THE MINERAL INDUSTRY OF

GUINEA

By Philip M. Mobbs

Guinea was the world’s second largest bauxite producer and had the world’s largest bauxite resources (Plunkert, 1999). Mining accounted for about 16% of the nation’s estimated $3.6 billion gross domestic product and about 80% of the value of Guinea’s exports (U.S. Department of State, September 1998).


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 1998, the country’s corporate income tax rate is 35%.

Guinea was the second largest producer of bauxite in the world, with $797 million in 1997. In 1998, the GDP was $843 million.

The country’s corporate income tax rate is 35%.

In addition to possessing significant bauxite reserves, Guinea has diamond, gold, granite, and iron deposits. The Government encourages foreign participation in the bauxite sector and promoted the diversification of the mineral industry. The mining sector is significant, with the key mining company being the government-owned Compagnie des Bauxites de Guinée (CBG).

In 1998, mining accounted for about 16% of the nation’s estimated $3.6 billion gross domestic product and about 80% of the value of Guinea’s exports. CBG was controlled by the Government of open pit bauxite mines in the Boké District, including the Sangarédi Mine.

CBG was controlled by the Government of open pit bauxite mines in the Boké District, including the Sangarédi Mine. CBG was controlled by the Government of open pit bauxite mines in the Boké District, including the Sangarédi Mine. CBG was controlled by the Government of open pit bauxite mines in the Boké District, including the Sangarédi Mine.
January 27, 1999, Ashanti announces strong production and cost reductions for 1998, press release, accessed May 19, 1999, at URL http://www.ashanti.com/gh/pressreleases/current/seann170.htm). Run by Société Ashanti Goldfields de Guinée, the 4 Mt/yr-capacity heap-leach operation at Siguiri was owned by Ashanti Goldfields Co. Ltd. of Ghana (85%) and the Government (15%). At yearend, Société Ashanti Goldfields de Guinée began a $27 million expansion to double ore-processing capacity to 8 Mt/yr (Australia’s Paydirt, 1998). Near Siguiri, Société Ashanti Goldfields de Guinée continued its evaluation of the Kosise deposit and the Sanu Tinti pit and was drilling on the Foulata prospect 35 km west of Siguiri. The alliance of Ashanti and IAMGold Corp. of Canada continued evaluation of the Mandiana gold concession and was seeking additional partners for the project.

Les Minéraux SGV S.A., a subsidiary of Semafo (Barbados) Ltd., reevaluated the Gobele and the Jean gold deposits by means of additional drilling in 1998. At yearend, Semafo was negotiating a development agreement. Les Minéraux SGV also was exploring a Simandou area gold prospect.

For many junior mining companies, 1998 was a difficult year to raise funds for exploration and development projects. The decreased availability of financing resulted in several companies pulling out of Guinea or significantly reducing their exploration activity. African Selection Mining Corp. of Canada maintained the EcoGuinée and Bassadorides gold exploration permits. International Chalice Resources Inc. of Canada (formerly Chalice Mining Inc.) relinquished the Heremankono property. GolDEX AS, a wholly owned subsidiary of Kenor, carried out exploration on the Farabana exploration permit. Leo Shield Exploration NL of Australia was looking for partners for its interest in gold exploration concessions in Guinea. Golden Limbo Rock Resources S.A., a subsidiary of Mano River Resources Inc. of Switzerland, continued its evaluation of the Gueliban and the Missimana gold properties. Moydow Mines International Inc. of Ireland retained the Kissi Kissi property in Guinea. Prospector International Resources Inc. of Canada (formerly Pacific Galleon Mining Corp.) held the Bananfara concession. Prospex Mining Inc. of Canada was evaluating the Beyla and the Kindia gold concessions and submitted applications for gold exploration permits near Gaoual, Kifaya, and Siguiri. Reunion Mining plc of the United Kingdom and First Quantum Minerals Ltd. of Canada wrote off their interest in the Nyantannia gold permit. SAGEM S.A. of Guinea and New Sage Resources Ltd., the Canadian subsidiary of Striker Resources NL of Australia, wound down exploration of the Sankarani gold deposit. Société Minière de Kérouané, a venture of Lithos Corp. of Canada and local partners, was exploring for gold on the Apredor concession. Voyager Gold NL of Australia acquired several gold permits from West African Gold Mines of Australia, including the Bankole prospect.

Rio Tinto plc of the United Kingdom was exploring the iron deposits in the Simandou Range. Semafo Guinée S.A. was exploring the Kaloun/Mount Kakoulima nickel prospect in a joint venture with AFCAN Mining Corp. of Canada. A geophysical survey was run on the prospect, about 50 km from Conakry.

Nationwide, 70% to 80% of diamond production was of gem quality. More than 80% of production was from indigenous artisanal operations. In February, as part of a legal settlement, Trivalence Mining Corp. of Canada bought out the 25.5% equity interest that Consolidated African Mining Ltd. of South Africa had held in Aredor FCMC S.A. Aredor FCMC’s ownership at yearend was First City Mining Co. Ltd., a subsidiary of Trivalence (85%) and the Government (15%). In March, Aredor FCMC commissioned a mobile 4.3-meter (m) pan plant. The plant had a capacity of 720,000-metric-ton-per-year (t/yr) of gravel. The company began upgrading the existing 240,000-t/yr-capacity twin 2.4-m pan plant on the concession. Aredor FCMC also was processing samples from the concession’s kimberlite deposits and had a second 4.3-m pan plant that was processing tailings left by the concession’s previous operator. Aredor FCMC diamond production in 1998 was about 19,000 carats (Trivalence Mining Corp., 1999).


African Resources Inc. of Canada (formerly Alpha Diamond Corp.) and Gold Rivers of Africa Corp. were dredging on a diamond and gold mining concession on the Konkoure River at Télémélé. The joint venture of Arena Gold Resources Inc. (60%), La Société Minière de Kérouané (SMK) S.A. (25%), and the Government (15%) held an exploration permit for diamond in the Apredor area, north of the permit held by Trivalence. De Beers Consolidated Mines Ltd. of South Africa was evaluating its 13 kimberlite exploration concessions and had applied for an additional 5 diamond concessions.

Total bauxite reserves were estimated to be about 20 billion metric tons grading more than 40% aluminum oxide, according to the Ministry of Natural Resources and Energy. Iron resources were estimated to be about 6 billion tons grading 64% to 68% iron, and gold reserves were estimated to be between 200 and 1,000 metric tons of contained gold. The Government also estimated that reserves of diamond in Guinea were 20 million carats (Ministère des Ressources Naturelles et de l’Energie, 1997).

Major highways have been paved, but the rural transportation infrastructure was inadequate to meet demand. Guinea had two main ports—Conakry and Kamsar. Conakry, the country’s main general cargo port, was linked to the Kinda Mine by a 104-km 1.435-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 gauge line connected Conakry with Kankan.
Guinea had a nominal installed electricity generating capacity of about 197 megawatts (MW), of which thermal plants accounted for 145 MW and hydroelectric powerplants accounted for 52 MW; however, many thermal plants and the generators at the Kinkon and the Tinkisso dams operated intermittently, resulting in a tangible generating capacity of about 100 MW (Guinéenews, June 1998, Espoirs énergétiques en Guinée, accessed November 9, 1998, at URL http://www. myna.com/~boubah/GUINEE/ARCHIVES/9806.htm). Mining companies accounted for about 50% of the thermal power production. At yearend, the Government proposed to privatize the national electric power generating, transmission, and distribution network.

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 dominating 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.

References Cited


Major Source of Information

Ministère des Ressources Naturelles et de l’Energie
Centre de Promotion et du Development Minier
P.O. Box 295
Conakry, Republic of Guinea
Telephone: (224) 41-15-44
Fax: (224) 41-49-13

Major Publications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alumina:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrate</td>
<td>648</td>
<td>630</td>
<td>650</td>
<td>527</td>
<td>490</td>
</tr>
<tr>
<td>Calcined</td>
<td>640</td>
<td>616</td>
<td>640</td>
<td>520</td>
<td>480</td>
</tr>
<tr>
<td>Shipments, calcined</td>
<td>545</td>
<td>616</td>
<td>619</td>
<td>500</td>
<td>511</td>
</tr>
<tr>
<td><strong>Bauxite:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mine production:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wet basis 2/</td>
<td>14,900</td>
<td>18,000</td>
<td>18,700</td>
<td>19,250</td>
<td>17,000</td>
</tr>
<tr>
<td>Dry basis 3/</td>
<td>13,300</td>
<td>15,800</td>
<td>16,500</td>
<td>17,100</td>
<td>15,000</td>
</tr>
<tr>
<td>Calcined</td>
<td>89</td>
<td>244</td>
<td>95</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Shipments (dry basis):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metallurgical</td>
<td>11,033</td>
<td>12,304</td>
<td>13,000 e/</td>
<td>14,500</td>
<td>14,000</td>
</tr>
<tr>
<td>Calcined</td>
<td>91</td>
<td>89</td>
<td>95</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td><strong>Diamond 4/ 5/</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>thousand carats</td>
<td>381</td>
<td>365</td>
<td>205</td>
<td>205</td>
<td>400</td>
</tr>
<tr>
<td><strong>Gold 5/</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kilograms</td>
<td>5,617</td>
<td>7,863</td>
<td>6,838</td>
<td>7,000</td>
<td>14,000</td>
</tr>
</tbody>
</table>

1/ 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 November 15, 1999.
2/ Metallurgical plus calcinable ore estimated to be 13% water.
3/ Data are for wet-basis ore estimated to be 13% water, reduced to dry basis estimated to be 3% water.
4/ Production is approximately 70% to 80% gem quality.
5/ Figures include artisanal production.