

Beira: a barrage protects the city from flooding

The Mozambique harbour town of Beira is suffering from the consequences of climate change. Flooding is increasingly frequent whenever there are heavy rains, and at high tide the Indian Ocean pushes seawater into the Chiveve River, which flows through the middle of the city. Thereby the settlements and markets on the river banks get flooded. With the assistance of KfW Development Bank, however, a barrage is now being built that can be closed when spring tides and heavy rains occur at the same time.

Beira is an important port on the coast of Mozambique. Large areas of the town with 500,000 inhabitants are currently barely above sea level. The course of the river, which flows through the city, has long been neglected. A bridge collapsed in the estuary area decades ago. Its ruins blocked the path to the sea, the river silted up visibly and was no longer able to drain the hinterland. The resulting alluvial deposits became a dumping ground for waste, while the pools of water promoted the proliferation of mosquitos that carry malaria. At particularly high tides accompanied by heavy rains, the Chiveve River burst its banks and flooded large areas of the city and those settlements occupied by its poorest inhabitants.

All that is changing now: a barrage will protect Beira from flooding in the future, a practice that is frequently applied on the coast of northern Germany, too. KfW has financed the construction of the barrage on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ) since 2015 with a financial contribution of EUR 13 million. The gates of the barrage can be manually closed in a timely manner when heavy rainfall inland or particularly high tides are



The barrage will prevent flooding in the city centre of Beira.

reported. The Indian Ocean on the coast of Mozambique has a tidal range of up to seven meters. Thanks to climate change, both rainfall and periods of drought in the Southern African country are on the rise, making it increasingly important and urgent to protect Beira from the elements.

This measure is embedded in a comprehensive plan for the renaturation and improvement of the river's course in urban areas: the Chiveve River, which resembled more of a narrow ditch than a river in recent years, will be dredged, as will the port of Beira. This will benefit both fishermen and traders.

As part of the renaturation of the river course, a local non-governmental organisation in cooperation with KfW will take over reforestation with mangroves along the river banks.

"The river will be able to breathe freely again," explains Pascale Magin, who is responsible for Mozambique at KfW Development Bank. Fixed stands will be set up for the market alongside the river, replacing the formerly makeshift constructions. Parks will be created along the river banks and a waste disposal concept will be developed together with the municipality of Beira. This should make uncontrolled accumulations of rubbish a thing of the past.

Flooding mainly used to affect very poor areas of the city. The construction of the barrage and the betterment of the river course will particularly benefit the poorer segments of the population and the economic development of the city centre.

Charlotte Schmitz