TRINIDAD AND TOBAGO



Source: esri

General

Trinidad and Tobago - officially the Republic of Trinidad and Tobago - is a twin island sovereign state that is the southernmost nation in the Caribbean. It is situated 130 km south of Grenada off the northern edge of the South American mainland, 11 km off the coast of north-eastern Venezuela. It shares maritime boundaries with Barbados in the Northeast, Grenada in the Northwest, Guyana in the Southeast, and Venezuela in the South and West. Trinidad and Tobago has an area of 0.51 Mha (million hectares) with, in 2022 a population of 1.53 million, or 3.0 persons per ha (Wikipedia and United Nations, 2022).

Climate and geography

The climate is tropical. There are annually two seasons: the dry season for the first five months of the year, and the rainy season in the remaining seven months. Winds are predominantly from the Northeast. Unlike most of the other Caribbean islands, both Trinidad and Tobago have frequently escaped the wrath of major devastating hurricanes. In the Northern Range, the climate is often different from the sweltering heat of the plains south of it. Record temperatures for Trinidad and Tobago are 39 °C for the high, and a low of 12 °C (source: Wikipedia).

The terrain of the islands is a mixture of mountains and plains. On Trinidad the Northern Mountain Range runs parallel with the north coast. The rest of the island is generally flatter, with exception of the Central Mountain Range and Montserrat Hills in the centre of the island and the Southern Range and Trinity Hills in the South. The three mountain ranges determine the drainage pattern of Trinidad. The east coast is noted for its beaches. The island contains several large swamp areas, such as the Caroni Swamp and the Nariva Swamp. Major bodies of water on Trinidad include the Hollis Reservoir, Navet Reservoir and Caroni Reservoir. Trinidad is made up of a variety of soil types, the majority being fine sands and heavy clays. The valleys of the Northern Range and the soils of the East—West Corridor are the most fertile. Trinidad is also notable for containing Pitch Lake, the largest natural reservoir of asphalt in the world. Tobago contains a flat plain in the South-west, with the eastern half of the island being more mountainous, culminating in Pigeon Peak.

Existing polders

The Group Polder Development (1982) mentions that there are a number of small polders along the edges of the Nariva Swamp. In addition they mention that there are some polders along the edges of the Caroni Swamp. Some polder in these areas can be identified on Google Earth. Details about these areas have to be further investigated.

General characteristics of the polders in Trinidad and Tobago are shown in Table I.

Proposed polders

The Group Polder Development (1982) mentions that in the Nariva Swamp at least 7,000 ha is suitable for reclamation. It is questionable which part of this area has indeed been reclaimed. The total area of the swamp is about 12,000 ha. Out of this 6,234 ha is a nature reserve and has the status of a Ramsar site.

The Group Polder Development (1982) also mentions that there were plans for the reclamation of the Caroni Swamp. However, these plans have most probably not been implemented, while now the swamp is a nature reserve with the status of a Ramsar site.

Location of the polders in Trinidad and Tobago as shown on the World polder map

The locations of the polders in Trinidad and Tobago are shown in Figure 1.



Figure 1. Locations of the polders in Trinidad and Tobago (source: esri – Batavialand)

References

Group Polder Development, Department of Civil Engineering, Delft University of Technology, 1982.

*Polders of the World. Compendium of polder projects. Delft, the Netherlands.

United Nations, Department of Economic and Social Affairs, Population Division. 2022. World population prospects, medium prognosis. The 2022 revision. New York, USA.

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Table I. General characteristics of existing polders in Trinidad and Tobago

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use
Polders in the Nariva Swamp			RLL	10° 27' N	51° 05' W	1	Agriculture
Polders in the Caroni Swamp			RLL	10° 37' N	61° 26' W	5	Agriculture
Total							

^{*)} RLL = reclaimed low-lying land; LGS = land gained on the sea; DL = drained lake