



# 2015 Minerals Yearbook

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## INDIAN OCEAN ISLANDS [ADVANCE RELEASE]

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# THE MINERAL INDUSTRIES OF THE INDIAN OCEAN ISLANDS

## COMOROS, MAURITIUS, REUNION, AND SEYCHELLES

By James J. Barry

### COMOROS

Comoros consists of an archipelago of islands in the Indian Ocean that is located between Madagascar and Mozambique. The real gross domestic product (GDP) of Comoros increased by 1.0% for 2015. Mineral commodity output in Comoros included small quantities of common building materials for domestic consumption. Offshore oil exploration was ongoing and was governed under law No. 12–019/AU. Nearly all the country's mineral and petroleum needs were met through imports. In 2015, the imports of minerals and mineral fuels accounted for no more than 9% of the total value of the country's imported goods (International Trade Centre, 2015; International Monetary Fund, 2016, p. 174).

In December 2015, Rhino Resources Ltd. of the British Virgin Islands announced the acquisition of offshore Blocks 17 and 24. The two blocks border exploratory areas where recoverable gas has been confirmed and seismic data had shown the potential for oil. With the additional licensing of these 2 blocks, 8 of the 40 demarcated blocks for petroleum operations were being explored. The joint venture of Safari Petroleum, PLC of the United Kingdom (25%) and Western Energy Production, LLC of the United States (75%) was licensed for deepwater Blocks 38, 39, and 40. The joint venture of Discover Exploration Comoros B.V., which was a subsidiary of Discover Exploration Ltd. of the United Kingdom (60% working interest), and Bahari Resources Ltd. of Kenya (40% working interest) was licensed for deepwater Blocks 35, 36, and 37 (Centurion, LLP, 2015; Discover Exploration Ltd., 2015; Offshore, 2015; Rhino Resources, Ltd., 2015).

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### MAURITIUS

Mineral production in Mauritius was an insignificant part of the country's economy in 2015. Mining is governed under the Minerals Acts of 1966, and petroleum exploration and production are covered under the Petroleum Act of 1970. Locally produced minerals included aggregates and crushed stone, fertilizer, lime, salt, and sand; steel rebar was also produced. The country had no petroleum, natural gas, or coal reserves; most of its energy requirements were met by imported petroleum products, which constituted about 15% of the total value of the country's imported goods in 2015. Real GDP growth decreased slightly to 3.5% in 2015 compared with a growth rate of 3.6% in 2014. The mining and quarrying sector accounted for less than 0.3% of the GDP in 2015 (International Trade Centre, 2015; Statistics Mauritius, 2016, p. 12, 13; Ministry of Energy and Public Utilities, undated).

In 2015, salt production decreased by about 14% to 3,000 metric tons (t) from 3,500 t in 2014. Production from salt pans was permanently halted on December 31 because the Government planned to convert the pans to a real-estate development. Data on mineral production are in table 1. Table 2 lists the major mineral industry facilities in Mauritius (Thomas, 2015).

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### REUNION

Reunion is a volcanic island located about 200 kilometers southwest of Mauritius. Administratively, it is an Overseas

Department of France. Mineral production represented only a very small part of the economy of Reunion; quantitative information on mineral production was not available. Aggregates and coral sand were produced on the island, primarily for local consumption needs. Ciments de Bourbon SA, which was a subsidiary of Holcim (Outre-Mer) [Overseas], operated a 500,000-metric-ton-per-year grinding facility that used imported clinker. All demand for metals and mineral fuels was met through imports (Holcim Group, 2015).

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## SEYCHELLES

The mineral sector was not a significant contributor to the economy of Seychelles. In 2015, the country's real GDP increased by 4.3%, and the manufacture of concrete, glass, rock products, and other mineral products contributed 0.6% to the GDP. In 2015, mineral fuel imports accounted for 18% of the total value of imports, and mineral imports accounted for an additional 6% of the total value of imports (International Trade Centre, 2015; Central Bank of Seychelles, 2016, p. 9, 46).

The country's mineral industry is administered by the Ministry of Defense, Legal Affairs, Information, Youth, and Hydrocarbons and the Ministry of Natural Resources and Industry. The Mineral Act of 1962 governs mineral extraction and mining; the Removal of Sand and Gravel Act of 1982 regulates the mining of beach sand; and the Petroleum Mining Act of 1976 governs hydrocarbon exploration and production. Activity in the hydrocarbon sector is also regulated by the Seychelles Petroleum (Taxation) Act of 2008 and the Seychelles Petroleum (Taxation) (Amendment) Act of 2013.

Mineral commodities produced in Seychelles included clay for bricks, granite dimension stone, salt, and sand. Aggregate was the only mineral commodity for which production was reported. The production of crushed granite increased by 11% in 2015, to 169,292 t from 152,453 t in 2014. Production of aggregate other than crushed granite increased by 68% to 217,353 t from 129,131 t in 2014 (table 1). Table 2 lists the major mineral industry facilities in Seychelles.

The national oil company, PetroSeychelles Ltd., was established in 1984 for the promotion and supervision of oil exploration activities in the waters of Seychelles's expansive Exclusive Economic Zone. Although exploration

for hydrocarbons had been ongoing since the 1970s, no commercially significant petroleum or gas reserves had been found in the region to date; Seychelles depended entirely on imported petroleum products to meet its energy requirements (PetroSeychelles Ltd., 2015).

In 2015, Afren plc of the United Kingdom, through its wholly owned subsidiary East African Exploration (Seychelles) Ltd. (EAX) (75% working interest), planned to conduct three-dimensional (3-D) seismic data acquisition, but no results had yet been made available. WHL Energy Ltd. of Australia was active in three offshore exploration blocks located to the south of the islands. In 2014, Ophir Energy plc of the United Kingdom announced that it had entered into an agreement with WHL Energy to acquire a 75% operator interest in the southern offshore exploration blocks. In March 2015, the company released results of a 3-D seismic survey conducted in 2014 that covered 1,500 square kilometers. The survey results showed an estimate of more than 500 million barrels of oil in the exploration block. Interpretation started in September and was expected to be completed by yearend. The offshore region had been previously tested by four drill holes, all of which had detected the presence of oil and gas, but no economically viable amounts. At the end of 2015, Ophir was in the process of giving up its licenses, and it was unclear how this would affect further exploration of the offshore blocks (Afren plc, 2014; Amla, 2015; Ophir Energy plc, 2015, p. 28; 2016, p. 11, 24).

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TABLE 1  
MAURITIUS AND SEYCHELLES: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons)

Country and commodity <sup>2</sup>	2011	2012	2013	2014	2015
MAURITIUS					
Fertilizer	27,000	27,000	28,000	28,000 <sup>e</sup>	27,000 <sup>e</sup>
Salt, marine	3,500	3,800	3,800	3,500 <sup>e</sup>	3,000 <sup>e</sup>
Sand	44,035	40,000	23,000	53,000 <sup>e</sup>	50,000 <sup>e</sup>
Steel, rebar	34,000 <sup>e</sup>	32,200 <sup>e</sup>	26,700 <sup>e</sup>	24,855 <sup>3</sup>	24,000 <sup>e</sup>
Stone, crushed, including crushed basalt <sup>e</sup>	500,000	550,000	500,000	500,000	480,000
SEYCHELLES					
Aggregates:					
Crushed granite (locally known as crusher dust)	120,214	155,946	136,000	152,453	169,292
Other than crushed granite	101,046	123,759	117,471	129,131	217,353

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

<sup>1</sup>Table includes data available through June 17, 2016.

<sup>2</sup>In addition to the commodities listed, lime also was produced in Mauritius; aggregates, cement, and sand were produced in Reunion; and clay for bricks, granite dimension stone, salt, and sand were produced in Seychelles, but available information was inadequate to make reliable estimates of output.

<sup>3</sup>Reported figure.

TABLE 2  
MAURITIUS, REUNION, AND SEYCHELLES: STRUCTURE OF THE MINERAL INDUSTRIES IN 2015

(Metric tons)

Country and commodity	Major operating companies	Location of main facilities	Annual capacity <sup>c</sup>
MAURITIUS			
Aggregates	Betonix Ltd. (Bhunjun Group)	Nouvelle France and Tour Koenig	NA
Do.	Gamma Civic Ltd.	Solitude	NA
Do.	United Basalt Products Ltd.	Near Ausailles	660,000
Fertilizer	Mauritius Chemical and Fertilizer Industry Ltd. (Harel Mallac Group, 70.41%)	Port Louis	100,000
Salt	Mont Calme Ltd.	Evaporation ponds at Tamarin <sup>1</sup>	NA
Steel, rebar	Samlo Koyenco Steel Company Ltd.	Near Midlands	12,000
REUNION			
Cement	Ciments de Bourbon, SA [Holcim (Outre-Mer)]	Clinker grinding plant in Le Port	500,000
SEYCHELLES			
Stone:			
Dimension, granite	Gondwana Granite Co. Ltd.	Victoria, Mahe Island	NA
Crushed	United Concrete Products (Seychelles) Ltd.	Pointe Larue, Mahe Island	150,000
Do.	Civil Construction Company Ltd.	Quarry on Mahe Island	150,000

<sup>c</sup>Estimated. Do. Ditto. NA Not available.

<sup>1</sup>Stopped operations on December 31, 2015.