2010 Minerals Yearbook

RWANDA [ADVANCE RELEASE]

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The Mineral Industry of Rwanda

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Rwanda's mining and quarrying sector accounted for only about 0.7% of the gross domestic product. The country, however, was a significant producer of tantalum, accounting for 15% of world tantalum mine production in 2010. Rwanda's exports of columbite-tantalite, cassiterite (tin ore), and wolframite (tungsten ore) were from domestic mining operations and reexports from mining operations in the Democratic Republic of the Congo [Congo (Kinshasa)] (Banque Nationale du Rwanda, 2011, p. 145; Papp, 2011).

Production

In 2010, tin production increased by an estimated 46%, and peat, by an estimated 10%. Production of tantalum decreased by an estimated 23% in 2010, and niobium (columbium), by an estimated 20% (table 1).

Structure of the Mineral Industry

The state-owned Régie d'Exploitation et de Développement des Mines (REDEMI) produced columbite-tantalite, cassiterite (tin ore), and wolframite (tungsten ore); privately owned companies, cooperatives, and artisanal miners also produced these mineral commodities. The privately owned Cimenterie du Rwanda (Cimerwa) was the country's only cement producer.

Commodity Review

Metals

Gold.—In February 2008, TransAfrika Resources Ltd. of Mauritius started exploration at its Byumba concession in the Gicumbi District. In January 2010, TransAfrika estimated that resources at Byumba were 5.55 million metric tons at a grade of 1.48 grams per metric ton gold (TransAfrika Resources Ltd., 2010).

Niobium (Columbium) and Tantalum.—In July 2010, the U.S. Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act, which contained provisions concerning the use of minerals to finance military operations in eastern Congo (Kinshasa). All companies registered with the U.S. Securities and Exchange Commission (SEC) that sold products containing cassiterite, columbite-tantalite, gold, or wolframite were required to disclose whether these minerals originated from Congo (Kinshasa) or adjoining countries. Companies that sold products containing cassiterite, columbite-tantalite, gold, or wolframite that originated in Congo (Kinshasa) or adjoining countries were 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 reports also were required to describe products that contained conflict minerals and to be published on the companies' Web sites (Global Witness, 2010, p. 21).

In September 2010, the Government of Rwanda signed an agreement with the International Tin Research Institute to implement a certification scheme for domestically produced tantalum, tin, and tungsten to meet end users' requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act. The Government planned to tag 100% of domestically produced tantalum, tin, and tungsten by March 2011 (International Tin Research Institute, 2010).

Columbite-tantalite was mined in the Gatsibo and the Kamonyi Districts. Centrale Multi-Services SARL (CMS) produced at the rate of about 180 metric tons per year (t/yr) of columbite-tantalite. In 2009, Gatumba Mining Concessions Ltd. (GMC) produced 28 metric tons (t) at Gatumba, and Natural Resources Development Rwanda Ltd. (NRD) of Germany, 11 t at Rutsiro. In 2010, GMC produced at the rate of between 12 and 36 t/yr, and NRD, less than 12 t/yr (Centrale Multi-Services SARL, 2010; Schütte and others, 2011, p. 4).

Tin.—Cassiterite was mined at the rate of about 300 t/yr by CMS. In 2009, Rutongo Mines Ltd. produced 225 t at Rutongo; NRD, 218 t at Nemba and Rutsiro; and GMC, 50 t at Gatumba. In 2010, Rutongo produced as much as 960 t/yr; NRD, between 96 and 168 t/yr at Nemba and 36 and 60 t/yr at Rutsiro; and GMC, about 120 t/yr (Centrale Multi-Services SARL, 2010; Schütte and others, 2011, p. 4).

Tungsten.—In 2009, Eurotrade International Ltd. produced 172 t of wolframite at Nyakabingo; Wolfram Mining & Processing Ltd., 144 t at Gifurwe; and NRD, 33 t at Rutsiro. In 2010, Eurotrade International produced as much as 480 t/yr; Wolfram Mining & Processing, 120 t/yr; and NRD, between 12 and 36 t/yr (Schütte and others, 2011, p. 4).

Industrial Minerals

Cement.—Cimerwa [Rwanda Investment Group S.A. (RIG), 90%] produced about 100,000 t/yr of cement. The company planned to complete a new plant with a capacity of 700,000 t/yr in western Rwanda by the end of 2011. Cimerwa planned to export cement to Burundi and eastern Congo (Kinshasa) (Waerp and Arnoldsen, 2011).

Rwanda's cement demand amounted to nearly 460,000 t in 2010, most of which was imported. By 2015, demand was expected to increase to 680,000 t. Cement prices were estimated to be about $300 per metric ton in Rwanda compared with $120 per metric ton in Kenya and $130 per metric ton in Tanzania. Rwandan cement prices were also substantially higher than in neighboring Uganda (nearly $200 per metric ton), which was also a landlocked country with high power and transportation costs, but lower than in Burundi (about $350 per metric ton) and eastern Congo (Kinshasa) (about $400 per metric ton) (Renaissance Capital LLC, 2011, p. 9, 35).

Mineral Fuels

Natural Gas.—State-owned company Kibuye Power 1 Ltd. extracted natural gas from Lake Kivu; the company's 4.2-megawatt (MW)-capacity gas-fired power station produced electricity for the local power grid. RIG planned to supply a new gas-fired power station with an initial capacity of 3.6 MW using natural gas from Lake Kivu; the capacity of the plant could be increased to 50 MW (Rwanda Utilities Regulatory Agency, 2010, p. 61).

Kivuwatt Ltd. (a subsidiary of CountourGlobal LLC of the United States) planned to extract natural gas from Lake Kivu and to build a new gas-fired power station. In the first phase of the project, the plant was expected to have a capacity of 25 MW of power starting in the first quarter of 2012. In the second phase, Kivuwatt planned to increase the capacity to 100 MW in 2014. Lake Kivu was estimated to contain 60 billion cubic meters of natural gas (Multilateral Investment Guarantee Agency, 2010, p. 1–2).

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TABLE 1

RWANDA: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

Commodity[2]		2006[e]	2007	2008[e]	2009[e]	2010[e]
Cement		102,589 [3]	103,034	103,244 [3]	92,100 [r, 3]	95,101 [3]
Columbite-tantalite, ore and concentrate:[e]						
Gross weight	kilograms	370,000 [r]	490,000 [3]	600,000 [r]	480,000 [r]	380,000
Nb content	do.	120,000 [r]	150,000	190,000 [r]	150,000 [r]	120,000
Ta content	do.	91,000 [r]	120,000	150,000 [r]	120,000 [r]	93,000
Gold, mine output, Au content[e]	do.	15	17	20	20	20
Natural gas:						
Gross	million cubic meters	-- [3]	--	NA	NA	NA
Dry	do.	-- [3]	--	2	4	4
Peat		-- [3]	--	5,000	20,000	22,000
Tin:						
Mine output, ore and concentrate:[e]						
Gross weight		600	1,141 [3]	1,500 [r]	1,700 [r]	2,500
Sn content		340 [r]	650 [r]	850 [r]	960 [r]	1,400
Refined		50 [e]	--	-- [3]	-- [3]	-- [3]
Tungsten, mine output, ore and concentrate:[4]						
Gross weight		1,436	2,686 [r]	1,708	874 [r]	843
W content[e]		740 [r]	1,400	880 [r]	450 [r]	430

[e]Estimated; estimated data are rounded to no more than three significant digits. [r]Revised. do. Ditto. NA Not available. -- Zero.

[1]Table includes data available through January 31, 2012.

[2]In addition to the commodities listed, sapphire and pozzolanic materials are also known to be produced, but information is inadequate to make reliable estimates of output.

[3]Reported data.

[4]Reported exports.

TABLE 2
RWANDA: STRUCTURE OF THE MINERAL INDUSTRY IN 2010

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Cement		Cimenterie du Rwanda Ltd. (Cimerwa) [Rwanda Investment Group S.A. (RIG), 90%]	Plant at Cyangugu	100,000
Gold		Eurotrade International S.A.	Nyakabingo	NA
Natural gas	million cubic meters	Kibuye Power 1 Ltd.	Plant at Lake Kivu	8 e
Niobium (columbium) and tantalum, columbite-tantalite ore and concentrate		Centrale Multi Services (CMS)	NA	180
Do.		Pyramides SARL	Cyubi[1]	96
Do.		Gatumba Mining Concessions Ltd. (GMC) (Kivu Resouces Ltd., 81%)	Gatumba	36
Do.		Natural Resources Development Rwanda Ltd. (NRD)	Rutsiro	10 e
Do.		Cooperative de Promotion de l'Industrie Miniere Artisanale (COPIMAR)	Sites in North and South Provinces	NA
Do.		Eurotrade International S.A.	Nyakabingo	NA
Do.		Munsad Minerals	Sites in Gatsibo District	NA
Do.		Régie d'Exploitation et de Développement des Mines (REDEMI)	Sites in Gatsibo District	NA
Peat		Peat Energy Co. [subsidiary of Rwanda Investment Group S.A. (RIG)]	Mine at Gishoma in Rusizi District	24,000
Sapphire		Artisanal miners	Mines at Cyangugu	NA
Tin:				
Cassiterite, ore and concentrate		Rutongo Mines Ltd.	Rutongo	960
Do.		Small cooperatives and miners associations	Various sites	430 e
Do.		Centrale Multi Services (CMS)	Rwinkwavu	300 e
Do.		Natural Resources Development Rwanda Ltd. (NRD)	Nemba	168
Do.		Munsad Minerals	NA	130 e
Do.		do.	Rutsiro	60
Do.		Gatumba Mining Concessions Ltd. (GMC)	Gatumba	120
Do.		Artisanal miners	Various sites	110 e
Do.		Régie d'Exploitation et de Développement des Mines (REDEMI)	Rutongo	90 e
Do.		Cooperative de Promotion de l'Industrie Miniere Artisanale (COPIMAR)	Sites in North and South Provinces	70 e
Do.		Rwanda Metals SA	Ntunga	60 e
Do.		Eurotrade International S.A.	Nyakabingo	NA
Refined		Metal Processing Association	Smelter at Gisnyi[1]	200
Tungsten, wolframite ore and concentrate		Eurotrade International S.A.	Nyakabingo	480
Do.		Centrale Multi Services (CMS)	NA	300
Do.		Wolfram Mining & Processing Ltd.	Gifurwe	120
Do.		Natural Resources Development Rwanda Ltd. (NRD)	Rutsiro	36
Do.		Africa Primary Tungsten SARL	NA	NA
Do.		Cooperative de Promotion de l'Industrie Miniere Artisanale (COPIMAR)	Sites in North and South Provinces	NA
Do.		Pyramid International	NA	NA
Do.		Rwanda Allied Partners	NA	NA
Do.		Wolfram Bergbau- und Hütten GmbH Nfg	NA	NA

[e]Estimated. Do. Ditto. NA Not available.
[1]Not operating in 2010.