

EGYPT

By Gavin Bowyer

London Mining and Mineral Consultants Ltd

In November 1999, President Mubarak was re-elected for his fourth term of six years. In November and December 2000 there were parliamentary elections. The ruling National Democratic Party (the NDP) won 175 seats but was defeated in many seats by candidates who had stood as independents to express their criticism of the government. However, the NDP has maintained control of the 454-seat house with the support of 213 of the successful independent candidates, who returned to the NDP after the election. The opposition includes a 17-strong Muslim Brotherhood faction. The next presidential election is due in October 2005 and at the same time, October to November 2005, the next parliamentary elections will be held.

In 2000, the real GDP is estimated to have fallen to 3.9%, down from 6.0% in 1999, but is expected to rise to 4.5% in 2001. The annual consumer price inflation fell from 3.1% to 2.9% but may rise this year to 3.5%. Petroleum and gas account for over 50% of exports and some 8.5% of GDP.

Oil and Gas

The average production of crude oil continued to fall through 2000 from 717,000 bbl/d in June to 677,000 bbl/d in December. Two thirds of the crude production is refined domestically. Almost 80% of production comes from the long established oilfields of the Gulf of Suez, with exploration concentrated on fields in the Western Desert and the Red Sea coast south towards the Sudan. Crude oil reserves were reported in 1998 as some 3.9 billion bbl, but it is considered that if advanced extraction techniques are employed, another 10 billion bbl could be recoverable.

The most exciting planned developments are in the exploitation of natural gas. Natural gas resources and reserves were estimated in

mid-1999 as 1,100-1,700 billion m³. In December 2000, production of gas was up to 80,000 m³/d. In the same month, Egypt signed a memorandum of understanding with Lebanon and Syria to lay an 800 km long pipeline to transport natural gas from Egypt to Lebanon and Syria, with possible extensions to Jordan and Turkey. The first 400 km will be a submarine pipeline from El-Arish in Egypt to Tripoli in Lebanon. This will be followed by a 400 km pipeline which will feed into Syria with a 50 km spur into Lebanon. The estimated cost of the project is US\$1 billion. Two companies will be formed, Eastern Gas, responsible for the submarine pipeline and Arab Gas to distribute the gas to Syria and Lebanon and onto Jordan and Turkey. An earlier project for a proposed submarine gas pipeline to Turkey, with a spur to Israel, is on hold. It was to be a joint venture between the state owned Egyptian General Petroleum Corp. and Merhar, an Israel group, but the current political situation has stalled further progress.

In November 2000, the Spanish Egyptian Gas Co., Segas, was formed to establish a liquefied natural gas (LNG) plant at Damietta. The plant will supply 4 billion m³/y of natural gas to new power stations in Spain. Also, the EGPC has signed agreements with BG International, Edison of Italy and BP for future LNG exports.

Gold

Centamin Egypt Ltd, formerly Centamin NL, through its wholly-owned subsidiary Pharaoh Gold Mines NL, holds three gold concessions, Sukari, Barramiya and Abu Marawat/Hamama in the Eastern Desert. It has concentrated its exploration and evaluation activities on the Sukari gold project in the Eastern Desert, near Marsa Alam on the Red Sea coast. In 1998, consultants ACA Howe estimated the total resource in the

Amun zone using a range of cut-offs. The estimates range from 2.2 Moz at 2.2 g/t Au using a 0.5 g/t cut-off, to 1.0 Moz at 13.7 g/t Au using a 3.0 g/t cut-off. A drilling programme has continued throughout 2000 and into 2001. In April 2001, Centamin announced that it had intersected a new high grade zone in the footwall of the main Amun zone. The Amun zone resource is now estimated to contain 1.4 Moz of recoverable gold. The data from Amun, in association with metallurgical testwork and open-pit studies, will be brought together in a pre-feasibility study. The investigations on the other two gold concessions, Barramiya and Abu Marawat/Hamama, have been on hold while attention concentrates on Sukari. These concessions lie to the west and the north of Sukari. Centamin has an agreement with the Egyptian Geological Survey and Mining Authority, EGSMA, that, if mining goes ahead, allows for a 30-year mining lease, renewable for a further 30 years, with a 15-year tax holiday and a 3% royalty payable on net proceeds.

Other Minerals

In the Nile Delta, to the east of Alexandria, Centamin Egypt Ltd and Kara Gold NL each own 50% of Egyptian Pharaoh Investment (EPI), an Egyptian company which has an agreement with the Egyptian Government to develop a heavy minerals project at Rosetta. The government has estimated that the area contains resources of some 37 Mt of heavy minerals. Under the agreement, EPI and the Egyptian Government will share the profits from the mining and separation of the heavy mineral, after EPI recovers all of its development costs. EPI would then upgrade the ilmenite concentrate to pigment grade titanium oxide, TiO_2 . No further exploration has been carried out at Rosetta since 1998, but Centamin has been contacted by other companies which are showing interest. Currently, El Nasr Phosphate Co. is producing some ilmenite at its Abu Ghalaga Mine in the Red Sea region.

Aswan Development & Mining Co., Ademco, and its affiliate company, Aswan Iron & Steel Co. (Aisco), are planning a major iron-ore mine and associated iron and steel plant. Ademco has been awarded a 25-year permit to mine for iron ore at a deposit with resources estimated at over 65 Mt, at a rate of some 2.3 Mt/y. It is looking to contract out the mining operations and several contractors have expressed interest including Simto of Australia, Quebec Mining Co. of Canada and Scharrighuisen of South Africa. Aisco is 60%-owned by Ademco, with the remainder largely held by major international shareholders including US Steel, Mannesmann Demag of Germany, Cegelec of France and Pumini of Italy. It is planning to invest US\$668 million in an iron and steel plant to be built some 690 km south of Cairo. The project is programmed to start in 2001 with production of some 1.5 Mt/y of steel billets. In February 2000, some concern was raised about the award of contracts and the chairman of Ademco was reportedly under investigation.

Iron ore is also mined near the Baharia oasis in the Western Desert and the Lakah Group, with Hysla of Mexico, are reported to be considering constructing a sponge iron plant in the New East Port Said industrial zone.

Coal resources in Sinai are estimated at some 50 Mt. To exploit some of these resources, the Maghara mine was re-opened in 1996 at a production rate of 125,000 t/y of coal, which was targeted to rise to 600,000 t/y in five years. However, doubts have been expressed recently as to whether this expansion is economically viable.

The Abu Tatur phosphate mine, north-west of El Kharga, is forecast to produce 4.5 Mt/y at 31% P_2O_5 , yielding 2.2 Mt/y of concentrate. The phosphate rock will be mined using longwall techniques. An associated chemical fertiliser plant is also planned. Reportedly, some US\$1.5 billion was spent on developing the mine and possibly twice as much again on infrastructure. However, the project has been beset by cost and management

problems and the government may bring in private sector management. Elsewhere, phosphate and limestone are mined near Bur Safaga and Quseir on the Red Sea coast.

In 2000, EGSMA invited tenders for exploration of base metal prospects and development of ornamental stone deposits. Also, the government planned to replace

EGSMA with a new body to be called the Egyptian General Mineral Resources Corp., which would operate in a similar manner to the Egyptian General Petroleum Corp.

Egypt also has deposits of manganese, potash, sulphur and uranium, which are not being exploited at this time.