

# **2007 Minerals Yearbook**

# FIJI [ADVANCE RELEASE]

## THE MINERAL INDUSTRY OF FIJI

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Fiji's identified land-based mineral resources were carbonate rock, copper, gold, lead, river sand and gravel, silver, and zinc, of which gold and silver had been exploited since 1933. Fiji reportedly has potential to host oil and gas offshore. In 2007, Fiji's mining activities involved mostly the production of carbonate rock, and river sand and gravel. In 2007, none of the Fiji's mineral production was of world significance.

Because of the coup in early December 2006 followed by months of tensions between the military and the Government, the real growth rate of Fiji's gross domestic product (GDP) for 2007 was revised by the Ministry of Finance and National Planning in March 2007 to a negative growth of 2.5% from the initially reported positive growth of 2%. According to ANZ Pacific Quarterly, investment prospects for Fiji were expected to remain uncertain until the interim Government provides greater clarity about its macroeconomic policy and investment directions. However, the reopening of Fiji's only gold mine in late 2007 was expected to help the growth prospects in 2008 (ANZ Pacific Quarterly, 2007a, b)

The Ministry of Lands, Mineral Resources, and Environment (MLMRE) is the main Government agency that implements the country's mineral development policies under the Mining Act of 1978, which was revised in 1985. The Mineral Resources Department (MRD), which falls under the MLMRE, is responsible for developing policies on mining and for providing geologic and relevant information and assistance to investors in the mining sector. The MRD also facilitates the exploration for and development of mineral and petroleum resources in the country (Mineral Resources Department, 2007).

According to the Fiji Islands Bureau of Statistics' National Accounts Office, the output of the mining and quarrying sector, which dropped by 49.8% in 2006, contributed about 0.5% of the GDP in 2006 (the latest year for which data were available) compared with about 1% of the GDP in 2005. Gold and silver production, which accounted for more than 50% of the sector's contribution to the GDP in 2006, contributed a much smaller percentage to the GDP in 2006 owing to a scheduled mine shutdown and a mine-shaft conveyance incident at the Vatukoula gold mine, which is located on the island of Viti Levu, during the second and third quarters of 2006 (Fiji Islands Bureau of Statistics, 2007b).

Fiji relied on imports to meet its mineral fuel requirements. Fijian imports of mineral fuels, which included automobile and industrial distillate fuels, aviation turbine fuel, and motor spirits, amounted to \$592.5 million and accounted for 33.2% of total imports in 2007 compared with \$600.7 million and 32.7% of total imports, respectively, in 2006. Fiji's major export mineral commodity was gold, which was valued at only \$1.6 million and accounted for about 0.3% of the country's exports in 2007 compared with \$25.4 million and 5.2% of the country's exports, respectively, in 2006 (Fiji Islands Bureau of Statistics, 2007a).

#### Production

According to Government official statistics, the mining activities in Fiji during the past 5 years involved the production of coral sand and limestone for cement manufacturing, gold and silver, river sand and gravel, and crude stones (table 1).

Most of the gold and silver production was exported. Crushed stone, limestone, dimension stone, and sand and gravel were produced and consumed mostly by the domestic construction industry. All limestone produced was consumed as raw material by Fiji's single cement producer.

Emperor Mines Ltd. of Australia, which was 45.3% owned by DRDGold SA of South Africa in 2006, was bought by Westech Gold PTY Ltd. on March 28, 2007. As of December 2006, the Emperor gold mine had underground delineated gold reserves of 2.34 million metric tons (Mt) at a grade of 11.4 grams per metric ton (g/t) gold for 858,000 troy ounces within a total underground resource of 16.2 Mt at a grade of 9.1 g/t gold for 4.76 million troy ounces underground. An additional 250,000 troy ounces of gold are contained in 5.18 Mt of mine tailings that grade at 1.5 g/t gold (Emperor Mines Ltd., 2007; River Diamonds PLC, 2007a).

In July 2007, River Diamonds PLC announced that it had entered into an agreement to acquire a 12.5% interest in Viso Gero International Inc. (VGI), which in turn owned a 94% interest in Westech. In October 2007, River Diamonds increased its stake in VGI to 20% from 12.5%. In November 2007, River Diamonds announced that Westech had produced 15.6 kilograms (503 troy ounces) of gold from the mining processing circuit at the Vatukoula Mine. In December 2007, River Diamonds signed an agreement to acquire 100% of VGI and would hold 100% interest, through Westech, in the Vatukoula gold mine (River Diamonds PLC, 2007b-d).

In July 2007, Newcrest Mining Ltd., which was one of the leading Australian gold mining companies, signed a memorandum of understanding to take a 65% interest in a joint venture with two Japanese companies-Mitsubishi Materials Corp. and Nittetsu Mining Co. Ltd.-to explore for copper and gold and to develop the mine in the Namosi region, which is located about 30 kilometers west of Suva, Fiji's capital city. Initially, Nittetsu Mining had a 71.94% interest in the joint venture and Mitsubishi Materials had a 28.06% interest. Newcrest could earn up to a 65% stake in the joint venture by funding \$21.5 million for exploration during a 4- to  $5\frac{1}{2}$ year period. According to Newcrest Mining, once Newcrest completes its earn-in, Nittetsu Mining will have the right to purchase up to 400,000 metric tons per year of concentrate, up to a maximum of 20% of the total joint-venture production (Reuters Ltd., 2007; Sydney Morning Herald, The, 2007).

Following the signing of the joint-venture agreement with Mitsubishi Materials and Nittetsu Mining, Newcrest Mining announced in December that it would start exploration in December 2007. An initial core drilling program was to test depth extension of the mineralization at the Waisoi Prospect, where Placer Dome Inc. (Placer Pacific) of Canada had identified a large low-grade resource of more than 900 Mt at a grade of 0.4% copper and 0.14 g/t gold in the early 1990s (Highbeam Research, Inc, 2007).

#### **Structure of the Mineral Industry**

Fiji's mineral industry consisted of one locally controlled cement company, one British-owned gold mining company, and several locally controlled small industrial minerals quarries (company names and their production capacities were not available) that produced such construction materials as limestone, sand and gravel, and other construction aggregates (table 2). The mining and quarrying sector employed 1,650 workers and accounted for about 0.5% of Fiji's labor force of 345,000 in 2000 (the latest year for which data were available) (Fiji Islands Bureau of Statistics, 2007c).

#### Outlook

The activity of the Fiji mining sector is expected to continue the 2007 downward trend and to remain at the lower level during the next 2 years compared with the previous 3-year period despite reactivation of the Vatukoula gold mine by River Diamonds in late 2007. The mining sector, however, is expected to rebound in the next 3 to 4 years because of the planned high gold production by River Diamonds and development of the copper-gold mine in the Namosi region by the joint venture of Mitsubishi Materials, Newcrest Mining, and Nittetsu Mining.

Fiji's economy as measured by the GDP was forecast to grow at a rate of 2.04% in 2008 and 2.78% in 2009 compared with a negative growth rate of 4.36% in 2007 (International Monetary Fund, 2008)

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TABLE 1
FIJI: PRODUCTION OF MINERAL COMMODITIES <sup>1</sup>

Commodity <sup>2</sup>		2003	2004	2005	2006 <sup>e</sup>	2007 <sup>e</sup>
Cement, hydraulic <sup>e</sup>	metric tons	120,000	120,000	143,000	143,000 <sup>r</sup>	145,000
Gold, mine output, Au content	kilograms	3,519	3,731	2,793	1,430	16
Limestone <sup>e</sup>	metric tons	180,000	180,000	215,000	215,000	220,000
Sand and gravel <sup>e</sup>	cubic meters	280,000	280,000	330,000	300,000	310,000
Silver, mine output, Ag content	kilograms	1,974	1,901	1,418	750	3
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<sup>e</sup>Estimated; estimated data are rounded to no more than three significant digits. <sup>r</sup>Revised.

<sup>1</sup>Table includes data available through June 6, 2008.

<sup>2</sup>In addition to the commodities listed, bauxite, crushed and dimension stone, coral sand, marble, and other construction materials are produced, but data are insufficient to make reliable estimates of output.

### TABLE 2FIJI: STRUCTURE OF THE MINERAL INDUSTRY IN 2007

(Thousand metric tons unless otherwise specified)

		Major operating companies		Annual
Commodity		and major equity owners	Location of main facilities	capacitye
Cement		Fiji Industries Ltd. (an affiliate company of	Lami, Suva, Fiji	145
		Holcim Group)		
Gold <sup>1</sup>	kilograms	Vatukoula Gold Mine (River Diamonds PLC, 100%)	Vatukoula, on the island of Viti Levu	1,700
Silver <sup>1</sup>	do.	Vatukoula Gold Mine (River Diamonds PLC, 100%)	do.	340

<sup>e</sup>Estimated. do. Ditto.

<sup>1</sup>The Vatukoula gold mine was closed in December 2006 and reopened by Westech Gold Pty Ltd. in October 2007. Westech Gold, which acquired Emperor Gold Mines in early 2007, was 100% owned by River Diamonds PLC of the United Kingdom, through acquisiton of

Viso Gero International Inc. in Decmber 2007.