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QUELIMANE, MOZAMBIQUE: STRENGTHENING BICYCLE CULTURE IN AFRICA'S CYCLING CAPITAL

Quelimane is a medium-sized city with high ambitions to lead the African continent's transition to sustainable transport. Despite a population of just over 300,000 and relatively low GDP per capita, the City's leadership is determined to show the world that cycling can form the backbone of an urban transportation system. The municipality is in the process of building cycling lanes to connect the main residential areas to the market and commercial zones, and is upgrading sidewalks to improve the experience of pedestrians. With this relatively low investment in supportive infrastructure, the City aims to demonstrate how to slow or even reverse the adoption of private motor vehicles and create a cost-effective and low carbon urban mobility system.

ABOUT QUELIMANE

Quelimane is located in the Zambézia province, in the central region of Mozambique. It is the administrative capital and largest provincial city, located on the Rio dos bons Sinais, approximately 20 kilometers inland from the Indian Ocean. **The region is highly vulnerable to climate change** and has been hit by extreme flooding in 2007 and Cyclone Idai in 2019. With a decline in the once lucrative coconut, fishing, and rice production industries, the city now experiences high levels of poverty and unemployment, and citizens rely heavily on small-scale informal trading. Data from 2008 shows that most of the population live in precarious housing, and less than six percent have running water. Although **the people of Quelimane live a relatively low carbon lifestyle** by international standards, they are extremely vulnerable to the effects of climate change and face the challenge of developing resilient and sustainable infrastructure to improve lives at a low cost.



Population (2017 estimate) 349,842

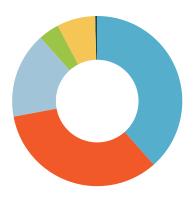
Land area: 114 km²

Density: 3,069 persons/km²

MODAL SPLIT

40% Walking
35% Cycling
17% Motor Vehicles
4.1% Private taxi
7.6% Motorcycles
0.4% Tricycles

Source: Classio Mendiate, 2017



MOBILITY IN QUELIMANE

Quelimane has become known for its cycling culture, with **over a third of journeys taking place by bicycle**. This is in part due to Mayor Manuel de Araújo's extensive use of bicycles in his political campaign. He often attests to the significance of cycling, pointing out that "cycling in Quelimane is more than a mode of transport - it is a tool for social cohesion; it is our identity." By appearing on a bicycle in public and encouraging other officials to do the same, **the Mayor has elevated the status of cyclists**, who are now referred to by locals as 'sons of the Mayor'.

Bicycles are cost effective and prove easier to navigate through the narrow unpaved streets of the urban periphery than automobiles and larger vehicles. The fact that they produce no CO2 emissions is an added bonus. In Quelimane, bicycles are not only used for commuting, but for taxi services and for carrying all manner of goods. Bicycle usage is supported by an extensive network of bicycle related small businesses that provide a wide range of livelihood opportunities. Bicycle shops – mostly run by Chinese, Indian and Nigerian citizens – sell new and used bicycles as well as parts, and strategically located bicycle repair workshops around the central market help ensure that repairs can be made swiftly and cost effectively.

Despite this proud cycling culture, cyclists are exposed to numerous risks and inconveniences due to a lack of cycling infrastructure. This threatens to turn them toward motorized alternatives over time. A lack of dedicated cycling paths means that **cyclists share the road with fast-moving and dangerous motor vehicles**, and road fatalities and injuries have become a regular occurrence. The experience of cycling is also inconvenient and uncomfortable due to exposure to the harsh Mozambican sun, a shortage of secure spaces to store bicycles in public spaces (leaving them vulnerable to theft) and a lack of places to shower and change attire after cycling. Much like the motorcycle taxis elsewhere in Africa, **the erratic behavior of bicycle taxi operators adds to the risks faced by commuting cyclists**, and the Association of Taxi Drivers and Bikers Zambézia (ATAMOZ) has been engaged in a process to register and license them since 2017 in an effort to improve their compliance with road laws.



Walking is also a popular mode of transport in Quelimane, and is used more widely than any other option - particularly by those living close to the urban center. However, the spatial growth of the city is occurring in areas that are situated further than walking distance away from activities, and a lack of pedestrian infrastructure such as pavements and night lighting makes it a risky option.





Quelimane does not have any formal public transport for journeys within the city. The only buses on offer are those connecting it to surrounding districts. It is thus not surprising that **private cars are becoming increasingly popular as a means of enabling people living outside the center to access work opportunities,** and in 2016-2017 car ownership and use increased by six percent, while bicycle ownership decreased three percent. This worrying trend is facilitated by national transportation policies that promote the importation of cheap second hand cars from other parts of the world, and the provision of parking facilities and road upgrades. Not only is increased car ownership adding to traffic congestion and emissions, but reliance on imported fossil fuels makes users highly vulnerable to fuel price hikes.

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CONNECTING QUELIMANE WITH CYCLING LANES

Quelimane has high ambitions to retain and grow its cycling culture by facilitating safer cycling via dedicated cycling lanes. **The City aims to connect the main residential areas to the market and commercial zones** with cycling lanes totaling approximately 2.3 kilometers. This will entail improvements to existing pavements, the installation of bicycle parking facilities in high use areas and the planting of trees along cycle routes to provide shade and improve users' experience.

Although the Quelimane Municipality is attempting to finance the cycle lane project using its own funds, the available budget will only cover the most basic interventions in priority areas. Securing further funding to extend the length of cycle lanes and serve other streets is considered essential to making the initiative more sustainable, and options such as parking charges are being considered to allow vehicle users to cross-subsidize cycling infrastructure.

PROMOTING NMT IN QUELIMANE

The Quelimane Municipality is also engaged in a project to improve conditions for pedestrians. By paving sidewalks, planting shade-providing trees and clearly marking road crossings, it is hoped that pedestrian safety and comfort can be improved, and that the city will be able to retain the high percentage of pedestrian trips whilst reversing the trend towards motorization. Ultimately, **the municipality would like to extend pedestrian and cycling infrastructure to all city streets**, and use land use planning and policies more effectively as a tool to reduce commuting distances for citizens.





"Cycling in Quelimane is more than a mode of transport - it is a tool for social cohesion; it is our identity."

Hon. Manuel de Araújo Mayor of Quelimane



KEY CONTACTS

City of Quelimane

Classio Joao Mendiate, Transport Engineer

ICLEI Africa Secretariat

Blake Robinson - blake.robinson@iclei.org africa.iclei.org | @ICLEIAfrica

TUMI Initiative

Daniel Moser daniel.moser@giz.de transformative-mobility.org | @TUMInitiative

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Author: Blake Robinson & Ryan Fisher

Contributors: Classio Joao Mendiate

Editor: Nadja Martinussen

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