EGYPT

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Egypt has an extensive history of mineral production; production has included construction materials (such as dimension stone, clay, and gypsum), copper, gemstones, materials for glass, gold, iron ore, and zinc. In recent decades, crude petroleum, natural gas, and refined petroleum products have dominated Egypt's mineral sector. The production of cement had become a notable segment of the mineral industry. Egypt was a modest producer of primary aluminum, steel, and ferroalloys and has secondary (remelt) production of copper, lead, and zinc. The recent rapid expansion of the steel, the cement, and the fertilizer industries had been propelled by the Government's privatization program, private development of new facilities or expansion of privatized operations, and the construction boom associated with the Government's promotion of settlement and industrial development of relatively underpopulated parts of the country, particularly near Aswan and in the Sinai.

The nation's gross domestic product (GDP) was estimated to be \$98.7 billion¹ in 2000 (World Bank Group, September 17, 2001, Egypt, Arab Rep. at a glance, accessed September 28, 2001, at URL http://www.worldbank.org/data/countrydata/ aag/egy aag.pdf). The Egyptian economy was well diversified. Segments of the GDP at factor cost for the July 1, 1999, to June 30, 2000, Egyptian fiscal year (the last period for which such disaggregated data were available) included industry, manufacturing, and mining, which were combined to account for 19% of the GDP; transportation, which included Suez Canal operations, which accounted for 9% of the GDP; crude petroleum and petroleum products, which accounted for 7% of the GDP; and construction, which accounted for 6% of the GDP (Ministry of Economy, September 2001, Gross domestic product at factor cost, Monthly Economic Digest, accessed September 21, 2001, at URL http://www.economy.gov.eg/ English/monthly/ 2b GDP.htm).

Trade

According to the Ministry of Economy, Egypt's total exports in 2000 were valued at about \$4.7 billion, and total imports amounted to about \$14 billion. Crude oil and petroleum products accounted for about 41% of the value of total exports in 2000, which was an increase of 36% in the value of total exports in 1999. In 2000, the value of fuel imports rose to 7% of the value of total imports compared with 3% in 1999 (Ministry of Economy, September 2001, International trade by major commodity groups, Monthly Economic Digest, September 2001, accessed September 21, 2001 at URL http://www.economy.gov.eg/English/monthly/ 5e_1Trade.htm). World Bank trade statistics indicate that fuel and energy accounted for 13.7% of the value of total imports in 2000 and 7.7% in 1999 (World Bank Group, 2001, Egypt, Arab Rep. at a glance, accessed September 28, 2001, at URL

http://www.worldbank.org/data/countrydata/aag/egy_aag.pdf). The Suez Canal Authority revenues were \$1.9 billion in 2000 when 14,141 ships transited the waterway compared with 13,490 vessels in 1999. Tonnage increased to 438,962 million metric tons (Mt) in 2000 compared with 384,994 Mt in 1999. In September, the Government authorized a \$440 million, 10year plan to deepen and widen the Canal. It proposed to widen the channel to 400 meters (m) from 345 m and to dredge to a sufficient depth to accommodate ships with a 21.9-m draft compared with the current 17.7-m draft limitation thus opening the canal to vessels larger than the current Suezmax classification (the domain of ships within the 110,000- to 150,000-deadweight-ton range) (American Chamber of Commerce in Egypt, June 2001, Canal revenues recovering, Business Monthly, accessed September 20, 2001, at URL http://www.amcham.org.eg/HTML/News Publication/ BusinessMonthly/June01/summ5d.htm).

Commodity Review

Metals

Aluminum.—The nation's primary aluminum producer Aluminium Co. of Egypt (Egyptalum, also known as Misr Aluminium Co.) proposed to expand its production capacity to about 300,000 metric tons per year (t/yr) by 2008. In 2000, Egyptalum's production capacity was 195,000 t/yr. By 2002, the company anticipated capacity would be 245,000 t/yr with the scheduled completion of the conversion of the cells of potline no. 5 to prebaked anodes (Mining Journal, 2000).

Iron and Steel.—In addition to several minimills that produced steel in Egypt, the two major steel production facilities were the privately owned Alexandria National Iron and Steel Co. (ANSDK)² and the public enterprise Egyptian Iron and Steel Co. During 2000, Al Ezz Steel Rebars Co. acquired 28% equity interest in ANSDK. ANSDK started commercial production from an 80,000-t/yr direct reduction iron plant (its third Midrex[®] direct reduction module at El-Dikheila steelworks near Alexandria) (Metal Bulletin, 2000c). During 2000, Suez Steel Co. started its 600,000-t/yr-capacity minimill at Adabiya, which had been built by Voest-Alpine Industrieanlagenbau GmbH & Co. (VAI). VAI subsequently was contracted to construct a FINMET[®] direct reduction plant for Suez Steel to be designed to produce 1.15 Mt of hot-briquetted iron (Voest-Alpine Industrieanlagenbau GmbH & Co., 2000).

General Lithograph Egypt Co. received a positive feasibility study of its proposed 100,000-t/yr-capacity electrolytic tinning

¹Where necessary, values have been converted from Egyptian pounds (E£) to U.S. dollars at the rate of E£3.4=US\$1.00.

²Many Egyptian company and place names are transliterations and/or translations from Arabic and have variable spellings depending on the literature source. Likewise, common acronyms for some of these companies evidently correspond to the transliterated Arabic names rather than to their English translations.

line in 6 October City, which is about 50 kilometers (km) west of Cairo (Metal Bulletin, 2000a). In Sadat City, a 500,000-t/yr bar and wire rod rolling mill and a 500,000-t/yr bar rolling mill were being built for Egyptian American Steel Rolling Co. El Attal Steel had a 300,000-t/yr bar mill under construction in Suez (Metal Bulletin, 2001). The Kouta Steel Group acquired the Arab Steel Factory from the Holding Co. for Financial Investments (Lakah Group).

Development of an iron mine near Aswan and an associated integrated iron and steel plant ceased when the Government charged the promoters with misappropriating public funds. The Government indicated that the promoters had sold equity in the Aswan Development & Mining Co. and the Aswan Iron & Steel Co. to state-owned banks on the basis of fraudulent claims (Metal Bulletin, 2000b; Middle East Economic Digest, 2001a).

Industrial Minerals

Cement.—Output from new cement plants and expanded privatized operations chased after a declining domestic market. Consumption faltered in 2000 as the expected sustained increase in cement demand failed to materialize (Privatization Coordination Support Unit, December 4, 2000, Privatizationrelated articles translated from the Egyptian press—ECES study indicates a decline in production rates during the first half of the year, accessed October 2, 2001, at URL http://www.carana.com/ pcsu/press/2000-Nov-28.htm).

Egyptian Cement Co. (ECC) [a joint venture that included Orascom Construction Industries of Egypt (53.6% equity interest) and Holderbank Financière Glaris Ltd. of Switzerland (43.72%)] fired the third kiln at its plant in November. ECC's fourth kiln was scheduled to come online in early 2002.

In 2000, Cimentos de Portugal, SGPS, S.A., acquired 91.4% equity interest in Ameriyah Cement Co., and Suez Cement Co. secured 64.8% interest in Tourah Portland Cement Co. Sinai White Portland Cement Co. continued construction of a white cement plant.

Fertilizer.—Abu Qir Fertilizers & Chemical Industries Co. brought the 1,200-metric-ton-per-day (t/d) ammonia and 1,750t/d urea Abu Qir III plant online in early 1999. Egypt Basic Industries Co. continued to plan construction of a 1,850-t/d ammonia plant in the new Suez Industrial Zone, which is about 20 km south of Suez (Lippmann and others, 1999, p. 15; Middle East Economic Digest, 2001b).

Mineral Fuels

Egypt had an important energy minerals sector that was dominated by the production of natural gas, crude petroleum, and refined petroleum products. The U.S. Department of Energy's general overview of the Egyptian energy sector can be found at URL http://www.eia.doe.gov/cabs/egypt2.html.

In July, negotiations on natural gas sales between the Government and the international petroleum companies were concluded. The Government obtained lower rates for the gas that it acquired and paid for the gas in local currency instead of dollars.

In 1999, two successful exploration wells on the West Gharib concession of a joint venture of Dublin International Petroleum (Egypt) Ltd. of Bermuda [a subsidiary of Tanganyika Oil Ltd. of Bermuda (a subsidiary of Tanganyika Oil Co. Ltd. of Canada)] (50% equity interest), GHP Exploration (West Gharib) Ltd. (one of several subsidiaries of Transatlantic Petroleum Corp. of Canada that were active in Egypt) (30%) interest), and Drucker Petroleum Inc. (a subsidiary of Drucker Industries Inc.) (20% interest) resulted in the development of the Hana field. Production from the Hana field began on December 29, 1999, and the venture drilled several successful development wells in the field in 2000. Other successful wells drilled in Egypt during 2000 included the Akik-1X gas well, the Karama-1X oil well, the Neith South-1X oil well on the Khalda Offset concession, and the Shams-8X well on the Khalda concession for the joint venture of the Repsol-YPF Group of Spain, Apache Corp. of the United States, and Novus Petroleum Ltd. of Australia. On the Central Sinai concession, the joint venture of Alliance Egyptian National Exploration Co. and GHP Exploration (Egypt) Ltd. discovered oil with the Lagia-6 well. BG Group plc and Edison International successfully drilled the Sapphire-1, the Sapphire-2, the Sienna-1, and the Simian-3 wells on the West Delta deep marine concession.

Coplex (Egypt) Ltd. (a subsidiary Naftex Energy Corp.) and Cabre Exploration (Cyprus) Ltd. (a subsidiary of Kappa Energy Co. Inc. of Canada, which was renamed Vanguard Oil Corp. in January) drilled and completed the Tawoos-1 oil well on the West Esh El Mallaha concession. Shell Egypt N.V. and Energy Africa Ltd. drilled the JC18-1 well on the Matruh permit. In an attempt to bolster production from the Obaiyed gasfield, Badr El Din Co. (BAPETCO) (an affiliate of the Royal Dutch/Shell Group of companies) discovered gas with the Obaiyed South-1 well. Commercial gas flow from the Obaiyed field had begun in late 1999, but production rapidly declined during 2000. BAPETCO planned additional wells at Obaiyed and Obaiyed South.

Four liquefied natural gas (LNG) projects were under consideration in 2000. BG International, which in October 2000 became the BG Group, and Edison International planned to bring an LNG plant near Idku, east of Alexandria, on-stream in 2004. BP Amoco plc proposed the construction of a twotrain LNG plant and a two-train natural gas liquids (NGL) plant on the Mediterranean coast. LNG shipments were to start in 2004. BP Amoco also planned to build a NGL plant on the Gulf of Suez. Royal Dutch/Shell Group proposed to construct a gas-to-liquids plant and a two-train LNG plant. By 2004, Grupo Union Fenosa of Spain planned to build a two-train LNG plant at Damietta.

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

(Thousand metric tons unless otherwise specified)

Commodity	1996	1997	1998	1999	2000 e/
METALS	170 200	179 200	105 000	102 210	200.000
Aluminum metal metric tons	179,200	178,200	195,000	193,319	200,000
Copper, refined, secondary e/ do.	4,600 3/	5,000	6,000	6,000	5,000
Iron and steel:	a (a)		2	2 000 /	a c oo
Iron ore and concentrate	2,429	2,744	3,001	3,000 e/	2,500
Metal:	1.050	1 000	1 22 4 24	-	
Pig iron e/	1,050	1,000	1,334 3/	700	700
Direct reduced iron	827	1,190	1,610	1,670	1,530 3/
Steel, crude	2,618	2,717	2,870	2,619	2,820 3/
Ferroalloys: e/					
Ferromanganese	35	26	18	30	30
Ferrosilicon	44	44	44	44	45
Manganese ore e/ metric tons	15,000	15,000 r/	10,000 r/	20,000 r/	20,000
Titanium, ilmenite e/	124 3/	125	125	130	125
INDUSTRIAL MINERALS					
Asbestos e/ metric tons	1,836 3/	2,000	700 r/	1,000 r/	2,000
Barite e/			300 r/	500 r/	500
Cement, hydraulic, all types	18,700	19,700	21,000	23,313 r/	24,143 3/
Clays:					
Bentonite e/	50	50	33 r/	50	50
Fire clay	350 e/	331	227	300 e/	300
Kaolin metric tons	258,725	258,869	285,497	290,000 e/	290,000
Feldspar, crude do.	53,783	57,335	325,654	330,000 e/	330,000
Fluorspar do.	700	775	140	500 e/	500
Gypsum and anhydrite, crude	2,000 e/	2,423	1,338	2,000 e/	2,000
Lime e/	750	800	800	800	800
Nitrogen:					
Ammonia, N content	1,126	1,061	1,141	1,407	1,511 3/
Urea, N content	480	445	482	700	853 3/
Phosphate:					
Phosphate rock	808	1,067	1,076	1,018	1,020
P2O5 content	222	310	311	298	300
Sodium compounds:					
Salt	1,530	2,024	2,387	2,400 e/	2,400
Soda ash e/	50	50	50	50	50
Sodium sulfate metric tons	2,000 e/	2,118	2,498	2,500 e/	2,500
Stone, sand and gravel:					
Basalt thousand cubic meters	600 e/	883	241	300 e/	300
Dolomite	1,000 e/	1,324	3,444	3,500 e/	3,500
Granite, dimension stone cubic meters	20,000 e/	24,958	35,817	40,000 e/	40,000
Gravel thousand cubic meters	10,500 e/	12,033	11,463	12,000 e/	12,000
Limestone and similar do.	18,300	23,559	25,618	27,000 e/	27,000
Marble (including alabaster) blocks cubic meters	80,000 e/	127,767	134,664	140,000 e/	140,000
Sand:		.,	- ,	.,	.,
Industrial sand (glass sand)	850 e/	505	574	600 e/	600
Construction sand	22,000 e/	21,250	19,420	22,000 e/	22,000
Sandstone thousand cubic meters	200 e/	66	6	e/	,
Sulfur:	200 0	00	0	0,	
Elemental, byproduct e/ metric tons	8,000	4,453 3/	4,450	4,400	4,500
Sulfuric acid, S content	222 r/	230 r/	224 r/	214 r/	220
Talc, soapstone, pyrophyllite metric tons	41,227	43,627	39,720	40,000 e/	40,000
Vermiculite do.	447	447	12,376	12,000 e/	12,000
MINERAL FUELS AND RELATED MATERIALS	· + + /	- 1 - 1 /	12,370	12,000 0/	12,000
Coal e/	200	300	370 3/	400	400
Coke e/	1,800	1,800	1,500	1,420	400 1,400
Gas, natural:	1,000	1,000	1,300	1,420	1,400
Gross production million cubic meters	16,800 e/	17,000 e/	19 270	19,766	25 000
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Dry do.	13,183	13,349	16,430	17,800 e/	21,000
Petroleum:	226 500	212 200	204 400	211.000	200.000
Crude, including condensate thousand 42-gallon barrels	336,500	313,300	304,400	311,000	290,000
See footnotes at end of table.					

TABLE 1--Continued EGYPT: PRODUCTION OF MINERAL COMMODITIES 1/2/

(Thousand metric tons unless otherwise specified)

Commodity		1996	1997	1998	1999	2000 e/
MINERAL FUELS AND RELA	TED MATERIALSContinued					
PetroleumContinued:						
Refinery products:						
Liquified petroleum gas	thousand 42-gallon barrels	5,080	6,333	5,090	5,371	5,500
Gasoline and naptha	do.	40,185	44,065	43,465	43,699	45,000
Kerosene and jet fuel	do.	17,255	16,606	15,788	15,472	16,000
Distillate fuel oil	do.	42,298	43,790	45,230	45,857	46,000
Residual fuel oil	do.	85,787	86,100	87,625	82,011	83,000
Lubricants	do.	1,645	1,729	1,820	1,834	1,800
Asphalt	do.	4,181	4,641	5,042	6,030	6,000
Unspecified 4/	do.	4,596	2,400	2,350	1,987	1,700
Total	do.	201,027	205,664	206,410	202,261	205,000

e/ Estimated. r/ Revised. -- Zero.

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

2/ Table includes data available through September 21, 2001. In addition to those listed, Egypt produced a number of commodities for which data were unavailable; these include a number of metals, such as lead, produced by secondary recovery methods, and manufactured mineral commodities, such as carbon black and glass. 3/ Reported figure.

4/ Amounts needed to complete reported refinery products totals shown.