THE MINERAL INDUSTRY OF

BANGLADESH

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Growth in Bangladesh's gross domestic product (GDP) shrank to 3% because of devastating floods (Far Eastern Economic Review, 1999, p. 76). Per capita GDP was \$1,330 in 1997. Inflation jumped to 6.3% in 1998, and the trade deficit fell 25% to \$1 billion. The garment industry accounted for 70% of the country's exports, while grain imports accounted for the largest bill. The current account deficit broadened to 2.9% of GDP, and the overall budget deficit widened to 4.7% of GDP. The currency, called the taka, held fairly firm but was devalued 1.7% on July 5 and again 3% in October. The exchange rate was 48.50 taka for the dollar in November 1998. Currency turmoil in Asia had not had much effect on the country's financial sector. Remittances from Bangladeshi workers abroad helped maintain relatively stable foreign exchange reserves at \$1.7 billion. The Government planned to privatize 60 state-run enterprises but had sold only 5 companies.

Bangladesh has few proven mineral resources. The mineral resources identified by the Geological Survey of Bangladesh in order of importance are coal, natural gas, limestone, kaolin and alluvial clay, glass sand, peat, dimension and construction stones, and mineral sand. The country does not have any identified metallic mineral deposits. However, a metallic anomaly and traces of metallic minerals found in the basement complex in the northwestern shelf zone of the Bengal Basin gave indications of copper, lead, and zinc. Coal deposits have been exploited and small cement plants are set up for the utilization of indigenous limestone to make clinker. Salt was produced on a small scale at several thousand seawater evaporation sites in the coastal areas of Chittagong and Cox's Bazar. (See table 1.) Heavy mineral sand deposits were found along the beaches from Kutubdia to Teknaf.

Chittagong Steel Mills' production was at its lowest level when it was slated for privatization. Its steel melting capacity is around 150,000 metric tons per year (t/yr) using scrap and pig iron. The company has a 130,000-t/yr blooming mill, a 100,000-t/yr bar mill, a 36,000-t/yr hot strip mill, a 36,000-t/yr heavy plate mill, and a 50,000-t/yr galvanizing shop. The tender for the sale of the company was put on hold as the Government attempted to assess interest in the plants.

The country relies heavily on imported cement to meet its domestic demand. Cement consumption in 1998 was 3.1 million metric tons. The Dhaka area accounted for 30% of total consumption and the Khulna area 20%. Other main markets were Chittagong and Rajshahi. Bangladesh produced 1.6 million metric tons per year (Mt/yr) of cement, of which Chhatak Cement accounted for 250,000 t/yr. The balance was produced by 12 separate grinding operations. Four new

grinding plants were planned to go into production by 2002, adding 1.5 Mt/yr of capacity. Scancem planned to form a joint venture with Sumitomo Corp. of Japan to set up a \$90 million grinding plant. Also, Commonwealth Development Corp. of the United Kingdom pledged \$30 million for a new 1.2-Mt/yr grinding plant (International Cement Review, 1998).

Bangladesh has enormous deposits of natural gas that are available for power generation, industrial, and other uses. Fertilizer plants used sizable amounts of natural gas. Bangladesh Chemical Industries in Dhaka planned to build a 1,200-metric-ton-per-day diammonium phosphate plant at Chittagong Urea Fertilizer's site at Rangadia, Chittagong. The country produced both ammonia and urea fertilizers. The Semutang-5 appraisal well onshore Block 15 tested positive across part of a natural gas-bearing zone. The partners are Cairn Energy PLC of the United Kingdom (52.5%) as operator, Shell Bangladesh Exploration and Development (SBED) (17.5%), and Midlands Hydrocarbons of Bangladesh (30%).

Commercial production at the Sangu offshore gasfield near Chittagong in the Bay of Bengal, a joint venture of the stateowned Petrobangla with Cairn Energy, Halliburton Co. of the United States, and SBED, was launched in April. It started up production at a rate of 51,000 cubic meters per day (m³/d) of gas and raised output gradually to 136,000 m³/d. The Government contracted 8 out of a total of 23 oil and gas exploration blocks to different foreign companies. Petrobangla awarded Block 5 to a joint venture of Cairn Energy (50%) and SBED (50%) in the second licensing round of 1998. Twentytwo oil companies were waiting a decision from the Government to resume negotiations for 12 concessions in both the north and south of the country and in the Bay of Bengal. Occidental Petroleum Corp. of the United States planned to spend \$200 million on gas exploration by drilling six wells—three exploration wells and three development wells (World Oil, 1998). It was drilling exploration wells in a gasfield in northeastern Bibiyana. The company planned to produce 28,300 m³/d of gas from Jalabad field by the end of 1998. During 1998, Bangladesh saw a total of nine wells drilled.

The national power grid failed in July for the second time in 2 months. Bangladesh required an average 2,300 megawatts (MW) a day of electricity but produced only 2,000 MW. An additional 500 MW of electricity could be generated by public and private utilities beginning in December. Electricity, in general, is produced by both thermal and hydroelectric powerplants.

A consortium financially backed by International Finance Corp. agreed to invest \$103 million in a 110-MW barge-

mounted powerplant near Khulna. The partners are Wartsila NSD Corp. of Finland and two local companies. The powerplant should reduce power shortages in the country's underdeveloped southwestern region and would be the first private sector utility. Permits also were issued for three additional barge-mounted powerplants—two 236-MW units at Haripur, of which one was to be built and operated by AES Power Corp. of the United States, and a 130-MW unit at Baghabari (Journal of Commerce, 1998). Another bargemounted powerplant with a capacity of 100 MW would be set up in Jessore District. A total of \$1 billion would be invested in the private power sector. The Government planned to gradually privatize all power sector operations, including billing and distribution.

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Major Sources of Information

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Major Publications

Bangladesh Bureau of Statistics, Dhaka: Monthly Statistical Bulletin of Bangladesh. Statistical Yearbook of Bangladesh.

${\bf TABLE~1}\\ {\bf BANGLADESH:~ESTIMATED~PRODUCTION~OF~MINERAL~COMMODITIES~1/}$

(Metric tons unless otherwise specified)

Commodity 2/		1994		1995		1996	1997	1998
Cement, hydraulic 3/		280,000		280,000		285,000	285,000	290,000
Clays, kaolin 3/		3,283	4/	6,541	4/	7,000	7,200	7,500
Gas, natural, marketed 3/5/	million cubic meters	5,974	4/	6,000		6,100	6,200	6,300
Iron and steel, metal: 3/								
Steel, crude (ingot only)		34,000		36,000		37,000	36,000	35,000
Steel products		87,000		88,000		90,000	90,000	90,000
Nitrogen, N content of urea, ammonia, and ammonium sulfate 4/		1,027,400		1,270,600		1,233,000	1,079,600	1,129,200
Petroleum:								
Crude	thousand 42-gallon barrels	1,184	4/	1,190		1,200	1,300	1,350
Refinery products	do.	7,600		7,700		8,760 r	7,900	8,500
Salt, marine 3/		350,000		350,000		350,000	350,000	350,000
Stone, limestone 3/		25,679	4/	23,474	4/	24,000	25,000	26,000

r/ Revised.

 $^{1/\,} Table$ includes data available through June 15, 1999.

^{2/} In addition to the commodities listed, crude construction materials, such as sand and gravel and other varieties of stone, presumably are produced, but available information is inadequate to make reliable estimates of output levels.

^{3/} Data are for years ending June 30 of that stated.

^{4/} Reported figure.

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