BUILDING BACK BETTER

PLANNING WORKSHOP FOR CLIMATE RESILIENT INVESTMENT IN RECONSTRUCTION AND DEVELOPMENT IN CYCLONE AFFECTED REGIONS OF MALAWI, MOZAMBIQUE AND ZIMBABWE

Mozambique presentations on impacts of cyclones Idai and Kenneth

Harare - October 23, 2019
1. Context;
2. Affected Population;
3. Total Damage, Loss and Recovery Needs;
4. Mozambique Positioning in the Region to address Vulnerability;
5. Financing and Financial Management
6. Challenges and Next Steps
Over the past 30 years, "Four drought periods between 1980 and 1992 have killed some 100,000 people.

Downstream 9 of the 15 major river basins in Southern Africa;
50% of the territory covered by international rivers;
40% of topography less than 200 m above sea level;
Coastline of 2700 km in the South West Indian Ocean;
Since 1990, Mozambique was affected by 10 cyclones, in 2019 – 3 cyclones, Idai, Kenneth and Desmond.
AFTER CYCLONE OF IDAI, PDNA WAS LEADED TO DETERMINE LOSSES AND DAMAGES AND THEIR CALCULATION OF RECONSTRUCTION NEEDS

IDAI and Kenneth cyclones

HUMANITARIAN ASSISTANCE

Short term 2019-2020

Mid Term 2020-2021

Long Term 2022-2023

Recovery and Reconstruction

Service Replacement

Recovery and Reconstruction Interventions

DRF

Sectoral Development Programs

Interventions de Recuperação e Reconstrução

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Affected Population in Mozambique

- **Total Population**: 21.6 M
- **Affected Provinces**: *
- **Number of affected people**: 1.8 M
- **Number of people needing urgent assistance**: 1.6 M

* Source: INE
** Source: MRA - IDAI 2019
Some populations are more vulnerable, more affected Poverty in the affected areas may increase from the current average of 64% to 79%, above dos

- **About 650 people died;**
- **CHILDREN:** It is estimated that 6.1 million households are headed by children (12-14 years). There are about 2 million orphans and vulnerable children;
- **OLDER PEOPLE:** There are estimates that over 75% of affected older people require urgent assistance in Sofala and Manica;
- **DISABILITIES:** 111,000 of people with disabilities have been directly affected by the disaster (Light for the World);
- **IDPs:** About 400,000 of people have been displaced and face complete destitution.
Impacto dos Ciclones – Socioeconómico

Social Sector - 240,000 Houses were partially or totally destroyed, and 50% of the damage was registered in vulnerable neighborhoods with about 90% destruction of assets and 200,000 people were restricted access to water;

In the Productive sector - loss of stocks and agricultural production - representing up to 80% of the income and food for the whole year of about 500 thousand families, with a high food insecurity with a tendency to increase. There is a serious situation of thousands of children and pregnant women suffering from acute or moderate malnutrition;

More than US $ 39 million of Lost Revenue resulting from the impact to the Commerce and Industry sector. The damage caused by Cyclone Idai to the private sector in the 6 affected provinces is estimated at USD 115 million in relation to 356 productive units. The greatest losses were registered in the province of Sofala with a weight of 99.5%;

Infrastructure Sector - equivalent to 39% of the national road network were affected, including roads and bridges, making mobility of more than 8 million people conditional. Likewise, 300 thousand households were deprived of electrical energy caused by significant damages in the infrastructures of transport and of electrical energy.
The preliminary forecast points to a slowdown in real GDP growth to 2.5% in 2019.

Annual inflation is expected to accelerate from 6% to 8% by the end of 2020.
Recovery Needs include associated costs:

- Recovery Needs include associated costs: Human Tissue Recovery;
- Replenishment or reconstruction of miscellaneous infrastructure and physical assets;
- Build Back Better measures with significant disaster risk reduction to ensure resilience to future cyclones / floods of equal or slightly greater magnitude;
- Recovery of the production of goods and services;
- Restoration of people's access to basic products and services.
- Reestablishment of governance (rehabilitate public buildings, training to facilitate the management of the recovery process, etc.)

Recovery also include a budget line for disaster risk reduction to repair damage to dykes, meteorological and hydrological stations, early warning systems, among other
## Recovery and Reconstruction Needs, Financing and Gaps

<table>
<thead>
<tr>
<th></th>
<th>USD 3.2 Bilion</th>
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<tbody>
<tr>
<td><strong>Recovery and reconstruction Needs</strong></td>
<td></td>
</tr>
<tr>
<td>Financial Resources <strong>Pledged to respond PDNA</strong></td>
<td>USD 1.4 Bilion</td>
</tr>
<tr>
<td>Confirmed resources by Partners</td>
<td>USD 1.15 Bilion</td>
</tr>
<tr>
<td>Available Funds with financing agreements signed waiting realization of legal provisions.</td>
<td><strong>USD 433 M</strong> (WB 320 M, AfDB 50 M, Zju Chi 60 M, <strong>UNDP 2 M</strong> - Agreement 72.2 M, JICA 50 m and South Coreia 50m )</td>
</tr>
<tr>
<td>GAP</td>
<td>USD 1.8 Bilion</td>
</tr>
</tbody>
</table>
Principles of Post-Disaster Reconstruction

- Build on international experiences;
- Give priority to the defense of life and vulnerable people;
- Improve the living conditions of peripheral neighborhoods.
- Build back better – and ensure resilience to future disasters;
- Link with territorial and local plans for development and adaptation;
- respect for the zoning plans of the territory, interdict high-risk zones and promote new urban centralities;

- National Climate Change Adaptation and Mitigation Strategy (ENAMMC) 2013-2025
- Territorial planning plans
- Structure Plan in Cities
- Local adaptation plans in Districts
- Strategic development and investment Plans, among others
Principles of Post-Disaster Reconstruction

comprehensive

Rapid

Reconstruction and Recovery Program
(Aproved by Goverment on 13, Augoust 2019)

Resilient
(Build Back Better And Build to last)

Transparency, Peace and Social Cohesion
Government led – Establishment of the Post-Cyclone Reconstruction Cabinet on April 09, 2019

Focused on needs identified in PDNA

Involving the various stakeholders:

- Central, Provincial and District Government Sectors & Services
- Municipalities
- Private Sector
- Community Organizations
- Among others
Regional Perspective - Integrated Vulnerability Management

- The severity of Cyclone impacts is determined by the level of preparedness, readiness as well as vulnerability at all levels (people and goods) - activities to prevent or reduce the installation of new risks;

- Disasters (droughts, floods and others) should be domesticated in favor of humanity by taking action and measures both during the implementation phase of development programs and at the time before, during and after the disaster - optimize response actions and minimize damage and loss resulting from the disaster;

- It is in the common interest that in the countries of the same water region, cooperation mechanisms for the integrated management of shared water resources be established, and investments and coordinated operation of infrastructures (Dams, Dams, ...) be implemented and consolidated mechanisms for the achievement of various goals of national, regional and international interest;

- In SADC cooperation has started and relevant Joint Water Commissions have been set up; and

**RECONSTRUCTION / RECOVERY:** Measures developed after the disaster, aimed at the recovery of more resilient normality.
Financial and Fiscal Readiness Strategy

a) The reorientation of the national budget;
b) The application of fiscal benefits to support reconstruction, including the granting of payment of Taxes and Fees by assessing the financial situation of each operator;
   ✓ Customs Facility - has early departure on importation of building material and food products;
   ✓ Annual IRPC Payment Deferral for 2018 May 2019 for December of the same year. Payments may be made by monthly and successive installments - Decree 45/2010 of 2 November (b) waiver of payments for the 2019 financial year;
   ✓ Application of Tax Facilities - Economic Operators Subject to Personal Income Tax IRPS - Second Category;
d) The contribution of the private sector;
c) The contribution of local governments; and
e) The contribution of cooperation partners, including multilateral agencies.

To the portion of the financing gap that donors can support.
a) Reconstruction process takes their time – approach the rainy season;
b) Collect recovery projects of NGOs and private sector;
c) Develop guidelines for reporting recovery progress;
d) Develop information system for monitoring and Evaluation;
e) Implement the studies and other technical requirements for infrastructure projects; and
f) Mobilizing resources to cover the reconstruction deficit.
For a Rapid, resilient and comprehensive reconstruction

Thank You
Disaster Management
GAPS AND NEEDS

Harare, Outubro, 2019
Mozambique is one of Africa’s countries most vulnerable to extreme weather and climate events. Over the past 40 years, about 20 million people have been cumulatively affected by droughts, floods, epidemics or tropical cyclones.

During the last six months, Mozambique has been affected by Cyclones Idai and Kenneth, as well as Desmond Tropical Storm, among other extreme events.
COUNCIL OF MINISTERS

MINISTER OF STATE ADMINISTRATION AND PUBLIC SERVANTS

Disaster Management Coordinating Council

INGC

Technical Council for Disaster Management

Regional Directorates

Provincial Branches

Distictal Branches

CERUMs

CLGRC

MINEC

MASA

MITADER

MGCAS

MDN

MIC

MINT

MOPHRH

MEF

MISAU

MTC

MINEDH

MIREME

MCTESTP

MAIP

DNGRH

INAM

DNG

ANE

SENSAP

UNAPROC – National Civil Protection Unity

HCT – Humanitarian Country Team

CENOE – National Centre for Emergency Operations

COE – Emergency Operations Centre

CERUM – Resource and Multiple Use Center

CLGRC – Local Committees for Disaster Risk Management
Tropical cyclones that hit the coast of Mozambique from 1980 to 2019

The numbers show the maximum speeds over the Mozambican Channel before landfall.

<table>
<thead>
<tr>
<th>Anos</th>
<th>Velocidade do vento (Km/h)</th>
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<tbody>
<tr>
<td>1984</td>
<td>92</td>
</tr>
<tr>
<td>1988</td>
<td>133</td>
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<tr>
<td>1994</td>
<td>83</td>
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<td>2012</td>
<td>194</td>
</tr>
<tr>
<td>2017</td>
<td>194</td>
</tr>
<tr>
<td>2019</td>
<td>213</td>
</tr>
</tbody>
</table>

Source: Prof. A. Mavume / Departamento de Física / UEM
The prediction of tropical cyclones indicated that 8-10 tropical systems occurred in the southwest Indian Ocean basin and that 1-2 could reach the Mozambique Channel. Looking at the map on the right we can see that at this time 14 systems were formed in the southwest Indian Ocean basin and 4 systems crossed the Mozambique Channel, 3 affected directly Mozambique, Tropical Storm DESMOND (Zambezia, Sofala, Inhambane and Gaza), Tropical Cyclone IDAI (Sofala, Manica, Zambezia, Tete and Inhambane) and Tropical Cyclone KENNETH (Cabo Delgado and Nampula) with high winds and heavy rainfall above 200mm in 24 hours.
### Summary of Lessons Learned and Gaps

<table>
<thead>
<tr>
<th>System</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Warning</td>
<td>Establishment of the Local Committees for Disaster Risk Management (LCDRM)</td>
<td>Limited equipment and resources to support the creation of more LCDRM in most of the floods-prone communities.</td>
</tr>
<tr>
<td></td>
<td>Existence of community-based early warning systems for floods, cyclones and droughts</td>
<td>Due to inadequacy of funding, only very few vulnerable communities that live along the river basins have early warning systems.</td>
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<td></td>
<td>Existence of community radios to support information dissemination</td>
<td>Limited human resources at Provincial and district levels</td>
</tr>
<tr>
<td></td>
<td>Short range forecast and weather warnings/alerts provided by Met Service and Water Directorate</td>
<td>Lack of hydro-meteorological stations along the main riverbanks</td>
</tr>
</tbody>
</table>

**Lack of forecasting capacities at Meteorology and Hydrology Sector**

- Meteorological information is not impact-based, as a result it is not understood by the population
- Absence of communication systems to operate in case of failure of normal communication
- Absence of evacuation plan for specific vulnerable regions (settlement areas flooded)
## Summary of Lessons Learned and Gaps

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<tr>
<td><strong>Information Management</strong></td>
<td>Well established information management flux</td>
<td>Limited human resources at all levels, especially at sub-national levels</td>
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<td></td>
<td>Well established inter-institutional information sharing for hazards monitoring</td>
<td>Limited connectivity for information sharing and communication</td>
</tr>
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<td></td>
<td>Allocation of human and material resources to the affected areas</td>
<td>Lack of technical capacity for data collection, analysis and hazard monitoring</td>
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<tr>
<td></td>
<td>Support from the international community: UNDAC, OCHA, IFRC,</td>
<td>Limited communications due to power outage, mobile networking and radio not functioning, road accessibility, etc...</td>
</tr>
<tr>
<td><strong>Funding</strong></td>
<td>Government contingency plan funds</td>
<td>Timely access and Limited fund allocation</td>
</tr>
<tr>
<td></td>
<td>Allocation of the Flash Appeal funding</td>
<td>Timely access to financial resources &amp; Limited fund allocation</td>
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<tr>
<td></td>
<td>National solidarity support</td>
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<td></td>
<td>Support from SADC member states</td>
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<td>Support from international member states and partners</td>
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Summary of Lessons Learned and Gaps

**Coordination**

- Strong Government coordination and leadership

- Well established coordination structures in both sides: Government and HCT;

- Multisectorial and Decentralized coordination (CENOEs/COEs, CTGCs)

- Activated the On-site operations and coordination center (Mobile CENOE)

- Agreement on common press conferences

**Some partners mobilized staff without government coordination**

- Lacking mechanisms and tools for proper and effective coordination (INAM, NDHRM, INGC)

- National focal points with limited understanding of the coordination mechanism

- Limited resources and limited understanding of the roles and responsibilities in terms of operations and the information flux
I. **Improvements in predictive event capacity, enabling:**

- Early Activation of Emergency Operation Centers
- Prepositioning of products and equipment
- Activation of Local Committee’s for Disaster Risk Management
- Community preparation;

II. Need for investments for response and search and rescue:

- Campaign hospitals;
- Helicopters;
- Satellite phones and V-sats;
- Properly equipped vehicles;

III. Need to harmonize / standardize humanitarian assistance kits;

IV. Need to empower the media throughout the disaster risk management cycle;

V. Need for continued integration and consolidation of local leaders in the disaster risk reduction process;
Challenges/Reflections:

Challenges:

• Lack of access to funds to support the overall response;
• Getting specific data to support decision making;
• Equipment and capacity building (Logistics, Information management, coordination, UNAPROC, CLGRC),
• Involvement of private sector for an adequate response;
• Timely access to DRR Funds both national and international.

Reflections:

• Reinforce the alignment of DRR issues in the main public policies;
• Support and invest more in preparedness at all levels: National, regional, provincial and district levels;
• Strengthen national disaster risk financing capacity
  • Full capitalization and operation of the DRM Fund and
  • Risk transfer mechanisms (Climate Insurances)
• Creation, training and capacity building for more INGC staff, at all levels, including the Local Committees for Disaster Risk Management (LCDRM: first responders to extreme events).
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Immediate restoration of early warning

- Inventory and evaluation of the existing EWS (Early Waning and Early Action) in the affected region, including training to the local communities.
- Immediate Installation of multi-hazard EWS (new design required to fit with new SOPs and updated mapping systems) / technical recovery of affected flood and cyclone early warning systems.
- Updating of the Multi-Hazard risk maps and scenarios, assessing new exposure and vulnerabilities caused by the catastrophe.
- Establishment of an integrated national Multi-hazard (flood, cyclone, heat Health, storm surge etc) with detailed SOP in line with the DRR Master Plan 2017-2030.
- Early Warning Early Action Protocols and Early Warning Systems (technology)
- Installation of multi-hazard EWS (new design required to fit with new SOPs and updated mapping systems) – current system was not adequate for IDAI and future equivalent level Tropical Cyclones need to be prepared for.
• Analysis of the situation of CLGRC, creation, strengthening and training of local committees in highly flood and cyclone exposed areas in the region (after updating of the flood and cyclone scenarios).

• Definition and implementation of a short-term policy reform strategy, in order to better improve technical and operational capacities that require political decision making, including regulations and standards for operation procedures for public, private and civil society organization located in high flood and cyclone exposed areas.

• Regulation and updating of existing DRM legal and institutional framework, including the mandate of disaster management agency and partner technical agencies – NMHS for clarity of roles and responsibilities to support efficient MHEWS and coherent messaging to the people its operational branches and national, regional and local level.