

16th Meeting of the Southern African and Islands Hydrographic Commission

Lesson Learnt from Cyclone IDAI - Mozambique

[Mozambique - Member State]

Introduction



- Systems characterized by heavy rainy, strong winds, wave with high heights
- In 2019 – Spread out across the 7 Oceanic Basins
 - 71 Systems were formed
 - 43 TC were named (Sepc Met Cent)
- The **Deadliest and Costliest cyclone in 2019 was Cyclone Idai** (Killed over 1297 ppl, caused more than 2.001 billion USD in damages)
- In **Mozambique it Caused:**
 - **Death of more than 600 ppl; 1600 ppl Injured; 1.8 million ppl affected;**
 - Rapid assessment from WB (**~773 million in damages; an exhaustive assessment (~3.2 billion as the costs for reconstruction)**)

Objectives, and Alignment with National and International Strategies and Policies

OBJECTIVES

- Highlight the Impacts of Cyclone Idai to the Mozambican Hydrographic Services - Beira
- Lesson Learnt from Cyclone IDAI

Importance of Beira Port to the Country and the Region

Why Choose the Beira Corridor? Reason 1: Location & Costs



Beira Port is:

- The **Second most important** port in Mozambique
- A **gateway** to Malawi, Zambia, Zimbabwe's **export to the rest of the world** (and Nowadays to DRC as well)

The usage of Beira Port presents opportunity to **decongest** North-South Corridor, while ensuring **efficient and cost affectively moving** of goods in the region.

Reason 1- Location & Costs

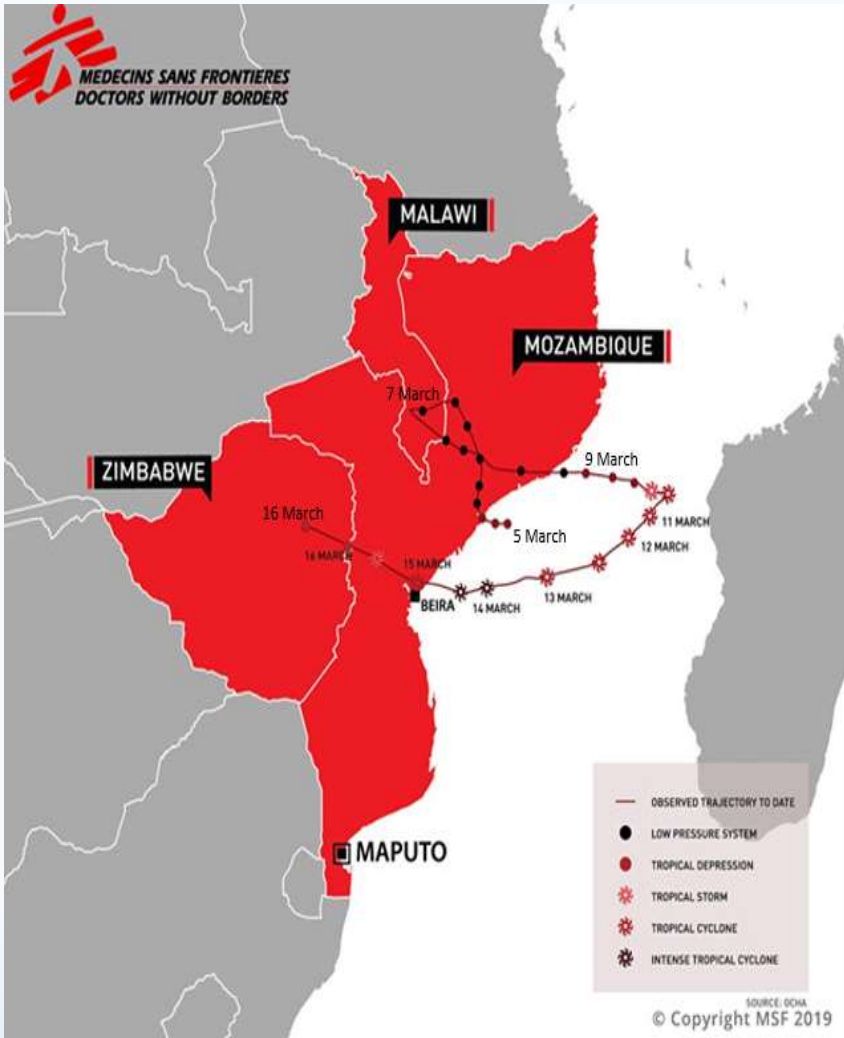
Main Ports Vs Main Business Cities – Distance in Km

Ports	Harare Zimbabwe	Bulawayo Zimbabwe	Lusaka Zambia	KITWE Zambia	Lubumbashi DRC	Blantyre Malawi	Lilongwe Malawi
Beira	858	726	1,054	1,170	1,000	812	950
Durban	1,711	1,454	2,380	2,707	2,613	2,323	2,678
Dar es Salaam	2,634	3,028	1,985	1,951	2,290	2,031	1,667



Event Characterization

- Tropical Cyclone started to develop as Tropical depression on March 5th.



- During the following 4 days the system persisted over the land, and on March 7th the system turned back east, south-eastward
- On March 9th the system moved back toward MC. And at sea the system has intensified rapidly maturing into an intense tropical cyclone
- Landfall eventually occurred on the evening of 14th of March at around 22UTC in the Northern vicinity of Beira, with winds of 165Km/hr; gusting up to 230 Km/hr, and wave heights of approximately 10 m.

Effect of Cyclone Idai in the Hydrographic Service, In Mozambique



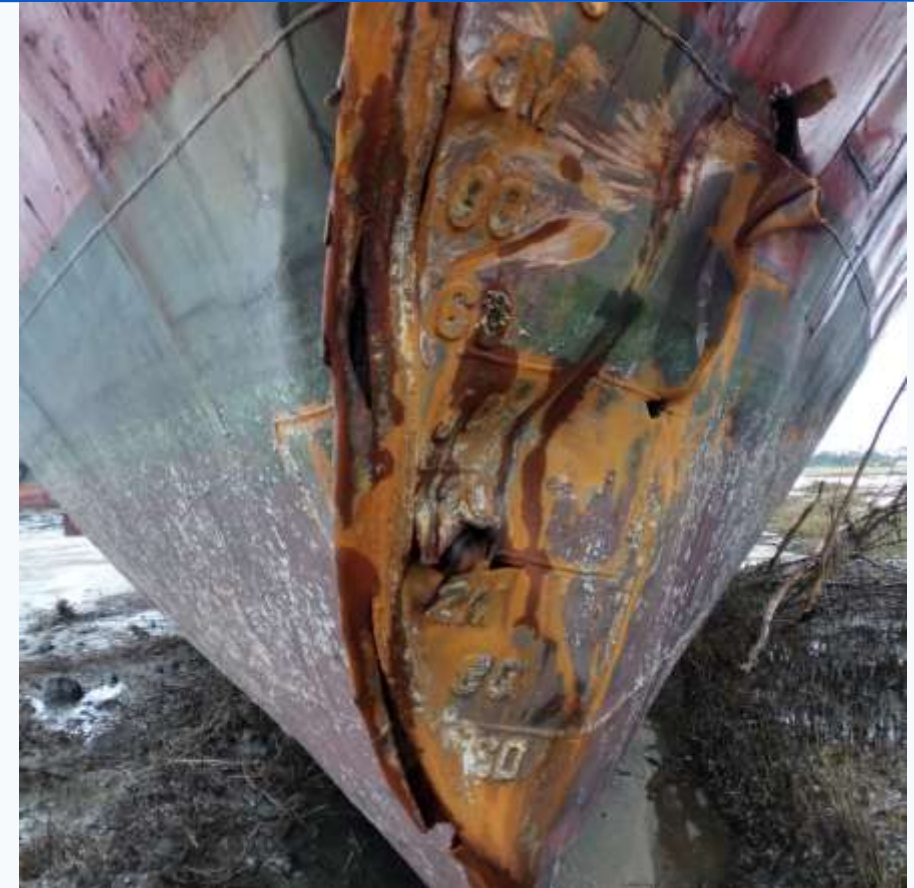
The **access door to the cabin broken**

Several breaches inside the boat

Failures on the operation of the starboard engine

Some of Hydrographic Survey's equipment's damaged

Effect of Cyclone Idai in the Hydrographic Service, In Mozambique



Buoy Tender – Bazaruto

- ❖ A Breach in the Collision-tank
- ❖ A Tear on the Bow

Effect of Cyclone Idai in the Hydrographic Service, In Mozambique

Buoys along the Beira Port Access Channel

Three Buoys were drifted with Idai, and subsequently were repositioned with the assistance of Port and Railway Company.

One Buoy was damaged, and removed for subsequent restoration and replacement

Effect of Cyclone Idai in the Hydrographic Service, In Mozambique

Assessment of the Beira Lighthouse



Findings in the lighthouse were as the followings:

- The protection wall was destroyed
- The sand material around the lighthouse had moved, exposing the underlying lighthouse structure to salt water, and leaving the steps to access the lighthouse at risky to collapse.

Effect of Cyclone Idai in the Hydrographic Service, In Mozambique

Effects on the INAHINA's Office in Beira



- The **removal of the ceil** of the INAHINA's office in Beira.
- Furniture **destroyed**
- **Computer equipment damaged** as the raining and wave waters have entered into the office
- Documents and **archives were wet** as result of water entering into the offices

Identified Challenges Post Cyclone

- ❖ Verification of **possible obstructions** along the Beira Port Access Channel
- ❖ Another issue worth it to call for attention, is the fact that INAHINA has surveyed in 2018, as such it may be unsafe to edit charts based on the hydrographic data collected before the cyclone Idai
- The meeting should considers technical assistance to update all bathymetric information in Beira Bay, a priority activity not only for the country but for the region as well.

Recommendations and Conclusions

- To Carry out Hydrographic Survey in the Bay of Beira, enabling the update of Nautical Charts of Beira Harbor (**Issue of procedures to call for emergency**)
- Capacity building of Mozambique and the Region on standard operation procedures to call for emergency, in events where the support from international community, or any other cooperation partner is of paramount importance.

Conclusion

- SAIHC/IHO to consider the recommendations if feels it as appropriate.

Muito Obrigado Pela Atencao Dispensada!

Thank You for the Provided Attention!