

## THE MINERAL INDUSTRY OF

# PARAGUAY

By Pablo Velasco

Paraguay has a predominantly agricultural economy and a thriving commercial sector. There was a large subsistence sector (including sizable urban underemployment) and a large underground reexport sector. The country has vast hydroelectric resources, including the world's largest hydroelectric generation facility at the Itaipú Dam, but it lacks significant known mineral or petroleum resources. The economy was dependent on exports of soybeans, cotton, cattle, timber, and electricity generation (Bureau of Western Hemisphere Affairs, July 1999, Economy, Background Notes, accessed December 13, 1999, at URL [http://www.state.gov/www/background\\_notes/paraguay\\_0799\\_bgn.html](http://www.state.gov/www/background_notes/paraguay_0799_bgn.html)).

The mineral industry of Paraguay accounted for less than 1% of its gross domestic product of about \$10 billion in 1998 and was concentrated in the manufacture of cement and the extraction of industrial materials. Mineral-related activities included production of pig iron and steel and petroleum refining, all derived from imported raw material. (*See table 1.*)

Paraguay's continued integration into the Southern Cone Common Market offers great potential for growth and supports the move toward a Free Trade Area of the Americas early in the

next century. Yamana Resources Inc. of Canada said it entered into a letter of intent with a subsidiary of Newmont Mining Corporation, whereby the U.S. gold giant will operate exploration programs in Paraguay. An official from Yamana said Newmont may fund exploration costing \$5 million over 6 years, with a minimum of \$0.5 million for the first year to earn a 70% interest, and a further \$4 million, including feasibility work as Newmont may elect, to earn 75% interest. Yamana may elect either a 25% fully participating interest of 10%, during capital payback, and thereafter a 15% carried interest. Gold exploration will focus on large districts of alkalic rocks (Weekly Mining News, 1999).

For more extensive coverage of the mineral industry of Paraguay, see the 1996 Minerals Yearbook, volume III, The Mineral Industries of Latin America and Canada.

### Reference Cited

Weekly Mining News, 1999, Yamana and Newmont team up to explore in Paraguay: Weekly Mining News, ed. 243, June 25-July 1, p. 5.

TABLE 1  
PARAGUAY: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity 2/	1994	1995	1996	1997 e/	1998 e/
Cement, hydraulic thousand tons	659	635	613	620 r/ 3/	556 3/
Clays:					
Kaolin	74,000	66,300	66,500	66,700	66,700
Other e/ thousand tons	1,900	1,900	1,900	2,000	2,000
Gypsum e/	4,500	4,500	4,500	4,500	4,500
Iron and steel:					
Pig iron	90,018 r/	103,130 r/	103,562 r/	78,615 r/ 3/	66,000
Steel, crude	87,055 r/	94,927 r/	95,543 r/	65,542 r/ 3/	70,000
Lime e/	100,000	100,000	100,000	100,000	100,000
Petroleum, refinery products:					
Liquefied petroleum gas thousand 42-gallon barrels	51	--	7 r/	7 r/	10
Gasoline do.	580	288 r/	223 r/	255 r/	250
Jet fuel do.	157 r/	142 r/	-- r/	71 r/	110
Kerosene do.	69 r/	55 r/	52 r/	50	50
Distillate fuel oil do.	920 r/	661	526 r/	593 r/	600
Lubricants do.	-- r/	-- r/	-- r/	-- r/	--
Residual fuel oil do.	489	489	354 r/	422 r/	450
Refinery fuel and losses do.	-- r/	-- r/	-- r/	-- r/	--
Unspecified do.	55	40	29	35	35
Total do.	2,321 r/	1,675 r/	1,191 r/	1,433 r/	1,505
Pigments, mineral, natural, ocher e/	330	300	300	300	300
Sand, including glass sand e/ thousand tons	2,000	2,000	7,000	10,000	10,000
Stone: e/					
Dimension do.	70	70	70	70	70
Crushed and broken:					
Limestone (cement and lime) e/ do.	600	600	600	600	600
Marble e/	750	750	750	750	750
Other e/ do.	2,000	2,000	2,000	2,000	2,000
Talc, soapstone, pyrophyllite e/	200	200	200	200	200

e/ Estimated. r/ Revised.

1/ Includes data available through September 1999.

2/ In addition to commodities listed, construction materials (clays, gravel, miscellaneous rock, sand, and weathered tuffs) were presumably produced. Available information is inadequate to make reliable estimates of output levels of these commodities.

3/ Reported figure.