

Global Geotourism Perspectives



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Geological Attractions for Tourists in Mauritius

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Geological Attractions for Tourists in Mauritius

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Introduction

The island of Mauritius lies in the Indian Ocean, 890 km to the east of Madagascar. It is situated between latitude 19°50' S and 20°32' S and 57°18' E and longitude 57°46' E. Mauritius is part of the Mascarene Islands along with the French island of Réunion 200 km to the southwest and the Mauritian island of Rodrigues 560 km to the east-northeast.

Mountains and hills, plateaus, river valleys and plains define the topography of Mauritius. The island is made up of a central plateau gradually rising towards the southwest where it reaches its highest point of 828 m at Piton de la Petite Rivière Noire. This plateau is surrounded by the remnants of a primary shield volcano in the form of a chain of mountains and some isolated peaks. Mauritius is almost entirely ringed by coral reefs.

The Republic of Mauritius comprises the main island of Mauritius and several outlying islands and islets. The island of Mauritius has an area of 1,865 sq km (with a length of 65 km and width of 45 km) and a population of 1,237,286 as on 30 June 2009. The Mauritian capital and largest city is Port Louis, in the northwest of the island. Other important towns are Beau Bassin–Rose Hill, Curepipe, Quatre Bornes, and Vacoas–Phoenix. The local climate is tropical, modified by southeast trade winds. There is a warm, dry winter from May to October and a hot, wet, and humid summer from November to April. Rodrigues is the main outer island of the Republic of Mauritius with a surface area of 108 sq km and a population of 37,748 as on 30 June 2009.

Safford (1997) writes that Mauritius was originally completely covered by wet or dry evergreen forest and scrub, and palm savanna. Habitat destruction following human colonization in 1638 resulted in the reduction of native vegetation cover on the mainland. Humans sent the native bird, the dodo, into extinction by 1681 (Ash, 2006). The island was ruled in turn by the Dutch, French, and British, who modified habitats on Mauritius at an alarming rate. In the 19th century, large areas of dense Mauritius forests were cleared and converted wholesale into

sugarcane plantations. A huge wave of mass migration of labourers from India to work in these fields took place in the second half of the 19th century. By this time, habitat modification on Mauritius had reached almost every corner of the island. Sugarcane is grown on about 90 per cent of the cultivated land area. In fact, Safford (1997) estimates that only 5 per cent of the original native vegetation cover remained on Mauritius by 1993.

Tourism in Mauritius

Mauritius has long been known for its natural beauty. Author Mark Twain, for example, noted in his personal travelogue, *Following the Equator* (1897) – ‘You gather the idea that Mauritius was made first and then heaven, and that heaven was copied after Mauritius’.

Mauritius possesses a wide range of natural and man-made attractions complemented by a multi-ethnic and multicultural population. The tourism sector contributes significantly to economic growth and has been a key factor in the overall development of Mauritius. In the past two decades, tourist arrivals increased at an average annual rate of 9 per cent. Tourist arrivals grew by 2.6 per cent from 906,971 in 2007 to 930,456 in 2008. Surveys have shown that the main reason for tourists visiting Mauritius is beach holidays.

Developing tourism as a robust and vibrant industry has always been a top priority of the Government. However, if not properly planned and managed, tourism could significantly degrade the environment through pressures on the coastal and marine ecosystems on which it is so dependent. In its tourism vision for 2020 the Government has emphasized the need for diversifying into ecotourism with the sensitive use of Rodrigues and other outer islands (MENDU Report, 2005). Geotourism that sustains or enhances the geographical character of places, and ecotourism, linking areas of higher economical value to low impact tourism, may present important and environmentally sustainable opportunities for tourism development. The abundant geological features that relate mainly to the volcanic origin of the island, offer much towards achieving this cause.

Geology of Mauritius

The Mascarene Islands of Mauritius, Réunion, and Rodrigues are the tops of great volcanic cones that rise from the ocean floor. A popular geological hypothesis – the mantle plume hypothesis – suggests that these islands were formed over a hotspot, caused by a mantle plume upwelling under the African plate, with a source in the lower mantle (e.g. Morgan 1981; Duncan and Richards 1991; Mahoney *et al.*, 2002). According to the hypothesis, the present location of this plume is Réunion, which is currently volcanically active, whereas Mauritius and Rodrigues are no longer so. This hypothesis is not universally accepted (e.g. Burke, 1996; Sheth, 2005 and 2007).

Chapter extract

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