

MINING & TRADE *Review*

ISSUE NO. 67

November 2018

SPECIAL EITI EDITION

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EXPOSED!

- MWEITI report reveals grave weakness in extractives revenue administration
- licenced companies not paying royalties, ground rent
- government entities falling short on revenue collection

By Chiku Jere

Malawi is failing to maximize revenue collection from extractives sector as some mining companies are evading ground rent for their concession areas while government is falling short in enforcing mineral royalties remittance, a situation which is leading to loss of revenue by the State – reads the Malawi Extractives Industry Transparency Initiative (MWEITI) 2015/16 Financial Year Report.

The country's second EITI report which was officially launched on October 17, 2018 at Capital Hotel in Lilongwe, points at glaring weaknesses in revenue administration that mostly involve the non-collection of non-tax payments such as ground rent and royalties by Department of Mines (DoM).

Ground rent is the annual charge of surface rental paid by the exploration or mining company per square kilometre of the area covered by the licence, while royalty is a fee paid by a mine operator or owner to compensate for natural resources that are extracted. ...cont. on page 2



Left to Right: Malunga, Director for Revenue Policy Department Kenneth Matupa, Steiger, Munthali, Kumwembe and MWEITI National Coordinator George Harawa launching the Report

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Unpack National Treasures

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Steiger: Germany's Dpt Head of Mission **Kumwembe: Chief Director MoNREM**

From page 1 Companies named in the report as not having been paying ground rent during 2014/15 to 2015/16 financial years despite holding active licences include Bwanje Cement Products, Crown Minerals Ltd, Dantansie Mining Company Ltd, Blackfire Explorations Ltd; Ashgill Australia Pty Ltd, DDY General Dealers and FSK Civil Engineering.

No reason has been given as to why these entities have not been giving what is due to the State and why authorities mandated to enforce such payments have remained inert.

For years, the report also indicates that the DoM has not been collecting the 2.5% sale's royalty of the highly-valued cut and polished corundum from Nyala Mines Ltd sold by the US-based Columbia Gem House Inc. despite the company reporting exports of up to 432 Kg of the precious minerals in the 2014/15 financial year alone.

The 193-page report attributes this upshot to, among other factors, Mines Department's lack of required resources to carry out audits in order to estimate the sales' royalties due.

It also notes that the current legislations have no specified basis for charging royalties either based on production amounts or the selling price.

Section 78 (u) of Petroleum Exploration and Production Act (1983) and Section 128 (2.g) of the Mines and Mineral Act (1981) only stipulate that royalties may be paid in kind at the discretion of the Minister of Natural Resources, Energy and Mines, but does not provide any guidelines to the Minister for determining royalties payable.

Another telling revelation in the report is that Portuguese multinational Mota Engil has over eight (8) mining licences in Malawi but only pays royalties for one licence.

It is reported that government exempts Motal-Engil from paying royalties on non-commercial licences used for governmental infrastructure projects, but the weakness is that the DoM has no means of distinguishing which quarried products are being sold for commercial purposes from those being sold for government projects' use, a scenario that presents a loophole for revenue stonewalling.

The report notes that this situation symbolises a general lack of control and inadequate monitoring of the activities of mining licence holders throughout the country to effectively enforce revenue collection.

The Malawi government made a commitment to join EITI as a way of upholding sound governance of the extractive sector by ensuring transparency and accountability for maximized benefit of the citizenry.

The launching ceremony of the second MWEITI report attracted different stakeholders including government officials, civil society and private sector representatives.

Presiding over the launch, Ministry of Natural Resources, Energy and Mining Chief Director Bright Kumwembe said substantial progress Malawi has made so far in embracing the initiative demonstrates government commitment to reforms adding that successful production of two EITI reports, sets the sector on the right path.

"Government will strive to implement all the recommendations that the report has brought forth, to improve the governance of the sector with the aim of making it beneficial to the nation," he said.

Kumwembe urged all stakeholders to remain committed to the the course saying, more effort is still required to achieve the goal of attaining EITI Membership status.

On his part, Deputy Head of Mission at the Embassy of the Federal Republic of Germany Thomas Staiger, whose government funded the Malawi EITI process through Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, said the German government is encouraged with the effort and commitment the country has vested in the implementation of the initiative, and pledged continued financial and technical support.

Natural Resources Justice Network Chairperson Kossam Munthali also appreciated the commitment that government and other stakeholders have shown in implementing the initiative describing the status quo as a giant step taken towards breaking the vicious cycle of suspicion, mistrust and cat-and-rat relationship that has existed amongst stakeholders regarding the extraction and utilisation of natural resources.

He said that through EITI implementation, Malawi is *...cont. on page 3*



Part of the audience that attended the report launch

...from page 2 definitely changing, in a positive manner, the way in which business is conducted.

“Adherence to EITI principles and enactment of the Access to Information law underscore government’s commitment in ensuring that there is transparency in the public sector. Malawians will be able to access extractives industry information and data that was in the past taken as sensitive and secret, and will go a long way in helping government in making informed decisions,” said Munthali.

He said the nation should not only be contented with the fact that it is able to produce good EITI Reports annually but authorities should embrace and put into effect the recommendations that the report suggests pertaining to the extractives industry governance to spur the reforms in the sector.

Munthali emphasized the need to expedite the enacting of the revised Mines and Minerals Bill into law, reviewing the Petroleum Exploration and Production Act of 1983, developing the Oil and Gas Policy and finalizing the development of the model Petroleum Sharing Agreement (PSA) saying that will provide a viable legal framework to inform negotiations of extractive sector contracts.

Coordinator for Malawi Chamber of Mines and Energy Grain Malunga hailed the EITI process for bringing together stakeholders who formerly were exhausting their energy in fighting each other.

“There is now a common understanding amongst players with different interests in the sector. The good thing is that we all want something good to come out of the extractive sector for the betterment of the economy of this country. All we need is to maintain this path of coordination, appreciation and understanding of each other’s role in this respect to achieve this common goal,” he said.

The report reconciles revenue payments to government receipts of 19 selected extractives companies plying trade in Mining, Oil and Gas, Forestry as well as Transport Sectors that exceeds the materiality threshold of MWK33million.

Such companies include Hamra Oil Holdings Ltd, RAKGAS MB45, SacOil Holdings Ltd, Mota Engil Minerals and Mining (MW) Ltd, Paladin (Africa) Ltd, Shayona Cement Corporation, Lafarge Cement Ltd, Cement Products (MW) Ltd; Terrastone Ltd, Cilcon Ltd and Cpl-Mchenga Coal Mines Ltd.

Others are Optichem 2000 (Malawi) Ltd, Zalewa Agriculture Lime Co, Kaziwiziwi Mining Co, Sovereign Services Ltd, M.A Kharafi & Sons, Malawi University of Science and Technology, Master Stone Breakers and Pamodzi Stone Mining (PSM) Investments.

Reconciliation of receipts reported by the government between July 1, 2015 and June 30, 2016, indicates that total revenues received by State from the extractive sector amount to MWK 5,346 million (K5.3billion), accounting for 8.2% of the total domestic revenues in the financial year.

MRA accounted for largest amount of the total revenue streams generated by the sector at 69%, followed by the Department of Forestry (DoF) and the Ministry of Transport and Public Works (MoTPW) accounting for 17% and 6% respectively while the Department of Mines collected 5% of total extractive industry revenues.

An analysis of Government revenues by sector contribution designates the Forestry Sector at top contributor at 48%, followed by Mining Sector at 30%, Transport Sector 18%



Malunga: EITI has brought common understanding

Munthali: Put into effect the recommendations

while as the Oil and Gas Sector pumped in 4% of the total extractive sector revenues during the FY 2015/16.

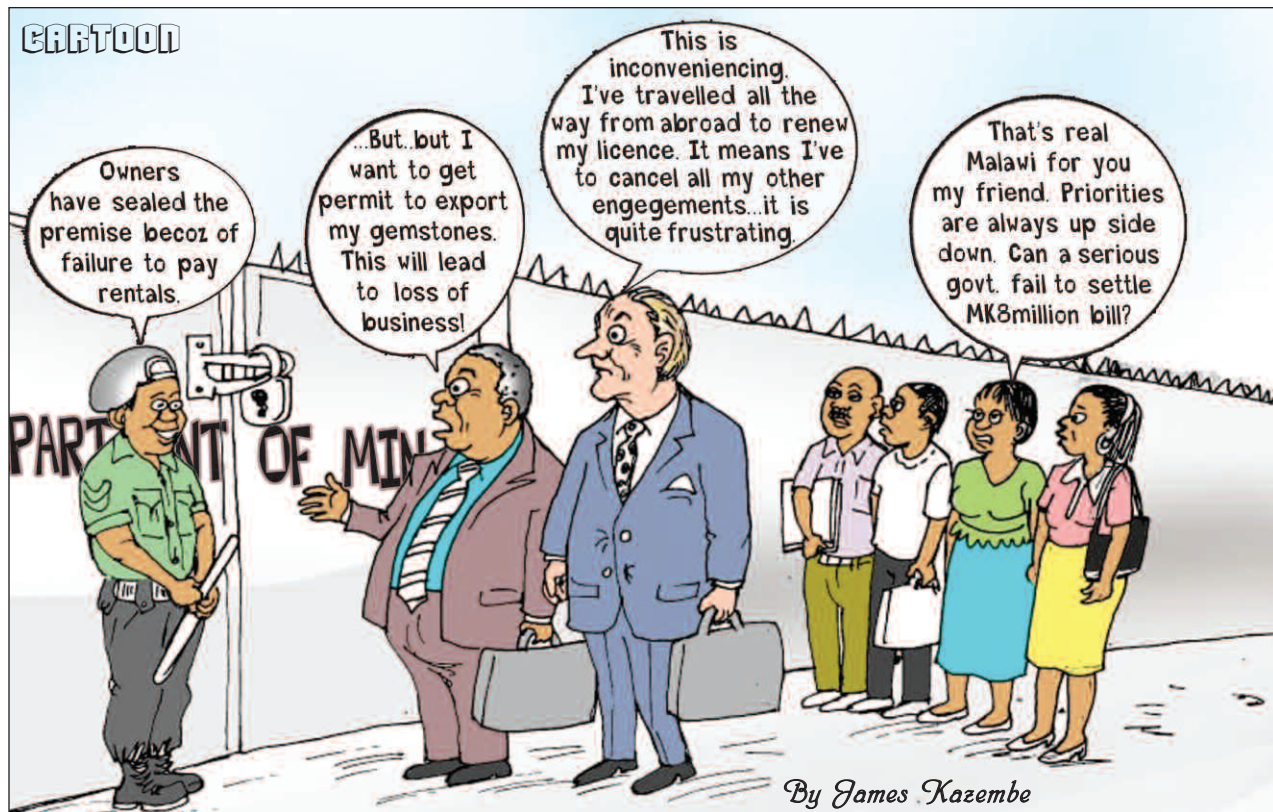
According to National Statistical Office (NSO), mining sector contribution in the Economy in terms of Gross Domestic Product (GDP) has decreased from 0.92% of the previous financial year to 0.90% of the average GDP at the constant price, accounting for MKW 11,622 million (MK11.6bn) on average of the calendar years 2015 and 2016, mainly from mining and quarrying sector.

The NSO, splits the annual average GDP contribution from mining, oil and gas, and forestry sectors for 2015-2016 as 0.9%, 0% and 7.3% respectively.

2016 only saw an increase in terms of sector’s contribution to employment compared with 2015, with the sector employing 8,172,228, people which makes the average contribution of the mining sector for the years 2015 and 2016 to be 0.18%.

In terms of export earnings, NSO confirmed mining commodity earnings for the financial year 2015/16 amounting to MWK 6,400 million against country’s total exports during the financial year which amounts to MWK 614,639 million.

The Report launch saw eight institutions that submitted certified templates for 2015/16 EITI Report production, namely: Hamra Oil, RAKGAS MB45, Shayona Cement Corporation, Terrastone, Raiply Malawi, Department of Mines, Ministry of Finance, Economic Planning and Development (MoF) and Malawi Revenue Authority (MRA), being awarded with certificates ■



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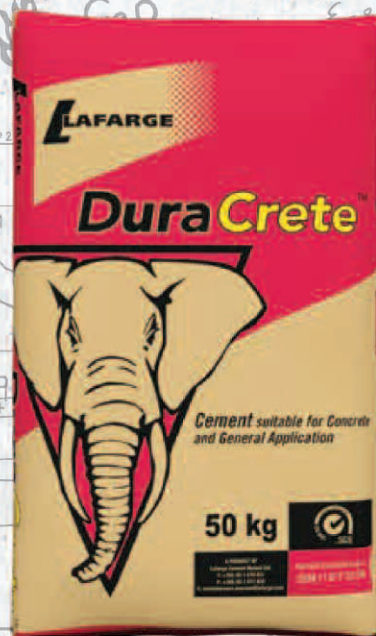
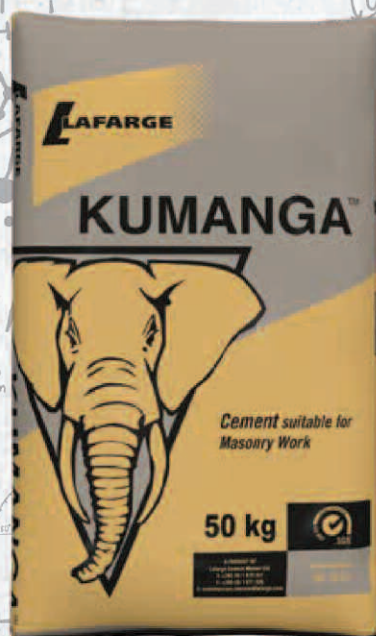
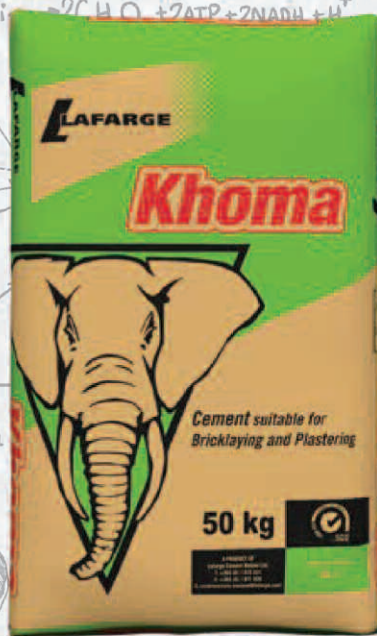
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EDITORIAL



BY MARCEL CHIMWALA,
PUBLISHING EDITOR

Clean up the mess in extractive revenue management

The recently released Malawi Extractives Industry Transparency Initiative (MWEITI) report says Malawi is failing to maximize revenue collection from extractives sector as some mining companies are evading ground rent for their concession areas while government is falling short in enforcing mineral royalties remittance, a situation which is leading to loss of revenue by the State.

As reported in our lead article, the country's second EITI report, which was officially launched on October 17, 2018 at Capital Hotel in Lilongwe, points at glaring weaknesses in revenue administration that mostly involve non-collection of non-tax payments such as ground rent and royalties by Department of Mines (DoM).

The report mentions names of some of the companies that have not been remitting royalties and ground rents to the Department but no reason has been given as to why these entities have not been giving what is due to the State and why authorities mandated to enforce such payments have remained inert.

For years, the report also indicates that the DoM has not been collecting the 2.5% sales royalty of the highly-valued cut and polished corundum from Nyala Mines Ltd sold by the US-based Columbia Gem House Inc. despite the company reporting exports of up to 432 Kg of the precious minerals in the 2014/15 financial year alone.

The 193-page report attributes this upshot to, among other factors, Mines Department's lack of required resources to carry out audits in order to estimate the sales' royalties due.

It also notes that the current legislations have no specified basis for charging royalties either based on production amounts or the selling price.

We feel the report should be a wake-up call for Capital Hill to sober up things at the Department of Mines, which is responsible for collection of this non-tax revenue from the minerals sector.

The government can correct the situation by, among other things, increasing financial allocation to the Department and establishing District Mines Offices.

It is unfortunate that since the first multiparty government in 1994 our leaders have been making noise about diversifying the country's economy to embrace mining as a key economic sector but there is nothing to show on the ground.

Departments of Mines and Geological Survey, which are key to uplifting the sector, continue to suffer from lack of adequate funding for their operations as the government is spending whopping sums of money on agricultural subsidies.

We do not need to prove this underfunding to these important Departments further as the fact that the Department of Mines headquarters in Lilongwe was closed earlier this month for failure to pay rental arrears amounting to K7-million is clear testimony.

As the saying goes, you reap where you sow, the government has to understand that there is no way the country can adequately benefit from the mining sector if funding to these Departments remains low with officers left to play bawo instead of going to the field to inspect mining operations.

The result of such negligence by the government are there for all of us to see; failure by the companies to pay ground rent and royalties and illegal mining in Mangochi, Lilongwe, Ntcheu, Balaka and other areas.

Of course, after the people in Mangochi demonstrated and presented a petition to government on illegal mining, State President Arthur Peter Mutharika has intervened and deployed the Malawi Defence Force which has arrested the miners and handed them to police.

However, this is not a lasting solution. The lasting solution should be for the government to provide funds to the DoM to send its officers to license the illegal miners and start taxing them.

Equally with adequate funding, the DoM would be in a position to establish District Mining Offices to scale up revenue collection from artisanal and small scale miners in the districts so that even brick molders and sand miners who have a hand in environmental degradation pay to obtain permits from the government.

Otherwise with the current status quo, it will not be surprising to see customary land owners continue doing the work of the DoM by allocating plots to illegal miners and a number of companies continue dodging the payment of royalties and ground rent without being questioned ■

Kayelekera uranium mining likely to resume - report



Part of the Kayerekera plant

By Gloria Mbwana

Mining of uranium at Kayelekera in Karonga, which was suspended in 2014 due to low prices of the yellow cake is likely to resume in the coming years.

This is according to the 2015-2016 Malawi Extractive Industry Transparency Initiative (MWEITI) report which analyses revenue from the extractive sector.

Owned by Paladin Africa, a subsidiary of dual listed Paladin Energy, Kayelekera which was launched in 2009 is the first modern and relatively major mining operation in Malawi with an average production of 1,500 tonnes of uranium per year.

The mine put Malawi on a world map as a mining country and considerably increased the contribution of the mining sector to GDP (about 1% of the country's GDP) before Paladin resolved to put it on care and maintenance in 2014 as a result of the prevailing low uranium prices in the aftermath of the Fukushima nuclear disaster in Japan, which resulted in the closure of many nuclear plants in Asia hence pushing down the demand for the yellow cake.

But the report says global demand of uranium is expected to increase in the coming years necessitating the reopening of the mine.

"Global demand is expected to increase in the coming years due to the construction of nuclear reactors in China, India, Russia and the Middle East and this is expected to lead to uranium price increase. Production of uranium in the country is, therefore, likely to resume in the coming years", says the report.

Revenue from the mining sector is projected to increase in the coming years as besides uranium, Malawi is endowed with sizeable quantities of a number of minerals which are largely unexploited.

The country has large reserves of coal in Rumphu, Karonga and Chikwawa and other minerals such as phosphates (apatite) at Tundulu in Phalombe, bauxite on Mulanje mountain, kaolinitic clays at Linthipe and Senzani in Dedza district and Ntcheu respectively, kyanite

in Ntcheu, limestone in several districts in the country, rare earths (including strontite and monazite) associated with alkaline rocks in Balaka and Phalombe, graphite in Salima and Lilongwe, iron sulphides (pyrite and pyrrhotite) in Lilongwe, titanium minerals along lakeshore in Salima and Nsanje, vermiculite in Mwanza and uranium in Karonga.

Most of these minerals have been evaluated in the past by either the Geological Survey Department or private companies.

Only phosphate, coal and uranium have been exploited and in addition rock aggregate is quarried in many parts of the country for the construction industry.

There are proven coal reserves in different areas across the country and most of the production is from Mchenga, Nkhachira (Malcoal) and Kaziwiziwi mines in the Northern Region.

Coal is used by local factories and is exported to Tanzania and Zambia since recent years.

Malawi also mines limestone which is used as feed stock for the production of lime and manufacture of cement, tobacco estates, poultry and paint industries for local market, and recently the country has started to export lime products to Mozambique.

"Production of rock aggregate is significant from small to large scale levels. However, the sector seems to suffer from illegal practices as companies producing rock aggregate for government projects are exempt from paying royalties but several of them also engage in commercial activities against the law", says the MWEITI report.

Lime production is mostly done in southern Malawi in the districts of Blantyre, Balaka and Ntcheu and in some areas lime producers operate in groups through cooperatives..

Gold resources of Malawi remain unexplored but informal alluvial gold panning activities in Makanjira area in the lakeshore district of Mangochi was reported to the Department of Mines in August 2017, and included several rivers such as Unga, Lugalo, Lukomola and Thilasi.

There is also gemstone mining at a small scale level in the country and the minerals include ruby, sapphire, tourmaline, aquamarine and rhodolite. ■

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Malingunde graphite mining to start in 2021

By Wahard Betha

ASX-listed Sovereign Metals says it has planned to start full scale graphite production at Malingunde in 2021 following completion of mining construction works which are expected to start in 2020.

In his presentation at the launching ceremony of the 2016/2017 Malawi Extractive Industry Transparency Initiative (MWEITI) report in Lilongwe, Sovereign Metals' Country's Director, Andries Kruger says mine construction will start at Malingunde after completion of technical studies, obtaining finances and mining license and establishing strong community support.

"We are about to embark on discussions with finance providers to secure funding for the development and construction of the Malingunde project," says Kruger.

Kruger explains that Sovereign is currently in the middle of discussions with numerous end users and traders of graphite in preparation for the available graphite market.

He also says the company is advancing towards striking product transport and logistics agreements with service providers for easier transportation of the mineral deposits from the mine.

Sovereign is looking forward to completion of an infrastructure assessment program and of the Environmental and Social Impact Assessment (ESIA) which they described as currently well advanced and expected to be completed in early 2019.



Kruger: Presenting progress report of Malingunde Graphite Project during the launch of second MWEITI Report

"We are in the final stages of Pre-Feasibility (PFS) and we plan to proceed to a Definitive Feasibility Study (DFS)," he says.

In a period of seven years of investment in Malawi, Sovereign has drilled over 40,000 metres at four deposits as part of exploration and has so far invested over US\$15-million

in the project, and expects to spend over US\$5-million at Malingunde prior to financing.

Malingunde's total investment upon project delivery is pegged at over US\$70-million.

Sovereign completed a scoping study on Malingunde deposit in 2017 which delivered the world's largest reported soft saprolite-hosted graphite resource with capital and operating costs per unit at the very bottom of the graphite supply cost-curve.

The results of the scoping study demonstrate the potential for the Malingunde Project to support a very low capital and operating cost operation with annual graphite concentrate production of approximately 44,000 tonnes over an initial mine life of 17 years.

The study results indicate that the project's total operating costs of approximately US\$301 per tonne concentrate (FOB Nacala Port) is at the very bottom of the graphite supply cost curve and the lowest of any reported ASX-listed peer company of scale <300ktpa.

The results also show that the total capital cost of US\$29 million, (includes 35% contingency) for production of ~44,000 tonnes of concentrate per annum is the lowest capital intensity of all peers.

They demonstrate a very rare combination of low capital and operating costs for Malingunde at a realistic scale of production and a payback of under two years using conservative graphite pricing assumptions.

The results also indicate very low mining costs with the soft saprolite being free-dig with a low strip ratio of 0.5:1, and the project supports a simple process flow sheet with no primary crush or grind, leading to low processing costs and lower capital requirements.

The study shows that Malingunde will have simple plant design which uses "off the shelf equipment" allowing rapid and cost effective initial construction and future expansion options ■



Graphite samples extracted from the proposed mine site



Kruger (L) explaining to MWEITI Secretariat team led by National Coordinator George Harawa during mine site tour

Chamber of Mines to hold Indaba this month

By Our Reporter

The Malawi Chamber of Mines and Energy has announced that it will hold its Annual General Meeting on November 23 at Woodland Hotel in the Capital City, Lilongwe.

Coordinator for the Chamber Grain Malunga says the meeting will include presentations by different mining companies on the progress of their projects.

Malunga says the presentations, open to the media, will be made in the morning while in the afternoon there will be a closed session.

All delegates are expected to arrive at the meeting by 9.00AM and discussion will include a review of progress the Chamber has made over the year and way forward ■



Group photo of delegates during 2017 Chamber of Mines official launch

Raiply named largest contributor to extractive revenue



Some of Raiply's products

By Gloria Mbwana

Raiply Malawi has emerged as the extractive industry's largest contributor to government revenue; this is according to the recently launched Malawi Extractive Industry Transparency Initiative (MWEITI) report for the financial year 2015-2016.

The report says five companies contributed approximately 68% of the total extractive sector revenue with Raiply Malawi topping the list with a contribution of about MK1.3-billion representing 25% of the revenue.

Paladin Africa Ltd which came second raked in MK688-million which equals 13% of the total revenue from the country's extractive, Total Land Care MK657-million (12%), Central East African Railways 488-million (9%), Vale Logistics MK463-million (9%) while the rest of the extractive firms contributed MK1.7-billion representing 32% of the revenue.

Raiply manufactures wood products from timber obtained from part of the vast Viphya industrial plantations and is operating under logging concession agreement signed with the Government of Malawi in 1999 of 20,000 hectares of plantations.

The company's major products include plywoods, block boards, shuttely, shutterboards, lampine shelvings, timber, transmission poles and furnitures.

In his presentation made at the launch of the MWEITI report in Lilongwe, Raiply CEO Khrishna Das says the basis for the company's success story is that all productions at Raiply are highly mechanised and the company uses modern technologies in the wood industry.

"The company has rehabilitated old machines and invested more than MK6-billion in modern machines like peeler, kiln driers, treatment plant and boilers," says Das.

He says Raiply has also invested \$13 million in a new subsidiary, Raiply EPZ Limited, which is charged with the production of medium density fibre boards (MDF) mainly for export using the export processing zone (EPZ) facility.

Das says: "The EPZ is one area that has promoted generation of forex as these products are bought for local market and export."

"The introduction of MDF boards has excited local customers as they no longer have to go to foreign countries to import such that the local market consumes 30% of the products."

"70% of the products are exported to Common Market for Eastern and Southern Africa (COMESA) and Southern Africa Development Community (SADC) countries.

The company entered into a logging concession agreement with the Government of Malawi for a period of 60 years.

The logging concession agreement obligated Raiply to



Raiply CEO Das, receiving EITI award from Ministry of Mines's Chief Director Bright Kumwembe while Germany's Deputy Head of Mission Thomas Staiger looks on

undertake rehabilitation of all areas found burnt and harvested at the start of operation.

Das says Raiply has raised slightly over 11-million seedlings covering over 7000 hectares since the year 2000 and invested in the purchase of seeds, polythene tubes, wages and protection of the two nursery sites of Chauteka and Champhoyo.

He says the company has also invested in corporate social responsibility (CSR) realising that as the largest timber and wood processing firm, it has to be a good corporate citizen.

Raiply's CSR projects include the construction of Mtangatanga Community Day Secondary School whose daily activities also receive full support from the company.

The company also sponsors sports trophies competed for by schools in the immediate surrounding zones, giving room for talent development and identification, the notable one being the K4.5-million Raiply Volleyball Trophy which is competed at national level.

In addition, Raiply supports the Malawi Police Service (MPS), through provision of shelters and other forms of assistance besides being an intergral partner of MPS in community policing forums.

"We realise we have a duty before the country and communities surrounding the concession area," says Das.

However, Raiply faces major challenges like theft by Illegal Sawyers and members of the local community who deliberately harvest from plots that are in its concession area and Das explains that as a result of the malpractice, the company has lost over 3000 hectares of matured plantation.

The other challenge is that of bush fires which are destroying mature, young and newly planted trees in the concession area.

"Let us all unite to protect the Viphya Industrial Plantations to sustain the operations of the wood processing Industry in the country and avoid a situation where Malawi becomes a wood importer," he says. ■



Raiply employee working at the timber factory



The company's replanted forest

MINING & Social Issues



The Author, *Ignatius Kamwanje*, is a Consulting Geoscientist with experience in Mineral Exploration, Mining Geology, ESIA, Ground Water Resources and Occupational Safety, Health and Environment.

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Mineral Resource and Reserve Classification + Estimation

A mineral resource and reserves can be defined as commodities or products that are commercially produced by mineral exploration exercise. These commercial products are called mineral resource/reserve categories and are usually classified by using technical standards and these standards are eventually called Mineral Resource/Reserve Classification Systems. It should be borne in mind that resources, reserves, ore, deposit and other such words have accepted definitions to prevent public companies from abusing the terms and misleading investors.

During exploration and initial evaluation of a mineral deposit, the principal emphasis is placed upon its geology and the estimation of the quality and quantity of the resources present. Data are collected from several sampling programs, including trenching, pitting, drilling, as well as during trial mining. The object of this sampling is to provide a mineral inventory. Once the mining engineers and financial analysts have established that the mineral can be mined at a profit, or in the case of industrial minerals can be marketed at a profit, it can then be referred to as an Ore Reserve.

Mineral Resources are subdivided, in order of increasing geological confidence, into Inferred, Indicated, and Measured categories. Portions of a deposit that do not have reasonable prospects for eventual economic extraction are not included in a Mineral Resource. The JORC (Joint Ore Reserves Committee) defines ore and reserves as the economically mineable part of a measured or indicated mineral resource. Reserves include diluting materials and allowances for mining losses. Reserves are usually assessed during feasibility studies and include consideration and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore reserves are subdivided in order of increasing confidence. Before resource calculations can proceed, a study of the mineralization is required. This can often be defined by readily identifiable geological boundaries. In some cases, inferences and projections must be made and borne in mind when assessing confidence in the resources. Some deposits can only be delineated by selecting an assay cut-off to define geographically and quantitatively the potential mineralized limits. In the later stages when confidence is higher, the ore limits will be carefully calculated from conceptual mining, metallurgical, cost, and marketing data.

1. The Users of Mineral Resource/Reserve Classification Standards

- Technical personnel who are able to estimate mineral reserve/resource standards, carrying out mineral exploration, feasibility studies, mine design and optimization, mine production planning and scheduling etc.
- Governments who are able to use resource/reserve standards as in market analysis supervision, administration of the resource, statistical analysis and projections, policy and decision making, demand and supply chain analysis etc.
- Market user who raise capital from stock exchanges, make loan from bank, bonds, property valuers etc.

Mineral resources and reserves form information base for mineral administration, market operation and technical processing in mining sector. Without such standards, no resources and reserves, mining companies, investors, government officials, resource geologists and mining engineers it would be very difficult to work.

2. Resource/Reserve Estimation Categories and descriptions

According to CIMM (Canadian Institute of Mining and Metallurgy), the following table summarizes the resource/reserve categories to make it easier for reader to understand.

CATEGORY		RESOURCE CATEGORY DESCRIPTION
Resource	Reserve	
Measured	Proven	The estimated quantity and grade of that part of a deposit for which the size, configuration, and grade have been very well established by observation and sampling of outcrops, drill holes, trenches and mine workings.
Indicated	Probable	The estimated quantity and grade of part of a deposit for which the continuity of grade, together with the extent and shape, are so well established that a reliable grade and tonnage estimate can be made.
Inferred	Possible	The estimated quantity and grade of a deposit, or a part thereof, that is determined on the basis of limited sampling, but for which there is sufficient geological information and a reasonable understanding of the continuity and distribution of metal values to outline a deposit of potential economic merit.

During the project life, from the exploration stages to the feasibility and mine design studies, different ore reserve calculations are carried out, each with a different confidence level. The confidence in the reserve estimate grows as the amount of borehole data increased. A number of factors influence the validity of ore reserve estimates, among others include; geological controls, sampling methods, cut-off grade analytical techniques, specific gravity and

dilution factors.

3. Factors that are considered to have a viable mineral Resource/Reserve classification

• Economic viability

The levels of economic viability on mineral development depends on the characteristics of the mineral deposit, the technical, economic and market conditions. Here, resource evaluation drilling provides answers to economic questions relating to the grade, tonnes and mining/metallurgical characteristics of the potential ore body. A good understanding of the nature of the mineralization should already have been achieved and is probably a big factor in the confidence needed at such a factor. Providing the data to answer the economic questions requires detailed drilling and sampling patterns. Evaluation and definition drilling provide the detail and confidence levels required to proceed to the final feasibility study.

• Geological confidence

This refers to reliabilities of geological information, such as tonnage, grade, mining and metallurgy parameters that, to a great extent, depend on sampling densities. In general, there are usually three levels of geological confidence that can be defined which are Measured, Indicated and Inferred.

Measured, Indicated, or Inferred classification using geological confidence depends on two issues to a great extent in order to decide the deposit of the block in question.

- the type of the deposit whether large or small, simple or complicated; That is, for the same deposit type, the more the samples available, the higher the resource level is available.
- the number of samples for the same sampling space, the larger the deposit size is, the higher the resource level is available.

When classifying a block, exploration geologists apply these two criteria in combination by his/her experience. It is most important to establish the geological and structural control of mineralization as early in a project as possible.

• Study stages/Feasibility

The levels of studies on mineral development, to a great extent is dependent on the reliability of geological, technical and economic information that is readily available and used. In general, three stages of studies can be defined:

- Scoping/Conceptual Study which establishes the likely presence of a resource. It is based upon the interpretation of the size, shape and grade of the potential resource and the possible mining and processing methods. The resource estimate may only be based upon reference to deposits of similar genesis and size and may only be based on evaluation. There might be sufficient indications of tonnage and grade to encourage further work. During the study, similar deposits elsewhere are used as the basis to establish whether their mining or processing methods are technically feasible on the deposit being anticipated.
- Pre-feasibility Study that involves major sampling and test work programs, including mineralogical examination of the ore and pilot plant testing to ascertain the viability of the selected mineral processing option and likely recoverability. It evaluates the various options and possible combinations of technical and business issues.

(c) Feasibility Study that involves drilling, assaying, mineralogical, and pilot plant test work continuation. The feasibility study confirms and maximizes the value of the preferred technical and business option identified in the prefeasibility study stage. It is at the end of the order-of-magnitude study that the exploration team usually hands over to the mining geologists, mineral processing engineers/metallurgists and geotechnical plus mining engineers for implementation. Sufficient sample collection and test work takes place during a feasibility study for more of the resource estimate to be reported in the measured category.

It must be borne in mind that the reader should understand that in Economic and Study stages, a set of technical, economic, environmental, governmental, legal factors are at interplay and must be considered.

4. Resource/Reserve Estimation

In essence, the mineral industry uses the term “mineral resource estimation” or “resource estimation”, but all these methods can be used for mineral reserve estimation under the given hypotheses of technical and economic conditions. Changes in the metal prices, metallurgical assumptions and operating costs will affect the size of the Mineral Reserve. Higher operating costs and lower metallurgical recoveries would increase the cut-off grade and so reduce the quantity of ore in the Mineral Reserve. All known environmental, permitting, legal, title, taxation, socio-economic, marketing, and political or other relevant issues are taken into consideration when estimating this Mineral Reserve.

There are three main Resource estimation methods that are normally used but for a layman's understanding, it will not be discussed in this paper since it involves mathematical calculations and understanding ■

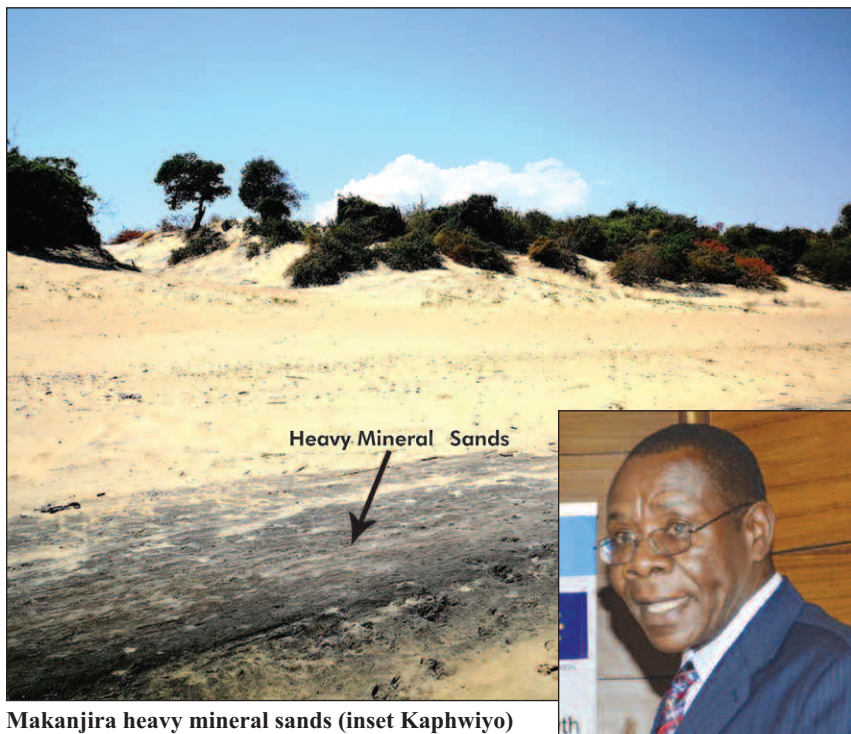


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Makanjira heavy sands mining planned for 2019



Makanjira heavy mineral sands (inset Kaphwiyo)

By Gloria Mbwana

Chinese firm MAWEI Mining says it has planned to start mining at its Makanjira Heavy Mineral Sands project in Mangochi in late 2019 or early 2020 once energy and transport issues are sorted out.

Senior Advisor for MAWEI Charles Kaphwiyo explains in his presentation made at the launch of 2016/16 Malawi Extractive Industry Transparency Initiative (MWEITI) report that the company is ready to invest US\$38.8-million in the first phase of the mining venture to run for one to 10-years years.

In these first ten years, it will be mining 10mt of ore per year producing Ilmenite; 215,793 tonnes, Magnetite; 63,600 tonnes, Zirconite; 8300 tonnes and Rutile; 1,100 tonnes.

Kaphwiyo explains that the project will rake in US\$29.2Million in annual revenue with a profit of US\$5.4Million.

MAWEI started exploration at the site in 2009 and completed feasibility studies in 2017.

The studies confirmed the availability of over 354 million tonnes ore containing Ilmenite; 9.48mt, magnetite; 1.648mt, Zirconite; 0.358mt, Rutile; 0,04mt and monazite 0.017mt.

The Malawi Government granted the company a mining licence in November 2017.

In his presentation, Kaphwiyo pegs Makanjira Heavy Sands mine life at 23.6-years.

“This project will be beneficial to local Malawians as it intends to provide more than 230 jobs,” he says.

He, however, says there some challenges to kick-start the project including lack of power as it will require 3MW to roll out the first phase and 10MW for the rest of the mine life.

The other critical requirement for the project is to operationalize lake transport services from Makanjira to Chipoka to connect to the railway to Nacala for exporting.

He says: “Discussions are underway with the Electricity Supply Corporation of Malawi (Escom) for the energy, Mota Engil for the lake services and Central East African Railways for the railway transport.”

“Once these issues are resolved, we will start mine construction which will take seven to 10 months.”

Government has been under fire from civil society organisations for its secrecy in handling the Makanjira mining issue.

Chairperson of the Natural Resource Justice Network (NRJN) Kossam Munthali was quoted in *Mining & Trade Review* July edition as saying that the civil society is concerned that government has not made public terms of contract agreement with MAWEI, let alone publicised the licence awarding process, neither has open public consultations been held.

He said it is disheartening to note that despite all the advocacy and donor funded projects aimed at reforming the management of the mining sector, threat of vice still exists due to these secret dealings.

“This behavior lead us to question the motive behind resistance to reforms by government officials handling these issues. Why do they want the status quo to remain despite all the donor-funded training, advocacy and pleading efforts to promote transparency that have been exhausted? Your guess may be as good as mine, which is really very unfortunate,” Munthali said ■



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by Grain Wyson Phillip Malunga FIMMM
Minerals, Geology, Environment & Corporate Affairs Consultant

A Reflection on the Mines and Minerals Act (1981)

ABSTRACT

Recent reaction from stakeholders in the mining sector has been the inadequacy of the Mines and Minerals Act (1981) in addressing issues related with transparency in handling of mining contracts by government, environmental management and community benefit sharing.

These have not been the only issues that need to be addressed in coming up with the new Mines and Minerals Act. This paper tries to highlight other shortfalls that need to be addressed in line with the Mines and Minerals Policy (2013).

INTRODUCTION

The current Mines and Minerals Act (1981) was drafted based on the existing Acts from the region, more especially Namibia and Botswana. That time Malawi was engaged in exploration activities though government had insignificant mining operations. Malawi Development Corporation was in cement production while lime production and artisanal/small scale gemstone prospecting were under individuals.

The act had no foundation based on Mines and Minerals Policy and did not have challenges emerging from benefit sharing and sustainable development.

This paper looks at issues that make this Act shortcoming to current emerging issues.

SHORTFALLS IN THE CURRENT MINES AND MINERALS ACT (1981)

The Commissioner for Mines and Minerals has been the Principal Secretary except in circumstances where the Minister may appoint another Officer to act as such. The Mines Department was established in 1983 and is not referred in the Act.

The Act does not address emerging issues that have arisen through private sector involvement in the minerals sector through exploration and mining.

Some of the issues are as follows:

1. The need to recognize Malawi as a sovereign state with no recognition of the interests of the British Crown
2. Mineral wealth needs to be vested in state and not the president on behalf of the people of Malawi
3. Ministerial discretion needs to be removed through establishment of a Minerals Advisory Board to look into allocation of mineral rights for minister's consideration.
4. There is need to harmonise the provisions of the Mines and Minerals Act (MMA) with other Acts governing Environment, Agriculture, Land, Public Roads and water Resources.
5. The MMA needs to be clear on issues related with security of tenure, licence retention and holding of licences for speculative purposes.
6. Mining contracts for strategic minerals and those dealing with large scale investors require parliamentary oversight.
7. Trading in precious metals and gemstones should be through miners, dealers and brokers licenced through Minerals Advisory Board.
8. Community Benefit Sharing is a serious emerging issue and must be addressed through non-tax revenue such as royalties and ground rents.
9. The role of State Enterprises is necessary where strategic minerals of lesser value are required for infrastructure development and import substitution. State equity

in strategic minerals and liquid minerals will require participation of State Owned Enterprises that will have the mandate to undertake economic empowerment through divesture.

10. Taxation types and levels will require a stability clause in order to determine fully profitability of a project. Taxation should not be negotiated to avoid skewing and discretionary tendencies that breed corruption and misunderstanding.
11. Adherence to environmental management and rehabilitation needs to be secured through an environmental bond.
12. Conditions for employment of expatriate staff needs to safeguard employment of local skilled and non-skilled labour.
13. The rights of local people and minority groups need to be protected in order to encourage peaceful coexistence.
14. The structure of the institutions under the minerals sector needs to be properly set up and enacted so that the sector is ably administered and promoted.

The private sector hopes that these issues will be adequately addressed and that the new Act will be simple, clear and will serve both government and mining companies in a manner as to benefit mining communities for promotion of sustainable development.

EXPECTATION OF ALL STAKEHOLDERS

The new Minerals and Mines Act is expected to address the following:

1. Vesting of minerals in the state
2. Introduction of stable taxation and fiscal regime
3. Promote transparency in contract negotiations
4. Introduce accountability and transparency in mining revenue management
5. Introduction of Minerals Advisory Board under the Commission for Minerals and Mines
6. Introduce legally binding Community Development Agreement or benefit sharing with local communities
7. Introduction of Environmental Bond

CONCLUSION

The current Mines and Minerals Act (1981) was introduced at a time when the minerals sector was at its infancy stage and before the establishment of Department of Mines. The role of the Director of Mines is overshadowed by the Commissioner of Mines who is the Principal Secretary.

Current issues surrounding sustainable development in mining requires equitable benefit sharing among mining companies, government and mining communities in a way as to promote the development of the industry. Therefore the new MMA should promote private sector investment in mining while equally generating economic benefits to the country for current and future generation.

BIBLIOGRAPHY

- Malawi Government. 1981. Mines and Minerals Act (Cap. 61:01).
- Ministry of Natural Resources, Energy and Mining. (2013). Mines and Minerals Policy of Malawi. Lilongwe ■



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MWEITI recommends reforms in extractive sector

...Forestry Department requires cadastral system ...Licence fees for extractives have to be adjusted



Forestry revenue activities need to be transparent

By Wahard Betha

The newly launched report by the Malawi Extractive Industries Transparency Initiative (MWEITI) detailing revenue from the sector in the 2015/16 financial year has proposed a number of reforms to improve the administration of revenue in the extractive sector.

The report, among other things, recommends that Malawi mainstreams EITI disclosure and make it an integral feature of the country's governance and management systems.

"It is recommended that MSG develops work plan for mainstreaming and the creation of open data for EITI into government systems in order to improve transparency in Malawi and make it an integral feature of the country's governance and management systems," says the report.

The report also recommends that government entities

accesses how to disaggregate revenue stream between projects wherever possible by upgrading the information system of Department of Mines (DoM) and MRA; and reviewing the tax declaration processes and forms to be submitted by companies to both MRA and DoM.

"It is recommended that DoM develops procedures to ensure the completeness of the export data reported by mining companies and implements a computerized system to monitor and update this data including obtaining MRA's data on exports on a monthly basis in order to update DoM's cadastral system" reads the report.

It also stresses the need to ensure that relevant national surveys are conducted regularly at a minimum of every five years to ensure that statistics published is accurate and reliable.

The report recommends a review of the public and private sector partnership (PPP) agreement that the government signed with the Central East African Railways

(CEAR), which handles transportation of coal from Moatize in Mozambique through Malawi to Nacala Port.

"It is recommended that the concession agreement with CEAR be amended to be managed by the Ministry of Transport and Public Works in accordance with the provisions of the PPP policy statement and the PPP Act."

The report also recommends that MWEITI MSG considers working on the road to publish all contracts and concession agreements in the transport and forestry sectors.

It says in order to promote a favorable legal environment for investment and in a bid to boost the confidence of private operations in the country, MSG should follow up with the Ministry of Natural Resources, Energy and Mining on how to accelerate the reforms of the petroleum registration and how to address any technical barriers delaying process and also finalizing the production sharing agreements.

The report also proposes that the Department of Forestry sets up a forestry cadastral system that is able to integrate all the data to ensure transparent and efficient management of the forestry licenses and green lands of the country.

This may include summarizing all the agreements coordinates in a single national map; ensuring that all export permits and licenses are centralized on the integrated information system and that minimum of all information on each license required are included; gathering of all relevant and most updated studies conducted so far and funded by different donors on Malawi forestry sector; and upgrading of the information system in order to include all cadastral information as open data map publicly accessible.

The report further imposes amendment of the fee amounts in both the forestry and mining sector in order to meet the actual economic opportunities and constraints, and recommends updating the schedules of the Forestry Rules to maintain realistic and competitive fees comparable to those applicable in other mining countries.

"Given the high annual inflation rate and that the amendment of the legislation that sets the fee amounts may take a substantial amount of time, it is recommended amending fee amounts in the forestry and mining sector through a ministerial memorandum or an administrative decision that can be easily made on an annual basis," states the report.

Regarding the capacity building for the oil and gas division at DoM, the report recommends reviewing the structures in order to allow that all technical officers within the division access relevant training and capacity building programs ■



Kasikizi Coal Mines Limited has partnered with ZAGAF Cement Sales to mine and sell steam coal from Vungu Mine in Mwanjenja Coalfield, Karonga District. The mine is expected to produce 10,000 tonnes per month to supply coal for agroprocessing and cement industry. Export opportunities and thermal power generation offer increase in production.

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Kanyika deposit valued at over \$1 billion

By Wahard Betha

Africa-focused resources group Globe Metals and Mining, has pegged the value of its Kanyika deposit in the southern part of Mzimba at over a US\$1-billion.

Globe finalized feasibility studies at Kanyika which is a multi-commodity deposit containing niobium, tantalum, uranium and zircon.

In his presentation made at the launch of Malawi Extractive Industry Transparency Initiative (MWEITI) report for 2015/16, Globe's Country Director, Chispine Ngwena, says the project will have an annual production of 300 tons of Niobium and 220 tons of Tantalum.

He says currently Globe is busy finalizing the Development Agreement with the Malawi Government in order to move into mine construction stage.

"In essence, this Development Agreement clarifies that mining activities will be carried out in terms of the Laws of Malawi" says Ngwena.

Ngwena describes Kanyika as one of Malawi's major projects which will significantly benefit Malawi in various ways including raking in foreign exchange and providing employment opportunities to citizens.

Globe has so far conducted a number of activities at Kanyika including exploration targeting niobium and tantalum, a definite feasibility study, environmental and social impact assessment, and development of a resettlement action plan.

Ngwena says mine construction will take 18 months but will only commence when the development agreement and finances are acquired.

The project requires an investment of \$350 million and will rake in gross revenue of \$75 million per year over a mine life of over 20 years, employing about 1000 workers.

The Kanyika Niobium Project in Malawi will produce high purity niobium pentoxide and tantalum pentoxide powders which will be used as additives to steel to enable steel mills to produce high-margin products through enhanced flexibility, weight reduction and strength.



Ngwena: Malawi will significantly benefit from the project

Even though more than 90% of niobium is used in steel, niobium consumption has been growing at twice that of steel for the last 20 years.

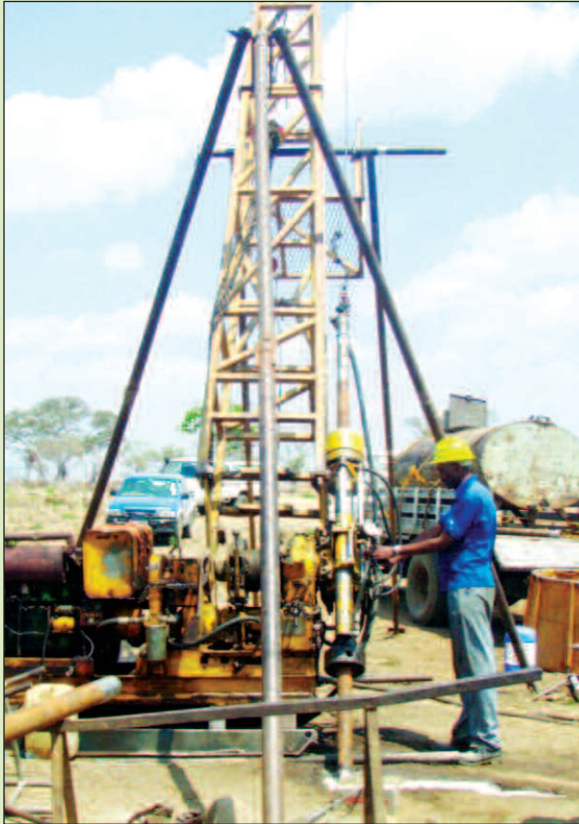
Market prospects for niobium were boosted in September 2017 when technology giant Toshiba announced that niobium-titanium used in lithium rechargeable

batteries boosted the driving range of electric vehicles to 320km on 6-minute, ultra-rapid recharge.

The new anode material, titanium niobium oxide achieves double the capacity of the anode of current lithium-ion batteries.

The new battery also offers high energy density and ultra-rapid recharging characteristics, and its titanium niobium oxide anode is much less likely to experience lithium metal deposition during ultra-rapid recharging or recharging in cold conditions—a cause of battery degradation and internal short circuiting.

Meanwhile, Globe has renewed its EPL adjacent to the mining lease area for a further two years commencing May 22, 2018 to allow for further regional exploration work ■



Niobium drilling and sampling works at Kanyika



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