THE MINERAL INDUSTRY OF

TUNISIA

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Production and processing of crude oil, mining of phosphate rock, and manufacturing of phosphate-based fertilizer products were significant segments of the Tunisian minerals industry. Natural gas and petroleum production accounted for about 2.9% of the gross domestic product (GDP) of the country's diversified economy. The building materials, cement, and glass sector were responsible for about 1.7% of the GDP, and mining accounted for about 0.8% (Central Bank of Tunisia, 2003, p. 54). The nominal GDP of this 163,610-square-kilometer North African nation was estimated to have been about $21.3 billion[1] in 2002 (International Monetary Fund, 2003a§[2]). The International Monetary Fund (2003b§, c§) also estimated that GDP at purchasing power parity exchange rates was $65.7 billion in 2002 versus $62.7 billion in 2001.

In 2002, total Tunisian exports were valued at $6.8 billion compared with $6.6 billion in 2001. Mineral sector exports included crude oil ($504 million), phosphate-based fertilizers ($289 million), phosphoric acid ($151 million), petroleum products ($139 million), phosphate rock ($32 million), aluminum fluoride ($31 million), cement ($27 million), iron and steel ($20 million), and zinc ($18 million). The total value of imports for 2002 was estimated to be $9.5 billion. Imports of minerals and mineral-based products were valued at about $305 million in 2002 and imports of mineral fuels were about $864 million (Central Bank of Tunisia, 2003, p. 103, 105, 108-111, 115, 118, 148).

Commodity Review

Metals

Iron and Steel.—In November, El Fouladh-Société Tunisienne des Sidérurgie, which was the Government-owned steel plant, temporarily shut down its 200,000-metric-ton-per-year (t/yr)-capacity blast furnace for maintenance. Decreased production of pig iron and steel as a result of the closure lead to a decrease in El Fouladh's output of reinforcing bars for concrete. The blast furnace was expected to be back online in mid-2003. In 2002, the company also downsized its workforce, putting about 600 people into early retirement (Organisation for Economic Co-operation and Development, 1999, p. 55; Central Bank of Tunisia, 2003, p 63; Lahmar, 2002§).

Stage 2 of Danieli Morgårdshammar S.A.'s upgrade of Intermetal's steel bar and section mill in Tunis was nearly completed at yearend. The renovated 300,000-t/yr-capacity facility was scheduled to be commissioned in February 2003 (Danieli Group, 2003§).

Lead and Zinc.—In 2002, Breakwater Tunisia S.A. milled 423,414 metric tons (t) of lead-zinc ore compared with 411,052 t in 2001. Production of the higher grade F-3 zone of the underground Bougrine Mine was suspended for about 3 months, which resulted in the production of 61,656 t of zinc concentrates that contained 33,706 t zinc in 2002 compared with 69,724 t of zinc concentrates that contained 37,832 t zinc in 2001. In 2002, the mine produced 6,859 t of lead concentrates that contained 4,565 t lead compared with 9,869 t of lead concentrates that contained 6,424 t lead in 2001 (Breakwater Resources Ltd., 2003, p. 13). Additional lead-zinc ore was mined at the Boujabeur Mine [at the rate of about 150 metric tons per day (t/d)] operated by Société Minière du Nord-Ouest and the Fej Lahdoum Mine at Nar d'Hal (at about 100 t/d) (Consolidated Global Minerals Ltd., 2001, p. 16).

Consolidated Global Minerals Ltd. of Canada continued its evaluation of the Djebba prospect, the four exploration permits of the Fej Lahdoum-Ain Jemmala project, the Koudiat El Louatia property, and the Ouled Moussa permit. Consolidated Global Minerals was granted an extension of the term of its permits to July 13, 2005, from January 5, 2003. Aurora Metals Ltd. of the British Virgin Islands completed a 7-hole drilling program on the Hammala, Koudiat ed Diss, and Koudiat Sidi Amor permits in 2002. Aurora subsequently applied for two additional exploration permits adjacent to existing acreage.

Industrial Minerals

Société des Ciments Artificiels Tunisiens (a subsidiary of Colacem S.p.A. of Italy) proposed to increase its Ben Arous plant's capacity to 800,000 t/yr of grey portland cement by 2004. Funding was acquired from the European Investment Bank (Arabicnews.com, 2002§). In 2002, the Government set the price of cement at 76 dinars per metric ton (about $54 per ton). There had been some expectation that Government control of cement price would be lifted (Ben Ali, 2003§). In addition to Société des Ciments Artificiels Tunisiens, five other cement companies and one white cement company operated in the country. Tunisia had 45 brick companies, 95 gravel quarries, 2 lime companies, and 57 marble quarries.

Mineral Fuels

The Hydrocarbon Code (law No. 99-93 of August 17, 1999) regulated oil and gas exploration and production in Tunisia. In 2002, production of natural gas, which was primarily from

[1]Where necessary, values have been converted from Tunisian dinars (TD) to U.S. dollars (US$) at an average rate of TD1.42=US$1.00 for 2002 and of TD1.44=US$1.00 for 2001.

[2]References that include a section mark (§) are found in the Internet References Cited section.

the offshore Miskar Field, was reported to have declined to 2,194 million cubic meters (Central Bank of Tunisia, 2003, p. 59). The continued decline in crude oil production from the larger oilfields, especially the Ashtart, El Borma, and Sidi El Kilani Fields, was offset by production from the smaller fields, which included the Didon, El Hakeb-Guebiba, Isis, and Sidi Lataïem Fields. Successful oilwells drilled in 2002 included the offshore Baraka South East-1 by Agip Tunisia BV; the Adam-1 on the Borj el Khadra permit by the joint venture of Agip Tunisia BV (50%), Pioneer Natural Resources Tunisia Ltd. (40%), and Paladin Expro Ltd. (10%); and the offshore Hasdrubal Southwest-1 on the Amilcar permit by BG Tunisia Ltd. and the state-owned Entreprise Tunisienne d'Activités Pétrolières. Pioneer had acquired its interest in the Borj el Khadra permit from Gulf Canada Tunisia Ltd. in June 2002.

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Major Sources of Information

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TABLE 1
TUNISIA: PRODUCTION OF MINERAL COMMODITIES [1]

(Thousand metric tons unless otherwise specified)

Commodity[2]		1998	1999	2000	2001	2002[p]
METALS						
Iron and steel:						
Iron ore:						
Direct shipping ore and concentrate, gross weight		220	219	182	204	198
Fe content		119	119	98	109 [e]	105
Metal:						
Pig iron		123	180	196	192	152
Steel, crude		171	229	237	239	220 [e]
Lead, mine output, Pb content	metric tons	4,272	6,589	6,602	6,820 [e]	5,081
Silver metal, primary[e]	kilograms	2,500	4,000	3,700	3,650	3,000
Zinc:						
Concentrate, gross weight	metric tons	57,036	89,213	74,996	73,000	64,890
Zn content	do.	31,368	49,066	41,247	40,000 [e]	35,692
INDUSTRIAL MINERALS						
Barite	do.	8,011	530	3,702	2,208 [r]	5,539
Cement, hydraulic[3]		4,588	4,864	5,657	5,721	6,022
Clays, for construction and clay products		3,478	3,670	3,870	4,260	4,400
Fertilizers:						
Triple-superphosphate		767	812	805	783	796
Phosphoric acid		1,184	1,208	1,043	1,144	1,219
Diammonium-phosphate		919	1,048	1,113	1,124	1,315
Ammonium nitrate		156	172	182	170	127
Fluorine:						
Fluorspar, acid grade	metric tons	1,190	520	--	--	--
Aluminum fluoride		40	39	43	44	39
Gypsum[e, 4]		100	110	125	125	125
Lime		482	475	517	467	471
Phosphate rock, washed:						
Gross weight		7,901	8,006	8,339	8,144	7,735
P_2O_5 content[e]		2,370	2,400	2,500	2,440	2,300
Salt, marine		473	447	620	654	616
MINERAL FUELS AND RELATED MATERIALS						
Gas, natural:						
Gross	million cubic meters	1,899	1,819	1,985	2,254	2,149
Dry[e]	do.	1,500	1,450	1,600	1,800	1,700
Petroleum:						
Crude	thousand 42-gallon barrels	30,570	30,960	28,207	26,300	26,800
Refinery products:						
Liquefied petroleum gas	do.	1,473	1,288	1,279	1,180	1,200
Gasoline	do.	2,951	3,096	3,301	3,460	3,380
Kerosene	do.	978	1,194	1,216	1,560	1,530
Distillate fuel oil	do.	4,178	3,812	4,010	3,480	3,590
Residual fuel oil	do.	4,202	4,149	4,346	3,910	4,020
Other[e]	do.	800	1,420	940	980	1,010
Total[e]	do.	14,600	15,000	15,100	14,600	14,700

[e]Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. [p]Preliminary. [r]Revised. -- Zero.
[1]Data available as of August 11, 2003.
[2]In addition to the commodities listed, a variety of crude construction materials (sand and gravel and stone) was produced, but output was not reported, and available information was inadequate to make estimates of output.
[3]Includes white cement production, in thousand metric tons: 1998--167; 1999--192; 2000--250; 2001--247; and 2002--259.
[4]Does not include phosphatic gypsum (waste product) generated during fertilizer production.