

With such mineral wealth, why is Tanzania not richer?



Martin Caton MP,

The All-Party Parliamentary Group for Earth Sciences met to discuss “The Political and Economic Implications of Tanzania’s Mineral Resources - including the gemstone Tanzanite”. The Chair of the Group, Rt Hon Kevin Barron MP was unable to attend on the day and Martin Caton MP, Vice-Chair, chaired the event. Presentations were given by Dr David Hargreaves (Director, Fairtrade Gemstones) and Liv Carroll (Senior Geologist, Wardell Armstrong) both of whom have worked extensively in Tanzania. Attendees included: parliamentarians; mining geologists, mining engineers and gemstone mine owners (many with direct mining experience within Tanzania); representatives from the oil and gas, and coal industries; jewellers and gemmologists.

The meeting included an explanation of the relationship between the geography and geology of the country, its political and financial systems, and its mineral wealth, which includes gold, nickel, tin, copper, uranium, coal and gemstones. The gemstones of Tanzania include gem quality diamond, ruby, sapphire, emerald, garnet and the blue-coloured Tanzanite, which is only found in Tanzania. With such a mineral wealth, why is the country, like most African states, still poor with a long history of failing development?

Tanzania has the potential to progress via mining to gain hard currency exports, initially of high value minerals such as gold and gemstones, then build infrastructure to enable exploitation of bulk minerals such as iron ore, coal, copper and nickel.

The minerals potential is well suited for development as a fast track to economic enhancement. The presentation introduced the steps that are being taken in this direction and what the results might be. Historical, cultural and political influences were discussed as possible barriers to economic enhancement.

A former British colony, Tanzania is about twice the size of Spain, with a population of 40 million growing at 2% per annum of whom more than 40% under the age of 15.

More than 80% of Tanzania's population is estimated to be rural, yet only 4% of the land is cultivated. Agriculture is the mainstay of the economy, providing more than 60% of GDP (GDP per capita is approximately US\$1500) and 80% of employment, but mining is now beginning to have a significant input. The Tanzanian government, reportedly, want to increase the contribution to the annual GDP of the mining sector to 10% by 2025. This gives an indication of the importance of the growing minerals industry in Tanzania. However, with a population reliant on agriculture, for many giving up good agricultural land and an established way of life for mining is not an acceptable alternative.

Following independence Tanzania was a socialist state under Julius Nyerere with endemic proportions of corruption that denied any economic relief to the population. From his retirement in 1985, until 1995 the one party state continued with collective agriculture and state controlled industry, under which nearly all foreign investment ceased. Multiparty elections in 1995 reversed these trends and saw an influx of foreign investment led by the mining industry, a sector totally ignored by previous governments.

Coal deposits which occur in the South of the country, for example at Kiwira near the Malawi border at Mbeya, have been worked since 1988. At present they receive Government assistance following the withdrawal of funding by a Chinese consortium. The mine failed to deliver enough coal to fire the Tanesco 200Mw power station and has only managed to produce about half that amount.

The remainder of the country is underlain by older rocks which contain the country's gold and gemstone deposits. These high value commodities are attractive to both large and small scale miners as they also have a high value to weight ratio. This is a critical feature in a country with poor infrastructure such as Tanzania. Hargreaves mapped out the distribution of gemstone occurrence which offer an opportunity for artisanal miners to recover stones that can provide portable cash and a support a second tier of traders.

Gold production is in central and northern Tanzania. Exploration began in earnest in the late 1980's only to accelerate with the change in government incentives that were eventually incorporated into the 1998 Mining Code. Today, there are 5 major gold mines operated by major companies such as

AngloGold Ashanti (Geita), Barrick (Bulyanhulu, Buzwagi, North Mara, Tulawaka) and Northern Mining Exploration (30% Tulawaka). Overall, annual gold production in Tanzania is around 50 tonnes or 1.6 million ounces with over 65% from these five mines.

The mining review, undertaken by the World Bank in 1990, was the precursor of the current Tanzania Mining Code. As with all developing nations, mining offers a kick start to the economy by inward investment, employment and taxation of the mined product. There are many countries who wish to attract similar investment and creating a mining code that offers a competitive environment for foreign direct investment is of primary concern. Such codes reflect the underlying financial conditions at the time they were written.

In 1998 the price of metals was low, with gold averaging \$300 per ounce in January, or about one quarter of today's price. This led to slim margins on gold mining and, as a result, the Tanzania code was designed to attract the investment required to begin industrial gold mining. The purpose of the 1998 Mining Code was also to provide tax for the government; if correctly balanced, both would prosper. Too much taxation would encourage mining companies to go elsewhere, too little would indicate an unsatisfactory outcome to the host nation. Codes are not only about taxation; they must also provide a secure tenure for investors, enable local participation, and be transparent to all.



Acknowledgment is made to "TanzaniteOne Ltd" for this photo of Tanzanite

Tanzanite was first discovered in 1967 near the base of Mt Kilimanjaro. This remains the only tanzanite locality in the world. The geology is such that it is not possible to predict when the resource will be exhausted, which has served to increase the interest in the gemstone as a finite product. Tanzanite is a brownish colour when found (in its rough state) but with heat treatment is transformed to a bright violet-blue. Tanzanite is a good marketing tool, used to raise awareness of Tanzania and its mineral wealth, though some gemmologists might argue that though the colour is outstanding, it is not sufficiently hard to be a particularly useful gemstone in rings as it is liable to damage due to abrasion.

TanzaniteOne Ltd is operating one of the four sections of the outcrop, Block C, at Merelani (some 70 km southeast of Arusha) in an orderly and safe manner. It also has a partnership with Tiffany & Co, New York, to market the stones and ensure stable prices. In 1989 over 30,000 artisanal miners were working the tanzanite mining area. Blocks A, B and D are operated by artisanal miners which results in a volatile market depending on local conditions. Over-supply in 1997 was followed by extreme shortage in 1998 as a result of heavy rains flooding artisanal shafts and killing hundreds of workers. Although prices have remained relatively high since that time, a volatile market isn't

attractive to investors and much work has been done by TanzaniteOne and others to establish a regulated market.

Artisanal mining of gold is also common. In the Lake Victoria Goldfields there are thousands of artisans recovering what gold they can and as is often the case with artisanal mining, safety is a problem. Barrick, the Canadian mining company, is operating the North Mara mine in the north west of the Lake Victoria gold field, 20 km south of the Kenyan border. In 2008 it produced nearly 200,000 ounces of gold. However, there have been serious invasions of the mine and its processing plant, including one in December 2008 when U\$15 million worth of heavy equipment was destroyed by local groups. Barrick was supported by national police in recovering their property. The scale of these actions by locals indicates the dissatisfaction of some to the exploitation of national resources.

This dissatisfaction resulted in criticism of the 1998 Mining Code, specifically that the 3% royalty was too generous and should be raised. Although no taxpayer will vote for an increase, the defence of this rate was that the amount of investment necessary to create a mining industry in a country with poor infrastructure was significant, a viewpoint supported by Dr Peter Kafumu, Commissioner of Minerals in the Ministry of Energy. Reported in 2007, Dr Kafumu regarded the rate as competitive and necessary to maintain investment. The importance of taxation in enabling international investment was discussed and there was concern that a retrospective rise (in relation to investment projections) would have a negative effect on attracting new companies.

In conclusion, the gemstone Tanzanite was seen to be a good 'hook' with which to raise awareness of the mineral wealth of Tanzania. Although working in Tanzania is expensive, improved infrastructure from roads to government administration and taxation, will improve the investment outlook and may attract small to medium size companies that are conspicuously absent today and ultimately improve the wealth of the country.

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