

THE MINERAL INDUSTRY OF

LAOS

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Laos, a landlocked country on the Indochinese Peninsula, was one of the least developed countries in Asia. In 1995, agriculture was predominant, while the industrial sector was severely underdeveloped. There was virtually an absence of manufacturing or extractive industries. The infrastructure was very poor, and external debt was substantial. The country is fairly rich in mineral resources such as coal, gold, gypsum, iron ore, limestone, potash, precious stones, and tin. Only gypsum, salt, and tin were being mined. Economic contribution from the mineral industry was very small but growing. (*See table 1.*)

By 1994, wide-ranging economic and fiscal reforms had been introduced to encourage private and foreign participation in economic development; in particular, the mineral and energy sectors.

Newmont Mining Corp. of the United States entered into a long-term agreement with the Government to explore for and to produce gold in an area covering 6,500 square kilometers (km²) in the Provinces of Vientiane and Sayaboury. CRA Exploration of Australia also acquired the rights to prospect for gold over a 5,000-km² area in the Provinces of Savannakhet and Khammouane. Tin was currently exploited, and concentrate (50% Sn) from two tin mines was sent to Malaysia for smelting.

A lignite deposit of around 220 million metric tons¹ with low sulfur content could be exploited at Hong Sa in the northwest of the country. Coal demand and the exploitation of coal resources would depend on the requirements of the electricity sector in which private participation was encouraged. Lignite would be consumed in a 600-megawatt (MW) powerplant. The plant's partners would include the Nghanthavee Group and the Laotian Government. Total project cost would be around \$1 billion² with first power being delivered before the year 2000.

In another development, the \$0.8-billion agreement between Actio Group of Thailand and the Laotian

Government covered concessions to explore for, produce, and generate power from potential lignite resources in Xiengkouang Province.

Current energy development in the country was focused on a limited amount of hydroelectric potential. Generating capacity comprised 200 MW of a hydroelectric plant and 15 MW of a diesel plant. About three-fourths of Laotian electricity output was exported to Thailand. The 210-MW Nam Theun project was to be undertaken by a consortium comprising the Laotian Government (55%), MDX Power of Thailand (20%), and the Nordic Hydropower Group from Scandinavia (25%). The powerplant would come on-stream in late 1997.

The \$1-billion Nam Theun II dam project in eastern Laos was initiated by Transfield Corp. of Australia, which holds 10% interest. The partners are Laotian Government (25%), state-owned Electricite de France (30%), and a Thai consortium (35%). The Electricity Generating Authority of Thailand agreed to buy output from the 680-MW plant. The hard currency from the project would aid the country's economic development. The project's environmental impact could be extensive flooding that would cover the Nakay Plateau forest lands. In addition, the number of people to be relocated by the project would amount from 3,000 to 4,000.

¹International Energy Agency Coal Research. Mar. 1995, p. 37.

²Where necessary, values have been converted from Laotian new kips (NK) to U.S. dollars at the rate of NK717=US\$1.00 for 1995.

Major Sources of Information

Lao Minerals Exploration Co.
Vientiane, Laos

Department of Geology and Mines, Ministry of Industry
Vientiane, Laos

TABLE 1
LAOS: PRODUCTION OF MINERAL COMMODITIES e/ 1/

(Metric tons unless otherwise specified)

Commodity 2/	1991	1992	1993	1994	1995
Coal, all grades	5,000	7,500	10,000	10,000	11,000
Cement (from imported clinker)	7,000	7,000	7,000	10,000	10,000
Gemstones (sapphires) carats	35,000	35,000	35,000	40,000	40,000
Gypsum	76,776 3/	79,863 3/	80,000	85,000	85,000
Salt, rock	8,000	8,000	8,000	8,000	8,000
Tin, mine output, Sn content	300	300	300	200	200

e/ Estimated.

1/ Table includes data available through Aug. 28, 1996.

2/ In addition to the commodities listed, crude construction materials such as sand and gravel and varieties of stone presumably are produced, but available information is inadequate to make reliable estimates of output levels.

3/ Reported figure.