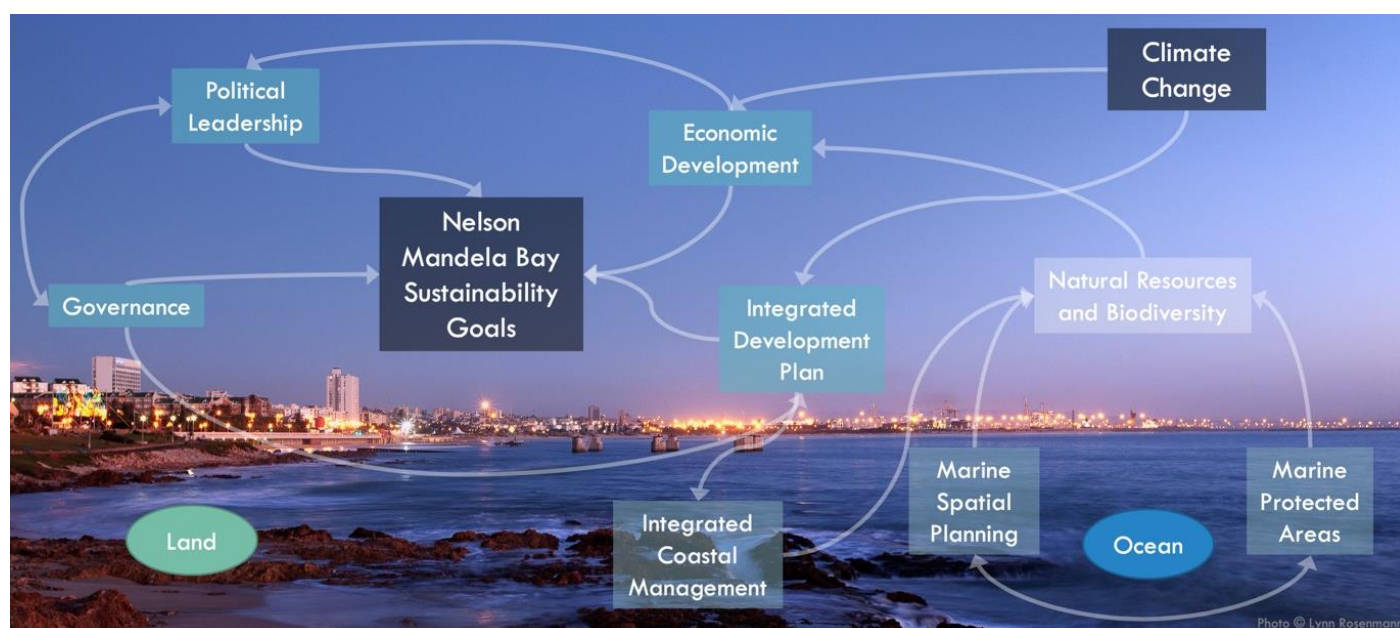


Cities & Climate Change in the Coastal Western Indian Ocean (CICLICO)

Interim Report on recent findings from the CICLICO project: Jan 2020-August 2021

Background

The city of Gqeberha in Algoa Bay is located in a system of people and nature. It is a city of many thousands that make a living and build a local economy in a beautiful and productive coastline and ocean. This system forms what is known as a social-ecological system (see below). The Nelson Mandela Bay Municipality (NMBM) is at the very centre of this system and its role in protecting natural resources while addressing human needs is undisputable. Reducing poverty, inequality and supporting job creation while ensuring that natural resources and the environment are used sustainably is a key challenge to NMBM. It will become more so with climate change, which is already impacting society.



The sustainability challenge for NMBM

Currently, the social-ecological system of Algoa Bay is not governed and managed as a single connected system. The ocean, coast and land are viewed and approached as separate management spaces. The laws, policies and management tools are designed for parts of the system, managed by different levels of government, and often by sector. This raises key questions relating to the sustainability challenge for the NMBM. Can the ocean, shoreline and the land be managed as one unit? Will considering the connectedness of the system help us better achieve the goals for sustainability in a changing climate?

This report

This report presents interim findings of a Western Indian Ocean Marine Science Association (WIOMSA) project called “CICLICO” that is endorsed by the NMBM. The project team consists of scientists from the Nelson Mandela University, the Nova University in Portugal and the Climate Service Center Germany. This presents some initial findings of the status quo of governance of the social-ecological system of Algoa Bay. Recommendations will be “co-produced” with further input from NMBM officials and other stakeholders in the Bay, and presented by the middle of 2022.

The information presented derives from questionnaires in which many NMBM officials and other stakeholders took part. The questionnaires were used to assess the “governance capacity” of institutions and organisations active in the Bay using five forms of capital i.e., social, human, political, financial and environmental capital. A “capital” is understood as the assets, capabilities, properties or other components of a governance system, which collectively represent its ability to function well.

The report concludes with the final steps of the research process before the project team reports back on findings of all aspect of the project and presents final recommendations.

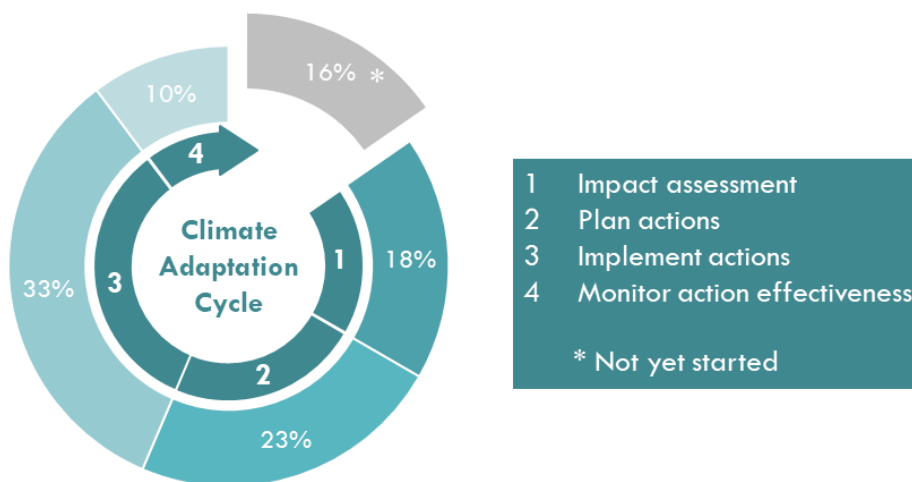
The information below highlight results from a questionnaire to 39 organisations active in Algoa Bay. These organisations were selected using a stakeholder analysis which identified actors relevant to ocean and coastal management in this area.

People who responded to the questionnaire (respondents) came from government and non-government organisations (NGOs), civil society organisations (CSOs), university and research institutes, business and industry.

Climate change was perceived as a serious to very serious problem by 74% of respondents, with droughts, sea-level rise and coastal erosion being the most cited climate-related threats.

Urgency of responding to climate change

In order to gain an overview of progress on adaptation, we asked respondents about their activities relating to the adaptation cycle (the outside circle in the diagram left). The adaptation implementation policy is a common representation of the steps of successful adaptation.



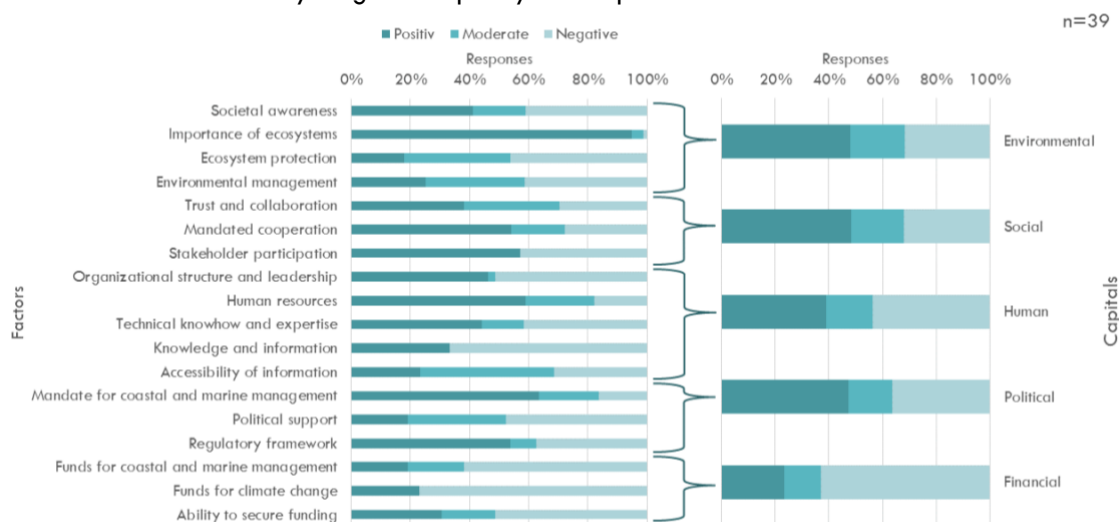
The majority of organisations (84%) have started to respond to climate change. Nearly half have implemented some actions, with 10% of organisations monitoring the effectiveness of these actions.

Governance capacities for climate change adaptation

Respondents rated various key elements (factors) pertaining to environmental, social, human, political and financial capitals of organizations that together provide an indication of the governance capacities for climate change adaptation in the Algoa Bay social-ecological system. Financial and human capital performed less strongly resulting, for example, from limited funding for adaptation, and gaps in knowledge and technical expertise in some stakeholders to plan climate actions.

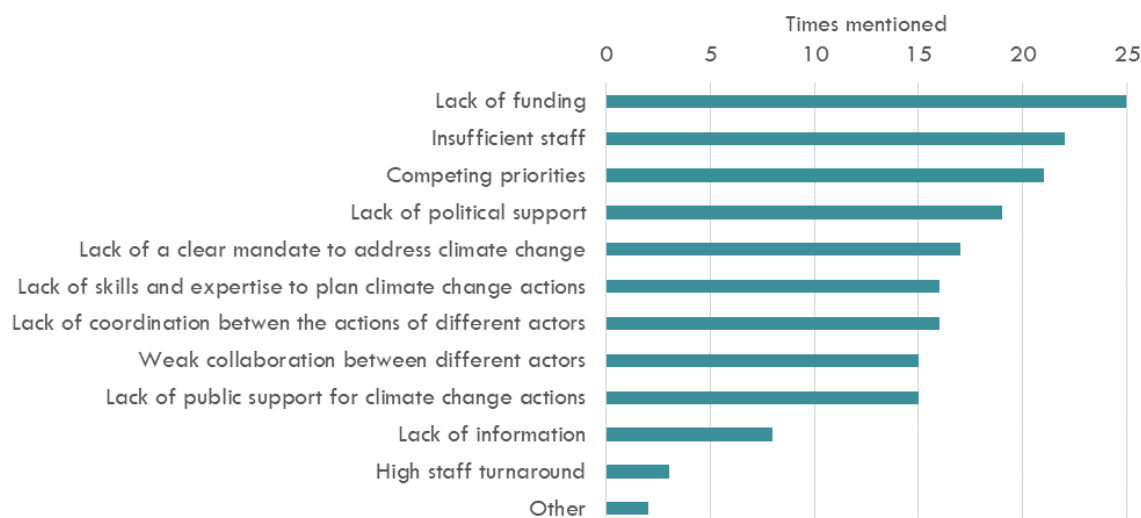
Generally, the results indicate an urgency to address funding issues, reinforce human resources and training focusing on stakeholders with lower human capital, and to improve availability and accessibility of information.

Beyond these overall trends, the research revealed important differences between organizations that will be further discussed with stakeholders to identify targeted capacity development needs.



Barriers to adapting to climate change

Lack of funding presents a main barrier to climate change adaptation and was mentioned by 64% of organisations. The main obstacles to acquiring funding for climate change actions were a lack of knowledge of funding sources, as well as insufficient staff time to apply for funding. “Other” barriers to climate change adaptation mentioned by respondents were: “government entities operating in silos and not coordinating their efforts” and a “lack of public support for climate change actions”.



Next steps

The CICLICO project continues until middle of 2022, a delay brought on by the Covid-19 pandemic. In order to complete the project, there are a number of activities that requires the project team to further interact with NMBM officials and other stakeholders in Algoa Bay. The project team still intends to undertake the following tasks before wrapping up the project:

1. Conduct an **assessment of collaboration and knowledge networks** for climate change adaptation in the Nelson Mandela Bay Municipal area (Oct/Nov 2021).
2. Provide **more details on the governance capacities** of different groups of organisations, including the municipality (March 2022).
3. **Seminar on the potential development and use of climate services** to support local coastal authorities (municipalities and metropolitan cities) (March/April 2022).
4. A **workshop with key coastal and ocean management stakeholders** to explore the climate change data and information needs of actors in the Nelson Mandela Bay Municipal area (March/April 2022).

This report was produced by the CICLICO project team for the NMBM, and other interested stakeholders. For more details, please contact Meredith Fernandes (Meredith.Fernandes@mandela.ac.za) or visit <https://www.algoabayproject.com/ciclico>.

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