



**MOZAMBIQUE**

WFP  
World Food Programme

SAVING LIVES  
CHANGING LIVES

## Anticipating Extreme Weather

Since 2019, WFP has been working with the Government of Mozambique to introduce anticipatory actions based on a forecast-based financing mechanism

These efforts started focusing on drought as the main entry point, aiming at operationalizing the recommendations of national policy documents such as the **Master Plan for Disaster Risk Reduction (PDRRD 2017-2030)** that identifies drought as a priority area, as well as the **Disaster Risk Management and Reduction Law (Law n.10/2020)** that calls upon the national institutions to establish an early warning and alert system for slow-onset disasters. For drought, this includes the **establishment of the country's first early warning system (EWS) for drought**.

The process started with the development of the necessary tools to improve drought forecasts and monitoring, and linking these enhanced products with strengthened risk analysis and contingency planning. Since the start, WFP held extensive consultations with the Government to inform the project design and tailor specific technical support for the relevant actors, namely the **National Disaster Risk Management institute (INGD)**, the **National Meteorological Institute (INAM)** and the **Ministry of Agriculture (MADER)**.

WFP works in close collaboration with each actor, providing custom-designed technical support and integrating the anticipatory action programme with broader capacity strengthening efforts to enhance the disaster management system as a whole.

Capacity strengthening is shaped around each stakeholder and its needs, while fostering further integration among them through **the creation of a multistakeholder national technical working group (TWG)**, led by INGD's Division of Arid and

**Semi-arid areas (DARIDAS)**. Agreements are signed with each actor, covering the specific needs of the institution, and defining the workplan and budget for the tailored institutional support. This includes:

- **On the job trainings** for the use of specialized software and platforms and **one-on-one support** conducted by a team of climate and earth observation experts;
- **Dedicated learning paths** designed upon request of each institution's technical team and the broader audience of the TWG members. Over the years, trainings focused on seasonal forecasts and monitoring dedicated to INAM staff. These trainings included definition of triggers for the activation of the anticipatory actions, drought and aridity indicators for all the members of the TWG, knowledge management, and others; and
- **Staffing support** to strengthen technical capacities and improve inter-institutional coordination. For example, **WFP recruited a Anticipatory Action (AA) specialist to be seconded at INGD/DARIDAS**, reinforcing the coordination of the TWG and the integration of anticipatory actions within the existing national processes. Other institutions have been supported through the recruitment of interns or ad-hoc consultancies to bridge specific technical gaps.

# WFP SUPPORTS NATIONAL GOVERNMENT

## National Meteorological Institute

WFP supports the **National Meteorological Institute (INAM)** to use satellite data streams integrated with local station data to develop a real time early warning and monitoring capacity. These activities resulted in:

- **Improved seasonal monitoring** that ensures full coverage of the Mozambican territory, with complete real-time coverage and greater accuracy using different source of data (satellite, and blended estimates), and makes the data analysis simpler and faster through the use of a cloud-based system. The **monthly weather monitoring bulletin** is available on the [INAM website](#).
- **Seasonal forecasts downscaled to the provincial and district level**, with the first province-level forecasts presented during the 2021 National Climate Outlook Forum, and later updated every two months.
- **Strengthened climate analysis**, thanks to the recovery and digitalization of 40 years of climate data. These records build a new state of the art climate datasets for Mozambique, allowing to extract district-specific climate information and informing the national state of the climate report released by INAM.

## Ministry of Agriculture and Rural Development

WFP supports the **Ministry of Agriculture and Rural Development (MADER)** in using high-resolution satellite data and agronomic ground data to monitor crop conditions and map the extent and composition of cropland through the design of specific field information collection tools at the district and provincial levels. This cooperation is contributing to the following:

- Setup of **near real-time data collection mechanisms of agronomic information** linked to high-resolution crop mapping;
- **Strengthened agricultural reporting**; and
- **Enhanced agricultural monitoring**.

Additionally, MADER has access to INAM's data (especially rainfall outputs) to develop internal

models such as Water Requirement Satisfaction Index (WRSI) as well as additional satellite layers. This effort allows harmonized diagnostic of the season across these key institutions.

## National Disaster Risk Management Institute

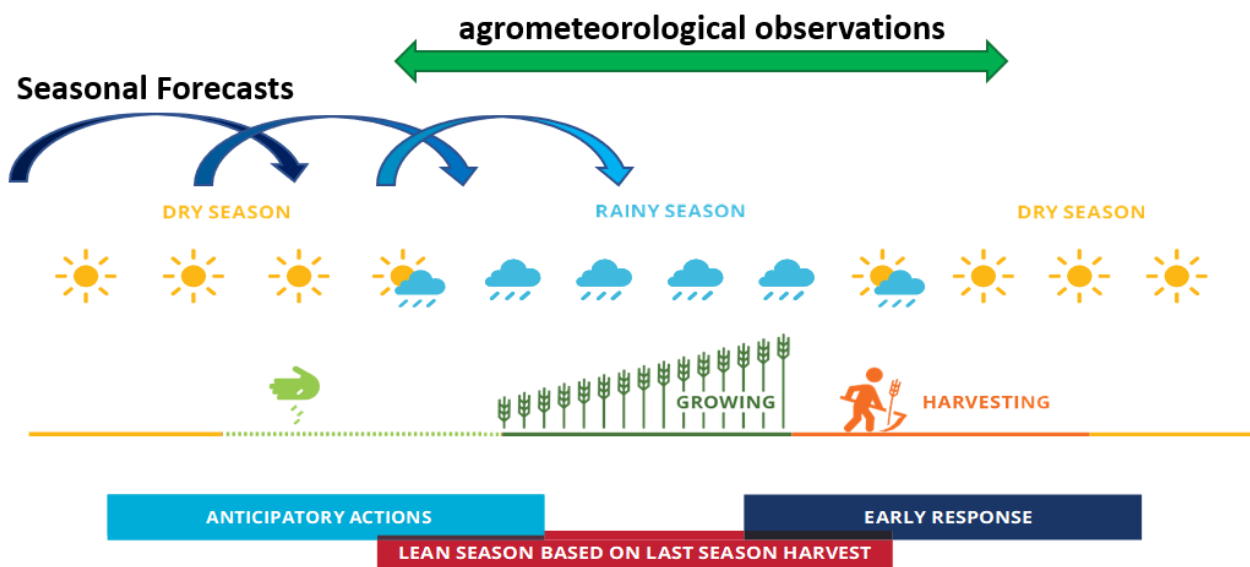
WFP supports the **National Disaster Risk Management Institute (INGD)** in bringing together all these efforts and technological advances and holds the central responsibility of taking action in case of a disaster. As the mandated institutions for disaster risk reduction and management, INGD plays a central role in the operationalization of the drought early warning system by leading the inter-institutional coordination through the **drought EWS Technical Working Group (TWG)**. The TWG is the mechanism for coordination and collaboration among the different government entities, as well as civil society and UN Agencies. It meets regularly to jointly analyze the data presented by the various sectors, working specifically on:

- Forecast, triggers, monitoring and data flow;
- Contingency planning for anticipatory action, including through the activation of social protection programmes; and
- Implementation, monitoring and financing mechanisms.

National institutions are also working jointly to **deepen the integration between anticipatory actions, disaster response and shock-responsive social protection**. In particular, INGD is fostering a close relationship with the **Ministry of Gender, Children and Social Action (MGCAS)** and the **National Institute of Social Action (INAS)** to link drought triggers with the scale-up of the cash-based social protection programmes (i.e., post-emergency Direct Social Support Programme - PASD-PE) as part of the activation of drought Anticipatory Action Plans.<sup>1</sup>

<sup>1</sup>Further details on the integration of social protection in drought disaster response can be found in the article [Integrating shock-responsive social protection into anticipatory action protocols ahead of a drought in Mozambique](#).

# FROM FORECAST DATA TO ANTICIPATORY DECISION MAKING HOW DOES ALL THE INFORMATION COME TOGETHER?



When **INAM, MADER and the National Directorate of Water Resources Management (DNGRH)** detect an anomaly in the forecast or the monitoring, the TWG assesses options for activating the anticipatory action plans based on the pre-defined drought triggers while reporting the situation to the **INGD National Centre for Emergency Operations (CENOE)**. The CENOE will then activate monitoring as well as possible response mechanisms.

The information is then reported to the **National Technical Council on Disaster Management (CTGD)**, which is mandated to launch the alert according to the national “traffic light” system (yellow,

orange, red). The drought alert system is tied to different severity levels of the forecasted event.

At the decentralized level, the early warning system is coordinated by **INGD representation and local emergency operation centres (COE)**. They collect and report data from the local to the central level. They also report alerts and operational instructions from Maputo to the communities.



## COMING TOGETHER INTO PRACTICE

Between 2020 and 2021, local government actors and partners developed anticipatory action contingency plans (AAPS) for drought in four pilot districts (Chibuto and Guijá in Gaza province and Marara and Changara in Tete province). PASD-PE was included as part of these plans, representing 68 per cent of the budget foreseen to be released if a drought trigger is reached.

From these district AAPS, anticipatory actions were included in the 2021/22 National Contingency Plan - a tangible achievement demonstrating successful national integration and commitment from the Mozambican Government towards this innovative approach.

The linkages with the social protection sector also continued to be strengthened and these achievements were presented during the Second Social Resilience Dialogue organized in

October 2021 by the MGCAS and INAS in collaboration with ING D, the World Bank and WFP. An action plan for adaptive social protection was approved. It includes a pillar on social protection and anticipatory action, in line with the work plan for operationalizing the drought early warning system.

## EXPANDING ANTICIPATORY ACTIONS BEYOND DROUGHT

Leveraging on the gains achieved in the Anticipatory Action system for drought, national actors have identified the need for further expansion and scale-up of the AA system to act ahead of fast-onset hazards and protect people at risk.

Considering WFP's current work with the Mozambican Government and other actors in support of innovative approaches and pre-arranged and flexible funding mechanisms as anticipatory action against droughts, WFP aims to support the Government of Mozambique in adopting this approach also for floods and cyclones.

To date, this area has been supported by the Mozambique Red Cross (CVM), focusing on the

shelter and WASH sectors. WFP aims to support the Mozambican Government to complement this effort with anticipatory actions aligned with WFP's mandate to safeguard food security and livelihoods from the impact of these extreme sudden-onset events.

In addition, WFP aims to expand the Government-owned anticipatory action mechanism into Mozambique's northern provinces directly or indirectly affected by the intensifying conflict. In doing so, WFP plans to close a current gap in providing anticipatory assistance ahead of the extreme weather events to population groups already experiencing exacerbated levels of vulnerability due to the current situation in Cabo Delgado.

## COORDINATION WITH OTHER AGENCIES AND CIVIL SOCIETY

WFP, FAO and the Mozambique Red Cross Society (CVM) are members of the drought EWS Technical Working Group (TWG). Members of the TWG have agreed on a unified approach regarding indicators and triggers for anticipatory actions for droughts to ensure national-level alignment.

With the support of the Food Security Cluster and its partners, representatives of civil society and humanitarian actors (UN OCHA, UNDP, etc.) came together in August 2022 during the first national dialogue platform to map anticipatory action initiatives and mainstream the anticipatory action approach among the humanitarian community in the country. This platform is committed to meeting

regularly and coordinating the various capacity strengthening and implementation initiatives.

At the regional level, WFP is a secretariat member of the inter-agency Regional Anticipatory Actions Working Group (RAAWG) for Southern Africa, which launched the first regional inter-agency strategy for anticipatory action with IFRC and FAO. Within the regional strategy, Mozambique was selected as one of the pilot countries to prototype inter-agency coordination for multi-hazard anticipatory action. The strategy's key outputs aim to enhance inter-agency coordination and alignment of methodologies, which is also taken forward at the national level in Mozambique.

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