



2008 Minerals Yearbook

BURMA

THE MINERAL INDUSTRY OF BURMA

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In 2008, Burma, also known as Myanmar, produced a variety of mineral commodities, including cement, coal, copper, lead, natural gas, petroleum, petroleum products, precious and semiprecious stones, tin, tungsten, and zinc.

Production

On May 2, 2008, tropical storm Nargis caused extensive damage, especially in southwestern Burma, and flooding as much as 50 kilometers (km) inland. The storm was considered the worst natural disaster in the recorded history of the country. During 2008, most of Burma's mining sector experienced a significant decline in mineral production. Copper production decreased by about 54%; spinel production, by 32%; coal, 12%; crude petroleum, 5%; and petroleum products, 4.6%. On the other hand, significant increases in production were reported for zinc (100%) and sapphire (86%). Other mineral commodities for which production increases were reported were jade (54.5%), ruby (34%), refined lead (22.4%), and cement (11%) (table 1; Thaindian News, 2009). Burma's sole copper mine (the Monywa copper project) halted operations in April 2008 for undisclosed reasons. Operations were expected to restart in the second quarter of 2009 (Intellasia.net, 2009).

Mineral Trade

Burma's total trade value for 2008 was \$11.32 billion,¹ of which exports represented \$7 billion, and imports, \$4.3 billion, or the equivalent of 61.8% and 38.2% of total trade, respectively. The total value of exports increased by about 11% compared with the total value in 2007 of \$6.3 billion, and that of imports increased by about 30% compared with the total value in 2007 of \$3.3 billion (Central Statistical Organization, 2009, p. 1, 50).

In 2008, the value of natural gas exports was approximately \$2.45 billion, which represented 35% of total exports and a decrease of 8.3% compared with the value in 2007. The principal mineral commodities imported by Burma in 2008 were cement, which was valued at \$25.4 million compared with \$24.1 million in 2007 (a modest increase of about 5%); coal and coke, which together were valued at \$2.47 million compared with \$6.7 million in 2007; and base metals and manufactures, which were valued at \$272.3 million compared with \$221.5 million in 2007 (an increase of about 23%) (Central Statistical Organization, 2009, p. 5-7, 16).

Thailand was Burma's main export partner in 2008 followed by Singapore and India. Total Burmese exports to Thailand were valued at \$2.62 billion (about 37.4% of the country's total exports); exports to Singapore were valued at \$883.5 million (12.6% of total exports); and exports to India were valued at \$743.2 million (10.6% of total exports) (Central Statistical Organization, 2009, p. 9-10, 18-19).

¹Where necessary, values have been converted from Myanmar kyat (K) to U.S. dollars (US\$) at the rate of K5.38=US\$1.00 for 2008.

Commodity Review

Metals

Nickel.—In July 2009, Burma's state-owned Mining Enterprise No. 3 (ME-3) signed a 50-50 joint-venture agreement with China Nonferrous Metal Mining Nickel Co. Ltd. (CNMC) to develop the Tagaung Taung (Dagongshan) nickel mine, which is located in the Thabeikying, Mandalay Division. CNMC agreed to provide all the investment necessary for the project. The mine, which would include an 85,000-metric-ton-per-year (t/yr)-capacity ferronickel plant that could lead to the production of 22,000-t/yr of nickel metal, was projected to be commissioned in 2011 (Metal Bulletin, 2008; New Light of Myanmar, The, 2008).

Industrial Minerals

Gemstones.—In July 2008, the U.S. President signed into law the Tom Lantos Block Burmese JADE (Junta's Anti-Democratic Efforts) Act of 2008 (Pub. L. 110-286), which prohibits the importation of gemstones (such as jadeite and rubies, including jewelry articles) and hardwoods from Burma to the United States. The Act, which was enacted in response to concerns regarding human and political rights in Burma, calls for the adoption of a resolution to create and implement a certification scheme to prevent the trade of such gemstones.

Outlook

For the past several years, the production of most mineral commodities has decreased exponentially in Burma owing mainly to the withdrawal of mining companies from the country. Burma's mineral production in 2009 will likely be further affected by the significant decline in late 2008 of world market prices and world demand for mineral commodities. As a result of the agreement signed by ME-3 and CNMC, Burma's nickel production is expected to increase after 2011 when the Tagaung Taung Mine is commissioned.

References Cited

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TABLE 1
BURMA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2004	2005	2006	2007	2008
METALS					
Chromium, chromite, gross weight	364	409	-- ^{r, e}	-- ^{r, e}	--
Copper:					
Mine output, Cu content	31,756	34,500	19,500	15,100 ^r	6,900
Matte, gross weight ^{e, 3}	80	80	80	80	80
Metal, refined	31,756	34,500	19,500	15,100 ^r	6,900
Gold, mine output, Au content ^e	90	90	100	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, 4, 5}	2,000	2,000	2,000	2,000	3,600
Metal:					
Refined	289	907	537	165	202
Antimonial lead (93% Pb) ³	-- ^e	-- ^e	NA	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	10	10	10	10	10
Silver, mine output, Ag content ^{4, 5}	1,120	2,302	684	218	--
Tin, mine output, Sn content: ^{4, 5}					
Of tin concentrate	330	402	566	499	499
Of tin-tungsten concentrate	196	306	357	331	242
Total	526	708	923	830	741
Metal, refined ^e	30	30	30	30	30
Tungsten, mine output, W content: ^{4, 5}					
Of tungsten concentrate	1	2	4	4	5
Of tin-tungsten concentrate	106	166	193	179	131
Total	107	168	197	183	136
Zinc, mine output, Zn content ^{4, 5}	196	78	46	10	20
INDUSTRIAL MINERALS					
Barite	2,224	2,058	2,930	6,813	5,679
Cement, hydraulic	518,999	543,072	570,031	608,192	675,788
Clays: ^{e, 3}					
Bentonite	815 ^r	602 ^r	904 ^r	900 ^r	900
Fire clay and fire clay powder	114 ^r	97 ^r	-- ^r	100	100
Feldspar ^{e, 3}	10,000	10,000	10,000	10,000	10,000
Gypsum	71,155	67,522	68,651	75,116	82,224
Nitrogen, N content of ammonia ^e	34,800	30,000	30,000	30,000	30,000
Precious and semiprecious stones:					
Jade kilograms	12,407,576	19,445,758	20,646,832	20,003,409	30,896,440
Diamond ^e carats	5	5	5	5	5
Rubies do.	2,919,147	2,710,002	1,685,481	1,394,939	1,868,696
Sapphires do.	2,241,803	495,192	422,806	608,008	1,129,039
Spinel do.	1,037,963	2,014,623	908,555	843,680	572,308
Salt ^{e, 6} thousand metric tons	35	35	35	35	35
Stone:					
Dolomite	4,184	3,980	4,460	4,674	4,264
Limestone, crushed and broken ^e thousand metric tons	3,300	3,400	3,500	3,800	4,000
MINERAL FUELS AND RELATED MATERIALS					
Coal, lignite	237,949	229,647	331,445	283,703	249,442
Gas, natural, marketed million cubic meters	10,277	11,648	12,501	13,315	12,445
Petroleum:					
Crude thousand 42-gallon barrels	7,160	8,133	7,675	7,625	7,242
Refinery products ⁷ do.	5,133	4,638	4,867	4,885	4,661

See footnotes at end of table.

TABLE 1—Continued
BURMA: PRODUCTION OF MINERAL COMMODITIES¹

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

¹Table includes data available through March 3, 2010.

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 2004—58,395; 2005—116,768; 2006—84,208; 2007—71,323, and 2008—54,355.

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 and 2007; Selected Monthly Economic Indicators, December 2005, January 2007, May 2008, and January 2009; World Bureau of Metal Statistics, February 2008 and March 2009.

TABLE 2
BURMA: STRUCTURE OF THE MINERAL INDUSTRY IN 2008

(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.	Hsinmin cement plant in Kyaukse, Mandalay Division	146,000
Coal		Mining Enterprise No. 3 (ME-3)	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, S&K Mine, and Monywa refinery, in Monywa region, central Burma	40,000
Fertilizer, N content		Myanma Petrochemical Enterprise (Government, 100%)	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 Public Company Ltd. (25.5%), Myanma Oil and Gas Enterprise (MOGE) (15%)	Yadana gasfield in Moattama, Gulf of Martaban	7,227
Do.	do.	Petronas Carigali Myanmar Inc. (40.91%), Myanma Oil and Gas Enterprise (MOGE) (20.45%), PTT Exploration and Production Public Company Ltd. (19.32%), Nippon Oil Exploration (Myanmar) Ltd. (19.32%)	Yetagan gasfield in Tanintharyi, Gulf of Martaban	4,635
Do.	do.	Myanmar Petroleum Resources Ltd. and Myanma Oil and Gas Enterprise (MOGE)	Mann oilfield, south of Yangon	37
Petroleum:				
Crude	thousand 42-gallon barrels	do.	do.	876
Refined	do.	Myanma Petrochemical Enterprise (100% state owned)	No. 1 refinery at Thanlyin (near Yangon)	9,490
Do.	do.	do.	No. 2 refinery at Chauk, central Burma	2,190
Do.	do.	do.	No. 3 refinery at Thanbayakan, central Burma	9,125
Steel		POSCO (70%)	POSCO steel plant in Yangon	30,000

Do., do. Ditto.

