



2013 Minerals Yearbook

BHUTAN AND NEPAL

THE MINERAL INDUSTRIES OF BHUTAN AND NEPAL

By Yolanda Fong-Sam

BHUTAN

In 2013, Bhutan's economy continued to grow, albeit at a slower rate of real growth of the gross domestic product (GDP). The real growth rate was 5.2% compared with 6.5% (revised) in 2012. In 2013, the GDP based on purchasing power parity was about \$5.2 billion, and the average inflation rate was 8.6%. In addition to receiving financial assistance from India, Bhutan generated income by selling hydroelectric power to India (Asian Development Bank, 2014; U.S. Central Intelligence Agency, 2014).

The mineral industry of Bhutan was small in scale relative to its main economic sector (agriculture and forestry), and was not a significant contributor to the country's economy. The country produced cement, coal, ferrosilicon (exported), iron ore, and industrial minerals used for construction. In 2013, iron ore production increased by 448% to 20,505 metric tons (t) from 3,741 t in 2012; limestone production, by 49% to more than 1 million metric tons (Mt) from 677,128 t; dolomite production, by 16% to 1.74 Mt from about 1.5 Mt; and gypsum production, by 12%. Production decreases were reported for talc (40%), coal (21%), and stone (11%). Bhutan and Nepal were mineral trade partners. Data on mineral production are in table 1 (U.S. Central Intelligence Agency, 2014).

Table 2 is a list of major mineral industry facilities in Bhutan.

References Cited

- Asian Development Bank, 2014, Basic statistics 2014, Bhutan: Asian Development Bank, 6 p. (Accessed January 15, 2015, at <http://www.adb.org/sites/default/files/publication/42007/basic-statistics-2014.pdf>.)
U.S. Central Intelligence Agency, 2014, Bhutan, *in* The world factbook: U.S. Central Intelligence Agency. (Accessed January 15, 2015, at <https://www.cia.gov/library/publications/the-world-factbook/geos/bt.html>.)

NEPAL

In 2013, Nepal's real GDP growth rate was 3.6% compared with 4.5% (revised) in 2012. The country's GDP based on purchasing power parity was about \$42 billion, and the average inflation rate was 9.9%. In 2013, Nepal's exports were valued

at \$1.06 billion, which accounted for about 2.5% of the GDP. Nepal's main export partners were India (93%) and Bangladesh (4%). Imports were valued at \$6.3 billion, which accounted for about 15% of the GDP. Nepal's imports came mainly from India (74.4%), the Republic of Korea (3.1%), and China (2.5%). The major imports included gold, electrical goods, machinery and equipment, and petroleum products (Asian Development Bank, 2014; U.S. Central Intelligence Agency, 2014).

Nepal's mineral industry was dominated by the production of industrial minerals, which were used mainly for domestic construction. Cement and brick production were Nepal's main mineral-related industries. The country also produced cement, red clay, coal, gemstones, limestone, marble, and rolled steel. Nepal's mineral resources were mostly unexploited and its mineral industry was not significant to the country's economy. In 2013, quartz production increased by 208% to 3,429 t from 1,114 t in 2012, and cement production increased by 11%. Decreases in commodity production were reported for kyanite (54%), coal (49%), and limestone (38%). Nepal has the potential to develop its hydropower industry, which, when developed, could have a capacity of 42,000 megawatts (table 1; U.S. Central Intelligence Agency, 2014).

Nepal's cement industry has about 6.6 Mt of annual production capacity. The country imported cement from Bhutan and India. About 45 cement factories were operating in Nepal, but only a few produced clinker. The country previously depended on India to supply 90% of its clinker needs (Bell, 2012, p. 109).

Table 2 is a list of major mineral industry facilities in Nepal.

References Cited

- Asian Development Bank, 2014, Basic statistics 2014, Nepal: Asian Development Bank, 6 p. (Accessed January 15, 2015, at <http://www.adb.org/sites/default/files/publication/42007/basic-statistics-2014.pdf>.)
Bell, Peter, 2012, Emerging market challenges: International Cement Review, July, p. 109.
U.S. Central Intelligence Agency, 2014, Nepal, *in* The world factbook: U.S. Central Intelligence Agency. (Accessed January 14, 2015, at <https://www.cia.gov/library/publications/the-world-factbook/geos/np.html>.)

TABLE 1
BHUTAN AND NEPAL: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Country and commodity ²	2009	2010	2011	2012	2013
BHUTAN					
Cement ^e thousand metric tons	180	200	544	521	500
Coal, bituminous	48,545	87,814	108,904	98,731	77,743
Dolomite	1,028,993	1,192,374	1,082,300	1,499,534	1,740,015
Ferrosilicon ³	90,798	97,528	96,711 ^r	107,819 ^r	110,000
Granite square meters	217	18,731	462	1,806	1,800
Gypsum	299,735	344,034	352,233	313,172	351,420
Iron ore, gross weight	--	--	--	3,741	20,505
Limestone	591,027	715,956	649,291	677,128	1,006,234
Marble	31	--	71,582	59,541	60,708
Quartzite	82,578	104,580	95,015	88,630	90,909
Slate square meters	1,765	--	--	--	--
Stone	475,614	716,760	1,842,678	1,494,467	1,335,030
Talc	64,381	26,302	8,562	16,062	9,584
NEPAL					
Cement ^e thousand metric tons	295	1,360 ^r	2,200 ^r	2,700 ^r	3,000
Clay, red cubic meters	8,950	6,705 ^{r,4}	9,066 ^r	13,400 ^r	12,490 ^p
Coal, bituminous	14,819	3,391 ^{r,4}	10,904 ^r	14,084 ^r	7,130 ^p
Gemstones:					
Kyanite kilograms	NA	NA	2,980	1,934	890 ^p
Quartz do.	826	1,000	560 ⁴	1,114	3,429 ^p
Tourmaline do.	NA	NA	--	--	607 ^p
Quartzite, slab ^e square meters	--	3,000	-- ^r	-- ^r	2,000 ^p
Steel, rolled ^e thousand metric tons	85	85	80	80	80
Stone:					
Limestone	582,999	580,000	1,276,452 ^r	4,719,542 ^r	2,940,240 ^p
Marble:					
Aggregate cubic meters	NA	NA	13,593 ^r	--	-- ^p
Chips	1,047	1,330 ^{r,3}	1,969 ^r	2,995 ^r	2,062 ^p
Craggy cubic meters	8,062	--	--	--	--
Slab, cut do.	426	500	13,595 ^r	-- ^r	-- ^p
Talc	6,601	1,655 ^{r,3}	6,935 ^r	5,140 ^r	4,410 ^p

^eEstimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ^pPreliminary. ^rRevised. do. Ditto.

NA Not available. -- Zero.

¹Table includes data available through February 9, 2015.

²In addition to the commodities listed, metallic commodities, such as copper wire, and manganese; and 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.

³Data compiled from the United Nations Comtrade database for all ferrosilicon exported from Bhutan.

⁴Reported figure.

TABLE 2
BHUTAN AND NEPAL: STRUCTURE OF THE MINERAL INDUSTRIES IN 2013

(Thousand metric tons unless otherwise specified)

Country and commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity ^e
BHUTAN			
Cement	Dungsam Cement Corp. Ltd. (Druk Holding & Investments Ltd., 100%)	Nganglam, Pemagatshel District	1,360
Do.	Penden Cement Authority Ltd. (Druk Holding & Investments Ltd., 40%)	Gomtu, Samtse District	350
Dolomite	Jigme Mining Corp. Ltd.	do.	2,000
Ferrosilicon	Bhutan Ferro Alloys Ltd. [Druk Holding & Investments Ltd., 100% (Government of Bhutan, Marubeni Co., and Tashi Commercial Co.)]	Phuentsholing, Lhukha District	34
NEPAL			
Cement	Dang Cement Industries Pvt. Ltd. (Ambuja Cement Ltd., 85%)	NA	1,200
Do.	Lhaki Cement Pvt. Ltd.	Bhawani Khola	660
Do.	Hetauda Cement Industries Ltd.	Hetauda, Makwanpur District	260
Do.	Manasa Cement Industry	Chandragadhi, Jhapa District	37
Do.	More than 40 cement manufacturers under the Cement Manufacturers Association of Nepal (CMAN)	NA	4,500
Lead and zinc	Nepal Metal Co. Ltd. (Government, 71%, and Khetan Group, 13%)	Lari	NA
Magnesite	metric tons Nepal Orind Magnesite Ltd. (Government, 75%; Khetan Group, 12.5%; Orissa Industries Ltd., 12.5%)	Dolkha District	50
Marble	Godavari Marble Industries Ltd.	Godawari, Latitpur District	1

^eEstimated. Do., do. Ditto. NA Not available.