



2009 Minerals Yearbook

INDIAN OCEAN ISLANDS

THE MINERAL INDUSTRIES OF THE INDIAN OCEAN ISLANDS

COMOROS, MAURITIUS, REUNION, AND SEYCHELLES

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COMOROS

The Comoros Islands form an archipelago of four islands—Anjouan (Nzwani), Grande Comore (Ngazidja), Mahore (Mayotte), and Moheli (Mwali)—which are located in a strategic position at the northern end of the Mozambique Channel. The archipelago is the result of volcanic action along a fissure in the seabed running west-northwest to east-southeast. Grande Comore is the largest and youngest of the islands. The Coelacanth, a unique fish that was thought by Western scientists to have been extinct for 50 million years, lives in the waters around the islands (Comoros Islands, 2009).

Comoros, which is a former French colony and one of the world's poorest countries, has few transportation links between its islands. The country has few natural resources and did not play a significant role in the world's production or consumption of mineral resources. Mineral production data continued to be unavailable; however, mineral production was presumed to be low because no significant construction projects were reported in 2009. The mineral industry of Comoros continued to be limited to producing mineral commodities in small quantities and only common local building materials, such as clay, crushed stone, gravel, and sand, during 2009 (U.S. Central Intelligence Agency, 2010).

Comoros was dependent on imports to meet its cement, energy, petroleum, and petroleum products requirements. France was Comoros's major trading partner. In 2007 (the latest year for which data were available), Comoros imported 41,508 metric tons (t) of cement, 35,837 t of petroleum products, and 3,167 t steel (International Monetary Fund, 2009, p. 57).

The International Monetary Fund (IMF) approved a 3-year \$21.5 million arrangement under the Poverty Reduction and Growth Facility to support the Government's economic program, which was aimed at promoting sustained growth to achieve deeper gains in poverty alleviation. The Governments' reform agenda seeks to consolidate recent gains in macroeconomic stability and promote the development of a business-friendly economic environment, which would create jobs and reduce poverty. The Government could start the program with a draw of about \$6.7 million from the IMF (afrol News, 2009b).

Comoros was totally dependent on diesel-powered energy, and the Government was looking into the possibility for major investments in projects to investigate the country's large potential of geothermal energy, including whether the volcanic archipelago could become self-supplied in energy. The joint venture of Gafu Energy NZ Ltd. and Sinclair Knight Merz (Pty) Ltd. (SKM) of Australia announced that it would invest

€120 million (\$144 million¹) in surveying and installing a geothermal project, which would entail geology and chemistry fieldwork, and a geophysical survey of the three islands, (Anjouan, Grand Comore, and Moheli). Mount Karthala, on Grand Comore, is one of the most active volcanoes in the world. In 2009, the Government granted the joint venture exclusive rights for geothermal projects (afrol News, 2009a).

Outlook

The outlook for mineral output is for little change in the foreseeable future owing to Comoros' very limited mineral resources and a weak infrastructure.

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MAURITIUS

The islands of Mauritius consist of the main island of Mauritius, the smaller island of Rodrigues, and two smaller groups of islands. All the islands are of volcanic origin and are surrounded by coral reefs.

The mineral industry of Mauritius was a negligible factor in its economy. The country has few mineral resources. Historically, mineral output consisted of basalt construction stone, and 'agro minerals', such as coral sand, lime from coral, and solar-evaporated salt. Quantitative information was rarely available and when available, appeared to be inconsistent. The demand for cement, fertilizers, iron and steel, flat-rolled metal products, and petroleum products was met through imports.

Mauritius developed the Mauritius Freeport Authority as a building block towards becoming a regional distribution center. The advantages for the Mauritian economy that could derive from the freeport include the following: generate more trade between Mauritius and neighboring countries and therefore

¹Where necessary, values have been converted from European Union euros (€) to U.S. dollars (US\$) at a rate of €1.00=US\$1.96.

more export revenues; attract foreign operators and therefore increase the inflow of foreign currency; generate employment in the export and services sectors; and foster the upgrading of port facilities. In 2009, there were about three hundred operators. Imports were mainly from China, India, South Africa, and Thailand. Exports went primarily to Madagascar, Reunion, and South Africa (Mauritius Island Online, 2009).

In 2008 (the latest year for which data were available), imports included mineral fuels and related products (21.4%), machinery and equipment (19.6%), manufactured goods (18.9%), and other unidentified products (40.1%). The Mauritius Freeport handled 72,617 t of imports and 85,195 t of reexports in 2008. South Africa was Mauritius's leading trading partner (United Nations Statistics Division, 2009).

Polymetallic nodules that occur on the ocean floor were a potentially important mineral commodity. The nodules occur at a depth of about 4,000 meters (m) and extend from 400 kilometers (km) to 800 km north of Port Louis, which is located northeast of Tromelin Island. The nodules each average more than 15% iron and manganese and more than 0.35% cobalt. Small phosphate deposits (bird guano) occur on the islands of Agalega, Cargados, and Rodrigues (Trade Chakra, 2009a).

Seaweed biomass research continued in 2009. The thrust would be the production of bio-fertilizer from the sap of seaweed and the generation of electricity from the combustion of the remaining biomass (Trade Chakra, 2009b).

Mauritius did not play a significant role in the world's production or consumption of minerals. Data on mineral production are in table 1.

Outlook

The outlook for exploration of minerals other than construction materials was negligible. It was expected that coral mining would be reduced owing to environmental concerns.

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REUNION

Reunion is a volcanic island located in the Indian Ocean about 200 km southwest of Mauritius. Administratively, it is one of the overseas departments of France and, as such, is part of the Eurozone.

As in previous years, mineral commodity production in 2009 represented only a small part of the economy of Reunion, and little quantitative information on mineral production was available. Aggregates, cement, and seacoast coral production continued to meet local consumption needs. Reunion had no identified resources of coal or petroleum; mineral fuels and petroleum products were imported. Little change in future mineral activity is anticipated.

SEYCHELLES

The Seychelles archipelago, which comprises 74 coralline islands and the Mahe group of 41 granitic islands, lies in the western part of the Indian Ocean and was part of a former microcontinent. The coralline group was, for the most part, only a little above sea level.

After experiencing an economic crisis and introducing bold economic reforms in 2008, the Government saw the fruits of its labors in 2009. Liberalization of its exchange regime and revised fiscal measures, together with tight monetary policy, stabilized the economy in 2009. The focus was shifting in 2009 to structural measures needed to set the economy on a sustainable growth path (International Monetary Fund, 2009).

Seychelles has very limited mineral resources and was not a globally significant mineral producer or consumer. Mining was limited mainly to granite quarrying and salt pans. Mineral production consisted of mostly unspecified quantities of such construction materials as clay, coral, sand, and stone. Occasional mining of small quantities of an organic phosphate fertilizer (bird guano) took place but was not reported by the Government. Seychelles had no identified sources of coal, natural gas, or petroleum. As there is no petroleum refinery, petroleum refinery products must be imported to meet the country's requirements.

In late 2008, Avana Petroleum Ltd. of Madagascar and East Africa Exploration Ltd. of the United Arab Emirates signed a production agreement with the Government to explore for petroleum offshore Seychelles in 2009. The companies selected 15,000 square kilometers in three tranches that they believed included a series of high-potential drilling targets (Offshore Magazine, 2008).

Outlook

The Government is expected to continue to promote the petroleum potential of the entire Seychelles region.

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TABLE 1
MAURITIUS, REUNION, AND SEYCHELLES: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons)

Country and commodity	2005	2006	2007	2008	2009 ^c
MAURITIUS²					
Cement ³	677,000 ^r	717,000	616,000 ^c	811,000	620,000 ⁴
Fertilizers ³	62,000 ^r	55,313	45,336	46,677 ^r	57,160 ⁴
Salt, marine	7,900	7,408	6,650	4,789 ^r	2,301 ⁴
Sand	60,135	91,422	66,850	102,972	87,506 ⁴
Steel, rebar ³	61,000 ^r	65,000 ^r	80,000 ^r	69,000 ^r	56,000
REUNION^{c, 5}					
Aggregates	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000
Cement	380,000	400,000	400,000	400,000	400,000
SEYCHELLES					
Aggregates	120,000	117,794	128,014	130,000 ^c	130,000
Dimension stone, granite	140	141	149	150 ^c	150
Gravel and crushed stone	210,000 ^c	142,584	135,888	140,000 ^c	140,000
Sand ^c	8,100	8,100	8,100	8,100	8,100

^cEstimated; estimated data are rounded to no more than three significant digits. ^rRevised.

¹Table includes data available through July 31, 2010.

²In addition to the commodities listed, asphalt, basalt, and lime are also known to be produced, but information is inadequate to make reliable estimates of output.

³Imports.

⁴Reported figure.

⁵In addition to the commodities listed, coral and volcanic rock are also known to be produced, but information is inadequate to make reliable estimates of output.

TABLE 2
MAURITIUS, REUNION, AND SEYCHELLES: STRUCTURE OF THE MINERAL INDUSTRIES IN 2009

(Metric tons)

Country and commodity	Major operating companies	Location of main facilities	Annual capacity
MAURITIUS			
Aggregates	United Basalt Products Ltd.	La Mecque	660,000 ^c
Do.	Gamma Civic Ltd.	Beau Bassin and Solitude	NA
Fertilizers	Mauritius Chemical and Fertilizer Industry Ltd.	Port Louis	100,000
Salt	Mont Calme Ltd.	Tamarin	NA
Steel, rebar	Samlo Koyenco Steel Company Ltd.	Midlands	12,000 ^c
REUNION			
Aggregates	Holcim (Reunion) S.A.	Bras Panon and Saint-Joseph	1,300,000 ^c
Cement	do.	Le Port	400,000
SEYCHELLES			
Granite	Gondwana Granite Ltd.	Victoria	NA
Gravel and crushed stone	United Concrete Products (Seychelles) Ltd.	Anse des Genets	150,000 ^c
Do.	Civil Construction Company Ltd.	Brilliant	97,000 ^c

^cEstimated. Do., do. Ditto. NA Not available.

