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2008 Minerals Yearbook

LESOTHO AND SWAZILAND

U.S. Department of the Interior
U.S. Geological Survey

September 2010

The Mineral Industries of Lesotho and Swaziland

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LESOTHO

With the exception of diamond mining, the mining and quarrying sector did not play a significant role in Lesotho's economy in 2008. Although Lesotho was believed to have significant mineral deposits, attempts at exploitation continued to be limited owing to lack of infrastructure and investment. Identified deposits included base metals, clays, diamond, dimension stone, sand and gravel, and uranium. Reserves of bituminous coal and shale have been identified in several areas of the country. There is a high concentration of kimberlite intrusion in northern Lesotho.

The Mines and Minerals Act of 2005, the Mine Safety Act of 1981, and the Precious Stones Order of 1970 provide for the administration of mineral exploration and development. 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 Act allows for investment by foreign and locally registered companies that agree to abide by mine safety regulations and income tax laws and to pay rentals on lease areas and royalties on the production. A 10% royalty is assessed on the value of diamond. Lesotho is a participant in the International Kimberley Process Certification Scheme, which governs international trade in rough diamond (Department of Mines and Geology, 2008).

Production

The country has a long history of diamond production, which is the major economic mineral of Lesotho. Diamond contributed almost 7% of the gross domestic product (GDP) in 2008 and employed about 1,300 people (Lekhetho, 2009). Data on mineral production are in table 1.

Structure of the Mineral Industry

The mineral industry of Lesotho was modest in size and mostly privately owned. The major mineral processing facilities and their capacities are in table 2.

Commodity Review

Industrial Minerals

Diamond.—In 2008, Gem Diamonds Ltd. announced the sale of the Light of Letseng, a 478-carat white diamond recovered at the Letseng Mine, for $18.4 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. The price translated to about $38,500 per carat. SAFDICO also bought the Lesotho Promise in 2006 and the Letseng Legacy in 2007 from Gem Diamonds. The Light of Letseng ranked as the 20th largest rough diamond to be recovered anywhere in the world. The Letseng Mine has produced four of the world's 20 largest rough diamonds and the 3 largest diamonds that have been recovered in this century. Letseng produced 60% of the world's large white high-quality rough diamond. Excluding the Light of Letseng, Gem Diamonds sold 84,474 carats of diamond in 2008 (van der Merwe, 2008).

Gem Diamonds announced that it was moving downstream in the diamond business through the establishment of its own cutting and polishing operation. To this end, Gem Diamonds recruited Matrix Diamond Technology of Belgium, which had developed the world's most advanced and sophisticated diamond mapping technology. When applied to large complex rough diamonds, such as those recovered at the Letseng Mine, this technology has the ability to enhance the polished yield. Gem Diamonds announced that it had doubled 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 in 2008 through a second gravity-fed plant. The mine has the capacity to process about 7 Mt/yr of ore, which would produce about 100,000 carats. The production decreased in 2007 owing to global economic conditions (MBendi Information Services (Pty) Ltd., 2008).

Global Diamond Resources plc (formerly Lesotho Diamond Corp.) of Gibraltar announced that it had commissioned its Kao Mine in late 2007. In 2008, the mine entered the first production phase, including bulk sampling. After 30,000 carats had been produced as required by the bank feasibility study, a decision would be made whether to enter into the second phase of production. Global Diamond stated that the mine was one of the largest unexploited diamond resources in the world and was expected to produce about 740,000 carats per year during its anticipated 30-year mine life (Strategic Investments Ltd., 2008).

Kopane Diamond Developments announced that the Liqhobong Satellite plant project would be placed on care-and-maintenance status at yearend owing to the economic and market turbulence. The company said that it would focus on advancing the appraisal and development of the Liqhobong Main Pipe project to take full advantage of a recovery in diamond prices in the future (Pringle, 2008).

The joint venture of Lucara Diamond Corp. and Mothae Diamond Inc. of Canada announced results of an audit of diamond recovery tailings from the phase 1 bulk sampling program at the Mothae project. Reprocessing of the tailings resulted in recovery of an additional 621 carats in 1,851 stones. The total recovery from the phase 1 program was 1,204 carats. Based on a revised survey, total kimberlite tonnage processed was 24,655 metric tons (t), which resulted in a grade estimate of 4.89 carats per hundred metric tons. A total

of 58 stones of greater than 2 carats and 13 stones of greater than 5 carats were recovered; the three largest diamonds were 10.24 carats, 8.65 carats, and 8.51 carats, respectively. Phase 2 of the sampling program was begun in 2008, in which up to an additional 70,000 t of kimberlite was to be processed. Mining and stockpiling of kimberlite was in progress in 2008. The Mothae kimberlite project is located 6.5 kilometers from the Letseng Mine, which produced the world's highest value run-of-mine diamond (Lucara Diamond Corp., 2008).

Outlook

Diamond production is not likely to increase significantly until there is a recovery from the global economic crisis. 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, coupled with constraints in education, will influence development into the foreseeable future.

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SWAZILAND

Mining has declined in importance in Swaziland in recent years and, in 2008, the mineral industry was not a significant contributor to the country's GDP. The Government announced that the Swaziland Electricity Co. was planning to develop a 120-megawatt hydroelectric plant and had invited submissions from engineering firms for feasibility and predesign studies (Engineering News, 2009).

Production

Information on the mineral industry of Swaziland was not readily available. Production of anthracite coal and quarried stone was estimated to be about the same as in 2007. 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 2008 was estimated to be about the same as in 2007. Data on mineral production are in table 1.

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 is expected to continue to constrain increases in production.

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TABLE 1
LESOTHO AND SWAZILAND: PRODUCTION OF MINERAL COMMODITIES[1]

Country and commodity		2004	2005	2006	2007	2008[e]
LESOTHO[2]						
Fire clay[e]	cubic meters	15,000	15,000	15,000	15,000	15,000
Diamond	carats	26,607 [r]	52,036 [r]	231,324 [r]	454,014	450,000
Stone, quarry products:[e]						
Dimension stone	square meters	1,000	1,000	1,000	1,000	1,000
Gravel and crushed rock	cubic meters	300,000	300,000	300,000	300,000	300,000
SWAZILAND[3]						
Coal, anthracite	metric tons	488,314	222,000	310,570 [r]	241,283	250,000
Ferrovanadium	do.	1,150	345	491	500 [e]	500
Stone, quarry products	cubic meters	230,062	567,000	534,688	207,535	300,000

[e]Estimated; estimated data are rounded to no more than three significant digits. [r]Revised. do. Ditto.

[1]Table includes data available through June 30, 2009.

[2]Reported data from Lesotho Department of Mines and Geology.

[3]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 INDUSTRIES IN 2008

(Metric tons unless otherwise specified)

Country and commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
LESOTHO				
Diamond	carats	Gem Diamond Mining Co. Ltd., 76%, and Government 24%	Letseng Mine	100,000
SWAZILAND				
Coal		Maloma Colliery Ltd.	Maloma Mine at Maloma	500,000
Ferrovanadium		Swazi Vanadium (Pty) Ltd.	Maloma	2,400