

THE MINERAL INDUSTRY OF SWAZILAND

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In 1996, mining activities in Swaziland remained at the same level as that of 1995, except overall production was lower compared with 1995 output. Exploration activities continued during the year although no significant findings were announced. For example, Southern Era Resources Ltd. of Canada began exploration on two licences covering historic gold mines. They announced in their 1996 Annual Report that all surface workings at the Daisy property have been mapped and a reference grid was established in the preparation for a core drilling program in 1997. At Southern Era's Piggs Peak gold property, a \$350,000 exploration program of underground rehabilitation, sampling, and drilling was initiated to test its bulk minable potential.¹

Asbestos, coal, diamond, and crushed stone remained the main mining products, and overall mining revenue in 1996 contributed slightly over 2% of the gross domestic product. The decrease in mining revenue was primarily attributed to low grades of diamond ore and the general depletion of reserves of coal, asbestos, and diamonds. For example, the operators of the Bulembu asbestos mine were granted a prospecting permit to explore the western extremity of this operating mine for possible extension of mine life; the exploration did not show any promising results. Asbestos production was estimated at 20,000 tons in 1996, about 30% lower than 1995 output.

The Maloma Colliery remained the only coal-producing mine during 1996. Although the company was successful in transferring some of the production line to an underground operation, overall performance was disappointing, since production was 16% lower in 1996 than 1995 output. High-grade anthracite was trucked 25 kilometers to the nearest railroad terminal and railed either to Richards Bay or Durban port facilities for export and Japan and other Asian markets. During the year, the port of Maputo in Mozambique was not available to receive Swazi coal for export.

For the second year in a row, diamond production was lower with a total output of 10,000 carats in 1996. At the Dokolwayo diamond mine, the production was primarily from unoxidized kimberlite, which yielded low-grade stones, and was an expensive operation. As a result of these factors, the owners, including Trans Hex International Ltd. of South Africa, notified the government that the mine would be closed by yearend.

The production of crushed stone for road building and construction stone decreased by 12,000 cubic meters during the year. The production from both Kwalini and Tonkwane quarries

was far below the peak year of 1994. The market sluggishness was attributed to lack of governmental programs on building new highways and upgrading the present system of transportation. It was anticipated that once Malagwane Hill road project commences, the demand for aggregate will increase. By the end of the year, the Kwalini quarry was under new management, and new production equipment was ordered.

Swaziland's road and railroad network was considered to be generally adequate to serve the mining industry, with the exception of the asbestos mine. The asbestos mine, located in mountainous terrain, ships its ore by aerial bucket way to the nearby town of Barberton, South Africa. Swaziland's first railroad, from Kadake to the Mozambique border, was built to export ore from the now closed iron mine northwest of Mbabane. The same line served to export coal when security conditions in Mozambique permitted. The portion of the railroad from Kadake to Matsapha has been inactive for many years and its rails were recently taken up. A newer, north-south railroad was built to allow the rapid transportation of South African goods, including coal, through Swaziland, chiefly to the South African ports of Richards Bay and Durban.

Swaziland's electrical generation capacity and grid have been a problem for industrial development. The generation capacity totaled about 60 megawatts, installed in a number of coal and diesel and/or fuel oil thermal plants. The coal-fired plants are designed for South African bituminous coal rather than the harder-to-ignite Swaziland anthracite. However, projects have been discussed to build anthracite-burning powerplants on the Swaziland coalfields, most notably at Mpaka where the proposal would involve reopening an old coal mine. Swaziland typically imports annually about \$10 million to \$13 million in electricity.

Except for coal, the future of mining in Swaziland is uncertain beyond the turn of the century. The Trans Hex 1996 Annual Report indicated that diamond resources at Dokolwayo were no longer economic. At the Bulembu asbestos mine, HVL Asbestos (Swaziland) Ltd. has expressed cautious optimism for finding modest additional reserves as a result of exploration between the existing ore body and the nearby South African border (Swaziland Department of Geological Survey & Mines, 1996). The results of current gold exploration are unlikely to be known until late 1997 or 1998.

Reference Cited

Swaziland Department of Geological Survey & Mines, 1996, Swaziland—Mining annual review-1996, Mining Journal (London), p. 143.

¹Where necessary, values have been converted from Swazi emalangenani (E) to U.S. dollars at the rate of E3.8=US\$1.00 in 1996.

Major Sources of Information

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

Commodity 3/		1992	1993	1994	1995	1996 e/
Asbestos, chrysotile fiber	metric tons	32,300	33,900	26,720	28,570	20,000
Coal, anthracite	thousand metric tons	100	50	228	172	144
Diamond	carats	50,500	61,700	76,100	75,000	70,000
Stone, quarry products	thousand metric tons	148	163	185	114	150

e/ Estimated.

1/ Estimated data are rounded to three significant figures.

2/ Includes data available through June 30, 1997.

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