



2007 Minerals Yearbook

BURMA

THE MINERAL INDUSTRY OF BURMA

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In 2007, Burma produced a variety of mineral commodities, including cement, coal, copper, lead, limestone, natural gas, petroleum, precious stones, tin, tungsten, and zinc.

Production

During 2007, most of Burma's mining sector experienced a significant decline in mineral production as it continued the trend that began in 2006. Copper production decreased by about 25% to 14,700 metric tons (t) from 19,500 t (revised) in 2006; refined lead production decreased by about 70% to 165 t from 537 t for the same time period; and silver production decreased to 218 kilograms (kg) from 684 kg in 2006, which represented a decrease in production of 68%. The greatest decrease in production compared with that of other commodities produced in the country in 2007 was reported for zinc mine output, which decreased by 78% to 10 t from 46 t produced in 2006 (table 1).

Among gemstones, production of ruby decreased to 1.395 million carats in 2007 from 1.685 million carats in 2006, or by 17.2%; spinel, to 843,680 carats from 908,555 carats, or by about 7%; and jade, to 20 million kilograms from 20.6 million kilograms, or by 3%. Sapphire production, on the other hand, increased by almost 44% to 608,000 carats from 423,000 carats in 2006. The other minerals for which production decreases were reported were coal (14.4%), tin (10%), and tungsten (7%) (table 1).

Other increases in production were reported mainly in the construction materials and the mineral fuels and related materials sectors. Production of barite, gypsum, cement, and dolomite increased by about 133%, 9%, 7%, and 5%, respectively, in 2007 compared with production in 2006. Production increases were also reported for natural gas (6.5%) and petroleum refinery products (less than 1%) (table 1).

Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities.

Mineral Trade

Burma's total trade value for 2007 was \$9.62 billion,¹ of which exports represented \$6.32 billion, and imports, \$3.30 billion, or the equivalent of 65.7% and 34.3% of total trade, respectively. The total value of exports increased by about 43% compared with \$4.42 billion in 2006, and that of imports increased by about 30% compared with \$2.54 billion in 2006.

In 2007, exports of base metals and ores totaled approximately \$86 million, which represented 1.4% of total exports and a decrease of about 30% compared with exports in 2006. The value of natural gas exports was nearly \$2.67 billion, or 42.3%

of total exports, which was an increase of 78.5% compared with the values in 2006. The principal mineral commodities imported by Burma in 2007 were cement, which was valued at nearly \$24.1 million compared with \$21.2 million in 2006 (an increase of nearly 14%); coal and coke, which together were valued at \$6.7 million compared with \$3.2 million in 2006; and base metals and manufactures, which were valued at \$221.5 million compared with \$185.8 million in 2006 (an increase of 19.2%).

Burma's main export partner in 2007 was Thailand, and total exports to Thailand were valued at \$2.95 billion (about 47% of Burma's total exports). India and China were the second and third ranked export partners, respectively; exports to India were valued at \$752.7 million (or 11.9% of total exports), and exports to China were valued at \$682.6 million (or 10.8% of total exports) (Selected Monthly Economic Indicators, 2008a-e).

Commodity Review

Metals

Copper.—The decrease in copper production during 2007 was owing mainly to the transfer in February 2007 of Ivanhoe Mines Ltd. of Canada's interest in Burma's main copper asset, the Monywa Copper Project, to an independent third-party trust to await the future sale of that interest. The Monywa Copper Project (which includes the S&K Mine), was a 50-50 joint venture between Ivanhoe Myanmar Holdings Ltd. (a wholly owned subsidiary of Ivanhoe Mines) and state-owned Mining Enterprise No. 1. The Canadian company operated in Burma through Myanmar Ivanhoe Copper Co. Ltd. (Monywa JVCo), which was incorporated in Burma (Ivanhoe Mines Ltd., 2007).

Outlook

During 2007, the mineral production of Burma decreased significantly following a similar decrease in 2006. Mineral production is expected to continue to decrease in 2008 as well. Copper production was to remain at a reduced level as a result of Ivanhoe Mine's assets in the Monywa Copper Project being transferred to an independent third party for sale.

References Cited

- Ivanhoe Mines Ltd., 2007, Fact file—The Monywa Copper Project: Vancouver, British Columbia, Canada, Ivanhoe Mines Ltd. report, October 3, 11 p.
- Selected Monthly Economic Indicators, 2008a, Table 1—Foreign trade: Nay Pyi Taw, Myanmar, Central Statistical Organization, May, p. 1.
- Selected Monthly Economic Indicators, 2008b, Table 4—Import of principal commodities: Nay Pyi Taw, Myanmar, Central Statistical Organization, May, p. 5-7.
- Selected Monthly Economic Indicators, 2008c, Table 6—Export of principal commodities: Nay Pyi Taw, Myanmar, Central Statistical Organization, May, p. 16-17.

¹Where necessary, values have been converted from Myanmar kyat (K) to U.S. dollars (US\$) at the rate of K 5.58=US\$1.00 for 2007.

TABLE 1
BURMA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2003	2004	2005	2006	2007
METALS					
Chromium, chromite, gross weight	341	364	409	400 ^e	400 ^e
Copper:					
Mine output, Cu content	27,870	31,756	34,500	19,500 ^r	14,700
Matte, gross weight ^{e,3}	79 ⁴	80	80	80	80
Metal, refined	27,870	31,756	34,500	19,500 ^r	14,700
Gold, mine output, Au content ^e kilograms	90 ⁴	90	90	100	100
Iron and steel:^{e,3}					
Pig iron	1,500	1,500	1,500	1,500	1,500
Direct-reduced iron	40,000	40,000	40,000	40,000	40,000
Steel, crude	25,000	25,000	25,000	25,000	25,000
Lead:					
Mine output, Pb content ^{e,5}	2,000	2,000	2,000	2,000	2,000
Metal:					
Refined	888	289	907	537	165
Antimonial lead (93% Pb) ³	21	-- ^e	-- ^e	NA	NA
Manganese, mine output, Mn content ^e	50	50	50	50	50
Nickel:^e					
Mine output, Ni content	10	10	10	10	10
Speiss (matte), gross weight ³	12 ⁴	10	10	10	10
Silver, mine output, Ag content ⁵ kilograms	778	1,120	2,302	684	218
Tin, mine output, Sn content:⁵					
Of tin concentrate	434	330	402	566	499
Of tin-tungsten concentrate	172	196	306	357	331
Total	606	526	708	923	830
Metal, refined ^e	30	30	30	30	30
Tungsten, mine output, W content:⁵					
Of tungsten concentrate	3	1	2	4	4
Of tin-tungsten concentrate	93	106	166	193	179
Total	96	107	168	197	183
Zinc, mine output, Zn content ⁵	127	196	78	46	10
INDUSTRIAL MINERALS					
Barite	4,850	2,224	2,058	2,930	6,813
Cement, hydraulic	571,505	518,999	543,072	570,031	608,192
Clays:^{e,3}					
Bentonite	856 ⁴	800	800	800	800
Fire clay and fire clay powder	130 ⁴	100	100	100	100
Feldspar ^{e,3}	10,000	10,000	10,000	10,000	10,000
Gypsum	66,069	71,155	67,522	68,651	75,116
Nitrogen, N content of ammonia ^e	62,500 ⁴	34,800	30,000	30,000	30,000
Precious and semiprecious stones:					
Jade kilograms	10,692,780	12,407,576	19,445,758	20,646,832	20,003,409
Diamond ^e carats	5	5	5	5	5
Ruby do.	1,858,889	2,919,147	2,710,002	1,685,481	1,394,939
Sapphire do.	2,297,352	2,241,803	495,192	422,806	608,008
Spinel do.	222,304	1,037,963	2,014,623	908,555	843,680
Salt ^{e,6} thousand metric tons	35	35	35	35	35
Stone:					
Dolomite	4,572	4,184	3,980	4,460	4,674
Limestone, crushed and broken ^e thousand metric tons	3,500	3,300	3,400	3,500	3,800
MINERAL FUELS AND RELATED MATERIALS					
Coal, lignite	109,214	237,949	229,647	331,445	283,703
Gas, natural:					
Marketed million cubic meters	9,799	10,277	11,648	12,501	13,315

See footnotes at end of table.

TABLE 1—Continued
BURMA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2003	2004	2005	2006	2007	
MINERAL FUELS AND RELATED MATERIALS—Continued						
Petroleum:						
Crude	thousand 42-gallon barrels	7,204	7,160	8,133	7,675	7,625
Refinery products ⁷	do.	5,835	5,133	4,638	4,867	4,885

⁶Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ⁴Revised. Do. Ditto. NA Not available. -- Zero.

¹Table includes data available through March 30, 2009.

²In addition to the commodities listed, construction aggregates, sand and gravel, and silica sand are produced, but available information is inadequate to make reliable estimates of output.

³Data are for fiscal year ending March 31 of the following year.

⁴Reported figure.

⁵Data are for the production by the state-owned mining enterprises under the Ministry of Mines.

⁶Brine salt production, in metric tons, reported by the Government was 2003–73,112; 2004–58,395; 2005–116,768; 2006–84,208, and 2007–71,323.

⁷Includes diesel, distillate fuel oil, gasoline, jet fuel, kerosene, and residual fuel oil.

Sources: International Fertilizer Industry Association, Ammonia Statistics 2004; Ministry of Mines and Central Statistical Organization (Yangon), Statistical Yearbook 2004; Selected Monthly Economic Indicators, December 2005, January 2007, and May 2008; World Bureau of Metal Statistics, February 2008.

TABLE 2
BURMA: STRUCTURE OF THE MINERAL INDUSTRY IN 2007

(Metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Cement	Union of Myanmar Economic Holdings Ltd.	Sinmin cement plant	146,000
Coal	No. 3 Mining Enterprise	Kalewa coal mine in Sagaing Division, near Kalewa	13,000
Copper	Ivanhoe Myanmar Holdings Ltd. (50%) and Mining Enterprise No. 1 (50%)	Monywa Copper Project, the S&K Mine, and the Monywa refinery, located in central Burma	40,000
Fertilizer, N content	Myanma Petrochemical Enterprise, 100% state-owned	No. 1 fertilizer plant at Sales, 190 kilometers southwest of Mandalay	94,900
Do.	do.	No. 2 fertilizer plant at Kyun Chaung, central Burma	75,555
Do.	do.	No. 3 fertilizer plant at Kyaw Zwar, central Burma	219,000
Natural gas	million cubic meters	Total E&P Myanmar (31.24%), Unocal Myanmar (28.26%), PTT Exploration and Production Company Limited International Ltd. (25.5%), Myanma Oil and Gas Enterprise (MOGE) (15%)	7,227
Do.	do.	Petronas Carigali Myanmar Inc. (40.91%), Myanma Oil and Gas Enterprise (MOGE) (20.45%), PTT Exploration and Production Company Limited International Ltd. (19.32%), and Nippon Oil Exploration (Myanmar) Ltd. (19.32%)	4,635
Do.	do.	Myanmar Petroleum Resources Ltd. and Myanma Oil and Gas Enterprise (MOGE)	37
Petroleum:			
Crude	thousand 42-gallon barrels	do.	876
Refined	do.	Myanma Petrochemical Enterprise, 100% state-owned	9,490
Do.	do.	do.	2,190
Do.	do.	do.	9,125
Steel	Myanmar POSCO Steel Co. Ltd. (70%)	POSCO steel plant in Yangon	30,000