

THE MINERAL INDUSTRY OF SIERRA LEONE

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Sierra Leone's mineral production remained restricted by civil unrest during most of 1996. The industry's prospects significantly improved when the Government and the Revolutionary United Front (RUF) signed a peace agreement on November 30, 1996. The mineral industry normally generated from 15% to 20% of the gross domestic product, 80% to 90% of export earnings, and employed almost 15% of the labor force, primarily in rural areas. However, the troops of the RUF have disrupted diamond mining operations intermittently since 1992 and in early 1995 the fighting resulted in the suspension of most mineral operations in Sierra Leone. During 1996, a South African security firm continued to assist the Government in maintaining control of the mining areas, allowing diamond and gold recovery to continue. However, operations at the bauxite and titanium minerals operations remained inactive.

The mining law, the Mines and Minerals Decree, (N.P.R.C. Decree No. 5) became effective on March 4, 1994. The Mineral Resources Development Policy (Government Notice No. 105 of March 9, 1995) required that proposals for the rehabilitation of mining sites be submitted and approved by the Ministry of Mineral Resources prior to the commencement of large-scale mining operations. Notice No. 105 also required small miners to assist with the rehabilitation of artisanal sites. During 1996, the Ministry approved 40 Exclusive Prospecting Licenses (EPLs) and 10 Exploration Licenses. Increased international interest was anticipated with the ending of the civil war.

The total value of minerals produced recovered to \$32 million¹ in 1996 from \$22 million in 1995 (Pas and Wright, 1997). The value of Sierra Leone's mineral exports was reported at \$30 million in 1996 compared with \$25 million in 1995 and \$102 million in 1994. For the last 2 years, diamond has been the nation's principal mineral export, replacing bauxite, ilmenite, and rutile. The Government Gold and Diamond Office was responsible for supervising the export of precious minerals. The Government has estimated that perhaps as much as two-thirds of the artisanal diamond and gold production and subsequent trading activity continued to bypass official revenue-collection channels. (See table 1.)

During 1996, Sierra Leone Ore and Metal Co. (SIEROMCO), announced it would not reopen its bauxite operations in the southern Mokañji area (Mining Journal (London), 1996). Prior to being overrun by the RUF insurgents

in 1995, SIEROMCO had estimated the production life of the Gbonge deposits to be 10 to 15 years. Jupiter Export-Import Inc. obtained an EPL for the Port Loko bauxite deposit in the northwest.

Diamond production in 1996 was primarily by small-scale artisanal miners. Although recent production was almost entirely from alluvial deposits, international exploration expanded interest to the kimberlite pipes in the Yengema and Tongo regions of eastern Sierra Leone.

The Government assigned the Koidu Kimberlite EPL east of Yengema in the Kono District to Branch Energy Ltd. of the Isle of Man, United Kingdom. Sunshine Kimberlite Mining Co., a subsidiary of Sunshine Mining of the United States, and Diamond Fields Resources of Canada had held rights to the concession. Branch Energy was acquired by Carson Gold Corp. of Canada in October 1996. Carson Gold simultaneously changed its name to DiamondWorks Ltd. DiamondWorks continued work on alluvial EPLs along the Sewa River and at Matemu.

AmCan Minerals Ltd. of Canada acquired the diamond exploration properties of Armsec International (SL) Ltd. and planned to work on a number of sites along the Sewa River. White Swan Resources (UK) Ltd. of the United Kingdom, a subsidiary of White Swan Resources Inc. of Canada, also was acquiring interest in companies holding diamond EPLs along the Sewa River.

Rex Mining Sierra Leone, a subsidiary of Rex Diamond Mining Corp. of Canada, was drilling and bulk sampling on its Tongo Fields kimberlite concession and was preparing to install a washing plant at its Kono District alluvial concession, near Koidu. Gold King Consolidated, Inc. of the United States and Gem World (SL) Ltd. of Sierra Leone were negotiating over a concession in the Kono District.

Offshore, the Diamond Corporation West Africa Ltd., a wholly owned affiliate of De Beers of South Africa, terminated its exploration program in August. The joint venture between Malaysia Mining Corp. Bhd. of Malaysia and Casierra Development Fund Inc. of Canada completed its sampling program on offshore EPL No. 5/94 in June 1996, and in August, the joint venture was dissolved.

Gold was recovered mainly in the streams draining the northern Sula Mountains. Official gold production figures remained low owing to smuggling and the civil war. The Geological Survey of Sierra Leone had identified alluvial gold deposits in the Gori Hills, Kangari Hills, Loko Hills, Nimini Hills, and Sula Mountains. Companies involved in various stages of gold exploration included Afro American Mining;

¹Where appropriate, values have been converted from Sierra Leone leones to U.S. dollars at the rate of LE900=US\$1.00 in 1995 and 1996 and LE578.17=US\$1.00 in 1994.

Baomahun Gold Mines; Condoliated Venturex Holdings Ltd. of Canada; General Investigations Development; Golden Prospect Mining Co. PLC of the United Kingdom; Golden Leo Resources Ltd., a subsidiary of Mano River Resources of Switzerland; Gondwana Investments; Resources Finance Ltd.; Rex Mining; and Sierra Gold.

The rehabilitation of the 10,000-barrel-per-day capacity Freetown petroleum refinery continued. West African Mining and Refining Co. Ltd., a recently formed subsidiary of Unipetrol Nigeria PLC, owned and operated the refinery.

Resource Securities Ltd., a subsidiary of Golden Prospect Mining Co., and Resources Finance Ltd. were exploring for platinum on the Freetown Peninsula.

The mining facilities of Sierra Rutile Ltd., a 50% Nord Resources Corp. of the United States and 50% Consolidated Rutile Ltd. of Australia joint venture, had been overrun by RUF forces in 1995. The company spent 1996 restructuring its debt and arranging financing for the rehabilitation and expansion of its operations near the Imperri Hills in southern Sierra Leone. Mining is expected to resume by 1998. Time Mineral Research Co. Ltd. had obtained an EPL for ilmenite and rutile in the Mawuru River area.

The port at Freetown received most of the country's imports and all its petroleum import traffic. Ports at Niti and Pepel were operated by private mining firms and normally handled bulk exports of bauxite and rutile.

Sierra Leone has additional mineral deposits, including low-

grade chromite, clay, graphite, iron ore, kaolin, lignite, and nepheline syenite. However, inadequate infrastructure, poor resource management, and the recently ended insurgency in the interior have severely hampered development. With a large part of the surface alluvials effectively high-graded by artisanal activity, increasingly deeper strata and undeveloped kimberlites will be targeted by international companies interested in entering the Sierra Leone diamond industry. Diamond production was expected to significantly increase with the number of international firms proposing to start up larger scale operations in 1997. Sierra Leone is expected to return as one of the world's leading rutile producers when Sierra Rutile resumes operations.

References Cited

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Ministry of Mineral Resources, [not paginated].

Major Source of Information

Ministry of Mineral Resources
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TABLE 1
SIERRA LEONE: PRODUCTION OF MINERAL COMMODITIES 1/

(Thousand metric tons unless otherwise specified)

Commodity	1992	1993	1994	1995	1996
Aluminum: Bauxite, gross weight	1,250	1,170	735	--	--
Diamond thousand carats	296	158	255	214 r/	270
Gold 2/ kilograms	92	157	125	4	16
Gypsum e/ metric tons	4,000	4,000	4,000	100 r/	300
Petroleum refinery products thousand 42-gallon barrels	1,010	--	--	-- 3/	-- 3/
Salt e/	200	200	200	--	50
Titanium:					
Rutile ore and concentrate 96% TiO ₂ , gross weight	149	152	137	--	--
Ilmenite ore and concentrate 60% TiO ₂ , gross weight	60	63	47	--	--
Zircon metric tons	1,330	--	1,300	--	--

e/ Estimated. r/ Revised.

1/ Table includes data available through Apr. 30, 1997.

2/ Data includes only officially reported production.

3/ The refinery was reactivated in 1995 for test runs.