

Tanzania Mining & Investment Conference

TMIC Magazine

Mining for Economic & Industrial Development

2024

www.madini.go.tz | Ministry of Minerals | 4th Edition | November 2024 - Free Version

Tanzania Spearheads Mining

To a different level



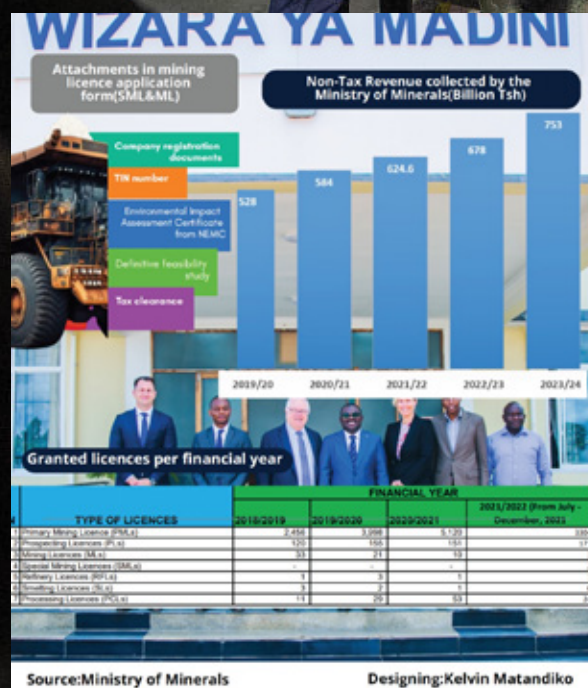
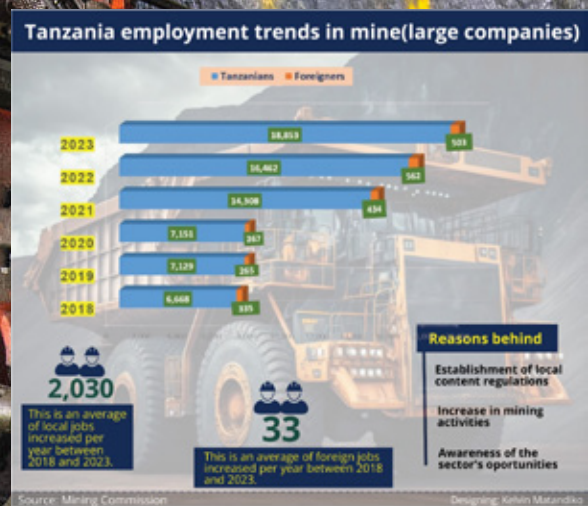
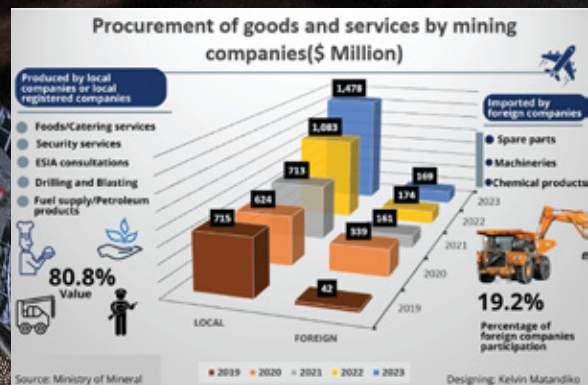
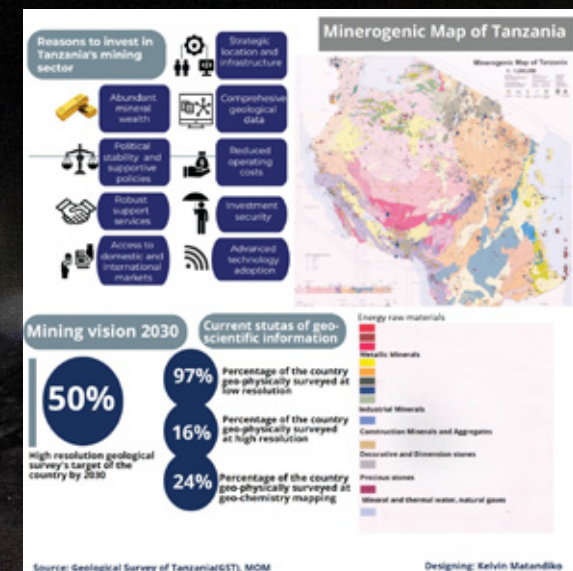
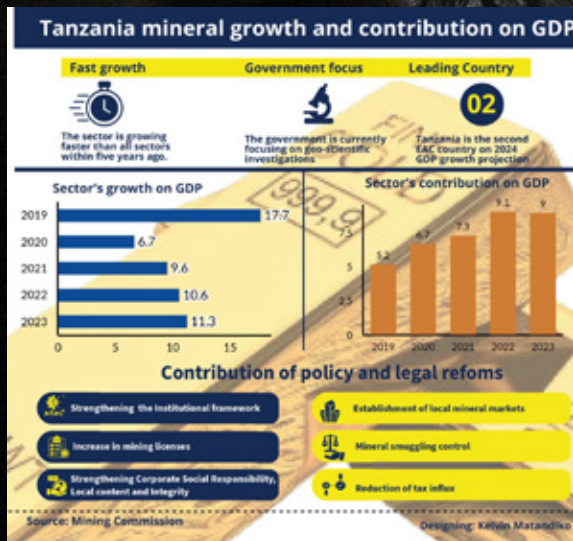
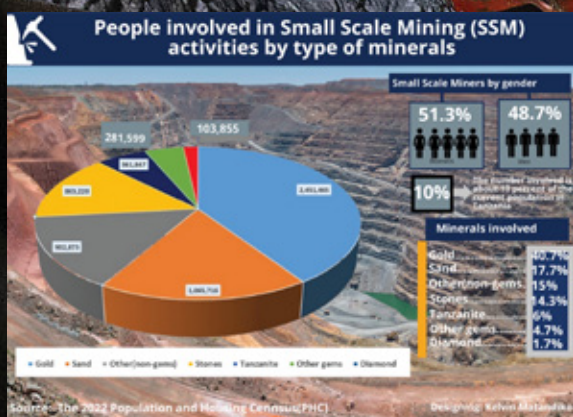
H.E. PRESIDENT DR. SAMIA SULUHU HASSAN'S VISION ON MINERAL RESOURCES

“Our goal is to ensure that more Tanzanians benefit from our mineral resources by adding value within the country. In terms of gold and silver, we already have refineries at 999.9 purity. Adding value to minerals also focuses on strategic minerals like copper, cobalt, nickel, copper, iron, and other minerals our country is fortunate to have. As a result, we encourage any interested parties to collaborate with us in the mining and value addition of those minerals, bringing capital and technology into joint ventures. This opportunity is open to local, foreign or even between local and foreign investors.”



A high-angle, low-light photograph of an underground mining tunnel. In the foreground, two workers wearing orange high-visibility shirts, blue trousers, and white hard hats are standing and looking at a clipboard. Behind them, a large, complex piece of mining machinery, possibly a continuous miner or a large drill, is visible. The machine has a prominent red section and several large, flexible, corrugated hoses. The tunnel walls are dark and rocky, with some yellow markings. The overall scene conveys a sense of industrial scale and manual labor in a confined space.

Theme: “Mineral
Value Addition for
Socio- Economic
Development”



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Minister's Foreword

Value Addition Key to Transforming Tanzania's Minerals Sector

I am honoured to welcome you to the Mining and Investment Conference 2024.

This annual gathering is not just a hallmark event for Tanzania but a pivotal moment for the entire mining sector in Africa. As industry leaders, government officials, investors, and stakeholders from across the globe convene in this peaceful commercial capital of Tanzania, we stand on the threshold of a transformative era where the emphasis is no longer solely on extraction but on the sustainable and inclusive value addition of our vast mineral resources.

Tanzania is uniquely endowed with diverse mineral resources, including gold, nickel, copper, and gemstones like the globally prized Tanzanite. While these resources have historically played a significant role in our national economy, their potential has often been underutilised due to the export of raw minerals with little or no value added.

Against this backdrop, the Government of Tanzania, guided by the Mineral Policy 2009, has undertaken sweeping

reforms to promote value addition, foster local capacity, and ensure that our natural resources generate maximum economic and social benefits for the country.

The Mineral Policy 2009 was formulated to address key challenges in the sector and align Tanzania's mining activities with the broader goals of sustainable economic development. One of the central tenets of this policy is the drive for mineral beneficiation and value addition, underscoring the importance of processing and refining minerals domestically to enhance their worth. This policy has laid the foundation for key regulatory reforms, including the Mineral (Value Addition) Regulations of 2020, which have set clear guidelines for local refining and processing of minerals.

By refining and processing our minerals locally, we are increasing the value of our exports, creating jobs, fostering industrial development, and building technological expertise. For example, the recent licensing of Tembo Nickel Refining Company Limited, which will refine nickel, cobalt, and copper, marks a significant milestone in our journey

towards a robust value-added mineral industry.

Moreover, we are actively engaging large-scale gold miners to ensure that a portion of their gold is refined locally, reducing reliance on exporting raw gold and enabling Tanzania to capture greater profits from the final stages of gold production and the established National Gold Reserve.

The establishment of the Tanzania Gemmological Centre (TGC) in Arusha is another critical step in this journey.

As a gemstone cutting and polishing centre, TGC is positioning Tanzania to become a hub for gemstone processing and skills development centres. Through specialised training and capacity-building programs, TGC equips Tanzanians with the skills needed to transform our raw gemstones into high-value products that compete in international markets. This initiative, aligned with the vision of the Mineral Policy 2009, demonstrates our commitment to empowering local talent and ensuring that the wealth generated from our minerals benefits Tanzanians first and foremost.



mineral processing sector. These incentives, combined with the ongoing modernisation of mining infrastructure and the enhancement of local expertise, reflect our commitment to creating a favourable environment for investment and growth.

The Mining and Investment Conference 2024 is a testament to our resolve to transform the mining sector into a pillar of Tanzania's industrial and economic development. This transformation is guided by the principles laid out in the Mineral Policy 2009, which continue to shape our strategies for maximising the benefits of our mineral wealth while ensuring environmental sustainability and social inclusiveness. As you participate in this conference, I urge you to explore Tanzania's opportunities and exchange knowledge in mineral value addition, technological innovation, and sustainable mining practices.

Together, we can ensure that Tanzania's mineral resources are not just a source of wealth but a catalyst for lasting prosperity, national development, and sustainable mining.

Hon. Anthony Mavunde
Minister for Minerals,
United Republic of Tanzania

Additionally, the Mining for Brighter Tomorrow (MBT) program, integral to our policy framework, embodies the government's commitment to sustainable and inclusive mining practices. The MBT focuses on increasing the productive involvement and inclusion of Tanzanian youth, women, and people with special needs in the country's mineral resources exploitation.

The program will strive to address specific challenges that confront the involvement of such groups, especially limited access to geoscientific information and financial services, the use of rudimentary technology translating to low productivity, insufficient technical knowledge of mining and mineral processing and issues related to mine health, safety and the environment. Addressing these challenges is key to ensuring that mining operations contribute positively to the well-being of local communities.

MBT aligns with the Mineral Policy of 2009, overarching goals, highlighting the government's need to take crucial steps to enable Tanzanians to engage in mining activities and guarantee that such engagement respects gender equality and equity. Our approach to mining is now firmly rooted in a long-term vision—Vision 2025, which

seeks to make Tanzania a middle-income country through industrialisation and economic transformation. The mining sector, focusing on value addition and local beneficiation, is at the heart of this vision. As we gather at this conference, we must recognise the critical role of value-added mining in driving Tanzania's industrialisation agenda and its contribution to global supply chains for critical minerals like nickel, cobalt, and graphite, essential for producing electric vehicles and renewable energy technologies.

In recognition of the challenges and opportunities ahead, the Government has introduced a range of incentives to attract investment in mineral value addition.

These include reduced royalties on minerals sold to local refineries and the abolition of the per cent inspection fee, making Tanzania a more attractive destination for investors in the



Statement by the Permanent Secretary

Why Value Addition in Minerals is Crucial

Welcome to the 4th edition of our magazine. Hosting national, regional, and international mining stakeholders for the 6th Tanzania Mining and Investment Conference is a great pleasure.

This prestigious conference presents another great opportunity to reflect on the progress and new adventures characterising the worldwide mining sector.

We host this Conference at exciting times within this lucrative mining sector. This sector plays a crucial role in the global economy, providing important raw materials for various industries, such as construction, manufacturing, and power generation.

Figures indicate that the mining sector has been experiencing impressive growth, and the market is expected to expand further, driven by a rising demand for minerals and metals.

The market was projected to grow from USD 2,138.73 billion in 2023 to USD 2,276.8 billion this year at a compound annual growth rate of 6.5 percent. This growth is largely due to several key factors. We're seeing a boost in infrastructure development, a surge in mergers and acquisitions, a growing adoption of autonomous equipment, and a rise in construction activities.

Minerals such as gold, silver, and copper have maintained their positions as essential materials for various industries, such as construction, electronics, automotive, and renewable energy.

As global demand for these resources continues to rise, Tanzania presents unique opportunities for investment in exploration, mining, mineral processing, and the provision of goods and services.

Tanzania's mining industry has been growing steadily in recent years,

responding impressively to the country's ambitious plans to harness its rich resources for achieving much-desired socio-economic prosperity.

The sector's contribution to national gross domestic product stood at 9.1 percent in 2023, earning the country USD 3,551.4 million. The sector employs over 6 million people across the production and service provision chain.

While these figures may seem impressive when compared to the past, they don't reflect the immense potential of the Tanzanian mining sector.

Tanzania is unarguably a key player in the global mining sector. The country is rich in a diverse array of mineral resources, boasting not only metallic minerals but also rare gemstones like Tanzanite, the stunning Winza ruby, and the much sought-after Mahenge



Spinel, along with a variety of industrial and energy minerals.

Recognising this, the Tanzanian government, under H.E Dr Samia Suluhu Hassan, the President of the United Republic of Tanzania has been taking deliberate measures to ensure that Tanzanians reap the benefits of these precious natural resources.

The theme for the 2024 conference, “Mineral Value Addition for Socio-Economic Development,” underscores the government’s keenness to realise greater socio-economic transformation driven by the country’s mineral resources.

Promoting value addition is vital for unlocking the full potential of our mining sector. Historically, Tanzania has primarily exported raw minerals with little processing, missing the chance to capture a greater share of the value chain. By fostering local processing and beneficiation of minerals, the country can develop a more sustainable and inclusive mining industry that benefits both local communities and the economy as a whole.

The recent government announcement

regarding the issuance of permits for exporting minerals with added value underlines its commitment to strengthening the value chain in the mining industry.

Under the 2020 Mineral Value Addition Regulations (The Mining (Value Addition) Regulations, 2020) and subsequent enhancements, miners and traders are now required to add value to minerals before they can be exported or sold overseas.

This policy shift aims to encourage the establishment of local processing facilities, promote technology transfer, and create a more sustainable mining sector in Tanzania. These new regulations on value addition carry significant implications for Tanzanian miners and traders.

Going forward, export permits will only be granted for minerals that have been processed in accordance with the regulations.

As a result, miners and traders will need to invest in processing facilities, technology, and expertise to meet these new requirements.

As we embark on this new chapter of

Tanzania’s mining journey, it is imperative to recognise the strategic importance of value addition in realising the full potential of our abundant mineral resources.

The government’s deliberate efforts and the evolving regulatory landscape present both challenges and opportunities, urging all stakeholders to adapt, innovate, and collaborate. Together, we can shape a sustainable, inclusive, and prosperous mining industry that contributes to national economic growth and uplifts local communities, fortifying Tanzania’s position as a key player on the global mining stage.

Let us seize this opportunity to build a future where mining truly transforms lives, drives socio-economic development and empowers future generations.

Eng. Yahya Samamba
Permanent Secretary,
Ministry of Minerals





Tanzania Enhances Domestic Mineral Processing

Tanzania's mining sector is not just about extraction—it's about unlocking the full potential of the country's rich mineral resources.

This is why Tanzania's Ministry of Minerals, through the Mining Commission, has ramped up its efforts to promote value addition, ensuring that more minerals are refined and processed domestically.

This strategy is poised to boost the economy, create jobs, and position Tanzania as a leader in value-added mining products.

A significant step forward came with the introduction of the Mineral (Value

Addition) Regulations of 2020, which provide the framework for refining minerals within Tanzania. The regulations are designed to maximize the value derived from the country's abundant natural resources, ensuring that minerals are not just exported raw but are processed to enhance their worth before reaching international markets.

The Minister for Minerals, Hon. Anthony Mavunde, says from July 2023 to March 2024, one of the notable achievements in this regard was the issuance of a license to Tembo Nickel Refining Company Limited.

This license allows the company to refine nickel, cobalt, and copper, marking a significant development in the country's refining capacity. As more licenses are issued, Tanzania is on the cusp of establishing a robust value-addition industry for these key minerals.

"The Ministry has also been actively engaged in discussions with large-scale gold miners operating in the country. The goal is to ensure that a portion of the gold they extract is refined locally in Tanzania's growing gold refining industries," says Hon. Mavunde. This move is expected to reduce reliance on exporting unrefined gold



and instead capture more of the profits and economic benefits associated with the final stages of gold production.

Hon. Mavunde says that by refining gold domestically, Tanzania can enhance its position in the global gold market, offering value-added products rather than raw materials, adding that this is envisaged to encourage local job creation and strengthen the mining value chain.

Leading the way in gemstone value addition drive is the Tanzania Gemmology Center (TGC), located in Arusha. As the country boasts an array of gemstones, including the rare and globally prized Tanzanite, TGC is crucial to the government's vision of transforming Tanzania into a hub for gemstone value addition.

The TGC offers specialised training in gemstone and metallic mineral value addition. By equipping Tanzanians with these essential skills, the Centre is fostering a generation of local experts capable of adding value to Tanzania's precious resources. Hon. Mavunde says the training of local experts is vital for boosting the domestic gemstone industry and

making Tanzania a major player in the global gemstone market.

Recognising the importance of creating an enabling environment for value addition, the Ministry has introduced several key incentives. Royalties for minerals sold to gold refining industries within Tanzania have been reduced from 6 percent to 4 percent, and the 1 percent inspection fee has been abolished.

These changes not only make refining in Tanzania more attractive to investors but also ensure that more of the country's wealth is retained within its borders, benefiting local businesses and workers.

The government's emphasis on value addition is not just about increasing revenues—it's about transforming the mining sector and ensuring that Tanzanians benefit from their country's natural wealth.

Hon. Mavunde stresses that by refining and processing minerals domestically, the country is capturing more value from its resources, creating jobs, and building a sustainable industry that will continue to grow for generations to come.



Geita Gold Refinery: Revolutionising Gold Refining for Tanzania



The Geita Gold Refinery (GGR), located in the Geita Region of Tanzania, is a game-changer in the nation's mining sector. It is not just a refinery but a technological marvel that is revolutionizing the way gold is refined.

Serving a diverse range of mining operators, from artisanal and small-scale miners to large-scale producers, the refinery is leading the charge in refining Tanzania's gold, adding value to the mineral before it reaches the global market.

The facility, with its cutting-edge technology, can process up to 15 kilograms of gold every 8 to 15

minutes, a feat that was previously unimaginable. This is a testament to Tanzania's commitment to enhancing mineral beneficiation and boosting revenue from its vast natural resources.

Equipped with state-of-the-art laboratory technology, including electric and induction furnaces as well as advanced XRF machines, the refinery offers the most accurate assay results, ensuring that both small and large operators receive precise value for their gold.

The lab's unique design allows miners and clients to view the assaying process, ensuring transparency and

fostering trust in the system. GGR has achieved significant milestones, becoming one of the few African refineries to receive five prestigious LBMA (London Bullion Market Association) ISOs: Information Security Management System (ISO: 27001:2013), Quality Management System (ISO: 9001:2015), Environmental Management System (ISO: 14001: 2015), Occupational Health and Safety Management System (ISO: 45001:2018), and Testing and Calibration Laboratories Program (ISO: 17025:2017). These certifications position GGR as a key player in responsible mineral sourcing, aligning with both national goals and



international standards.

Politically, GGR's success contributes to Tanzania's broader vision of economic transformation under initiatives such as Vision 2025.

By enhancing the country's ability to refine its own gold, the refinery is adding value domestically and securing its place in the global gold market. GGR's ability to complete the Responsible Mineral Initiative (RMI) assessment—a crucial requirement for global gold supply chains—marks it as the only refinery outside South Africa to achieve this in Africa. This demonstrates Tanzania's commitment to responsible and sustainable mining, a key element in the government's development agenda.

In May 2024, during the OECD Forum on Responsible Mineral Supply Chains, the LBMA commended GGR for completing the RMI assessment and for its efforts to ensure that its supply chain is free from conflict-affected materials.

This achievement underscores GGR's commitment to addressing governance challenges within the artisanal and small-scale mining (ASM) sector, which has historically faced unsupervised operations and criminal activity issues. In line with government policies aimed at formalizing ASM operations, GGR's

partnership with LBMA member StoneX to implement the Geoforensic Passport further strengthens its credibility.

With RMI conformance, GGR has significantly elevated its status, giving global gold refiners confidence that they are engaging with a credible and responsible supplier.

The refinery's direct connection to the world gold spot price market via its LBMA-accredited off-taker allows it to offer competitive pricing in real-time, ensuring that all miners, regardless of scale, receive fair market value for their gold. This immediate payment system enables miners to reinvest in their operations, driving productivity and supporting Tanzania's national development goals.

As GGR moves forward, its ambition to become the second LBMA-accredited refinery in Africa by 2025 is a testament to Tanzania's growing influence in the global gold market.

The Tanzanian government's support for such initiatives reflects the strategic importance of the mining sector in the country's economic future. By empowering miners of all scales, GGR plays a pivotal role in advancing national mining policies, contributing to Tanzania's industrialisation agenda, and securing a competitive position in



Tanzania, Thailand Pioneer Value Addition in Gem Industry

Tanzania and Thailand have signed a landmark cooperation agreement to enhance knowledge, research, and the production of internationally recognized, high-quality gemstone products, leveraging both countries' rich gemstone resources.

The agreement signed between the Tanzania Gemmological Center (TGC) and the Institute of Gemmology, Gems, and Jewelry of Thailand (GIT) focuses on modern technologies and value addition in the gem industry. For many years, Tanzania has been known for mining and exporting raw gemstones. However, with the implementation of Tanzania's mining law, there is now a strong focus on adding value to these minerals before they are sold abroad.

This shift not only complies with legal requirements but also boosts local participation in the economy. Tanzania is home to more than 100 types of gemstones, including high-value stones, though only about 25 are actively mined.

Speaking after the agreement was signed on February 22, 2024, the Deputy Permanent Secretary in the Ministry of Minerals, Mr. Msafiri Mbibo, who led the Tanzanian delegation, said that a large portion of the country's gemstones is still being sold in raw form.

He said the new agreement provides a significant opportunity for establishing factories in Tanzania to produce value added gemstones and jewellery. This move will enable Tanzania to create products that meet the high international standards necessary for entry into global markets.

This partnership also opens doors for Tanzanians and investors interested in mineral value addition, including



cutting, carving, polishing, and gem identification. It represents a major step toward transforming Tanzania into a hub for gem processing and manufacturing in Africa.

Mr. Mbibo noted that the idea for this collaboration was first initiated by former Minister for Minerals, Dr. Doto Biteko, who is now the Deputy Prime Minister and Minister of Energy, following his visit to Thailand in 2022 and his participation in the 2023 Jewelry Show in Bangkok.

GIT's General Director, Sumed Prasongpongchai, praised the agreement as a significant development for Tanzania's gem industry.

He affirmed GIT's readiness to support

Tanzania, noting that the partnership benefits Tanzania and contributes to the global development of the gemstone industry.

"Tanzania has the minerals, and we have the markets and technology," Prasongpongchai remarked, adding: "This cooperation will bring immense benefits to the jewellery industry." He further emphasized the importance of producing clean sustainable products that respect environmental standards and human rights, particularly in a world increasingly concerned about ethical sourcing and manufacturing.

Acting Coordinator of TGC, Engineer Ally Maganga, hailed the agreement as a transformative moment for Tanzania's gem value addition industry.



Thailand has long been a leader in gemstone processing, and this collaboration positions Tanzania to become Africa's gem hub.

The government has ambitious plans to support this initiative, including the construction of an eight-story building to enhance the TGC's infrastructure. The new building will introduce modern technology and facilities to revolutionize the gems and minerals sector. TGC plans to provide education that meets international standards, equipping Tanzanians with the necessary skills to excel in gemstone processing and value addition.

In addition, TGC is working with other international institutions to ensure that the centre produces experts who meet

global market standards.

The Ministry of Minerals has already appointed Skywards, a local construction company, to build the modern facility, with an estimated budget of TZS 30 billion allocated for the project.

TGC's training programs will offer miners and traders essential knowledge and skills in gemstone cutting, polishing, carving, gemmology and jewellery manufacturing, identification, gemstone grading and pricing, and other services.

Currently, TGC is registering students from neighbour counties including Democratic Republic of Congo, Republic of Kenya and South Africa, highlighting its growing reputation as a leading educational institution in

gemstone value addition.

Originally known as the Arusha Gemstone Carving Center, TGC was rebranded under the Mineral Policy of 2009 to reflect its expanded role. Today, it plays a crucial part in teaching students the art of value addition, gemstone cutting, and creating fine jewellery products such as earrings, necklaces, and bracelets.

As Tanzania continues to evolve as a centre for gemstone processing, this partnership with Thailand promises to bring about significant reforms in the sector, driving the country towards greater economic prosperity and global recognition in the gemstone industry.

Mineral Value Addition Drive in Tanzania

Geologically, Tanzania is endowed with various mineral resources, making it one of the leading mineral-producing countries in Africa. The minerals produced in the country include gold, copper, diamonds, tanzanite, ruby, limestone, gypsum, gravel, sand, clay, uranium, and coal. This makes the mining sector a significant contributor to the community livelihood and the national economy.

Tanzania and the world are focusing on adding value to mineral products to enhance the national income derived from them. Therefore, to develop productive mining activities, investment in industries and technologies for value addition of mineral products, such as processing, refining, and polishing industries, is essential.

Tanzania is recognized in Africa and globally for its abundant mineral resources. These minerals are mined both through open-pit and underground methods using different technologies and equipment depending on the level of investment. Tanzania's minerals are categorized into metallic minerals (gold, iron, silver, copper, nickel, niobium); gemstones (diamonds, tanzanite, ruby, sapphire, etc.); construction minerals (sand, gravel, stones, clay, and aggregates); industrial minerals (limestone, gypsum, salt); strategic minerals (graphite, nickel, cobalt); and energy minerals (coal and uranium).

Strategy for value addition of minerals

Mineral value addition is the process of improving raw minerals by processing and transforming them into intermediate or final products that have higher market value. This process involves several crucial steps that can increase revenue, employment, and technological advancement in the country. A comprehensive strategy for adding

value to minerals considers market demands, technological capabilities, infrastructure, and regulatory environments to stimulate mineral value addition activities within borders for the benefit of society and the nation.

Value addition for minerals is implemented through collaboration between public and private sectors, mining stakeholders, and research institutions to achieve specific goals. Mineral value addition steps include; beneficiation, processing, refining and manufacturing.

Beneficiation involves the physical or chemical separation of minerals from ore to increase their purity and quality. Beneficiation can improve the value of minerals by removing impurities and increasing their concentration. e.g. Nickel ore from Haneth – Dodoma can be value added from 2.5 percent to 60 percent.

Processing involves converting raw minerals into intermediate or final products through techniques such as crushing, grinding, and sorting. This can enhance the value of minerals by making them suitable for specific applications or markets.

Refining is the process of purifying minerals to remove impurities and produce high-quality products. For example, refining of metals like gold, silver, and platinum involves processes such as smelting, electrolysis, and chemical treatments. To date, Tanzania has more than 14 refineries including 6 gold refineries with capacity ranging from 60kg to 600 kg per day which are located in Geita, Mwanza, Kahama, Dodoma and Dar es Salaam. There are also eight smelters for graphite, copper, nickel and tin located in Kagera, Shinyanga, Tanga, Dodoma, Dar es Salaam and Lindi regions.

Manufacturing involves using processed minerals as raw materials to

produce finished goods. This can add significant value to minerals by creating products with higher market demand and value. In Tanzania there are 10 lapidaries including four large lapidaries and six small lapidaries in Dar es Salaam and Arusha.

The importance of innovation and technology

Investing in research and development to improve processing techniques, develop new products, and optimise production processes can also enhance the value of minerals.

Overall, a comprehensive mineral value addition strategy should consider factors such as market, demand, technological capabilities, infrastructure, and regulatory environment to maximise the economic benefits of mineral resources. Overall, a comprehensive mineral value addition strategy should consider factors such as market, demand, technological capabilities, infrastructure, and regulatory environment to maximise the economic benefits of mineral resources.

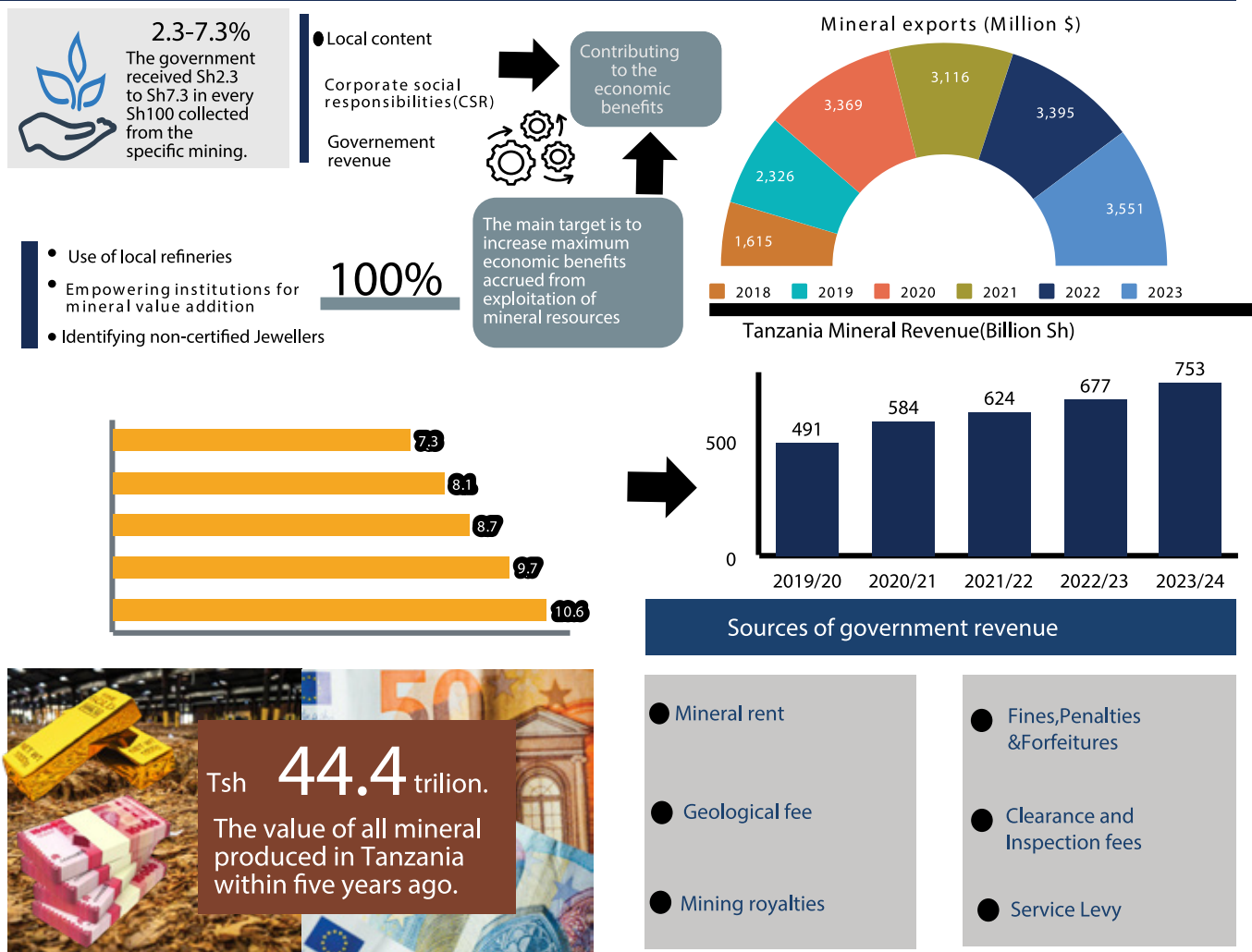
Some minerals and their products

Tanzania's metallic minerals (gold, iron, silver, copper, nickel, and niobium) are used differently based on their properties and needs of various sectors.

Gold is used to make valuable jewelry such as necklaces, rings, and earrings. It is also used in the manufacturing electronic devices such as computer cables due to its excellent conductivity. Gold is abundantly found in the Lake Zone region of Geita, Shinyanga, Mara, and Mwanza regions.

Iron is a crucial raw material in the construction sector and the manufacture of various products such as railway tracks (SGR), rebar, doors, and kitchen utensils (pots and plates). It is also used in the manufacturing

Tanzania mineral value and revenue trend-2019/2024



vehicles, machinery, and infrastructure construction such as buildings, bridges, and roads, and is also used to manufacture cement.

Iron is abundantly found in Liganga area in Njombe region, which has large iron ore deposits, and in various parts of the country.

Silver is used to make valuable jewelry, household items like spoons and plates, and in electronic devices such as phones. It is used as well to make computers, batteries, and solar panels. Silver is obtained as a by-product in gold and copper deposits, especially in the Bulyanhulu and North Mara mines. Copper is abundantly found in the Lake Zone and western parts of the country. It is used to manufacture electrical

wires and electronic devices, pipes, household items such as door handles, and decorations.

Tanzania's gemstones (Tanzanite, diamonds, rubies, sapphires, and garnets) are famous for their beauty and are mainly used in the production of valuable jewelry (rings, earrings, necklaces, bracelets, and other precious items). These gemstones are abundantly found in the Mozambique geological belt (Arusha, Mimerani, Tanga, and Morogoro).

Although there are small-scale gemstone processing industries in the country that manufacture these gemstones for local and international markets, the gemstone sector in Tanzania faces challenges such as

export of rough gemstones (un-cut, un-polished and un-processed), lack of modern cutting and polishing technologies, and lack of reliable markets for small-scale miners.

However, the government has initiated efforts to encourage gemstones value addition by establishing Tanzania Gemmological Center in Arusha Region with specific role of training young Tanzanians to various aspect of gemstones value addition and stone carvings. Other efforts include building processing industries, establishing gemstone markets and mineral auctions (both domestic and international) to ensure gemstones minerals contribute more to the national income and boost the country's economy.

Tanzania is also rich in industrial minerals such as limestone, gypsum, coal, kaolin, soda ash, and phosphates. These minerals are used in the production of various essential products for the construction, agriculture, energy, and other industries.

Gypsum is used to make cement, construction plaster, wallboards (gypsum boards), and also as a soil conditioner in agriculture. Gypsum is extensively mined in areas such as Itigi in Singida Region, Manda in Dodoma Region, Mkuranga in Coast Region, Kilwa in Lindi Region. Gypsum is used by Knauf Gypsum Tanzania to produce gypsum boards for construction, as well as by Dangote Cement in Mtwara, Camel Cement in Dar es Salaam, and Lafarge Holcim (Mbeya Cement) for making cement. Additionally, gypsum is used in building construction for making plaster and wallboards.

Limestone is a key raw material in cement manufacturing. It is also used in agriculture to neutralize soil acidity and as a raw material in the production of paint and glass. Limestone is abundantly found in areas such as Tanga, Wazo Hill (Dar es Salaam), Lindi, and Mbeya. The limestone produced in the country is used in cement factories like Wazo Hill Cement Factory, Kiln Product Industries, Tanga Cement, and Mbeya Cement Factory. It is also used in the agricultural sector as a fertilizer for highly acidic soils.

Phosphate is used to make phosphate fertilizers and is also used in the production of soap and other industrial chemicals. Phosphate is extensively mined in areas such as Minjingu in Manyara Region and Nachingwea in Lindi Region. Phosphate raw material is also used in soap industries as an ingredient in the production of powdered and bar soaps.

Soda ash is used in the production of glass, soap, industrial chemicals, and also as a raw material in making powdered and dishwashing soaps. Soda ash is abundantly found in the Lake Natron area in Arusha Region. It is used in industries for the production of glass and glass products. These industries use sand and gravel to make cement blocks. Examples include Nyati

Cement Blocks and Hansa Blocks; concrete mixing plants; industries like Simba Cement and Bamburi Ready Mix use sand and gravel in making concrete. Road construction companies such as China Civil Engineering Construction Corporation (CCECC) and Sinohydro Corporation use gravel and sand in road construction.

Clay is used in manufacturing of burnt bricks, roofing tiles, decorative pots, and other pottery products. Clay is found in areas such as Pugu in Dar es Salaam Region, Bagamoyo in Coast Region, Moshi in Kilimanjaro Region, and Kondoa in Dodoma Region. In value addition processes, there are industries that use clay to make burnt bricks like Kioo Limited in Dar es Salaam Region; roofing tile industries like Tanga Tiles and Kilimanjaro Ceramics, and pottery industries including small pottery industries like Nungu Ceramics that make pots and decorative items.

Marble and granite are used to make floors, wall tiles, countertops, and statues. They are also used in the construction of luxurious buildings and tombstones. Marble is found in areas like Kilimanjaro and Dodoma, while granite is found in areas like Mbeya, Morogoro, and Dodoma. In value addition, there are marble industries like those in Dodoma. Marble Ltd manufactures marble products for flooring and walls, while granite industries such as Mbeya Granite Factory and Morogoro Stone Quarry produce granite tiles and countertops for both domestic and international markets.

Tanzania also has a wealth of strategic minerals, which are becoming increasingly important in the production of new technologies and renewable energy. Some of these minerals are nickel, cobalt, graphite, and rare earth elements (REEs). Nickel is used in the production of stainless steel, electric vehicle batteries, chemical industries, and in making alloys that resist corrosion and high temperatures. It is also a crucial raw material in the manufacture of electronic devices (phones, computers, etc.). According to research, nickel is abundantly found in areas such as Kabanga in Kagera Region, Haneth in

Dodoma Region, and Lindi. Although nickel is used in international industries that manufacture stainless steel products, domestic industries utilising nickel are not yet well established in the country.

However, electric vehicle battery industries use nickel as an essential raw material for lithium-ion batteries used in electric vehicles. Although such industries do not currently exist in the country, nickel is the exported to supply raw material to the industries abroad. Also, Kabanga Nickel Project aims to mine and transport nickel through the Kahama refinery (Tembo Nickel Refinery Company Limited) and establish industries to process these minerals for domestic use and export. Cobalt is used in the production of electric vehicle batteries, phones, and electronic devices. It is also used in industries that manufacture stainless steel alloys and superalloys.

Graphite is used in manufacturing batteries, construction materials, electrical equipment, and industrial products such as electrodes, electric brushes, and lubricants. In Tanzania, Graphite is found at Nachu in Lindi Region, Handeni in Tanga Region, and Mererani in Manyara Region. Lithium-ion battery industries use graphite as a raw material for anodes in batteries for electric vehicles and electronic devices. Electrical industries use graphite to make electric brushes used in electrical equipment and electric motors.

Currently, this raw material is exported. The Mahenge Graphite Project aims to mine and process graphite for battery use as well as supply the mineral to other sectors worldwide.

Rare earth elements (REEs) are used in the manufacture of electronic devices, powerful magnets, electric vehicle batteries, military equipment, and renewable energy technologies such as wind turbines. These minerals are abundantly found in Lake Rukwa and Ngualla in Njombe Region.

To add value to REE minerals, the Ngualla Rare Earth Project aims to mine and process rare earth minerals for domestic use and export. Benefits, challenges and opportunities



in value addition activities. Processed or value-added products are sold at higher prices in the market, thus increasing the income of the country and communities involved in the sector. Value addition processes also require more workers, thus increasing employment for local citizens and helping to reduce the problem of unemployment;

On the other hand, value addition requires modern technologies and specialised expertise, which can help in enhancing the professional capabilities of the country and developing other production sectors. Additionally, a country that processes and adds value to its minerals can control product prices in the market and avoid challenges of falling raw material prices internationally.

It is equally important to note that there are still a number of challenges in value addition of minerals. Many developing countries face the challenge of lacking modern technologies and machinery to conduct value addition activities.

Operational costs pose another

challenge. Building processing and production factories requires significant financial investment, which often poses a challenge for countries with no sufficient resources. It is also important to note that processed products need markets with demand for those products, and often countries may lack opportunities for international markets due to high competition.

Opportunities in value addition of minerals

The Tanzanian government recall for local and international investment in the mineral processing sector. The government has created a favorable and enabling investment environment including improved infrastructure. Trade agreements between countries also present good opportunities for market access for value-added products.

Creating an enabling environment for research and innovation in the mining sector can help reduce dependence on foreign technology.

The journey from extracting minerals deep within the Earth to their application in advanced technologies highlights the critical economic opportunities in mineral value addition. Historically, Africa has been a major source of raw materials, but the focus is now shifting towards adding value within the continent.

This shift is essential for sustainable economic growth and reducing dependency on raw material exports. By processing and refining minerals locally, African countries can create jobs, foster technological advancements, and build stronger economies. This approach not only benefits the local economies but also contributes to global technological progress, as these minerals are crucial for manufacturing electronics, electric vehicles, and other high-tech products. Hence, the move towards mineral value addition is a transformative step that can drive economic development, technological innovation, and a more equitable global economy.

Tanzania Commits to Increase Local Content, CSR in The Mining Sector

In the heart of Tanzania's mining sector, significant strides are being made to increase local engagement and promote corporate social responsibility (CSR).

This lucrative industry is transforming, driven by strong local content policies and a commitment to corporate social responsibility.

The government's efforts to prioritise Tanzanians in mining activities and ensure that mining companies give back to their surrounding communities are apparently yielding impressive results.

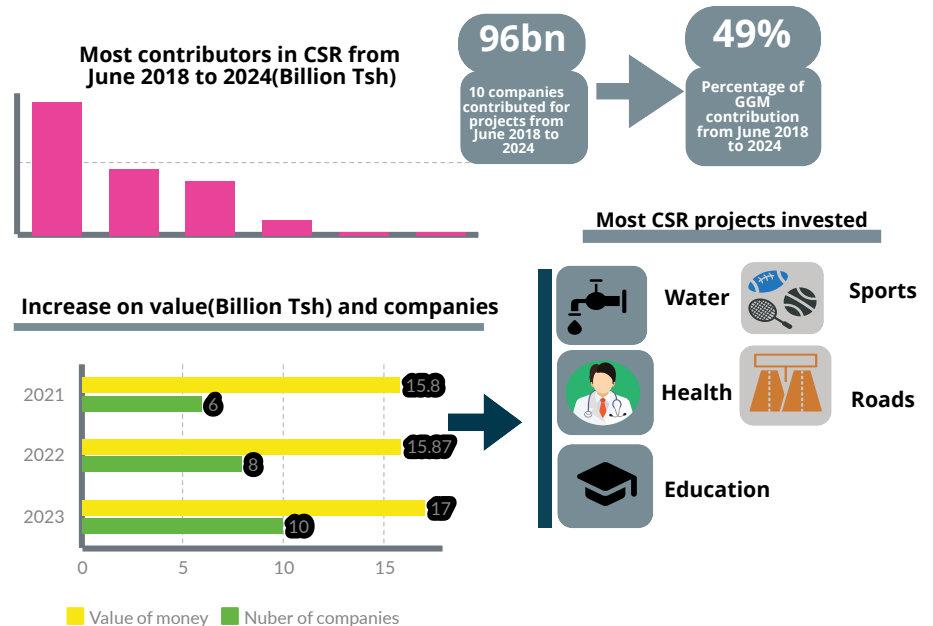
The continued growth of local manufacturing, employment, and CSR initiatives sets a promising trajectory for the future, ensuring that Tanzania's wealth of natural resources benefits not only the economy but also its people. The Ministry of Minerals, in collaboration with the Mining Commission, has implemented policies to ensure Tanzanians are at the forefront of mining activities while fostering stronger ties between mining companies and the communities around them.

Between July 2023 and March 2024, the Ministry of Minerals undertook a comprehensive review of plans submitted by mining companies on how they engage local Tanzanians in their operations. Out of 801 submitted plans, an impressive 797 were approved, leaving only four needing revisions.

According to the Minister for Minerals, Hon. Anthony Mavunde, this approval highlights the mining sector's strong commitment to aligning with national goals of prioritizing local employment and procurement.

During this period, the ministry also

Cummulative value of Corporate Social Responsibility(CSR) projects by mining companies



reviewed procurement applications from prominent companies such as Geita Gold Mining Limited, North Mara Gold Mine Limited, Shanta Mining Company Limited, and several others. In total, 154 procurement permits were granted to these companies, enabling them to procure goods and services essential to their operations. "This move further opened doors for local businesses to supply the necessary equipment and services," said Hon. Mavunde.

A total of 447 applications for procurement of goods and services from local suppliers were received and approved, signalling a vibrant ecosystem where Tanzanian businesses are increasingly becoming integral to the mining supply chain.

The year 2023 marked a major milestone for Tanzanian companies involved in mining activities. Local

businesses made significant sales, totalling USD 1.48 billion in goods and services sold to the mines.

This remarkable figure accounted for 90 percent of all mining sales, which stood at USD 1.65 billion. These numbers reflect a sharp increase from the previous year, when Tanzanian companies recorded sales worth USD 713 million, equivalent to 82 percent of total mining sales.

The steady rise in sales illustrates Tanzanian enterprises' growing capacity and competitiveness in the mining industry.

Hon. Mavunde says the mining sector registered another big milestone after three Tanzanian companies established factories within the Buzwagi Special Economic Zone to produce essential mining equipment.



Max Steel Limited, located in Dar es Salaam, is nearing the completion of its facility. The factory will produce wire mesh and rock bolts used in underground mines to prevent rock collapse. Construction is 90 percent complete.

Rock Solutions Limited is building a facility to manufacture core trays vital for mineral exploration activities in Mwanza. This project is also 90 percent complete.

Additionally, East African Conveyors Supplies Limited has completed a factory in Kahama Municipality, producing conveyor belts that are already being supplied to local mines and neighbouring countries. "The establishment of the factories are critical steps toward reducing reliance on imported mining equipment and fostering local manufacturing," he said, adding. "Will also increase job opportunities to Tanzanians and improve social welfare. He encouraged more Tanzanians to seize opportunities to establish factories that supply the growing demand for mining-related

products.

According to Hon. Mavunde, the ministry's commitment to prioritising Tanzanians in mining sector employment has resulted in significant job creation.

By March 2024, 19,356 jobs were generated by large- and medium-scale mining projects.

Tanzanians were awarded 18,853 jobs, representing 97% of the total, while only 3% were allocated to foreign workers. This shift aligns with the Mining Act and Regulations of 2018, which emphasize local content and employment.

Tanzania's mining sector is focused on economic growth and social impact. Between July 2023 and March 2024, mining companies invested over TZS 17 billion in CSR projects.

These initiatives benefited municipalities and towns surrounding mines, including Tembo Nickel, Geita Gold, and Bulyanhulu Gold Mine

Limited, among others.

The funds were channeled into essential community projects such as infrastructure development, health services, education, and environmental conservation.

This focus on CSR demonstrates the mining sector's commitment to improving the livelihoods of the communities in which they operate. To ensure the effective implementation of CSR activities, the Ministry of Minerals organized training sessions for various stakeholders between July 2023 and March 2024.

Participants included members of the Parliamentary Standing Committee on Energy and Minerals, leading mining companies, regional leaders, and district council officials from areas such as Geita, Ruvuma, and Songwe. These training programs increased awareness of CSR regulations and highlighted the roles and responsibilities of stakeholders in ensuring that CSR projects are well-executed and beneficial to local communities.

Empowering Small-Scale Miners Key to Economic Growth



Tanzania's small-scale mining sector is on the rise, thanks to new initiatives designed to boost the capacity and efficiency of miners across the country. The government, recognising the significant role small-scale miners play in economic development, has empowered the State Mining Corporation (STAMICO) to support these miners through various projects and initiatives aimed at increasing their productivity and earnings.

One of the standout developments is the acquisition of five drilling machines by STAMICO, specifically for small-scale miners, says the Minister for Minerals, Hon. Anthony Mavunde. The machines, which began operations on December 4, 2023, have already started drilling in licensed mining areas across the country, including Nyamongo in Tarime, Itumbi in Chunya, Lwamgasa in Geita, Katente in

Bukombe, Buhemba in Butiama, and Nholi in Dodoma.

"This significant investment is designed to give small-scale miners access to modern equipment, improving their ability to extract resources efficiently," Hon. Mavunde told the August House when moving his ministry's budget estimates for the 2024/2025 financial year.

To further support the small-scale mining sector, Hon. Mavunde promised for more other drilling rigs for small scale miners ensuring them five rigs to be expected in 2024/25 financial year. He further argued, STAMICO has announced plans to build two state-of-the-art processing centers—one for limestone in Tanga's Kona Z area and another for salt mining in Kilwa's Nangurukuru area.

These centers aim to streamline the production process for miners in these regions, giving them access to cutting-edge technology and improving the overall value chain in mining operations. Preliminary steps to identify the requirements for these centers have already begun.

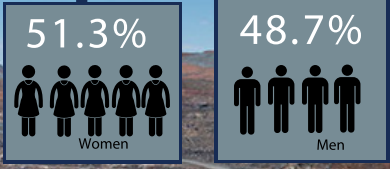
STAMICO's model centres in Katente, Lwamgasa, and Itumbi continue to play a crucial role in refining gold for small-scale miners at affordable rates. From July 2023 to March 2024, these centres generated TZS 794.13 million in revenue.

The Lwamgasa Model Centre in particular, has seen significant upgrades, expanding its capacity to refine up to 30 tonnes of gold ore per day, a substantial increase from its previous capacity of 9 tonnes.



People involved in Small Scale Mining (SSM) activities by type of minerals

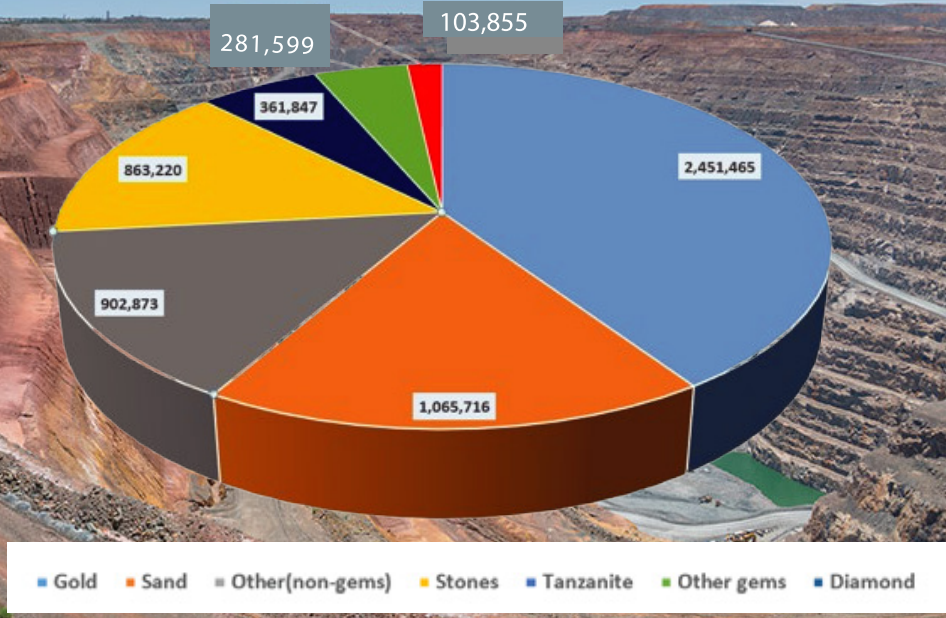
Small Scale Miners by gender



10% → The number involved is about 10 percent of the current population in Tanzania

Minerals involved

Gold.....	40.7%
Sand.....	17.7%
Other(non-gems).....	15%
Stones.....	14.3%
Tanzanite.....	6%
Other gems.....	4.7%
Diamond.....	1.7%



Tanzanians' Impressive Participation in The Mining Economy Surge

Geologically, Tanzania is endowed with various mineral resources, making it one of the leading mineral-producing countries in Africa. The minerals produced in the country include gold, copper, diamonds, tanzanite, ruby, limestone, gypsum, gravel, sand, clay, uranium, and coal. This makes the mining sector a significant contributor to the community livelihood and the national economy.

Tanzania and the world are focusing on adding value to mineral products to enhance the national income derived from them. Therefore, to develop productive mining activities, investment in industries and technologies for value addition of mineral products, such as processing, refining, and polishing industries, is essential.

Tanzania is recognized in Africa and globally for its abundant mineral resources. These minerals are mined both through open-pit and underground methods using different technologies and equipment depending on the level of investment. Tanzania's minerals are categorized into metallic minerals (gold, iron, silver, copper, nickel, niobium); gemstones (diamonds, tanzanite, ruby, sapphire, etc.); construction minerals (sand, gravel, stones, clay, and aggregates); industrial minerals (limestone, gypsum, salt); strategic minerals (graphite, nickel, cobalt); and energy minerals (coal and uranium).

Strategy for value addition of minerals

Mineral value addition is the process of improving raw minerals by processing and transforming them into intermediate or final products that have higher market value. This process involves several crucial steps that can increase revenue, employment, and technological

advancement in the country. A comprehensive strategy for adding value to minerals considers market demands, technological capabilities, infrastructure, and regulatory environments to stimulate mineral value addition activities within borders for the benefit of society and the nation.

Value addition for minerals is implemented through collaboration between public and private sectors, mining stakeholders, and research institutions to achieve specific goals. Mineral value addition steps include; beneficiation, processing, refining and manufacturing.

Beneficiation involves the physical or chemical separation of minerals from ore to increase their purity and quality. Beneficiation can improve the value of minerals by removing impurities and increasing their concentration. e.g. Nickel ore from Haneth – Dodoma can be value added from 2.5 percent to 60 percent.

Processing involves converting raw minerals into intermediate or final products through techniques such as crushing, grinding, and sorting. This can enhance the value of minerals by making them suitable for specific applications or markets.

Refining is the process of purifying minerals to remove impurities and produce high-quality products. For example, refining of metals like gold, silver, and platinum involves processes such as smelting, electrolysis, and chemical treatments. To date, Tanzania has more than 14 refineries including 6 gold refineries with capacity ranging from 60kg to 600 kg per day which are located in Geita, Mwanza, Kahama, Dodoma and Dar es Salaam. There are also eight smelters for graphite, copper, nickel and tin located in Kagera, Shinyanga, Tanga, Dodoma,

Dar es Salaam and Lindi regions.

Manufacturing involves using processed minerals as raw materials to produce finished goods. This can add significant value to minerals by creating products with higher market demand and value. In Tanzania there are 10 lapidaries including four large lapidaries and six small lapidaries in Dar es Salaam and Arusha.

The importance of innovation and technology

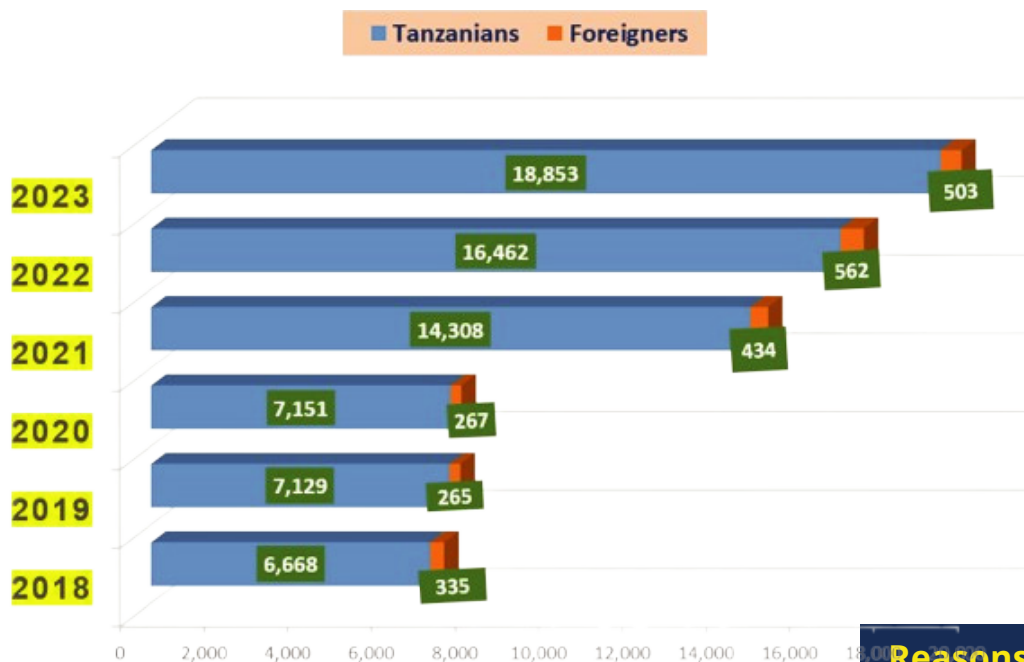
Investing in research and development to improve processing techniques, develop new products, and optimise production processes can also enhance the value of minerals. Overall, a comprehensive mineral value addition strategy should consider factors such as market, demand, technological capabilities, infrastructure, and regulatory environment to maximise the economic benefits of mineral resources. Overall, a comprehensive mineral value addition strategy should consider factors such as market, demand, technological capabilities, infrastructure, and regulatory environment to maximise the economic benefits of mineral resources.

Some minerals and their products

Tanzania's metallic minerals (gold, iron, silver, copper, nickel, and niobium) are used differently based on their properties and needs of various sectors.

Gold is used to make valuable jewelry such as necklaces, rings, and earrings. It is also used in the manufacturing electronic devices such as computer cables due to its excellent conductivity. Gold is abundantly found in the Lake Zone region of Geita, Shinyanga, Mara, and Mwanza regions.

Tanzania employment trends in mine (large companies)



This is an average of local jobs increased per year between 2018 and 2023.



This is an average of foreign jobs increased per year between 2018 and 2023.

Reasons behind

- Establishment of local content regulations
- Increase in mining activities
- Awareness of the sector's opportunities

Iron is a crucial raw material in the construction sector and the manufacture of various products such as railway tracks (SGR), rebar, doors, and kitchen utensils (pots and plates). It is also used in the manufacturing vehicles, machinery, and infrastructure construction such as buildings, bridges, and roads, and is also used to manufacture cement.

Iron is abundantly found in Liganga area in Njombe region, which has large iron ore deposits, and in various parts of the country.

Silver is used to make valuable jewelry, household items like spoons and plates, and in electronic devices such as phones. It is used as well to make computers, batteries, and solar panels.

Silver is obtained as a by-product in gold and copper deposits, especially in the Bulyanhulu and North Mara mines. Copper is abundantly found in the Lake Zone and western parts of the country. It is used to manufacture electrical wires and electronic devices, pipes, household items such as door handles, and decorations.

Tanzania's gemstones (Tanzanite, diamonds, rubies, sapphires, and garnets) are famous for their beauty and are mainly used in the production of valuable jewelry (rings, earrings, necklaces, bracelets, and other precious items). These gemstones are abundantly found in the Mozambique geological belt (Arusha, Mirerani, Tanga, and Morogoro).

Although there are small-scale gemstone processing industries in the country that manufacture these gemstones for local and international markets, the gemstone sector in Tanzania faces challenges such as export of rough gemstones (un-cut, un-polished and un-processed), lack of modern cutting and polishing technologies, and lack of reliable markets for small-scale miners.

However, the government has initiated efforts to encourage gemstones value addition by establishing Tanzania Gemmological Center in Arusha Region with specific role of training young Tanzanians to various aspect of gemstones value addition and stone carvings. Other efforts include building processing industries, establishing

gemstone markets and mineral auctions (both domestic and international) to ensure gemstones minerals contribute more to the national income and boost the country's economy.

Tanzania is also rich in industrial minerals such as limestone, gypsum, coal, kaolin, soda ash, and phosphates. These minerals are used in the production of various essential products for the construction, agriculture, energy, and other industries.

Gypsum is used to make cement, construction plaster, wallboards (gypsum boards), and also as a soil conditioner in agriculture. Gypsum is extensively mined in areas such as Itigi in Singida Region, Manda in Dodoma Region, Mkuranga in Coast Region, Kilwa in Lindi Region. Gypsum is used by Knauf Gypsum Tanzania to produce gypsum boards for construction, as well as by Dangote Cement in Mtwara, Camel Cement in Dar es Salaam, and Lafarge Holcim (Mbeya Cement) for making cement. Additionally, gypsum is used in building construction for making plaster and wallboards.

Limestone is a key raw material in cement manufacturing. It is also used in agriculture to neutralize soil acidity and as a raw material in the production of paint and glass. Limestone is abundantly found in areas such as Tanga, Wazo Hill (Dar es Salaam), Lindi, and Mbeya. The limestone produced in the country is used in cement factories like Wazo Hill Cement Factory, Kiln Product Industries, Tanga Cement, and Mbeya Cement Factory. It is also used in the agricultural sector as a fertilizer for highly acidic soils.

Phosphate is used to make phosphate fertilizers and is also used in the production of soap and other industrial chemicals. Phosphate is extensively mined in areas such as Minjingu in Manyara Region and Nachingwea in Lindi Region. Phosphate raw material is also used in soap industries as an ingredient in the production of powdered and bar soaps.

Soda ash is used in the production of glass, soap, industrial chemicals, and also as a raw material in making powdered and dishwashing soaps.

Soda ash is abundantly found in the Lake Natron area in Arusha Region. It is used in industries for the production of glass and glass products. These industries use sand and gravel to make cement blocks. Examples include Nyati Cement Blocks and Hansa Blocks; concrete mixing plants; industries like Simba Cement and Bamburi Ready Mix use sand and gravel in making concrete. Road construction companies such as China Civil Engineering Construction Corporation (CCECC) and Sinohydro Corporation use gravel and sand in road construction.

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Tanzania Beats Mining Sector Targets

Tanzania is relishing a new era of economic resilience, leveraging its abundant mineral wealth to drive growth, attract investment, and solidify its position as a leader in sustainable development across Africa.

The government's bold ambition to elevate the mining sector's contribution to its national economy has not only been met ahead of schedule but has also marked a transformative milestone in the nation's developmental journey.

Originally set out in the National Development Vision 2025, the target to raise the sector's share of the Gross Domestic Product (GDP) to 10 percent by 2025 was achieved in 2023, well ahead of the deadline.

This accomplishment also surpassed the aims of the National Five-Year Development Plan (FYDP III), which sought to nearly double the sector's contribution from 5.6 percent in 2020. The sector's robust growth reflects a

favourable investment climate bolstered by improved governance, supportive policies, and laws designed to attract foreign direct investments (FDIs).

Tanzania, endowed with a rich variety of industrial minerals and precious metals—including iron ore, coal, uranium, gold, diamonds, and Tanzanite—has emerged as a key player among African economies. Unlike many of its peers, Tanzania's success is not fueled by oil but by the strategic management of its vast mineral wealth.

The FYDP III outlines an agenda to promote natural resources-based industrialization. Key interventions include enhancing oversight of large- and medium-scale mining operations and empowering small-scale miners, especially women and youth, by providing essential training and licensing.

The plan also aims to improve the

capacity of key institutions such as the Mining Commission, Geological Survey of Tanzania (GST), and the Tanzania Gemmological Centre (TGC) to strengthen Tanzania's standing in the global mineral market.

The government has set ambitious goals for the mining sector, projecting an average annual growth rate of 7.7 percent by 2025/2026, up from 6.9 percent in 2019/2020.

Additionally, foreign exchange earnings from minerals are expected to rise from USD 2.99 billion in 2019/2020 to USD 5.5 billion by 2025/2026, driven by increasing demand for processed minerals.

Notably, the government aims to reduce raw mineral exports from 15 percent in 2019/2020 to 5 percent by 2025/2026, focusing instead on value addition and beneficiation to maximize returns.

The Minister for Minerals, Hon.

Tanzania mineral growth and contribution on GDP

Fast growth



The sector is growing faster than all sectors within five years ago.

Government focus



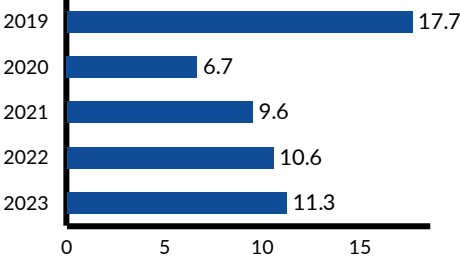
The government is currently focusing on geo-scientific investigations

Leading Country

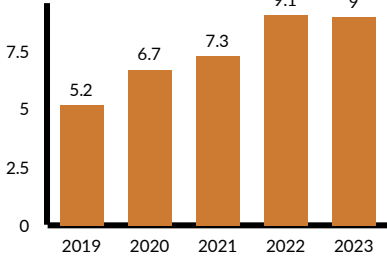


Tanzania is the second EAC country on 2024 GDP growth projection

Sector's growth on GDP



Sector's contribution on GDP



Contribution of policy and legal reforms



Strengthening the Institutional framework



Increase in mining licenses



Strengthening Corporate Social Responsibility, Local content and Integrity



Establishment of local mineral markets



Mineral smuggling control



Reduction of tax influx

Anthony Mavunde, highlighted that the mining sector was Tanzania's top foreign exchange earner during the 2022/2023 fiscal year, contributing a remarkable 56 percent to the nation's foreign currency reserves.

Mineral exports for the period totalled USD 3.1 billion, and tax revenues from the sector reached TZS 2.1 trillion TZS, which was 15 percent of the country's total domestic revenue.

The mining sector's revenue is on an upward trajectory, with financial transactions across 100 mineral buying centers and 42 mineral markets totaling TZS 1.7 trillion.

Government revenue from the sector also saw growth, rising from TZS 678 billion in 2022/2023 to TZS 753 billion in 2023/2024. For the 2024/2025 fiscal year, the government has set an ambitious revenue target of TZS 1 trillion, and Hon. Mavunde expressed confidence in achieving this goal. The minister credited the sector's success to the High-Resolution Airborne Geographical Surveys, which accounted for 16 percent of advancements in mining operations. This strategic initiative is expected to attract further investments, particularly in untapped mineral resources like

helium. Currently, Tanzania is on track to become the world's third-largest helium producer, behind Russia and the United States, thanks to ongoing explorations in the Rukwa and Songwe regions.

Looking ahead, Tanzania's Vision 2030, with its slogan "Madini ni Maisha na Utajiri" (Minerals are Life and Wealth), aims to integrate mining with other sectors like agriculture and health. This vision includes detailed mineral exploration efforts, which will drive new discoveries, support economic growth, and ensure the long-term sustainability of the mining industry.

To accelerate the sector's transformation, the government has significantly increased the Ministry of Minerals budget to TZS 231 billion 2024/2025 fiscal year, up from TZS 89 billion in 2023/2024.

This budget includes funding for constructing two zonal mineral laboratories in Geita and Chunya, as well as a state-of-the-art laboratory in Dodoma. The aim is to improve mineral analysis capabilities and provide small-scale miners with accurate geological data, making their operations more predictable and

efficient.

The government is acquiring a helicopter to conduct detailed geological surveys to further enhance the mining sector's growth. This investment will benefit small-scale miners by enabling them to assess potential mining sites more accurately. Hon. Mavunde also highlighted the growing importance of graphite, a critical mineral for electric vehicle (EV) batteries, in global markets. With worldwide graphite demand currently at 6.5 million tonnes, Tanzania is poised to increase its market share. Nine licensed investors are expected to boost the country's graphite production significantly.

Additionally, the government is nearing completion of the Tanzanite Exchange Center in Mirerani, which will centralize the country's tanzanite trade. With 84 percent of construction complete, the new facility will play a key role in managing and promoting Tanzania's unique gemstone on the global stage. With a clear vision and strong leadership, Tanzania's mining sector is set to achieve even greater heights, contributing to the country's economic growth and positioning it as a leading player in the global mining industry.

A Billion Reasons to Invest in Tanzania's Mining Industry

Tanzania, rich in natural resources and geological diversity, has emerged as one of Africa's top destinations for mining investments.

Over the past few decades, the mining sector has played a pivotal role in the country's economy, contributing significantly to national revenue, job creation, and foreign exchange earnings.

For investors looking to capitalize on Africa's vast mineral wealth, Tanzania presents a wealth of opportunities that are difficult to ignore.

Abundant Mineral Wealth

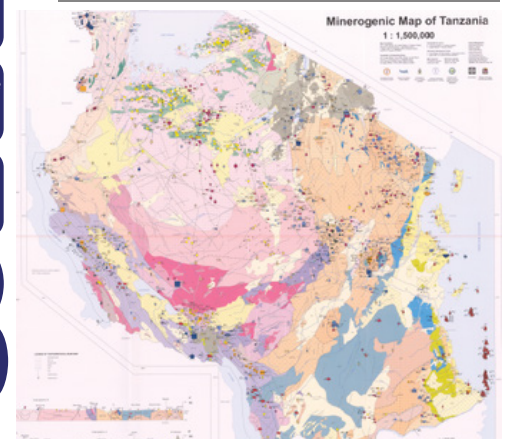
Tanzania boasts a diverse range of minerals, including precious metals, rare gemstones like Tanzanite, the exquisite Winza ruby and the coveted Mahenge Spinel, as well as various industrial and energy minerals. As global demand for these resources grows, Tanzania offers unparalleled opportunities for investment in exploration, mining, beneficiation and the supply of goods and services. The country's substantial gold reserves are concentrated in the Archean greenstone belts and banded iron formations around Lake Victoria, providing a solid foundation for investors and positioning Tanzania as a premier mining destination.

political Stability and Supportive Policies

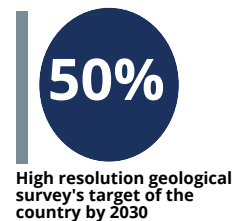
Tanzania's enduring political stability is one of its greatest assets. Since gaining independence in 1961, the country has maintained peace and a stable multiparty democracy, ensuring a secure environment for investment. The mining sector is governed by a robust legal framework, anchored by the Mineral Policy of 2009 and the



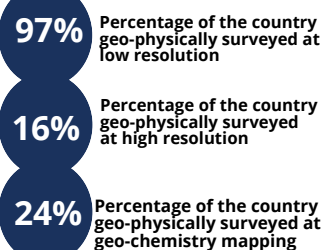
Minerogenic Map of Tanzania



Mining vision 2030



Current status of geo-scientific information



Mining Act Cap. 123, which guarantees transparency, predictability, and competitiveness for investors. Recent amendments to the Mining Act have further improved the investment climate, reducing taxes on mining equipment and streamlining the licensing process.

Strategic Location and Growing Infrastructure

Strategically located in East Africa, Tanzania serves as a gateway to the region, with easy access to the Indian Ocean and bordering several landlocked countries. The nation's infrastructure is rapidly advancing, with

significant investments in roads, railways, ports, and airports. The ongoing construction of the Standard Gauge Railway (SGR) will link Tanzania with its neighbours, enhancing logistical efficiency and facilitating the transport of minerals to global markets.

Comprehensive Geological Data

Tanzania has made great strides in geological mapping and data collection, with 98 percent of the country already surveyed. High-resolution airborne geophysical surveys have been conducted across much of the land, with plans to cover at least 50 percent by 2030. This extensive geological data is readily available to



philosophy—reconciliation, Resilience, Reforms, and Rebuilding—championed by Dr Samia Suluhu Hassan, President of the United Republic of Tanzania. This approach ensures that the country continues to progress as a united and prosperous nation, providing a stable and conducive environment for businesses to grow and thrive.



Expanding Economy and Mining Sector

Tanzania's economy has been steadily growing, with an average GDP growth rate of 5.5 percent over the past decade. The mining sector has been a key driver of this growth, with its contribution to GDP rising from 3.4 percent between 2007 and 2008 to 9.1 percent in 2022. The sector's contribution is projected to reach 10 percent by 2025, presenting investors with a dynamic and expanding market.

Adoption of Advanced Technologies

Tanzania's mining sector is embracing modern technologies to enhance efficiency and productivity. Companies are increasingly employing drones, geospatial technologies, and automation to streamline operations and improve resource management. These technological advancements not only boost profitability but also promote sustainability in mining activities.

Tanzania stands out as a premier destination for mining investment, offering a unique blend of abundant mineral resources, political stability, strategic location, and a favourable investment climate.

With its commitment to sustainable practices and ongoing infrastructure development, Tanzania is well-positioned to remain a key player in the global mining industry. Tanzania's mining sector provides billions of reasons to invest for investors seeking lucrative opportunities in a stable and supportive environment.

investors, reducing exploration risks and costs while enabling more informed decision-making. Competitive operating costs Tanzania has taken significant steps to reduce energy costs in mining operations through initiatives like the Mtwara natural gas project and the Julius Nyerere Hydroelectric Project. These efforts have lowered production costs, making mining operations more profitable and attractive to investors.

Access to Domestic and International Markets

As a member of the East African Community (EAC) and the Southern African Development Community (SADC), Tanzania offers access to large regional markets. Mineral products such as gold and Tanzanite are sold internationally, with Dar es Salaam port

serving as a key export hub.

The government's support for domestic and international auctions of gemstones further enhances market accessibility for investors.

Strong Support Services

Tanzania's mining sector benefits from a well-established network of support services, including a growing skilled workforce, access to technical expertise, and a robust financial sector. These services help reduce operational risks and costs, making Tanzania a more attractive investment destination. Furthermore, the country's adherence to international standards in mining ensures that operations are conducted safely, sustainably, and efficiently.

Investment Security and Stability

Tanzania's commitment to investment security is reinforced by the "4Rs"



Why Mining and Mineral Investment Conference ?

The Tanzania Mining and Investment Conference organized annually by the Ministry of Minerals, serves as a key platform for stakeholders in the mining sector to discuss and share insights about the industry.

The event brings together various players, including the government, private sector, and companies involved in mining, mineral processing, and export, with the aim of improving the sector's contribution to Tanzania's economy.

This conference is a strategic initiative to position Tanzania as a significant player in the global mining sector, while also ensuring that the benefits of mining activities contribute to the broader economy and development of the country.

Key Objectives of the Conference:

The conference offers an opportunity for stakeholders to share experiences and ideas on mining and mineral value chains globally.

This helps to foster collaboration and align strategies to promote the sector's growth.

It serves as a platform to communicate the Tanzanian government's good intentions regarding the legal, institutional, and certification frameworks within the mining sector.

The event seeks to ensure there is a common understanding of how the mining sector is managed, focusing on optimizing the benefits from mineral resources.

The conference addresses the challenges faced by local players, such as meeting international standards and promotes ways to integrate Tanzanians

more effectively into the mining sector's economic benefits.

Expected Benefits:

Promote Investment: The conference aims to attract both domestic and foreign investors into Tanzania's mining sector, by showcasing opportunities and the country's commitment to favorable mining policies.

Increase Capital in Mining: By attracting new investments, the conference aims to boost capital inflows into the sector, which would help in scaling mining operations and associated activities.

Enhance Private Sector Participation: It seeks to promote greater involvement of private players, especially in value addition and downstream activities of the extractive industry.



Strengthen Economic Linkages: The conference promotes stronger ties between the mining industry and other key economic sectors, enhancing overall national growth and development.

Value Addition and Small-Scale Mining: A key goal is to promote value addition in mining, particularly among small-scale miners, to ensure they benefit more from their activities by processing and refining minerals locally before export.

Market Expansion: The event helps increase market access for Tanzanian mineral products, both locally and internationally, through enhanced networking and exposure to potential buyers and partners.

Improved Regulation and Compliance: It emphasizes the need to strengthen

the implementation of laws, regulations, and procedures in the mining sector, ensuring transparency and adherence to high standards.

Boost Revenue Collection: By promoting investment, value addition, and better regulation, the conference aims to increase government revenue collections from the mining sector, benefiting the national economy.



Tanzania Steps Up Measures to Bolster Gold Reserves



Gold has historically been a vital component in financial reserves in countries around the world, and its demand shows no sign of waning as central banks continue to brace for gold purchases. According to available statistics, central banks around the world hold more than 35,000 metric tons of the precious metal, which represents around a fifth of all the gold ever mined.

One of the big reasons for buying gold is to diversify national financial reserves. While central banks are responsible for their nations' currencies, the currencies can be subject to swings in value based on the perceived strength or weakness of the underlying economy.

During times of economic turbulence, central banks might find themselves

compelled to print more money, especially as interest rates—the usual tool for monetary control—have remained close to zero for over a decade. While increasing the money supply may be necessary to prevent further economic disruption, it often comes at the expense of currency value. In contrast, gold is a finite physical commodity that cannot be easily increased in supply, making it a natural hedge against inflation.

As gold carries no credit or counterparty risks, it becomes a reliable source of trust within a country and across various economic conditions. This reliability makes it one of the most essential reserve assets globally, alongside government bonds. Also, gold's inverse relationship with the US dollar enhances its appeal. When the dollar loses value, gold

usually increases, allowing central banks to safeguard their reserves during times of market volatility.

In a strategic move that could reshape Tanzania's mining sector, H.E. Dr Samia Suluhu Hassan, President of the United Republic of Tanzania, on October 13, 2024, revealed that the Bank of Tanzania (BoT) has earmarked TZS 1 trillion for a domestic gold purchasing programme.

Closing the 7th Mining Technology Exhibition in Geita Region, Dr Samia emphasised the initiative's significance in sustaining the nation's gold reserves and mitigating foreign currency shortages that impede development across various sectors.

"This allocation is a game-changer," Dr Samia stated, adding: "The BoT is ready to buy gold, with payments



processed within 24 hours.” Under this initiative, gold licence holders and mineral traders are now mandated to sell 20 percent of their production directly to the BoT, following amendments to the Mining Act.

To incentivise participation, the government has introduced a host of benefits: reduced royalty fees from 6 to 4 percent, elimination of inspection fees, and a zero-rated VAT that allows sellers to reclaim input tax. Notably, payments are guaranteed upon the receipt of fire assay reports from approved refineries.

To further enhance the mining landscape, Dr Samia announced a TZS 250 billion loan guarantee scheme designed to empower mineral buyers and ensure the sector’s robust growth. “Our objective is to ensure that wealth generated from our minerals remains within the country for future generations,” she affirmed.

The government’s commitment to the mining sector is underscored by a substantial budget increase for the Ministry of Minerals, soaring from TZS 89 billion in 2023/2024 to TZS 231 billion in 2024/2025. The funding aims to improve revenue collection systems and enhance the Geological Survey of Tanzania’s capacity to conduct comprehensive mineral explorations nationwide. Currently, only 16 percent of the country has been geophysically

surveyed, but the government is investing in equipment to identify regional mineral resources better.

The results of these efforts are already evident. In 2023, the mining sector contributed 9 percent to Tanzania’s GDP, up from 7.2 percent in 2021. The target is 10 percent by next year. The government has also purchased 15 drilling machines, facilitating further exploration for small-scale mining areas.

A network of 44 mineral markets and 103 buying centres has been established, allowing efficient trading. In the 2023/2024 fiscal year, minerals worth over TZS 2 trillion were sold, generating TZS 180 billion in revenue. However, challenges persist as President Samia acknowledged ongoing issues such as the export of raw minerals, smuggling, and unsustainable mining practices. She reaffirmed her government’s commitment to ensuring that Tanzanians reap the full benefits of their mineral resources, advocating for local processing of gold and silver. “We have gold refining plants capable of refining to 99.99 percent purity,” she added, inviting foreign miners to consider Tanzania for their gold refining needs.

The government is actively working to attract foreign investment by waiving import duties and VAT on gold for refining.

“I urge our embassies to promote this opportunity, especially to our neighbours,” she remarked. Emphasising the need for inclusivity, Dr Samia noted the obstacles women and youth face in mining due to limited access to mining areas. To counter this, the government has begun reclaiming undeveloped areas from inactive licence holders and, where appropriate, redistributing them to small-scale miners.

President of the Federation of Miners Associations of Tanzania (FEMATA), Mr John Bina, acknowledged that the BoT’s programme had initially caused some disruptions but confirmed a collaborative effort with the government to resolve these issues. “We’ve agreed to sell 20 percent of our gold resources to the BoT as a demonstration of our patriotism,” he said, also advocating for tax exemptions on imported mining equipment to enhance competitiveness.


The Minister for Minerals, Hon. Anthony Mavunde, revealed that the government has cancelled 2,648 mining licences held by those failing to utilise them effectively, including 24 prospecting licences across 4.3 million hectares. He highlighted that 54 applications for new licences, covering an area of 13.4 million hectares, are currently under consideration.





BANK OF TANZANIA

DOMESTIC GOLD PURCHASE PROGRAM

 **10 October 2024**

The Bank of Tanzania
is purchasing gold at a

TZS 229,895.99 per gram

IMPORTANT INFORMATION

- ① **Prices:** World Market Price (TZS/g) published daily by the Mining Commission;
- ② **Payment Terms:** 100% payment after receiving the fire assay report from the approved refinery;
- ③ **Payment:** Within 24 hours, subject to confirmation of fire assay report;
- ④ **Refining cost:** The BOT will cover all refining costs;
- ⑤ **20% allocation:** This applies to all mineral rights holders and licensed dealers;
- ⑥ **Incentives:** Royalty fees 4% instead of 6%; Inspection fees 0% instead of 1%; and VAT: zero-rated; hence, sellers can claim input tax; and
- ⑦ Under this arrangement, any mineral rights holder, a licensed dealer, or a refinery with an Agreement with the BOT can sell any amount to the BOT.

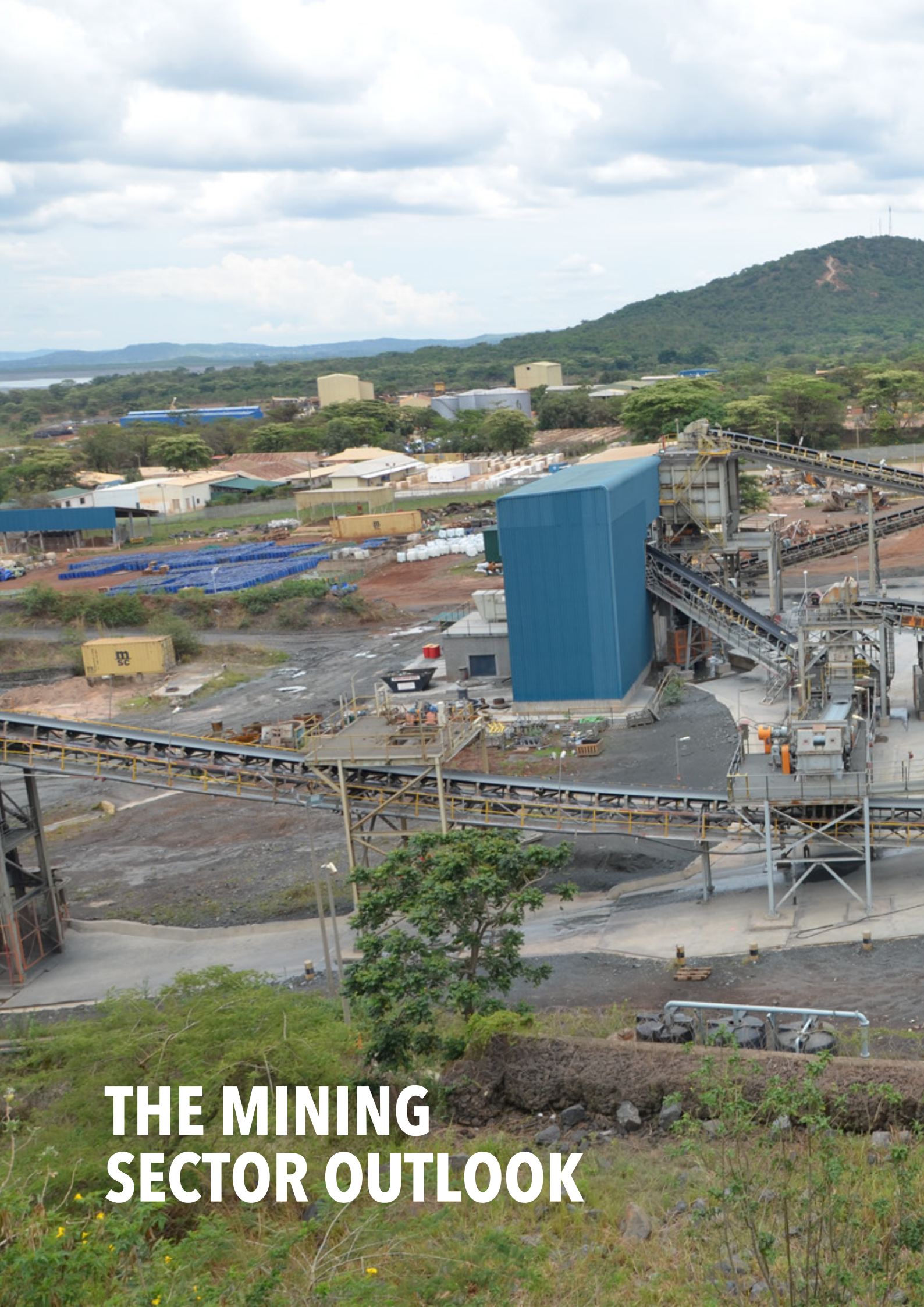
Gold sellers should deliver their gold to any of the following refineries: **Geita Gold Refinery Ltd, Mwanza Precious Metals Refinery Co. Ltd and Eyes of Africa Ltd.**



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THE MINING SECTOR OUTLOOK



Tanzania Sees Golden Opportunity as It Re-Introduces Gemstone Auctions



Tanzania is reintroducing international auctions in its gemstone mining sub-sector, providing a significant opportunity for gem buyers worldwide. This initiative follows the successful implementation of a financial empowerment system for gemstone producers, designed to support them while they wait for their materials to go to auction.]

In February 2024, a Tanzanian delegation led by the Deputy Permanent Secretary in the Ministry of Minerals, Mr. Msafiri Mbibo, travelled to Thailand to learn more about this system, which was introduced by Delgatto Capital DMCC, a U.S.-based

company, in collaboration with the Bonas Group, a leader in international gemstone auctions with over 150 years of experience.

The visit marked the delegation's second learning trip after a similar visit in September 2023. During their time with Bonas Group, the delegation gained valuable insights into how international auctions operate. Bonas Group has a solid track record, having conducted jewellery auctions for clients from countries including Brazil, Zambia, Ethiopia, Canada, Namibia, Sierra Leone, Botswana, and Mozambique.

Delgatto Capital offers a solution to one of the most pressing challenges faced by gemstone miners—limited capital. By providing funding to miners while they wait for auctions, Delgatto enables continuous production of raw materials without the need for miners to halt their activities due to financial constraints. This system allows miners to maintain their operations, ensuring a steady supply of gemstones for auction.

Mr. Mbibo emphasised the importance of this learning experience for Tanzania. "The system we observed in Thailand is precisely what our miners need, given their capital challenges.



Securing funding while waiting for auctions will greatly enhance their productivity. This visit has been a success for us," Mr. Mbibo remarked. He also invited Delgatto's executives to visit Tanzania to explore further collaboration opportunities. Rajiv Jain, Regional Director of Delgatto Capital, expressed his appreciation for the partnership with Tanzania and highlighted the country's vast mineral wealth. "Tanzania offers an excellent opportunity for collaboration, and we are excited to be a part of it," said Jain.

The government is planning to restore local and international mineral and gem auctions and exhibitions. Local auctions will be held in key production areas such as Mirerani, Mahenge, Tunduru, Dar es Salaam, Arusha, and Tanga.

The Mining Commission will manage these auctions in collaboration with the Tanzania Mercantile Exchange (TMX), utilising an electronic sales system. The

gems acquired through local auctions will then be sold in international markets.

International auctions are scheduled to take place quarterly in major Tanzanian cities like Arusha, Dar es Salaam, and Zanzibar.

Additionally, auctions will be held in international hubs like Bangkok in Thailand and Jaipur in India, further boosting Tanzania's presence in the global gemstone market.

A private company will manage these auctions on behalf of the government, leveraging its expertise to promote them and secure competitive prices on the international market. The Tanzanian Ministry of Minerals has allocated TZS 820 million in its 2024/2025 budget to support these activities.

These funds will finance training for new gemstone valuation professionals, purchase equipment, and manage local and international auctions. The Ministry's top priority is restoring

auctions and exhibitions based on successful North American, European, and Asian models.

This reintroduction of international auctions in Tanzania's mining sector offers gemstone buyers a unique opportunity to acquire high-quality gems directly from the source. The auctions provide a competitive platform for dealers to enhance their portfolios, expand their business networks, and obtain gemstones at attractive prices.

Tanzania is one of the world's most gemstone-rich countries. This initiative also promotes transparency and fair competition, benefiting both local and international players in the gemstone market.

Tanzania's renewed focus on international gemstone auctions is set to position the country as a leading destination for gem trading. Buyers will have access to some of the finest gemstones while driving economic growth and development in the mining sector.

Liganga, Mchuchuma Integrated Project



The Liganga and Mchuchuma Integrated Project represents a significant step forward in Tanzania's journey towards economic transformation.

Nestled in the Ludewa District in the Njombe Region, this ambitious initiative aligns with the government's National Development Vision 2025, aiming to drive industrialisation and stimulate economic growth.

The project promises not only to create employment opportunities but also to significantly boost the nation's GDP by establishing vital iron industries. The roots of this project trace back to 1996 when the Tanzanian government

recognised the necessity of basic industries for economic development. This led to a directive for the development of the Liganga and Mchuchuma projects, which are crucial for providing essential raw materials for various industries.

Following an international tender process in 2007, the Sichuan Hongda Group Company Limited (SHG) from China was chosen as the strategic investor, bringing valuable technological expertise to the table. At its core, the project comprises five key components: the Liganga Iron Ore Mine, which has the capacity to produce 2.9 million tonnes of iron ore

annually; the state-of-the-art Iron and Steel Complex, capable of producing 1.1 million tonnes of finished products per year; the Mchuchuma Coal Mine, set to produce 3 million tonnes of coal annually; a 600 MW coal-fired thermal power station; and a 220 KV power transmission line to connect the facilities and ensure efficient power distribution.

Recent developments indicate substantial progress. Exploration activities have confirmed approximately 126 million tonnes of iron ore within a 10-square-kilometre area, with total reserves estimated to reach between 700 million and 1.4



billion tonnes.

Likewise, the Mchuchuma Coal Mine boasts proven reserves of 428 million tonnes and offers a remarkable lifespan of over 140 years. This robust resource base positions Tanzania favourably to become a major player in the mining sector.

However, the journey has not been without its hurdles. Since 2015, the project has faced significant delays due to issues surrounding the performance contract and compliance with new mining legislation enacted in 2017. The government has actively intervened to address these challenges, forming special negotiation teams and holding high-level meetings to navigate the complexities involved. Despite the initial selection of SHG as the investor, recent uncertainties regarding their financial stability have raised concerns over the continuity of the project.

Compensation efforts for those affected by the project are ongoing, with significant progress made in recent months. By October 2024, the majority of impacted individuals had received compensation totalling

approximately TZS 15.42 billion, demonstrating a commitment to addressing social concerns alongside economic ambitions.

The anticipated benefits of the Liganga and Mchuchuma project are substantial. Upon its launch, the project is expected to generate significant annual revenues—approximately USD 730 million from iron and steel sales alone. In addition, it promises to create direct employment for 6,600 individuals and indirectly support over 26,400 jobs, a crucial boost to the local economy and a means to uplift livelihoods in the region.

The project also offers an opportunity for broader industrial development. Supplying essential raw materials will foster the establishment of various other industries, ultimately stimulating the manufacturing sector. The introduction of advanced processing technologies is set to enhance the country's industrial capabilities and infrastructure.

Furthermore, the power plant associated with the project will contribute to the national electricity supply, providing 350 MW to the

national grid, thereby supporting other industries and local communities. This infrastructure development will encompass improvements in transportation and utilities, benefiting the mining sector and the wider community.

The project will also invest in social infrastructure through corporate social responsibility initiatives, such as schools and healthcare facilities, ensuring that the benefits extend to the local population. Training and skills development opportunities will enhance the workforce, equipping them for future employment.

While the Liganga and Mchuchuma Integrated Project faces its share of challenges, its potential to transform Tanzania's industrial landscape cannot be overstated, the government's commitment to resolving the current issues reflects a determination to harness the country's rich mineral resources for the prosperity of its people. As negotiations progress and hurdles are overcome, this project stands poised to become a cornerstone of Tanzania's economic revolution, aligning closely with the nation's Vision 2025 goals.

Why Financing Key for Sustainable Mining Industry In Tanzania



Mining is a costly endeavour by its very nature, yet many nations have adeptly transformed their mineral wealth into economic prosperity, using these resources to meet social aspirations and address the challenges posed by mining activities.

The mining sector requires substantial upfront investment for exploration, equipment, and infrastructure. Securing financing is crucial for companies to access the necessary funds to initiate and sustain operations. Moreover, as technological advancements continue to evolve, access to funding supports vital mineral research and development. This enables adopting advanced

technologies that enhance efficiency, safety, and environmental sustainability.

However, mining is fraught with risks stemming from fluctuating commodity prices, regulatory changes, and environmental concerns. Adequate financing can help companies navigate these uncertainties and maintain operational stability. Importantly, investments can also be channelled towards sustainable practices, minimising the environmental impact of mining and promoting responsible resource extraction.

The Tanzanian government firmly believes that a well-financed mining

sector is essential for the industry's growth, stability, and sustainability. It has the potential to create jobs and drive economic development in local communities and across the country. This conviction has led the Ministry of Minerals to engage local financial institutions, raising awareness of the importance of financing mining activities throughout the value chain. Historically, local banks have been hesitant to invest in mining operations, viewing them as high-risk ventures akin to gambling.

However, a recent turning point occurred on September 13, 2024, when an agreement worth USD 179 million was signed between



Tanzania-based Black Rock Mining and three African banks, namely the Development Bank of Southern Africa (DBSA), the Industrial Development Corporation, and Tanzania's CRDB Bank Plc. This agreement aims to advance the Mahenge Graphite Project, with CRDB Bank Plc providing USD 66 million and taking on roles as the joint mandated arranger, facility agent, onshore account bank, and onshore security bank for the initiative.

Abdulmajid Nsekela, CEO of CRDB Bank Plc, expressed pride in the bank's garnered trust from major investors. "This project will not only deliver commercial benefits for the bank but also stimulate development in the

Mahenge and Ulanga areas, contributing to the national economy through taxes and foreign exchange," stated Mr. Nsekela.

Another noteworthy project receiving financing from CRDB Bank Plc is Geita Gold Mines Limited (GGML).

Other local banks, including NMB Bank Plc, National Bank of Commerce (NBC), KCB Tanzania, and Azania Bank, are also stepping up to finance mining activities. NMB, for instance, has allocated around TZS 50 billion for small-scale mining and TZS 150 billion for larger operations.

This breakthrough impacts Tanzania's

Mineral Policy and showcases local banks' potential to play a vital role in fostering inclusive growth. With Tanzanian banks increasingly financing such projects, the country is better positioned to retain more economic value generated from its mineral resources.

The government is optimistic that CRDB's success in structuring and executing this agreement will encourage other local financial institutions to finance mining operations, ultimately leading the charge in shaping the future of Tanzania's mining sector as the nation aspires to become a global mining powerhouse.

Building Skilled Workforce for Sustainable Mining Sector Growth



Despite being strategically located in a mineral-rich region, Tanzania has faced challenges in harnessing its geological wealth. In recent years, the country has embarked on an ambitious initiative to equip its population with the technical expertise necessary to operate advanced mining technologies and manage complex operations effectively.

The Tanzanian government has made significant investments in educational programmes tailored specifically to the mining industry's needs. These efforts aim to cultivate a skilled workforce proficient in modern mining techniques, mineral processing, safety

protocols, and environmental management practices. Currently, Tanzania boasts of four higher learning institutions and numerous colleges offering mining and related courses.

The University of Dar es Salaam offers degrees in Chemical and Process Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, and Quantity Surveying. The University of Dodoma offers a diverse range of programmes, including Bachelor of Science degrees in Applied Geology, Environmental Engineering, and Mining Engineering. The Mbeya University of Science and

Technology (MUST) also contributes to this educational landscape with a variety of diplomas and degrees in engineering fields, including Mining Engineering and Laboratory Science and Technology.

On the other hand, the Dar es Salaam Institute of Technology (DIT) offers a comprehensive set of technician certificates and diplomas, along with Bachelor's degrees in Mining and Civil Engineering. The Nelson Mandela African Institution of Science and Technology also provides courses in Hydrology, Water Resources Engineering, and Environmental Science and Engineering.



These educational programmes have improved operational efficiency in Tanzania's mining, processing, and mineral value-addition sectors.

A notable impact is seen in the increasing number of mines that employ Tanzanians to manage their operations. For instance, Geita Gold Mine Limited (GGML) and all Barrick Mines are managed predominantly by Tanzanian professionals, with GGML operating at approximately 97 percent Tanzanian management. Shanta Gold Mine Limited stands out with its operations being entirely managed by Tanzanians.

The presence of a professional and skilled workforce enhances the ability of investors to produce high-quality products at lower operational costs, making Tanzania an attractive choice for mining investments.

As the country continues strengthening its educational infrastructure and developing its human resources, it is

poised to become a leader in sustainable and responsible mineral extraction.

With a focus on building local capacity, Tanzania is not only improving its mining operations but is also setting a precedent for resource-rich countries seeking to maximise their mineral wealth while ensuring environmental stewardship and community benefit. The mining sector has placed Tanzania in the higher ranks among African economies in terms of FDI attraction and non-oil economies.

Tanzania is endowed with a variety of industrial minerals and precious metals, including iron ore, soda ash, coal, clay soil, uranium, gold, diamond and Tanzanite, a rare gemstone so far worldwide being found only in Tanzania.

Through the Third National Five-Year Development Plan (FYDP III), the East African nation seeks to promote natural resources-based industrialisation with

key interventions such as strengthening the management and control of large-scale and medium-scale mining; empowering small-scale miners including youth and women to participate in feasible mining activities by licensing areas with basic geological information, necessary training on productive mining, technologies and equipment and mining business through State Mining Corporation (STAMICO).

Other interventions include; strengthening the Mining Commission, the Geological Survey of Tanzania (GST), the Tanzania Gemmological Centre (TGC) and the Tanzania Extractive Industries Transparency Initiative (TEITI); promoting mineral value addition and beneficiation; identifying, promoting and facilitating extraction of rare minerals; and strengthening mineral markets, demonstration centres and centres of excellence.

Reforms Make Vibrant Tanzania's Mining Sector



Significant transformation has been witnessed in Tanzania's mining sector following reforms in legal, administrative and institutional frameworks. These reforms were implemented in an effort to safeguard Tanzania's wealth of mineral resources, create jobs for Tanzanians, and ensure that the mining sector plays a significant role in the nation's socio-economic development.

The 2017 Mining Act 2010 amendments were significant turning point. The amendment, among other things, established the Mining Commission, Resident Mines Offices and Mines Resident Officers while

de-establishing Zonal Mines Offices and the Tanzania Minerals Audit Agency (TMAA). These amendments transferred the responsibilities of the Mining Advisory Board (MAB), Zonal Mines Offices, the TMAA, and some of the Commissioner for Minerals' duties to the Mining Commission. This Commission is not just a new entity, but a robust regulatory body, primarily mandated to oversee and regulate the proper and efficient implementation of the Mining Act Cap 123, providing a strong governance structure for the sector.

Other improvements involved local content, corporate social responsibility,

and the integrity pledge issues.

Accordingly, mining companies must train and hire Tanzanians in compliance with an approved local content plan; reach agreements with local government authorities regarding corporate social responsibility; adhere to ethical business standards and support national campaigns against corruption; and compensate for environmental harm caused by mining-related pollution.

In 2019, the government took a proactive step by setting up mineral buying centres and markets. These markets have been instrumental in



combating smuggling, boosting government revenue, streamlining the traceability of minerals, and providing mineral producers with reliable, stable, and effective mineral markets. More importantly, they guarantee that mineral dealers and brokers are readily monitored and facilitated by the government, demonstrating the government's unwavering commitment to the integrity of the mineral markets and the welfare of the mining sector.

In 2023, for example, the mineral markets saw the trading of 17.25 tonnes of gold, 13,311.73 carats of diamonds, and numerous other minerals, enabling the government to collect TZS 176.57 billion in royalties, inspection fees, and service levies. This has contributed to an increase in government revenue collection, with the Mining Commission collecting TZS 688.5 billion in fiscal year 2023/2024, compared to TZS 491.7 billion in fiscal year 2019/2020.

The government purchased five drill rigs customised for use by small-scale

miners and entrusted them to the State Mining Corporation (STAMICO). STAMICO operates the rigs on a cost-recovery basis as part of the government's effort to assist small-scale miners in conducting exploration drilling at affordable prices. As of September 2024, STAMICO had drilled 5,819.53 meters for 19 beneficiaries in the small-scale mining sites of Itumbi, Buhemba, Bahi, Mpwapwa, and Lwamgasa.

The government's actions have sparked the sector's administration, revenue collection and Tanzanians' participation in small- and medium-scale mining operations. This has inspired many African nations to visit Tanzania and study its transformation narrative, particularly with regard to the designation and demarcation of certain potential areas for small-scale mining, the formalisation and administration of small-scale mining; government revenue collection mechanisms and arrangements, the operationalisation of mineral markets and buying centres;

and STAMICO's management of demonstration centres.

For example, during the 2023 6th Geita Minerals Technologies Exhibition, a Ugandan delegation visited the Geita region to learn about mining project exploration and development, as well as general mining sector management.

In November 2023, a Ghana Extractive Industry Transparency Initiative (GHEITI) delegation travelled to Tanzania to share experiences and learn about Tanzania's artisanal and small-scale mining approaches. In 2024, another delegation from Malawi's Ministry of Mining travelled to Tanzania to learn about STAMICO's operating tactics, resource management systems, and successful public-private partnerships.

This indicates that the Tanzanian government's initiatives have had positive consequences on the sector.



**A BILLION
REASOSNS TO
BELIVE IN TANZANIA**





Nickel Project in Tanzania to Become a Potential Game Changer in Addressing Climate Change

Tanzania's nickel project, backed by investments from the United States and BHP Group Limited, an Australian multinational mining and metals public company, is poised to play a critical role in addressing global climate challenges.

This ambitious initiative, which aims to drive a low-carbon economy, highlights Tanzania's commitment to having a sustainable economy based on environmental protection.

The project, which has drawn substantial investment, promises to catalyse growth across multiple sectors. In September 2024, the Minister for Minerals, Hon. Anthony Mavunde, and

Tembo Nickel officials held talks with a delegation from the U.S. led by U.S. Ambassador to Tanzania, Michael Battle.

Their discussions centred on a USD 50 million investment, a part of a broader effort that includes other global partners like Canada, the U.K., and Japan.

The Kabanga Nickel project entails constructing a state-of-the-art mineral refinery in Kahama District, Shinyanga Region.

The refinery, with an estimated cost of USD 500 million, is expected to boost Tanzania's capacity to process critical

minerals and address climate challenges.

According to Catherine Raw, BHP's Chief Development Officer, the minerals extracted from this project will be vital for global efforts to transition to cleaner energy sources.

Hon. Mavunde praised President Samia Suluhu Hassan for fostering stronger diplomatic and economic ties with the U.S., which have led to increased foreign investments.

He attributed these developments to President Samia's "4R" philosophy of reconciliation, resilience, reform, and rebuilding—which has transformed the

investment landscape. This surge in foreign interest was further bolstered by U.S. Vice President Kamala Harris's visit to Tanzania in March 2023, which reaffirmed bilateral relations.

The government of Tanzania holds a 16 percent stake in the Kabanga Nickel Project through its partnership with Tembo Nickel Corporation, while Kabanga Nickel Ltd (UK) owns the remaining shares.

Production is slated to begin in 2025, with a projected annual output of 40,000 tonnes of nickel, 6,000 tonnes of copper, and 3,000 tonnes of cobalt. Tanzania is positioning itself as a leading global producer of sustainable metals, essential for the growing demand driven by the transition to a low-carbon economy.

The Kabanga Nickel Project holds the world's largest development-ready nickel sulfide deposit, with an estimated 1.86 million tonnes of nickel equivalent resources.

Dr. Hilderbrand Shayo, an economist, said the refinery's focus on value-added nickel production would enhance Tanzania's export earnings and provide long-term economic benefits.

By processing minerals locally, Tanzania will shift from exporting raw materials to producing higher-value products, boosting national revenue and reducing trade deficits.

Dr. Sylvester Jotta, a business analyst at St. Augustine University of Tanzania (SAUT), highlights the project's potential to create jobs and stimulate local economies.

The demand for goods and services during the refinery's construction and operation will stimulate growth of small businesses and benefit workers, while payment of other government taxes including Pay-As-You-Earn (PAYE) will increase government revenue.

The refinery will also help mitigate

economic instability caused by the closure of the Buzwagi mine by constructing and operating its refinery at the very same area, driving growth in both regional and national GDP. Long-term benefits for Tanzania's economy.

Fortius Rutabingwa, Executive Director of Research at Orbit Securities, emphasizes that the Kabanga Nickel refinery will enhance local mineral resource beneficiation.

The project will not only create direct and indirect employment but also contribute to the government's revenue stream through taxes. Moreover, the refinery is set to leverage local energy sources like the Julius Nyerere Hydropower Project (JNHPP), reinforcing Tanzania's commitment to sustainable development.

As Tanzania continues to position itself as a hub for mineral processing, the Kabanga Nickel Project represents a transformative opportunity.



Tanzania Gets Ready to Unleash Graphite Wealth



Tanzania, with its vast graphite reserves, is prepared to capitalise on the rising global demand for graphite. According to estimates, Tanzania possesses almost 5 percent of the world's estimated 323.8 million tonnes of graphite reserves. The country's most significant graphite deposits are concentrated in its central and southeast regions.

Graphite is a form of carbon that crystallizes into layers of graphene. This versatile mineral offers unique qualities that have allowed for millennia of technological growth.

Many countries consider graphite a critical mineral due to its usefulness in

manufacturing batteries, brake linings, lubricants, pencils, powdered metals, steelmaking, refractories and irreplaceability in certain applications. The global demand and consumption of graphite are projected to rise steadily, primarily driven by the expansion of the lithium-ion battery market. The World Bank predicts that production could increase by nearly 500 percent by 20

Tanzania is poised to unlock its graphite potential as the mineral extraction gains momentum in line with the country's mining development goals.

Graphite projects currently underway

include Lindi Jumbo, Bunyu, Chilalo, Epanko, Mahenge, Nachu, and Bagamoyo. They range in status from licencing exploration to mine development to ramp-up production. For instance, the Lindi Jumbo Graphite Project, owned by Walkabout Resources (ASX:WKT), is a high-grade, high-margin, large flake graphite project located in south-eastern Tanzania, approximately 200km from the port of Mtwara.

The project's definitive feasibility study, updated in 2019, stated that the project hosts a high ore grade reserve of 5.5mt at 17.9 percent total graphitic carbon (TGC).



The annual production is estimated to be 40,000 tonnes of premium natural flake graphite over the life-of-mine of 24 years.

The project is in the ramp-up period and has started production using individual plant circuits. The first graphite concentrate from the Lindi Jumbo project was bagged in May 2024.

Through its ASX Announcement of 04 September 2024, Walkabout Resources informed that its ramp-up production during August averaged more than 55 bags of bagged dry graphite concentrate a day, with the maximum concentrate produced in a single day being 94 bags.

The Bunyu Graphite Project, located in Mtwara Region, is wholly owned by Volt Resources Limited (ASX: VRC). It is about 140km from the Mtwara port. The Bunyu Resource is one of the largest graphite deposits in the world and the largest in Tanzania with an

estimated resource of 461 million tonnes at 4.9 percent TGC for 22.6 million tonnes contained graphite and a proven reserve of 127 million tonnes at 4.4 percent TGC.

The project is designed with a two-stage development strategy. Stage one is designed to produce 24,780 tpa flake graphite (at 6.26 percent TGC feed grade), and stage two involves expansion, increasing annual production to 170,000 tpa flake graphite.

Stage one Bunyu Graphite has all been sold under binding offtake agreements with Graphex Group Limited and Qingdao Baixing Graphite Company Ltd.

The Chilalo Graphite Project, located in the Nachingwea District in Lindi Region, southeast Tanzania, is owned by a joint venture company, Kudu Graphite.

Evolution Energy Minerals (ASX: EV1,

FSE: P77) owns an 84 percent interest in Kudu Graphite through its wholly-owned subsidiary, Evolution Energy Minerals UK, while the Tanzanian government owns a 16 percent free-carried interest. The project's 2023 DFS updates indicate that Chilalo hosts a high-grade graphite deposit with an estimated mineral resource of 67.3Mt at 5.4 percent TGC for 3,667 Kt contained graphite.

As of March 2023, the project is estimated to contain a probable ore reserve of 8 megatonnes (Mt) grading 10.5 percent TGC and total contained graphite of 836,000 tonnes. The project will be an open pit mine for an estimated LoM of 17 years and a preproduction capital estimated at USD 120 million.

The Epanko Graphite Project is located in the Mahenge District in southeast Tanzania. EcoGraf (ASX: EGR) signed a framework agreement with the Tanzanian Government for the project.



This resulted in a joint venture entity, Duma TanzGraphite, which was incorporated to develop and operate Epanko. EcoGraf holds an 84 percent interest, and the government holds a 16 percent free-carried interest.

The Epanko project is one of Africa's largest development-ready graphite mineral resources, now totalling 290.8 metric tons at 7.2 percent TGC, according to EcoGraf's ASX announcement of March 11, 2024. The final milestone is to complete the funding process so construction can commence as soon as possible. The Mahenge project covers 324 square kilometres of exploration tenements in Tanzania's Ulanga district, approximately 250 km north of the border with Mozambique.

The project will be developed and operated by Faru Graphite Corporation, in which Black Rock Mining (ASX: BKT) has a share of 84 percent, and the government of Tanzania has a share of 16 percent as a free-carried interest. It is one of the largest JORC-compliant flake graphite resources globally, with 213 million tonnes at 7.8 percent TGC and a reserve of 70 million tonnes at 8.5 percent TGC.

Black Rock's DFS for the project

considers a four-stage construction schedule to deliver up to 340,000 tonnes per annum of 98.5 percent graphite concentrate for 26 years of 98.5 percent loss on ignition (LOI) premium graphite flake concentrate with the ability to produce Ultra Purity flake of 99 percent LOI.

The Nachu Graphite project, located west of the coastal city of Lindi in southeast Tanzania, is fully owned by Magnis Resources (ASX:MNS). The project is approximately 220km away from the Tanzanian port of Mtwara. Due to its large size, the project demonstrates significant potential and is estimated to produce 240,000 tonnes per year over the initial 11.7 years of operation.

Over 82 percent of the graphite concentrate produced at Nachu Graphite Project is above 150 microns, making the product very coarse. The graphite concentrate below 300 microns will be produced at 99 percent TGC, which is extremely high compared to the current industry standard of 94 – 96 percent TGC. The Bagamoyo Graphite project is located in the Bagamoyo District, Coast Region of Tanzania. Marula Mining PLC has 73 percent interest in the 22 primary graphite mining licenses

covering approximately 180 hectares. The project is in the exploration phase and exploration efforts have identified two significant graphite zones at Mihuga and Saadan South. August 2023 assay results confirmed the high-grade nature of graphite mineralization, particularly at the Mihuga Prospect, where total graphite content reached up to 19.71 percent with an average grade of 11.97 percent TGC. This finding underscores the promising potential of the Bagamoyo project.

In conclusion, Tanzania is positioning itself as a key player in the global graphite market, with its rich deposits and strategic projects across various regions. The nation's focus on developing its graphite resources aligns with the increasing global demand, mainly driven by the expanding lithium-ion battery sector.

As these projects progress from exploration to production, Tanzania's potential to supply high-quality graphite to international markets is undoubtedly strengthened. By harnessing these resources efficiently, Tanzania is poised to boost its mining industry and contribute significantly to the global supply chain of critical minerals, driving economic growth and technological advancement.



Helium Becomes Key Player in Tanzania's Mining Industry

Helium, a non-renewable and essential resource, plays a crucial role in the technological, scientific, medical, and manufacturing industries. Its global demand is projected to increase significantly, reaching 10 billion cubic feet (Bcf) by 2030 from an estimated 6 billion Bcf annual

This growing demand presents an opportunity for countries rich in helium reserves to capitalize on the market. With its vast, untapped helium reserves, Tanzania is emerging as a key

player in the mining industry. The entry of major exploration companies, such as Helium One Global Ltd and Noble Helium Limited, marks a significant step towards tapping into the country's potential helium resource

Tanzania is uniquely positioned within the East African Rift System (EARS), which spans several countries in East Africa and offers ideal geological conditions for helium accumulation. The East African Rift has garnered attention for its potential to supply

helium to meet global needs. Specifically, Helium One Global Ltd and Noble Helium Limited are leading exploration and development efforts in Tanzania

Helium One Global Ltd holds prospecting licenses (PLs) across three key helium-rich areas: Rukwa, Balangida, and Eyasi. The Rukwa project in the Rukwa Rift Basin in southwestern Tanzania has seen significant advancements. This basin is part of the larger East African Rift



System, which enhances its helium productivity

Noble Helium Limited is focused on multiple projects across Tanzania's East African Rift, including North Rukwa, North Nyasa, Eyasi, and Manyara. The North Rukwa project stands as its flagship initiative, showing promising helium flow potential. Recent developments in helium exploration highlight the growing momentum of this industry in Tanzania.

In September 2024, Helium One Global Ltd made a significant announcement regarding the discovery of substantial helium flows during well tests in the Itumbula West area of the Rukwa project.

This discovery is pivotal, as the company has now submitted a mining license (ML) application to the Tanzanian authorities, aiming to advance the commercial development of the helium project. Securing the ML would be a crucial milestone for both Helium One and Tanzania's entry into the global helium supply chain.

The company's decision to allow some of its PLs to lapse in less prospective regions reflects a calculated approach to resource management, reducing unnecessary expenditures. By

relinquishing PLs in less promising areas such as parts of Balangida and Eyasi, Helium One saved approximately 177,600 USD in annual fees, focusing on higher-potential zones like Rukwa.

Noble Helium's drilling activities have taken significant steps to advance its flagship North Rukwa project. The execution of a drilling contract with local contractor BoreXpert Limited highlights the company's commitment to moving towards production. The Mbelele structure within the North Rukwa Basin has shown promising signs of helium production potential, and the collaboration with the University of Dar es Salaam has reinforced the commercial viability of this region.

In addition, Noble Helium's exploration of the North Nyasa project, where soil gas surveys demonstrated helium concentrations of up to 7.8 parts per million, indicates further potential for helium discovery. However, its projects in Eyasi and Manyara remain in the early exploration phases.

The developments in Tanzania's helium exploration industry come at a crucial time. Global helium demand surges due to its application in critical sectors,

such as MRI machines, semiconductor manufacturing, and space exploration. The advancements made by Helium One and Noble Helium suggest that Tanzania could become a major supplier of helium, contributing to the diversification of its economy and generating significant revenue streams. The discovery of commercial quantities of helium in Tanzania could not only establish the country as a major player in the global helium market but also position it as a key partner for industries reliant on this non-renewable resource.

The potential for further discoveries in areas like North Nyasa and the early-stage Eyasi and Manyara projects ensures that Tanzania's helium industry may continue to grow for years to come.

Tanzania's strategic location within the East African Rift System and the significant progress made by Helium One Global Ltd and Noble Helium Limited underscore the country's potential to become a global leader in helium production.

As the demand for helium rises, Tanzania stands at the threshold of a major industrial opportunity. This opportunity could transform its economy and place it at the forefront of global helium supply.

Billion Reasons to Invest in Tanzania's Mining Industry



Tanzania, rich in natural resources and geological diversity, has emerged as one of Africa's top destinations for mining investments.

Over the past few decades, the mining sector has played a pivotal role in the country's economy, contributing significantly to national revenue, job creation, and foreign exchange earnings.

For investors looking to capitalize on Africa's vast mineral wealth, Tanzania presents a wealth of opportunities that are difficult to ignore.

Abundant Mineral Wealth

Tanzania boasts a diverse range of minerals, including precious metals, rare gemstones like Tanzanite, the exquisite Winza ruby and the coveted Mahenge Spinel, as well as various industrial and energy minerals. As global demand for these resources grows, Tanzania offers unparalleled

opportunities for investment in exploration, mining, beneficiation and the supply of goods and services.

The country's substantial gold reserves are concentrated in the Archean greenstone belts and banded iron formations around Lake Victoria, providing a solid foundation for investors and positioning Tanzania as a premier mining destination.

Political Stability And Supportive Policies

Tanzania's enduring political stability is one of its greatest assets. Since gaining independence in 1961, the country has maintained peace and a stable multiparty democracy, ensuring a secure environment for investment. The mining sector is governed by a robust legal framework, anchored by the Mineral Policy of 2009 and the Mining Act Cap. 123, which guarantees transparency, predictability, and competitiveness for investors.

Recent amendments to the Mining Act have further improved the investment climate, reducing taxes on mining equipment and streamlining the licensing process.

Strategic Location And Growing Infrastructure

Strategically located in East Africa, Tanzania serves as a gateway to the region, with easy access to the Indian Ocean and bordering several landlocked countries. The nation's infrastructure is rapidly advancing, with significant investments in roads, railways, ports, and airports. The ongoing construction of the Standard Gauge Railway (SGR) will link Tanzania with its neighbours, enhancing logistical efficiency and facilitating the transport of minerals to global markets.

Comprehensive Geological Data

Tanzania has made great strides in geological mapping and data



collection, with 98 percent of the country already surveyed.

High-resolution airborne geophysical surveys have been conducted across much of the land, with plans to cover at least 50 percent by 2030. This extensive geological data is readily available to investors, reducing exploration risks and costs while enabling more informed decision-making.

Competitive Operating Costs

Tanzania has taken significant steps to reduce energy costs in mining operations through initiatives like the Mtwara natural gas project and the Julius Nyerere Hydroelectric Project. These efforts have lowered production costs, making mining operations more profitable and attractive to investors.

Access To Domestic and International Markets

As a member of the East African Community (EAC) and the Southern African Development Community (SADC), Tanzania offers access to large regional markets. Mineral products such as gold and Tanzanite are sold internationally, with Dar es Salaam port serving as a key export hub.

The government's support for domestic and international auctions of

gemstones further enhances market accessibility for investors.

Strong Support Services

Tanzania's mining sector benefits from a well-established network of support services, including a growing skilled workforce, access to technical expertise, and a robust financial sector. These services help reduce operational risks and costs, making Tanzania a more attractive investment destination. Furthermore, the country's adherence to international standards in mining ensures that operations are conducted safely, sustainably, and efficiently.

Investment Security And Stability

Tanzania's commitment to investment security is reinforced by the "4Rs" philosophy—reconciliation, Resilience, Reforms, and Rebuilding—championed by Dr Samia Suluhu Hassan, President of the United Republic of Tanzania. This approach ensures that the country continues to progress as a united and prosperous nation, providing a stable and conducive environment for businesses to grow and thrive.

Expanding economy and mining sector
Tanzania's economy has been steadily growing, with an average GDP growth rate of 5.5 percent over the past decade. The mining sector has been a key driver of this growth, with its


contribution to GDP rising from 3.4 percent between 2007 and 2008 to 9.1 percent in 2022. The sector's contribution is projected to reach 10 percent by 2025, presenting investors with a dynamic and expanding market.

Adoption of Advanced Technologies

Tanzania's mining sector is embracing modern technologies to enhance efficiency and productivity. Companies are increasingly employing drones, geospatial technologies, and automation to streamline operations and improve resource management. These technological advancements not only boost profitability but also promote sustainability in mining activities.

Tanzania stands out as a premier destination for mining investment, offering a unique blend of abundant mineral resources, political stability, strategic location, and a favourable investment climate.

With its commitment to sustainable practices and ongoing infrastructure development, Tanzania is well-positioned to remain a key player in the global mining industry. Tanzania's mining sector provides billions of reasons to invest for investors seeking lucrative opportunities in a stable and supportive environment.



**Value
Addition**



Tanzania Enhances Domestic Mineral Processing



Tanzania's mining sector is not just about extraction—it's about unlocking the full potential of the country's rich mineral resources.

This is why Tanzania's Ministry of Minerals, through the Mining Commission, has ramped up its efforts to promote value addition, ensuring that more minerals are refined and processed domestically.

This strategy is poised to boost the economy, create jobs, and position Tanzania as a leader in value-added mining products.

A significant step forward came with the introduction of the Mineral (Value Addition) Regulations of 2020, which provide the framework for refining minerals within Tanzania. The regulations are designed to maximize the value derived from the country's abundant natural resources, ensuring that minerals are not just exported raw but are processed to enhance their worth before reaching international markets.

The Minister for Minerals, Hon. Anthony Mavunde, says from July 2023 to March 2024, one of the notable achievements in this regard was the issuance of a license to Tembo Nickel

Refining Company Limited. This license allows the company to refine nickel, cobalt, and copper, marking a significant development in the country's refining capacity. As more licenses are issued, Tanzania is on the cusp of establishing a robust value-addition industry for these key minerals.

"The Ministry has also been actively engaged in discussions with large-scale gold miners operating in the country. The goal is to ensure that a portion of the gold they extract is refined locally in Tanzania's growing gold refining industries," says Hon. Mavunde.

This move is expected to reduce



reliance on exporting unrefined gold and instead capture more of the profits and economic benefits associated with the final stages of gold production. Hon. Mavunde says that by refining gold domestically, Tanzania can enhance its position in the global gold market, offering value-added products rather than raw materials, adding that this is envisaged to encourage local job creation and strengthen the mining value chain.

Leading the way in gemstone value addition drive is the Tanzania Gemmology Center (TGC), located in Arusha. As the country boasts an array of gemstones, including the rare and globally prized Tanzanite, TGC is crucial to the government's vision of

transforming Tanzania into a hub for gemstone value addition.

The TGC offers specialised training in gemstone and metallic mineral value addition. By equipping Tanzanians with these essential skills, the Centre is fostering a generation of local experts capable of adding value to Tanzania's precious resources.

Hon. Mavunde says the training of local experts is vital for boosting the domestic gemstone industry and making Tanzania a major player in the global gemstone market. Recognising the importance of creating an enabling environment for value addition, the Ministry has introduced several key incentives. Royalties for

minerals sold to gold refining industries within Tanzania have been reduced from 6 percent to 4 percent, and the 1 percent inspection fee has been abolished.

These changes not only make refining in Tanzania more attractive to investors but also ensure that more of the country's wealth is retained within its borders, benefiting local businesses and workers.

The government's emphasis on value addition is not just about increasing revenues—it's about transforming the mining sector and ensuring that Tanzanians benefit from their country's natural wealth.

Geita Gold Refinery: Revolutionizing Gold Refining for Tanzania



The Geita Gold Refinery (GGR), located in the Geita Region of Tanzania, is a game-changer in the nation's mining sector. It is not just a refinery but a technological marvel that is revolutionizing the way gold is refined.

Serving a diverse range of mining operators, from artisanal and small-scale miners to large-scale producers, the refinery is leading the charge in refining Tanzania's gold, adding value to the mineral before it reaches the global market. The facility, with its cutting-edge technology, can process up to 15 kilograms of gold every 8 to 15 minutes, a feat that was

previously unimaginable. This is a testament to Tanzania's commitment to enhancing mineral beneficiation and boosting revenue from its vast natural resources.

Equipped with state-of-the-art laboratory technology, including electric and induction furnaces as well as advanced XRF machines, the refinery offers the most accurate assay results, ensuring that both small and

large operators receive precise value for their gold. The lab's unique design allows miners and clients to view the assaying process, ensuring transparency and fostering trust in the system.

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GGR has achieved significant milestones, becoming one of the few African refineries to receive five prestigious LBMA (London Bullion Market Association) ISOs: Information Security Management System (ISO:

27001:2013), Quality Management System (ISO: 9001:2015), Environmental Management System (ISO: 14001: 2015), Occupational Health and Safety Management System (ISO: 45001:2018), and Testing and Calibration Laboratories Program (ISO: 17025:2917). These certifications position GGR as a key player in responsible mineral sourcing, aligning with both national goals and international standards.

Politically, GGR's success contributes to Tanzania's broader vision of economic transformation under initiatives such as Vision 2025. By enhancing the country's ability to refine its own gold, the refinery is adding value domestically and securing its place in the global gold market. GGR's ability to complete the Responsible Mineral Initiative (RMI) assessment—a crucial requirement for global gold supply chains—marks it as the only refinery outside South Africa to achieve this in Africa. This demonstrates Tanzania's commitment to responsible and sustainable mining, a key element in the government's development agenda.

In May 2024, during the OECD Forum on Responsible Mineral Supply Chains, the LBMA commended GGR for completing the RMI assessment and for its efforts to ensure that its supply chain is free from conflict-affected materials. This achievement underscores GGR's commitment to addressing governance challenges within the artisanal and small-scale

mining (ASM) sector, which has historically faced unsupervised operations and criminal activity issues. In line with government policies aimed at formalizing ASM operations, GGR's partnership with LBMA member StoneX to implement the Geoforensic Passport further strengthens its credibility.

With RMI conformance, GGR has significantly elevated its status, giving global gold refiners confidence that they are engaging with a credible and responsible supplier. The refinery's direct connection to the world gold spot price market via its LBMA-accredited off-taker allows it to offer competitive pricing in real-time, ensuring that all miners, regardless of scale, receive fair market value for their gold. This immediate payment system enables miners to reinvest in their operations, driving productivity and supporting Tanzania's national development goals.

As GGR moves forward, its ambition to become the second LBMA-accredited refinery in Africa by 2025 is a testament to Tanzania's growing influence in the global gold market. The Tanzanian government's support for such initiatives reflects the strategic importance of the mining sector in the country's economic future. By empowering miners of all scales, GGR plays a pivotal role in advancing national mining policies, contributing to Tanzania's industrialisation agenda, and securing a competitive position in the global economy.



CAPTAINS OF THE INDUSTRY



Leminatha Breaks Mining Business Ceiling as She Scoops Prestigious Award



A chilly night of October 2023 left an indelible memory to 38-year-old Leminatha Cornel Kabigumila as she was decorated with the Best Woman in the Mining Industry, an award offered by the Ministry of Minerals during the Tanzania Mining and Investment Forum held in the commercial capital Dar es Salaam.

"This award has greatly motivated me, and it has encouraged me to break the

ceiling in the mining industry," beamed the mother of two shortly after she had received the award from the Malawian Minister for Mining, Monica Chang'anamuno, during the Usiku wa Madini event, held annually as part of the forum.

Leminatha, now a well-established entrepreneur in the mining industry, said the award greatly motivated her. It led her to establish Rare Mining East

Africa Ltd, which now holds 21 tin mining licenses.

She said she paid the government TZS 150 million to reapply for licenses from previous owners who were in debt and unable to utilise them. Additionally, she said she paid TZS 120 million for another 33 licenses.

The acquisition of the license has placed her among prominent mining



license holders. She has 95 small-scale mining licenses for tin and one for gold, all of which are active. The Ministry of Minerals introduced the award-giving ceremony for mining companies and individuals to acknowledge outstanding work in the sector and highlight their contributions to its development.

The Usiku wa Madini also features a gemstone and jewellery exhibition to promote investment opportunities in Tanzanian gemstones industry and encourage the use of locally made gem products.

Leminatha said before she won the award, she only owned four small-scale tin mining licenses.

"My joy is that I started from humble beginnings, selling milk and buns. And after I had lost my husband, I wasn't given anything, I had to start rebuilding my life from afresh," she said.

She said she kept moving forward because she had a bigger vision, adding that the award encouraged her to start a non-governmental organisation and lead a more community-oriented life.

Explaining her journey in the mining sector, Leminatha said she began mining in 2017 in Mwime, Kahama District in Shinyanga Region, where she collected gold ore.

By 2021, she had shifted her operations to the Kagera Region, specifically in the Kyerwa District, where she mines tin on her licenses and sells it to dealers through the Kyerwa mining market. She added that she chose tin due to its high global demand.

"What drove me to invest in mining is my love for minerals. I believed I could succeed in the sector. First, I thank God, and I appreciate the government for recognising the role of every miner, especially us women," said Leminatha. She expressed her gratitude to President Samia Suluhu Hassan, describing her as a president, teacher, and living example.

She also thanked Kyerwa mining officials, particularly Samwel Shoo, former Kagera Resident Mines Officer, now Geita Resident Mines Officer, for having confidence in her and granting her mining licenses.

"Now, I have 96 active PMLs. My success is due to having the right leadership, and I'm proud of my investment in the mining sector because of the way the government guides us," she said.

Leminatha encouraged other women to recognise the importance of work, as it enhanced a woman's value. She added that she believed women were excellent producers because of their

inner strength. "I advise my fellow women to do everything with love and devotion and seek knowledge. If you work hard, you will bring solutions and success to your family. Remember, children learn more from us than from their fathers," she said.

However, Leminatha said she was uncomfortable with the mining sector's challenges, including mineral price fluctuations.

Looking to the future, Leminatha plans to export tin ore to the global market and eventually build her own factories in Tanzania. She will use the minerals to produce branded products under Lem-nes International Limited.

In 2020, Prime Minister Kassim Majaliwa officially launched the International Conference on Great Lakes Regions (ICGLR) certificate for Tanzania's tin mineral at the Tanzania Mining and Investment Mining Forum. This certificate will enable the country to sell to any nation worldwide while combating illicit financial flows.

Tin has many applications, including connecting steel and metal pipes, electrical systems, and electronic circuits in mobile phones, railway tracks, aircraft systems, and electric elevators. It also prevents rust in food storage containers and roofing materials.



Chunya's Small Scale Miner, Wears Broad Smile as He Sells Gold Worth Billions of Shillings

Aidan Msigwa, a small-scale miner, wore a broad smile recently as he sold his 111.82 kilograms of gold for TZS 20.11 billion, testifying to the government's motto that "Madini ni Maisha na Utajiri", literally translated into English as "Minerals are life and wealth" to Tanzanians.

Msigwa, who made local and international headlines after he struck 111.82 kg of gold, sold his precious metal at the Chunya mineral market, one of 43 mineral markets established across the country since 2019. Chunya mineral market became the

country's second mineral market after the launch of the first main mineral market in Geita in March 2019. With the establishment of these markets, sellers and buyers have greatly benefited from mineral trade transparency and increased trust in the industry.

The markets have also led to increases in government revenues through proper documentation and taxing of all mineral sales.

These markets have placed Tanzania at the pinnacle of being a role model in

the efforts to reform the mining sector. Msigwa, a licensed small-scale miner in Chunya District in the Mbeya Region, owns several mining licenses, including small-scale mining licenses (PMLs) and prospecting licenses (PLs) in different areas of Chunya.

In addition to the mines, he owns a gold processing plant in the district, which is important for refining the gold he extracts.

Msigwa's gold was sold through the official market - a system through which even the government was able to collect its share of the revenues in



terms of royalties and taxes. The Chunya Resident Mining Officer, Eng. Laurent Mayala said the government got royalties amounting to TZS 1.2 billion after Msigwa had sold his gold.

Mayala added that TZS 201 million was collected as inspection fees, while TZS 60.34 million was paid as a service levy to the Chunya Municipal Council. The small-scale miner also paid withholding tax to the tune of TZS 402.31 million collected by the Tanzania Revenue Authority (TRA).

He said such revenues are very important to the government because the funds are reinvested in improving various essential services throughout the country.

The mining sector, and more specifically, gold mining, has remained one of the strongest revenue streams

for the Tanzanian government in its quest for national development. "Msigwa sold his gold through the proper channels, meaning the country benefited from his mining activities. This makes him a strong case for other miners to emulate," said Eng. Mayala. Eng. Mayala praised Msigwa for his patriotism by following the government's legal and transparent channels for selling the gold. He said Msigwa's actions represented a significant step toward promoting legal trade and discouraging illegal practices in the industry. Eng. Mayala said mineral smuggling denies the government much-needed revenues and causes net destabilisation in the country's economy.

However, some of the significant challenges facing small-scale miners are the use of outmoded and inefficient extraction processes. Eng. Mayala said efforts have been

made to promote safer and more efficient technologies, such as vat leaching, which has already been adopted by some miners at Chunya.

"If the government supports these small-scale miners and helps them improve their methods, then it will be assured of the continuity and growth of this sector, hence its continued contribution to the economy," Msigwa's sale of gold is one sign of the mining sector in Tanzania's continuing growth and development. Gold remains the country's leading mineral resource product, accounting for about 80 percent of mineral resource revenues.

According to the Minister for Minerals, Hon. Anthony Mavunde, the government will continue to support small-scale miners in efforts to drive economic growth.

Tanzania's Emerging Role in Manufacturing and Supplying Mining, Industrial Equipment



Tanzania continues to make great strides to grow and develop its industrial and mining industries. The establishment of factories and local companies that focus on the manufacturing of essential spare parts and equipment for mining, construction, and industrial activities testifies to this progress.

This is largely due to the deliberate actions of the government in providing an environment that is conducive to the emergence and growth of local

investors. Typical examples include the East Africa Conveyor Supplies Limited factory, besides major local companies such as JC Gear Group (T) Limited and Rock Solutions Limited.

The rise of East Africa Conveyor Supplies Limited

The Inauguration of production at the East Africa Conveyor Supplies Limited (EACS) factory located in Kahama District in Shinyanga Region is a good milestone toward achieving Tanzania's

manufacturing agenda. Operations at the factory began in May 2023 and it is producing vital spare parts, including steel conveyor frames, drop brackets, conveyor rollers, and caps. These products are used not only in mines in Tanzania which include Buckreef Gold Mine, Barrick North Mara, and Barrick Bulyanhulu, but also in neighbouring countries of the Democratic Republic of Congo and Zambia.

Located on the site of the now-closed Buzwagi Gold Mine, the EACS factory

is part of the government's strategic plan to convert it into a Special Economic Zone once the gold mining activities were complete. The factory will source its raw materials domestically and employ modern technology in the production process, reducing dependency on imported spare parts and setting itself up as a regional industrial products hub. This move is important in empowering the local economy and giving jobs to Tanzanians.

This, EACS Managing Director, Mr. Peter Kumalilwa, expressed optimism in the factory's potential to grow the industrial capacity of Tanzania. He said that some of their products have already gained interest in international markets and that plans are underway to expand sales into West African countries.

Kumalilwa emphasized that more support should be given by financial institutions to empower Tanzanians with capital to establish similar factories, arguing that the mining sector has huge potential for job creation and economic development.

JC Gear Group (T) Limited: A true local success story

Another such success story in the mining equipment field is JC Gear Group (T) Limited based in Mwanza region. This is a Tanzanian company that fabricates and repairs important machinery parts, such as bearings, shafts, gearboxes, and gears, among others, targeting a wide range of industries like mining, construction, and transportation, among others. Their products are crucial in the smooth running of machinery used in mining and in stone-crushing operations, as well as in power-generating turbines.

"My company has directly employed 36 Tanzanians and also provided training in advanced technologies," said Mr. James Makanyaga, the Managing Director of JC Gear Group.

He added that once the company secures more contracts with mines, it will increase job opportunities, insisting that through this investment, they are also contributing to the local economy by empowering young Tanzanians with valuable skills.

"Our products are versatile and can be used in all types of mines and machinery, including deep underground operations," said Mr. Makanyaga.

Rock Solutions Limited: A key player within the mining sector Rock Solutions Limited, located in Mwanza region, also make significant contributions as another leading participant in the provision of drilling and mining equipment in the mining sector. This company specializes on providing key instruments for mining activities, such as drilling hammers, compressors, machinery lubricants, and many more.

Although it has not yet embarked on local production, Rock Solutions works with different international and local companies in order to provide such services for better performance of the mining sector in Tanzania. This firm is likely to start local production in April 2025.

Rock Solutions Limited offers a diverse of services in the mining industry; from the supply of modern mining equipment to technical support, encompassing installation and maintenance with expert consultancy. It also constructs industrial buildings and office facilities. This proves that Rock Solutions is an integral player in Tanzania's mining supply chain.

Through its investment in the mining





industry, Rock Solutions Limited has become a key partner in ensuring that the sector is supplied with high-quality equipment and services that enhance operational efficiency and boost productivity for both local and international investors. The company's commitment to quality and innovation is evident in the trust it has earned from its clients.

Government and local content policy
It is a testament to the Tanzanian Government's Local Content Policy that companies like JC Gear Group Limited and Rock Solutions Limited have successfully engaged local participants along the mining value chain. This involvement encourages businesses within the local community to supply the goods and services needed in the mining industry, ensuring that the country's wealth benefits its people. To support this, the government is offering incentives to promote growth opportunities for local enterprises in the mining sector.

Mr. Kumalilwa, who is also the Chairman of the Tanzania Mining Industry Suppliers Association (TAMISA), estimated an annual direct circulation within the mining value chain of more than TZS 3 trillion. He noted that unless local businesspeople are actively engaged in the lucrative

mining sector, much of the economic benefit will leave the country. This underscores the need for Tanzanians to invest more in the mining industry and establish manufacturing facilities to meet its demands.

The supportive policy environment has fostered an enabling investment climate, allowing local companies to gradually reach international standards through strategic market expansion. This approach not only strengthens the local economy but also positions Tanzania as a competitive player in regional and global markets for mining and industrial equipment.

A bright future for Tanzania's manufacturing industry

Establishing the East Africa Conveyor Supplies Limited factory, along with the growth of local firms such as JC Gear Group and Rock Solutions Limited, demonstrates that Tanzania can increasingly produce and supply essential equipment for the mining and industrial sectors. This shift reduces reliance on imports, creates jobs, and contributes to economic growth.

Tanzanians now have the opportunity to capitalise on the mining industry and forge partnerships with international investors as the government builds a

robust industrial base. With the support of successful companies like EACS, JC Gear Group, and Rock Solutions Limited, Tanzania is poised to become a key player in East Africa's mining and industrial production landscape. This transformation has the potential to further strengthen the economy, improve livelihoods, and create employment opportunities for the youth in a sustainable manner.

Ongoing investment in local manufacturing and service provision within the mining industry is vital for nurturing local talent and expertise. The government is fostering an environment that allows Tanzanians to thrive in the industrial sector, laying the groundwork for an economy that is resilient to global economic fluctuations.

In a nutshell, Tanzania's journey toward industrialization emphasises local content and investment in the mining sector, which is crucial for national development. Ultimately, collaboration between the government and private partners will be instrumental in unlocking the full potential of both the mining and industrial sectors, paving the way for a prosperous and sustainable future for all Tanzanians.

How Tanzanian Politician is Promoting Gemstone Industry to Global Heights



In the heart of Tanzania's mineral-rich landscapes, Salim Alaudin Hasham, the Member of Parliament for Ulanga Constituency in the Morogoro Region, is crafting a story of ambition, patriotism, and opportunity.

For Hasham, the sky is the limit when it comes to fulfilling his burning ambition of promoting the gemstone industry. The politician's journey is one of passion and commitment, rooted in the belief that minerals are not just economic assets but a national heritage to be nurtured for the greater good.

His story exemplifies how a dream, pursued with purpose and dedication, can create a lasting impact not only on oneself but also on the entire nation. Hasham's love for Tanzania and its resources inspired him to establish a company called Ruby International Limited in 2014. The company's mission is to connect Tanzania's rich mineral resources with the global market while prioritising environmental sustainability.

What distinguishes Ruby International Limited is its eco-friendly approach to mining rare gems, reflecting respect for Tanzania's natural heritage and a

profound sense of responsibility towards future generations. Born and raised in Mahenge, an area renowned for its unique spinel gemstones, Hasham's connection to the land runs deep.

His passion for these precious stones began early, motivating him to create a company that would showcase the rare beauty of Tanzanian minerals to the world.

"Spinel is more than just a gemstone, it is part of our identity," Hasham proudly says.



"My goal has always been to mine these stones sustainably, protect the environment, and ensure that Tanzania's natural resources benefit its people," says the lawmaker.

Ruby International Limited commenced operations with the Mahenge/Epanko project, focusing on mining the esteemed Spinel stones. This initial success was merely the beginning. Driven by a vision to scale and diversify, Hasham expanded the company's activities into other regions of Tanzania, including Tanga, Arusha, and Tunduru District in the Ruvuma Region. Today, Ruby International Limited mines various precious stones, including Blue and Yellow Sapphires in Tunduru, Green Tourmaline in Tanga, and Green Garnets, known as Tsavorites, in Arusha.

The company's growth has been remarkable. Ruby International Limited currently employs over 400 individuals, with 85 permanent staff, and is poised to create more than 1,000 jobs. This significant contribution to local employment reflects Hasham's commitment to not only showcasing Tanzania's gems on the world stage but also enhancing the livelihoods of his fellow Tanzanians. However, Hasham's vision extends beyond Tanzania. Recognising the

potential of Tanzania's mineral wealth, he aims to connect with international markets.

Ruby International Limited established an office in Bangkok, Thailand, a major hub for the global gemstone trade. From there, the company exports its gemstones to countries such as Germany, Sri Lanka, Sweden, England, France, China, and Russia.

The global partnerships have bolstered the company's international presence and positioned Tanzania as a key player in the gemstone industry. Hasham credits much of his success to President Dr Samia Suluhu Hassan's visionary leadership and the reforms introduced by her administration. According to the politician, the government's efforts to enhance investment policies and create a conducive environment for mining have facilitated Ruby International Limited's growth.

"The support from the government has been instrumental," notes Hasham, adding: "With the right policies and a clear vision, we've been able to expand our business and contribute to the nation's economic development." For Hasham, the mining sector holds immense potential. He views investment in unique minerals, like Spinel

and Tsavorite, not just as a business opportunity but as a means to uplift communities and enhance Tanzania's reputation on the global stage.

"I recognised the value of tapping into international markets to increase the worth of our gems," he explains. Hasham's impact extends beyond his business success. As a small-scale miner who owns six primary mining licences, he has become a symbol of what is possible within Tanzania's mining sector.

His entrepreneurial spirit and commitment to sustainable practices have made him a champion of the industry. Through Ruby International Limited, Hasham proudly waves Tanzania's flag on the global stage, ensuring that the country's precious gems are recognised and valued worldwide. Hasham's journey is an inspiring story of how one man's dream, rooted in love for his country and its resources, has transformed not only his life but the lives of many others.

His leadership in the gem industry continues to pave the way for future generations of Tanzanians, proving that with determination and vision, Tanzania's mineral wealth can shine brightly on the global stage.



A photograph of a tunnel interior. The walls are covered in a metal mesh and have several small, rectangular lights attached. In the center, there is a large red metal cabinet with many small holes. To the left of the cabinet, there is a pile of orange safety gear, including what looks like a life preserver and some poles. To the right of the cabinet, there is a green metal structure, possibly a workbench or a piece of equipment. The floor is concrete and appears to be wet or reflective. The overall lighting is dim, with the primary light sources being the small rectangular lights on the wall and the green equipment on the right.

INVESTOR'S CORNER





STAMICO: Tapping into Tanzania's Mineral Potential

For over five decades, the State Mining Corporation (STAMICO) has spearheaded Tanzania's mining industry, playing a vital role in the nation's economic landscape.

Established in 1972, STAMICO is a wholly government-owned corporation dedicated to strategic investments in the entire mineral value chain, from exploration to trade.

With a team of seasoned geologists, mining engineers, and environmental specialists, the corporation provides essential geological and mining consultancy services and detailed geotechnical reports.

Leading the drilling frontier

Since 2020, STAMICO has expanded drilling activities, offering

state-of-the-art services that include diamond drilling, multipurpose air rotary for reverse circulation, and rotary air blast drilling. With 15 modern drilling rigs, the latest addition being the multipower Explorer acquired in June 2024, STAMICO is well-equipped to tackle the demands of the mining sector.

Currently, the corporation has secured significant contracts with major players in the industry, including Geita Gold Mines Limited worth TZS 55.2 billion, Shanta Gold Mine worth TZS 2.75 billion, and Buckreef Gold Mine worth TZS 5.1 billion. These partnerships underscore STAMICO's reputation as a reliable provider of commercial drilling services, further solidifying its position in Tanzania's mining landscape.

Revitalising Kiwira Coal Mine

A cornerstone of STAMICO's operations is the Kiwira Coal Mine, located within the Ivogo Ridge of the Songwe-Kiwira coalfield. After coal production ceased in 2008, the government handed over the project to STAMICO in 2014 for redevelopment. With coal reserves estimated at 46.5 million tonnes, STAMICO views Kiwira as a catalyst for economic growth in Tanzania.

The corporation is committed to increasing coal production to meet rising local and international demand. Currently, STAMICO mines, processes, and sells approximately 50,000 tonnes of coal per month—a significant increase from the 6,000 tonnes previously produced—thanks to the installation of the state-of-the-art coal crusher. The coal is primarily supplied to local industries, with a portion



earmarked for export to neighboring East African countries and beyond.

Innovating with Rafiki briquettes

In a bid to diversify its offerings, in 2021 STAMICO launched a pilot project to produce coal briquettes, branded as Rafiki. This initiative began with a small-scale plant capable of producing 2 tonnes per hour, allowing for essential research and optimization before scaling up to larger production facilities.

STAMICO currently operates two briquette plants, in Kisarawe and Kiwira, which were already in production as of August 2024. These plants utilize coal from the Kiwira mine, molasses from sugar production, and fine dust from local suppliers to create a clean, efficient energy source. Rafiki briquettes are characterized by their smokeless combustion, ease of ignition, and versatility for cooking, heating, and agricultural curing processes.

By adopting an agent-supply model for distribution, STAMICO aims to make

these briquettes accessible to a wide range of consumers, offering packaging options from 1 kg to 50 kg. Beyond providing an energy source, these briquettes align with global environmental initiatives by reducing reliance on firewood, thus helping to combat deforestation.

STAMICO also plans to install two more briquette plants in Dodoma and Tabora regions.

A vision for the future

STAMICO is not just a mining corporation but a transformative force within Tanzania's economy. Through strategic investments and innovative projects, the corporation continues to enhance its capabilities while supporting the nation's sustainable development goals. As it moves forward, STAMICO remains dedicated to maximizing the potential of Tanzania's rich mineral resources, fostering economic growth, and providing clean energy solutions for all. Recognizing STAMICO's efforts in making changes and contributing to the national economy through the

mineral sector, during the financial year 2022/2023, STAMICO was rewarded an award for Turn-Around Public Company and Public Corporation that has issued dividends to the Government, and in 2023/2024, it was given an award for Operational and Financial Excellence.

STAMICO'S available licences for joint venture

Critical minerals (lithium, graphite, REE, nickel, cobalt, iron ore and tin)

- Lithium – prospecting license (Dodoma, Central Tanzania)

The license is located within the Hombolo-Msagali belt that hosts lithium-bearing pegmatites within the Archean Dodoma rocks, mainly quartz feldspathic gneiss, amphibolitic schists, synorogenic granites, spodumene and quartzites. The belt is intruded by synorogenic granites. A strong structural in-print is present in the metamorphic host rocks trending NW, and it appears to control the emplacement of the pegmatite dykes. Lithium is known to be found in two minerals that occur within the pegmatites: lepidolite a lithium-bearing



mica with chemical formula $K(Li,Al)_3(Al,Si,Rb)_4O_{10}(F,OH)$ is a major source of lithium in these areas. Spodumene, a lithium aluminium silicate mineral ($LiAlSi_2O_6$) in the pyroxene family, is another important ore of lithium in this area.

STAMICO has been granted a prospecting license and is due to undertake exploration to delineate specific targets with lithium-bearing pegmatites.

- Graphite – 3 prospecting licenses (Lindi – Southeastern Tanzania)
The licenses are situated in south-eastern Tanzania, approximately 200km north of the Mtwara port and 460km south of Dar es Salaam, Tanzania's commercial city. The licenses are found within the high grade metamorphic rocks of the Neoproterozoic orogenic Mozambique belt, which is famous for presence of jumbo flakes graphite deposits.

STAMICO owns these licenses and plans to explore them. Envisaged activities include geological mapping, geophysical surveys, and drilling.

- REE – 1 prospecting license (Songwe – Southwestern Tanzania)
The license for rare earth elements (REE) is found within the Ubendian Mesoproterozoic Belt. The REEs occur within the Panda hill carbonatites which also contain niobium and phosphate mineralization.

Geological and geochemical data are available; however, detailed geological investigation, including drill work, is required to establish available resources.

- Nickel – 1 prospecting license (Kagera – North western Tanzania)
The license is located 75km SW of the Kagera port of Lake Victoria. It occurs in the Karagwe District within the Mesoproterozoic Karagwe – Ankolean Belt and along the strike of the Kabanga deposit, the largest undeveloped high-grade nickel sulphide occurrence in the world.

STAMICO has been granted this license, reconnaissance survey has been done and plans for detailed exploration are in place and drilling operations once targets have been established.

- Cobalt – 2 Prospecting licenses (Kagera – Northwestern Tanzania)
The licenses are located approximately 195km SW of the Kagera port of Lake Victoria in the Ngara district. They occur within the Mesoproterozoic Karagwe-Ankolean Belt along the strike of the Kabanga deposit, which contains nickel, copper, and cobalt mineralization. The extension of this belt is the host to the enormous cobalt mineralization in the Democratic Republic of Congo (DRC) and Rwanda.

STAMICO has been granted these licenses. Plans for detailed exploration are in place.

- Iron Ore – 4 prospecting licenses (Njombe – Southern Tanzania)
The licenses are located in Ludewa District, approximately 870km from Dar es Salaam. They are located within the Usagaran Paleoproterozoic belt close to the famous titaniferous Liganga-Mchuchuma Iron Ore. Locally, the geology indicates the availability of multiple Titaniferous magnetic bodies associated with anorthositic gabbro.

STAMICO has been granted these licenses. Plans for detailed exploration are underway.

- Tin – 1 prospecting licence (Karagwe – Western Tanzania)
The license is located in Karagwe district, approximately 80km SW of Bukoba. Regionally, the Karagwe-Ankolean Belt is the host of tin mineralization. Tin is found in Cassiterite (SnO_2) in magmatic and hydrothermal environments associated with highly fractionated granites. Cassiterite can also accommodate a wide range of trace elements.

STAMICO has been granted this license. Once targets are established, it requires a detailed exploration program that includes geological mapping, geochemical, and ground geophysical surveys, as well as drilling.

- Gold – 2 (Pida) prospecting licenses (Musoma – Northern Tanzania)
Located approximately 200km north of Mwanza City. The licenses are found



within Neoproterozoic Musoma-Mara Greenstone Belt. Regional structures (eg. Suguti shear zone and N-S extending dykes) are known to control gold mineralisation in the licensed area. They are also surrounded by multiple active gold mines.

STAMICO owns these licenses. High-resolution geophysical maps for this area and regional geological maps are available. To establish mineralisation targets, an exploration program involving geological mapping, geochemical and ground geophysical surveys, and drilling is required.

- Gold – 3 (Geita, Busanda and Bukombe) prospecting licenses (Geita – Northern Tanzania)
The licenses are located in Geita, approximately 150km Southwest of Mwanza City, in the Sukumaland Greenstone Belt. They occur together with the Geita Gold mine, the largest mine in Tanzania owned by AngloGold Ashanti.

STAMICO owns these licenses. High- and low-resolution geophysical maps for this area, as well as regional geological maps, are available. These licenses require a detailed exploration program.

- Bauxite - 1 Prospecting License (Kilimanjaro-Northern Tanzania)
The license is located in Same District in Kilimanjaro Region, approximately

446km from Dar es Salaam. The parent rocks for the bauxite deposits along this area are mainly granulites and feldspathic gneisses of the Neoproterozoic Mozambique belt.

STAMICO owns this license. Exploration through geological mapping, geochemical survey and drilling is required.

- Gypsum – 3 Prospecting Licenses (2 Lindi – Southeastern Tanzania and 1 Dodoma – Central Tanzania)

Two licenses are situated in south-eastern Tanzania, approximately 200km north of Mtwara port and 460km south of Dar es Salaam, Tanzania's commercial city. The two licenses are found within sandstone, clays, marls, and limestone of the Neoproterozoic Mozambique belt, while the other license is found within the Dodoman-Isangan Group in the granitic gneiss migmatite complex of the Meso-Neoproterozoic Tanzanian craton.

STAMICO owns this license. Exploration through geological mapping, geochemical survey and drilling is required.

- Limestone – 10 Primary Mining Licenses (Tanga – Northern Tanzania)
The licenses are located in the Tanga Region, approximately 41.3km from Tanga Port. They are found in the

layers of reef limestone and marls of the Jurassic age. Main lithologies include detrital and reef limestone, sandstone and oolitic sediments.

STAMICO owns this licenses. Exploration through geological mapping, geochemical survey and drilling is required.

STAMICO has established itself as a crucial player in Tanzania's mining industry, driving economic growth through strategic investments and innovative projects. The corporation has expanded its operations, including drilling services and revitalising the Kiwira Coal Mine while diversifying into clean energy by producing Rafiki briquettes. These initiatives reflect STAMICO's commitment to maximising Tanzania's mineral resources and contributing to sustainable development.

In addition to its current projects, STAMICO holds numerous exploration licenses for critical minerals like lithium, graphite, and rare earth elements, further strengthening its role in the industry. With a forward-looking approach and a focus on environmentally friendly practices, STAMICO is well-positioned to meet both domestic and international demands, ensuring that Tanzania's mineral wealth is utilised effectively for the nation's prosperity.

Tembo Nickel: Unlocking Tanzania's Drive to Power The World Sustainably



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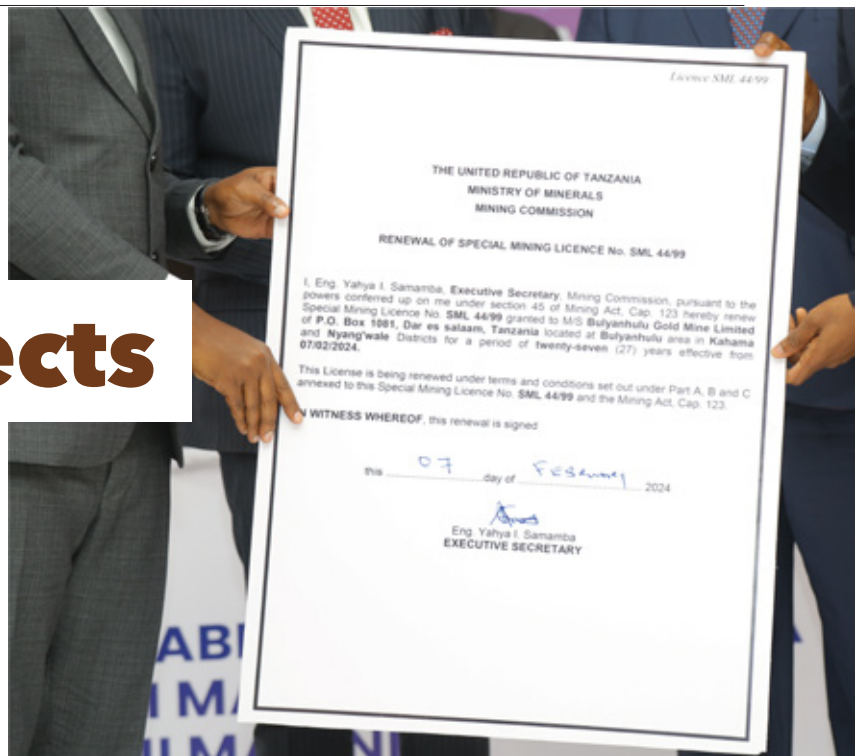
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- Gypsum – 3 Prospecting Licenses (2

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Status of Upcoming Mining Projects in Tanzania



Tanzania, a strategic player in the global mining sector and a home for upcoming projects across a diverse range of mineral resources.

Here's an overview of the status of several prominent mining projects, underscoring the country's strategic importance in the extraction of gold, uranium, rare earth elements, and heavy mineral sands.

1. Nyanzaga Gold Project

The Nyanzaga Gold Project, situated in the Lake Victoria Goldfield in Sengerema District, Mwanza Region, is a flagship initiative in Tanzania's gold mining landscape. Covering an area of 23.4 square kilometres, this project holds a Special Mining License (SML) granted in 2021.

It includes the Nyanzaga and Kilimani deposits, along with other exploration prospects nearby. Initially explored by OreCorp Limited, the project was

acquired by Perseus Mining in 2024, marking a major advancement in the region's mining operations. The acquisition by Perseus, a well-established entity in the gold mining industry, is expected to accelerate project development, offering potential for significant gold production.

The project's integration with the local economy is anticipated to boost employment, infrastructure development, and local investments.



2. Mkuju River Uranium Project

Located in Namtumbo District, Ruvuma Region, the Mkuju River Uranium Project is approximately 54 kilometers from Likuyu Sekamaganga village. Granted a Special Mining License (SML) in 2013, this project is owned by Mantra Tanzania Limited, a subsidiary of Uranium One Group. The Mkuju River Project is one of Tanzania's flagship uranium developments, recognised for its substantial reserves and potential to become a critical uranium production hub in East Africa. The project's strategic significance extends beyond national borders, with the potential to contribute to global nuclear energy supply chains. It also plays a pivotal role in diversifying Tanzania's mining portfolio and positioning the country as a key player in the global uranium market.

3. Ngualla Rare Earths Project

The Ngualla Rare Earths Project, located near Ngwala Village in the Songwe Region at the edge of the East African Rift Valley, is one of the world's largest deposits of Neodymium and Praseodymium (NdPr), critical components in high-strength permanent magnets used in electric

vehicles, wind turbines, and other advanced technologies. Owned by Mamba Minerals Corporation Limited (MML), with 84% of the company controlled by Peak Rare Earths via its subsidiary Ngualla Group UK and 16% owned by the Government of Tanzania, the project received its Special Mining License (SML) in April 2023. The Ngualla project is poised to make Tanzania a major player in the global supply of rare earth elements, which are key to global energy transition and technological advancements. The project aligns with Tanzania's broader strategy to leverage its mineral resources to attract foreign investment and foster technological development.

4. Heavy Mineral Sands Projects

Tanzania is home to four significant heavy mineral sands projects: Tajiri, Fungoni, Bagamoyo, and Sudi. The Fungoni and Tajiri projects have already obtained mining licenses, placing them on track for production. Fungoni, in particular, represents a low-capital, high-return mining venture near Dar es Salaam's coastal city. Tajiri, located along Tanzania's northern coastline, is recognized for its rich ilmenite, rutile, and zircon reserves. On

the other hand, the Bagamoyo and Sudi projects remain in the exploration phase, with potential for expansion as resource estimates and economic viability assessments progress. These projects are instrumental in expanding Tanzania's mining sector beyond traditional minerals, contributing to the global supply of industrial minerals used in diverse applications from construction to aerospace industries.

Conclusion

Tanzania's mining sector continues to evolve, with these projects exemplifying the country's rich mineral resources and its commitment to developing a diversified and sustainable mining industry. These projects not only enhance Tanzania's position in the global mining arena but also contribute significantly to the local economy through job creation, infrastructure development, and technology transfer.

As these projects progress, Tanzania stands to gain from increased foreign investment and strengthened economic growth, particularly as global demand for critical minerals continues to rise.

Tanzania Poised to Become Vital Source of Critical Minerals



Tanzania is emerging as a key player in the global supply of critical minerals, positioning itself to meet the growing demand for essential resources like graphite, lithium, cobalt, and rare earth elements that drive the future of technology and sustainable energy. At MineExpo International 2024 in Las Vegas, the United States, Tanzania's Deputy Minister for Minerals, Dr. Stephen Kiruswa, highlighted the vital role of critical minerals in global supply chains, emphasizing their growing importance in powering advanced technologies and sustainable industries.

As Dr. Kiruswa highlighted, these minerals are the backbone of industries that shape the future of global technology and energy. The resources power high-tech innovations like electric vehicles (EVs) and renewable energy systems and represent significant geopolitical leverage and economic opportunity.

In his speech, Dr. Kiruswa emphasized the surging demand for critical minerals, driven by global efforts to transition toward greener technologies and digital infrastructures. He stressed that lithium, cobalt, and rare earth elements are indispensable in the production of batteries, EVs, and sophisticated electronics.

However, the supply of these critical minerals is concentrated in few countries, with China controlling over 70 percent of rare earth production and the Democratic Republic of Congo dominating cobalt supply. This concentration poses a strategic risk, as any disruption could send shockwaves through industries dependent on these minerals.

The deputy minister stressed that these minerals are not only vital for technological advancement but are also key to ensuring broader economic stability, arguing that nations that

control critical mineral resources holds way in international trade negotiations while those that rely on imports face potential vulnerabilities.

According to Dr. Kiruswa, Tanzania is emerging as a significant player in the global critical minerals sector since the country is endowed with substantial reserves of graphite, rare earth elements, lithium, nickel, and cobalt. While still in the early stages of harnessing these resources, several exploration and mining projects are already underway, assured Dr. Kiruswa.

Notably, Tanzania has 12 advanced critical mineral projects set to be developed into mines. These include six graphite projects, a nickel venture, and projects focused on heavy mineral sands, rare earth elements, and uranium. Additionally, three graphite projects—Lindi Jumbo, Permanent Minerals, and GodMwanga—are operational. As global demand for



critical minerals accelerates, Tanzania's role is set to expand.

He highlighted Tanzania's attractive investment opportunities across various stages of mineral development, including exploration, mining, and value addition. Investors are encouraged to participate in joint ventures with advanced mining projects that need capital injections to move forward.

Dr. Kiruswa also pointed out opportunities in beneficiation and value addition, which are crucial for boosting Tanzania's economic return on its resources. Developing local processing facilities would enable the country to produce high-value products like battery-grade graphite.

Equally, there are prospects for investing in research and technology to establish manufacturing industries that utilize these minerals. Battery production and electronics manufacturing are areas where Tanzania could position itself as a leader in the global high-tech sector.

Tanzania's government is implementing several strategies to support the development of its critical minerals sector. Legal reforms, such as

amendments to the Mining Laws, aim to create a more investor-friendly environment, balancing foreign interests with national priorities.

Geological surveys are also being prioritized, with a High-Resolution Airborne Geophysical Survey planned to cover over 50 percent of the country by 2030. This will provide detailed data on mineral resources, reducing the risks associated with exploration.

Infrastructure development is another key focus, with investments being made in roads, railways, and ports to facilitate the efficient transportation of minerals from mine sites to global markets. Strengthening the national energy grid is also a priority, ensuring that the mining sector's growing demands are met.

In addition, Tanzania has introduced local content regulations that mandate the use of local goods and services in mining operations, creating employment opportunities and supporting the growth of local businesses. The government also emphasizes education and workforce development to align with the needs of the mining sector.

Tanzania offers a range of incentives to attract investors. These include tax exemptions on imported mining machinery, reduced corporate tax rates for companies listed on the Dar es Salaam Stock Exchange, and VAT deferment on equipment. The government guarantees investment protection, ensuring that profits can be repatriated and that companies are protected from expropriation.

According to Dr. Kiruswa, Tanzania is also finalising its "Critical and Strategic Minerals Strategy," outlining the country's approach to managing its mineral wealth.

The strategy will provide a framework for exploration, mining, beneficiation, and supply chain management, ensuring that Tanzania remains a key player in the global minerals market while pursuing sustainable development practices.

As the world looks toward a future powered by green technology and innovation, Tanzania is poised to become a vital source of the critical minerals needed to drive that transformation. The opportunities for investors are significant, and with ongoing reforms, Tanzania is laying the groundwork for a thriving and sustainable mining sector.

Tanzania Beats Mining Sector Targets



Tanzania is relishing a new era of economic resilience, leveraging its abundant mineral wealth to drive growth, attract investment, and solidify its position as a leader in sustainable development across Africa. The government's bold ambition to elevate the mining sector's contribution to its national economy has not only been met ahead of schedule but has also marked a transformative milestone in the nation's developmental journey.

Originally set out in the National Development Vision 2025, the target to raise the sector's share of the Gross Domestic Product (GDP) to 10 percent by 2025 was achieved in 2023, well ahead of the deadline.

This accomplishment also surpassed the aims of the National Five-Year

Development Plan (FYDP III), which sought to nearly double the sector's contribution from 5.6 percent in 2020. The sector's robust growth reflects a favourable investment climate bolstered by improved governance, supportive policies, and laws designed to attract foreign direct investments (FDIs).

Tanzania, endowed with a rich variety of industrial minerals and precious metals—including iron ore, coal, uranium, gold, diamonds, and Tanzanite—has emerged as a key player among African economies. Unlike many of its peers, Tanzania's success is not fueled by oil but by the strategic management of its vast mineral wealth.

The FYDP III outlines an agenda to promote natural resources-based

industrialization. Key interventions include enhancing oversight of large- and medium-scale mining operations and empowering small-scale miners, especially women and youth, by providing essential training and licensing.

The plan also aims to improve the capacity of key institutions such as the Mining Commission, Geological Survey of Tanzania (GST), and the Tanzania Gemmological Centre (TGC) to strengthen Tanzania's standing in the global mineral market.

The government has set ambitious goals for the mining sector, projecting an average annual growth rate of 7.7 percent by 2025/2026, up from 6.9 percent in 2019/2020.

Additionally, foreign exchange



earnings from minerals are expected to rise from USD 2.99 billion in 2019/2020 to USD 5.5 billion by 2025/2026, driven by increasing demand for processed minerals.

Notably, the government aims to reduce raw mineral exports from 15 percent in 2019/2020 to 5 percent by 2025/2026, focusing instead on value addition and beneficiation to maximize returns.

The Minister for Minerals, Hon. Anthony Mavunde, highlighted that the mining sector was Tanzania's top foreign exchange earner during the 2022/2023 fiscal year, contributing a remarkable 56 percent to the nation's foreign currency reserves.

Mineral exports for the period totalled USD 3.1 billion, and tax revenues from the sector reached TZS 2.1 trillion TZS, which was 15 percent of the country's total domestic revenue.

The mining sector's revenue is on an upward trajectory, with financial transactions across 100 mineral buying centers and 42 mineral markets totaling TZS 1.7 trillion.

Government revenue from the sector also saw growth, rising from TZS 678 billion in 2022/2023 to TZS 753 billion in 2023/2024. For the 2024/2025 fiscal year, the government has set an ambitious revenue target of TZS 1 trillion, and Hon. Mavunde expressed confidence in achieving this goal.

The minister credited the sector's success to the High-Resolution Airborne Geographical Surveys, which accounted for 16 percent of advancements in mining operations. This strategic initiative is expected to attract further investments, particularly in untapped mineral resources like helium. Currently, Tanzania is on track to become the world's third-largest helium producer, behind Russia and the United States, thanks to ongoing explorations in the Rukwa and Songwe regions.

Looking ahead, Tanzania's Vision 2030, with its slogan "Madini ni Maisha na Utajiri" (Minerals are Life and Wealth), aims to integrate mining with other sectors like agriculture and health. This vision includes detailed mineral exploration efforts, which will drive new discoveries, support economic growth, and ensure the long-term sustainability of the mining industry.

To accelerate the sector's transformation, the government has significantly increased the Ministry of Minerals budget to TZS 231 billion 2024/2025 fiscal year, up from TZS 89 billion in 2023/2024.

This budget includes funding for constructing two zonal mineral laboratories in Geita and Chunya, as well as a state-of-the-art laboratory in Dodoma. The aim is to improve mineral analysis capabilities and provide small-scale miners with

accurate geological data, making their operations more predictable and efficient.

The government is acquiring a helicopter to conduct detailed geological surveys to further enhance the mining sector's growth. This investment will benefit small-scale miners by enabling them to assess potential mining sites more accurately.

Hon. Mavunde also highlighted the growing importance of graphite, a critical mineral for electric vehicle (EV) batteries, in global markets. With worldwide graphite demand currently at 6.5 million tonnes, Tanzania is poised to increase its market share. Nine licensed investors are expected to boost the country's graphite production significantly.

Additionally, the government is nearing completion of the Tanzanite Exchange Center in Mirerani, which will centralize the country's tanzanite trade. With 84 percent of construction complete, the new facility will play a key role in managing and promoting Tanzania's unique gemstone on the global stage.

With a clear vision and strong leadership, Tanzania's mining sector is set to achieve even greater heights, contributing to the country's economic growth and positioning it as a leading player in the global mining industry.

Tanzania Beats Mining Sector Targets



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A photograph of a mining operation in a desert. A line of large yellow mining trucks is parked on a dirt road. A worker wearing a white hard hat and a high-visibility yellow shirt is standing on the side of the nearest truck, looking up. The background shows a rocky, hilly landscape under a blue sky with scattered white clouds.

THE MINISTRY'S INSTITUTIONS



GST Moves to Unlock Tanzania's Mineral Wealth as It Approaches Its 100th Anniversary



The Geological Survey of Tanzania (GST) is at the frontline of unlocking the country's mineral wealth and laying the foundation for strategic investments that will benefit all Tanzanians.

With an unwavering commitment to enhancing geological research, GST is unlocking the country's mineral wealth and laying the foundation for strategic investments that promise benefits for all Tanzanians. At the heart of GST's mission is the

quest to identify new mineral-rich areas across the country. This is not just about digging up resources; it's about creating a sustainable framework that attracts investments while promoting responsible resource management. GST is modernising its laboratories with state-of-the-art infrastructure and equipment.

Tanzania's geological landscape is a treasure trove, yet only 16 percent of the country has been geologically surveyed by high-resolution airborne geophysical survey.

Despite this, GST has made significant strides in mapping out key areas with mineral resources, providing essential insights for the development of various mines.

The geological reports also extend their impact on agriculture, analysing soil conditions to enhance fertiliser production and promote sustainable farming practices.

GST's work transcends the mining realm; it plays a pivotal role in water resource management by pinpointing



potential groundwater reservoirs. This data is invaluable for ensuring a safe and sustainable water supply for communities across Tanzania.

Moreover, GST's research aids disaster preparedness, equipping the nation to respond effectively to geological hazards such as earthquakes and landslides. The broader implications of this work underline GST's commitment to national safety and environmental sustainability.

As GST approaches its 100th anniversary in 2025, it prides itself on nearly a century of leadership in mineral exploration.

The institution has been instrumental in establishing major mining projects, such as Geita Gold Mine Limited, North Mara, Bulyanhulu and ongoing projects, including Jumbo Graphite and Kabanga Nickel.

Vision 2030 initiative envisions a harmonious integration of mining with sectors like agriculture and tourism, promoting a diversified and sustainable economy.

By identifying suitable agricultural soils and potential geological tourism sites, GST contributes to a holistic approach that benefits various sectors and communities nationwide. This vision aligns seamlessly with

Tanzania's broader development objectives, aiming for a significant economic boost by 2025.

GST's commitment to excellence ensures that the results provided to stakeholders are reliable and globally recognised.

GST is not merely strengthening the mining sector but laying the groundwork for a sustainable and prosperous future for all Tanzanians. As the nation digs deeper into its geological potential, GST's commitment to research and innovation promises to illuminate the path toward growth and opportunity for generations to come.

STAMICO Promotes Investment Opportunities in Tanzania



Tanzania's state-owned State Mining Corporation (STAMICO) called upon both local and international investors to capitalize on the country's increasingly favorable investment climate.

Dr. Venance Mwase, STAMICO's Managing Director, made the call when he addressed the Tanzania Mining and Investment Forum 2023, which was held on October 25 in the sprawling port city of Dar es Salaam.

Dr. Mwase underscored the Tanzanian government's continued efforts to promote the mining industry under the leadership of H.E. President Dr. Samia Suluhu Hassan.

He said recent government-led reforms and infrastructure improvements have significantly strengthened STAMICO's capacity to serve as a key player in the sector.

STAMICO is a state-run corporation that oversees the contribution of the

mineral sector to the national economy and creates employment opportunities for Tanzanians.

"We have made remarkable progress, particularly in the acquisition of modern drilling equipment, which is critical for mining operations," he told the forum, attracting mining stakeholders worldwide.

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particularly in the acquisition of modern drilling equipment, which is critical for mining operations," he told the forum, attracting mining stakeholders worldwide.

Dr. Mwase stated that the technological upgrades make STAMICO a competitive partner for international investors looking to explore Tanzania's immense mineral potential.

He also highlighted several key STAMICO partnerships that showcase Tanzania's expanding role in global mining, including its collaboration with AngloGold Ashanti in rock drilling and its shares in the Buckreef Gold Mine, launched last year, to illustrate the corporation's growing influence.

The Buckreef Gold Mine has quickly become a catalyst for economic growth, contributing to the mining sector's increasing impact on the national economy.

Dr. Mwase said mining is becoming a cornerstone of Tanzania's industrialization agenda, with opportunities to further integrate the sector with other key sector of the

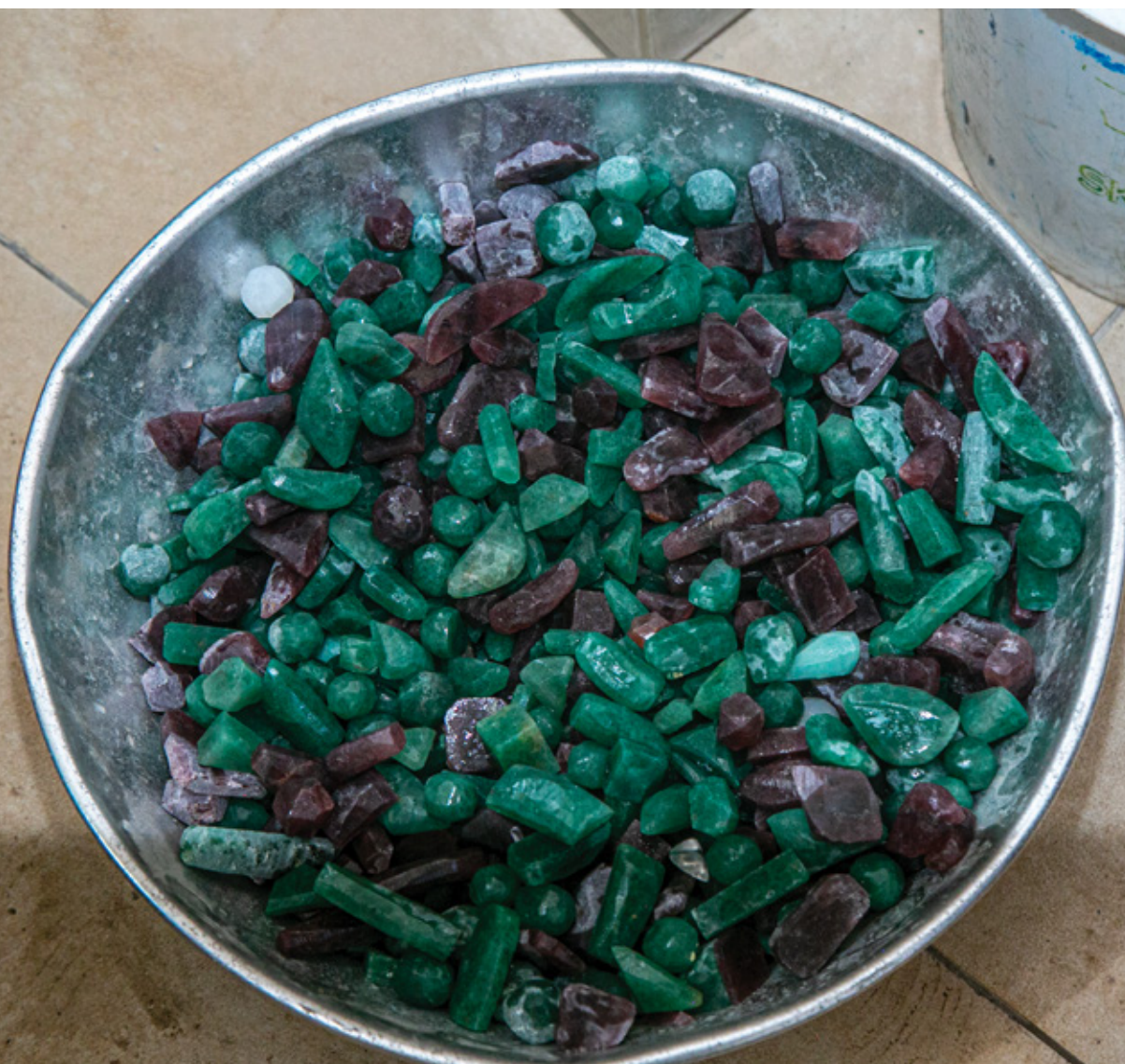
economy such as manufacturing and infrastructure development.

"The mining sector has vast potential to contribute to our broader economic objectives, and I invite investors to seize the opportunities now while we continue to build on the robust regulatory and operational frameworks being put in place," he said. STAMICO's invitation to investors comes amid reforms aimed at creating a stable and attractive investment landscape.

President Samia's administration has worked tirelessly to improve transparency and efficiency in the mining sector, providing an environment conducive to both local and international investment.

The forum serves as a platform for the mining industry's global stakeholders to discuss emerging trends, regulatory updates, and new avenues for exploration and development. The forum discussions ranged from mining regulations and partnerships to technological advancements and the future of Tanzania's mineral exploration efforts.

TGC: Key Player in Minerals Value Addition



The Tanzania Gemmological Centre (TGC), A Wholly state-owned training centre for gemstone value addition under the Ministry of Minerals, was founded in 2003 in Arusha's Njiro area. Originally established as the Arusha Gemstone Carving Centre (AGCC), its main objective was to train locals in gem and rock carving to add value.

However, with the formulation of the National Mineral Policy in 2009 and subsequent amendments to the Mining Act in 2010, TGC's objectives were broadened to include skill-based

training, promotion, advisory, and consultancy services in gemmology, lapidary, and jewellery technologies. Eng. Ally Maganga, the Deputy Coordinator of the Tanzania Gemmological Centre (TGC), recently expounded about the Centre's strategic initiatives and their transformative effects on Tanzania's gemstone industry.

Eng. Maganga highlighted that since 2019, TGC has been registered by the National Council for Technical Education (NACTE) under Registration

No. REG/SAT/033. The centre offers certificate and ordinary diploma courses in gemmology, jewellery, and lapidary technology. It is equipped with modern training facilities adhering to international standards, ensuring high-quality training.

In addition to training, TGC provides a wide range of services, including gemological research and development, gem and rock carving, gemstone identification, treatment, and testing.

The Centre also issues gemstone



certificates of authenticity to corporate and individual customers. Furthermore, TGC offers consultancy services and produces, markets, and sells gem and jewellery products.

TGC's vision is to become the Centre of Excellence in training, developing, promoting, and supporting the gem and jewellery industry to meet international standards.

Its mission is to ensure national and international trust in the Tanzanian gem and jewellery industry by maintaining quality, standards, integrity, and professionalism in the provision of gem and jewellery-related services.

One of the most significant developments spearheaded by TGC is constructing an eight-story building in Arusha. Eng. Maganga explained that this new facility is expected to be a game-changer for the gemstone industry in Tanzania.

The building will house advanced gemstone processing, certification, and trading facilities, providing a centralized location for stakeholders to conduct business efficiently.

With advanced processing facilities, raw gemstones can be cut, polished, and certified in the country, significantly increasing their market

value. This process will ensure that Tanzania earns higher revenues from its gemstone resources.

The new building will create numerous job opportunities for Tanzanians, ranging from skilled labour in gemstone cutting and polishing to administrative roles.

A centralized hub with modern facilities will attract both local and international investors. The transparency and efficiency in operations will boost investor confidence, leading to increased investments in the sector.

Reinstating gemstone auctions

Eng. Maganga also talked about the reinstatement of gemstone auctions, which are expected to play a crucial role in transforming the gemstone industry in Tanzania. The benefits of these auctions include:

Global exposure: Hosting regular auctions will attract buyers worldwide, helping Tanzanian gemstones gain international recognition and demand. **Competitive pricing:** Auctions provide a platform for competitive bidding, ensuring that gemstones are sold at their true market value. This competitive environment will benefit miners and traders by offering them better product prices.

Revenue generation: The government gains significantly from reinstating auctions through taxes and fees, which can be reinvested into the industry for further development and infrastructure improvements.

Market transparency: Auctions promote transparency in the trading process. Buyers and sellers have clear visibility of the prices, reducing the chances of underhanded deals and ensuring fair transactions.

Extension services and training

TGC also plays a vital role in providing extension services and training to small-scale miners. Research conducted by TGC in 2021 revealed that areas with metamorphosed rocks in the northern part of Tanzania host significant potential for gemstone mineralisation. This has favoured the existence of many small-scale gemstone miners in regions such as Manyara, Arusha, Tanga, Ruvuma, and Morogoro.

TGC has established sensitisation programs to support these miners in disseminating awareness, knowledge, and skills in value-adding activities. Training clinics have been introduced, organising miners into groups and providing them with skills in lapidary, gemstone identification and valuation, carving, jewellery design and manufacturing, and business skills. These initiatives aim to raise miners' income and provide employment opportunities to the youth and marginalised communities, including women.

Students see a brighter future
Students at TGC have expressed optimism about their future prospects upon completing their studies. Many students believe that the comprehensive training and hands-on experience they receive at TGC will

equip them with the skills necessary to excel in the gemstone industry.

They are particularly excited about the opportunities to work in the new facility and participate in the value-addition process, which they believe will significantly enhance their employability and income potential. Nasra Mohamed, a second-year student at the centre, shared her enthusiasm, saying: "The training at TGC has opened my eyes to the vast opportunities in the gemstone industry. I am confident that the skills I have acquired here will enable me to contribute significantly to the industry and improve my livelihood."

Another student, Juvenale J ustin, a third-year student at the centre, expressed his aspirations, saying: "I look forward to working in the new facility and being part of the team that transforms raw gemstones into valuable products. This experience will be invaluable for my career and help me achieve my dream of starting my gemstone business."

As TGC continues to bridge the gap between the gemstone sector and tourism, the future looks bright for Tanzania's gemstone industry and the students who will lead it into a new era of prosperity and excellence.



New Dawn for Small-Scale Mining



Tanzania's rich mining landscapes have long posed the challenge of balancing the interests of large mining corporations with the increasing number of artisanal and small-scale miners. However, the Ministry of Minerals, in partnership with Barrick Gold Corporation, has launched a ground-breaking initiative aimed at transforming the small-scale mining sector, particularly in the Mara Region.

This collaborative effort is set to empower artisanal miners by providing

them with essential resources, legal frameworks, and support to operate more efficiently, safely, and profitably.

On October 5, 2024, Dr. Steven Kiruswa, the Deputy Minister for Minerals, announced an ambitious strategy that promises to revolutionize Tanzania's small-scale mining landscape. During the presentation of Barrick's Quarterly Implementation Report in Shinyanga Region, Dr. Kiruswa outlined plans to create a conducive environment for artisanal miners through resource access,

improved safety measures, and formal structures.

Historically, small-scale miners in Tanzania have faced numerous challenges, including limited access to capital, inadequate equipment, and unsafe working conditions. These obstacles have often pushed them into illegal operations, creating conflicts with large mining corporations such as Barrick. The situation has been particularly volatile in areas like North Mara, where intruders have invaded large-scale mining sites, damaging



property and causing operational disruptions.

Research and Empowerment: A New Approach

The new government initiative seeks to strike a balance between the interests of small-scale miners and large corporations through extensive research and empowerment efforts. Dr. Kiruswa emphasized that the program would focus on 13 licensed areas in the Mara Region, which will be prospected and mapped. These areas will then be allocated to small-scale miners through a structured process involving multiple layers of supervision and management.

This approach is unprecedented in Tanzania's mining history, as it acknowledges the unique challenges faced by small-scale miners and offers a sustainable solution. The Ministry of

Minerals, in collaboration with Barrick, will provide artisanal miners with legally demarcated areas where mineral deposits have been identified. This initiative not only ensures that small-scale miners operate legally but also equips them with the knowledge and resources to mine efficiently.

Barrick's Commitment to Sustainable Development

Barrick Gold Corporation, a leading global gold producer, has a long-standing presence in Tanzania through its operations at the North Mara and Bulyanhulu mines. In addition to its gold production activities, Barrick has made significant contributions to community development in the regions where it operates.

Barrick's President and CEO, Mark Bristow, highlighted the company's

commitment to sustainable development, noting that Barrick is actively exploring new deposits in previously mined areas at Bulyanhulu and North Mara. These efforts may lead to the opening of new mines in the near future, signalling Barrick's long-term commitment to Tanzania.

Beyond mining, Barrick has invested heavily in local communities through its partnership with Twiga, a joint venture with the Tanzanian government. This partnership has invested USD 10 million in education and constructed 64 schools, 396 classrooms, and 97 dormitories. These efforts have significantly improved access to education in mining communities.

Supporting Local Communities

Barrick's contributions extend beyond education. The company has invested



in infrastructure improvements, including the construction of health centres and roads that connect remote mining areas to major towns and cities. These investments have provided local communities with better access to essential services and economic opportunities.

Iddi Kassim Iddi, the Member of Parliament for Msalala Constituency in Shinyanga Region, praised Barrick and Twiga for their role as responsible corporate citizens. He acknowledged the positive impact of Barrick's investments in education, infrastructure, and health, which have transformed people's lives near mining operations.

Additionally, Barrick has supported local social organisations by donating USD 30,000 to various non-governmental organisations

(NGOs) working in these communities. This contribution underscores Barrick's commitment to sustainable development and improving the welfare of the communities in which it operates.

A Future of Collaboration and Growth

The Ministry of Minerals and Barrick collaboration represents a significant step towards fostering coexistence between large-scale mining operations and artisanal miners. This initiative reduces land and resource disputes and promotes sustainable mining practices by providing formal, legal avenues for small-scale miners to operate.

This initiative offers small-scale miners an opportunity to move away from illegal and risky operations toward a

future of productive, legal, and profitable mining activities. With the government's and Barrick's support, small-scale miners will have access to the resources, expertise, and legal frameworks necessary for success. This initiative is part of a broader effort to ensure that Tanzania's mining sector benefits all stakeholders, from large corporations to independent miners.

As Tanzania continues to develop its mining industry, this partnership between the Ministry of Minerals and Barrick will play a crucial role in fostering shared prosperity and sustainable growth in the sector. Indeed, the future looks bright for Tanzania's mining sector as cooperation and development pave the way for a more inclusive and prosperous industry.



Tunduru's Mineral Market Rekindles Hope to Small-Scale Miners

The transformation of the mining sector in Tanzania continues at an impressive pace after H.E. President Dr. Samia Suluhu Hassan recently launched a new mineral market in Tunduru District in Ruvuma Region.

The launch of the market represents a major step toward empowering small-scale miners.

The Tanzanian government is fulfilling its pledge to provide them with the tools and opportunities they need to grow and graduate into medium and, eventually, big miners.

Launching the market on September 26, 2024, during her official visit to the

Ruvuma Region, President Samia reiterated the government's dedication to revitalizing the mining industry, particularly through the Vision 2030 initiative.

"This market isn't just a structure; it's a lifeline for our small-scale miners," she noted, highlighting how the facility—developed through a Public-Private Partnership (PPP)—will create a more supportive and profitable environment for these vital contributors to the economy.

The impact of this initiative is already apparent. Tunduru District generated an impressive TZS 6.3 billion in government revenue between July and

August 2024 alone. "Our efforts are yielding dividends," President Samia remarked, capturing the optimism accompanying this positive shift in the sector.

To further support these miners, the government, through the State Mining Corporation (STAMICO) has allocated funds for 15 new drilling rigs. Five of these have already been acquired. They have been designed to reduce production costs and enhance efficiency for small-scale operations. The remaining rigs are on their way, promising even greater support for the mining community.

These strategic investments have led to

a remarkable annual growth rate of 10.9 percent in the mining sector, now contributing 9.1 percent to Tanzania's GDP.

President Samia credited this progress with implementing investor-friendly laws and improved regulatory frameworks encouraging growth and sustainability.

According to the Ministry of Minerals' report for the 2023/2024 financial year, the mining sector contributed TZS 753 billion to the government's fund, with small-scale miners generating 40 percent of that revenue. This underscores artisanal miners' essential role in driving growth within the sector and shaping Tanzania's broader economic landscape.

As Tunduru's new mineral market opened its doors, it symbolises hope and opportunity for small-scale miners across the nation, setting the stage for a more vibrant and inclusive mining industry.

Tunduru District is rich in natural resources and boasts an impressive array of gemstones and minerals, including ruby, sapphire, and gold. This wealth of resources has sparked a surge of interest among local residents, many of whom are turning to mining as a viable source of income.





Empowering Small-Scale Miners Key to Economic Growth

Tanzania's small-scale mining sector is on the rise, thanks to new initiatives designed to boost the capacity and efficiency of miners across the country.

The government, recognizing the significant role small-scale miners play in economic development, has empowered the State Mining Corporation (STAMICO) to support these miners through various projects and initiatives aimed at increasing their productivity and earnings.

One of the standout developments is the acquisition of five drilling machines by STAMICO, specifically for small-scale miners, says the Minister for Minerals, Hon. Anthony Mavunde.

The machines, which began operations on December 4, 2023, have already started drilling in licensed mining areas across the country, including Nyamongo in Tarime, Itumbi in Chunya, Lwamgasa in Geita, Katente in Bukombe, Buhemba in Butiama, and Nholi in Dodoma.

"This significant investment is designed to give small-scale miners access to modern equipment, improving their ability to extract resources efficiently," Hon. Mavunde told the August House when moving his ministry's budget estimates for the 2024/2025 financial year.

To further support the small-scale

mining sector, Hon. Mavunde promised for more other drilling rigs for small scale miners ensuring them five rigs to be expected in 2024/25 financial year. He further argued, STAMICO has announced plans to build two state-of-the-art processing centers—one for limestone in Tanga's Kona Z area and another for salt mining in Kilwa's Nangurukuru area.

These centers aim to streamline the production process for miners in these regions, giving them access to cutting-edge technology and improving the overall value chain in mining operations. Preliminary steps to identify the requirements for these centers have already begun.



STAMICO's model centres in Katente, Lwamgasa, and Itumbi continue to play a crucial role in refining gold for small-scale miners at affordable rates. From July 2023 to March 2024, these centres generated TZS 794.13 million in revenue.

The Lwamgasa Model Centre in particular, has seen significant upgrades, expanding its capacity to refine up to 30 tonnes of gold ore per day, a substantial increase from its previous capacity of 9 tonnes.

Training and development initiatives Empowerment is not just about providing equipment; it's also about building capacity. The Ministry of Minerals has placed a strong emphasis on training small-scale miners, ensuring that they are equipped with the skills and knowledge needed to succeed.

Between July 2023 and March 2024, over 10,213 miners received training on mine safety, health, and environmental conservation. In addition to technical skills, the miners also learned about mineral trading, tax compliance, and importance of government royalties—essential knowledge for running a sustainable legal mining operation.

"In collaboration with the Federation of Small Miners Associations of Tanzania (FEMATA), the ministry organized a training visit to China for over 100 miners and traders," said Hon. Mavunde.

According to the Minister, this international exposure allowed Tanzanian miners to gain valuable insights into modern mining techniques, explore new technologies, and establish connections with Chinese mineral traders.

"The visit was instrumental in helping miners learn about advanced equipment and the global market dynamics, further expanding their capabilities," he said.

Access to financing has been a critical challenge for small-scale miners in Tanzania. Recognizing this, Hon Mavunde says the ministry works closely with financial institutions to secure loans for miners, enabling them to invest in better equipment and expand their operations. Between July 2023 and March 2024, a total of TZS 187 billion was loaned to miners, a notable increase from the TZS 145 billion loaned in 2022. He commended STAMICO for

continuously encouraging miners to maintain accurate production and trade records, saying its efforts have paid off, making it easier for them to access loans.

"Major banks such as CRDB Bank Plc, NMB Bank Plc, and AZANIA Bank have played a key role in providing financial support to miners, and the ministry is urging other financial institutions to follow suit," said Hon. Mavunde. He noted that the availability of these loans would significantly enhance the productivity of small-scale miners, contributing to the overall growth of the sector.

Hon. Mavunde insisted that the sixth phase government under President Samia Suluhu Hassan is committed to fostering the development of small-scale miners, not only to boost their individual livelihoods but also to contribute to the nation's economic growth.

He said the government will continue empowering artisanal miners by enhancing access to modern equipment, building state-of-the-art processing centres, and offering comprehensive training and financial support.



MINING & ENVIRONMENT



Transformative Chapter for The Economy as Buzwagi Gold Mine Closes Down Business in Tanzania

Buzwagi Gold Mine, located in Kahama District in Shinyanga Region, has been a key driver of the country's mining sector for over a decade. Along with Bulyanhulu, it ranks as one of the two largest gold producers in Tanzania, both owned by Barrick Gold through its subsidiary, Acacia Mining.

Although gold production ceased in 2021, signalling the end of mining activities, Barrick is committed to leaving a lasting positive legacy through various new projects.

Some of the lesser-known aspects of this transformation include the official

commissioning of the Barrick Academy, the construction of a new terminal at Kahama airstrip, and the development of the Buzwagi Special Economic Zone. The Buzwagi Mine began operating in 2009. It extracted significant quantities of gold minerals and contributed greatly to Tanzania's economy by creating employment, pumping in tax revenues, and engaging in development projects for the community.

At its peak, the Buzwagi Gold Mine employed more than 3,000 local people and was among the leading economic contributors within the

Shinyanga region. During its operating life, it also contributed to the development of local infrastructure like education, health services, and clean water.

As the gold reserves were depleted, further mining became unviable, and the mine closed in 2021, officially being decommissioned in July 2022. The idea had always been to eventually close Buzwagi because it was reaching the end of its productive life. Since 2017, operations have been scaled down, with Acacia focusing on processing the remnants of gold ore left behind from earlier mining



activities. This decline in gold reserves is a common feature in the mining industry, where the life of a mine becomes determined or dictated by the available resources.

The Barrick Academy: A new era of skills development

In 2024, Barrick launched the Barrick Academy at the former Buzwagi mine site. It is a modern facility that offers focused, specialised training programmes to upgrade over 2,000 foremen, supervisors, and superintendents from Barrick's Africa and Middle East operations over the next two years.

These programs would equip managers with leadership and technical skills that will better position them to lead high-performance teams and manage teams more effectively. In the future, financial leadership, advanced computer literacy, and safety courses will be added to the curriculum. In this way, Barrick's larger objective is to ensure that leadership is developed not only within its operations but also for the Tanzanian workforce and economy in the long term.

New Terminal at Kahama Airstrip

Another important attribute of Barrick's legacy at the Buzwagi site is the construction of a new terminal at the Kahama airstrip, which was officially handed over to the Tanzania Airport Authority in January 2024. The new terminal, which cost USD 384,000, of which 70 percent was donated by Barrick, will serve 250 passengers at one given time, up from 25 passengers, an improvement in infrastructural development within the region.

The new terminal comprises a VIP lounge, coffee and gift shops, and

facilities for people with disabilities. It is anticipated to be an important factor in Kahama's economic development by facilitating scheduled flight services, greatly expanding the region's connectivity and investment opportunities.

Economic impact and prospects for the future

While the closure of the Buzwagi Gold Mine drew the curtain on intensive mining activities at the site, it is currently being converted into the Buzwagi Special Economic Zone (BSEZ). A feasibility study done in 2021 estimated that BSEZ can create up to 3,200 jobs annually in a sustainable manner, bringing in over USD 150,000 annually through service levies from the local municipality in the short term and approximately USD 1.3 million annually in the long run.

Additionally, it is expected to contribute roughly USD 4.5 million in PAYE taxes within a short period and more than USD 18 million annually within a longer period.

Creating the BSEZ and constructing the terminal at the Kahama airstrip will turn the mine into two regional economic drivers, creating long-term job opportunities and ensuring sustainable development.

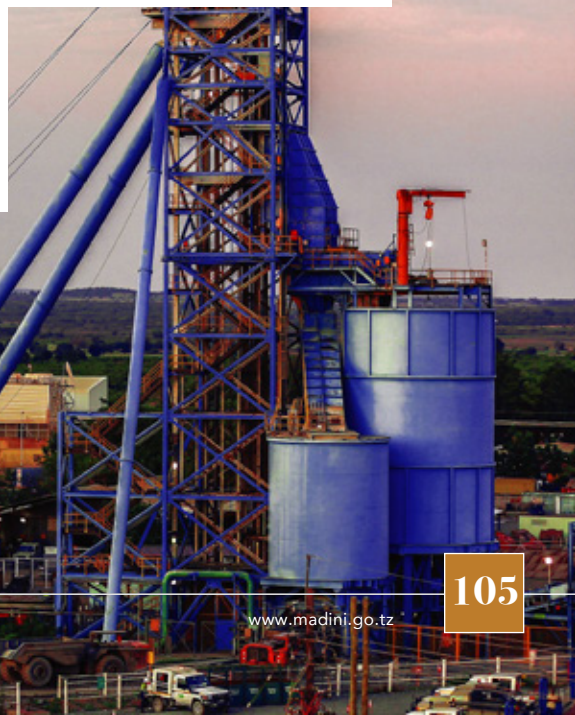
Buzwagi's strategic location makes it ideal for becoming a hub for industrial, logistics, and trading activities in the Great Lakes Region. With its proximity to the Isaka dry port and in the process of connecting through the standard gauge railway (SGR) to the port city of Dar es Salaam, the BSEZ will ensure continued trade transactions with neighbouring countries, including Rwanda, Burundi, Uganda, and the eastern Democratic Republic of Congo. Ongoing Community Projects The corporate social responsibility by

Barrick at Buzwagi has continued with the support of the community through some important aspects. This will include the KUWASA project, which uplifts education, health, and the conservation of the environment. Barrick has injected a total of USD 158,000 into this project.

Other projects in the pipeline for implementation include agribusiness projects for 3,900 farmers in two wards and the Malenge irrigation scheme for 2,356 farmers. Other projects include improved infrastructure, capacity-building programs, and the formation of farmers' cooperatives that would ensure livelihood activities in the area continued well beyond the mine's closure.

The planned mining closure of Buzwagi Gold Mine ends a significant chapter in Tanzania's mining history, but the region's future certainly looks brighter. Indeed, with the Barrick Academy, the BSEZ, and the newly constructed terminal, the Buzwagi legacy is being turned into a driver of economic growth and social development. This transformation not only secures the region's economic future but also sets a new global standard for sustainable mine closures.

Barrick's holistic approach proves that how a mine closes can be just as impactful as how it operates. The Buzwagi SEZ, together with the new infrastructure that has been developed, is positioned to play a critical role in the country's industrialization drive, as stated in the government's ambition of becoming an industrialized middle-income nation.



Tanzania Strengthens Environmental Safeguards in the Mining Sector



Mining activities have, in most cases, been blamed for damage to the environment and human health. They are also blamed for pollution, water contamination, land degradation, and health hazards to communities around the mines.

However, to ensure sustainable mining activities in Tanzania, the Mineral Policy 2009 calls for the government to

increase monitoring and regulation of the mining industry to limit or eliminate mining's negative effects on health and safety, the environment, and society. The policy also stresses the need for the government to take measures to raise environmental awareness and promote environmentally friendly mining methods, particularly among small-scale miners.

To execute such policy requirements, the Mining Act, Cap 123, has set legally enforceable procedures to be followed in addition to the provisions of the Environment Management Act (EMA), Cap 191.

Particularly, the EMA, Cap 191, read together with its Third Schedule, requires that an environmental impact assessment study be carried out prior



to the commencement or financing of any mining project. It restricts undertaking or causing to be undertaken a project or activity without an environmental impact assessment certificate issued by the National Environment Management Council (NEMC).

The Mining Act, Cap 123, sets environmental principles specific to the mining sector. It calls for mineral licence holders and any other persons involved in the exploitation of mineral resources to comply with environmental principles and safeguards prescribed in the EMA, Cap 191 and all other relevant laws. It also regulates issues of pollution caused by mining operations and how liabilities emanating from the impact of such pollution should be handled.

According to the Mining Act, applicants for special or mining licenses must provide an environmental certificate as a supporting document to the applications. The application must include an environmental investigation,

a social study, and an environmental protection plan for primary mining licences. These procedures are in place to ensure that environmental protection plans are thoroughly reviewed and that licensing authorities are fully informed about how the environment will be safeguarded throughout mining operations.

In addition, the Mining Commission is mandated to oversee and audit environmental management, environmental budgets, and expenditures for progressive rehabilitation and mine closure, in addition to the NEMC's mandate to advise the government on matters pertaining to sustainable environmental management. Small-scale miners have consistently received training from the Ministry of Minerals on cost-effective, easily adaptable, and environmentally friendly mining and mineral processing technologies, thanks to collaborations with its subordinate organisations, including the State Mining Corporation (STAMICO) and the Mining Commission.

The NEMC and Mining Commission's scheduled and unscheduled environmental inspections have also largely been the driving force behind the implementation of environmentally sound mining practices.

Therefore, Tanzania's commitment to safeguarding the environment in mining areas is a crucial step toward sustainable development in the sector. By enforcing stringent regulations through the Mining Act and the Environment Management Act, along with proactive measures such as environmental impact assessments, training, and continuous monitoring, the government ensures that mining activities are conducted responsibly.

These efforts protect natural resources and public health and promote more sustainable practices, especially among small-scale miners. Through collaboration with key stakeholders, Tanzania is setting a solid foundation for a mining industry that balances economic growth with environmental stewardship."

Julius Nyerere Advocated for Patience in Minerals Extraction, Saying They Never Rot



The late Mwalimu Julius Nyerere, who ruled Tanzania for 23 years from independence in 1961, was a visionary leader in the sense of the word.

As the first President of the United Republic of Tanzania, Mwalimu Julius Nyerere had a vision when it came to the exploitation of the country's vast

minerals.

From his early days of leadership, Mwalimu Nyerere showed how minerals were a very important resource for the sustainable development of Tanzania and its people.

The best foundation of his leadership can be seen immediately after Tanganyika's independence in 1961, when his government was allocated a 50 percent share in the diamond mine of Williamson Diamond Ltd, located in Mwadui in the Shinyanga Region. From then on, Mwalimu ensured that the shares belonged to the Tanganyika



people, inherited from the colonial government.

Mwadui Diamond production has been going on for a long time since 1940. After independence, Mwalimu Nyerere did not see the need to nationalise it because the nation had no experts, so he thought it wise for the government to keep its 50 percent share of the mine.

The leadership of Mwalimu Nyerere laid a solid foundation to ensure the safety of all Tanzanian minerals by creating a friendly mining environment and allowing mineral exploration to be done in other areas for the benefit of current and future generations, believing that minerals belong to Tanzanians.

“Minerals don’t rot, we will start mining them only when Tanzanians have the knowledge of mining works ready to achieve this,” said Mwalimu Nyerere. Mwalimu Nyerere cautioned Tanzanians not to rush into mining because they did not have the professional and technological skills to mine minerals and benefit from them

as a nation according to their capabilities at the time.

Under his leadership, he believed that minerals were a precious resource. That is why he decided to continue with the Geological Survey Department (GSD), which was established in 1925 during the colonial period. Now, it is the Geological Survey of Tanzania (GST), which is responsible for surveying and mapping geological maps and mineral research in the country.

The Government established GST in December 2005 by Government Agency Act No. 30 of 1997 (CAP. 245) as amended by Act No. 14 of 2009 under the former Ministry of Energy and Minerals to promote the quality and efficiency of geoscientific work and attract investors in the Mining Industry from within and outside the country.

But in recent years, the country has embarked on an ambitious initiative to equip its population with the technical expertise necessary to operate advanced mining technologies and manage complex operations

effectively.

The policy and legal reforms in Tanzania have created a conducive environment for investments in the mining sector, which has increased the production of minerals in the country to a large extent since the early 2000s due to the increase in exploration and mining companies in the country. The increase in investment in the mining sector increases the demand for geoscientific information, which is important in knowing the areas with minerals. This will increase the scope of the mining sector's contribution to the national GDP and eliminate poverty by linking other sectors of the economy. Closing the 7th Technology and Investment Exhibition in the mining sector in Geita Region on October 13, 2024, the President of the United Republic of Tanzania, H.E. Dr. Samia Suluhu Hassan, said the Government valued the mining sector for its great contribution to improving the conditions of its citizens, including small miners and promoting the national economy.

THE VALUE OF PARTNERSHIP



When Barrick took over the management of the North Mara, Bulyanhulu, and Buzwagi gold mines in 2019, it swiftly revived these long-dormant operations in a new partnership with the Tanzanian government. To date, it has paid dividends of \$461 million to shareholders. Overall, it has invested \$4 billion in the country's economy, spent \$15.6 million on community development and employs 6,000 people with Tanzanian nationals now making up 96% of the mines' workforce.

The combined North Mara and Bulyanhulu are on track to become yet another of Barrick's Tier One gold complexes, soaring from stagnation to the summit of their sector.

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* A Tier One Gold Asset is an asset with a reserve potential to deliver a minimum 10-year life, annual production of at least 500,000 ounces of gold and total cash costs per ounce over the mine life that are in the lower half of the industry cost curve.

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A man in a yellow high-visibility shirt and white hard hat stands in profile, looking towards the right. He is wearing safety glasses and earplugs. The background shows a large industrial structure, possibly a conveyor belt or bridge, with a sunset sky in shades of orange and blue. The ground is dusty and there are some mechanical components visible in the distance.

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