

# 2012 Minerals Yearbook

FIJI [ADVANCE RELEASE]

## THE MINERAL INDUSTRY OF FIJI

### By Lin Shi

In 2012, gold continued to be the mainstay of the mineral industry of Fiji, although gold production was only of minor significance to the country's economy, accounting for about 1% of the country's gross domestic product (GDP). Fiji's GDP in 2012 was valued about \$3.9 billion, and the average annual inflation rate as measured by the consumer price index was about 4.3% (World Bank, The, 2013).

Fiji's mineral industry also included a cement plant and several quarries that produced coral and river sands, limestone, and stone and crushed gravel. Although gold had been produced in Fiji since the first gold discovery in the 1930s, the only significant mine was the Vatukoula Mine, which is located in the Nakauvadra Mountains on the main island of Viti Levu about 100 kilometers (km) northwest of the capital Suva and 8 km inland from the coast (table 2).

#### **Government Policies and Programs**

The Mineral Resources Department (MRD) is Fiji's national geological survey and mining organization. The MRD develops mining policies, provides geologic information, assists mining investors, and facilitates the exploration and development of mineral and petroleum resources in the country (Mineral Resources Department, 2012).

#### **Production**

In 2012, gold production in Fiji increased by 1.9% to about 1,700 kilograms (kg) (reported as 53,152 troy ounces) from 1,600 kg (reported as 52,157 troy ounces) in 2011. This increase was a result of continued investment in the Vatukoula Mine's infrastructure, which allowed the mine's owner, Vatukoula Gold Mines plc., to access the high-grade ore bodies, although lower ore tonnage was delivered to the mill during the year (Vatukoula Gold Mines plc., 2013).

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

Fiji had one British-owned gold and silver mining company, one locally operated cement company, and several small locally operated industrial mineral quarries that produced construction materials, such as limestone, sand and gravel, and other construction aggregates. Fiji was a regional gold producer, and it hosts several undeveloped major porphyry copper-gold and epithermal gold deposits.

#### **Mineral Trade**

In 2012 (the latest year for which data were available), the leading export partners of Fiji were the United States, which received 13.3% of Fiji's exports; Australia, 12%; Japan, 6.3%; Samoa, 5.8%; and Tonga, 5.1%. Fiji's major mineral commodity export was gold. The leading import partners of Fiji were Singapore, which supplied 32.6% of Fiji's imports;

Australia, 15.4%; New Zealand, 14.4%; and China, 10.7%. Fiji's major mineral commodity import category was petroleum products. The country increased its imports of petroleum products in 2012, which included mineral fuels, mineral oils, and distillations. Imports of mineral products were expected to increase steadily in 2013 and beyond (Fiji Islands Bureau of Statistics, 2013; U.S. Central Intelligence Agency, 2013).

#### **Commodity Review**

#### Metals

**Bauxite and Alumina.**—Shangdong Xinfa Group of China built a bauxite mine in Fiji, and the mine went into production in November 2011. By yearend 2012, the mine had supplied about 300,000 metric tons (t) of bauxite to the company's alumina refinery in China. China imported in total about 500,000 t of bauxite from Fiji in 2012 (Antaike, 2013).

Gold.—Vatukoula Gold Mines acquired 100% of Fiji's primary gold metal producing mine, the Vatukoula gold mine, in 2008. In 2012, the company processed 480 million metric tons (Mt) of ore and sold 1,636 kg (52,616 troy ounces) of gold at an average cost of \$1,627 per troy ounce. The company's production was limited by the flooding in February and April 2012, which hampered access to some of the mine's ore bodies. Operating costs on a per ton basis increased to an average of \$179 owing to an increase in diesel prices during the year. Although the "mineral resource base" remained at 130,000 kg (4.2 million troy ounces), Vatukoula Gold Mines decreased its mineral reserves by 1,600 kg (50,000 troy ounces) to 22,000 kg (700,000 troy ounces) owing to the mine's depletion (Vatukoula Gold Mines plc., 2013, p. 4, 7, 10).

The Namosi Joint Venture project was a large undeveloped copper-gold deposit with reserves estimated to be about 1,300 Mt of ore at a grade of 0.12 gram per metric ton (g/t) gold. Newcrest Mining Ltd. of Australia owned and managed 69.94% of the project (Newcrest Mining Ltd., 2013, p. 5).

In August 2011, Nautilus Minerals Inc. of Canada acquired 14 special prospecting licenses to explore the potential mineral deposits offshore Fiji. The licenses were for an exploration area that covers 60,000 square kilometers of ocean floor. Each of the licenses had an initial 2–year term. Although it retained an interest in Nautilus as a significant shareholder, Teck Resources Ltd. of Canada elected not to participate in exploration activities in Fijian waters (Nautilus Minerals Inc., 2011, 2012).

#### Industrial Minerals

**Cement.**—Fiji Industries Ltd.'s cement mill broke down in November 2012, which caused a cement supply shortage countrywide. Fiji imported cement from New Zealand during this time to help meet domestic demand (ICR Newsroom, 2012).

#### Outlook

Vatukoula Gold Mines is likely to open some high-grade areas in its mine to increase gold production, as well as continue with its reserve and resource drilling program to increase the company's mineral reserve base (Vatukoula Gold Mines plc., 2013).

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 ${\it TABLE~1}$  FIJI: ESTIMATED PRODUCTION OF MINERAL COMMODITIES  $^{1,\,2}$ 

(Thousand metric tons unless otherwise specified)

Commodity <sup>3</sup>		2008	2009	2010	2011	2012
Bauxite	*				50	500
Cement, hydraulic	*	143 *	110 *	120 *	120 *	110 *
Gold, mine output, Au content	kilograms	871	1,040	1,856 4	1,622 r,4	1,653 4
Limestone	*	215 *	215 *	50 *	50 *	50 *
Silver, mine output, Ag content	kilograms	265 4	293	500	400	300

Revised. do. Ditto. -- Zero.

## TABLE 2 FIJI: STRUCTURE OF THE MINERAL INDUSTRY IN 2012

(Thousand metric tons unless otherwise specified)

	Major operating companies		Annual
Commodity	and major equity owners	Location of main facilities	capacitye
Bauxite	* Shangdong Xinfa Group	NA	500
Cement	Fiji Industries Ltd. (FIL)	Lami, Suva, Fiji	150
	(an affiliate company of Holcim Group)		
Gold	kilograms Vatukoula Gold Mines plc., 100%	Vatukoula, island of Viti Levu	1,856
Silver	do. do.	do.	500

<sup>&</sup>lt;sup>e</sup>Estimated. do. Ditto. NA Not available.

<sup>&</sup>lt;sup>1</sup>Estimated data are rounded to no more than three significant digits.

<sup>&</sup>lt;sup>2</sup>Table includes data available through July 9, 2013.

<sup>&</sup>lt;sup>3</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.

<sup>&</sup>lt;sup>4</sup>Reported figure.

<sup>\*</sup>Correction posted on October 10, 2014.

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