



# 2009 Minerals Yearbook

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## RWANDA

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# THE MINERAL INDUSTRY OF RWANDA

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Rwanda was not a globally significant consumer of minerals. In 2009, however, Rwanda's share of the world's tantalum mine production amounted to about 9%, and tungsten, 1%. In 2008 (the latest year for which data were available), the mining and quarrying sector accounted for about 1% of the gross domestic product. About 50,000 Rwandans were employed in the mining sector in 2007. 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, 2009, p. 128; Garrett and Mitchell, 2009, p. 39-41; Papp, 2010; Shedd, 2010).

## Production

In 2009, peat production increased by an estimated 300%, and natural gas, by about 100%. Production of tungsten decreased by an estimated 14% in 2009, and niobium (columbium), tantalum, and tin, by an estimated 13% each.

## 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. In 2006, the Government privatized 20 of REDEMI's concessions. The privately owned Cimenterie du Rwanda (Cimerwa) was the country's only cement producer.

## Commodity Review

### Metals

**Gold.**—TransAfrika Resources Ltd. of Mauritius engaged in a drilling program at its Byumba concession in the Gicumbi District from October 2008 to September 2009. In October 2009, Transafrika started work on a resource estimate at Byumba. Kivu Gold Corp. of Canada also engaged in gold exploration. Rogi Mining Ltd. of Russia held the Miyove concession.

**Niobium (Columbium) and Tantalum.**—Columbite-tantalite was mined in the Gatsibo and the Kamonyi Districts by companies that included Centrale Multi-Services SARL (CMS), Eurotrade International S.A., Gatumba Mining Concessions Ltd. (GMC), Munsad Minerals, and Natural Resources Development Rwanda Ltd. (NRD) of Germany. CMS produced at the rate of 180 metric tons per year (t/yr) of columbite-tantalite in 2009. GMC planned to spend \$2.5 million on building 10 new small processing plants by late 2014 (Holland, 2009b; Centrale Multi-Services SARL, 2010).

**Tin.**—Cassiterite was mined in 26 of Rwanda's 30 districts. CMS produced cassiterite at the rate of 300 t/yr in 2009 compared with 174 t/yr in 2007. In 2009, NRD produced

cassiterite at Ntemba at the rate of nearly 220 t/yr compared with 56 t/yr in 2007. NRD planned to increase production to about 430 t/yr. GMC produced cassiterite at Gatumba at the rate of 60 t/yr in 2009 compared with 10 t/yr in 2007. The company was considering the development of medium-scale cassiterite and columbite-tantalite mines at Gatumba that would increase output to between 1,200 and 2,400 t/yr of cassiterite. Columbite-tantalite prices were \$38 per pound in late November 2009; GMC's expansion depended on prices increasing to \$60 per pound (Garrett and Mitchell, 2009, p. 38; Holland, 2009a, b; New Times, 2009; Centrale Multi-Services SARL, 2010).

Umlhaba Mining of South Africa was engaged in a joint venture with the Government to revamp the Rutongo Mines in Rulindo District. The cost of the project was estimated to be about \$5 million (Karuhanga, 2009).

**Tungsten.**—Privately owned companies, such as Africa Primary Tungsten SARL, CMS, Eurotrade International S.A., Pyramid International, Rwanda Allied Partners, and Wolfram Bergbau- und Hütten GmbH Nfg of Austria, accounted for about 50% of Rwanda's wolframite production in 2007; cooperatives, nearly 40%; and artisanal miners, about 10%. In 2009, CMS produced about 300 t/yr of wolframite (Centrale Multi-Services SARL, 2010; Transafrika Resources Ltd., 2010).

### Industrial Minerals

**Cement.**—Rwanda imported 116,000 t of cement in 2008; Ciments du Rwanda Ltd. (Cimerwa) [Rwanda Investment Group S.A. (RIG), 90%] was unable to meet domestic demand in spite of producing at about its full capacity of 100,000 t/yr. Cimerwa planned to build a new plant with a capacity of 600,000 t/yr at a cost of \$70 million. In June 2009, Cimerwa was trying to secure financing for the project (Majyambere, 2009).

### Mineral Fuels

**Natural Gas.**—State-owned company Kibuye Power 1 Ltd. extracted natural gas from Lake Kivu; the company's 2-megawatt (MW)-capacity gas-fired power station produced electricity for the local power grid. Starting in December 2009, RIG planned to supply a new gas-fired power station with an initial capacity of 3.6 MW using natural gas from beneath Lake Kivu (Africa Energy Intelligence, 2009).

In March 2009, CountourGlobal LLC of the United States signed an agreement with the Government 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 starting in 2010; full capacity of 100 MW would be reached by 2012. The estimated cost of the project was \$325 million (African Power Mining & Oil Review, 2009).

**Peat.**—In 2008, Peat Energy Co. (a subsidiary of RIG) started peat production at Gishoma in Rusizi District. By October 2009, production amounted to 20,000 t. Cimerwa planned to use peat

as a source of energy; the company planned to replace about 70% of its fuel oil consumption with peat. RIG also planned to develop the Gihitasi and the Masya peat deposits (Gahigi, 2009).

**Petroleum.**—At the end of 2009, Vangold Resources Ltd. of Canada spun off its concession in Lake Kivu and southwest Rwanda to a new company called Vanoil Energy Ltd. of Canada. Vanoil planned to complete a seismic survey at Lake Kivu in the third quarter of 2010.

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

(Metric tons unless otherwise specified)

Commodity <sup>2</sup>	2005	2006	2007	2008 <sup>c</sup>	2009 <sup>c</sup>	
Cement	101,128	102,589	103,034	103,244 <sup>3</sup>	100,000	
Columbite-tantalite, ore and concentrate:						
Gross weight	kilograms	276,000	188,000	490,000	490,000	430,000
Nb content <sup>e</sup>	do.	87,000 <sup>r</sup>	59,000 <sup>r</sup>	150,000 <sup>r</sup>	150,000 <sup>r</sup>	130,000
Ta content <sup>e</sup>	do.	68,000 <sup>r</sup>	46,000 <sup>r</sup>	120,000 <sup>r</sup>	120,000 <sup>r</sup>	104,000
Gold, mine output, Au content <sup>e</sup>	do.	10	15	17 <sup>3</sup>	20	20
Natural gas:						
Gross	million cubic meters	( <sup>4</sup> )	--	--	NA	NA
Dry	do.	( <sup>4</sup> )	--	--	2	4
Peat		--	--	--	5,000	20,000
Tin:						
Mine output: <sup>e</sup>						
Gross weight		215 <sup>3</sup>	600	1,141 <sup>3</sup>	1,500 <sup>r</sup>	1,300
Sn content		140 <sup>r</sup>	390 <sup>r</sup>	740 <sup>r</sup>	980 <sup>r</sup>	850
Refined <sup>c</sup>		200	50	-- <sup>3</sup>	-- <sup>3</sup>	-- <sup>3</sup>
Tungsten, mine output:						
Gross weight		557	1,436	2,988	1,708 <sup>r,3</sup>	1,500
W content		270 <sup>r</sup>	680 <sup>r</sup>	1,400 <sup>r</sup>	810 <sup>r</sup>	700

<sup>c</sup>Estimated; estimated data are rounded to no more than three significant digits. <sup>r</sup>Revised. do. Ditto. NA Not available. -- Zero.

<sup>1</sup>Table includes data available through May 27, 2010.

<sup>2</sup>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.

<sup>3</sup>Reported data.

<sup>4</sup>Less than one-half unit.

TABLE 2  
RWANDA: STRUCTURE OF THE MINERAL INDUSTRY IN 2009

(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 <sup>e</sup>
Niobium (columbium) and tantalum, columbite-tantalite ore and concentrate	Various producers, including the following: Centrale Multi Services (CMS) Cooperative de Promotion de l'Industrie Miniere Artisanale (COPIMAR) Eurotrade International S.A. Gatumba Mining Concessions Ltd. (GMC) (Kivu Resouces Ltd., 81%) Munsad Minerals Natural Resources Development Rwanda Ltd. (NRD) Régie d'Exploitation et de Développement des Mines (REDEMI)	Numerous sites, including: NA Sites in North and South Provinces Nyakabingo Gatumba  Sites in Gatsibo District Giciye Sites in Gatsibo District	500 <sup>e</sup>
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	Small cooperatives and miners associations	Various sites	430 <sup>e</sup>
Do.	Centrale Multi Services (CMS)	Rwinkwavu	300 <sup>e</sup>
Do.	Natural Resources Development Rwanda Ltd. (NRD)	Ntemba	216
Do.	do.	Giciye, Rutiro, and Sebeya	NA
Do.	Munsad Minerals	NA	130 <sup>e</sup>
Do.	Artisanal miners	Various sites	110 <sup>e</sup>
Do.	Régie d'Exploitation et de Développement des Mines (REDEMI)	Rutongo	90 <sup>e</sup>
Do.	Cooperative de Promotion de l'Industrie Miniere Artisanale (COPIMAR)	Sites in North and South Provinces	70 <sup>e</sup>
Do.	Gatumba Mining Concessions Ltd. (GMC)	Gatumba	60
Do.	Rwanda Metals SA	Ntunga	60 <sup>e</sup>
Do.	Eurotrade International S.A.	Nyakabingo	NA
Refined	Metal Processing Association	Smelter at Gisnyi <sup>1</sup>	200
Tungsten, wolframite ore and concentrate	Various producers, including the following: Africa Primary Tungsten SARL Centrale Multi Services (CMS) Cooperative de Promotion de l'Industrie Miniere Artisanale (COPIMAR) Eurotrade International S.A. Natural Resources Development Rwanda Ltd. (NRD) Pyramid International Rwanda Allied Partners Wolfram Bergbau- und Hütten GmbH Nfg Wolfram Mining & Processing Ltd.	Numerous sites, including: NA NA Sites in North and South Provinces  Gifurwe and Nyakabingo Giciye, Rutiro, and Sebeya NA NA NA NA Gifurwe and Rwinkwavu	3,000 <sup>e</sup>

<sup>e</sup>Estimated. Do., do. Ditto. NA Not available.

<sup>1</sup>Not operating in 2009.

