

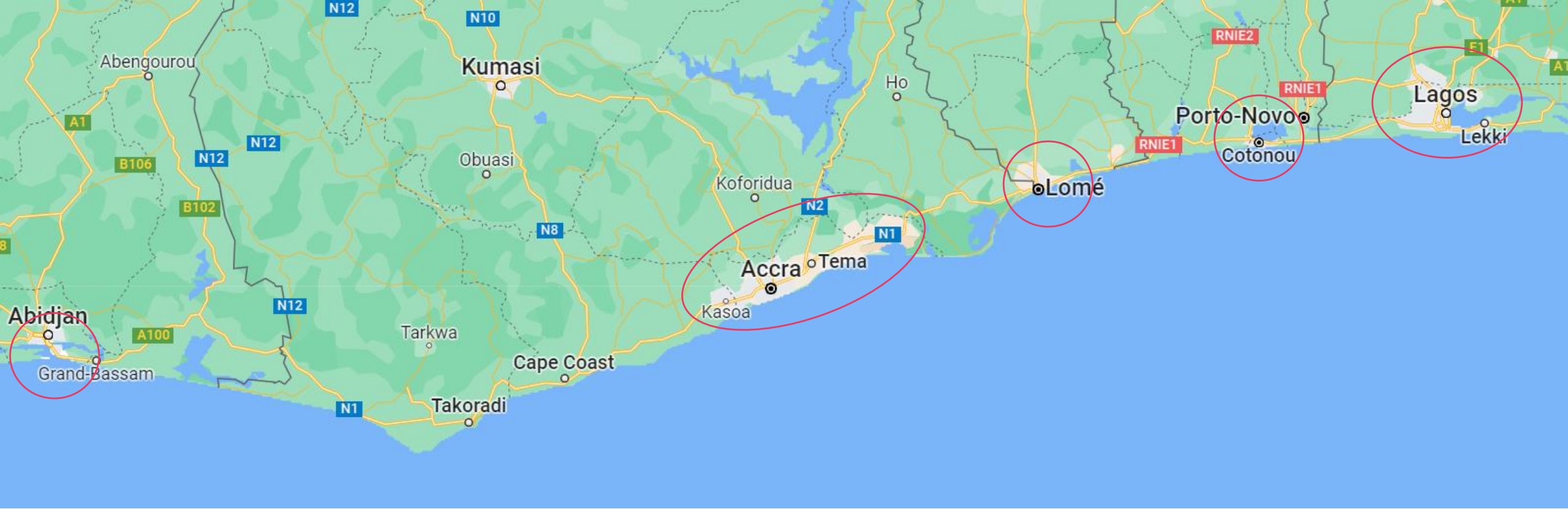
A management framework for the sustainability of lagoons in West Africa

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Resilient Lagoon Network



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Coastal lagoons in West Africa



Lagos-Lekki lagoon complex

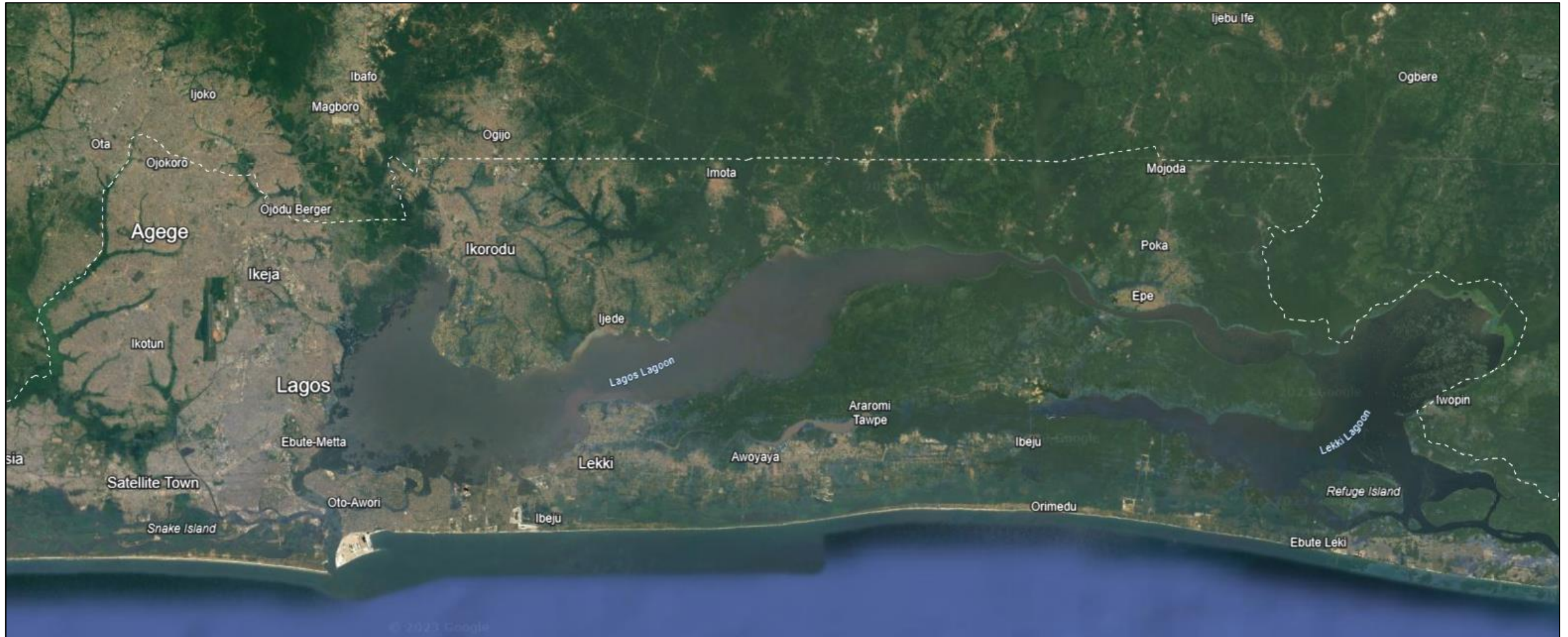
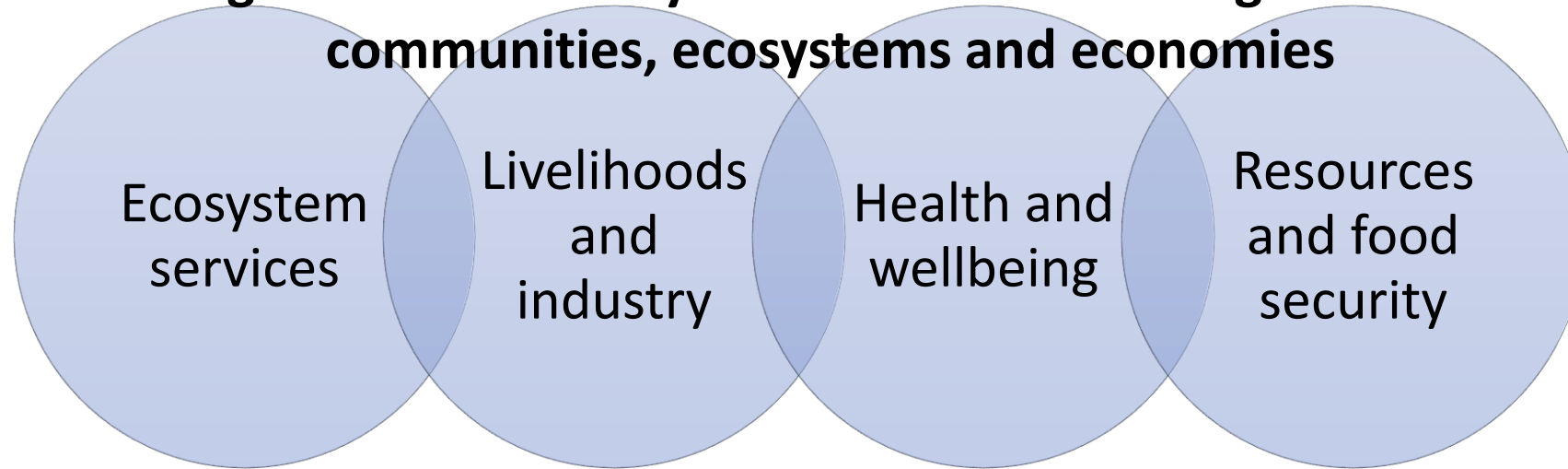


Image: Google Earth, coastline approx. 100km

Why lagoons matter

Ensuring the sustainability of the West Africa's lagoons is vital to communities, ecosystems and economies



Impacts of climate change

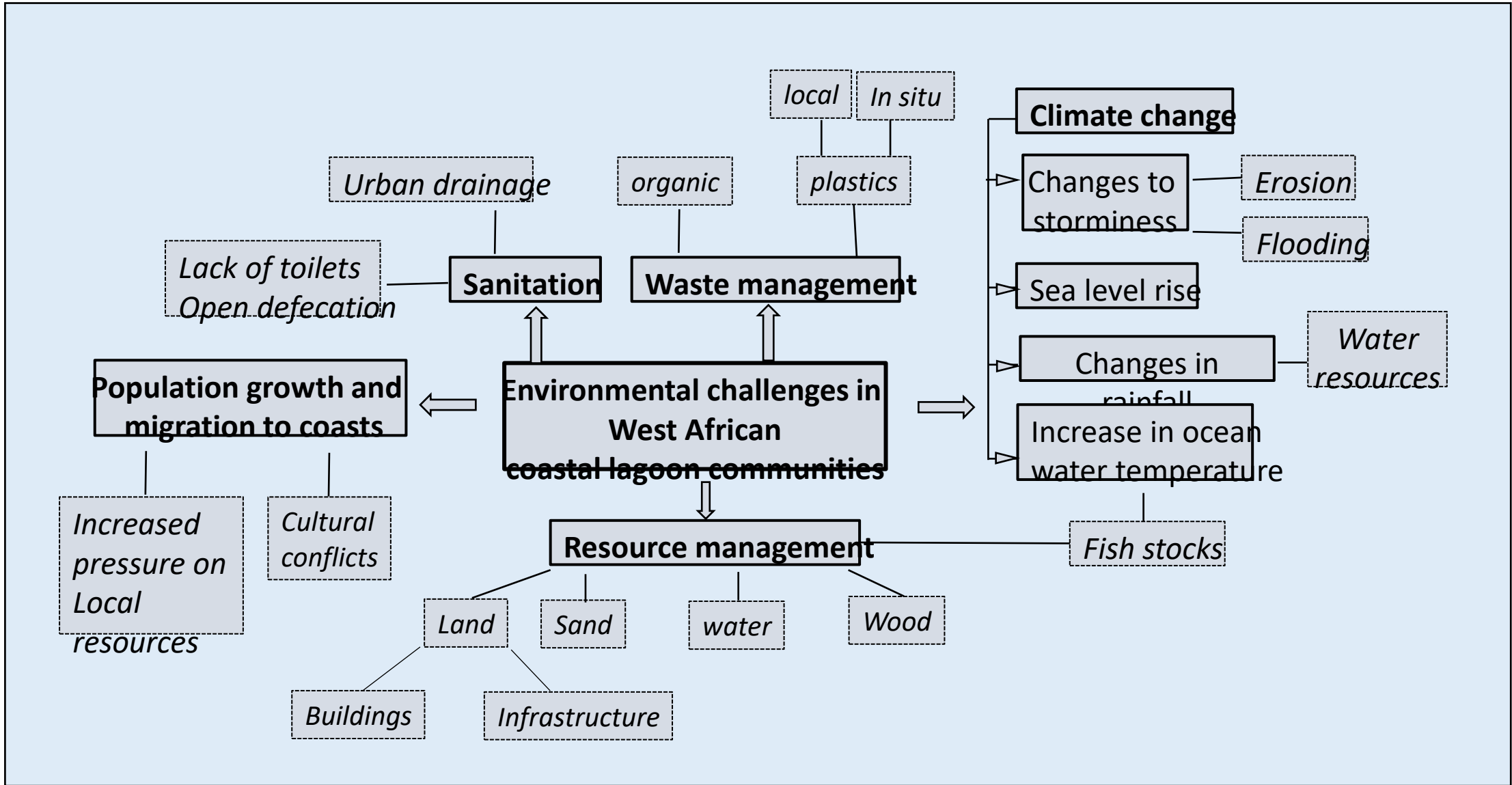
Sea level rise – increased storminess – temperature rise
changes to rainfall patterns



Development related impacts

Urbanisation-habitat fragmentation-water quality
resource management-waste-sanitation





The Resilient Lagoon Network <https://lagoonnetwork.org/>



15 network members from 10 institutions in the UK, Ghana, Nigeria and Benin with expertise in natural and social sciences.

We aim to provide a framework to develop and share solutions to address the development challenges of rapidly growing and increasingly vulnerable coastal lagoons and communities.

Building a framework for sustainable lagoon governance

Key questions:

- **How** do we measure the sustainability of a lagoon? What are the key indicators of a sustainable lagoon?
- **What** are the key aspects of good governance of lagoons? How do we govern lagoons to ensure their sustainable future?
- **Who** needs to be involved in the governance of lagoons? Who informs the sustainable management of lagoons?

Building the framework

Informed by experience of lagoon stakeholders

Input from academics from diverse subject specialisations

Participation from stakeholders:

- **March 2022: Online stakeholder conference and survey**
- **July 2022: Stakeholder conference in Ghana**
- **November 2022: focus group with lagoon practitioners**

Thematic analysis of information garnered from stakeholders via surveys, focus group and conference discussion resulted in three key framework areas:

- 1. Key indicators (measures) for lagoon sustainability**
- 2. Tenets (good practice) for sustainable lagoon governance**
- 3. Stakeholder diversity and involvement**

Key Indicators of sustainable lagoons

Governance

- Effective and integrated institutional framework
- Involvement of local stakeholders
- Inclusion of indigenous knowledge
- Effective planning systems

Social and economic

- Food security
- Sustainable livelihoods
- Access to healthcare and wellbeing support
- Effective sanitation systems
- Functioning ecosystem services
- Provision for environmental education

Environmental

- Water quality
- Functioning ecosystems
- Biodiversity
- Functioning hydromorphology
- Sustainable resource use

Key drivers of challenges faced by lagoons and their communities: Population growth, Resource use and Climate change

Governance

Effective and integrated institutional framework



Involvement of local stakeholders



Inclusion of indigenous knowledge



Effective planning systems



Social and economic

Food security



Sustainable livelihoods



Access to healthcare and wellbeing support



Effective sanitation systems



Functioning ecosystem services



Provision for Environmental education

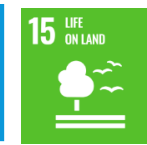


Environmental

Water quality



Functioning ecosystems



Bio-diversity



Functioning hydro-morphology

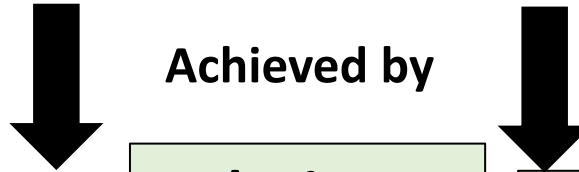


Sustainable resource use



Tenets of sustainable lagoon governance

1. Vertical: Bottom up meets top down approach
2. Horizontal: Collaboration across stakeholders
3. Participatory: includes all stakeholders
4. Inclusive: incorporates traditional knowledge

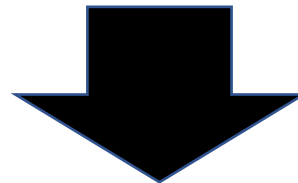
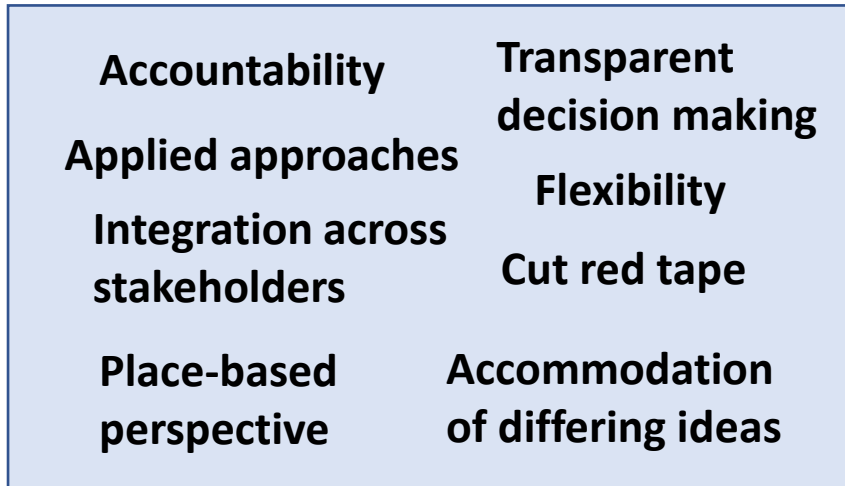


Achieved by

Embedding good governance practice

**Inclusive
Equitable
approaches**

Involvement of local stakeholders



Co-operative action to secure sustainable lagoons

Commercial

Tourist- focused businesses

Commercial businesses

Commercial transport

National government

Traditional authorities

Local authorities

Transport authorities

Government agencies
and departments

Lagoon
stakeholders

Lagoon-side communities

Local communities
(not located directly on lagoon)

Researchers/Academics

NGOs and civil
Society organisations

International organisations

Donors and funding agencies

Religious organisations

Governance

Community

Influencers and
Knowledge exchange

Turning the framework into practice:

Sharing and dissemination: website, policy brief, webinars, in-country discussions, support for implementation and trials

<https://lagoonnetwork.org/securing-the-future-of-lagoons/a-lagoon-management-framework/>

Further research

Pilot projects to test framework approaches

Understanding diversity and variance of lagoons across the Global South

**Impacts of climate change on lagoons and lagoon communities e.g. flooding
Urban lagoons**