

THE MINERAL INDUSTRY OF

GUINEA

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Guinea was the world's second largest bauxite producer and had the world's largest bauxite resources (Plunkert, 2000). Mining accounted for about 16% of the nation's estimated \$3.7 billion gross domestic product and a major portion of the value of Guinea's exports (World Bank, September 9, 2000, Guinea at a glance, accessed November 22, 2000, at URL http://www.worldbank.org/data/countrydata/aag/gin_aag.pdf). The limited domestic demand for crude minerals resulted in the mineral sector effectively dominating the nation's exports. Less than 10% of mined bauxite was used to produce alumina in Guinea. In 1999, the country's total exports were valued at \$755 million compared with \$709 million in 1998 (World Bank, September 7, 2000, Guinea at a glance, accessed November 22, 2000, at URL http://www.worldbank.org/data/countrydata/aag/gin_aag.pdf). Guinea supplied about 41% of the United States' metallurgical-grade bauxite imports in 1999 (Plunkert, U.S. Geological Survey, Bauxite and alumina in 1999, Mineral Industry Surveys, accessed November 22, 2000, at URL <http://minerals.usgs.gov/minerals/pubs/commodity/bauxite/090499.pdf>).

The Mining Code of 1995, as amended by Arrêté no. A98/5874/MRNE/SGG of August 10, 1998, defines incentives, mineral ownership, mining fees, mining titles, royalties, and other taxes. The Government reserves 15% free equity for itself in all gold and gem operations. State participation in bauxite- and iron-ore-mining ventures is subject to negotiation. Mineral beneficiation in Guinea is encouraged. Royalties were 5% on alumina and 3.5% on concentrates of other minerals compared with 10% on bauxite and 7% on other ores. The corporate income tax rate is 35%.

In addition to possessing significant bauxite reserves, Guinea has diamond, gold, granite, and iron deposits. The Government encouraged the foreign participation in the bauxite sector and promoted the diversification of the mineral industry. The investment bank UBS Warburg Dillon Read was advising the Government on the restructuring of the bauxite industry, but the mineral industry privatization program was proceeding slower than expected.

Compagnie des Bauxites de Guinée (CBG), which the largest bauxite producer, operated a number of open pit bauxite mines in the Boké District, which included the Sangarédi Mine. CBG had a capacity of 14 million metric tons per year (Mt/yr) and was controlled by Halco Mining Inc. (51%), and the Government (49%), which was consortium comprised of Alcan Aluminium Limited of Canada, Aluminium Pechiney of France, and Alcoa Inc. of the United States.

Société d'Economie Mixte Friguia, which operated the Fria bauxite mine and the Kimbo alumina refinery, was owned by the Frialco Holding Co. (51%) and the Government (49%). In 1998, Frialco partners (Alcan, 20%; Aluminium Pechiney, 30%; Hydro Aluminium a.s. of Norway, 20%; and Noranda Inc. of Canada, 30%) actively looked to divest their interest in the

consortium. In October of the same year, the Government took control of the Frialco consortium's interest in Friguia and subsequently offered to privatize 100% of the equity interest in the company. In 1999, Reynolds Metals Co. and the Guinean Government were negotiating for a sale of 100% of the Government's stake in Friguia (Metal Bulletin, 1999).

On August 19, 1999, Alcoa and Reynolds announced that they had reached a definite merger agreement under which Alcoa would acquire all outstanding shares of Reynolds in a stock-for-stock transaction. Alcoa was the world's leading producer of aluminum, and Reynolds was the third largest aluminum company in the world (Alcoa Inc., 1999). On May 3, 2000, Alcoa and Reynolds announced that the U.S. Department of Justice (DOJ) and the European Union (EU) had approved their proposed merger and that the merger had been completed (Alcoa Inc., 2000).

On August 11, 1999, Alcan, algroup, (the aluminum division of Aluisse Lonza Group Inc.), and Pechiney announced that they had reached agreement on the principal terms of a proposed merger of the three companies (Alcan Aluminium Limited, 1999, p. 1). The merger was subject to approval of shareholders, the DOJ, and the EU. The effects of the mergers in the world aluminum industry on the bauxite operations in Guinea was not clearly defined by yearend 1999.

The state-owned Société des Bauxites de Kindia (SBK) proposed to restore its production to the original 3-Mt/yr capacity. SBK's production, about one-half of capacity, was exported to the Ukraine.

Artisanal operators accounted for an important percentage of the national gold output; commercial operations, however, were mining more than 50% of the gold produced in Guinea (European Union, 1998, Guinea—Mines '98 accessed August 25, 1998, at URL <http://www.landscape.de/mines98/country/gn/index.htm>). Société Minière de Dinguiraye, owned by Delta Gold Mining (15%) and by the Government (85%), a Jersey, Channel Islands registered corporation of the United Kingdom, operated the open pit Léro gold mine. Delta's ownership was consolidated in 1998 when Kenor ASA of Norway bought out joint-venture partner Mine Or S.A., the gold operations subsidiary of La Source Group of France.

The \$55.7 million Siguri Mine began operating in 1998 and soon became the largest gold mine in Guinea (Ashanti Goldfields Co. Ltd., January 27, 1999, Ashanti announces strong production and cost reductions for 1998, accessed May 19, 1999, at URL <http://www.ashanti.com.gh/pressreleases/current/seann170.htm>).

Total bauxite reserves were estimated to be about 20 billion metric tons (Gt) at a grade of more than 40% aluminum oxide, according to the Ministère des Ressources Naturelles et de l'Énergie, 1997. Iron resources were estimated to be about 6 Gt at a grade of 64% to 68% iron, and gold reserves were estimated to be between 200 and 1,000 t of contained gold. The

Government also estimated there were reserves of 20 million carats of diamond in Guinea.

Major highways have been paved, but the rural transportation infrastructure was inadequate to meet needs. Guinea had two main ports—Conakry and Kamsar. Conakry, which was the country's main general cargo port, was linked to the Kinda Mine by a 104-kilometer (km) 1.435-meter (m) standard-gauge railroad line and to the Fria Mine by a 145-km 1-m narrow-gauge railway. Kamsar, which handled only bauxite shipments, was linked to the Sangarédi Mine by a 135-km standard-gauge railroad line. In addition to the mine railroads, a 661-km 1-m narrow gauge line connected Conakry with Kankan.

Although the 1995 mining code significantly improved the business climate for the mineral industry, mining operations remained hampered by infrastructural constraints. International funding of mineral deposit development was proceeding more slowly than anticipated. The less-than-expected foreign investment was attributed to the country's perceived political and economic risks and decreased availability of financing for junior mining companies, as well as civil disturbances in the adjacent countries of Guinea-Bissau, Senegal, and Sierra Leone.

Alumina, bauxite, and gold production are expected to continue to dominate Guinea's economic activity. Ventures requiring significant electric power availability, such as an aluminum smelter, could become feasible as the nation's power-generation capacity is increased.

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Plunkert, Patricia, 2000, Bauxite and alumina: U.S. Geological Survey Mineral Commodity Summaries 2000, p. 32-33.

Major Source of Information

Ministère des Ressources Naturelles et de l'Énergie

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Major Publications

Ministère des Mines et de la Géologie, 1995, Symposium sur les investissements dans le Secteur Minière en Afrique:

Ministère des Mines et de la Géologie, 8 p.

Morgan, George A., Izon, David, and Sow, Nene Ousmane,

1992, Mineral economy of Guinea: U.S. Bureau of Mines

Mineral Perspectives, 24 p.

TABLE 1
GUINEA: PRODUCTION OF MINERAL COMMODITIES 1/ 2/

(Thousand metric tons unless otherwise specified)

Commodity	1995	1996	1997 e/	1998 e/	1999 e/
Alumina:					
Production:					
Hydrate	630	650	527	490	500
Calcined	616	640	650 r/ 3/	480	500
Shipments, calcined	616	619	640 r/	511 3/	480
Bauxite:					
Mine production:					
Wet basis 4/	18,000	18,700	19,250	17,000	17,000
Dry basis 5/	15,800	15,628 r/	16,359 r/ 3/	15,000	15,000
Calcined	244	470 r/	660 r/	100	100
Shipments (dry basis):					
Metallurgical	12,304	13,000 e/	14,500	14,000	14,000
Calcined	89	95	95	100	100
Cement e/	250,000	260,000	260,000	260,000	250,000
Diamond 6/ 7/	thousand carats	365	205	205	400
Gold 5/	kilograms	7,863	6,838	7,100 r/	11,700 r/
					13,300

e/ Estimated. r/ Revised.

1/ Estimated data are rounded to no more than three significant digits.

2/ In addition to the commodities listed, modest quantities of crude construction materials (clays, sand and gravel, and stone) presumably are produced, but output is not reported. Table includes data available through March 21, 2001.

3/ Reported figure.

4/ Metallurgical plus calcinable ore estimated to be 13% water.

5/ Data are for wet-basis ore estimated to be 13% water, reduced to dry basis estimated to be 3% water.

6/ Production is approximately 70% to 80% gem quality.

7/ Figures include artisanal production.