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2005 Minerals Yearbook

NAMIBIA

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The Mineral Industry of Namibia

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Diamond remained the most economically significant mineral commodity produced by the mining industry of Namibia. The country, which is located on the southwestern coast of Africa, was the world's sixth ranked producer of uranium and the eighth ranked producer of gem diamond. In 2005, diamond production declined slightly compared with that of 2004 because of a 21% reduction in Namdeb Diamond Corp. (Pty) Ltd.'s land-based diamond production and the half-year suspension of offshore mining by Diamond Fields International Ltd. as its MV *Diamond Fields Discover* (formerly the MV *Anya*, which had mined Diamond Fields' offshore concessions under contract) was renovated. Other mineral production in Namibia included copper, fluorspar, gold, lead, salt, semiprecious stones, silver, stone, and zinc (Olson, 2006; World Nuclear Association, 2006§[1]).

Based on purchasing power parity estimates published by the International Monetary Fund (2006§), Namibia's gross domestic product (GDP) was $15.1 billion in 2005 and the GDP per capita was about $7,478. The real GDP growth rate declined to 3.5% from 4.2% in 2004, and inflation dropped to 2.4% in 2005 from 4.1% in 2004.

Commodity Review

The rise of international prices of most mineral commodities continued in 2005 and sparked additional international interest in Namibian mineral occurrences. Copper exploration activity in Namibia included that of Copper Resources Corp. on the Haib project and Helio Resource Corp. on the Leicester, the Otjitombo, and the Tevrede South prospects. Diamond exploration included the offshore activity of Afri-Can Marine Minerals Corp. on Block J and the joint venture of Epia Minerals (Pty.) Ltd. and Trans Hex Group Ltd. on the Namdeb concessions. Other diamond exploration included that of Motapa Diamonds Inc. on the Kavango prospect, Mount Burgess Mining N.L. on the Tsumkwe project, Namibian Resources plc on the East and West Saltztal prospects, and Reefton Mining N.L. on the Skeleton Coast project. Companies that explored for gold in 2005 included AfriOre Ltd. on the Capricorn project, Teal Exploration & Mining Inc. on the Otjikoto prospect and in the Otavi area, and Yale Resources Ltd. on the Makuru project. Evaluation of uranium mineralization in Namibia included that of Australian United Gold Ltd. in the Engo Valley, Bannerman Resources Ltd. on the Goanikontes prospect, Forsys Metals Corp. (formerly Forsys Technologies Inc.) on the Valencia project, Reefton Mining N.L. on the Erango project, Rössing Uranium Ltd. on the SH and SK anomalies on Rössing's mining lease near Arandis, and Uranco Inc. on the Trekkopje deposit.

Metals

Copper.—In 2005, Ongopolo Mining and Processing Ltd. reopened the Matchless Mine, which had been closed in 1983. Ongopolo also operated the Tsumeb copper smelter and the Kombat and the Otjihase copper-lead-silver mines.

Industrial Minerals

Diamond.—Namdeb, which was a joint venture between De Beers Centenary AG (50%) and the Namibian Government (50%), was the country's leading diamond producer. During 2005, Namdeb, its contractors, and its subsidiaries produced about 1.7 million carats. Namdeb's offshore production of diamond exceeded onshore production for the first time since the 1923 diamond agreement between De Beers' and the Government's predecessors. The decline of onshore diamond production was attributed to the exhaustion of economic ore in Diamond Area no. 1, the Daberas terraces of the Orange River Mines, and Site 2 of the Pocket Beaches unit. Despite the decline in onshore production, Namdeb proposed to increase total company production to 10 million carats per year by 2010 (Namdeb Diamond Corp. (Pty) Ltd., 2006, p. 8, 21, 24-25).

Mineral Fuels

Uranium.—In 2005, Paladin Resources Ltd. began construction of the Langer Heinrich open pit uranium mine. Rössing, which had been Namibia's only uranium operation, processed about 12 million metric tons of ore in 2005 and produced 3,711 metric tons of U_3O_8. Whereas much of Rössing's production was exported under long-term contracts, excess production was sold in the international spot market. The increases in the spot market price (to $35.25 per pound in 2005 from $8.84 per pound in 2001) of the past few years had encouraged the company to evaluate an expansion of the mine; previously, the company had planned to close the mine in 2009. In December, Rössing confirmed that it would start a 2-year $112 million project that would include the purchase of new mining and transportation equipment and the rehabilitation of the process plant. Under the plan, Rössing would increase U_3O_8 production capacity to 4,000 metric tons per year and would extend operations at the facility to 2016 (Rössing Uranium Ltd., 2006, p. 2, 32).

Outlook

The long tradition of mining in Namibia has been renewed with the reopening of the Tsumeb-area copper mines and smelter in 2000, the opening of the Skorpion zinc project in 2003, the recent expansion of fluorspar and gold mines, and the continued success of offshore diamond exploration and development. The rise in world commodity prices during the

[1]References that include a section mark (§) are found in the Internet References Cited section.

early 2000s has resulted in plans for additional exploration in Namibia for base metals, diamond, gold, natural gas, and uranium. Potentially new mine development and new value-added gemstone cutting and polishing, metal-processing, and other mineral-based manufacturing industries could maintain the minerals sector's position as a significant segment of the economy of Namibia for the foreseeable future.

With a climate that is among the driest in the world, the lack of water resources will continue to be a constraint on development in Namibia. New investment to develop the country's natural gas resources and to harness the hydroelectric power potential of the Kunene River will influence the future economic growth of Namibia. The expansion of regional transportation infrastructure in northern Namibia could see the Port of Walvis Bay become an alternative route for minerals exports from southeastern Angola, Botswana, and Zambia.

References Cited

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Major Sources of Information

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TABLE 1
NAMIBIA: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

Commodity		2001	2002	2003	2004	2005
METALS						
Arsenic, white, 99% arsenic trioxide		914	880	389	1,264	89
Copper:						
Mine output, concentrate (26% - 30% Cu):						
Gross weight		53,790	63,997	64,882	58,792	40,542
Cu content		12,393	18,012	16,175	11,174	10,157
Metal, blister:						
From domestic concentrates		18,386	17,850	16,106	15,500 r, e	14,600 e
From imported toll concentrates		8,629	8,853	9,930	9,200 r, e	9,000 e
Total		27,015	26,703	26,036	24,704	23,551
Gold	kilograms	2,706	2,815 r	2,508	2,205	2,703
Lead, mine output, concentrate:						
Gross weight		25,565	24,140	31,453	27,338	24,689
Pb content of Pb and Pb/Zn concentrates		12,088	13,809	18,782	14,338	14,320
Silver:						
Mine output, Ag content of concentrate	kilograms	20,396	43,632	45,100	27,153	30,003
Metal, refined, primary[2]	do.	18,150	12,020	18,140	14,815	15,000
Tantalite:						
Gross weight, concentrates		--	23 e	100 e	30 e	--
Ta content (36%)		--	8	36	11 e	--
Tin:						
Gross weight, concentrates		--	--	72	25 e	--
Sn content (60%)		--	--	43	15 e	--
Uranium, U_3O_8		2,640	2,751	2,401	3,583	3,711
Zinc, mine output, concentrate (49% - 54% Zn):						
Gross weight		70,923	77,587	107,920	123,372	126,123
Zn content of Zn and Pb/Zn concentrates		37,622	42,685	60,500	66,028	68,000 e
Metal, refined, primary[2]		--	35	47,436	120,533	132,818
INDUSTRIAL MINERALS						
Diamond, gem	thousand carats	1,487	1,562	1,481	2,004	1,902
Fluorspar, acid grade (97% $CaFl_2$)[3]		81,551	81,084	79,349	104,785	84,211
Gypsum		--	--	--	--	--
Salt		543,218	630,159	697,914	754,351	573,248
Semiprecious stones:						
Agate		138	190	123	158	150
Amethyst	kilograms	4,500 e	4,500 e	300	41,367	40,000
Blue chalcedony	do.	NA	NA	124	69	50
Chrysocolla	do.	2,685	13	-- e	--	--
Garnet	do.	150 e	150 e	--	115	100
Picture stone		NA	NA	326	240	200
Pietersite		5,370	--	11	9	--
Rose quartz		30	--	93	--	--
Sodalite		46	1,691	174	--	--
Tourmaline	kilograms	--	--	218	102	100
Stone:						
Dolomite		19,593	--	15,401	13,536	14,000 e
Granite		5,723	24,754	27,456	25,492	21,380
Marble		18,337	3,182	4,523	8,356	5,112
Sodalite		--	NA	704	138	100
Sulfur, pyrite concentrate:						
Gross weight (49% - 51% S)		68,674	3,633	31,786	3,658	1,035
S content		34,491	1,874	16,390	1,835	520
Wollastonite		284	742	585	406	253

[e]Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. [r]Revised. NA Not available. -- Zero.

[1]Table includes data available through October 31, 2006.

[2]Includes products of imported concentrate.

[3]Fluorspar production shown in wet metric tons; approximately 9% moisture.