

# 2011 Minerals Yearbook

## DJIBOUTI [ADVANCE RELEASE]

## THE MINERAL INDUSTRY OF DJIBOUTI

### By Thomas R. Yager

In 2011, the small East African country of Djibouti produced salt and such construction materials as basalt (table 1). Djibouti's production and consumption of minerals were not globally significant.

#### Production

Salt mining started on a semi-industrial scale at Lake Assal in 1998. After declining sharply in 2004, production through 2011 remained at an estimated 30,000 metric tons per year (t/yr).

#### Structure of the Mineral Industry

Salt production at Lake Assal was carried out by privately owned companies. Small amounts of salt were also produced at Doraleh by artisanal miners.

#### **Commodity Review**

#### Metals

**Gold.**—Stratex International plc and Thani Ashanti Alliance Ltd. [a joint venture of AngloGold Ashanti Ltd. of South Africa (50%) and Thani Dubai Mining Ltd. of the United Arab Emirates (50%)] explored for gold at the Afar project, which is located in Djibouti and eastern Ethiopia. Stratex held six exclusive exploration licenses in western Djibouti that were part of the Afar project (Stratex International plc, 2011).

#### Industrial Minerals

**Cement.**—Cimenterie d'Ali Sabieh was considering the development of a new cement plant with a capacity of 200,000 t/yr in Ali Sabieh. In early 2011, the Export-Import Bank of India extended a \$10 million line of credit to the Government of Djibouti to build the plant (International Cement Review, 2011).

**Salt.**—Resources of salt in brine at Lake Assal were estimated to be 100 million metric tons. Mining was limited by reliance on the Ethiopian market, the absence of reliable water and energy supplies, and the regulatory framework. Other constraints

included poor working conditions and a lack of iodization machinery (Geographic Environmental Solutions, 2008, p. 12; U.S. Embassy, Djibouti, Djibouti, 2011).

Société d'Exploitation du Lac Assal's (SEL's) salt mining operation at Lake Assal had a capacity of 86,000 t/yr. Salt Investment SAZF [a joint venture of Emerging Capital Partners LLC (ECP) of the United States, Hardtechnologies Group of Spain, and SEL] had planned to complete a new mining operation and processing plant at Lake Assal with a capacity of 4 million metric tons per year by June 2010. Salt was expected to be exported to Middle East countries and countries in Asia (Geographic Environmental Solutions, 2008, p. 12; Feytis, 2009).

In December 2010, however, Salt Investment suspended work on the project because of higher costs resulting from problems with the quality of the salt. Magnesium and other contaminants rendered salt from Lake Assal unsuitable for the chemicals, glass, and plastic industries without additional processing. By June 2011, Salt Investments was negotiating with Mitsubishi Corp. of Japan regarding a possible investment of \$5 million to resolve quality problems. Additional investment could be necessary for maintenance of equipment and facilities because of Djibouti's harsh climate (Feytis, 2010; U.S. Embassy, Djibouti, Djibouti, 2011).

#### **References Cited**

- Feytis, Alexandra, 2009, Djibouti's salt emergence: Industrial Minerals, no. 504, September, p. 15.
- Feytis, Alexandra, 2010, Salt investment puts 4m. tpa salt project on hold in Djibouti: Industrial Minerals, December 8. (Accessed December 8, 2010, at http://www.indmin.com/Article/2728772/Salt-Investment-puts-4m-tpa-saltproject-on-hold-in-Djibouti.html.)
- Geographic Environmental Solutions, 2008, Salt Investment SAZF—Lake Assal salt project, Djibouti—Environmental impact statement: Johannesburg, South Africa, Geographic Environmental Solutions, 108 p.
- International Cement Review, 2011, East Africa up for grabs?: International Cement Review, March, p. 102–110.
- Stratex International plc, 2011, Stratex International plc ('Stratex' or 'the Company') defines new epithermal gold mineralisation in Djibouti: London, United Kingdom, Stratex International plc press release, February 9, 5 p.
- U.S. Embassy, Djibouti, Djibouti, 2011, U.S. firm "Salt Investments" idled—Djibouti: U.S. Department of State Telegram 13526, June 14, 2 p.

#### TABLE 1

#### DJIBOUTI: ESTIMATED PRODUCTION OF MINERAL COMMODITIES<sup>1, 2</sup>

#### (Metric tons)

Commodity <sup>3</sup>	2007	2008	2009	2010	2011
Salt	30,000 <sup>r</sup>	30,000 r	30,000 r	30,000 r	30,000

<sup>r</sup>Revised.

<sup>1</sup>Estimated data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Table includes data available through May 16, 2012.

<sup>3</sup>In addition to the commodity listed, crude construction materials, including basalt, are produced, but available information is

to make reliable estimates of output.

#### TABLE 2

#### DJIBOUTI: STRUCTURE OF THE MINERAL INDUSTRY IN 2011

#### (Metric tons)

				Annual
	Commodity	Major operating companies	Location of main facilities	capacity <sup>e, 1</sup>
Salt		Société d'Exploitation du Lac Assal (SEL)	Mines at Lake Assal	86,000
do.		Société Sel de Djibouti	do.	52,000
do.		Société Moussa Ali	do.	34,000
do.		Société Saline de Djibouti	do.	21,000
do.		Société Mont Goda	do.	18,000
do.		Société Mahad	do.	13,000
do.		Société Kalou	do.	11,000
do.		Société Mont Garbi	do.	4,000
do.		Artisanal miners	Mines at Doraleh	8,400

<sup>e</sup>Estimated. do. Ditto.

<sup>1</sup>Capacity estimate based on annual production between 1999 and 2004 for all producers except Société d'Exploitation du Lac Assal and artisanal miners.