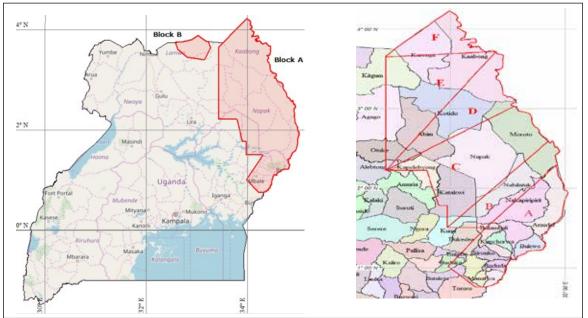


Figure 3.1: Location of Karamoja Airborne Survey Blocks

Source: MEMD Reports

The phase three geological and geochemical activities to confirm the anomalies surveyed were ongoing at 80% but behind schedule. The geological mapping and geochemical surveys at scales of 1:250,000 and 1:150,000 were completed for Mbale, Napak. A total of 1,073 geological and geochemical samples were collected for detailed mineral content analysis. The progress of ground mapping for some the remaining areas (Karenga, Kotido, Kaabong and part of Lamwo at Agoro hills) was affected by insecurity in the sub region.



L-R: A storage room for the collected samples; Some of the collected samples under phase 3

The survey also undertook geothermal and hydro-geological quality control to identify potential areas of underground water and heat. Under the airborne survey project, training and sensitization of ministry staff in mapping techniques continued.

ii) Identification and Development of Other Mineral Targets

Several undertakings were made to identify different minerals which included iron ore, copper, gold, uranium and Rare Earth Elements (REE) among others. In that regard, geological mapping and the feasibility study of the ten targeted iron ore prospects¹ in Kigezi region was undertaken. A total of 46 wells were drilled in seven² of these prospects with support from the European Union, ADT Africa, and Kalem Group. Further exploration and drilling had not been undertaken because the funds for compensation and relocation of affected persons had not been availed. The MEMD was still in search of a development partner to develop these iron ore prospects.

Also, related to exploration for iron ore, the geological and geophysical survey to discover the lateral extent of the iron ore deposits in Burunga-Mugabuzi (Mbarara and Kazo) was undertaken. However, extensive and detailed surveys were hindered by low funds for the activity. The magnetic and gravity exploration of Uranium in Katara, Buhweju and Lwensakala, Ssembabule was conducted and the interpretation of geochemical and geological data from the Boma Uranium mineralization prospect was also undertaken.

¹Kihumuro, Katuna, Rukaranga, Kijuguta, Karukara, Kyanyamuzinda, Kamena, Rwengongo, Katagata and Rugado

² Kihumuro, Katuna, Rukaranga, Kijuguta, Karukara, Kyanyamuzinda, Kamena



iii) Development of Mineral Processing Infrastructure

The MEMD continued to engage partners for more mineral value addition. The draft Mineral Production Sharing Agreement (MPSA) for the Kilembe copper mines was at the evaluation of Request for Proposals (RFP) from the seven (07) shortlisted applicants.

Related to mineral processing, the license holder for Wagagai mine in Busia was in the process of setting up a gold processing plant. The license holder (Rwenzori Rare Metals Limited) for the Makuutu Rare Earth Project (43.78 acres) completed core drilling over four (04) licensed areas. The total reserve estimation of Rare Earth Elements (REEs) stood at 640 million tonnes. As part of preparations for production, the construction of a pilot demonstration processing plant was yet to commence.

Under the Sukulu Phosphate and steel project, mining and production of fertilizers commenced but dispatch to the market was not achieved. Additionally, steel production had not begun.

b) Establishment of Geothermal reserves

The targets for this output for the FY2023/24 was; 24 Temperature Gradient Holes (TGHs) at Kibiro and Panyimur geothermal prospects logged, eight (08) TGHs drilled and eight (08) exploration wells at Kibiro and Panyimur geothermal prospects designed.

Temperature gradient monitoring for existing Temperature Gradient Holes (TGH) in the prospects continued and a total of 14 (Kibiro – 6, Panyimur – 8) of the planned 24 TGHs were logged. A total of seven (7) of the planned eight (8) TGHs were also drilled. The Environment and Social Impact Assessment (ESIA) for exploration well drilling was approved by the National Environment Management Authority (NEMA). In addition, the Electricity Regulatory Authority (ERA) approved feasibility studies for a proposed 10MW Panyimur-Panyigoro geothermal power plant. The design of the exploration wells had not commenced due to delay in procuring a consultant to undertake the activity.

3.2.2 Establish and Equip a Dedicated Exploration Unit, with Access to Functional Laboratories

The intervention aims at the establishment of functional regional exploration units across the country and thus decentralize the Directorate of Geological Survey and Mines (DGSM) functions. This would quicken the process of analysis of mineral samples explored in the various regions countrywide. The intervention also aims at equipping the new exploration units or regional centres with key equipment and staff.

The outputs for FY 2023/24 were: land for Busia regional center acquired and mineral beneficiations centers in Ntungamo and Fort Portal equipped and staff recruited

Performance

The performance of the intervention was poor at 42.7%. The land for establishment of the Busia beneficiation center was acquired.

The furniture and IT equipment for the newly constructed mineral beneficiation centers in Rwengoma, Ntungamo and Fort Portal were procured but not delivered. The staff recruitment progress was at 'shortlisting of applicants' stage by the Public Service Commission. The procurement for the first lot of equipment to operationalize the two centers was not achieved due to unavailability of funds.





The completed but not yet fully equipped plant house at Rwengoga, Ntungamo

3.2.3 Organize, Formalize and Regulate the Artisanal and Small-Scale Miners

The intervention aims to improve the livelihood of more than 26.5% of the population directly and indirectly employed in the mineral sub-sector. The intervention focusses more on Artisanal Small-Scale Miners (ASMs) who mostly work under poor conditions.

The planned output for FY2023/24 was; formalization and regulation of Artisanal Miner groups through biometric registration and sensitization in best mining practices.

Performance

The performance was fair at 54.8%. A total of 1,343 ASMs (89%) in the districts of Busia, Rubanda and Kabale were sensitized on gender mainstreaming, best mining practices (mercury free gold recovery) and anti-money laundering.

The first phase of formalizing and biometric registration of ASMs was concluded. A total of 1,276 (44%) ASMs were registered bringing the cumulative number to 7,495. A total of 1,150 (750 males, 400 females) mineral license holders were sensitized on best mining practices and artisanal mining. The poor performance of the registration process was attributed to low staffing. In addition, the MEMD received the funds towards the end of Quarter four thus was not able to implement all the activities by 30th June 2024.

Although the use of mercury in gold processing has been replaced by Borax, artisanal mining sites still characterized with the following: the continued use of toxic chemicals (cyanide, mercury); environmental degradation; use of child labour; and low enrollment registered in schools around the mining areas. The ASMs lacked basic mining equipment due to their low financial capacity thus leading to low production and unsafe working conditions. The mineral production was further hampered by poor infrastructural development at the mining sites with most areas not having access to electricity which is required for the operation of machinery.

3.2.4 Strengthen Capacity to Monitor, Inspect and Enforce Health, Safety and Environmental Provisions

The intervention aims at issuing mining licenses; and inspecting and monitoring mining areas to ensure that they are operated under safe working conditions. The planned outputs were; mining rights and licenses inspected and issued; and enforcement and awareness campaigns undertaken to ensure safe working conditions of miners.

The annual outputs for the FY 2023/24 were:

i. 80% of Mineral prospecting and exploration, mining, and mineral trade rights monitored;



- ii. Mineral licenses reviewed, due diligence on mineral rights undertaken and noncompliance notices issued; and
- iii. Stakeholders sensitized on licensing requirements.

Performance

The performance was good at 83.8 %. Overall, 62% (247) of licenses for the different mineral rights holders in the various regions of the country were monitored and 241 non-compliance notices (100%) issued. In line with this, due diligence on 43 of the planned 100 mineral dealer's license applications was also conducted. A total of 846 production returns for both location and mining lease concessions were reviewed. Overall, performance of compliance level was at 70%. The MEMD also granted one goldsmith license and one mineral smelting license to promote mineral value addition.

To promote licensing and safety, a total of 1,350 stakeholders and 130 license holders were sensitized on licensing requirements in the various mining areas across the country. The MEMD continued monthly compilation of mineral statistics and quarterly dissemination to the public.

The Non-Tax Revenue (NTR) from the issued licenses; and the royalty payments arising from the mining and inspection activities was Ug shs 25.30 billion. This was a 123% increase from FY 2022/23. The value of mineral production increased to Ug shs 378.2 billion from Ug shs 248.5 billion in FY 2022/23. The mineral production was majorly attributed to production of iron ore at Ug shs 216.7 billion (57.3%) and limestone (26.6%) as illustrated in Figure 3.2. The value of gold production which was mainly contributed to by ASMs was low at 0.2% and the bulky minerals (pozzolona, marble) contributed to only 6% of the mineral production value thus the need to fast track installation of independent weigh bridges. Minerals in the others category included coltan, dimension stone, granite, kaolin, lithium, wolfram, and manganese among others.

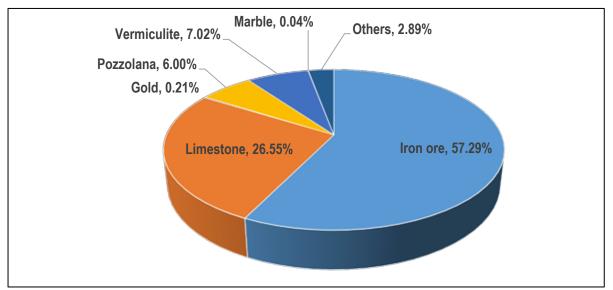


Figure 3.2: Contribution of various minerals in value as at 30th June 2024 (Ug shs billion)

Source: MEMD Q4 Reports



The intervention targets the maintenance of specialized machinery and mineral information systems. Additionally, it aims at building the technical capacity of staff to undertake effective sample analysis and monitoring of mining sites to promote mineral inspection, regulation and enforcement.

The planned outputs for the FY 2023/24 were:

- i. E-Government connected weighbridges installed within the mining areas with bulky minerals (pozzolana, marble) and land acquired for additional weigh bridge sites;
- ii. E-Government mineral production system and data bank developed;
- iii. Specialized equipment and consumables for mineral and geothermal exploration procured; and
- iv. Mineral staff recruited.

Performance

The performance of the intervention was fair at 65.7%. The progress per output is presented here under.

Installation of Weighbridges in Mining Areas with Bulky Minerals

In order to accurately track mined mineral quantities, the MEMD acquired six weigh bridges for installation in the bulky mineral producing regions. The sites for installation were identified in Bulambuli, Sironko, Katakwi and Napak districts. The designs and geotechnical investigations were completed but the weighbridges had not been installed. The delay was due to challenges in the land acquisition for the sites, but the negotiations with land owners were ongoing.

The identification and mapping of 12 more pieces of land in mining jurisdiction with bulky minerals in Tooro, Ankole, Kigezi, Teso, Buganda and Busoga regions for additional weigh bridges was concluded. Negotiations with the land owners was ongoing. Additionally, procurement of four mobile weigh bridges was ongoing, with the contract signed but delivery was awaiting funds release.

Development of Mineral Information Systems and Staff Training

The architecture designs and geotechnical studies of the E-government databank structure in Entebbe were completed. The structure will house the E-government system and will be a real time monitoring centre of the different mining locations and the weigh bridges. The procurements of ICT equipment (laptops and desktops) for the systems operation of the e-Government system was concluded awaiting delivery. The procurement of servers and software for the E-government system for mineral statistics was at bid evaluation.

Other procurements aimed at designing additional systems had poor progress. For example, the procurements of consultants to undertake designs for the mineral statistics databank; and the e-government mineral production and statistics system was at contract signing stage. Likewise, the procurement of the Datamine and Vulcan software was also at contract signature stage. The procurements were both procurements hindered by poor (28%) release of funds.



The maintenance of the other systems that included; Geological and Mineral Information System (GMIS) and National Mining Cadastre and Registry System (MCRS) to quicken the licensing process also continued.

Eleven (11) staff received specialised training in geothermal development, reservoir engineering, exploration geophysics, earth resources engineering, and geothermal power utilisation. One additional staff enrolled for a PhD study in Mining and Minerals Engineering in United Kingdom.

Maintenance and Acquisition of Specialised Machinery

The aim was to ensure efficient operation of equipment for mineral sample analysis. The maintenance and testing of geophysical equipment such as magnetometers, gravimeters, XRF, Radon meter and MT sets among others was undertaken. The procurement of several laboratory consumables was initiated but not concluded due to limited funds. These included; reagents, heating elements for the high temperature muffle furnace, spare parts and accessories for the fume hoods and Esco oven.

Recruitment of Mineral Staff

The recruitment process for 30 mineral inspectors and six (06) project administration staff was initiated and was at 'shortlisting' stage by the Public Service Commission. The additional staff will boost monitoring activities and regulation in the sector.

3.2.6 Review of the Mining Act 2003 and Develop Other Relevant Laws and Regulations

The intervention addresses the gaps in the Mining Act, 2003 by enacting a bill seeking to promote transparency of mining operations. It is aimed at transforming artisanal small-scale mining in Uganda to create an enabling environment for attracting investments among others. The Act aims at introducing artisanal mining permits and small-scale mining licenses. This will positively impact the livelihood of ASMs and the Ugandan population that benefits indirectly from the sector.

The annual outputs for FY 2023/24 were:

- i. Two regulations to operationalize the Mining and Minerals Act, 2022 developed; and
- ii. Mineral code system for Uganda developed

Performance

The annual performance was poor at 43.8%. Consultation on the regulations and mining legislation was conducted through a national workshop in mining and six (06) ASM consultative workshops. This led to the commencement of the ASM regulations as well as zoning of areas for ASM mining. Drafting of the Mining and Mineral Artisanal Mining; and the Geoscientific services regulations was under review by the Auditor General. In addition, a training workshop on African Mineral and Energy Classification (AMREC) was conducted aimed at developing a mineral code system.

The poor progress in developing the regulations delayed the operationalization of the Mining and Minerals Act towards supporting ASM mining activities. The Act is envisaged to accelerate formalization of artisanal mining, improve mining and mineral administration, and business processes. This will ensure efficient collection and management of mineral revenues, promote value addition to minerals and increase mineral trade. It will therefore greatly contribute to the programme objectives of: increased investment in mining and value addition; and expanded mineral-based processing and marketing.

3.2.7 Establish and Strengthen Earthquake, Landslides and Other Geo-hazard Monitoring Systems.

The intervention aims at developing and putting in place measures to avoid the destruction of life and property due to geo-hazards. The output was measures to avoid destruction of life and property due to geo-hazards put in place through the management and maintenance of geo-hazard infrastructure.

The planned outputs for FY 2023/24 were: Earthquake data centers monitored and maintained; Earthquake analysts trained; and data disseminated to end users.

Performance

The performance was at fair at 69.6 %. The MEMD continued with the collection, analysis and interpretation of earthquake data using the seismic stations at Entebbe, Hoima, Nakawuka (Wakiso), Kilembe (Kasese) and Kyahi (Mbarara). A total of 37 seismic events were registered on three of the seismic stations. A total of 19 Passive Seismic stations installed in the Albertine graben were maintained.

3.2.8 Challenges

- i. The mining industry continues to be dominated by artisanal miners whose production levels are low, often under unsafe working conditions due to the use of rudimentary methods.
- ii. Low staffing to the Mineral Development Programme affected the operationalization of regional centers, staff training and minerals inspection which are required to better regulate the sector and undertake further minerals exploration.
- iii. The poor funding to the programme hindered key activities such as acquisition of key mineral analytical equipment, land acquisition and accurate tracking of mineral production using the acquired weigh bridges.
- iv. The mineral production was hampered by poor infrastructural development at the mining sites with most areas not having access to electricity which is required for the operation of machinery.



CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

4.1 Programme Conclusion

The performance of the Mineral Development Programme was fair at 66.5%. The performance was majorly affected by low staffing levels; and poor release of GoU funds which constrained the progress of key activities. Despite the poor release, the funding to the programme slightly increased over the past two years.

The government undertook several interventions mainly geared towards exploration of new mineral locations, enhancement of technical capacity in the sector and the streamlining of the activities of the artisanal miners. The programme however remains under prioritized in terms of financing yet it has a lot of potential to contribute revenue to the national economy. The minerals development sector was dominated by small-scale artisanal miners who have limited financial capacity in a sector that is capital-intensive.

The low level of investment by the government and the private sector continues to hold back the potential economic benefits from the sector due to the high levels of capital required to undertake value addition to the mined minerals. The operationalization of the new enacted minerals and mining law to enable the government to better organize and regulate the mining sector was pending development of the mining regulations. The operationalization of the law will also attract the much-needed investment in value addition and processing of minerals so that more jobs can be created and revenue from the programme.

4.2 Recommendations

- i. With the enactment of the Minerals and Mining law, the Government should focus on attracting large-scale mining companies so that there is increased investment in the sector. This will create more jobs and also increase the revenue from the mining sector.
- ii. The MEMD should fast-track the regulations for operationalization of the Mining and Minerals Act, 2022 to enable better regulation of artisanal mining activities.
- iii. The MEMD and MFPED should prioritize funding to the sub-programme to enable the acquisition of the relevant equipment and staffing.
- iv. The government through the MEMD should support the ASMs to formalize their operations through enhanced sensitization and training.



REFERENCES

- Ministry of Energy and Mineral Development (2023), Ministerial Policy Statement, Vote; 017
- 2. Ministry of Energy and Mineral Development (2023), Quarter 1 and 2 FY 2023/24 reports
- 3. National Planning Authority, Third National Development Plan (NDPIII) 2020/21 2024/25

| Annex 1: Detailed Perforn | Annex 1: Detailed Performance of the Mineral Development Programme as of 30 th June 2024 | ogramme a | as of 30 th J | une 2024 | | | | |
|---|--|------------------------------|--------------------------|-----------------|----------|-----------------------------|--------------------------|---------------------|
| Intervention | Out put | Financial Performance | rformance | | Physical | Physical Performance | | Remarks |
| | | Annual | % of | % of | Annual | Cum. | Physical | |
| | | Budget (Ug shs bn) | budget received | budget spent | Target | Achieved Quantity | performance Score (%) | |
| Undertake a detailed exploration and quantification of minerals and geothermal | Geological, geochemical and geophysical surveys over mineral targets conducted Mineralization models developed and drilling | 7.533 | 66.0 | 95.3 | 100 | 44.0 | 66.7 | Fair Performance |
| | Karamoja Airborne Survey completed | 19.829 | 70.1 | 99.5 | 20 | 8.0 | 57.1 | |
| | Geothermal Exploration undertaken | 3.012 | 68.4 | 91.1 | 40 | 21.0 | 76.8 | |
| Establish and equip a dedicated exploration unit, with access to functional laboratories | Mineral beneficiations centres in Ntungamo and Fort Portal equipped 16 mineral beneficiation staff recruited | 2.380 | 42.1 | 33.3 | 100 | 18.0 | 42.7 | Poor Performance |
| Organize, formalize and regulate the artisanal and small-scale miners | 5,000 ASMs sensitized. 8,000 ASMs biometrically registered 1,000 miners and mineral license holders sensitized | 2.020 | 36.5 | 89.8 | 100 | 20.0 | 54.8 | Fair Performance |
| Strengthen capacity to monitor, inspect and enforce health, safety and environmental provisions. | 80% of mineral prospecting, exploration licenses monitored 200 mineral licenses reviewed and due diligence on 100 mineral rights undertaken 50 surface right verification on mining license applications undertaken Staff recruited | 4.668 | 48.9 | 78.7 | 100 | 41.0 | 83.8 | Good performance |
| Strengthen the capacity to undertake mineral certification, trading, testing, | Land for weigh bridges and additional regional centres acquired 4 weighbridge operators recruited Designs for Mineral systems and software completed | 11.470 | 7.1 | 34.4 | 100 | 4.7 | 65.7 | Fair Performance |

ANNEX





| Intervention | Out put | | | Financial Performance | rformance | | Physical | Physical Performance | | Remarks |
|--|---|---|------------|------------------------------|-------------|-------------|----------|----------------------|---------------|---------------------|
| | - | | | A used | 0/ <u> </u> | 0/ 26 | 1 V | | | |
| | | | | Annual | % OT | % OI | Annual | cum. | Puysical | |
| | | | | Budget | budget | budget | Target | Achieved | performance | |
| | | | | (Ug shs bn) | received | spent | | Quantity | Score (%) | |
| inspection, regulation and enforcement | Maintenance and calibration of mineral exploration equipment and software an staff training | ibration of mine it and software | ral and | 3.971 | 89.5 | 81.3 | 100 | 50.0 | 55.8 | |
| | 20 Desktop computers and 20 laptop computers procured | rs and 20 laptop | | 0.575 | 86.1 | 91.9 | 100 | 65.0 | 75.5 | |
| Review of the Mining Act 2003 and develop other relevant regulations | Two regulations to enforce the Mining and Minerals Act 2022 developed Develop one mineral code system for Uganda | nforce the Minin veloped code system fo | ig and | 0.810 | 89.0 | 83.6 | 100 | 39.0 | 43.8 | Poor Performance |
| Establish and strengthen earthquake, landslides monitoring systems | Monitor earthquakes and maintenance of earthquake monitoring infrastructure Training of analysts | and maintenan ig infrastructure | ce of | 0.152 | 17.2 | 100.0 | 100 | 12.0 | 69.69 | Fair Performance |
| | Total | | | 56.421 | 54.2 | 89.9 | | | | fair |
| Average Outputs Performance | e | | | | | | | | 62.9 | performance |
| Outcome Performance | | | | | | | | | | |
| Indicator | | Annual Target | Achieved | | | | | Score | Indicator (%) | |
| Proportion of licensees adhering to requirements (%) | g to requirements | 75 | 52.5 | | | | | 70.0 | 70.0 | Good performance |
| Contribution of mining sector to GDP (%) | GDP (%) | 2.5% | 1.9% | | | | | 76.0 | 76.0 | Good performance |
| Average Outcome Performance | ce | | | | | | | | 73.0 | |
| Overall Programme Performance | nce | | | | | | | | 66.5 | Fair |
| | | | | | | | | | | Performance |
| Source: MEMD Q4 Reports, Field Findings | Field Findings | | | | | | | | | |









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