

THE MINERAL INDUSTRY OF PAKISTAN

By Travis Q. Lyday

The Islamic Republic of Pakistan is located in southern Asia in the northwestern corner of the Indian subcontinent. It borders the countries of India to the east, China to the northeast, Afghanistan to the north and west, and Iran to the southwest. The Arabian Sea along the south forms a 1,046-kilometer coastline. Its total area of 803,940 square kilometers is slightly less than twice the size of California.

Mining and quarrying products, which included natural gas, and petroleum played a minor role in the economy of Pakistan; they accounted for less than 1% of the gross domestic product. The country also produced a variety of minerals, of which

the more important included barite, chromite, coal, dolomite, gypsum, limestone, magnetite, natural gas, petroleum, salt, and sulfur. Additionally, various regional geologic surveys substantiated the potential of such metals as copper, gold, iron ore, lead, platinum, silver, and zinc and such industrial minerals and rocks as multicolored granite, marble, and other dimension stones of high quality.

More-extensive coverage of the mineral industry of Pakistan can be found in the 2002 U.S. Geological Survey Minerals Yearbook, volume III, Area Reports—International—Asia and the Pacific.

TABLE 1
PAKISTAN: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity	1999	2000	2001 ^c	2002 ^c	2003 ^c
METALS					
Aluminum, bauxite, gross weight	11,216	8,668	9,000	9,500	9,600
Chromium ore:					
Gross weight	16,279	26,844	26,000	27,200	27,500
Cr ₂ O ₃ content	7,325	12,080	12,000	12,500	13,000
Iron and steel:					
Pig iron ^c thousand tons	1,500	1,500	1,500	1,600	1,600
Steel, crude ^c do.	500	500	500	550	550
Lead, refined, secondary ^c	2,000	2,000	2,000	2,100	2,330
INDUSTRIAL MINERALS					
Abrasives, natural, emery ^c	150	120 ²	150	150	150
Barite	20,505	21,234	25,000	26,100	27,100
Cement, hydraulic ^c thousand tons	9,600	9,900	9,900	10,300	10,300
Chalk	6,283	7,711	7,700	8,000	8,000
Clays:					
Bentonite	15,349	27,700	28,000	29,200	30,000
Fire clay	152,379	143,643	145,000	151,500 ²	160,000
Fuller's earth	15,565	15,288	15,000	15,700	16,000
Kaolin, china clay	64,692	49,574	50,000	52,000	52,000
Other ^c	200,000	200,000	200,000	209,000	210,000
Feldspar	29,235	43,186	45,000	47,000	47,000
Fluorspar	220	997	1,000	1,000	1,000
Gypsum, crude	244,538	377,000	380,000	397,000	397,000
Magnesite, crude	2,175	4,192	4,200	4,400	4,500
Nitrogen, N content of ammonia	1,998,900	1,884,300	1,966,100 ²	2,050,000	2,050,000

See footnotes at end of table.

TABLE 1--Continued
PAKISTAN: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity	1999	2000	2001 ^c	2002 ^c	2003 ^c
INDUSTRIAL MINERALS--Continued					
Phosphate rock: ^c					
Gross weight	11,500	11,000	11,000	11,500	11,500
P ₂ O ₅ content	1,950	2,000	2,000	2,100	2,000
Pigments, mineral, natural, ocher	3,200 ^e	4,747	4,800	5,000	5,000
Salt:					
Rock	1,019	1,313	1,500	1,600	1,700
thousand tons					
Marine	16	20	20	21	23
do.					
Total	1,035	1,333	1,520	1,590	1,600
do.					
Sand: ^c					
Bajir and common	175,000	212,120 ²	215,000	225,000	225,000
Glass	130,000	162,000 ²	165,000	172,000	175,000
Sodium compounds, n.e.s.: ^c					
Caustic soda	220,000	220,000	220,000	230,000	230,000
Soda ash, manufactured	230,000	230,000	230,000	240,000	240,000
Stone:					
Aragonite and marble	391,754	582,000	585,000	611,000	610,000
Dolomite	188,573	287,962	290,000	303,000	303,000
Limestone	9,437	9,884	9,900	10,300	12,000
thousand tons					
Other, as "ordinary stone" ^{ce}	18	20	20	21	22
do.					
Strontium minerals, celestite	634	1,918	2,000	3,000	3,000
Sulfur:					
Native ^c	150	150	200	210	215
Byproduct, all sources	21,166	20,189	21,000	21,900	22,000
Total	21,316	20,339	21,200	22,110 ^{r,2}	22,215 ²
Talc and related materials, soapstone	67,670	54,365	55,000	57,500	58,000
MINERAL FUELS AND RELATED MATERIALS					
Coal, all grades	3,461	3,116	3,500	3,700	3,800
thousand tons					
Coke ^c	900	900	900	950	1,000
do.					
Gas, natural:					
Gross production	8,876	24,222	25,000	26,000	26,000
million cubic meters					
Marketed production, sales ^c	7,700	20,900	21,000	22,000	22,000
do.					
Natural gas liquids ^c	564	600	600	650	650
thousand 42-gallon barrels					
Petroleum:					
Crude	19,986	20,450	22,000	23,000	24,000
do.					
Refinery products: ^c					
Gasoline	8,589 ²	8,500	8,700	9,000	9,000
do.					
Jet fuel	5,255 ²	5,500	5,700	6,000	6,000
do.					
Kerosene	2,714 ²	2,700	3,000	3,100	3,100
do.					
Distillate fuel oil	14,000	14,000	15,000	15,700	15,700
do.					
Residual fuel oil	13,500	13,500	15,000	15,500	15,500
do.					
Lubricants	1,500	1,500	2,000	2,100	2,100
do.					
Other	5,000	5,000	7,000	7,300	7,300
do.					
Total	50,600	50,700	56,400	58,700	58,700
do.					

^cEstimated; estimated data are rounded to no more than three significant digits; may not add to totals shown.

¹Table includes data available through October 1, 2004.

²Reported figure.