THE MINERAL INDUSTRY OF

TANZANIA

By George J. Coakley and Thomas R. Yager

The United Republic of Tanzania is an East African country with a rapidly developing minerals industry. Encouraged by more-aggressive Government investment policies and the exploration successes reported between 1996 and 1999, mining was becoming a significant part of the Tanzanian economy.

In 1999, Tanzania's gross domestic product (GDP) amounted to about $23.3 billion at purchasing power parity, which was an increase of 4% compared with that of 1998. Per capita income was $550 at purchasing power parity in 1999 (U.S. Central Intelligence Agency, 2000, p. 485). In 1998, mining accounted for about 2.3% of the GDP (United Republic of Tanzania, 2001, Mining, accessed March 1, 2001, at URL http://www.tanzania.go.tz/miningf.html). Although the country's natural resources included coal, cobalt, diamond, gemstones, graphite, iron ore, natural gas, nickel, and phosphate rock, development of gold resources will be the focus of the mining industry in the next 5 years.

In late 1998, Ashanti Goldfields Co. Ltd. of Ghana and Resolute Ltd. of Australia opened their $48 million Golden Pride gold mine. During 1999, Resolute bought out Ashanti's interest in Golden Pride for $20 million (Resolute Ltd., January 10, 2000, Announcement to Australian Stock Exchange—Final settlement of Golden Pride acquisition, accessed February 9, 2000, at URL http://resolute-ltd.com.au/sc12-lnews/html/12frameset.html). For the year ending June 30, 2000, Resolute mined 2.89 million metric tons at a grade of 3.7 grams per metric ton (g/t) gold at Golden Pride that yielded 7,008 kilograms (kg) of gold.

Two other major gold projects were moved forward during 1999 by Ashanti at Geita and by Barrick Gold Corp. of Canada at Bulyanhulu. Both companies appeared to have a strategy of building a large central gold-processing facility supported by a primary ore body and by acquiring junior exploration companies that have successfully drilled out economic gold reserves transportable to the central facility.

By the end of 1999, Ashanti had completed construction on 50% of its new $165 million Geita Project. The open pit mining, leach, and carbon-in-pulp processing operation will be on-stream by late 2000 with a capacity to produce more than 15,500 kilograms per year (kg/yr) of gold. Ashanti reported the results of exploration drilling at the Geita Project through the end of 1999 at an estimated measured, indicated and inferred resource of 370,000 kg (12 million ounces) of gold, of which 170,000 kg (5.5 million ounces) were reserves. The resource is distributed among six deposits with grades that ranged from 2.6 to 4.4 g/t (Ashanti Goldfields Co. Ltd., Annual report for 1999, accessed November 10, 2000, at URL http://www.ashantigold.com/download/annual1999.pdf).

As a result of a debt restructuring agreement with its lenders owing to large gold hedging losses in 1999, Ashanti announced plans to sell a 50% interest in Geita. In April 2000, Ashanti signed an agreement with AngloGold Ltd. in which AngloGold was to pay Ashanti $205 million in cash for a 50% share of the project and agreed to obtain or provide project financing to the Geita project that totaled $130 million. Ashanti was to repay $65 million, or half the project financing loan, to AngloGold from future Geita project cashflow (Ashanti Goldfields Co. Ltd., April 5, 2000, Joint announcement by AngloGold and Ashanti—Ashanti to sell a 50% interest in Geita to AngloGold, accessed November 10, 2000, at URL http://www.ashantigold.com/5April2000.htm).

In March 1999, Barrick purchased Sutton Resources Ltd., which was a Canadian junior exploration company, and the Bulyanhulu gold and the Kabanga nickel sulfide properties, both in Tanzania, for approximately $281 million (Barrick Gold Corp., March 27, 1999, Barrick acquires 91% of Sutton—Barrick Gold Corp., Press Release, accessed March 27, 1999, at URL http://www.barrick.com/barrick_glance/press_releases/docs/pr990327.cfm). During further exploration in 1999, Barrick doubled Sutton's gold reserve estimate to 230,000 kg (7.5 million ounces) from 110,000 kg (3.6 million ounces). In October, Barrick began construction on the $280 million Bulyanhulu underground mine and mill project, which will have the capacity to produce at least 12,440 kg/yr of gold. Start-up was expected in early 2001 (Barrick Gold Corp., February 7, 2000, Latest news—Barrick outlines growth strategy for 2000 and beyond—Enhances leverage to gold, accessed February 11, 2000, at URL http://www.barrick.com/main.cfm).

Other companies that explored for gold included Maiden Gold NL and Tanganyika Gold NL of Australia; East Africa Gold Mines Ltd. and Spinifex Gold NL, which were two companies financed by the Lion Selection Group; Pangea Goldfields Inc., Tan Range Exploration Corp., and Serengeti Diamonds Ltd. of Canada; AngloGold Ltd., Iscor Ltd., and Randgold Resources Ltd. of South Africa; and Ormonde Mining plc of Ireland.

In the petroleum sector, Ocelot Energy Inc. and Trans Canada Pipelines Ltd., which was a Canadian joint venture under contract to the Government, received final approval to develop the $340 million Songo Songo offshore natural gas production and processing project with the delivery of gas to a Dar es Salaam power station expected around the end of 2001. In early 2000, Ocelot changed its name to PanAfrican Energy Corp. Ltd. (PanAfrican Energy Corp. Ltd., November 30, 1999, Ocelot International's natural gas-electricity project in Tanzania receives final cabinet approval, accessed November 2, 2000, at URL http://www.panafricanenergy.com/news/newsf.html).

The future outlook for the minerals sector in Tanzania, which is being stimulated by positive new mining and foreign investment legislation and by the success of mineral exploration in the country since 1996, is promising. Decisions on proceeding with future new mining developments, particularly for gold and nickel, however, will be subject to external market forces and world commodity prices. Lack of adequate infrastructure remains a problem. Efforts supported by international development funds, however, have begun to

upgrade harbors, pipelines, roads, and railroad transport systems. The development of domestic natural gas resources may provide help in cost-saving energy import substitution and as a source of cheaper energy for new industrial developments.

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Major Sources of Information

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Ministry of Energy and Minerals
P.O. Box 2000
Dar-es-Salaam, Tanzania
Telephone: 255-51-117153-9/112793/371442/110414
Fax: 255-51-116719

Geological Survey of Tanzania
P.O. Box 903
Dodoma, Tanzania
Telephone: 255-61-23281/5
Fax: 255-51-44071

Tanzania Investment Centre
P.O. Box 938
Dar es Salaam, Tanzania
Telephone: 255-51-113365 or 34200
Fax: 255-51-112761

Major Publications

Hestor, B.W., 1998, Tanzania *in* Hestor, B.W., ed., Opportunities for mineral resource development (3d ed.): prepared for the Ministry of Energy and Minerals of Tanzania, 109 p.

TABLE 1
TANZANIA: PRODUCTION OF MINERAL COMMODITIES 1/ 2/

(Metric tons unless otherwise specified)

Commodity 3/		1995	1996	1997	1998	1999 e/
Calcite		37	40 e/	40	40	40
Cement, hydraulic	thousand tons	320 e/	1,100	1,150	1,200	1,200
Clays:						
Bentonite e/		70	75	75	75	75
Kaolin		596	1,332	1,375 r/	1,300	1,300
Coal, bituminous		43,200	52,000	35,000	35,000	35,000
Diamond 4/	carats	49,538	126,670	123,100 r/	95,300 r/ 5/	120,000
Gemstones, excluding diamond 6/	kilograms	111,403	137,165 r/	124,570 r/	48,518 5/	100,000
Gold, refined	do.	320	318	8,082 r/	6,770 r/	7,000
Graphite		359	6,776	11,000	--	--
Gypsum and anhydrite, crude		42,000 r/	55,400 r/	46,300 r/	18,000 r/	18,000
Iron ore		43,200 r/	86,400 r/	91,200 r/	--	--
Limestone, crushed		1,062,081	1,200,000 r/	1,282,500 r/	1,300,000 r/	1,300,000
Phosphate minerals:						
Apatite e/		6,700	28,020	3,000	1,935	--
P_2O_5 content		2,080 e/	8,686	930	600 5/	--
Salt, all types		105,000	86,700	119,710	97,000	100,000
Sand, glass e/		4,200	4,200	4,200	4,200	4,200
Soda ash e/		300	300	300	300	300
Tin, mine output, Sn content		3	-- e/	--	--	--

e/ Estimated. r/ Revised. -- Zero.

1/ Includes data available through March 2000.

2/ Estimated data are rounded to no more than three significant digits.

3/ In addition to the commodities listed, modest quantities of unlisted varieties of crude construction materials (other clays, sand and gravel, and stone) presumably are produced, but output is not reported quantitatively, and available information is inadequate to make reliable estimates of output levels.

4/ Diamond figures are estimated to represent 70% gem-quality or semigem-quality and 30% industrial-quality stones.

5/ Reported figure.

6/ Precious and semiprecious stones produced included amethyst, chrysoprase, emerald, peridot, rhodolite, ruby, tanzanite, and tourmaline.