Setting the Scene

Overview of Tanzania's Extractive Sector



1. Setting the Scene: Overview of Tanzania's Extractive Sector

1.1 The Role of the Extractive Sector in Tanzania's On-going Development

1.1.1 Brief History of the Mining Sector and Its Importance to Tanzania's Development

Tanzania's rich mineral endowment has long been considered a potential source of growth and poverty reduction. It is now considered one of Africa's most mineral-rich countries, with a rich mineral endowment including diamond, uranium, iron ore, nickel, copper, cobalt, and silver.³⁰ Numerous varieties of gemstones are also extracted: ruby, garnets, topaz, emeralds and tanzanite.³¹ Soda ash, gypsum, salt, phosphate, gravel, sand, and dimension stones are also extracted.³² The country is the only tanzanite producer in the world and is home to the only known tanzanite deposit in the world.³³ Tanzania's mineral deposits are found in different regions throughout the country. Gold mines are largely concentrated in the lake zone (described in the national policy as "the greenstone belt, located to the east and west of Lake Victoria")³⁴ and the Tanzanite mines are located in the Simanjiro district, located in the Manyara region.³⁵

Commercial mining for gold started as early as the 1890s near Lake Victoria.³⁶ Available records show that gold was "discovered" on the mainland of Tanzania (then known as Tanganyika) around the Lake Victoria region in 1894, during the German colonial occupation, which lasted from 1885 to 1919.³⁷ Large-scale mineral extraction of gold commenced during German occupation and has been underway since that time. However, evidence suggests that prior to German occupation, the local populations engaged in small-scale mineral prospecting.³⁸

Since 2008, the number of large gold mines has increased rapidly³⁹ with the commissioning of seven large-scale gold mines - Bulyanhulu, Buzwagi, Geita, Golden pride, New Luika, North Mara and Tulawaka, making Tanzania one of the largest gold producers in Africa.⁴⁰ Since 2000, mining has been the fastest growing sector in Tanzania with an average annual growth rate of about 15%, the largest recipient of foreign investment, and the largest contributor to the country's exports.⁴¹ Gold has only recently been eclipsed by tourism because of the drop in the export value due to the dramatic fall of the prices of the metal.⁴² The recent reforms of the extractive sector have coincided with Tanzanian growth and development.⁴³

The extraction of diamonds is also a very important aspect of Tanzania's mining operations, with the Williamson Mine, the first and only operating diamond mine in Tanzania, having started its operations in the 1930s at Mwadui.⁴⁴ The diamonds extracted were mostly

kimberlites and the mine was quite prosperous, with approximately 2M carats extracted since its inception. However, production has been decreasing due to the flooding of the mine and the exhaustion of resources.⁴⁵

A massive nickel mining project in Kabanga also began in 2005, now considered one of the biggest nickel mines in the world.⁴⁶ The current known reserves of nickel are approximately 209 million tons.⁴⁷ Tanzania also has uranium reserves. Exploration started in the 1970s, and it was discovered that the biggest uranium deposits were located in the Mkuju River.⁴⁸ In 2009, it was announced that 70 licences were delivered to various companies by the Ministry for Mining and Energy.⁴⁹ The Canadian Uranium One company was supposed to start mining in 2013, but the commercial production was pushed back to 2018.⁵⁰

Coal is also available, with reserves averaging 1.9 billion tons, of which 25% is proven, although geological studies have shown that the overall potential is closer to 5 million tons. ⁵¹ It is exploited in small scale at the Kiwira Coal Mine in the Mbeya Region, and at the Tancoal Energy Limited Mine at Ngaka in Ruvuma Region. ⁵² Tanzanian soil has also proven abundant in copper, which led to the activity of two mines (the Nyasa Kwamnere Handeni and the Ibaga copper mines), with the overall production standing at 2980 tons. ⁵³

The Sustainable Management of Mineral Resources Project Phase II (SMMRP) is prioritising the sustainable development of artisanal and small-scale mining (ASM), a labour-intensive activity which already involves an estimated 1 million Tanzanians in rural areas, "as a way to spread the benefits of mining and reduce rural poverty" and "improve benefits for Tanzania and Tanzanians" with an emphasis on shared growth and poverty reduction.⁵⁴

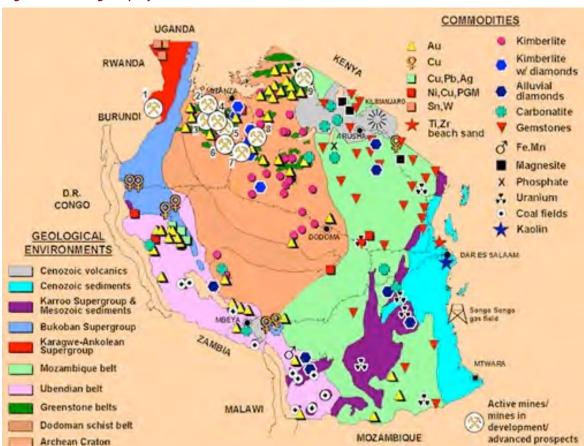


Figure 1: Mining Map of Tanzania⁵⁵

Figure 2: Mineral Occurrence in Tanzania⁵⁶



The latest TEITI Reports show that revenues from the extractive sector to the Government of Tanzania increased by 28%, from USD 602 million (TZS 956 Billion) in 2013 to USD 754 million in 2014 (TZS 1,221 billion) due mainly to the increased gold production and corporate tax paid by one company in the oil & gas sector, which represented 30% of total extractives revenue in 2014.⁵⁷ This is in addition to USD \$200,000 that extractive companies paid to local government authorities.⁵⁸

Within the mining sector, there are two large sub-sectors. Large Scale Mining (LSM) associated with large-scale FDI, infrastructure development, technology transfer, high productivity and high export earnings. LSM tends to be highly capital intensive but with very limited contributions to job creation. Artisanal and Small-Scale Mining (ASM) often involves local miners using basic methods to extract near-surface deposits. ASM is associated with low investment, low productivity and the use of informal marketing channels, but it accounts for over 90 percent of the sector's employment. It is far more accessible to the poor, especially in rural areas, who carry out ASM as a mean of income generation. ASM is spread across ten zones delineated by the Government. Between 1987 and 1997 ASM accounted for 95 percent of the country's mineral production, principally gold, copper and silver production. Currently, ASM accounts for roughly 10 percent of

Tanzania's gold production, and is a major producer of gemstones, copper ore, iron ore, tin, bauxite, industrial minerals and building materials.⁵⁹

As the World Bank noted,

"figures provided by the MEM [Ministry of Energy and Minerals] indicate that around 700,000 people are officially working in the sector, but an estimated 1 million people are believed to be involved in this activity, including women and children, along the supply chain. Typically, ASM generates four jobs for every person involved. However, it often operates outside formal channels and is associated with severe social, environmental, safety and security risks."

The Government policy with respect to ASM has been to actively encourage formalisation by simplifying procedures for acquiring licences, decentralizing services and providing financial assistance to artisanal miners willing to formalise. As a result of these efforts, the number of licences has risen dramatically, increasing from about 35 in 1999 to nearly 35,000 in 2014.⁶⁰

1.1.2 Brief History of the Oil & Gas Sector and Its Importance to Tanzania's Development

Tanzania is not an oil-rich country. The 2015 Pre-Assessment Report of the Tanzanian energy sector conducted under the Principles of the International Energy Charter and the Energy Charter Treaty, determined that no oil reserves have been found in Tanzania as of yet. As a result, the State must rely on imports of petroleum products from other countries, which account for approximately 3% of the total energy imports per year. However, exploration is ongoing; in October 2014 the Tanzanian Energy Ministry held meetings with oil giants Total and British Petroleum to discuss oil and gas exploration. In addition, the Tanzania Petroleum Development Corporation, a state-owned oil and gas company, opened another bidding round in April 2016 to allow more exploration companies to participate in the country's oil and gas sector.

In contrast, natural gas resources are abundant in Tanzania, both on- and offshore. Exploration for natural gas commenced in 1952 and the first discovery was made in 1974 at Songosongo Island in the Lindi Region.⁶⁴ As explained in a recent study on the sector,

"[t]he reason why production for long was not viable had to do with the character of the finds. Most exploration companies were looking for oil, which is easier and cheaper to exploit and transport to distant markets, but what they found was gas. Until recently, gas was considered appropriate for domestic consumption only, in particular in developing countries. Tanzania with its very small domestic market was not commercially attractive." 65

The presence of natural gas was discovered in 1974, at Songo-Songo in the Lindi Region.⁶⁶ Major explorations began in the 2000s.⁶⁷ Most of the natural gas deposits are found in onshore gas fields along the country's coast⁶⁸ in Songosongo, Mnazi Bay, Mkuranga, Kiliwani North, and Ntorya. The reserves are now estimated to be higher than 43TCF (and at least 57TCF), but many of the reserves are yet to be found and explored.

The production of gas is currently organised through a Production Sharing Agreement (PSA), which allows the Ministry of Energy and Minerals to grant licences to the Tanzania Petroleum Development Corporation.⁶⁹ As of December 2013, 26 PSAs have been signed between the Government and 18 different companies.⁷⁰ As many as 63 wells have been drilled (BG in Blocks 1,2,3; Statoil in Block 2; Petrobras in Block 5).⁷¹ As of 2013, the production of gas is "based on small discoveries at SongoSongo Island in Kilwa, and at Mnazi Bay in Mtwara Region."⁷²

The year 2014 was also the busiest year in terms of gas drilling so far, expectedly reaching 13 wells by different companies. As noted in a recent study,

"The Tanzanian government has sought to convince the two major consortiums, BG in collaboration with Ophir and Statoil in collaboration with ExxonMobil, that they should join forces and construct an LNG plant together. The companies have announced that they will not take any decision until 2018. Local unrest in the region that is projected to host the LNG plant, fear of political instability related to the forthcoming 2015 elections, and fluctuating world market oil prices make them prefer to wait and see. This will delay the project well into the 2020s."

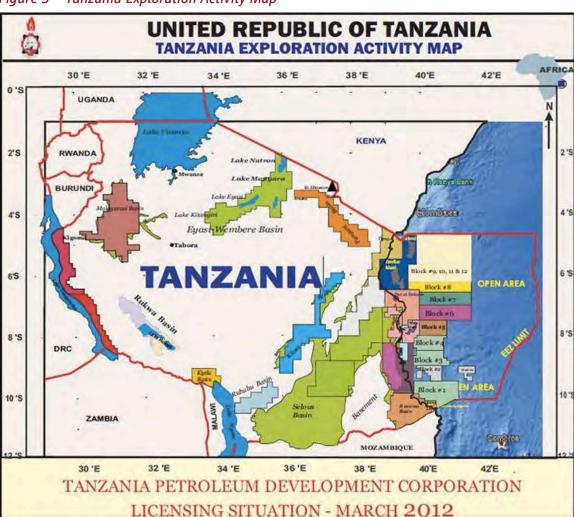


Figure 3 – Tanzania Exploration Activity Map⁷⁴

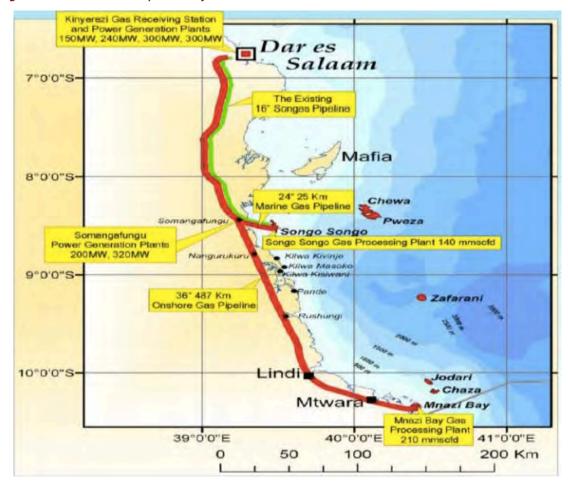


Figure 4: Natural Gas Pipeline Infrastructure⁷⁵

These figures exclude 2.7 million additional discoveries made on 25th February 2015 as reported in the local media.⁷⁶

The extraction and transportation of natural gas in Tanzania led to the necessary construction of pipelines near the shore. Recently, news has surfaced that the project for the construction of another pipeline going from Tanzania to Uganda is in discussion. This information is linked to the recent discovery of "an additional 2.17 tcf" of natural gas reserves in an onshore field.⁷⁷ The construction of a 520 km gas pipeline from Mtwara to Dar es Salaam was completed in October 2015.⁷⁸ The pipeline was made possible by a US\$ 1.2 billion loan from the Peoples' Republic of China.⁷⁹

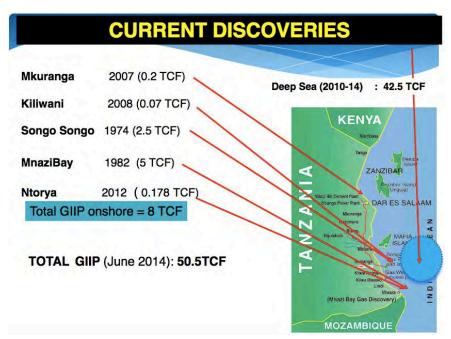


Figure 5: Current Natural Gas Discoveries in Tanzania80

1.2 Tanzania's General Governance Structure in the Extractive Sector

1.2.1 Division of Responsibilities between Mainland Tanzania and Zanzibar

The United Republic of Tanzania (URT), formed by union of the former Republic of Tanganyika (now referred to as Tanzania mainland) and the People's Republic of Zanzibar⁸¹ in April 1964⁸² is governed by the 1977 Union Constitution, which remains in force today. The Union has two autonomous governments: the Union Government⁸³ and the Revolutionary Government of Zanzibar.⁸⁴ The Union Government, exercises powers over the whole territory on "union matters" and on all other matters within Tanganyika (Tanzania Mainland)⁸⁵ including mineral resources.

While the Union has existed for over fifty years, the exercising of governance powers by the two governments has not been as clear cut. While "mineral oil resources, including crude oil, other categories of oil products and natural gas" are explicitly listed as Union matters, hence outside of the Revolutionary Government of Zanzibar's jurisdiction, implementation of mineral governance has proven to be a thorny issue.⁸⁶

This Report focuses on the extractive sector laws in mainland Tanzania because up until the time of writing, no natural gas discoveries have been made in Zanzibar and exploration activities have stalled due to legal uncertainties as Zanzibar insists on a need for full autonomy over oil and gas matters that fall under Union matters according to the Union Constitution.⁸⁷ There is a stalemate between the Tanzanian Government authorities and

those in Zanzibar over the distribution of benefits from natural resources found on the island's territory, where the latter had taken the stance that Zanzibar should receive all revenues. The stalled constitutional process was supposed to have addressed the issue but in the meantime, amendments that had been proposed to the new Petroleum Act pave the way for Zanzibar to take control over its resources.⁸⁸

1.2.2 Government Institutions Governing the Extractive Industry in Tanzania

The Government of the United Republic of Tanzania has the overall responsibility to administer exploration, extraction and management of the country's extractive resources.⁸⁹ The President appoints Ministers to oversee ministries/cabinet level institutions.⁹⁰

The Ministry of Energy and Minerals

The Ministry of Energy and Minerals (MEM) is responsible for the development of energy and mineral sectors in Tanzania. It envisions its function as playing "an important role in poverty reduction and in supporting socioeconomic development in Tanzania." MEM works with a range of stakeholders: public, private, public-private partnerships, local communities, NGOs and civil society and has a Client Service Charter defining these relationships. Its divisions include:

- The Environmental Section Unit has responsibilities of ensuring compliance of environmental issues.
- The Minerals Division Commissioner is responsible for the day-to-day administration of the regime, and is supported by various officers.⁹³
- The Small-Scale Mining Development Division under the Commissioner of Minerals acts as a national centre for small-scale mining management, and is responsible for coordinating outreach programs, among other things.⁹⁴
- The Mining Advisory Board advises the Minister on various matters relating to the administration of the Mining Act. 95 While the President appoints the chair of the Board, the Minister appoints its other members. 96
- The Geological Survey of Tanzania is responsible for advising the Minister on geological matters, and undertaking the geological mapping of Tanzania. 97
- The Energy Division Commissioner is responsible for oil and gas as well as electricity and renewables.

The Energy and Water Regulatory Authority

The Energy and Water Regulatory Authority (EWU RA) is the autonomous regulator of midstream and downstream activities, including transportation of gas. 98

The National Environment Management Council (NEMC)

The NEMC is responsible for environmental enforcement, compliance, review and monitor environmental impact statements, research and awareness raising. The main mission of the NEMC is to promote environmental management in Tanzania through coordination, facilitation, awareness raising, enforcement, assessment, monitoring and research.

Ministry of Natural Resources and Tourism (MNRT)

The Ministry of Natural Resources and Tourism of the United Republic of Tanzania is responsible for management of natural, cultural and tourism resources. The Ministry is involved in the extractive sector in that it aims to conserve natural, cultural resources sustainably and develop tourism for national prosperity and benefit of mankind through development of appropriate policies, strategies and guidelines; formulation and enforcement of laws and regulations; monitoring and evaluation of policies and laws.¹⁰⁰