



2014 Minerals Yearbook

BURUNDI

THE MINERAL INDUSTRY OF BURUNDI

By Thomas R. Yager

In 2014, Burundi produced 2% the world's production of tantalum. The country also mined small amounts of gold, limestone, niobium (columbium), peat, sand and gravel, tin, and tungsten. Burundi was not a globally significant consumer of minerals. The manufacturing industry accounted for 10.9% of the gross domestic product in 2014, and the mining and quarrying industry, 0.7%. Mineral fuels accounted for about 20% of Burundi's imports, and cement, 2% (African Development Bank Group, 2015; Institut de Statistiques et d'Etudes Economiques du Burundi, 2016, p. 205, 238; Papp, 2016).

In October 2013, the Government passed the Mining Code of Burundi (law No. 1/21 of October 15, 2013), which partially replaced the Mining and Petroleum Act of 1976 (Decree-Law No. 1/138 of July 17, 1976). The exploration for and mining of minerals and mineral fuels other than petroleum and natural gas were governed by the Mining Code of Burundi. At yearend, the natural gas and petroleum subsector still was governed by the Mining and Petroleum Act of 1976. The Ministry of Energy and Mines was responsible for issuing licenses and regulating the mineral sector.

In July 2010, the U.S. Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act, which contains provisions in Section 1502 concerning the use of minerals to finance military operations in eastern Congo (Kinshasa). The U.S. Securities and Exchange Commission (SEC) issued regulations in final form in accordance with the Dodd-Frank Act in August 2012 (U.S. Securities and Exchange Commission, 2012, p. 56274–56275).

Under the new regulations, all companies registered with the SEC that sell products containing gold, tantalum, tin, or tungsten are required to disclose whether these minerals originated from Congo (Kinshasa) or from countries that share a border with Congo (Kinshasa), including Burundi. Companies that sell products containing gold, tantalum, tin, or tungsten that originated in Congo (Kinshasa) or bordering countries are also required to submit annual reports to the SEC describing the due diligence measures taken, the smelters that processed the minerals, and the companies' efforts to determine the mine of origin. The companies also are required to describe products that contain conflict minerals in their reports, and the reports are to be published on the companies' Web sites (U.S. Securities and Exchange Commission, 2012, p. 56274).

In April 2014, a panel of the Court of Appeals for the D.C. Circuit mostly upheld the SEC's authority to implement the regulations in Section 1502 of the Dodd-Frank Act. The panel ruled that the regulations requiring companies to describe certain products as having been "not found to be DRC conflict free" were unconstitutional on First Amendment grounds. Subsequently, the Circuit Court of Appeals overruled part of the panel's ruling that struck down the disputed Section 1502 regulations. On November 18, 2014, the panel agreed to

rehear arguments regarding First Amendment issues in the case (Seitzinger and Ruane, 2015).

In April 2014, the Government of Burundi and the International Tin Research Institute (ITRI) started the ITRI Tin Supply Chain Initiative (iTSCI) certification scheme for domestically produced tantalum, tin, and tungsten to meet end users' requirements of the Dodd-Frank Act. About 50% of Burundi's cassiterite, columbite-tantalite, and wolframite mine sites were estimated to be covered by iTSCI (U.S. Embassy, Bujumbura, Burundi, 2014).

Production

The production of tungsten increased by an estimated 283% in 2014; tin, by an estimated 146%; niobium (columbium) and tantalum, by an estimated 50% each; and gold, by an estimated 25%. In 2014, peat production decreased by 41%, and cement, by an estimated 30% (table 1; Institut de Statistiques et d'Etudes Economiques du Burundi, 2016, p. 205).

Structure of the Mineral Industry

Most mining operations were privately owned. About 20,000 workers were estimated to be involved in artisanal mining in 2014. Employment in artisanal gold mining was estimated to be between 4,000 and 6,500 workers, and at the mine sites covered by iTSCI, 3,051 workers. Of the 40 mine sites covered by iTSCI, 35 were reported to be active. State-owned Office Nationale de la Tourbe (ONATOUR) was Burundi's only peat producer and privately owned Burundi Cement Co. (BUCECO) was the country's only cement producer (Matthysen, 2015, p. 27; World Bank Group, 2015).

Commodity Review

Metals

Cobalt, Copper, Iron and Steel, Iron Ore, Nickel, and Platinum-Group Metals.—In June 2014, Burundi Mining Metallurgy International Ltd. (BMM) (a subsidiary of Kermas Group of the United Kingdom) received a mining license for the Musongati nickel-cobalt-copper deposits. BMM planned to start a pilot project for mining and refining at Musongati in 2015. By early 2018, the company planned to process 500,000 metric tons per year (t/yr) of ore, and by 2020, 1 million metric tons per year (Mt/yr). From 1 Mt/yr of ore, BMM planned to produce 416,500 t/yr of iron, 11,400 t/yr of nickel, 3,800 t/yr of copper, 1,050 t/yr of cobalt, 1,100 kilograms per year (kg/yr) of palladium, 600 kg/yr of platinum, and 400 kg/yr of gold. Resources at Musongati were estimated to be about 150 million metric tons (Mt) grading 1.31% nickel, 0.21% copper, and 0.09% cobalt (Burundi Mining

Metallurgy International Ltd., 2011, p. 68–69; Koncar, 2013; Nzosbaba, 2014; Ulrika Joyce, Economics Officer, U.S. Embassy, Bujumbura, Burundi, written commun., June 26, 2014).

The power requirements for the Musongati Mine and refinery at production levels of 1 Mt/yr were estimated to be between 100 and 200 megawatts (MW) of capacity, which would be supplied by hydroelectric and solar plants. Solar power would support pilot production, and a new hydropower station, which had not started as of late 2014, would support large-scale production. Long-term plans to increase ore processing to 5 Mt/yr would require 800 MW of capacity (Nzosbaba, 2014).

In the fourth quarter of 2013, the Government granted the World Sports Alliance Intergovernmental Organization (WSA-IGO) exploitation licenses for the Nyabikere and the Waga nickel laterite deposits in central Burundi. WSA-IGO planned to produce 35,000 t/yr of refined nickel and other metals at Nyabikere and Waga. Based on the grades at the deposits, production was estimated to be 34,000 t/yr of nickel, 900 t/yr of cobalt, and 450 t/yr of copper. As of late June 2014, it was unclear when the project would start production. Resources at Nyabikere were estimated to be 46 Mt at a grade of 1.45% nickel, 0.031% cobalt, and 0.012% copper; and at Waga, 35 Mt at a grade of 1.38% nickel, 0.048% cobalt, and 0.028% copper (Songore, 1999; World Sports Alliance Intergovernmental Organization, 2014; Ulrika Joyce, Economics Officer, U.S. Embassy, Bujumbura, Burundi, written commun., June 26, 2014).

Gold.—In 2014, artisanal miners produced an estimated 500 kilograms of gold, primarily from the Provinces of Bujumbura, Cankuzo, Cibitoke, Muyinga, and Ruyigi. In October 2014, 11 artisanal mining cooperatives were authorized to mine for gold. The number of licensed cooperatives was less than in 2013, partly as a result of the Government's adoption of a new permitting system under the Mining Code of Burundi (Matthysen, 2015, p. 27–30).

In early 2013, the Government granted Etablissement Jean Jbeili of Lebanon exclusive rights to refine all the gold produced in Burundi. The refinery, which was located in Bujumbura, was expected to start production in February 2014. Etablissement Jean Jbeili was also granted the right to process tailings from artisanal gold mining operations. As of April 2014, it was unclear when the company would start the refinery or the tailings operations (U.S. Embassy, Bujumbura, Burundi, 2014).

Niobium (Columbium), Tantalum, Tin, and Tungsten.—Tantalum Mining Co. (formerly Comptoir Minier des Exploitations du Burundi S.A.), which employed about 800 artisanal miners, operated the country's largest columbite-tantalite mine at Kivuvu in Kayanza Province. Cooperative d'Exploitation Minière du Burundi operated the largest wolframite mine at Canika in Kirundo Province. In 2014, columbite-tantalite output increased to 105,547 kilograms (kg) from 73,518 kg in 2013, and wolframite output, to 49 metric tons (t) from 12 t. Production recovered from 2013, when low levels of output may have been attributable to the 2-month mining ban imposed by the Government and decreased demand because of concerns about purchasing conflict minerals from Congo (Kinshasa) (Institut de Statistiques et d'Etudes Economiques du Burundi, 2016, p. 205; Ulrika Joyce, Economics Officer, U.S. Embassy, Bujumbura, Burundi, written commun., June 26, 2014).

Industrial Minerals

Cement, Clay, and Gypsum.—In the third quarter of 2014, Burundi Cement Co. (BUCECO) was operating at between one-fourth and one-third of its capacity of 100,000 t/yr because of power shortages. BUCECO quarried clay domestically and imported clinker and gypsum for use in cement production. The company received a license to quarry limestone in Cibitoke Province in 2014. All of Burundi's cement requirements were imported before BUCECO started production in 2011; imports increased to 107,773 t in 2014 from 96,222 t in 2013 (Aubin, 2014; Institut de Statistiques et d'Etudes Economiques du Burundi, 2016, p. 239).

Mineral Fuels

Peat.—ONATOUR's peat production decreased to 11,376 t in 2014 from 19,256 t in 2013 because of the early arrival of seasonal rainfall. The decrease was broadly based, with decreased production at all mines in 2014. The Gitanga Mine produced 4,001 t in 2014; the Gisozi Mine, 3,883 t; the Buyongwe Mine, 1,756 t; and the Matana Mine, 1,736 t. Peat was consumed mostly by the Burundian military because of shortages of firewood and charcoal (Madirisha, 2014; Institut de Statistiques et d'Etudes Economiques du Burundi, 2016, p. 205; Banque de la Republique du Burundi, [undated], p. 17).

As of late June 2014, plans by WSA-IGO to build a new 60-MW peat-fired power station for mining operations at Nyabikere and Waga were on hold. The company was waiting for the passage of a new law establishing public-private partnerships in the energy sector (Ulrika Joyce, Economics Officer, U.S. Embassy, Bujumbura, Burundi, written commun., June 26, 2014).

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TABLE 1
BURUNDI: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²		2010	2011	2012	2013 ^e	2014 ^e
Cement		--	34,500	70,500	100,000	70,000
Gold, mine output, Au content ^e	kilograms	300	400 ^r	500 ^r	400	500
Niobium (columbium) and tantalum, ore and concentrate:						
Gross weight	do.	67,365	158,782	258,578	73,518 ³	105,547 ³
Nb content ^e	do.	13,000	31,000	51,000	14,000	21,000
Ta content ^e	do.	13,000	31,000	51,000	14,000	21,000
Peat		13,111	7,973 ^r	19,641 ^r	19,256 ^{r,3}	11,376 ³
Tin, mine output:						
Gross weight		29	52	117	31 ^{r,3}	75
Sn content ^e		12	22	50	13 ^r	32
Tungsten, mine output:						
Gross weight		329 ^r	505	565	12 ³	49 ³
W content ^e		100	200 ^r	270 ^r	6 ^r	23

^eEstimated; estimated data are rounded to no more than three significant digits. ^rRevised. do. Ditto. -- Zero.

¹Table includes data available through February 22, 2016.

²In addition to the commodities listed, brick and other clay, limestone, and sand and gravel were produced, but available information is inadequate to make reliable estimates of output.

³Reported figure.

TABLE 2
BURUNDI: STRUCTURE OF THE MINERAL INDUSTRY IN 2014

(Metric tons unless otherwise specified)

Commodity	Major operating companies	Location of main facilities	Annual capacity
Cement	Burundi Cement Co. (BUCECO)	Plant in Cibitoke Province	100,000
Clay	do.	NA	NA
Gold	kilograms Artisanal miners	Various sites in Bujumbura, Cankuzo, Cibitoke, Muyinga, and Ruyigi Provinces	500 ^e
Niobium (columbium) and tantalum, columbite-tantalite ore and concentrate	Various producers, including the following: Tantalum Mining Co. (TAMINCO) do. do. Artisanal miners	Of which: Kivuvu Mine in Kayanza Province Ndona Mine in Cibitoke Province Muhere Mine in Kirundo Province Various sites in Kayanza, Kirundo, Muyinga, and Ngozi Provinces	260 ^e
Peat	Office Nationale de la Tourbe (ONATOURE)	Buyongwe, Gisozi, Gitanga, and Matana	20,000
Tin, cassiterite ore and concentrate	Various producers, including the following: Tantalum Mining Co. (TAMINCO) Artisanal miners	Of which: Kivuvu Mine in Kayanza Province Various sites in Cibitoke, Kayanza, Kirundo, Muyinga, and Ngozi Provinces	100 ^e
Tungsten, wolframite ore and concentrate	Various producers, including the following: Cooperative d'Exploitation Minière du Burundi Artisanal miners	Of which: Canika Mine in Kirundo Province Various sites in Kirundo and Muyinga Provinces	600 ^e

^eEstimated. do. Ditto. NA Not available.