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# Theory of Change

Strengthening Sea Level Monitoring and Data Management  
in East Africa for Coastal Resilience and Community



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**Date Presented:**

**September 25th, 2025**

# General questions

## **1- Why do you need to monitor the sea level network installation and rehabilitation**

Provide scientific evidence to support decision making on safety, navigation, and infrastructure planning, prevent risks from tides, extreme events, and storm surges and areas of vulnerability for coastal populations & habitats

# General questions

## **2-Who is the intervention for? Description/mapping the stakeholders**

Implementers: National Oceanographic Institutes, National Data Center, Meteorological departments

Beneficiary: Port authorities, Marine navy, Maritime transport, Fisheries, Planning authorities, Disaster organisation, Research institute, Media, Tourism sector, Policy makers, Climate change directory

Participants: Beach management unit, Community based fisheries, Local fishermen and entrepreneur, LMMAs, Local communities

# General questions

## **3-How will the intervention work? What are the duties of the stakeholders**

Implementers: Delivers data and services that can be easily used and accessed by the end users, install and maintain the equipment

Beneficiaries: Use the scientific evidences to make good decision, planning and communication

Participants: Take the necessary actions according to the suggestion of decision makers, look after the equipment, build awareness between them

# General questions

## **4-What are the primary outcomes of the projet? And Why is it important**

Capacity building

Strengthening the observation network

Improved resilience of the community against the hazards from sea level rise

Safer maritime operation (maritime transport and fisheries, etc.)



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# General questions

## **1-Defining the problem of stakeholders**

Implementers: Lack of capacity (human resources, equipment, infrastructures, technical capacity), communication and dissemination platforms

Beneficiary: Lack of reliable data to make good decisions

Participants: High vulnerability against sea level rise disasters



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## **2-Defining the desired end-goal (impact)**

Implementers: Strengthening the capacity to monitor

Beneficiary: Informed decisions/policies for adaptation and mitigation

Participants: Enhanced resilience and reduced vulnerability

## 3-Define outcomes and output results

Long term	Medium term	Short term
<p>Increased network</p> <p>Strengthened national and regional capacity</p> <p>Available long term time series data for projection and for accurate decision making</p>	<p>Available data that is FAIR (Findable, Accessible, Interoperable and Reusable)</p> <p>State of climate for one year that inform national decisions (how many tropical cyclone can hit you in one year), to know how much to invest for recovery</p> <p>Improved policies</p> <p>Establishment of community of practices</p> <p>Follow political policies</p>	<p>Application: webmap/apps for tide and weather forecasting,</p> <p>More data collected</p> <p>Capacity building</p> <p>Community of practice established</p>

## What are necessary to achieve that impact?

- Comprehensive stakeholders engagement
- Continual collaboration with other institutions (to avoid delay of the project, or to ease the custom clearing of equipment)
- Data sharing agreement and protocols





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## 4- Mapping Activities – What are the activities that will lead to these short- and long term results are then mapped out

- Capacity needs assessment (technicians, forecasters, electricity, etc.)
- Stakeholders analysis and engagement
- Installation of equipment and training
- Availability of human resources for installation and maintenance of the equipment



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## 5- Assumption: What are critical assumption, i.e. the underlying conditions or resources that must exists for the planned change to occur

- Dedicated person who will do the work
- Government support
- End users have access and use the data
- Funding



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## 6- Contribution of the project: What is the best way for the project and organisations to contribute, and what should its role be? (position, capacity added value)

The project:

- Provision of the equipment
- Data acquisition, quality control and distribution
- Provision of technical support (equipment and proper training)
- Installation/maintenance
- Running cost

The host institution:

- Provides experts
- Provide space
- Ensuring national buy-in of the project and alignment of the project with national policies

## 6- What are the opportunities and risks in collaborating with governments, NGOs or communities

Opportunities	Risks
Ensuring sustainability (Government)	Change of political regimes, very long and complicated bureaucracy can delay the project
Leveraging funding, organizing national workshops, Expanding and enhancing partnerships and stakeholders engagement (NGOs)	Conflict of interests,
Ownership, Overall security of the equipment, visibility of the project (Community)	High expectation of the project which we cannot always fulfil



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## 6- Other contributors: What do others do? Are there needs and opportunities for multi-actor collaboration?

Port authorities can contribute for sea level monitoring and maintenance, and safety

Data sharing

Internet providers, etc.



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## 7- Project monitoring – When and how can we revisit the ToC and reflect on what works during the project

During the project

After the project

Mid-term review of the ToC to assess and adjust what is working and not as thing might change (one year)



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## Recommendations

- Conduct vulnerability assessment to the community (gender equality and social inclusion,
  - How the project will address the community (→ to get support from NGOs and government)
  - The project should address the gender and social inclusion issue (ex: during flooding, of any coastal hazards, assess the impact of these events on women, children, etc.)



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**THANK YOU**