

THE MINERAL INDUSTRY OF NIGER

By Philip M. Mobbs

Niger was an internationally important uranium producer, annually exporting concentrate containing approximately 3,000 tons of yellow cake. Other commercially exploited minerals were coal, gypsum, limestone, molybdenum, salt, and tin. The country had a significant area of greenstone belts under exploration for gold. According to the Ministry of Mines, Niger also had indications of barite, cobalt, columbium-tantalum, copper, chromite, graphite, iron ore, lead, lithium, monazite, molybdenum, nickel, phosphates, platinum-group metals, silver, talc, titanium, and zinc resources (Dikouma, 1993; Ministère des Mines, 1997). Mining accounted for approximately 4% of gross domestic product, which was estimated at approximately \$1.8 billion for 1996.¹

Law 93-016 of March 1993 and Decree No. 93-044/PM/MMEI/A of March 1993 provided the legal framework for the mining industry. The mining law provided a number of promotional incentives and guarantees, including duty-free import of capital equipment, guarantees against expropriation, and the right to repatriate earnings and dividends. Additional laws affecting the mineral industry include: the General Fiscal System, the General Customs and Excise System, the Exchange Regulation, the Labor Act, and the Trade Act. The Government retained 10% free equity in mining ventures and the option to purchase an additional 23% equity in mineral production ventures. There was a 5.5% royalty. The January 1996 military coup d'État and subsequent change of government did not appear to have adversely affected the remote mineral industry operations.

Gold exploration companies responded heartily to the Government's promotion of Niger's mineral resources. The three major greenstone gold belts in the Liptako region of west Niger were the focus of the gold rush. The Gorouol (or Kourki) Belt bordered Burkina Faso and Mali in the northwest of the Liptako area, the Sirba Belt was west of Niamey, and the Tera Gassa Belt was between the Gorouol Belt and the Sirba Belt (Bureau of Geological Consultancy, 1993). A number of small-scale miners were producing from operations in the Sirba Belt. Production of artisanal gold from the entire Liptako region was estimated at 1 metric ton per year.

In the Tera Gassa Greenstone Belt, Etruscan Enterprises Ltd. of Canada (23%) and Echo Bay Mines Ltd. of Canada (44%) drilled and trenched the Koma Bangou prospect. Echo Bay

Mines subsequently sold its interest in the prospect to Etruscan. Etruscan submitted a feasibility study of the Koma Bangou prospect during 1996, effectively creating a joint venture with L'Office National des Ressources Minières (ONAREM) which held 23% of the project and controlled the State's 10% interest.

Etruscan also acquired 56% of African GeoMin Mining Development Corp. (AGMD), a subsidiary of Hansa GeoMin Consult GmbH of Germany. AGMD owned the Tiawa concession in the Sirba Greenstone Belt and had drilled the Samira deposit on the concession. AGMD completed a prefeasibility study which recommended additional exploration. In December, Placer Dome of Canada acquired substantial equity interest in Etruscan and acquired an option on 51% interest in the Samira deposit. At yearend, Etruscan initiated an airborne geophysical survey across the entire Tiawa concession.

Auspex Minerals Ltd. of Canada initiated geophysical and geochemical studies of the Koulbaga gold concession and agreed to buy out its joint-venture partner, Proma Minerals A/S of Norway, in the Tera Gassa Belt property.

Ashanti Goldfields Co. Ltd. of Ghana began exploration of the Tera gold property in October. The sampling program would allow Ashanti to earn 51% interest in the Tera Gassa Belt property from Carlin Resources Corp. of Canada. In the Sirba Greenstone Belt, Ashanti was earning up to 60% interest in the Nassile property from Royalstar Resources Ltd. of Canada. International African Mining Gold Corp. and Ashanti were drilling and trenching on Libiri prospect on the Saoura concession, north of the Nassile concession.

First Quantum Minerals Ltd. of Canada, formerly First Quantum Ventures Ltd., was sampling stream sediments on the Sakoira gold exploration permit of Reunion Mining Plc. of the United Kingdom. The Tera Gassa Belt property, approximately 120 kilometers (km) northwest of Niamey, was, unlike any other Liptako concession, east of the Niger River. First Quantum had the right to earn 45% interest in the Sakoira property.

Imperial Metals Corp. of Canada and Sumitomo Corp., a subsidiary of Sumitomo Metal Industries, Ltd. of Japan, were drilling on the M'Banga concession, 50 km west of Niamey in the Sirba Belt.

In the Gorouol Belt, Berlant General Trading Establishment of Kuwait obtained the Kossa concession and Proma Minerals SA of Norway was awarded the Tin-Awati concession during 1996. In October 1996, EXP Resources Ltd. of Canada (formerly Explogas Inc. of Canada) obtained an option from Proma to acquire 60% interest in Tin-Awati.

Also reportedly exploring in Niger were Al-Qudairi International Trading and Contracting of Kuwait on the Tringui

¹Where necessary, values have been converted from Commaunauté Financière Africaine (CFA) francs to U.S. dollars at the exchange rate of CFA franc 523=US\$1.00 in 1996.

concession in the Tera Gassa Belt, Barrick Gold Corp. of Canada on the Tialkam concession in the Sirba Belt, and Pioneer Goldfields Ltd. of the United Kingdom, a subsidiary of Pioneer Group, Inc. of the United States on the Deba concession in the Sirba Belt (African Mining, 1997; American Embassy, Niamey, 1997).

Small quantities of tin ore were mined by private individual operators at El Mécki, Tarouadji, Timia, Agahak, and Guissat in the Air Mountains of central Niger, northeast of Agadez.

Uranium concentrates were produced by two companies, the Société des Mines de l'Air (SOMAÏR) and Compagnie Minière d'Akouta (COMINAK). Uranium remained the main mineral commodity mined in Niger and represented a large percentage of the country's foreign exchange earnings. SOMAÏR operated its open pit mine northwest of Arlit, approximately 250 km northwest of Agadez. Compagnie Générale des Matières Nucléaires (COGEMA) of France owned 56.9% of the company; ONAREM held 36.6%; and Urangesellschaft, a COGEMA subsidiary, had a 6.5% holding in SOMAÏR. COMINAK's underground operations were approximately 10 km southwest of SOMAÏR, near Akouta. COMINAK was a joint-venture mining operations between COGEMA (34%), ONAREM (31%), Overseas Uranium Resources Development Co. of Japan (25%), and the Spanish Co., Empresa Nacional del Uranio S.A. (10%). The miners at SOMAÏR were out on strike in February and March. COMINAK operations were subject to a 3-week sympathy strike by its workers in March.

Production of industrial minerals and mineral fuels was limited to a few commodities, such as cement, coal, gypsum, limestone, salt, and sand and gravel, which was consumed domestically.

Exxon Corp. of the United States and its partner Elf Aquitaine of France continued hydrocarbon exploration in the southeast. The Government was interested in leasing additional hectares in the East Niger Basin to stimulate petroleum exploration activity.

There were 11,258 km of highway. The Government approached the European Union for Sysmin funding to upgrade the nation's road network in the west to improve access to the Liptako gold district. The ports of Abidjan, Côte d'Ivoire, and Cotonou, Benin, were connected by railroad to terminals at Ouagadougou, Burkina Faso (approximately 500 km by

highway from Niamey) and Parakou, Benin (approximately 560 km by highway from Niamey), respectively. Highways linked Niamey with ports at Accra, Ghana; Abidjan; Cotonou; Lagos, Nigeria; and Lomé, Togo.

Uranium will probably remain the most important mineral commodity produced in Niger and the largest foreign exchange earner for the immediate future; however, the projected shallow, open pit gold mines have excellent potential to allow the gold sector to become a factor in the nation's economy. Development of other resources, such as iron ore, petroleum, and phosphates, have the potential to provide additional jobs and foreign exchange revenue for the country.

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Major Sources of Information

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Other Publication

- Mining Journal (London), 1993, Niger Country Supplement: Mining Journal, v. 321, no. 8234, July 23, 12 p.

TABLE 1
NIGER: ESTIMATED PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity 2/	1992	1993	1994	1995	1996
Cement, hydraulic	29,288 3/	29,200	29,200	30,000	30,000
Coal, bituminous	133,525 3/	133,500	133,500	135,000	140,000
Gold	1	1	1	1	1
Gypsum	1,750	1,700	1,700	1,800	1,800
Molybdenum concentrate, Mo content	10	10	10	10	10
Salt thousand metric tons	3 3/	3	3	3	3
Tin, mine output, Sn content	20	20	20	20	10
Uranium	2,970 3/	2,914 r/	2,975 r/	3,150 r/	3,160

r/ Revised.

1/ Includes data available through July 1997.

2/ In addition to the commodities listed, phosphate, tungsten, and a variety of construction materials (clays, sand and gravel, and stone) are produced; but information is inadequate to make reliable estimates of output.

3/ Reported figure.