

MAURITANIA

By El Ghaouth Memady

The surface area of Mauritania exceeds 1,085,000 km². The country is located in West Africa and is bounded by the Atlantic Ocean to the west, by Mali to the east, by Morocco and Algeria to the north and by Senegal to the south. Its population amounts to 2.7 million people.

The mining industry is a very important component of Mauritania's economy. In 2002, it contributed more than 12% of GNP and nearly 40% of total exports. At present, mining is mostly confined to iron ore.

Iron is by far the most widespread metal in the country. It occurs in several geological formations, particularly in the Precambrian crystalline Regueibat Shield. The three main areas containing iron-ore deposits are Tiris, Sfariat and Tasiast. The deposits owned and mined by Société Nationale Industrielle et Minière de Mauritanie (SNIM) are located within Tiris and the mines are at Idjill Kédia, M'haoudat and Guelbs.

In 2002, SNIM exported nearly 10.5 Mt of sinter feed, of which 60% comprised direct shipping ore and 40% concentrate. Turnover was close to US\$200 million. SNIM's traditional market is Europe. Recently, foreign mining firms have shown an interest in Mauritania's iron ore, either in joint venture with SNIM or independently. Australian-listed Sphere Investments Ltd has an option to earn a 50% interest in SNIM's Guelb El Aouj project by spending US\$11 million on a three-year feasibility study. El Aouj possesses a resource of some 500 Mt at 37.5% Fe, and the project envisages a beneficiation plant on the coast at Nouadhibou capable of producing super, high-grade pellet feed, with an Fe content of 70%. Early in 2003, the South Africa iron-ore producer, Kumba Resources Ltd, acquired an option to earn into Sphere's interest.

On the exploration front, BHP Billiton has licences located to the south of Idjill Kédia, adjacent to SNIM's concession. In 2002, BHP Billiton completed a ground geophysical survey on its two exploration licences, and early this year it was planning to carry out 4,000 m of reverse circulation (RC) drilling on selected geophysical anomalies. Drilling will not exceed 250 m in depth.

Outside the iron-ore sector, a noteworthy development in 2002 was the sale by Normandy LaSource of the Haouewa gold deposit in Tasiast Province, to Australian-based Midas Gold plc under the name of Tasiast Holdings SA. The Australian company intended to complete about 25,000 m of RC and core drilling during 2003, with a view to confirming the presence of deeper, higher-grade ore. Normandy LaSource had spent about US\$6.5 million during the preceding five years and outlined proven reserves of 1-2 Moz at shallow depth. Early in 2003, St Barbara Mines and Geomaque Explorations announced plans to acquire Midas Gold prior to a merger to form Defiance

Mining Corp. They released a revised resource estimate for the Tasiast deposit and indicated resources are now put at 8.3 Mt at an average grade of 2.29 g/t Au, and inferred resources at 21 Mt at 1.74 g/t Au.

The exploration boom in Mauritania in recent years has continued into 2003. Over 85 exploration licences have been granted, of which 48 are for gold and base metals, and 26 for diamonds. The number of Mauritanian and foreign operators increased slightly in 2002. There were over 20, including SNIM and its affiliates (GMM, SAMIA), Ashton Mining, BHP Billiton, Brick Capital Co., DiaMet Minerals Africa, General Gold International, Guelb Moghrein Joint Venture, Tasiast Mauritania Ltd, Lonart, Rex Diamond, Sipia, De Beers, Luchosol, Franjuan, Somisel, Burns Trading Pty Ltd, AEI Ltd, Wadi El Rawda-Emirates, Brimax Sands and the Office Mauritanien de Recherche Géologique (OMRG).

Meanwhile, progress has been made with the first and second phases of the Projet de Renforcement Institutionnel du Secteur Minier en Mauritanie (PRISM), which is designed to promote the mining industry in Mauritania and to enhance private sector investment in mining. An airborne geophysical survey was carried out in the Regueibat Shield in northern Mauritania, and over most of the Mauritanides in central Mauritania. The survey included magnetics and radiometrics, and covered nearly 300,000 km². In addition, a geochemical survey was carried out. As a result, 26 maps in the form of a CD-ROM have been published at scales of 1:500,000 and 1:200,000 for the most promising areas.

The PRISM 1-WB and PRISM 2-WB projects were sponsored by the Mauritanian Government and financed by a US\$16.5 million loan from the International Development Agency, an arm of the World Bank. The third phase (PRISM 1-IDB) is being financed by the Islamic Development Bank (IDB) and is now in progress in the southern part of Mauritania. The fourth and final phase (PRISM2-IDB), also financed by the IDB, will cover central and eastern Mauritania.

Part of PRISM involves a three-year mapping project covering 500,000 km² in southern Mauritania being carried out by the Mauritanian Department of Mines and Geology in partnership with the British Geological Survey. The areas being mapped encompass part of the Regueibat Dorsal and the Mauritanide belt, areas regarded as prospective for gold copper, chromium, nickel, PGM, tungsten and iron ore. Part of the project involves the design of a GIS for the whole country.

The major event for Mauritania in 2002 was the discovery of oil and gas by Woodside and Hardman (two Australian firms) along with ENI-Agip of Italy. The discovery was the result of offshore drilling undertaken during 2001 and 2002. Five successful boreholes out of the six wells drilled, have intersected a thick, high-quality oil pass and gas column. Woodside and Agip plan to start production in 2005, at the rate of 75,000 bbl/d from the Chinguetti Field. The reserves within the second Banda Field are now estimated at 100 Mbbl. Other appraisal wells are planned for 2003.

It is noteworthy that no less than six operators hold a number of oil exploration licences: Woodside Mauritania (offshore areas 2 and 6); Dana Petroleum Ltd (off- shore areas 1, 7 and 8); International Petroleum Group (offshore area 11); Brimax Petroleum International (offshore area 12); Belhasa and Link Resources (inland Ta 1 and Ta 2 within the Taoudeni Basin); and Baraka Mauritania Ventures (Ta 11 and Ta 12 areas in the Taoudeni Basin).

Along with the oil and gas discoveries, a new page of the mining industry is unfolding: new projects include the production by SNIM of high-grade pellets (68% Fe), possibly transformed into sponge-iron using natural gas; steel processing by SAFA/SNIM; etc. Also, the Mauritanian economy should benefit from low-priced oil and gas. It is intended, for example, to desalinate sea-water for industrial purposes.