



# 2006 Minerals Yearbook

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CHAD

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# THE MINERAL INDUSTRY OF CHAD

By Philip M. Mobbs

In 2006, Chad was the 10th ranked petroleum producer in Africa. Petroleum accounted for about 30% of Chad's gross domestic product and 45% of Government revenue. A new Petroleum Code was under consideration in 2006. The Petroleum Revenue Management Law (law No. 001/PR/99 of 1999) and amendments, such as law No. 002/PR/06 of 2006, defined the allocation of petroleum revenues. Mining of solid minerals, which was a negligible contributor to the national economy, was regulated by the Mining Code (law No. 011/PR/1995 of 1995) (BP p.l.c., 2007, p. 8).

Most formal international trade with landlocked Chad was funneled through seaports in Cameroon and Nigeria. Petroleum was exported via the Chad-Cameroon pipeline to an export terminal at Kribi, Cameroon. Informal trade moved across the borders into the neighboring central African countries of the Central African Republic, Libya, Niger, and Sudan. In 2005, which was the last year for which data were available, exports of crude oil were valued at \$2.7 billion<sup>1</sup> and accounted for 86% of total exports (Strauss and others, 2007, p. 138).

## Production

Crude oil overshadowed the country's limited production of other mineral commodities, which included clay, gold, lime, limestone, salt, sand, soda ash (natron), and stone. Estimates of Chad's mineral production are provided in table 1.

## Structure of the Mineral Industry

Small-scale local mining operations produced most of the country's solid minerals. International oil companies were involved in the exploration for and production of crude oil. In 2006, a law to establish the Société des Hydrocarbures du Tchad (SHTc) was approved by Parliament. SHTc is expected to participate in all petroleum production-sharing contracts. Esso Exploration and Production Chad, Inc. (Esso Chad) and Tchad Oil Transportation Co. S.A. operated a portion of about 200 kilometers (km) of the 1,070-km crude oil pipeline that originated in Chad and ended at an offshore terminal in Cameroon.

## Commodity Review

Potential mineral exploration activity in Chad was inhibited by armed factions that engaged in hostilities along the eastern

and the northern borders. Exploration also was inhibited in eastern Chad by social instability, which was associated with ongoing military action in the Darfur region of Sudan.

## Mineral Fuels

**Petroleum.**—Esso Chad, which was a venture of Exxon Mobil Corp. of the United States (40% equity interest), Petronas Carigali Overseas Sdn. Bhd. of Malaysia (Petronas) (35%), and Chevron Overseas Petroleum Inc. of the United States (25%), operated five oilfields. Production from the Moundouli Field began in mid-2006. To offset unexpected reservoir conditions, Esso Chad continued to drill infill wells in the Bolobo, the Kome, and the Miandoum Fields. In 2006, 58 additional wells were drilled in these fields. Also in 2006, Esso Chad began the development of the Maikeri Field and started exploration drilling on the Mangara prospect (Esso Exploration and Production Chad, Inc., 2007, p. 9-11).

In August 2006, the Government threatened to expel Chevron and Petronas from Chad because of a dispute concerning an interpretation of the companies' income tax agreements. The Government proposed that SHTc acquire Chevron's and Petronas' combined 60% interest in Esso Chad. The dispute was settled in October when the international oil companies agreed to pay the Government about \$300 million to cover negotiated tax liabilities (Xinhua Financial News, 2006).

EnCana Corp. of Canada negotiated the sale of its 50% interest in the Permit H concession to CNPC International Ltd. of Chad, which was a subsidiary of China National Petroleum Corp. The transfer of interest was expected to take place in early 2007.

## References Cited

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- Xinhua Financial News, 2006 (October 9), Chad—Oil companies resolve tax dispute: Xinhua Financial News. (Accessed October 10, 2006, at <http://www.rigzone.com/news/article/asp?aid=36950>.)

<sup>1</sup>Where necessary, values have been converted from Communauté Financière Africaine francs (XAF) to U.S. dollars (US\$) at the average rate of XAF522.8=US\$1.00 for 2006.

TABLE 1  
CHAD: ESTIMATED PRODUCTION OF MINERAL COMMODITIES<sup>1, 2</sup>

(Thousand metric tons unless otherwise specified)

Commodity <sup>3</sup>	2002	2003	2004	2005	2006
Aggregate, sand, and stone	500	300	300	300	300
Gold, mine output, Au content kilograms	150	150	150	150	150
Petroleum, crude <sup>4</sup> thousand 42-gallon barrels	--	8,600	61,400	63,300	55,900
Salt	9	9	9	10	10
Soda ash, natron	12	12	12	12	12

-- Zero.

<sup>1</sup>Estimated data are rounded to no more than three significant digits.

<sup>2</sup>Table includes data available through August 9, 2007.

<sup>3</sup>In addition to the commodities listed, other industrial minerals and construction materials (clay, lime, and limestone) are produced, but information is inadequate to make reliable estimates of output.

<sup>4</sup>Reported figure. Production volume was metered on the floating, storage, and offloading vessel offshore Kribi, Cameroon.

TABLE 2  
CHAD: STRUCTURE OF THE MINERAL INDUSTRY IN 2006

(Metric tons unless otherwise specified)

Commodity	Major operating companies and and major equity owners	Location of main facilities	Annual capacity
Gold kilograms	Artisanal placer operations	Mayo Dala Department	150
Petroleum, crude 42-gallon barrels per day	Esso Exploration and Production Chad, Inc. (Exxon Mobil Corp., 40%; Petronas Carigali Overseas Sdh. Bhd., 35%; Chevron Overseas Petroleum Inc., 25%)	Bolobo, Kome, Miandoum, Moundouli, and Nya Fields, Doba Basin	175,000
Salt	Various local operators	Various locations	10,000
Soda ash	do.	Lake Chad, near Liwa	12,000