

# THE MINERAL INDUSTRIES OF COMOROS, MAURITIUS, REUNION, AND SEYCHELLES

By Thomas R. Yager

## COMOROS

The Federal Islamic Republic of the Comoros is located on three main islands in the Mozambique Channel about two-thirds of the way between northern Madagascar and northern Mozambique. In 2004, the mineral industry of Comoros continued to be limited to the production of such construction materials as clay, sand and gravel, and crushed stone for local consumption. The demand for cement, petroleum products, and steel was met through imports.

In 2004, the gross domestic product (GDP) of Comoros amounted to about \$1 billion based on purchasing power parity. The GDP increased by 1.9% in 2004 after rising by 2.1% in 2003. In 2002, construction and public works accounted for about 6% of the GDP; manufacturing, 4%; and electricity, gas, and water, 2% (International Monetary Fund, 2004, p. 73; 2005, p. 208; 2005§<sup>1</sup>).

In 2002 (the latest year for which data were available), imports of iron and steel were 4,795 metric tons (t) compared with 2,481 t in 2001 and 3,168 t in 1997. The value of iron and steel imports amounted to about \$2.2 million in 2002, or nearly 4% of total imports (International Monetary Fund, 2004, p. 104).

Imports of cement were 29,985 t in 2002 compared with 40,000 t in 2001 and 24,088 t in 1997. The value of cement imports amounted to about \$2.1 million in 2002, or 3% of total imports (International Monetary Fund, 2004, p. 104).

In 2002, Comoros operated powerplants that had a total capacity of 13 megawatts (MW). The production of electricity was 33.5 gigawatthours (GWh) in 2002 compared with 32 GWh in 2001 and 29 GWh in 1998. From 1998 to 2002, reported national consumption of electricity rose to 31 GWh from 18 GWh. Fossil fuels provided most of the country's power; geothermal energy resources were known to occur within the territory, but were not developed. Imports of petroleum products were 48,480 t in 2002 compared with 45,103 t in 2001 and 16,380 t in 1997. The value of imported petroleum products amounted to \$11.4 million in 2002, or 18% of total imports (International Monetary Fund, 2004, p. 83, 104).

## Outlook

Minerals output was not expected to change significantly because Comoros has very limited mineral resources and weak infrastructure. Adversarial relationships among island Governments have nearly halted economic reforms (United Nations Integrated Regional Information Networks, 2004).

<sup>1</sup>References that include a section mark (§) are found in the Internet Reference(s) Cited sections.

Import dependence and deforestation may lead to development of the country's geothermal resources. The International Monetary Fund (2005, p. 208) predicted that the GDP would increase by 3% in 2005 and 3.5% in 2006.

## References Cited

- International Monetary Fund, 2004, Union of the Comoros—Selected issues and statistical appendix: Washington, DC, International Monetary Fund, August 13, 108 p.
- International Monetary Fund, 2005, World economic outlook—Globalization and external imbalances: Washington, DC, International Monetary Fund, April, 289 p.
- United Nations Integrated Regional Information Networks, 2004, Comoros—Political tensions disrupt economic reforms—Report: New York, New York, United Nations Integrated Regional Information Networks press release, August 18, 2 p.

## Internet Reference Cited

- International Monetary Fund, 2005 (April), Comoros, World Economic Outlook Database, accessed April 22, 2005, via URL <http://www.imf.org/external/pubs/ft/weo/2005/01/data/index.htm>.

## MAURITIUS

The Republic of Mauritius is located about 1,000 kilometers (km) east of Madagascar. In 2004, Mauritius produced basalt construction stone, lime from coral, sand, semimanufactured steel, and solar-evaporated sea salt. Local companies also cut imported diamond.

In 2004, the GDP of Mauritius amounted to about \$14.9 billion based on purchasing power parity; per capita GDP was about \$12,200. The GDP increased by 4.4% in 2004 after rising by 3% in 2003. Manufacturing accounted for 18% of the GDP; construction, 5%; electricity, gas, and water, 2%; and mining and quarrying, less than 1% (International Monetary Fund, 2005, p. 208; 2005§; Mauritius Central Statistics Office, 2005b, p. 31).

Domestic rolling mills produced steel-reinforcing bars (rebar) and welded mesh using imported ingot as raw material. In 2004, the production of iron bars and steel tubes rose to 65,000 t from 58,700 t in 2003. Imports of iron and steel amounted to 109,000 t at a value of \$67.5 million in 2004, or about 2% of total imports (Mauritius Central Statistics Office, 2005a, p. 22, 25; 2005b, p. 27).

United Basalt Products (UBP) was the leading producer of building materials in Mauritius. UBP produced aggregates at 10 locations on the island of Mauritius. On the island of Rodrigues, Welcome Industries Ltd. (a subsidiary of UBP) had a production capacity of nearly 150,000 metric tons per year (t/yr) of aggregates. Gamma Civic Ltd. also produced aggregates.

Mauritius did not produce cement in 2004; all the country's cement requirements were imported. In 2004, imports of cement amounted to 719,000 t at a value of \$39.6 million, or about 1% of total imports (Mauritius Central Statistics Office, 2005a, p. 22, 25).

Mauritius Chemical and Fertilizer Industry Ltd. was the country's only producer of fertilizers. In 2004, fertilizer production rose to 89,400 t from 82,000 t in 2003. Imports of fertilizers amounted to 48,000 t at a value of \$11.1 million in 2004 (Mauritius Central Statistics Office, 2005a, p. 25; 2005b, p. 27).

Mauritius had no identified resources of fossil fuels. In 2004, imports of coal were 331,800 t compared with 289,400 t in 2003. Gamma Civic operated an asphalt plant; the demand for all other petroleum products was met through imports. The value of imported mineral fuels, lubricants, and related products amounted to \$359 million in 2004, or nearly 13% of total imports (Mauritius Central Statistics Office, 2005a, p. 22-23; 2005b, p. 28).

National production of electricity rose to 2,117 GWh in 2004 from 2,058 GWh in 2003. In 2003, diesel and fuel oil accounted for 48.8% of electricity generated; coal, 22.7%; bagasse, 21.3%, hydroelectric plants, 5.7%; and kerosene, 1.5%. Mauritius had powerplants with an effective generating capacity of 568.3 megawatts (MW). The state-owned Central Electricity Board planned to expand capacity at the 48-MW Port Louis power station to between 78 and 87 MW and to build a new bagasse-powered facility with a capacity of 60 MW (Africa Energy Intelligence, 2004; Mauritius Central Statistics Office, 2004, p. 12; 2005b, p. 28).

## Outlook

The economy of Mauritius is likely to continue to grow steadily in the near future. The International Monetary Fund (2005, p. 208) predicted that the GDP would increase by 3.7% in 2005 and by 2.9% in 2006. In the short run, the growth in the minerals sector is likely to be restricted to construction materials. Offshore oil exploration has been inconclusive, and polymetallic nodules on the ocean floor are unlikely to be developed in the foreseeable future.

## References Cited

- Africa Energy Intelligence, 2004, Mauritius—Four line up for renovation: Africa Energy Intelligence, no. 370, May 26-June 8, p. 7.
- International Monetary Fund, 2005, World economic outlook—Globalization and external imbalances: Washington, DC, International Monetary Fund, April, 289 p.
- Mauritius Central Statistics Office, 2004, Energy and water statistics—2003: Port Louis, Mauritius, Mauritius Central Statistics Office, 19 p.
- Mauritius Central Statistics Office, 2005a, External trade—4th quarter 2004: Port Louis, Mauritius, Mauritius Central Statistics Office, 31 p.
- Mauritius Central Statistics Office, 2005b, Mauritius in figures: Port Louis, Mauritius, Mauritius Central Statistics Office, 42 p.

## Internet Reference Cited

- International Monetary Fund, 2005 (April), Mauritius, World Economic Outlook Database, accessed April 22, 2005, via URL <http://www.imf.org/external/pubs/ft/weo/2005/01/data/index.htm>.

## REUNION

Reunion, which is an overseas department of France, is located about 650 km east of Madagascar. Production of mineral commodities represented only a small part of the economy of Reunion, although little quantitative information was available. In 2000, construction and public works accounted for 7% of the GDP; manufacturing, 4%; and energy, 1% (Gautier, 2004).

Holcim (Réunion) S.A. produced 380,000 t/yr of hydraulic cement by grinding imported clinker; its plant at Le Port had a capacity of 400,000 t/yr. The company also produced 1.3 million metric tons per year of aggregates from plants at Bras Panon, Sainte-Clotilde, Saint-Joseph, and Saint-Pierre [Holcim (Réunion) S.A., 2003]. Additionally, seacoast coral continued to meet local construction needs.

Reunion has no identified resources of coal or petroleum; all petroleum demand was met through imports. In 2004, the Government decided to build a 70-km railway to link St. Benoit, St. Denis, and St. Paul because of increasing road congestion. The railway was expected to be completed in 2012 at a cost of \$1.6 billion to \$1.7 billion (International Railway Journal, 2004§).

## References Cited

- Gautier, Alexandre, 2004, Légère inflexion de la croissance en l'an 2000: Économie de la Réunion, no. 121, Second quarter, p. 2-4.
- Holcim (Réunion) S.A., 2003, Holcim intègre l'environnement et la sécurité à son programme de développement (Holcim integrates environment and safety into its program of development): Le Port, Reunion, Holcim (Réunion) S.A. press release, November 23, 1 p.

## Internet Reference Cited

- International Railway Journal, 2004 (March 26), Réunion to have a railway, accessed May 5, 2005, at URL [http://www.railjournal.com/latenews\\_archive.html](http://www.railjournal.com/latenews_archive.html).

## SEYCHELLES

The Republic of Seychelles is a group of 40 granitic and 50 or more coralline islands that is located northeast of Madagascar in the Indian Ocean. Mineral production in Seychelles consisted mostly of production of such construction materials as clay, coral, sand, and stone.

In 2004, the GDP of Seychelles amounted to about \$980 million based on purchasing power parity. The GDP fell by 2% in 2004 after declining by 6.3% in 2003. Handicrafts, manufacturing, and mining accounted for 17% of the GDP; building and construction, 10%; and electricity and water, 2%. In 2004, the building and construction sector grew by 34%, and the electricity and water sector, 1.3% (Central Bank of Seychelles, 2004, p. 56-57; International Monetary Fund, 2005, p. 208; 2005§).

Seychelles had no identified resources of fossil fuels. In 2004, imports of mineral fuels amounted to nearly \$98 million, which was 22% of total imports. The production of electricity for 2003 was 242 GWh compared with 229 GWh in 2002 and

159 GWh in 1998 (Central Bank of Seychelles, 2004, p. 76; 2005, p. 45).

## Outlook

The International Monetary Fund (2005, p. 208) predicted that the GDP of Seychelles would decline by 4% in 2005 and rise by 3% in 2006. The short-term outlook for mineral production is for little change. Seychelles has modest natural resources, and any newly discovered resources of petroleum and natural gas could not be exploited immediately.

## References Cited

Central Bank of Seychelles, 2004, Quarterly review: Victoria, Seychelles, Central Bank of Seychelles, v. 22, no. 1, January-March, 77 p.

Central Bank of Seychelles, 2005, Annual report 2004: Victoria, Seychelles, Central Bank of Seychelles, 94 p.

International Monetary Fund, 2005, World economic outlook—Globalization and external imbalances: Washington, DC, International Monetary Fund, April, 289 p.

## Internet Reference Cited

International Monetary Fund, 2005 (April), Seychelles, World Economic Outlook Database, accessed April 22, 2005, via URL <http://www.imf.org/external/pubs/ft/weo/2005/01/data/index.htm>.

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

(Metric tons unless otherwise specified)

Country and commodity	2000	2001	2002	2003	2004 <sup>c</sup>
<b>MAURITIUS<sup>2</sup></b>					
Fertilizers	83,673	84,278	86,100	82,000 <sup>r</sup>	89,400 <sup>3</sup>
Salt, marine	6,100	6,800	7,000	7,200 <sup>c</sup>	7,700
Sand, coral <sup>c</sup>	400,000 <sup>3</sup>	410,000	--	--	--
Steel, semimanufactures	46,000	48,700	52,400	58,700	65,000 <sup>3</sup>
<b>REUNION<sup>4</sup></b>					
Cement <sup>c</sup>	380,000	380,000	380,000	380,000	380,000
<b>SEYCHELLES</b>					
Dimension stone, granite	54,788	6,044	97,576 <sup>r</sup>	92,120 <sup>r</sup>	93,000
Gravel and crushed rock	230,000 <sup>r,c</sup>	245,000 <sup>r,c</sup>	239,746	212,926	213,000
Sand	12,053	8,128	2,840	2,165	2,200

<sup>c</sup>Estimated; estimated data are rounded to no more than three significant digits. <sup>r</sup>Revised. -- Zero.

<sup>1</sup>Includes data available through July 5, 2005.

<sup>2</sup>In 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 levels.

<sup>3</sup>Reported figure.

<sup>4</sup>In addition to the commodity listed, coral and volcanic rock are also known to be produced, but information is inadequate to make reliable estimates of output levels.