MOZAMBIQUE

Source: esri

General

Mozambique - officially the Republic of Mozambique - is a country in Southeast Africa bordered by the Indian Ocean in the East, Tanzania in the North, Malawi and Zambia in the Northwest, Zimbabwe in the West, and Eswatini and South Africa in the Southwest. It is separated from Madagascar by the Mozambique Channel in the East. The area of the country is 80.2 Mha (million hectares) with in 2022 a population of 33.0 million, or 0.41 persons per ha (Wikipedia and United Nations, 2022).

Climate and geography

Mozambique has a tropical climate with two seasons, a wet season from October to March and a dry season from April to September. Climatic conditions, however, vary depending on altitude. Rainfall is heavy along the coast and decreases in the North and South. Annual precipitation varies from 500 to 900 mm depending on the region, with an average of 590 mm. Cyclones are common during the wet season (source: Wikipedia). Theron and Barwell (2012) give a detailed description of the possible climate change impacts and the possible measures in the field of coastal zone protection.

44% of the country consists of lowlands below 200 m+MSL (mean sea level). The lowland in Cabo Delgado and Nampula consists of no more than a coastal plain about 60 km wide, but extends deep into the interior around the Zambezi delta. The 2655 km long coast is characterized by cliffs in the North and around the Zambezi delta by extensive mangrove swamps. In the South the estuaries are rarer, here too there is an alternation of shallows and mangrove swamps with a number of bays opening to the North. South of Ponta Da Barra, the coast is characterized by dunes and lagoons. In the interior of northern and central Mozambique, the lowland gradually changes into a gently sloping plateau that rises slowly from 200 to 1000 m+MSL and covers 43% of the country. On the plateau are some mountain ridges. Especially in the North there are many mountains. In the South, the Lebombo Mountains are up to 1000 m+MSL high. The country is crossed from East to West by two major rivers, the Limpopo and the Zambezi. In the lower parts of the country they can reach a width of 3 km and a delta of 80 km wide. The Ruvuma River forms the border with Tanzania over a distance of more than 700 km. The largest lake is the Cahora Bassa reservoir for hydropower that was built in the 1970s.

Existing polders

There are two polder areas (Group Polder Development, 1982):

- Delta of Incomati River 4,000 ha;
- Delta of Limpopo River 24,000 ha.

Polders also seem to exist along the Zambezi River, but no details could be found.

General characteristics of the polders in Mozambique are shown in Table I.

Proposed polders

No proposed polders could be found.

Location of the polders in Mozambique as shown on the World polder map

The location of the polders in Mozambique is shown in Figure 1.

The pictures by Prof. Adriaan Volker are shown in Table II.

Figure 1. Location of the polders in Mozambique (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

Theron, A. and L. Barwell, 2012. Theme 2. *Coastal planning and adaptation to mitigate climate change impacts*. National Institute for Disaster Management (INGC). Stellenbosch, South Africa.

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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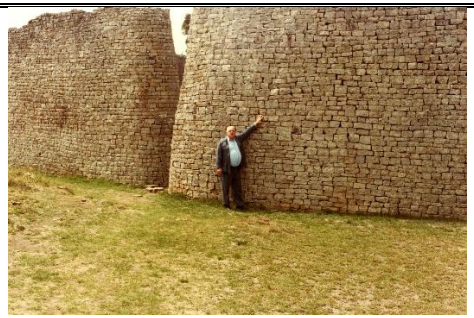
Lelystad, February 2023

Table I. General characteristics of the existing polders in Mozambique

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use
Delta of Incomati River		4,000	RLL	25° 28' S	32° 49' E	8	Agriculture
Delta of Limpopo River		24,000	RLL	24° 53' S	33° 36' E	8	Agriculture
Total		28,000					

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

Table II. Pictures by Prof. Adriaan Volker

	
A4 001/II.4.1 *) Group picture. Front row from left to right: Antonio Gonzalve Henrique, Arnaldo Lopez Pereira (director Water Affairs), Jose da Costa (UNESCO), Prof. Adriaan Volker, Prof. Alvaro Caruo Vaz. Second row from left to right: Jos de Sonneville, D.G. Jamieson, unknown, Armando Lencastre, Klas Calderwell (RIT Stockholm), unknown, Jan Suska (UNESCO), Barraden Leitas (DNA-DRN), Abdul Fakir (CETA), Borges Cuelho (EDM)	A4 002/II.4.2 Prof. Adriaan Volker in front of Great Zimbabwe

*) Batavialand/orginal