Adaptation – Mozambique

Urban development and climate change

Mozambique is the hardest-hit country in Africa when it comes to extreme weather events such as floods, cyclones or droughts and severe erosion. They pose a constant threat to the population, which is generally incapable of sufficiently protecting itself against such phenomena. Climate trends are showing that the country will suffer even more from the effects of climate change in the future. This is why KfW is promoting local measures so that the population can be better prepared for such extreme weather events. One prime example of this is the coastal town of Beira, which is affected by floods on a regular basis. KfW’s aim is to minimise the negative impact of such events and to improve people’s living conditions in the long term.

Context

Home to half a million inhabitants, the coastal town of Beira is Mozambique’s second-biggest city and boasts one of the country’s most important ports. Large parts of the city centre are scarcely above sea level. Some of the settlements are informal. These neighbourhoods are characterised by a high population density, inadequate residential areas and infrastructure, a lack of water and waste water systems and a high poverty rate, which also make them particularly vulnerable to extreme weather conditions.

Beira is unprepared for the expected climate risks – both at present and in the future. Accordingly, it is considered to be the city most threatened by climate change in Mozambique. In addition to the rising sea level, severe rainfall causes flooding on a regular basis. When this happens, inhabitants not only suffer material losses, but are also exposed to increased health risks due to stagnant water. In the future, this situation will be exacerbated even further due to weather extremes, rising ground water and sea levels, and ongoing coastal erosion. The inhabitants of informal settlements with their businesses are particularly at risk, as are other parts of the city centre too.

Project approach

KfW supports Beira’s sustainable, holistic and climate-adapted urban development approach. In the first phase of the project, KfW financed the construction of a Green Urban Infrastructure in Beira Municipality. Commissioned by the Federal Ministry for Economic Cooperation and Development (BMZ), it is managed by the Ministry of Public Works, Housing and Water Resources (MOPHRH), City Administration in Beira (CMB) and World Bank.
sluice structure and the rehabilitation of the course of the River Chiveve. The river bed was cleared of waste and dredged, so its function as a natural drainage system could be restored. Additional backwater areas in the event of flooding complemented the adaptation measures. In the second phase of the project, jointly with the World Bank, the run down open space along the river will be rehabilitated. A public economically viable park area will be created. The green space will incorporate among others a playing ground, sports facilities, a botanical garden with urban gardening, an open air theatre, an event centre as well as a restaurant, sanitation facilities and lighting.

A market in the vicinity to the bus station will also be rehabilitated. To increase connectivity within the city centre and along the river, bridges, 5.5 km of cycling lane and pavements will be built. Also 1.5 km of wooden pedestrian bridges over the mangrove area will be constructed. Boards along the path will provide information on the protection of the ecosystem.

To secure the ownership and sustainable use of area the residents participate from the outset: for instance a competition to select the park logo was held. Also, various sporting and cultural events have been organised for children and youth of the adjacent formal and informal settlements. Further the project supports the creation of an autonomous park administration.

Impact
The city of Beira is becoming increasingly resilient to the effects of climate change. The completed adaptation measures, the sluice structure, the rehabilitation of the course of the river and the backwater areas, already counter the climatic risks. The measures protect the residents from floods and reduce health risks as a result. By creating a park area along the rehabilitated riverbed, the risk of it being polluted again is reduced. At the same time the quality of life of the residents is improving by gaining access to the recreational area as well as social and cultural events in the park. Direct and indirect employment opportunities are also created. The management of the park is in the responsibility of the municipality. It can thus strengthen its role as a service provider for its citizens. The construction of cycling lanes will contribute to make bicycles a more attractive and safe inner city means of transport.

All in all, Beira not only appears to be better protected as a result of the measures, but is a better place to live in, too.