

2020–2021 Minerals Yearbook

INDIAN OCEAN ISLANDS [ADVANCE RELEASE]

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THE MINERAL INDUSTRIES OF THE INDIAN OCEAN ISLANDS

COMOROS, MAURITIUS, REUNION, AND SEYCHELLES

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Note: In each major section of this chapter, information for 2020 is followed by information for 2021.

COMOROS

Comoros consists of an archipelago of islands in the Indian Ocean that is located between Madagascar and Mozambique. In 2020, the real gross domestic product (GDP) of Comoros increased by 0.2% compared with an increase of 2.0% in 2019 owing to the coronavirus disease 2019 (COVID-19) pandemic. Mineral commodity output in Comoros included small quantities of common building materials for domestic consumption. Mineral exploration, production, processing, and transactions are subject to the provisions of the Mineral Substances Regime Decree-Law No. 54/1110. Petroleum exploration and production are governed under law No. 12-019/AU, which was established in 2012, and Decree No. 13-030/PR, which was established in 2013. Nearly all the country's mineral and petroleum needs were met through imports. In 2020, cement imports increased by 25% compared with those in 2019, accounting for 9% of the total value of the country's imported goods; iron sheets and aluminum imports increased by 45%, accounting for 5%; and petroleum products imports increased by 2%, accounting for 25% (African Development Bank Group, 2021, p. 38, 116; 2022, p. 46, 142; Banque Centrale des Comores, 2021, p. 26; 2022, p. 21; Bureau Géologique des Comores, 2021a, b; African Mining Legislation Atlas, 2022). Data on mineral production are provided in table 1.

In 2020, Comoros had 40 blocks demarcated for petroleum operations and 8 blocks licensed for exploration. Discover Exploration Comoros B.V. (a subsidiary of Discover Exploration Ltd. of the United Kingdom) held the licenses for deepwater Blocks 35, 36, and 37. Rhino Resources Ltd. of the British Virgin Islands owned the licenses for offshore Blocks 17 and 24. Western Offshore E&P, LLC of the United States held the licenses for the remaining three deepwater blocks, Blocks 38, 39, and 40 (Cohen and Marshall, 2019; Bureau Géologique des Comores, 2021a; Discover Exploration Ltd., 2021; Duval and Bhattacharya, 2021).

MINERAL INDUSTRY HIGHLIGHTS IN 2021

In 2021, the real GDP of Comoros increased by 1.9% compared with an increase of 0.2% in 2020. Mineral commodity output in Comoros included small quantities of common building materials for domestic consumption. Nearly all the country's mineral and petroleum needs continued to be met through imports in 2021. In 2021, the cement imports were essentially unchanged compared with those in 2020, accounting

for 8% of the total value of the country's imported goods; iron sheets and aluminum imports decreased by 17%, accounting for 4%; and petroleum products imports increased by 23%, accounting for 27%. Discover Exploration was expected to start exploration of Blocks 35, 36, and 37 by as early as 2023 (table 1; Discover Exploration Ltd., 2021; African Development Bank Group, 2022, p. 46, 142; Banque Centrale des Comores, 2022, p. 21).

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MAURITIUS

Mineral production did not play a significant role in the economy of Mauritius in 2020. Locally produced minerals included crushed stone, fertilizer, sea salt, and sand; steel rebar was also produced. The country had no petroleum, natural gas, or coal reserves. The country's energy requirements were met by imported petroleum products, which supplied 56% of the country's requirements; coal, which supplied 30.7%; and local sources, including renewable resources, 13.3%. The real GDP of Mauritius decreased by 14.9% in 2020 compared with an increase of 3.0% in 2019. In 2020, the nominal GDP was an estimated \$10,920 million¹ and the mining and quarrying sector accounted for about 0.2% of the GDP. Mining is governed under the Minerals Act of 1966. Petroleum exploration and production are covered under the Petroleum Act of 1970 (Imrichova and Beedassy, 2020; Statistics Mauritius, 2021a-c; Chambers, 2022, p. 58). Data on mineral production are provided in table 1.

In 2020, the production of crushed stone decreased by an estimated 17%; sand, by an estimated 16%; and steel rebar, by an estimated 15%. These commodities, excluding sea salt, were used for local building and construction work, which had a 24.9% decrease in investment in 2020 (table 1; Statistics Mauritius, 2021c, p. 5–6). Table 2 is a list of the major mineral industry facilities.

MINERAL INDUSTRY HIGHLIGHTS IN 2021

Mauritius had no petroleum, natural gas, or coal reserves. The country's energy requirements continued to be met by imported petroleum products in 2021, which supplied 54% of the country's requirements; coal, which supplied 33%; and local sources, including renewable resources, 12%. The real GDP of Mauritius increased by 4.8% in 2021 compared with a decrease of 14.9% in 2020. In 2021, the nominal GDP was an estimated \$11,122 million,² and the mining and quarrying sector accounted for about 0.2% of the GDP (Statistics Mauritius, 2021a; 2022a).

In 2021, the production of sea salt increased by an estimated 59%; sand, by an estimated 23%; and crushed stone (basalt), by an estimated 22%. These commodities, excluding sea salt, were used for local building and construction work, in which investment had increased by 17.8% in 2020 (table 1; Statistics Mauritius, 2022b, p. 6).

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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 was predominantly used to meet local construction needs and represented only a small part of the economy of Reunion. In 2020, the country's real GDP decreased by 4.2% compared with an increase of 2.2% in 2019 owing to the COVID-19 pandemic, and there was a 9.4% decrease in investment in the construction sector. Ciments de Bourbon SA was owned by Cementis Océan Indien and was the only cement producer in Reunion. The company produced an estimated 218,000 metric tons (t) of cement, which was an estimated 13% decrease compared with the amount produced in 2019. Reunion had several quarries that were producing aggregates, pozzolana, and sand (CEROM, 2021, p. 1, 3). Data on mineral production are provided in table 1. Table 2 is a list of the major mineral industry facilities.

MINERAL INDUSTRY HIGHLIGHTS IN 2021

Mineral production in Reunion was predominantly used to meet local construction needs and represented only a small part of the economy of Reunion. In 2021, real GDP increased by 6.7% compared with a decrease of 4.2% in 2020. Ciments de Bourbon produced an estimated 273,000 t of cement, which was an estimated 25% increase compared with production in 2020 (tables 1, 2; CEROM, 2022, p. 1, 3).

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¹Where necessary, values have been converted from Mauritian rupees (MURs) to U.S. dollars (US\$) at the annual average exchange rate of MUR39.35=US\$1.00, for 2020.

²Where necessary, values have been converted from Mauritian rupees (MURs) to U.S. dollars (US\$) at the annual average exchange rate of MUR41.69=US\$1.00, for 2021.

SEYCHELLES

Mineral production did not play a significant role in the economy of Seychelles in 2020. In 2020, the country's real GDP decreased by 7.7% compared with an increase of 3.1% in 2019 owing to the COVID-19 pandemic. The nominal GDP was \$1,200 million.³ In 2020, mineral fuel imports accounted for almost 18% of the total value of imports (Central Bank of Seychelles, 2022, p. 14, 15, 16, 57).

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 (Kamuti, 2019; Seychelles Revenue Commission, 2023).

Mineral commodities produced in Seychelles included stone, such as granite (crusher dust) and other unspecified stone. In 2020, the production of granite (crusher dust) decreased by 23% to 166,139 t from 215,925 t in 2019. Production of other unspecified stone decreased by 14% to 230,050 t from 266,155 t in 2019. The decrease in the production of these commodities was caused by inactivity in the construction sector and a decrease in the labor force owing to the COVID-19 pandemic, which led to decreased demand and investment (Central Bank of Seychelles, 2022, p. 10, 14). Data on mineral production are provided in table 1. Table 2 is a list of the major mineral industry facilities.

Government-owned PetroSeychelles Ltd. was established in 1984 for the promotion and supervision of petroleum exploration activities in the Seychelles Exclusive Economic Zone (EEZ). Although exploration for hydrocarbons had been ongoing since the 1970s, no commercially significant petroleum or gas reserves had been found in the region by yearend 2020. Sub-Saharan Resources Ltd. of Australia and PetroSeychelles Ltd. were the only companies actively exploring in the EEZ in 2020 (PetroSeychelles Ltd., 2023a–c).

MINERAL INDUSTRY HIGHLIGHTS IN 2021

In 2021, the country's real GDP increased by 4.4% compared with a decrease of 7.7% in 2020. The nominal GDP was \$1,1287 million.⁴ The manufacture of mineral commodities, including the production of construction materials (blocks, crusher dust, and aggregates) accounted for 1.0% of the GDP. In 2021, mineral fuel imports accounted for almost 20% of the total value of imports (Central Bank of Seychelles, 2022, p. 11, 14, 16, 57).

In 2021, the production of granite (crusher dust) decreased to 132,000 t from 166,139 t in 2020, or by 21%. Production of other unspecified stone decreased to 201,784 t from 230,050 t in 2020, or by 12% (table 1).

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³Where necessary, values have been converted from Seychelles rupees (SCR)s to U.S. dollars (US\$) at the annual average exchange rate of SCR17.62=US\$1.00 for 2020.

⁴Where necessary, values have been converted from Seychelles rupees (SCRs) to U.S. dollars (US\$) at the annual average exchange rate of SCR16.92=US\$1.00, for 2021.

 $\label{table 1} \textbf{TABLE 1}$ $\mbox{MAURITIUS, REUNION, AND SEYCHELLES: PRODUCTION OF MINERAL COMMODITIES}^1$

(Metric tons, gross weight, unless otherwise specified)

Commodity ²		2017	2018	2019	2020	2021
MAURITIUS						
Fertilizers		15,000 e	14,900 r, e	15,300 e	14,900 ^r	16,300 e
Iron and steel, products, rebar	l, products, rebar 26,200 26,000 °		26,000 e	22,100 e	24,000 ^e	
Salt, sea salt		500 e	510 e	500 ^r	500 ^r	793 °
Stone, sand, and gravel, construction:						_
Sand and gravel, sand		40,000	34,000	37,000 ^r	31,000 e	38,000 e, r
Stone, crushed, unspecified, including crushed basalt ^e		500,000	510,000	527,000 ^r	439,000	535,000
REUNION						
Cement, hydraulic	thousand metric tons	250 ^r	260 ^r	250	218 e	273 e
SEYCHELLES						
Stone, size and shape unspecified:						
Granite, crusher dust		158,972	196,095	215,925	166,139	132,000
Other		163,277	173,469	266,155	230,050 г	201,784

^eEstimated. ^rRevised.

 ${\it TABLE~2}$ MAURITIUS, REUNION, AND SEYCHELLES: STRUCTURE OF THE MINERAL INDUSTRIES IN 2021

(Metric tons)

	Major operating companies		Annual
Country and commodity	and major equity owners	Location of main facilities	capacitye
MAURITIUS			
Aggregates	Betonix Ltd. (Bhunjun Group, 100%)	Plants in Nouvelle France, Rose Belle,	NA
		and Tour Koenig	
Do.	Gamma Materials Ltd. (Gamma Civic Ltd., 100%)	Fond du Sac, Calebasses, St Julien,	2,500,000
		Bramsthan, Rose Belle, La Chaumiere	
		near Solitude	
Do.	United Basalt Products Ltd.	Quarry near Ausailles	660,000
Fertilizers	Mauritius Chemical and Fertilizer Industry Ltd.	Plant in Port Louis	100,000
	(Harel Mallac & Co. Ltd., 100%)		
Steel, rebar	Samlo Koyenco Steel Company Ltd.	Plant near Midlands	12,000
REUNION			
Aggregates	Granulats de L'Est	Alluvial quarries in Bras-Panon	NA
Do.	Holcim Reunion SA (Cementis Océan Indien)	Quarry in Bras-Panon	NA
Do.	Teralta Granulat Béton Réunion (Audemard Group)	Quarries in Le Port, Saint-Benoit,	NA
		Saint-Paul, Saint-Louis, and Saint-Pierre	
Do.	Société Concassage Préfabrication Réunion	Quarries in Le Port, Saint-Paul, and	NA
	Saint-Pierre		
Cement	Ciments de Bourbon, SA (Cementis Océan Indien)	Clinker grinding plant in Le Port	500,000
Pozzolana	Holcim Reunion SA (Cementis Océan Indien)	Quarry in Saint-Pierre	1,500,000
SEYCHELLES			
Stone:			
Granite	Gondwana Granite Co. Ltd.	Quarry in Victoria, Mahe Island	NA
Other, crushed	United Concrete Products (Seychelles) Ltd.	Quarry in Pointe Larue, Mahe Island	150,000
Do.	Civil Construction Company Ltd. Seychelles	Quarry on Mahe Island	150,000
er .: . 1 D D: MANI	7.11		

^eEstimated. Do. Ditto. NA Not available.

¹Table includes data available through March 15, 2023. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

²In addition to the commodities listed, lime also was produced in Mauritius; aggregates 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. Although Comoros is a part of the Indian Ocean Islands, it did not produce any minerals and depended upon aluminum, cement, iron sheet, and petroleum products imports to meet domestic demand.