THE MINERAL INDUSTRY OF

SWAZILAND

By George J. Coakley

The Kingdom of Swaziland is a landlocked country surrounded by South Africa on three sides and by Mozambique to the east, has a surface area of 17,360 square kilometers, and in 2001 supported a population of about 1 million people. Mining has been an important part of the history of Swaziland but a small and declining factor in its present economy. Swaziland contains the world's oldest known mine site, the Lion Cavern at the Ngwenya iron mine (closed in 1977) on Bomvu Ridge northwest of Mbabane. Carbon-14 dating yielded an estimate for the earliest mining at this site of from 43,000 to 41,000 B.C. The material extracted was hematite (libomvu) and specularite ochres for cosmetic and ritual uses. These ores could have been mined until at least 23,000 B.C. (Swaziland National Trust Commission, undated§1).

Asbestos, coal, and crushed stone were the country's main mining products (table 1). Diamond mining, which was all from a single kimberlite pipe at Dvokolwako, ceased in 1996, and asbestos mining ceased in 2000. Small-scale gold mining has taken place in the past within Swaziland's portion of the Barberton greenstone belt; but official gold production has been nil. Swaziland also has intermittent production of brick clay for a brick mill near Matsapha.

The country's gross domestic product (GDP) in 2000, the latest year for which data were available, was estimated to be \$4.4 billion based on purchasing power parity, representing a growth rate of 2.4%. The GDP per capita was \$4,000 (U.S. Central Intelligence Agency, 2002§). The Swazi economy was dominated largely by export-oriented agricultural and related value-added manufacturing production, which was vulnerable to climatic and external demand factors. In the Governmental fiscal year (FY) 2000-2001, mining and quarrying generated revenues of about \$11.4 million², equal to 1.4% of the Kingdom's real GDP, a decline from \$19.4 million and 1.6%, respectively, in the previous year. The decline was attributed to the 31.5% decrease in the value of asbestos production and the 11.3% decrease in the value of coal production, resulting from lower tonnages, from that of FY 1999-2000. As a result of declining reserves, environmental concerns, and weak markets, asbestos mining, which had been the dominate source of mining revenue, ceased by yearend 2000. Mining and quarrying revenues for FY 2000-2001 comprised asbestos (\$3.01 million), coal (\$6.85 million), and crushed stone (\$1.59 million) (Central Bank of Swaziland, 2002§).

In 2001, fewer than 1,000 Swazi's were directly employed in the country's mining sector, although an estimated 1,000 Swazis processed timber from the country's extensive pine plantations that was exported to mines in South Africa, and 10,000 to 15,000 Swazis were employed in South African mines. Wage repatriation from miners in South Africa contributed to the Swazi economy; the collapse of international gold prices and subsequent downsizing of the South African gold mining labor force, however, resulted in layoffs of a number of Swazi miners and reduction in miner wage remittances back to Swaziland. Swaziland Greenstone Quarry, which was a Taiwanese company, was examining the potential for developing a green chert operation in the Malolotja Game Reserve in the Hhohho region, but faced environmental opposition from the Swaziland National Trust Commission (Michael Lee Enterprises, 2002§).

Foreign investment in mining remained regulated by the Investment Promotion Bill of 1997. The legislation, which is part of the Swazi economic and social reform agenda, was developed to promote local and foreign investment in Swaziland. The Swaziland Investment Promotion Authority, which is a one-stop service center for investors, opened in 1999. In October 2000, the Government announced new tax incentives to attract new foreign investment. The new provisions included a 10-year cut in corporate tax to 10% from 37.5% for eligible "development" companies and a 10-year exemption from withholding tax on dividends. Mbendi Information Services (2000§) described Swaziland's minerals policy and legislation as follows: "There is a fundamental distinction in the constitutional law of Swaziland between the State and its Government on the one hand and on the other the 'Swazi Nation' and the King (the Ngwenyama). By constitution minerals are vested in the Ngwenyama in trust for the Swazi Nation. The Ngwenyama grants mineral rights after consultation with a Minerals Committee. This committee is appointed by the Ngwenyama on advice by his advisors in accordance with the Swazi law and custom. The conditions and terms of mineral rights issued are negotiated and approved by the Ngwenyama."

Commodity Review

Asbestos.—In FY 2000-2001, production of chrysotile asbestos from the Bulembe Mine, which was one of the world's largest asbestos mines, decreased by 45% from 1999-2000. The mine, which once employed about 1,000 workers, was closed in 2000. Following similar actions by South African asbestos miners, in September 2000, a group of 450 former asbestos miners in Swaziland suffering from asbestos-related lung disease announced plans to file a suit against the British firm Turner and Newall, which operated the asbestos mine in northwestern Swaziland through the early 1980s. The South African case against Turner and Newall was settled in favor of the South African asbestos miners in April 2002 for more than \$30 million, while the separate case for Swazi asbestos miners

¹References that include a section twist (§) are found in the Internet References Cited section

 $^{^2}Where$ necessary, values have been converted from Swazi emalangeni (E) to U.S. dollars at the rate of E7.1=US\$1.00 for 2000 and E6.11=US\$1.00 for 1999.

was still pending (Temkin, 2002§).

Coal.—Production from the Maloma Mine, which was the sole coal producer, declined by 11.3% to 378,043 metric tons (t) in FY 2000-2001 from 426,299 t in FY 1999-2000. The mine, which switched from open pit to underground operations in 1999 produced high-quality anthracite for export to South Africa. Following a methane gas explosion in July 2001, which killed 1 worker and injured 12 workers, the mine was closed. The mine had sufficient resources to sustain production for the next 25 years, but it was uncertain when it will reopen (Mabuza, 2001§; Swaziland Business Yearbook, 2002§).

Stone, Crushed.—Stimulated by ongoing activity for road building and rehabilitation, the production of crushed stone increased by 21.5% to 304,043 t in FY 2000-2001 from 250,193 t in FY 1999-2000. Main construction projects included the Nhlangano-Lavumisa highway, the Ngwenya-Mbabane highway, the Siteki-Mhlumeni road, continued work on the Mbabane-Manzini highway, and the Maguga Dam.

Outlook

With the closure of the principal asbestos and coal mines, and the cutback in the employment of Swazi migrant workers in South Africa gold mines, the mineral sector of the Swazi economy has essentially collapsed. The main hope for revival of this sector rests with the ability of the Government to attract new foreign investment to reopen one or all of the closed coal mines at Maloma and Mpaka, where identified coal resources could support additional production. However, Swazi coal, as an energy source in the region, is faced with competition from excess coal capacity in South Africa and the development of low-cost natural gas resources in Mozambique.

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Major Sources of Information

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TABLE 1 SWAZILAND: PRODUCTION OF MINERAL COMMODITIES 1/

Commodity 2/		1997	1998	1999	2000	2001 e/
Asbestos, chrysotile fiber	metric tons	25,888	27,693	22,912 r/	12,690	
Coal, anthracite	thousand metric tons	203	410	426	378	380
Stone, quarry products	thousand cubic meters	456	453	250	304	350

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

^{1/} Reported data from Swaziland Geological Survey and Mines Department or Central Bank. Includes fiscal year data available through July 2002.

^{2/} In addition to the commodities listed, modest quantities of crude construction materials (brick clay and sand and gravel) and pyrophyllite are produced, but output is not reported quantitatively, and information is inadequate to make reliable estimates of output levels.