THE MINERAL INDUSTRIES OF

BHUTAN AND NEPAL

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BHUTAN

Bhutan's economy continued to grow at a slow but steady pace. In 2001, gross domestic product (GDP) grew at 6%, and the average inflation rate remained at 4.5%. The country's foreign reserves stood at $293 million. Apart from foreign aid, Bhutan generated income from its hydroelectric power projects, which sold most of their electricity to India. The mineral industry of Bhutan was small and dominated by the production of cement, coal, dolomite, and limestone and was insignificant to its economy.

In July, the National Assembly promulgated a new electricity act, providing a formal legal basis for exploitation of the country's large hydropower potential. One provision was for the establishment of the Bhutan Electricity Authority, which would be responsible for the construction, operation, and maintenance of the country's powerplants.

Bhutan Ferro Alloys planned to increase its capacity to produce silicon metal or low- to medium-carbon silicomanganese. The company had a production capacity of 15,000 metric tons per year (t/yr) of ferrosilicon with a 24-megawatt (MW) Elkem electric arc furnace. The new capacity would be installed at its existing plant with a 12-MW furnace to produce silicon metal or silicomanganese. Indian ferroalloys producers complained about Bhutanese ferrosilicon imports that did not carry any duty. Almost all of Bhutan's output of 15,000 t/yr was exported to India. Bhutan Ferro Alloys is a joint venture between the Government, Marubeni Corp. of Japan, and a local partner (Metal Bulletin, 2001a).

Two major power generation projects, at Kurichu and Tala, made significant progress during 2001. The first of four turbines at Kurichu was installed and commissioned in April. The first and second generating units with 15 MW each were connected with the Indian electric grid in August. The larger 1,020-MW Tala project was to be completed by 2004 or 2005 (Far Eastern Economic Review, 2002a).

NEPAL

The Nepalese economy was bleak in 2001 with a below-targeted GDP growth of 5% and a massive budget deficit. The Government planned to meet budget deficit through new taxes, foreign bilateral and multilateral loans, internal borrowing, and sale of treasury bills and development bonds. Exports of hand-woven woolen carpets, ready-made garments, and cashmere shawls, which accounted for 80% of the country's total exports, declined for 2001. A trade dispute with India affected Nepal's export earnings. The Indian Government proposed to levy a 50% value-added tax on raw materials imported from Nepal for the production of clarified butter, zinc oxides, synthetic yarns, and copper wire. Labor disputes also affected the distillery industry's revenue and employment. A shortfall in foreign assistance was the result of the economic downturn in Europe and the United States (Far Eastern Economic Review, 2001).

Nepalese imports from India included chemical fertilizer, pesticides, petroleum products, synthetics, textiles, thread, and vehicles and parts. Imports from other countries included computer parts, copper wire and sheet, medical equipment, medicine, palm oil, paraffin wax, plastic granules, steel sheets, and zinc ingots. The mineral industry of Nepal was dominated by the production of cement, clay, coal, limestone, magnesite, and marble.

Nepal's rerolling mills faced a difficult time owing to high electricity costs, oversupply, low domestic demand, and cheap imports from India. The tariff reduction to 1% on Indian steel also added to the problems. Of a total of 35 mills, only 5 or 6 were running at full capacity with 3 to 4 operating for only part of the year. Of the 14 mills at Biratnagar, 200 kilometers southeast of Kathmandu, 12 were closed. The total national rerolling capacity was 600,000 t/yr. In 2000, the demand for reinforcing steel was 130,000 metric tons (t). The 10 mills still in operation ran at half their capacity, producing a total of 150,000 t (Metal Bulletin, 2001b).

The Kali Gandaki project, Nepal's largest hydroelectric powerplant, was scheduled to begin operation in January 2002. The total cost was $490 million. The plant was funded by the Asian Development Bank, the Japan Bank for International Cooperation, the Nepal Electricity Authority, and the Government (Far Eastern Economic Review, 2002b).

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Major Sources of Information

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TABLE 1
BHUTAN AND NEPAL: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Country and commodity 2/		1997	1998	1999	2000 e/	2001 e/
BHUTAN e/ 3/						
Cement		160,000	150,000	150,000	150,000	160,000
Coal		70,000	69,000	68,000	67,000	65,000
Dolomite		250,000	255,000	250,000	260,000	265,000
Ferrosilicon		15,000	18,000	18,000	15,000	16,000
Gypsum		50,000	53,000	54,000	54,000	55,000
Limestone		270,000	272,000	275,000	278,000	280,000
Marble	square meters	4,000	4,000	4,000	4,000	4,000
Quartzite		50,000	51,000	52,000	52,000	53,000
Slate	square meters	9,000	9,000	9,000	9,000	9,000
Talc		3,000	3,200	3,400	3,700	3,800
NEPAL 3/						
Cement e/		225,000	280,000	290,000	300,000	285,000
Clay, red		5,129	4,664	3,119	2,304 4/	2,700
Coal:						
Bituminous		8,163	15,770	10,954	17,530 4/	15,000
Lignite		785	350	312	52 4/	100
Total		8,948	16,120	11,266	17,582 4/	15,100
Gemstones:						
Quartz	kilograms	3,000	2,000	3,200	2,830 4/	3,000
Tourmaline	do.	5	21	11	15	20
Total	do.	3,005	2,021	3,211	2,845	3,020
Lime, agricultural e/		26,000	25,000	24,000	23,000	22,000
Magnesia, dead-burned e/		25,000	26,000	26,000	24,000	25,000
Salt	thousand tons	7	6	1 r/	2 4/	2
Steel, rolled e/		110,000	130,000	130,000	120,000	110,000
Stone:						
Limestone		368,666	484,154	401,700	244,586 4/	280,000
Marble:						
Chips		636	613	660	655 4/	640
Slab, cut	square meters	769,400	656,230	704,750	797,000 4/	750,000
Craggy	do.	5,400	2,680	2,092	1,530 4/	1,600
Quartzite e/		2,600	2,700	2,700	2,800	2,800
Talc		6,809	5,553	6,157	5,852 4/	6,000

e/ Estimated. r/ Revised.

1/ Includes data available through July 25, 2002.

2/ In addition to the commodities listed, crude construction materials, such as sand and gravel and a variety of stone, presumably are produced in Bhutan and Nepal, but information is inadequate to make reliable estimates of output levels.

3/ Estimated data are rounded to no more than three significant digits; may not add to totals shown.

4/ Reported figure.