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TUNISIA

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The Mineral Industry of Tunisia

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Phosphate rock and phosphate-based fertilizers were Tunisia's major contributions to the international mineral supply. Tunisia was the world's fifth ranked phosphate rock producer and accounted for more than 5% of the world supply of phosphate rock. About 80% of Tunisian phosphate rock production was processed locally into fertilizers, such as diammonium phosphate and triple superphosphate, and phosphoric acid. Tunisia was a minor producer of petroleum and ranked 11th among African producers of crude oil (BP p.l.c., 2007, p. 8; Jasinski, 2007).

Despite the drop in the production of crude oil and natural gas in 2006, the hydrocarbon sector accounted for about 4.7% of Tunisia's gross domestic product (GDP) compared with 4.3% in 2005. Increased international petroleum prices, which more than offset the negative economic impact of the production volume decline, accounted for the increase in value of Tunisian hydrocarbon production. The cement, construction materials, glass, mining, and phosphate-based fertilizer sectors accounted for about 4% of the GDP (Central Bank of Tunisia, 2007, p. 54).

Crude and refined petroleum accounted for about 13% of total exports. Minerals and mineral-based products, such as cement, fertilizer, raw steel, and manufactured steel pipes, accounted for about 9% of total exports (Central Bank of Tunisia, 2007, p. 102, 107, 109, 113, 117).

Mineral exploration and production were licensed by the Government according to the Mining Code (law No. 2003-30 of April 28, 2003). The Hydrocarbon Code (law No. 99-93 of August 17, 1999) and amendments (which included law No. 2002-23 of February 14, 2002 and law No. 2004-61 of July 27, 2004) regulated natural gas and oil operations.

Production

The Tunisian mineral sector posted mixed results in 2006. Production of most mineral and mineral-based commodities fell within a range of plus or minus 7% of that of 2005. Production of lead and zinc ore ceased in 2005.

Structure of the Mineral Industry

The fertilizer, iron and steel, phosphate, and petroleum refining sectors of the mineral industry were controlled by state-owned companies. Much of the cement sector had been privatized in the past 10 years. Private companies produced crude construction materials. The Government promoted programs to enhance the ability of small- and medium-sized industrial businesses to compete with international companies.

Enterprises Tunisienne d'Activités Petrolières (ETAP), which participated in production joint ventures with international oil companies or monitored their exploration and production operations, managed the Government's interest in the petroleum sector. There were 38 gasfields and oilfields, but most of the country's petroleum output was produced from the Adam, the Ashtart, the Dalia, the Didon, El Borma, the Haja, the Miskar, and the Oudna Fields. Société Tunisienne des Industries du Raffinage operated the country's petroleum refinery.

Commodity Review

Metals

Iron and Steel.—Société Tunisienne de Sidérurgie proposed to install an additional electric arc furnace (EAF) at its El Fouladh facility. After the scheduled installation and startup of the new 100,000 metric-ton-per-year (t/yr)-capacity EAF in 2008, the company planned to expand the capacity of its operating 65,000-t/yr-capacity EAF to 100,000 t/yr of crude steel. The combined 200,000 t/yr capacity of the two EAFs would match the company's rolling mill capacity, which would eliminate the need to import billet for the mill (Metal Bulletin, 2007).

Lead and Zinc.—In 2006, Albidon Ltd. of Australia, Breakwater Resources Ltd. of Canada, and Maghreb Minerals Plc of the United Kingdom continued exploration for economic lead and zinc deposits. An Albidon and Zinifex Ltd. of Australia joint venture and Maghreb Minerals were expected to increase exploration activity in 2007.

Industrial Minerals

Cement.—Groupo Prasa of Spain proposed an expansion program that would increase the white cement production capacity of Société Tuniso-Andalouse de Ciment Blanc S.A. (Sotacib) (formerly Société Tuniso-Algérienne de Ciment Blanc S.A.) to 500,000 t/yr from a nominal design capacity of 260,000 t/yr. In recent years, Sotacib routinely produced more than the plant's design capacity, averaging about 300,000 t/yr of white cement (Middle East Economic Digest, 2006c).

Nitrogen, Phosphate Rock, and Sulfur.—Group Chimique Tunisienne (GCT) initiated an evaluation of the construction of a 2,200-metric-ton-per-day (t/d)-capacity ammonia plant and a 1,000- to 3,000-t/d-capacity urea plant. GCT, in conjunction with the Indian firms of Coromandel Fertilisers Ltd. and Gujarat State Fertilizers & Chemicals Ltd., proposed to build a 3,600-t/d-capacity sulfuric acid plant and 1,100-t/d-capacity phosphoric acid plant near the existing GCT facility at Skhira. If approved, the Skhira 2 project could begin initial production in 2010 (Middle East Economic Digest, 2006a, b).

Envisan N.V., which was a subsidiary of Jan de Nul N.V. of Belgium, and state-owned Société Générale d'Entreprise de Matériel et de Travaux started the decontamination and rehabilitation of the fertilizer sector's phosphoric gypsum waste dump in the Taparura area of Sfax. The rehabilitation project was expected to take 30 months.

Mineral Fuels

Petroleum.—The Adam concession, which included the Adam, the Hawa, and the Dalia Fields, remained Tunisia's leading crude oil producing center and posted a 4.2% increase in production in 2006 compared with that of 2005. Crude oil production from El Borma Field declined by 9.8% compared with that of 2005, and production from the Ashtart Field declined by 16.2% in 2006 compared with that of 2005. New production included that from the Oudna Field, which was operated by Lundin Petroleum AB of Sweden for joint-venture partners Atlantis Tunisia Ltd. and ETAP. Lundin had ended production from the Isis Field in April in order to rehabilitate the Ikdam floating production, storage, and offloading vessel (which had handled the production from the Isis Field) for use at Oudna (Central Bank of Tunisia, 2007, p. 57).

Outlook

The mineral and energy sectors, which accounted for about 22% of total Tunisian exports, are integral parts of Tunisia's economic future. Metal deposits in northern Tunisia are expected to continue to attract exploration interest. The phosphate mines of Compagnie des Phosphates de Gafsa are expected to be able to respond to increased demand for washed phosphate rock. With high international petroleum prices, the hydrocarbon resources of Tunisia, which are small relative to the other oil-producing nations of North Africa, are expected to continue to attract international oil companies.

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TABLE 1
TUNISIA: PRODUCTION OF MINERAL COMMODITIES[1]

(Thousand metric tons unless otherwise specified)

Commodity[2]		2002	2003	2004	2005	2006[p]
METALS						
Iron and steel:						
Iron ore:						
Direct shipping ore and concentrate, gross weight		198	164	256	206	214
Fe content		105	97	134	108	112
Metal:						
Pig iron		152	36	--	--	--
Steel, crude		200	86	70	66	68
Lead, mine output, Pb content	metric tons	5,081	5,000	5,470	8,708	--
Silver, metal, primary[e]	kilograms	3,000	3,000	2,400	1,200	--
Zinc:						
Concentrate, gross weight	metric tons	64,890	65,800	52,747	29,412	--
Zn content	do.	35,692	36,000	29,011	15,889	--
INDUSTRIAL MINERALS						
Barite	metric tons	5,539	3,000	1,813	--	--
Cement, hydraulic[3]		6,022	6,038	6,662	6,691	6,932
Clays, for construction and clay products		4,400	4,500	5,200	5,400	5,600
Fertilizers:						
Triple superphosphate		796	875	868	848	792
Phosphoric acid		1,219	1,164	1,241	1,217	1,181
Diammonium phosphate		1,315	1,324	1,314 [r]	1,115 [r]	1,093
Ammonium nitrate		127	164	134	149 [r]	151
Fluorine, aluminum fluoride		39	45	42	42	43
Gypsum[e, 4]		125	110	108	113	120
Lime		471	446	476	424	401
Phosphate rock, washed, gross weight		7,461	7,890	8,051	8,220	7,801
Salt, marine		616	700	1,117	1,132	1,127
MINERAL FUELS AND RELATED MATERIALS						
Gas, natural:						
Gross	million cubic meters	2,149	2,167	2,298 [r]	2,343 [r]	2,149
Dry[e]	do.	1,700	1,750	1,850 [r]	1,900 [r]	1,750
Petroleum:						
Crude	thousand 42-gallon barrels	26,800	24,300	25,700	26,200	25,000
Refinery products:						
Liquefied petroleum gas	do.	1,310	1,200	1,250	1,260	1,280
Gasoline	do.	3,380	3,600	3,450	1,840 [r]	1,540
Kerosene	do.	1,590	1,270	1,310	1,770	1,050
Distillate fuel oil	do.	3,500	3,780	3,220	3,600 [r]	3,780
Residual fuel oil	do.	4,020	4,050	3,960	4,060 [r]	4,020
Other[e]	do.	1,120	1,180	660	1,300	1,390
Total[e]	do.	14,900	15,100	13,900	13,800 [r]	13,100

[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]Table includes data available through September 24, 2007.

[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: 2002--259; 2003--296; 2004--304; 2005--333; and 2006--333.

[4]Does not include phosphatic gypsum (waste product) generated during fertilizer production.

TABLE 2
TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2006

(Metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity[1]
Aluminum fluoride	Industries Chimiques du Fluor	Ghannouch, near Gabes	43
Cement:			
Portland	Société des Ciment d'Enfidha (Corporación Uniland, S.A., 88%)	Enfidha	2,000
Do.	Société des Ciment de Jbel Oust (Cimentos de Portugal SGPS, S.A., 100%)	Jbel Oust	1,600
Do.	Société des Ciment de Gabès (Secil - Companhia Geral de Cal e Cimento, S.A., 99%)	Gabes	1,100
Do.	Société des Ciment d'Oum el Kélil (Government, 100%)	Le Kef	970
Do.	Société des Ciment de Bizerte (Government, 100%)	Bizerte	840
Do.	Société des Ciments Artificiels Tunisiens (Colacem S.p.A., 100%)	Ben Arous	800
White	Société Tuniso-Andalouse de Ciment Blanc S.A. (Grupo Prasa, 100%	Feriana	333 [2]
Fertilizer:			
Ammonium nitrate	Group Chimique Tunisienne (Government, 100%)	Ghannouch, near Gabes	330 [3]
Diammonium phosphate	do.	do.	1,300
Triple superphosphate	do.	M'Dhilla	465
Do.	do.	Sfax	330
Gypsum	Les Plâtres Tunisiens (Knauf Gips KG of Germany)	Maknassy	100
Iron and steel:			
Iron ore	Société de Djebel Djerissa (Government, 100%)	Djerissa Mine	175
Do.	do.	Tamera Mine	75
Steel, crude	Société Tunisienne de Sidérurgie (Government, 100%)	El Fouladh	65
Steel, rolled, bar and rod	Intermetal S.A. (Private, 100%)	Ben Arous	300
Petroleum, refined 42-gallon barrels per day	Société Tunisienne des Industries du Raffinage (Government, 100%)	Bizerte	34,000
Phosphate rock	Compagnie des Phosphates de Gafsa (Government, 100%)	Kef Eddour Mine	3,200
Do.	do.	Kef Eschfair Mine	3,000
Do.	do.	Jallabia Mining Center	1,700
Do.	do.	Redeyef Mine	150
Phosphoric acid	Group Chimique Tunisienne (Government, 100%)	Ghannouch, near Gabes	470
Do.	do.	Skhira	375
Do.	do.	M'Dhilla	183
Do.	do.	Sfax	131
Salt	Compagnie Générale des Salines de Tunisie	Sfax and Zarzis	760
Do.	SAIDA S.A.	Sebkhet Sidi El Heni	250

[1]Actual production may significantly exceed nominal capacity.
[2]Nominal capacity is 260,000 metric tons per year (t/yr)
[3]Does not include production capacity of 30,000 t/yr of explosives-grade ammonium nitrate.