

TANZANIA

*By Dr Peter D Kafumu
Senior Geologist and Head of Promotion and Statistics
Ministry of Energy and Minerals*

During 2003, as in the previous year, the mineral sector in Tanzania continued to grow, mainly as a result of investments in gold exploration and mining, and gemstone mining and trading. The tremendous rate of growth of the gold-mining industry reflects the continual increase in gold exploration which, in 2003, resulted in another gold-mining contract being signed, this time, between the Government of Tanzania and Pangea Minerals Ltd. The contract will pave the way for mining at Tulawaka in the Biharamulo District, Kagera Region, in the Lake Victoria goldfields. The Tulawaka mine is expected to come on stream in early 2005. It will be the sixth large-scale gold mine to come into production in Tanzania within six years.

Tulawaka is jointly owned by Barrick Gold Corp subsidiary, Pangea Goldfields Inc (70%) and Minière du Nord (30%), both of Canada, and will be operated by Pangea Minerals Ltd. The mine, expected to have a life of 25 years, involves an investment of US\$50 million, and annual production capacity is anticipated to be 500,000 oz.

The mineral sector has thus continued to grow and the contribution of the sector to national GDP rose to 2.8% in 2003, up from 2.5% in 2002. The value of mineral exports in 2003 increased by an estimated 24% to US\$558 million, from US\$485 million in 2002. Gold exports increased by 20%, from US\$414 million to US\$504 million. Together, the total export value of minerals, fish, manufactured goods, horticulture products etc, was about US\$800 million, up from US\$676 million in 2002, an increase of over 15%. Gold continued to be the major contributor to export revenues, accounting for more than 62% of the total, compared with 49% in 2002.

Gemstone mining (including diamonds) is also growing, and official export values rose to US\$29.12 million in 2003, up from US\$22.02 million in 2002. The increase is attributed mainly to an expansion of mining and also of trading activity. In 2002 there were 212 official gemstone traders but last year the number had risen to 417. Merelani Mining Co Ltd, a subsidiary of African Gem Resources Ltd (Afgem) of South Africa, is the only mechanised large-scale tanzanite mine in Tanzania and accounts for over 30% of the total exports of tanzanite.

Over 98% of gemstones are exported from Tanzania in raw form to cutting and polishing centres outside the country, and the value of the rough gemstones that are retained in Tanzania is insignificant when compared with the amounts that are received from the sale of the polished products. There is a general feeling within Tanzania that the country is not benefiting, and that a good number of Tanzanians are being denied employment opportunities in

the cutting and polishing of gemstones, and in jewellery design and manufacture. In this regard, the legislative framework is being reviewed in order to insert a clause that would require all gemstones eventually to be cut and polished in Tanzania prior to export.

Ten years ago, Tanzania was little known to mining investors, despite its prospective geological environment and big potential for gold, base metals, platinum group metals, iron ore, industrial minerals, coal, diamonds and coloured gemstones. The situation has now completely changed, with junior and major players in the mining industry flocking into the country for mineral concessions and investments. Tanzania has now become an especially important destination for gold exploration and exploitation.

Whereas in 2002 there were 497 mineral prospecting licences and only 166 mining licences, today, issued prospecting licences are in excess of 2,200 and the number of mining licences granted has reached 170. The majority of these licences are targeting gold, followed by platinum group metals and gemstones.

This exploration boom has led to the discovery of economic deposits, some of which have already developed into operating mines. Each year since 1998, a new gold mine has been opened in Tanzania. The mines are owned by Rolute Ltd; Ashanti Goldfields in joint venture with AngloGold; Barrick Gold Corp; Placer Dome Inc; Meremeta Ltd; and Pangea Goldfields Inc in joint venture with Miniere du Nord (Table 1). Also present in the country are De Beers, which operates the old Williamson diamond mine at Shinyanga, and Afgem which is mining tanzanite near Moshi.

With the new mines, Tanzania has become one of the fastest-emerging gold producers in Africa, and is now the continent's third-largest gold-producing country after South Africa and Ghana. Annual production of gold has increased from around 43.2 t in 2002 to about 48.0 t in 2003. As indicated earlier, the mining sector is now leading in terms of growth and contribution to the country's export earnings.

Tanzania now has proven gold reserves in excess of 36 Moz (equivalent to over 1,000 t of gold). This estimate is based on the reported total gold reserves of the six gold mines that have been opened in the past six years (Table 1).

Foreign investment in Tanzania's minerals sector is not confined to gold and gemstones. Barrick Gold Corp acquired the Kabanga nickel project five years ago through its takeover of Sutton Resources Ltd, and in February this year, the company signed a letter of intent with fellow Canadian miner, Falconbridge Ltd, for the latter to earn a 50% interest in Kabanga by funding the next US\$45 million of expenditure within a defined work programme and completing a feasibility study within a three-year option period. Barrick has carried out some exploration work at Kabanga and has estimated the total

inferred resource at some 26.4 Mt averaging 2.6% Ni, although this excludes the results of its 2003 drilling programme. Barrick and Falconbridge have already agreed to carry out a major drilling programme and geophysical surveying at Kabanga, and on other targets within the Kagera nickel belt.

The achievements in Tanzania's mining sector have been stimulated by major economic policy reforms which have changed Tanzania from a command economy in the early 1980s to today's market-oriented economy. Favourable fiscal and legal regimes, coupled with a stable political environment, have been the driving forces in attracting investment to the minerals sector, and investing in Tanzania's minerals sector, in any form, mining or mineral trading, is now considered by many investors to be feasible and a sector that can guarantee profits of substantial magnitudes.

In line with the reforms, the World Bank assisted Tanzania in drawing up a new mining policy in 1997, and an investor-friendly mining law that was enacted in 1998. The Mining Act of 1998 guarantees investors' security of tenure; security of capital and profits; transparency in issuance, and administration of, mineral rights; and also addresses environmental concerns. Amongst areas of major departure from the old policy, is the changed role of the government, from active participation as owner and operator of mines, to that of being administrator, regulator, facilitator and services provider to the industry.

In order to sustain the growth momentum in the sector, there are a number of programmes which are currently being undertaken by the government. These include a project to upgrade the geo-scientific database, with technical assistance from the Nordic Development Fund. Also, a high-resolution airborne geophysical survey in selected areas is being undertaken, with the objective of increasing the information base for investors. The initial datasets are now available at the Tanzania Geological Survey at a reasonable price. The airborne survey project will be succeeded by ground geophysical, geochemical, and geological activities.

Other programmes that are in progress include the modernisation of administration of the mineral rights by setting-up a computerised mining cadastre system. The implementation strategy has been prepared and the procurement of a contractor to undertake the task is under way. It is also intended to transform the Geological Survey of Tanzania into an executive agency. This process began in 2002 and is progressing well, and expected to be completed by mid-2005.

Table next page.

Table 1: Large-Scale Gold, Diamond and Tanzanite Operations

Name of Mining Company	Owner of the mine	Mineral	Type of Mine	Initial output	Resource (Moz)	Reserve (Moz)	Investment US\$M	Annual Production	Mine Life (Yrs)
Golden Pride Project (Nzega)	Resolute Ltd	Gold	Open pit	Nov-98	2.71	1.07	77.00	180,000 oz	9
Geita Gold Mine (Geita)	AngloGold (50%) Ashanti Goldfields (50%)	Gold	Open pit	Aug-00	14.00	7.00	450.00	600,000 oz	14
Kahama Mining Corp (Kahama)	Barrick Gold Corp	Gold	U/G	Jul-01	14.50	10.00	280 + acq	400,000 oz	20
Afrika Mashariki Gold Mine (Tarime)	Placer Dome Inc	Gold	Open pit	Aug-02	4.10	1.90	72 + new investment	176,000 oz	10
Buhemba Gold Mine (Musoma)	Meremeta Ltd (50%) Tanzania Govt (50%)	Gold	Open pit	Feb-03	0.75	0.20	65.00	80,000 oz	8
Tulawaka Gold Mine - Pangea Minerals Biharamulo	Pangea Goldfields Inc (70%) Minière du Nord (30%)	Gold	Open pit	Expect 2005	N/A	N/A	50.00	500,000	25
Williamson Diamonds Ltd (Shinyanga)	De Beers (75%) Tanzania Govt (25%)	Diamond	Open pit	1940	51 Mct	N/A	12.30	221,000 ct	N/A
Merelani Mining Ltd (Arusha)	Afgem (75%) Mr A. Mpungwe (25%)	Tanzanite	U/G	March-00	50 Mct	N/A	20.00	230,000 ct	15