



# 2007 Minerals Yearbook

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**LESOTHO AND SWAZILAND [ADVANCE RELEASE]**

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# THE MINERAL INDUSTRIES OF LESOTHO AND SWAZILAND

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## LESOTHO

With the exception of diamond mining, the mining and quarrying sector was a marginal contributor to the gross domestic product of Lesotho. Although Lesotho was believed to have significant mineral deposits, attempts at exploitation continued to be limited owing to lack of investment. Known deposits included base metals, clays, diamond, dimension stone, sand and gravel, and uranium. Reserves of bituminous shale and coal had been identified in several areas of the country.

The Ministry of Natural Resources through the Department of Mines and Geology is responsible for the regulation of the mining sector and coordination of development and operational activities in the energy, mining, and water sectors. The country has an established mining legislation governed by the Mines and Minerals Act 2005. Lesotho is a participant of the Kimberley Process Certification Scheme, which governs international trade in rough diamond.

The country has a long history of diamond production, and diamond is the major economic mineral of Lesotho. The Letseng La Tera kimberlite deposit had the distinction of producing some of the highest dollar-value-per-carat diamond in the world. Diamond grades at Letseng were very low, ranging between 2 and 2.5 carats per hundred metric tons of kimberlite, but the diamond value was reported to be greater than \$1,000 per carat. This high average value was the result of recovery of very large exceptional-quality diamonds. Whereas kimberlites occur throughout the country, northern Lesotho was probably the most concentrated area of kimberlite intrusion in the world, with an average intrusion of one kimberlite per 21 square kilometer (Spilpunt, 2007).

### Production

Data on mineral production are provided in table 1.

### Structure of the Mineral Industry

Mineral processing facilities and their capacities are provided in table 2.

### Commodity Review

#### *Industrial Minerals*

**Diamond.**—In 2007, Gem Diamonds Ltd. announced the sale of the Letseng Legacy, a 493-carat white diamond recovered at the Letseng Mine, for \$10.4 million to South Africa Diamond Corp. (SAFDICO), which was the manufacturing arm of Graff Jewelers Ltd. of the United Kingdom and one of the world's leading diamond manufacturing and trading companies.

SAFDICO bought the 603-carat Lesotho Promise from Gem Diamonds for \$12.4 million in 2006. Three of the largest diamonds ever mined have been recovered from the Letseng Mine (Antwerp World Diamond Center, 2007).

Gem Diamonds reported that it was doubling the capacity of the Letseng Mine from 2.6 million metric tons per year (Mt/yr) of ore in 2007 to 5.3 Mt/yr by midyear 2008. Efforts directed at maximizing the quality and quantity of diamond recovered there were reportedly resulting in improvements in the grade recovered and the average price per carat. Grade from the Satellite Pipe was running at 2.26 carats per hundred metric tons of ore, which was 14% ahead of expectations. A total of 226 diamonds of more than 10.8 carats each were recovered during the first half of 2007 (Mining Review Africa, 2007a). The Letseng Mine's Main Pipe and Satellite Pipe have a combined estimated resource of \$4.7 billion. The average price achieved for diamond from the Main Pipe was \$1,128 per carat and that from the Satellite Pipe was \$894 per carat (London Stock Exchange, 2007).

European Diamond's plc's Lihobong diamond project covered a 390-hectare (ha) license area located about 100 kilometers (km) northeast of Maseru. At an elevation of 2,600 meters (m), the Lihobong kimberlites were among the highest known kimberlites in the world. European Diamonds had a mining lease for several kimberlites within its lease area, including the mine's Satellite Pipe; it had an evaluation license for the Main Pipe. The Satellite Pipe was expected to yield 250,000 to 300,000 carats per year by open pit mining during a mine life of 5 years. The Main Pipe is a 9-ha pipe located 180 m from the Satellite Pipe. A 10-year, 4 Mt/yr operation that was expected to produce about 700,000 carats per year was proposed in a study by Bateman and Fluor Daniels. European Diamond announced that at yearend it was changing its name to Kopane Diamond Development plc to reflect the company's growing focus on Africa (Mining Review Africa, 2007 p. 22 b).

The joint venture of Lucara Diamond Corp. and Mothae Diamond Inc. received prospecting rights covering an area of 25 square kilometers for the Mothae kimberlite. The kimberlite is located 6.5 km to the northwest of Gem Diamond's Letseng Mine, which produced the world's highest-value run of mine diamond. Lucara and Mothae were carrying out a sampling program to determine if the Mothae kimberlite also contained a population of large high-value diamonds similar to the Letseng Mine (African Mining, 2007).

### Outlook

Diamond production is likely to increase in 2008, but the outlook for the remainder of Lesotho's mineral industry was for little change in the near future. Limited investment in the mineral sector and high rates of HIV/AIDS infection among

Lesotho's population were likely to constrain development of the mining sector into the near future.

## References Cited

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## SWAZILAND

Mining has declined in importance in Swaziland in recent years. In 2007, the mineral industry of Swaziland continued not to be a significant contributor to the country's GDP.

### Production

Information on the mineral industry of Swaziland was not readily available. Production of anthracite coal and quarried

stone decreased in 2007 (table 1). The quarrying of stone was for domestic consumption and depended on local demand. Xstrata plc of Switzerland operated a ferrovanadium plant at Maloma with a capacity of 2,400 metric tons per year. Production of ferrovanadium in 2007 was about the same as in 2006. The anthracite coal produced at the Maloma Mine and plant that was not used for vanadium production was exported to South Africa for use in Xstrata's other ferrochromium plants (Investors Chronicle, 2007).

### Structure of the Mineral Industry

The principal mining and mineral processing facilities in Swaziland, with their locations and capacities, are listed in table 2.

### Outlook

The outlook for Swaziland's mineral industry is for little change in the near future. The low level of exploration was likely to constrain increases in production.

### Reference Cited

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TABLE 1  
LESOTHO AND SWAZILAND: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

Country and commodity		2003	2004	2005	2006	2007 <sup>e</sup>
<b>LESOTHO<sup>2</sup></b>						
Fire clay <sup>c</sup>	cubic meters	14,470 <sup>3</sup>	15,000	15,000	15,000	15,000
Diamond	carats	2,099	26,607 <sup>r</sup>	52,036 <sup>r</sup>	112,408 <sup>r</sup>	114,000
<b>Stone, quarry products:<sup>c</sup></b>						
Dimension stone	square meters	1,089 <sup>3</sup>	1,000	1,000	1,000	1,000
Gravel and crushed rock	cubic meters	389,695 <sup>3</sup>	300,000	300,000	300,000	300,000
<b>SWAZILAND<sup>4</sup></b>						
Coal, anthracite	metric tons	448,664	488,314	222,000	310,570 <sup>r</sup>	241,283 <sup>3</sup>
Ferrovanadium	do.	1,011	1,150	345	491	500
Stone, quarry products	cubic meters	324,129	230,062	567,000	534,688	207,535 <sup>3</sup>

<sup>e</sup>Estimated; estimated data are rounded to no more than three significant digits. <sup>r</sup>Revised. do. Ditto.

<sup>1</sup>Includes data available through November 30, 2008.

<sup>2</sup>Reported data from Lesotho Department of Mines and Geology.

<sup>3</sup>Reported figure.

<sup>4</sup>In addition to the commodities listed, modest quantities of crude construction materials (brick clay and sand and gravel), kaolin, pyrophyllite (talc), and soapstone are produced, but output is not reported quantitatively, and information is inadequate to make reliable estimates of output.

TABLE 2  
LESOTHO AND SWAZILAND: STRUCTURE OF THE MINERAL INDUSTRY IN 2007

(Metric tons unless otherwise specified)

Country and commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
<u>LESOTHO</u>				
Diamond	carats	Gem Diamond Mining Co. Ltd., 76%, and Government, 24%	Letseng Mine	36,000
<u>SWAZILAND</u>				
Coal		Maloma Colliery Ltd.	Maloma Mine at Maloma	500,000
Ferrovandium		Swazi Vanadium (Pty) Ltd.	Maloma	2,400