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2005 Minerals Yearbook

YEMEN

U.S. Department of the Interior
U.S. Geological Survey

August 2007

The Mineral Industry of Yemen

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Cement, crude petroleum, gypsum, limestone, marble, natural gas, refined petroleum products, salt, sand and gravel, and stone were produced in the Republic of Yemen. The country, which is located on the southern tip of the Arabian Peninsula, has an area of 527,870 square kilometers and supported a population of about 21 million in 2005.

Production and processing of crude oil accounted for a significant portion of the nation's gross domestic product (GDP). In 2005, the GDP at constant prices (real) was estimated to have increased by 3.8%. Since 2001, the continued drop in crude oil production from aging fields had accounted for an incremental reduction in the annual increase of the real GDP, which rose at a rate of 2.6% (revised) in 2004 compared with 3.1% in 2003, 3.9% in 2002, and 4.6% in 2001. The expected decline in crude oil production in 2005, however, was countered by increased international oil prices. Oil export prices averaged $51.5 per barrel in 2005 compared with $36.6 per barrel in 2004 and $27.9 per barrel in 2003. In 2005, the GDP based on purchasing power parity was estimated to be about $19.5 billion[1] and the GDP per capita based on purchasing power parity was $751 (Central Bank of Yemen, 2006b§[2]; International Monetary Fund, 2006§).

In 2005, the value of exports from Yemen was $6.41 billion, of which crude oil accounted for $5.95 billion; steel products, about $3.95 million; and salt, about $725,000. In 2004, the value of exports from Yemen was about $4.68 billion, of which crude oil accounted for $4.3 billion; steel products, about $4.39 million; and salt, $993,000. In 2005, total imports were valued at $4.71 billion compared with $3.86 billion in 2004 (Central Bank of Yemen, 2006a§-c§).

Commodity Review

Metals

Cobalt, Copper, Gold, Nickel, and Platinum.—Cantex Mine Development Corp. drilled the Suwar cobalt-copper-nickel prospect, which was located about 50 kilometers (km) north-northwest of Sana'a, and continued exploration of the Al Masna'a and the Wadi Qutabah cobalt-copper-nickel-platinum prospects. Cantex also began a drilling program at the Al Hariqah gold prospect, which was located about 130 km northwest of Sana'a.

Zinc.—In March, ZincOx Resources plc of the United Kingdom completed a feasibility study of the Jabaili zinc deposit, which was located about 110 km northeast of Sana'a. In October, Jabal Salab Co. Ltd. [the joint-venture company of ZincOx (60% interest) and Anglo American plc and Ansan Wikfs (Hadramaut) Ltd. (20% each)] signed an exploitation contract with the Government's Geological Survey and Mineral Resources Board (ZincOx Resources plc, 2006, p. 5).

Industrial Minerals

Cement.—Domestic production satisfied less than 45% of the local cement demand. Regional cement shortages caused by the construction boom in the Middle East resulted in an increase in the official cement price to $4.70 for a 50-kilogram bag in June from $3.67 per bag. In many instances, retail cement prices were higher. Expansion of existing cement plants and the construction of new cement plants were planned to meet the local demand. Construction continued on the 1-million-metric-ton-per-year (Mt/yr) expansion of Yemen General Corp. for Cement Manufacturing and Marketing's Amran plant. The state-owned Yemen General Corp. also planned a 200,000-metric-ton-per-year (t/yr) expansion of the Bajil cement plant and a 150,000-t/yr expansion of the Al Barh Factory. Arab Yemen Cement Co. planned to build a 1.2-Mt/yr-capacity cement plant at Mukhalla in Hadramout Province. A local consortium planned to build a 1-Mt/yr-capacity plant at Batis and Star Cement of the United Arab Emirates planned to build a 600,000-t/yr-capacity plant near Aden (Irish, 2006; Hizam, 2005§; Yemen Observer, 2005§).

Mineral Fuels

Natural Gas.—Because Yemen had little gas-gathering infrastructure, most of the natural gas in the country was produced from gas caps associated with oilfields and was flared or reinjected for reservoir pressure maintenance. For a number of years, the gas production from fields on the Jannah and the Marib al Jawf Blocks has been reinjected into the reservoirs in anticipation of the eventual development of a liquefied natural gas (LNG) plant. Yemen LNG Co. Ltd. (YLNG) was formed in 1997 to build and operate an LNG plant; the company was unable to finalize long-term gas-supply contracts with international buyers, however, until early 2005, when 20-year LNG sales and purchase agreements were signed with Tractebel LNG Trading S.A. of Belguim, which was renamed SUEZ LNG Trading S.A. in March 2005 (for 2.5 Mt/yr of LNG), Korea Gas Corp. (2 Mt/yr), and Total Gas & Power Ltd. (2 Mt/yr). YLNG awarded construction contracts to Yemgas (a joint venture of JGC Corp. of Japan, the KBR division of the Halliburton Co. of the United States, and Technip of France) for a two-train 6.7-Mt/yr-capacity plant. Initial production from train 1 was expected in late 2008. Production from train 2 was planned to begin by mid-2009 (Middle East Economic Digest, 2005; Air Products and Chemicals, Inc., 2005§).

Petroleum.—In 2005, the Government terminated Yemen Exploration and Production Co's (YEPC) operations on

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[1]Where necessary, values have been converted from Yemeni Rials (YR) to U.S. dollars (US$) at the average rate of YR191.42=US$1.00 for 2005 and YR184.78=US$1.00 for 2004. The implied purchasing power parity conversion rate was YR147.125=US$1.00 for 2005.

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

Block 18 (Marib al Jawf) during the initial year of a 5-year extension and renewal of the production-sharing agreement. YEPC subsequently filed for arbitration against the Government. Yemen Hunt Oil Co. had managed the operations on the block for YEPC.

In 2005, crude oil production began from the Hiswah Field on Block 9, which was operated by Calvalley Petroleum Inc. of Canada, and the Nabrajah Field on Block 43, which was operated by DNO ASA of Norway.

Outlook

The Government's economic diversification program would be helped by the development of metal deposits and additional industrial mineral deposits. The construction industry and the economy would benefit from the expected increased cement production when the construction of proposed cement plants and the expansion of existing plants are completed.

The increase of international oil prices in 2005 may encourage additional oil exploration in the future, but high international oil prices were not entirely a positive development for the Government of Yemen. Because of limited in-country refining capacity, the Government imported some petroleum products at international prices and sold them locally at highly subsidized prices (gasoline at $0.69 per gallon and diesel fuel at $0.34 per gallon). In 2005, widespread protests erupted in response to an increase in the official prices of fuels; the price of gasoline, for example, was increased to $1.29 per gallon prior to the protests. Subsequently, the reduction of the official price of gasoline to $1.19 per gallon in July helped quell the protests. Future fuel-price-related civil disturbances could adversely affect the country's economy and investor's interest in the mineral industry of Yemen (Xinhua News Agency, 2005§).

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Major Source of Information

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TABLE 1

YEMEN: PRODUCTION OF MINERAL COMMODITIES[1]

(Thousand metric tons unless otherwise specified)

Commodity[2]		2001	2002	2003	2004[e]	2005[e]
Cement	metric tons	1,493,000	1,561,000	1,541,000	1,546,300 [3]	1,550,000
Gypsum	do.	44,000	41,000	42,000	37,000 [r]	38,000
Marble	thousand square meters	101	99	98 [r]	97 [r]	100
Natural gas:[e]						
Gross[4]	million cubic meters	18,000	29,991 [3]	30,000	28,500 [r]	29,500
Flared and used	do.	900	956 [3]	1,000	1,000	1,000
Liquids	thousand 42-gallon barrels	2,400	2,400	2,400	2,400	2,400
Petroleum:						
Crude	do.	165,000	159,924	157,000	147,000 [r]	149,000
Refinery products:						
Liquefied petroleum gas	do.	910	1,100	1,100	800 [r]	900
Naphtha	do.	5,100	3,100	3,500	1,100	1,100
Benzene	do.	7,100	7,200	7,400	8,100 [r]	8,100
Kerosene	do.	3,630	3,450	3,510	3,100 [r]	3,300
Distillate fuel oil	do.	12,500	13,800	16,000 [r]	16,900 [r]	17,000
Residual fuel oil	do.	9,320	6,770	10,000 [r]	9,000 [r]	9,000
Other[e]	do.	420	420	640 [r]	640 [r]	640
Total	do.	39,000 [r]	35,800 [r]	42,200 [r]	39,600 [r]	40,000
Salt	metric tons	95,000	125,000	116,000	88,000 [r]	90,000
Sand and gravel		607	612	624	668 [r]	700
Stone, quarried		2,486	2,288	2,333	2,269 [r]	2,300

[e]Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. [r]Revised.

[1]Table includes data available through September 25, 2006.

[2]In addition to the commodities listed, feldspar and silica sand may have been produced, and limestone for cement and rolled steel bars were produced, but available information is inadequate to make estimates of output.

[3]Reported figure.

[4]Most natural gas that was produced was stripped of hydrocarbon liquids and reinjected.