THE MINERAL INDUSTRY OF

UGANDA

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The contribution of Uganda's mineral production to the nation's economy was minimal in 1997. Prior to the economic and political upheaval of 20 years ago, the Ugandan mineral sector had accounted for about 30% of the gross domestic product (GDP). In 1996-97, the agriculture sector accounted for 44% of the GDP compared with the minerals sector's contribution of about 3%.

Mining was regulated by the Mining Act of 1964, the Investment Code of 1991, and the Income Tax Act of 1997. An updated mining code was being considered by Parliament. Mineral industry activities were administered by the Ministry of Natural Resources. The Ministry's Department of Geological Survey and Mines issued prospecting, location and mineral dealer licenses; mining leases; and water rights. The Ministry's Commissioner for Energy and the Directorate of Energy and Mineral Development set energy sector policies. The Uganda Investment Authority, the Government agency responsible for investment promotion, operated a one-stop center to facilitate investment ventures.

Gold exports reached a total of 6,819 kilograms (kg) in 1997 compared with 5,067 kg in 1996, 3,093 kg in 1995, and 225 kg in 1994 (Gerald M. Sendaula, Ministry of Natural Resources, written commun., May 6, 1998). The increase has been attributed to the abolishment of the Central Bank's monopoly on gold purchases in 1994 and to gold mined in the Democratic Republic of the Congo (Kinshasa) and brought into Uganda (Indian Ocean Newsletter, 1998).

The Government was actively promoting the development of the nation's mineral resources. Reflecting the shift in interest as international gold prices dropped, most of the prospecting licenses issued in 1997 covered exploration for base metals, gold, and silver; in 1996, most of the licenses in effect had been for gold only. The Government was helping local mining entrepreneurs search for international joint-venture partners and financing. To the Government's dismay, some gold prospecting licenses appear to be used by international companies to maintain a presence in the gold districts instead of being active mineral prospects (Crespo Sebunya, March 1998, correspondent, NewAfrican, accessed October 14, 1998, at URL http://dialspace.dial.pipex.com/town/terrace/lf41/na/mar98/nambo0302.htm).

During October, the Karnag Consortium of Cyprus agreed to investigate the feasibility of resuming phosphate mining in the Sukulu Hills. The Government was interested in having other closed mineral operations, such as the salt works and several tin and tungsten mines, reopened. Additional Ugandan mineral resources reported to have the potential to attract commercial investment include diatomite, dimension stone, gypsum, iron deposits, mica, nickel, and vermiculite (Hester and others, 1996).

Although prospecting licenses were staked all over the country, the mining licences (15) were in the southeast and southwest. Active anti-Governmental rebellions continued, impeding exploration activity in the north and northwest.

Kasese Cobalt Co. Ltd. (KCCL) secured a \$66 million construction loan to recover cobalt from Kilembe Mine concentrates stockpiled near the Kasese railhead in southwestern Uganda. KCCL was raising an additional \$44 million from its owners, Banff Resources Ltd. of Canada, the state-owned Kilembe Mines Ltd., International Finance Corp., Proparco of France, and private Ugandan investors. Construction of the KCCL infrastructure and preparation of the plant-site were completed in 1997. Bioleaching of the concentrates, solvent extraction, and electrowinning were not expected to begin until late 1998, with commercial production scheduled for early 1999. Plans were to process the stockpiled concentrates to recover approximately 1,000 metric tons per year of cobalt cathode. Operations were expected to extend over a period of 11 or 12 years.

Gold was recovered by artisanal miners in the northeast and along the western border. Seven nickel prospecting licenses held by Equatorial Resources Ltd. and Nickelfields Uganda Ltd., local subsidiaries of Pacific Vanguard Mines Ltd. of Canada, and Prospecting License 4150 were transferred to Nhlanhla Ltd., a joint venture of Pacific Vanguard, Ketch Trading Co. of Switzerland, and GHK Resources Ltd. of Canada. The Nhlanhla properties subsequently were sold to Ruwenzori Exploration (Uganda) Ltd. in October 1997. Ruwenzori is a joint venture of Avmin Africa Holdings B.V. (70%), a subsidiary of Avmin Ltd. of South Africa, and Nhlanhla (30%).

Companies reporting activity on exclusive prospecting licenses or special exclusive prospecting licenses included African Mineral Exploration; Africa Mines Holding Ltd.; Al Kayan Minerals; Anglo-Ugandan Corp. plc; Bisya Mines Ltd.; Butologo Gold Mines; Branch Energy (Uganda) Ltd.; Falcon Mining Co. Ltd.; Global Resources (Uganda) Ltd.; Gold Empire Ltd.; Goldstar Minerals (Uganda) Ltd.; Karo Mines Uganda Ltd.; Kaygee Resources Ltd.; Kigezi Twimuke Co., Ltd.; Kitara Mining Co. Ltd.; Lincoln Exploration Ltd.; MLS Lime Co.; Mukasa Prospecting and Mining Co. Ltd.; Nabisoga Mining Ltd., an affiliate of Uganda Gold Mining Ltd. of Canada; Nayim Resources Ltd.; New Ensign Resources Ltd., an affiliate of Glencar Mining plc of Ireland; Protocol Resources; Rift Resources Ltd. of Canada; Rockman International Ltd.; Roraima Mining Co. Ltd., an alliance of International Roraima Gold Corp. of Canada and ISCOR Ltd. of South Africa; Ruhabguro Tin, Wolfram, and Bismuth Mines Ltd.; Ruwenzori; Saudi Marble (Uganda) Ltd.; Shield Mining Co.; and Union Minerals (Department of Geological Survey and Mines, written communication, 1998).

Other companies holding prospecting licenses in 1997 included African Fields Ltd.; Africa Resources Ltd.; BNG International Enterprises (Uganda); Catalyst Ventures Corp. of Canada, which acquired interest in the Kaabong Project from Branch Energy (Uganda); Dobrana Resources Ltd. of Canada; Echo Resources Ltd.; Gold and Gems Partners (Uganda) Ltd.; International Foundation for Mining and Development; Kadam Mining Co.; United African Mines Co. Ltd.; and Zamak (Uganda) Ltd.

African Selection Mining Corp. of Canada and Anglo-Ugandan Corp. terminated their joint venture on the Kamalenge gold license in December 1997 after negative exploration results. Pangea Goldfields (Uganda) Ltd. wrote off its two gold exploration concessions. Tusker Exploration Ltd. allowed nine gold prospecting licenses to expire in 1997.

Heritage Oil and Gas Ltd., a London-based Bahamian company, was working on its Block 3 concession in the southern Lake Albert Basin and around Semliki Flats. In November, Hardman Petroleum (Uganda) Pty. Ltd. (45%), Planet Oil Holdings Ltd. of the United Kingdom (45%), and Balmain Resources Pty. Ltd. of Australia (10%) secured a production-sharing agreement for Block 2 in the northern portion of the Lake Albert region.

The Government's Road Sector Development Program, initiated in 1996, is a 10-year \$1.5- billion project intended to reconstruct 4,000 kilometers (km) of road and to repair the nation's 30,000-km road network. Surface transport suffered setbacks in late 1997 as torrential rains damaged bridges and highways. Flooding associated with the rains periodically halted rail traffic. The railway connected Kasese, Kampala, and Tororo in Uganda with the port of Mombassa, Kenya. A rail ferry connected Port Bell, near Kampala, with Mwanza, Tanzania, which was connected to Dar Es Salaam, Tanzania by rail. Also in 1997, a feasibility study was begun to review the extension of the petroleum products pipeline from western Kenya into Uganda. Petroleum products currently are imported by truck through Kenya and Tanzania.

With its booming economy, Uganda has been subject to electric power deficits since the early 1990's. Besides domestic demand, the Uganda Electricity Board (UEB) was saddled with a long-term contract to supply 30 megawatts (MW) to Kenya. Intermittently, smaller amounts of electric power were sold to Tanzania and Rwanda. Power was generated by the 160-MW-capacity Owen Falls hydroelectric dam, supplemented by smaller hydroelectric generation facilities near Kabale and Kasese. UEB also obtained power from diesel plants near Arua, Kampala, Kitgum, Mbale, Moroto, Moyo, and Nebbi. Three sugar factories generated electric power by burning bagasse, adding about 5 MW to the nation's power supply.

Impregilo SpA and Salini of Italy were contracted to finish the Owen Falls Dam expansion begun by SIETCO of China. Arabian International Construction of Egypt began a feasibility study on a proposed 450-MW Kalagala hydroelectric powerplant about 15 km downstream from Bujagali Falls. Nile Independent Power Co., a joint venture of AES Corp. of the United States and Madhvani International of South Africa, was to build a 290-MW hydroelectric-generating plant on the Victoria Nile; power was

not expected to be available to the Uganda grid until 2003. An 180-MW hydroelectic powerplant also was proposed for the Karuma Falls area.

Uganda's economy continued to expand despite the unrest in the Central African region and the rebellion in northern Uganda. Its mineral resources are underexplored and underdeveloped. The legacy of the Mineral Development Promotion Program which ended in June 1996, combined with the downturn in the price of gold is the expectation that the Ugandan mineral industry will have more opportunity to diversify through the coming years. Successful mineral exploration activities should attract additional international interest and investment in the nation's mineral industry. Gold exports are expected to tumble as less gold is brought into Uganda from the Congo (Kinshasha). Growth of energy-intensive mineral processing may be limited during the next 5 to 6 years by the UEB's power problems.

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Major Sources of Information

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 ${\bf TABLE~1} \\ {\bf UGANDA:~PRODUCTION~OF~MINERAL~COMMODITIES~1/~2/} \\$

(Metric tons unless otherwise specified)

Commodity		1993	1994	1995	1996 e/	1997 e/
Cement, hydraulic		50,000 e/	42,000	85,000	150,000	150,000
Columbium-tantalum	kilograms	452	435	1,842	2,000	2,000
Gold	do.	291	1,627	1,506	2,954 3/	3,000
Gypsum		308	201	1,538	3,000	3,000
Iron ore				7	200 3/	200
Lime, hydrated and quick		1,024	163	970	1,000	1,000
Limestone e/		46,000	38,000	78,000	135,000	135,000
Phosphate minerals, apatite				20	3/	
Salt, evaporated		10	10	10	10	10
Steel		20,000	10,000	12,000	12,000	15,000
Tin, mine output, Sn content		3	3	43	(4/) 3/	(4/)
Tungsten, mine output, W content		5	12	17	3/	

e/ Estimated.

^{1/} Includes data available through October 19, 1998.

^{2/} In addition to the commodities listed, the following are presumably produced but information is inadequate to estimate output: clay, copper content of slag, corundum, garnet, gemstones, gravel, kaolin, marble, ruby, sand, and vermiculite.

^{3/} Reported.

^{4/} Less than 1 unit.