



2013 Minerals Yearbook

SOLOMON ISLANDS

THE MINERAL INDUSTRY OF SOLOMON ISLANDS

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Solomon Islands is a country in the South Pacific Ocean that consists of large and small volcanic islands and hundreds of islets and atolls. About 80% of the country's population depends on agriculture, fishing, and forestry for at least a portion of its livelihood. The mineral resources that are the most significant to the economy are gold and silver. The country's undeveloped mineral resources include lateritic bauxite, lead, nickel, and zinc (Asian Development Bank, 2014).

Minerals in the National Economy

According to the Central Bank of Solomon Islands, the country's gross domestic product (GDP) increased by 3.2% in 2013 compared with an increase of 3.3% in 2012; economic growth was driven mainly by the agriculture and fishing industries. Mining output accounted for 13% of the GDP in 2013 (Central Bank of Solomon Islands, 2013a, p. 3; 2013b).

Export earnings from agriculture, gold, and logging decreased by a combined 11% to \$3.21 billion, and the value of imports increased by 3% to \$3.38 billion. The value of mineral exports fell by 27% to \$624 million owing to a decrease in gold prices and a reduction in gold output. The reduction in gold output was caused by bad weather conditions and the redevelopment of the Gold Ridge Mine. Mineral commodity exports accounted for 20% of total exports, and mineral commodities remained the second-ranked commodity export category, in terms of value, in 2013. Gold and silver exports went mostly to Australia. The major export partners in 2012 were China (50.7%), Australia (17.5%), Italy (3.9%), and the United Kingdom (3.6%). The major import partners were Singapore (26.6%), Australia (25.2%), China (7%), and Malaysia (6.8%) (Australian Department of Foreign Affairs and Trade, 2012; Central Bank of Solomon Islands, 2013a, p. 4; 2013c, p. 18).

Production

In 2013, gold output decreased by 13% compared with that of 2012, and silver output decreased by 24%. Data on mineral production are in table 1 (Central Bank of Solomon Islands, 2013a, p. 4; 2013c, p. 11).

Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities.

Commodity Review

Metals

Bauxite and Alumina.—Subsidiary companies of Southwest Pacific Bauxite Pty Ltd. of Australia held 75% interest in the Vaghena Island bauxite project. The mine contained

approximately 25 million metric tons (Mt) of bauxite. A feasibility study for the project was planned to be completed in mid-2014. Depending on the results of the study and the granting of mining licenses, production could begin in 2015. The projected annual production capacity of the mine was 1.2 million metric tons per year (Mt/yr) and could be expandable to 2 Mt/yr after several years. The project is located on the northeastern portion of Vaghena Island, and it was expected eventually to employ between 200 and 250 people (Solomon Bauxite Ltd., 2014; Southwest Pacific Bauxite Pty Ltd., 2014).

Copper, Gold, and Silver.—In 2012, Caldera Minerals (Pty) Ltd. of Australia drilled four holes in the West Guadalcanal project area, which was acquired by Axiom Mining Ltd. of Australia in 2013. The drilling results showed copper grades of 3.30% for 2 meters (m) out of 60 m and copper grades of 0.45% for 5 m out of 25 m. Historical data for trench sample intervals at West Guadalcanal (collected by the past explorer Nuigini Mining Ltd. of Papua New Guinea) was 130 m at a grade of 0.58 gram per metric ton (g/t) gold, including 10 m at a grade of 3.44 g/t (Axiom Mining Ltd., 2013, p. 13).

Axiom Mining completed reconnaissance evaluations of the Arosi project on Makira Island (in Makira and Ulawa Province) and at the Itina project in western Guadalcanal Province by conducting geologic mapping and stream-sediment and rock-float sampling. Based on the results, the company decided to relinquish its rights to the areas (Axiom Mining Ltd., 2013, p. 13).

Blue Water (SI) Ltd. of Australia, which was an indirect subsidiary of Neptune Minerals, Inc. of the United States, was awarded a 7-year staggered license by the Government of Solomon Islands to conduct seafloor prospecting offshore Western Province and to search for gold in 12 sites offshore Temotu Province. Environmental groups and the local Temotu people expressed concern about the potential environmental impacts of deep sea mining, however, and called for more consultation work before Blue Water proceeds with the exploration (Radio New Zealand, 2013a, b; West, 2013).

The Gold Ridge Mine, which is located in Guadalcanal Province, was the sole operating gold mine in Solomon Islands. In May 2000, Ross Mining N.L. of Australia, which owned the Gold Ridge Mine, was acquired by Delta Gold Ltd. of Australia. A month later, Delta Gold abandoned the mine owing to the civil unrest in Guadalcanal. Australian Solomon Gold Ltd. of Australia (ASG) acquired the mine in 2005. In 2009, Allied Gold Mining Plc. of Australia took over ASG and, from 2009 to 2010, worked on redeveloping the mine. In March 2011, Allied Gold Mining (through its subsidiary Gold Ridge Mining Ltd.) restarted mining at the Gold Ridge Mine. In September 2012, St Barbara Ltd. of Australia acquired Allied Gold Mining (and its subsidiary Gold Ridge Mining Ltd.) for \$556 million. As of 2013, total probable reserves at the Gold Ridge Mine were 23.3 Mt at a grade of 1.71 g/t gold, and total resources (including measured, indicated, and inferred) were 37.6 Mt at

a grade of 1.73 g/t gold. In 2013, Gold Ridge Mining reduced its number of employees to 840 from 910 employees in 2012, or by 8% (Allied Gold Mining Plc, 2011, p. x, 4; Owen and Weldegiorgis, 2011, p. 4; Central Bank of Solomon Islands, 2013b, p. 12; St Barbara Ltd., 2014).

On May 5, 2013, SolGold plc of Australia (formerly Solomon Gold plc) terminated its joint-venture agreement with Newmont Mining Corp. of the United States for the Guadalcanal project, which included the Kuma copper-gold project, and renewed its prospecting license for the Kuma project. The Kuma project is located about 40 km south-southeast of the capital, Honiara. After terminating the joint-venture agreement with Newmont, SolGold entered into a joint-venture agreement with Gold Ridge Mining, which could secure its property rights to the Central, the Lower Koloula, the Mbetilonga, and the Sutakiki tenements (the Sutakiki gold prospect lies within Kuma copper-gold project area, which had been explored by SolGold and Newmont as a part of their Guadalcanal joint-venture agreement). The drillhole intersection of the ore body (between 108 and 140 m in depth) of the Sutakiki gold project graded 9.45 g/t gold and included a high-grade zone of 10 m grading 21.1 g/t gold and up to 0.28% copper. In 2013, SolGold conducted exploration of the Lower Koloula project and identified two main areas of interest—the Big Frog and the Pepechichi areas. The Big Frog is a porphyry system, and rock-float samples graded 2.47 g/t gold, 100 g/t silver, and greater than 0.1% copper. The Pepechichi area is defined by a copper-gold anomaly. The Malukuna project area had not yet been explored (Asia Miner News, 2013; SolGold plc, 2013a, p. 23, 26; Solomon Gold plc, 2014).

SolGold also renewed its prospecting licenses for Fauro Island. The Fauro prospect consists of nine target areas and includes the central Ballyorlo porphyry copper and gold deposit, and peripheral high-level targets and high-grade epithermal gold-silver targets at Kiovakase and Meriguna. Surface trenching by BHP Billiton Ltd. of Australia at Meriguna yielded 30 m grading 1.60 g/t gold and 10 m grading 5.02 g/t gold; nine shallow holes were drilled in 2013 (SolGold plc, 2013a, p. 23, 24; 2013b, p. 1–5).

Nickel.—Sumitomo Metal Mining Co., Ltd. (SMM) of Japan obtained several prospecting licenses for the Choiseul Islands and Santa Isabel Islands through its local subsidiary SMM Solomon Ltd. and had been conducting exploration there since 2005. In 2010, the Government of Solomon Islands granted SMM Solomon prospecting licenses for nickel ore deposits in three areas on Santa Isabel Island. In 2011, however, the Government canceled SMM Solomon's licenses for the Kolosori and the San Jorge deposits for unknown reasons, and awarded them to Axiom KB Ltd. instead. SMM Solomon filed a complaint with the Government, seeking cancellation of the rights awarded to Axiom KB and reinstatement of SMM Solomon's rights to the deposit. The case was to be heard by Solomon Islands' High Court sometime in late 2013 or early 2014 (Axiom Mining Ltd., 2013, p. 27; Dorney, 2013; Sumitomo Metal Mining Co., Ltd., 2013, p. 1–3).

Outlook

Owing to severe weather and related flooding in early 2014, the economic growth of Solomon Islands is projected to be near zero in 2014. The flooding also resulted in the suspension of formal mining operations at the Gold Ridge Mine. Growth in the mineral industry will depend on how quickly gold production re-starts at Gold Ridge, and on the future mining projects, such as those for nickel (International Monetary Fund, 2014, p. 3).

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TABLE 1
SOLOMON ISLANDS: PRODUCTION OF MINERAL COMMODITIES

(Kilograms)

| Commodity | 2009 | 2010 | 2011 | 2012 | 2013 |
|---------------------------------|------|------|--------------------|--------------------|--------------------|
| Gold, mine output, Au content | 130 | 130 | 1,641 ^r | 2,180 ^r | 1,886 ^r |
| Silver, mine output, Ag content | -- | -- | 612 ^r | 932 ^r | 708 ^r |

^rRevised. -- Zero.

TABLE 2
SOLOMON ISLANDS: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Kilograms)

| Commodity | Major operating companies and major equity owners | Location of main facilities | Annual capacity |
|---------------|---|-----------------------------------|-----------------|
| Gold, in ore | Gold Ridge Mine (St Barbara Ltd.) | Guadalcanal, Guadalcanal Province | 1,845 |
| Gold, refined | Meekom Gold Exchange and Refinery Corp. Ltd. | Solomon Islands | 600 |