



REPÚBLICA DE MOÇAMBIQUE  
MINISTÉRIO DA SAÚDE  
Central de Medicamentos e Artigos Médicos



# CYCLONE IDAI RESPONSE

## Regional Medical Stores

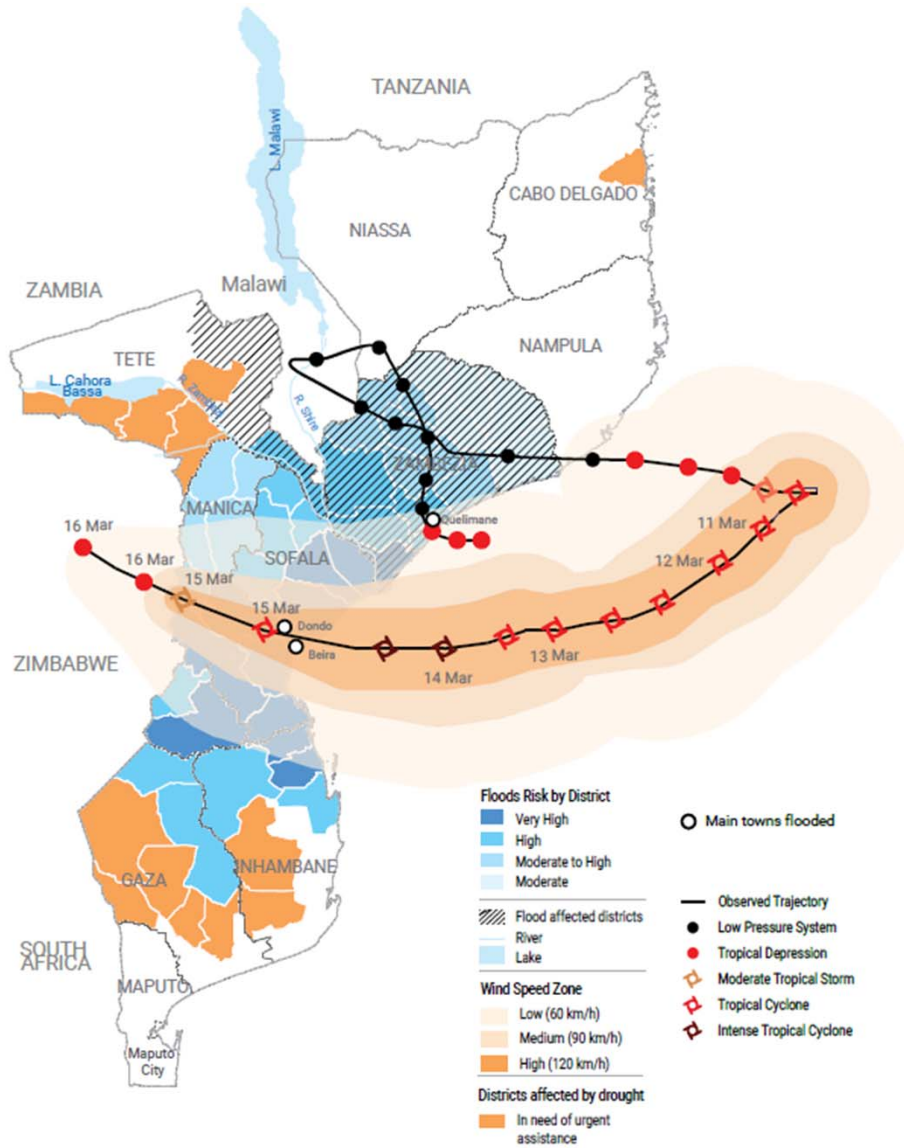
### Beira Mozambique

Nelson Edison Candido Mbota – Regional Warehouse  
Manager (CMAM)

Asmal Gopal – Provincial Support Manager (GHSC-PSM)

**USAID Global Health Supply Chain Program - Procurement and Supply Management**

# Cyclone IDAI - Mozambique





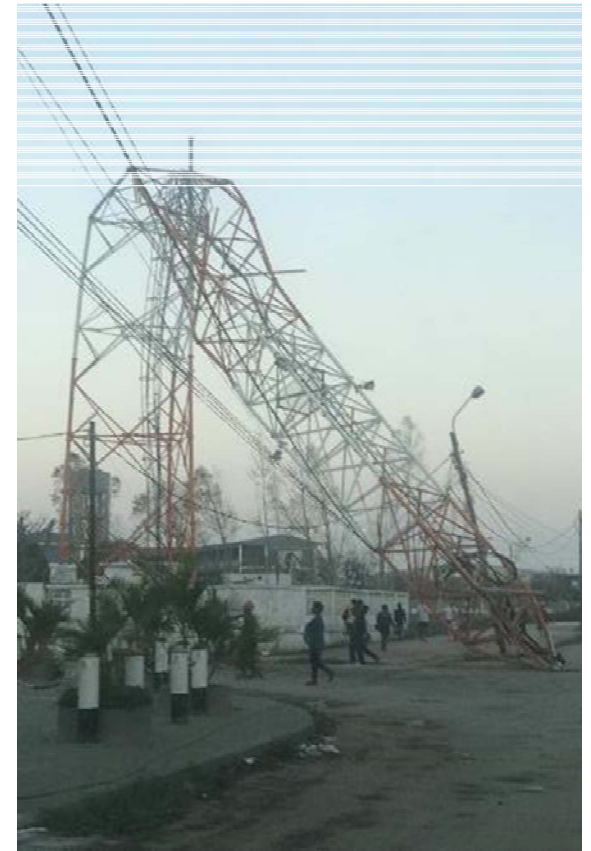
# Cyclone IDAI - Mozambique



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# Cyclone IDAI – Mozambique

- On March 14-15, a category 4 Cyclone made landfall directly hitting the coastal city of Beira, the 3<sup>rd</sup> largest city in Mozambique and active sea port
- 180-220 Km/hour gusts
- Heavy rainfall (200mm in less than 24 hrs) causing the flooding of large areas (3000 km<sup>2</sup> and of which 715.378 was cultivated land)
- 603 people were reported dead
- An estimated 14% of the health structures in the affected provinces has been damaged or destroyed
- 29% of national road network affected
- Directly affected more than 1.85 million people
- 400.000 displaced people



*(Source: National Situation Report 4, 31<sup>st</sup> May)*

# Cyclone IDAI – Mozambique – GoM Response

- GoM declared a National state of Emergency on March 19<sup>th</sup> 2019
- GoM requested technical assistance from the World Bank for a Post Disaster Needs Assessment (March 27<sup>th</sup> 2019)
- An international appeal for assistance was made
- GoM established a Post Cyclone IDAI recovery program (PREPOC)
- GoM Approved the creation of a Post Cyclone reconstruction office
- GoM hosted an international donor pledging conference in Beira, 31<sup>st</sup> May/1<sup>st</sup> June 2019

*(Source: National Situation Report 4, 31<sup>st</sup> May and Club of Mozambique(photo))*





# LOGISTICS and EMERGENCY RESPONSE

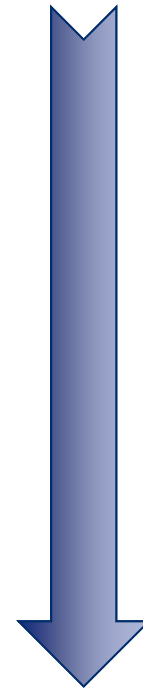
Directly after the severity of the impact of Cyclone IDAI was known, CMAM in cooperation with GHSC-PSM, went into emergency gear.

Staff, funding, and other resources were made available to support the MOH in this crisis situation.

Main activities:

1. Impact assessment
2. Mobilize funding, additional staff, equipment
3. Protection of stocks and avoidance of additional damage, repackaging operation
4. Secure and Rehabilitate Infrastructure
5. Re-establish IT and Warehouse Management Software
6. Re-establish procedures and create emergency specific ones
7. Perform an inventory
8. Manage donated products
9. Bring the Supply Chain back to normal

WEA 7  
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# Overview of MOH Warehouses in Beira

## Pioneiros Regional Warehouse

- **Products stored:** Medicines
- **Capacity:** 2,200 pallets

## Munhava Regional Warehouse

- **Kind of Products:** Medicines
- **Capacity:** 2,600 pallets

## Manga Provincial Warehouse

- **Kind of Products:** Medicines
- **Capacity:** 513 Pallets

## LLIN Regional Warehouse

- **Kind of Products:** LLINs
- **Capacity:** 1000 Pallets

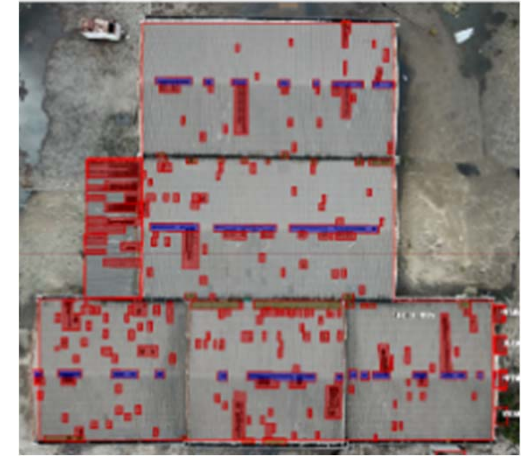




WF4 :

## Main Activities

- Send several warehouse and IT staff from other Regional Warehouses and recruit Team Leader
- Coordinate needed repairs (roofs, electrical, paint, flooring, offices) of warehouses with landlords and MOH.
- Perform assesment of Adjustable Pallet Racking (APR)
- Transfer 1000 Pallets with product from Munhava to Pioneiros.
- Transfer carton boxes from Maputo Regional warehouse and start repackaging operation
- Establish IT needs and procure and install new equipment
- Repair of of all Material Handling Equipment
- Establish separate warehouse for donated medical items (AEM), including WMS.
- Develop and approve emergency request procedure/form and flow chart



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# Procedures and Requests

## Armazém de Emergência (AEM) - Beira

Rua General Vieira da Rocha nr. 2319, Beira, Moçambique.

Ponto Focal da AEM: Dr. Nelson Mbote

Chefe do Armazém Central da Beira

Email: [nelsonmbota55@gmail.com](mailto:nelsonmbota55@gmail.com)

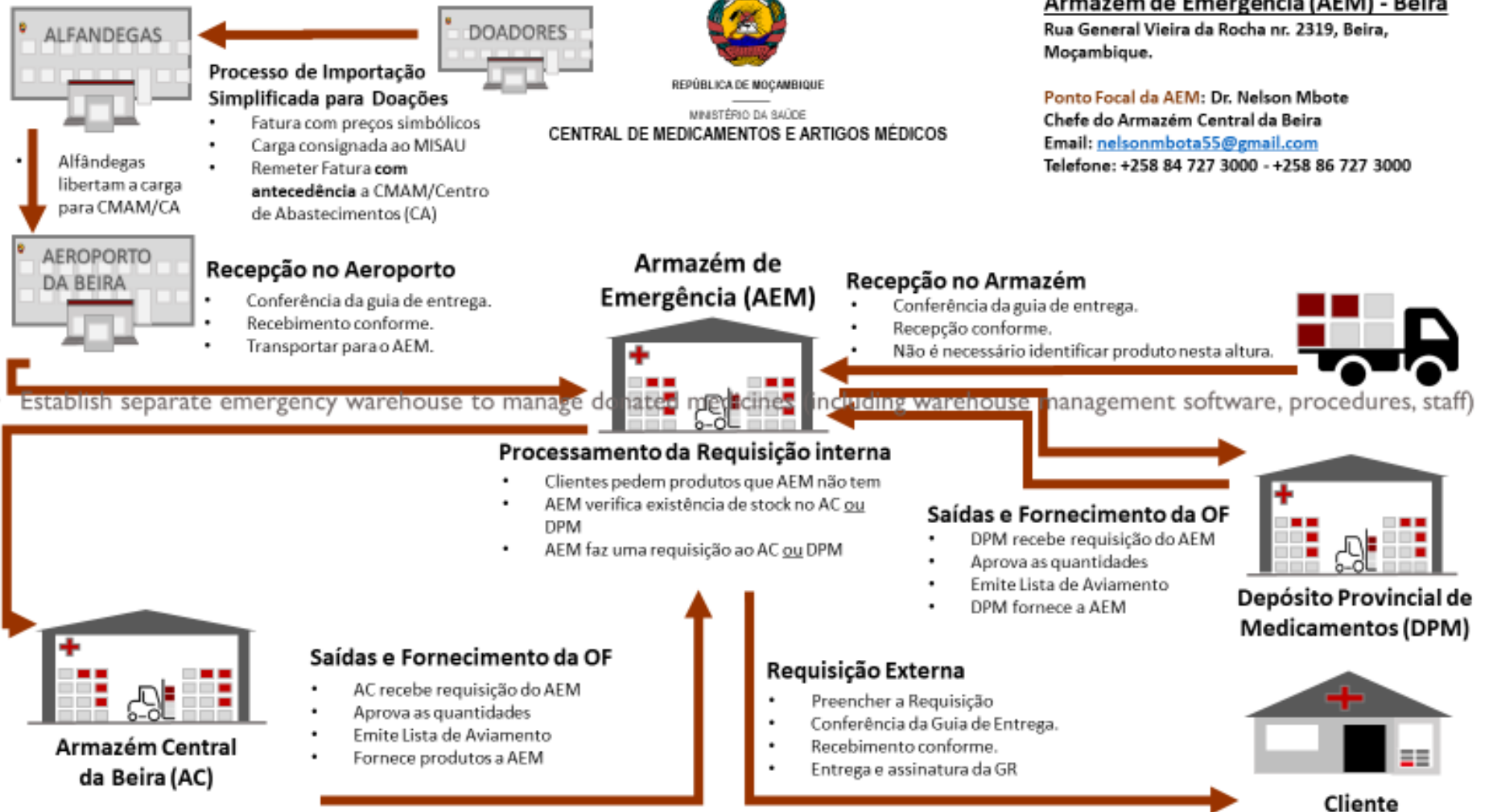
Telefone: +258 84 727 3000 - +258 86 727 3000



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# Impact on Munhava RW Warehouse and APR



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# Emergency Warehouse for Medicines (AEM)

- Operates with two WFP Rub Hall tents on the Pioneiros RW premises
- Managed with the MACS Warehouse Management Software (we received 5 free licenses). A new warehouse and locations was created in the system. Everyday the following reports were produced:
  - Stock on Hand (SOH)
  - Received goods (donor)
  - Distributed goods (client)
- CMAM received donations from 14 different countries, 24 organizations.
- 706 different medicines and medical materials received. 227 donated Pharmaceuticals were not in the National formulary and needed code creation



# Main Challenges

## Commodities (General)

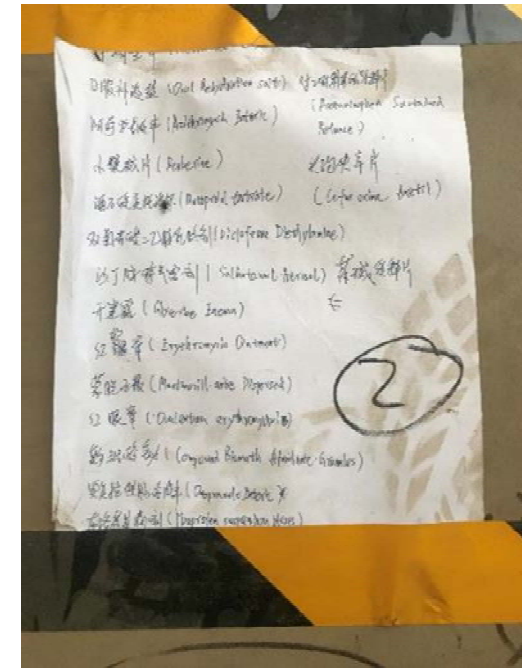
- No consolidated national overview of donations of Medicines and Medical materials!
- Large quantities (400 pallet equivalent) of expired IV fluid which took considerable resources to deal with.
- Boxes available (Coartem kit) were not ideal for repacking heavy items like plumpy nuts and IV fluid.
- Large quantities of normal routine shipments were arriving with products which were not directly useful in the emergency phase taking up scarce space (male and female condoms)



# Main challenges (cont.)

## Commodities (AEM)

- Codification and establishing the products was a challenge because:
  - Labels not in Portuguese or English
  - Products not part of the National Formulary
  - Arrival Lab and Medical materials which were not known by the pharmacists of CMAM
- Some donors sent expired product or product with limited remaining shelf life (< 1 year)
- Open boxes/packages
- Small quantities
- Arrival of large quantities of Cold Chain products without any warning
- Management of emergency kits. To unpack or not to unpack that is the question.



## **Main Challenges (cont.)**

### **Infrastructure (General)**

- Slow response to repair of roof in RW Pioneiros. New rains caused additional damage to equipment and product and is causing continuous short circuits (possible cause for fire)
- Availability of storage space

### **Infrastructure (AEM)**

- Hot hot hot!
- Finding a location/space (solved with WFP Rub Halls)

## Main challenges (cont.)

### Procedures (AEM)

- There was no agreed emergency request procedure
- There were no criteria to determine who could receive what and how much of the donated products
- People insisting on taking items “urgently” and creating issues because they were not processed in the system
- Shortage of trained Human Resources who can implement and reinforce procedures





# Main General challenges (Cont.)

## Human Resources (General and AEM)

- Overstretched HR staff affected by the Cyclone making long hours
- Hotel room availability
- Health and safety for the workers

## Services (General and AEM)

- Unreliable communication due to damaged mobile networks
- Fuel and food shortages because of damaged access roads
- Interrupted power supply

## MHE (General)

- Shortage of working Material Handling Equipment



# Lessons Learned

## Commodities

- Create a separate emergency warehouse (AEM)
- Divide products when arriving in useful now, useful later and never useful and spend time accordingly on managing them (triage)
- Have boxes and other packing materials in stock for repacking operation. Including pallets, and plastic sheeting for protection when storing outside or covering product inside the damaged warehouse.

## Infrastructure

- Have Rub Halls (tent) available at each Regional Warehouse
- The use of drones with cameras to assess the damage the infrastructure was very useful and easy

## Human Resources

- Add staff in the AEM from other areas/warehouses who know about medical materials and lab items to help with identifying the products
- Continuous presence of warehouse associates and IT staff was needed to support the Beira MOH and PSM team due to the high work load, need to find quick solutions and re-establish procedures
- Plan for rest and recuperation of staff

# Lessons Learned (Cont.)

## Human Resources (Cont.)

- Have identification and safety jackets/shoes for all workers
- Immediately send an emergency food package for the team
- Block book hotel rooms to minimize management time. Alternatively rent a house
- Availability of daily labor is mandatory

## Communication & IT

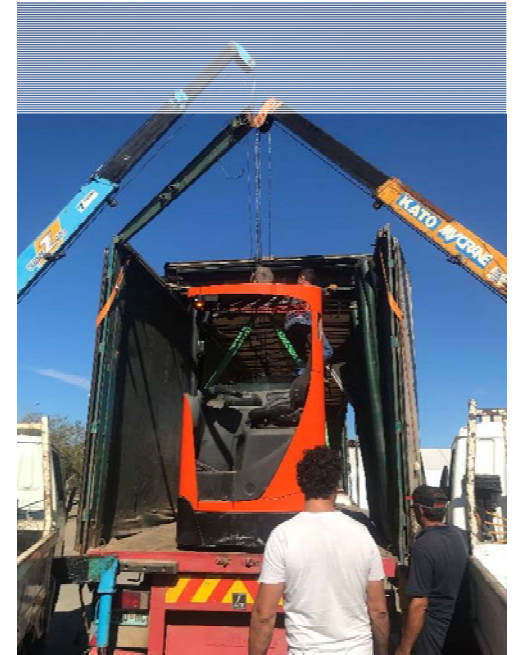
- Use of a WhatsApp group to communicate and share information especially pictures was really helpful.
- Prepare database and licenses for WMS
- Have a sat-phone available in the first weeks (including license)
- Have VHF radios (including license)
- Preposition IT equipment



# Lessons Learned (Cont.)

## Management

- CMAM in the driver's seat and be able to make decisions on the ground (Commando Unico)
- Leveraging existing relations and passed and ongoing technical assistance activities is sometimes better and more effective than trying to be an emergency organization. PSM was well positioned to do so.
- Sharing logistics information of the AEM by CMAM/GoM increased credibility amongst donors and other stakeholders
- Have emergency funds to solve daily operational constraints (daily labor, fuel, small repairs, maintenance equipment, etc.)
- Start process to develop a comprehensive national logistics emergency response plan to be better prepared next time. Including procedures, contacts, resources, coordination mechanisms, HR, etc.





# Emergency Preparedness – Having a plan

- Standardize the processes and documentation (SOPs)
- Develop a process for requesting items from the AEM
- Prepare instructions/guidelines for donors. Drugs should be solicited and be part of the National Formulary
  - Consignments should be correctly labelled (preferably in the local language),
  - Not mixed
  - Correctly classified
  - Remaining shelf life should be minimally one year

*(Source: Humanitarian Supply Management and Logistics in the Health Sector, 2001, PAHO)*

# Emergency Preparedness – Having a plan (Cont.)

- Create a recording system where the total stream of donated medicines is visible
- Create one central staging warehouse at the airport
- Develop procedures to categorize items on arrival with regards to usefulness
- Establish guidelines and SOPs how to manage emergency kits
- Use as much as possible the same existing SOPs for inventory management
- Create clear coordination and data sharing procedures
- Establish staffing requirements: develop job profiles and organograms specifically for the emergency response activity
- Create a WMS data base which is ready to use from the start with a complete list of products/emergency kits which can be expected as donations



**OBRIGADO TO ALL OF YOU  
ANY QUESTIONS?**

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