



# 2008 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 2008, however, Rwanda's share of the world's tantalum mine production amounted to about 5%, and tungsten, 4%. In 2007 (the latest year for which data were available), the mining and quarrying sector accounted for less than 0.8% of the gross domestic product. About 50,000 Rwandans were employed in the mining sector in 2007. Rwanda's exports of cassiterite (tin ore), columbite-tantalite, and wolframite (tungsten ore) were from domestic mining operations and reexports from mining operations in Congo (Kinshasa) (Banque Nationale du Rwanda, 2008, p. 25-26; Garrett and Mitchell, 2009, p. 39-41; Mukaaya, 2009; Papp, 2009; Shedd, 2009).

## Production

In 2008, tin mine production increased by an estimated 22%. In 2007, niobium (columbium) and tantalum mine production increased by about 160% each, and tungsten, by an estimated 107% compared with that of 2006. The production of natural gas restarted in 2008 (Banque Nationale du Rwanda, 2008, p. 31, 33; Garrett and Mitchell, 2009, p. 37).

## Structure of the Mineral Industry

The state-owned Régie d'Exploitation et de Développement des Mines (REDEMI) produced cassiterite (tin ore), columbite-tantalite, and wolframite (tungsten ore); privately owned companies 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 and Nickel.**—TransAfrika Resources Ltd. of South Africa held concessions in the Gicumbi and the Rusizi Districts in the north and southwest, respectively. In July 2008, TransAfrika started drilling for gold in the Gicumbi District following a soil sampling program. The company planned to explore for gold in the Rusizi District and for nickel in the Kayonza and the Kirehe Districts in the east. Coopexmi SARL, Kivu Gold Corp. of Canada, and Rogi Mining Ltd. of Russia also started gold exploration (Mukaaya, 2008a; Africa Mining Intelligence, 2009).

**Niobium (Columbium) and Tantalum.**—Columbite-tantalite was mined in the Gatsibo and the Kamonyi Districts by companies that included Eurotrade International SA, Munsad Minerals, and Natural Resources Development Rwanda Ltd. (NRD). H.C. Starck of Germany purchased a controlling share in NRD. From 2003 to 2007, national production of columbite-tantalite increased to 490 metric tons (t) from 118 t.

Exports increased to \$39 million in 2008 from \$19 million in 2007 (Pourtier, 2004, p. 31; Africa Mining Intelligence, 2009; Garrett and Mitchell, 2009, p. 37).

**Tin.**—Cassiterite was mined in 26 of Rwanda's 30 districts; exploration was active in 185 permits at the end of 2008. From 2003 to 2007, national cassiterite production increased to 1,141 t from a revised 283 t; the increase was attributable to new producers. Small cooperatives and mining associations produced 429 t in 2007; Centrale Multi Services, 174 t; and Munsad Minerals, 130 t. Production of cassiterite by Coopérative de Promotion de l'Industrie Minière Artisanal (COPIMAR) decreased to 64 t in 2007 from 106 t in 2003, and by REDEMI, to 87 t from 168 t. The country's exports increased to \$72 million in 2008 from \$31.9 million in 2007 (Pourtier, 2004, p. 31; Mukaaya, 2008a; Africa Mining Intelligence, 2009; Garrett and Mitchell, 2009, p. 37-38).

**Tungsten.**—From 2003 to 2007, national wolframite production increased to 2,988 t from a revised 109 t. COPIMAR and REDEMI accounted for a combined 83% of Rwanda's output in 2003; the increase was attributable to new producers, such as Africa Primary Tungsten SARL, Eurotrade International S.A., Pyramid International, Rwanda Allied Partners, and Wolfram Bergbau- und Hütten GmbH Nfg. Eurotrade International produced wolframite at Gifurwe and Nyakabingo. In 2008, Rwanda's wolframite exports decreased to \$14 million from \$19 million in 2007 (Pourtier, 2004, p. 31; Africa Mining Intelligence, 2009; Garrett and Mitchell, 2009, p. 37).

### Industrial Minerals

**Cement.**—Rwanda experienced cement shortages in 2008; Cimerwa [a subsidiary of Rwanda Investment Group (RIG)] was unable to meet domestic demand in spite of producing at about its full capacity of 100,000 metric tons per year (t/yr). Cement was imported from Kenya and Uganda. Cimerwa planned to complete a new plant with a capacity of 600,000 t/yr by June 2010 (Mukaaya, 2008b).

### Mineral Fuels

**Natural Gas.**—State-owned company Kibuye Power 1 Ltd. extracted natural gas from Lake Kivu for use at a local gas-fired power station with a capacity of 5 megawatts (MW). The company produced at 30% of capacity at the power station in 2008, of which two-thirds was available for the local power grid. RIG planned to build a new gas-fired power station with an initial capacity of 5 MW that would use natural gas from Lake Kivu. Production was planned to start in November 2008; equipment for the extraction of gas sank in Lake Kivu in early November. RIG planned to start production with new equipment in August 2009 (Africa Energy Intelligence, 2008).

**Peat.**—Cimerwa planned to use peat as a source of energy in its new plant; fuel and electricity accounted for about 70%

of the current plant's total costs. RIG's subsidiary Peat Energy Co. planned to start producing 24,000 t/yr of peat starting by the end of February 2009 following the completion of a feasibility study in early 2008. Production was expected to increase with the expansion of Cimerwa in 2010 (Mukaaya, 2008b; Rwanda Investment Group S.A., undated).

**Petroleum.**—In 2008, Vangold Resources Ltd. of Canada engaged in an initial airborne magnetic survey in the East Kivu Graben Basin. Vangold was able to complete about 70% of the survey; the company was unable to finish its work because of instability in Congo (Kinshasa) (Vangold Resources Ltd., 2008).

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

(Metric tons unless otherwise specified)

Commodity <sup>2</sup>		2004	2005	2006	2007	2008 <sup>c</sup>
Cement		104,288	101,128	102,589	103,034	103,244 <sup>3</sup>
Columbite-tantalite, ore and concentrate:						
Gross weight	kilograms	220,000	276,000	188,000	490,000 <sup>r</sup>	490,000
Nb content <sup>c</sup>	do.	72,000	91,000	62,000	160,000 <sup>r</sup>	160,000
Ta content <sup>c</sup>	do.	45,000	57,000	38,000	100,000 <sup>r</sup>	100,000
Gold, mine output, Au content <sup>c</sup>	do.	5 <sup>r</sup>	10 <sup>r</sup>	15 <sup>r</sup>	17 <sup>r,3</sup>	20
Natural gas:						
Gross	million cubic meters	(4) <sup>r</sup>	(4) <sup>r</sup>	--	--	NA
Dry	do.	(4)	(4)	--	--	2
Tin:						
Mine output: <sup>c</sup>						
Gross weight		250 <sup>r</sup>	215 <sup>r,3</sup>	600 <sup>r</sup>	1,141 <sup>r,3</sup>	1,400
Sn content		190 <sup>r</sup>	170 <sup>r</sup>	470 <sup>r</sup>	899 <sup>r,3</sup>	1,100
Refined <sup>c</sup>		200	200	50	-- <sup>3</sup>	-- <sup>3</sup>
Tungsten, mine output:						
Gross weight		157	557	1,436	2,988 <sup>r</sup>	3,000
W content		90	320 <sup>r</sup>	820	1,700 <sup>r</sup>	1,700

<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 April 26, 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 2008

(Metric tons unless otherwise specified)

Commodity	Major operating companies	Location of main facilities	Annual capacity
Cement	Cimenterie du Rwanda (Cimerwa)	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	11 <sup>e</sup>
Niobium (columbium) and tantalum, columbite-tantalite ore and concentrate	Various producers, including the following: Coopérative de Promotion de l'Industrie Minière Artisanale (COPIMAR) Eurotrade International S.A. Munsad Minerals Natural Resources Development Rwanda Ltd. (NRD) Régie d'Exploitation et de Développement des Mines (REDEMI)	Numerous sites, including: Sites in North and South Provinces  Nyakabingo Sites in Gatsibo District Giciye Sites in Gatsibo District	500 <sup>e</sup>
Sapphire	Artisanal miners	Mines at Cyangugu	NA
Tin:			
Cassiterite, ore and concentrate	Small cooperatives and miners associations	Various sites	430 <sup>e</sup>
Do.	Natural Resources Development Rwanda Ltd. (NRD)	Ntemba	216
Do.	do.	Giciye, Rutiro, and Sebeya	NA
Do.	Centrale Multi Services	Rwinkwavu	180 <sup>e</sup>
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.	Coopérative de Promotion de l'Industrie Minière Artisanale (COPIMAR)	Sites in North and South Provinces	70 <sup>e</sup>
Do.	Gatumba Mining Concessions Ltd. (Metal Processing Association, 51%; and Government, 49%)	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 SARM Coopérative de Promotion de l'Industrie Minière 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 Sites in North and South Provinces  Gifurwe and Nyakabingo Giciye, Rutiro, and Sebeya 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 2008.

