

THE MINERAL INDUSTRY OF

LESOTHO

By George J. Coakley

The landlocked, 30,350 square kilometer nation of Lesotho is an independent enclave within the Republic of South Africa. In 1997, the population was 2 million, and the gross domestic product (GDP) per capita, based on purchasing power parity, was estimated to be \$2,500. The minerals industry was not a significant part of the economy; repatriated wages from Basotho miners working in the South African gold mines, however, added one-third to the GDP. Additional revenue was generated from the sale of water to South Africa through the Lesotho Highlands Water Project (HWP) in the Maluti Mountains. The first dam of this project was completed in 1996. Total cost of the HWP, which was being funded by the World Bank, was estimated to be \$4 billion dollars.

Commercial interest in the mineral resources of Lesotho was limited to diamonds. Lesotho has long been known as a source of diamonds, mostly from alluvial deposits. In recent years 33 kimberlite and 140 dykes, of which 24 are diamondiferous, have been identified by the Lesotho Geological Survey. Artisanal miners produced a small amount of clay, crushed stone, and sand and gravel for domestic consumption. Artisanal diamond production was around 1,500 carats per year (kt/yr), while Messina Diamond Corp. of Canada reported 1997 exports of 8,160 carats, valued at \$366,533, of diamonds derived from sampling of the Lihobong kimberlite pipes (Whitelock, 1998). The exploration and drilling program completed at Lihobong in December 1996 identified two mineralized kimberlite pipes, the

Main and the Satellite. Resource estimates at the Main Pipe were 99 million metric tons (Mt) to a depth of 650 meters (m), with a +1-millimeter (mm) microdiamond grade of 49 carats per hundred tons (cpht). Tonnage estimates were 50 Mt to a depth of 250 m and 26 Mt to 125 m. Resource estimates at the Satellite Pipe were 4 Mt to a depth of 125 m, with a +1-mm microdiamond grade of 139 cpht. The prefeasibility study for the project, completed in 1997, indicated that a 2.6 Mt per year open-pit mine could produce 700,000 kt/yr. A full scale bulk sampling of the two pipes will begin in July 1998, with a bankable feasibility study expected to be completed in early 1999 (Messina Diamond Corporation, 1998, Development and exploration, accessed January 12, 1999 at URL <http://www.messinadiamond.com/frames-dev-exp.html>).

Reference Cited

Whitelock, Keith, 1998, Lesotho: Mining Journal, Africa Annual Review Supplement, v. 325, no. 8381, July 3, p. 46.

Major Source of Information

Departments of Mines and Geology Ministry of Water
Energy and Mining
Maseru, Lesotho