

TANZANIA

By Edwin P. Mchihiyo

Senior Geologist, Ministry of Energy and Minerals, Dar es Salaam

During the year 2000, exploration in Tanzania was generally slow for most junior companies. However, larger companies active in Tanzania such as Barrick Gold Corp., Ashanti Goldfields, AngloGold and Resolute Ltd intensified their exploration activities in and around their properties.

General and Parliamentary Elections were held successfully in October 2000 and President Benjamin William Mkapa was re-elected in office by majority vote for five more years. The re-election of President Mkapa for another term has reassured investors of continued commitment of the good work started by the President in winning investor's confidence to Tanzania. Mr. Mkapa has been a strong supporter of the mining sector. Opening the Ashanti's Geita mine in August, 2000 the President said that Tanzania has among the best policy, legal, administrative, fiscal and regulatory frameworks in the world for private-sector participation in exploitation of mineral wealth, and assured investors that the good investment climate will continue to ensure that investors get out of the ground more than they put in. To demonstrate his emphasis and commitment on environmental management, the President ordered the establishment of a Presidential Award for leadership and excellence in environmental management to be given annually. The award will be given to mining companies that have demonstrated outstanding contribution to environmental management beyond simple compliance with existing regulations.

Tanzania's economic performance improved in the year with inflation remaining low at 6%. The economy was projected to grow at 5.1%. Preliminary data indicate that real GDP grew by 4.9% compared to 4.7% in the year 1999. The mining sector attained a growth rate of 15.4%. Total value of mineral exports in year 2000 was US\$184.8 million and it is

estimated to reach over US\$400 million by June 2001. Traditional exports increased by approximately 30% to US\$37.1 million while non-traditional exports increased by 90.5% from US\$48.2 million to close to US\$200 million. The improvement in performance is attributable mainly to exports of gold, diamonds and gemstones, which accounted for approximately 90% of the non-traditional exports.

Gold exports alone reached US\$120.53 million after commissioning of Geita mine in June 2000. Geita produced a total of 176,836 oz during the year at an operating cost of US\$145/oz. The mine has production capacity of 500,000 oz/y and is owned and operated jointly by Ashanti Goldfields Co. Ltd and AngloGold Ltd. AngloGold joined the project following Ashanti's sale of 50% of its interest in the mine to AngloGold in December, 2000. During the year, Ashanti's exploration focus continued to be in and around its existing mining operations. Deep infill and extension drilling at Geita increased reserves by 67% to 31.6 Moz, while total resources, including inferred, increased to 14.6 Moz. The company has embarked on feasibility on the 1.7 Moz underground resource of 6 Mt grading 8.9 g/t at the adjacent Nyankanga deposit.

In order to expedite exploration activities in Tanzania, Ashanti incorporated a new independent company, Ashanti Exploration Ltd (AEL) whose sole emphasis will be on exploration projects.

Barrick Gold Corp. continued throughout the year to strengthen its position in Tanzania in terms of mine development and exploration. At December, 2000, Bulyanhulu had 10 Moz of gold reserves based on 205,000 m of drilling. Intensive mine development included completion of 18 months of mine construction

and gold processing facilities at its mine in Bulyanhulu, Kahama District. The mine is owned 100% by Kahama Mining Corp. Ltd, a subsidiary of Barrick Gold Corp. The mine was officially opened by His Excellency President Benjamin William Mkapa in July, 2001. By the time of opening, a total of US\$280 million had been spent in preparing the mine for production and in construction of the necessary infrastructure required by the mine. Bulyanhulu mine is the biggest underground mining investment in the country so far with a capacity to process daily 2,500 t of ore containing gold, silver and copper. Commercial production started with 263,000 oz in 2001 and will rise to about 400, 000 oz in 2002. Phase two of the mine has begun which will increase production to 500,000 oz/y. Free gold will be processed by gravity at the mine site while gold-rich copper concentrate will be transported to Japan for smelting.

Barrick Gold, through its subsidiary Barrick Exploration Africa, embarked on an impressive exploration programme in Tanzania during the year. By December, 2000 the company had acquired substantial exploration ground, through joint venture, of approximately 60 prospecting licences held by junior exploration companies over the Lake Victoria Greenstone Belt and was conducting regional and detailed exploration programmes on them.

Barrick Gold acquired Kabanga Nickel Co. and is now undertaking detailed exploration and feasibility of the Kabanga nickel property in northwest Tanzania after withdrawal of AngloGold from the project. Using a cut off of 1.2% Ni, Barrick has recalculated the Kabanga resource and reported a revised estimate of 12.7 Mt, grading 2.1% Ni, 0.30% Cu and 0.16% Co.

Resolute Ltd., the pioneer company from Australia which led the way by being the first to establish a mine in Tanzania at its Golden Pride property in Lusu, Nzega, recorded good progress. During the year 2000, it exported

8.2 t of gold valued at US\$68 million. The company has reported their intention to continue with exploration in and around the property with a view to increasing resources.

The National Development Corp. (NDC), a public parastatal holding company given an exclusive mandate to develop the Mchuchuma Colliery in southern Tanzania, carried out a feasibility study with detailed environmental impact assessment on the project with a view to open an opencast coal mine. The techno-economic studies conducted have established economic/financial viability for the establishment of an open cast colliery with production capacity of 1.5 Mt/y and a 400 MW coal-fired thermal power station. With this feasibility, NDC was able to attract interest of several world-class investors to finance the project.

Value of Mineral Exports			
Mineral	Value in US\$ (Millions)		
	1998	1999	2000
Diamond	12.11	32.35	45.75
Gold	3.34	38.95	120.53
Gemstones	8.13	14.04	18.50
Other Minerals	-	0.23	-
Total	23.58	85.57	184.78

Afrika Mashariki Gold Mines, a privately held Australian company, has been active on gold prospects at Nyabirama and Nyabigena in Musoma-Mara District northeast of Lake Victoria. The company has identified a resource of 41 Mt, grading 2.7 g/t Au, containing 3.6 Moz. During the year, the company continued with preparations for mine development and mobilizing financing for the project. The company envisages that the mine would come on stream towards the end of the year 2002 at production capacity of about 6.2 t/y and expected to last for 11.5 years.

Anglo-American through its subsidiary Ambase conducted exploration for base metals in the southwestern part of the country. During the year under review, the

company conducted regional and detailed surveys including drilling for base metals at several targets in the southwestern parts and along Lake Tanganyika.

AFGEM, a coloured gemstone company listed on the Johannesburg Stock Exchange, is investing US\$20 million in the development of the tanzanite industry. This investment includes the development of a mine and processing facility at the Merelani mining area as well as a cutting and polishing facility to allow value adding within Tanzania.

A number of junior exploration companies have taken up prospecting licences for base metals and PGM in south and southwest Tanzania which is believed to have potential for the minerals. These include the Australian junior companies Nyati Mining and Tumbili Ventures.

Although mining companies active in Tanzania strive to undertake exploration and mine development activities in accordance with provisions of the newly enacted Mining Act, the Mining (Environmental Management and Protection) Regulation, impacts from

abandoned mines and mining waste are beginning to manifest themselves at historical mining sites in Tanzania. Acid mine drainage with pH levels of as low as one have been reported in some old mining areas. In a number of mining communities in the Lake Victoria Greenstone Belt, not all authorities are fully aware of the fact that this situation causes the most serious mining environmental problem of all. The resulting solutions from such acid mine and acid rock drainage can pollute rivers and soils far away from the mine site and cause toxicity to humans, animals and aquatic life. In order to address this problem, the government has solicited a US\$9 million credit facility from the Nordic Development Fund. It is intended that part of the credit will be utilised to finance a programme to identify and characterise abandoned mine sites in Tanzania and to design strategies to minimise adverse impact to the environment. The Nordic credit became effective at the end of 2001 and recruitment of consultants is under way. Part of the credit will also be utilised to finance a programme to generate geological, geophysical and geochemical data and to develop a modern mining cadastre for the Minerals Division.