



2007 Minerals Yearbook

BANGLADESH

THE MINERAL INDUSTRY OF BANGLADESH

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Bangladesh lacks metallic mineral reserves but it has small reserves of coal, natural gas, and petroleum. The country was reported to have large potential for discovery of natural gas, and exploration for natural gas was active in 2007. Increased output of natural gas could place Bangladesh as one of the important producers in the South Asia region.

Production

Bangladesh produced small amounts of industrial minerals and processed products, which included cement, clay, limestone, nitrogen fertilizers, and salt. This production was not significant to the national economy. Bangladesh Steel and Engineering Corp. produced a small quantity of steel ingot, and Eastern Refinery Ltd. processed imported crude oil into petroleum products for domestic use. The country was estimated to show slight increases in output of its mineral commodities (except steel, owing to outdated facilities) (table 1).

Structure of the Mineral Industry

Bangladesh Oil, Gas and Mineral Corp. (Petrobangla) is a state-owned company that was responsible for oil and gas exploration, production, and distribution. In addition, the company was involved in the exploration for and production of such minerals as coal, granite, and limestone for the manufacture of cement. The country's cement sector was dominated by international companies and local private investors. Several of the world's leading cement producers had operations in Bangladesh, including Cementos Mexicanos, S.A. de C.V. (CEMEX), HeidelbergCement AG of Germany, Holcim Ltd. of Switzerland, and Lafarge Group of France (table 2).

Commodity Review

Industrial Minerals

Cement.—Lafarge Surma Cement Ltd. of Bangladesh started production of clinker and cement for the Bangladesh market. The fully integrated dry-process plant produced high-quality low alkali cement at Chhatak in the Sunamganj District using limestone and shale from its own mines which are located 17 kilometers away across the border in the State of Meghalaya, India. An overland conveyor belt delivered 800 metric tons per hour of raw material. The cement plant produced 4,000 metric tons per day of cement. Initial production capacity was about 1.5 million metric tons per year (Mt/yr). Cementos Molins S.A. of Spain and Lafarge invested \$270 million in the cement plant. The other equity partners included Asian Development Bank, International Finance Corp., and local conglomerates Islam Group and Sinha Group. Bangladesh's total cement production capacity was 17 Mt/yr from 65 plants (News Today, The, 2006).

Granite.—Maddhapara Granite Mining Co. Ltd., which is a subsidiary of Petrobangla, operated a hard-rock mine at Maddhapara in the Dinajpur District. The mine was fully operational in 2007 with a production capacity of 1.65 Mt/yr of granite. During the mine development period, some 347,000 metric tons (t) of granite was produced, of which 133,000 t was used as construction material (Bangladesh Oil, Gas and Mineral Corp., 2007).

Mineral Fuels

Coal.—Petrobangla's coal mining operation was conducted by Barapukuria Coal Mining Co. Ltd. at Barapuluria in the Dinajpur District. The coal mine had a production capacity of 1 Mt/yr of coal. Coal extraction was by long-wall mining. The coal was delivered to a thermal powerplant. Development work of the next long-wall coal face was underway, and production was expected to begin in 2007 (Bangladesh Oil, Gas and Mineral Corp., 2007).

Global Coal Management plc continued to wait for approval from the Government for its Phulbari coal project's plan of development. The project's environmental impact and feasibility studies had been completed, and mining operations could be done by open pit method. After coal preparation, the final product would be coking coal and thermal coal for both export and domestic use. The bituminous coal resource of 572 million metric tons was large enough for the mine to last more than 30 years at a mining rate of 15 Mt/yr (Global Coal Management plc, 2007).

Natural Gas.—Cairn Energy plc of the United Kingdom began exploration drilling on the offshore Magnama structure in Block 16 after completing two-dimensional seismic surveys. Magnama was estimated to contain 99 billion cubic meters of gas. Block 16, in which Cairn held a 75% interest, was home to the Sangu gasfield, which produced an average of 2.7 million cubic meters per day of gas in 2007 (Petroleum Economist, 2007).

Petrobangla's exploration and production arm, Bangladesh Petroleum Exploration and Production Co. Ltd. (BAPEX), conducted exploration for oil and gas in the country. BAPEX performed a seismic survey in Block 11 and a drilling program with its associated seismic data processing and laboratory facilities. The company completed seismic operations in Block 9 and planned to drill an exploration well at Srikail. BAPEX operated the Fenchuganj, the Saldanadi, and the Shahbazpur gasfields (Bangladesh Oil, Gas and Mineral Corp., 2007).

Petrobangla's two production units are Bangladesh Gas Fields Co. Ltd. (BGFCL) and Sylhet Gas Fields Ltd. (SGFL). BGFCL, which operated the Bakhrabad, the Habiganj, the Meghna, the Narshingdi, and the Titas gasfields, was drilling two new wells at Titas and planned to drill additional wells at Habiganj and Narshingdi. SGFL, which operated the Beanibazar, the Kailashtila, the Rashidpur, and the Sylhet gasfields, was drilling

two new wells at Kailashtila. Both companies processed their own gas before supplying it to transmission companies (Bangladesh Oil, Gas and Mineral Corp., 2007).

Petroleum.—Eastern Refinery Ltd. was Bangladesh's only petroleum refining company. As a subsidiary of Bangladesh Petroleum Corp. (BPC), the company processed imported crude oil at a refinery in Chittagong and transferred petroleum products to distribution and marketing subsidiaries of BPC. The refinery had a processing capacity of 34,000 barrels per day of crude oil (Eastern Refinery Ltd., 2007).

Eastern Refinery Ltd., 2007, Company profile: Eastern Refinery Ltd. (Accessed July 17, 2007, at <http://goliath.ecnext.com/coms2/product-compint-0000951787-pages.html>.)

Global Coal Management plc, 2007, Interim report: Global Coal Management plc. (Accessed March 19, 2007, at <http://www.londonstockexchange.com/lsecws/ifspages/marketnewspopup.aspx?id=1437608>.)

News Today, The, 2006, Lafarge Surma Cement starts production: The News Today, December 23, 2006. (Accessed August 21, 2007, at <http://www.newstoday-bd.com/business.asp?newsdate=12/23/2006>.)

Petroleum Economist, 2007, News in brief: Petroleum Economist, v. 74, no. 11, November, p. 45.

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TABLE 1
BANGLADESH: ESTIMATED PRODUCTION OF MINERAL COMMODITIES^{1,2}

(Metric tons unless otherwise specified)

| Commodity ³ | 2003 | 2004 | 2005 | 2006 | 2007 | |
|--|----------------------------|------------------------|-----------|---------------------|-----------|--------|
| Cement, hydraulic ⁴ | 5,000,000 | 5,000,000 | 5,100,000 | 5,100,000 | 5,100,000 | |
| Clays, kaolin ⁴ | 8,200 | 8,300 | 8,400 | 8,500 | 8,600 | |
| Coal | 800,000 | 850,000 | 900,000 | 950,000 | 1,000,000 | |
| Gas, natural, marketed ^{4,5} | million cubic meters | 12,000 | 13,000 | 14,000 | 15,000 | 16,000 |
| Granite | 347,000 | 650,000 | 900,000 | 1,200,000 | 1,500,000 | |
| Iron and steel, metal: ⁴ | | | | | | |
| Steel, crude, ingot only | 25,000 | 25,000 | 20,000 | 10,000 ^r | -- | |
| Steel products | 70,000 | 70,000 | 70,000 | 70,000 | 60,000 | |
| Nitrogen, N content of urea, ammonia, ammonium sulfate | 1,388,700 ⁶ | 1,379,500 ⁶ | 1,380,000 | 1,250,000 | 1,300,000 | |
| Petroleum: | | | | | | |
| Crude | thousand 42-gallon barrels | 1,800 | 1,700 | 1,900 | 2,000 | 2,100 |
| Refinery products | do. | 9,000 | 9,100 | 9,200 | 9,300 | 9,400 |
| Salt, marine ⁴ | 350,000 | 350,000 | 350,000 | 350,000 | 360,000 | |
| Stone, limestone ⁴ | 34,000 | 36,000 | 37,000 | 38,000 | 40,000 | |

^rRevised. do. Ditto. -- Zero.

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

²Table includes data available through July 8, 2008.

³In addition to the commodities listed, crude construction materials, such as sand and gravel and other varieties of stone, including granite, presumably are produced, but available information is inadequate to make reliable estimates of output.

⁴Data are for years ending June 30 of that stated.

⁵Gross production is not reported; the quantity vented, flared, or reinjected is believed to be negligible.

⁶Reported figure.

TABLE 2
BANGLADESH: STRUCTURE OF THE MINERAL INDUSTRY IN 2007

(Thousand metric tons unless otherwise specified)

| Commodity | | Major operating companies and major equity owners | Location of main facilities | Annual capacity ^c |
|--------------|------------------------------|---|--|------------------------------|
| Cement | | Bangladesh Oil, Gas, and Mineral Corp. (Petrobangla) | Chittagong | 1,000 |
| Do. | | do. | Sylhet | 1,100 |
| Do. | | Cemex Cement Bangladesh Ltd. | Mahmudnagar | 600 |
| Do. | | HeidelbergCement Bangladesh Ltd. | Chittagong and Dhaka | 1,000 |
| Do. | | Holcim (Bangladesh) Ltd. | Bagerhat and Narayanganj | 1,300 |
| Do. | | Lafarge Surma Cement Ltd. (Lafarge Group and Cementos Molins S.A.) | Chhatak, Sunamganj | 1,500 |
| Do. | | Premier Cement Mills Ltd. | Muktarpul and Munshiganj | 1,460 |
| Do. | | Shah Cement Industries Ltd. | Dhaka | 1,860 |
| Do. | | Unique Cement Industries Ltd. | Chittagong, Dhaka, and Sylhet | 1,440 |
| Coal | | Barapukuria Coal Mining Co. Ltd. [Bangladesh Oil, Gas, and Mineral Corp. (Petrobangla), 100%] | Barapukuria | 1,000 |
| Fertilizer | | Bangladesh Chemical Fertilizer Corp. | Auganish | 560 |
| Do. | | do. | Fenchugani | 100 |
| Do. | | do. | Ghorasai | 600 |
| Gas, natural | million cubic meters per day | Bangladesh Gas Fields Co. Ltd. [Bangladesh Oil, Gas, and Mineral Corp. (Petrobangla), 100%] | Bakhrabad, Habiganj, Meghna, Narshingdi, and Titas | 22 |
| Do. | do. | Bangladesh Petroleum Exploration and Production Co. Ltd. (BAPEX) [Bangladesh Oil, Gas, and Mineral Corp. (Petrobangla), 100%] | Fenchuganj and Saldanadi | 1.6 |
| Do. | do. | Cairn Energy plc | Sangu (offshore) | 3.2 |
| Do. | do. | Niko Resources Ltd. | Bibiyana and Feni | 6.1 |
| Do. | do. | Sylhet Gas Fields Ltd. [Bangladesh Oil, Gas, and Mineral Corp. (Petrobangla), 100%] | Beanibazar, Kailashtila, Rashidpur, and Sylhet | 5.4 |
| Do. | do. | Tullow Oil plc | Bangura | 1.7 |
| Do. | do. | Unocal Bangladesh Ltd. | Jalalabad and Moulovibazar | 9.7 |
| Granite | | Maddhapara Granite Mining Co. Ltd. | Maddhapara | 1,650 |
| Petroleum | | | | |
| Crude | 42-gallon barrels per day | Cairn Energy plc | Sangu | 30,000 |
| Refined | do. | Eastern Refinery Ltd. | Chittagong | 34,000 |
| Steel, crude | | Bangladesh Steel and Engineering Corp. | do. | 20 |

^cEstimated; estimated data are rounded to no more than three significant digits. Do., do. Ditto.