

# Mozambique – El Niño impact

# FEWSNET Global Weather Hazards Summary

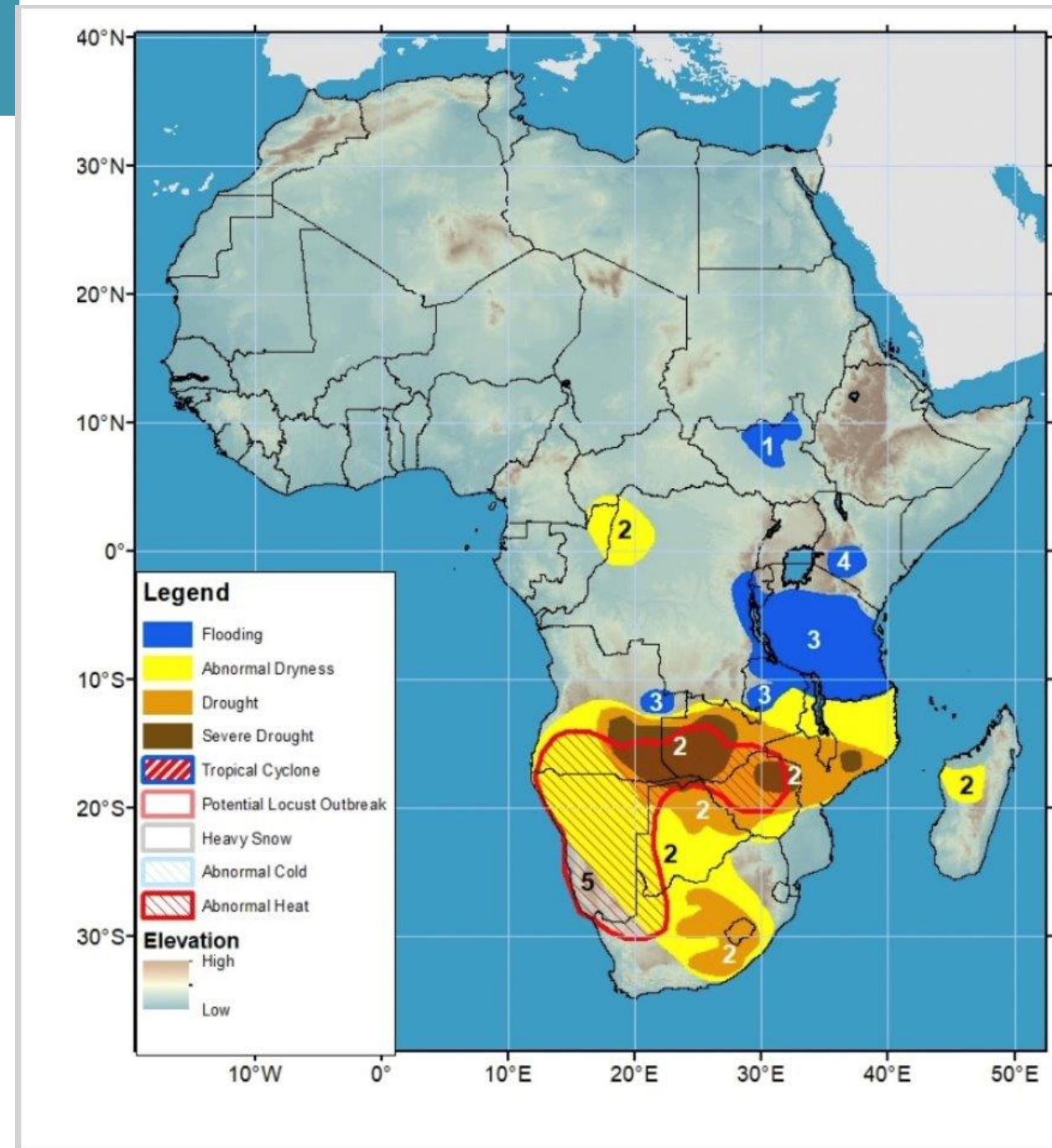
## 18-24 April – Southern Africa Region

Many parts of Southern Africa are abnormally dry, with drought in eastern Angola, western and central Zambia, north-eastern Namibia, northern Botswana, much of Zimbabwe, central Mozambique, central and eastern South Africa, and Lesotho.

In the last 90 days, much of southern Africa received far less rain than usual.

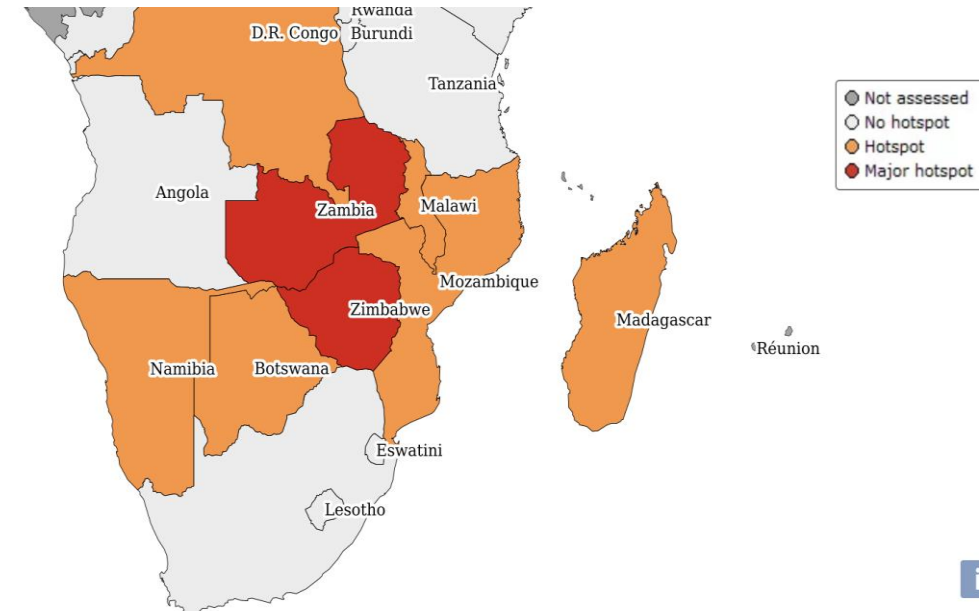
Large rainfall deficits include southeastern Angola, Zambia, Zimbabwe, northern Namibia, northern and central Botswana, Zimbabwe, central and southern Mozambique, southern Malawi, northern and central parts of South Africa, and parts of Madagascar.

Abnormal heat will return to Southern Africa exacerbating already very dry conditions.



# El Niño impacts: a regional scale issue

- The effects of El Niño-driven rainfall shortages and warmer temperatures pose a significant downside risk to regional cereals production in 2024.
- According to ASAP (EU Anomaly Hotspots of Agriculture Production) most of countries in Southern Africa are currently rated either as hotspots or major hotspots.
- Zambia, Malawi and Zimbabwe declared state of emergency because of the drought – impact of El Niño.
- Harvests are ongoing, but regional cereal output is expected to be reduced compared with the average due to the drought across central parts of the region.
- Regionwide decrease in agricultural production:
  - ➔ **aggregate 2024 maize production below-average**
  - ➔ **import demand is foreseen to increase steeply in 2024/25.**
- The El Niño is a significant factor driving humanitarian needs, as the whole region is facing water scarcity, diminished crop yields and, consequently, food shortages, along with potential displacement and the spread of diseases.

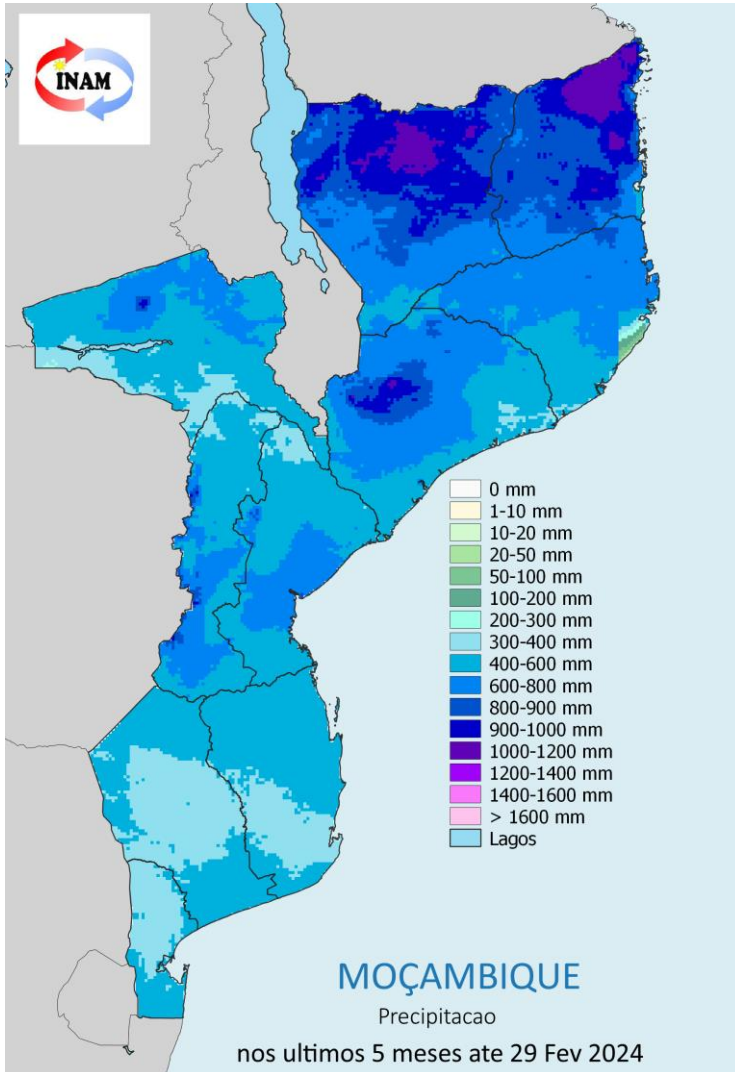




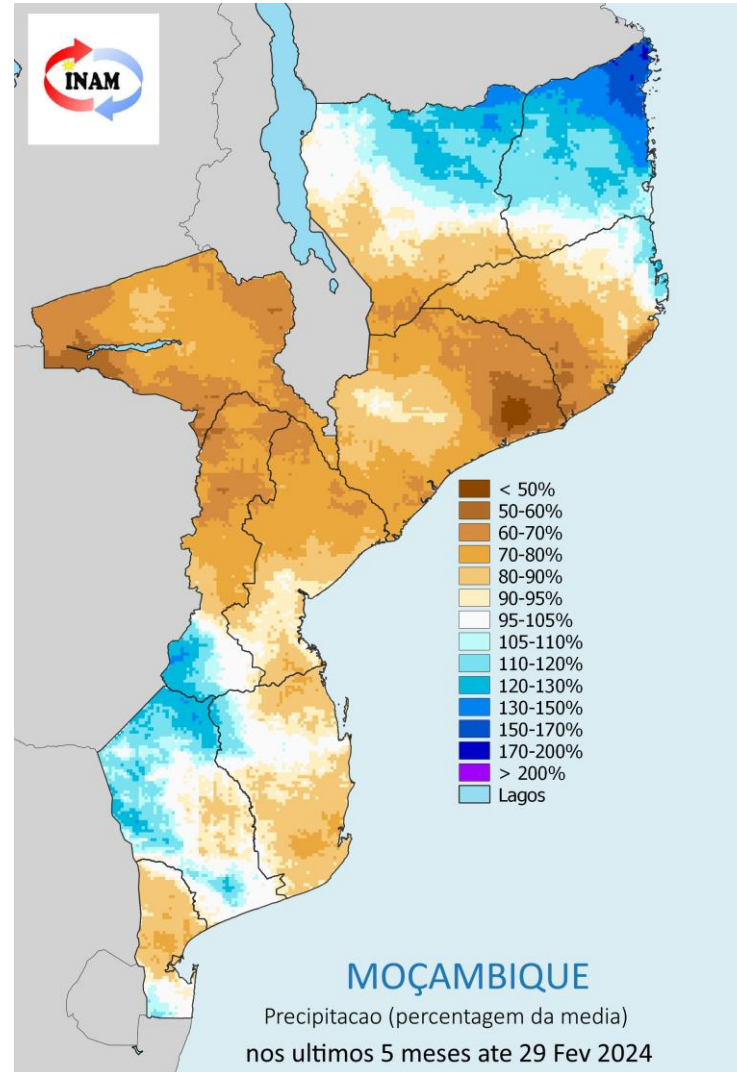
# Impact of El Niño on key food staples prices and markets

- Maize production in **South Africa** (the main source of grains for neighbouring countries) is forecast to decline by 12% compared to the five-year average (2019-2023). This outlook is predominantly underpinned by a poor production forecast for white maize (key food staple).
- South African wholesale prices of **white** maize grain increased by 33% between January (start of the drought) and March 2024, **yellow** maize prices rose by 15% over the same period.
- **White maize prices at near-record levels.**
- Production prospects in Zambia also indicate a below-average 2024 maize harvest is likely; Zambia is the second main exporter in the subregion.
- **White maize supplies will be needed from outside of Southern Africa** - the last time that happened in large quantities was after the 2015/16 El Niño.
- Declines in agricultural production likely to cause hikes in domestic food prices across Southern Africa, and both availability and access shocks **impacting both urban and rural households.**





**Fig 2a:** Rainfall amounts in the 5 months ending February 29<sup>th</sup> 2024. Amounts are in mm

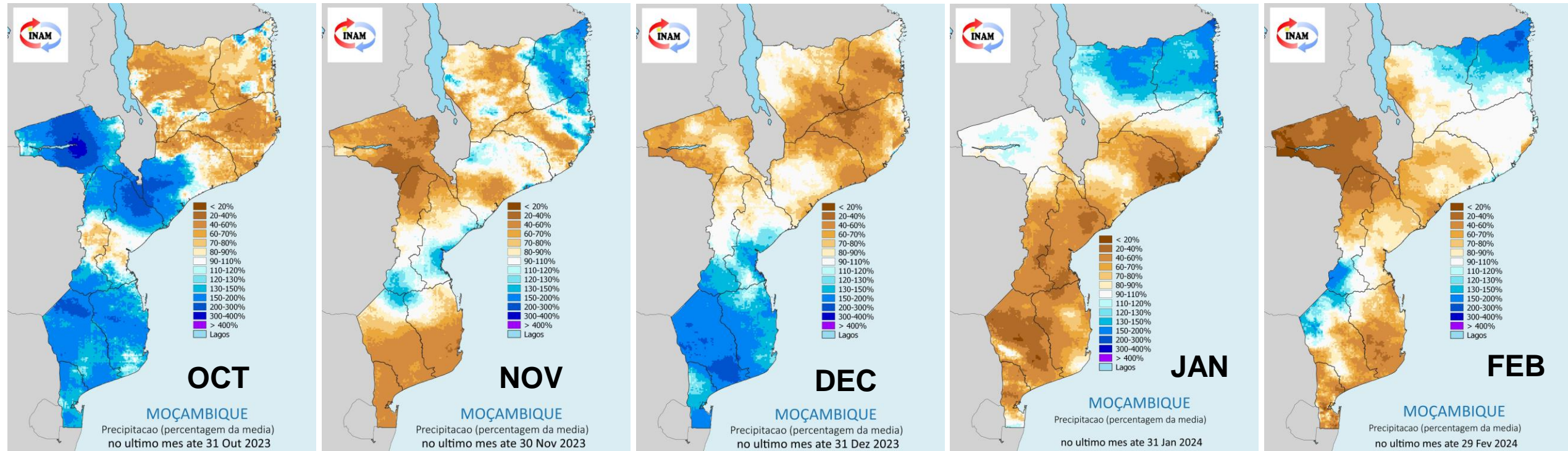


**Fig 2b:** Rainfall in the 5 months ending February 29<sup>th</sup> 2024, as a proportion of the long-term average. Blue and purple (orange and brown) shades correspond to above (below) average rainfall.

**Full season view:**  
October-February  
rainfall

Severe seasonal deficits  
in Tete, Zambezia,  
Nampula, Sofala and  
Manica

# El Niño in Mozambique: Month by Month

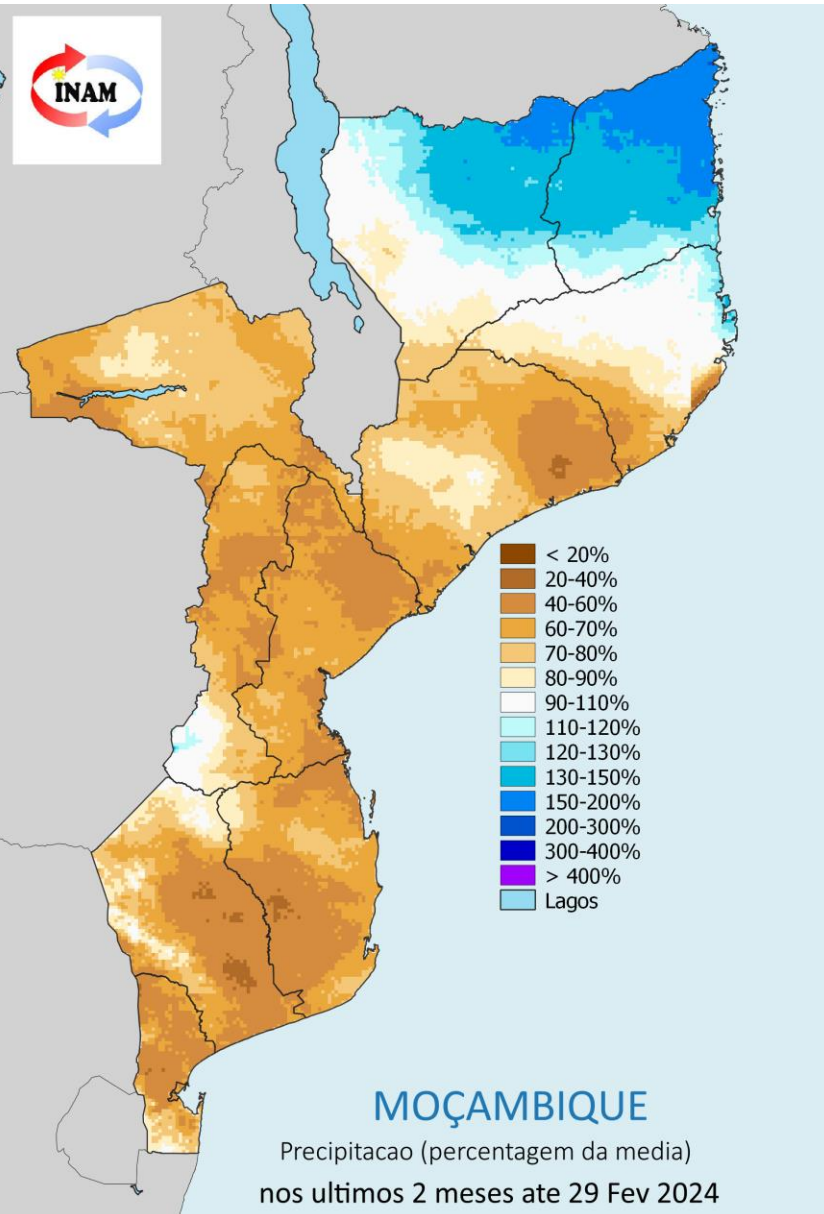


**Not a straightforward season:**

In many areas flipping between wetter and drier-than-average patterns



# El Niño in Mozambique: Mid Season Drought

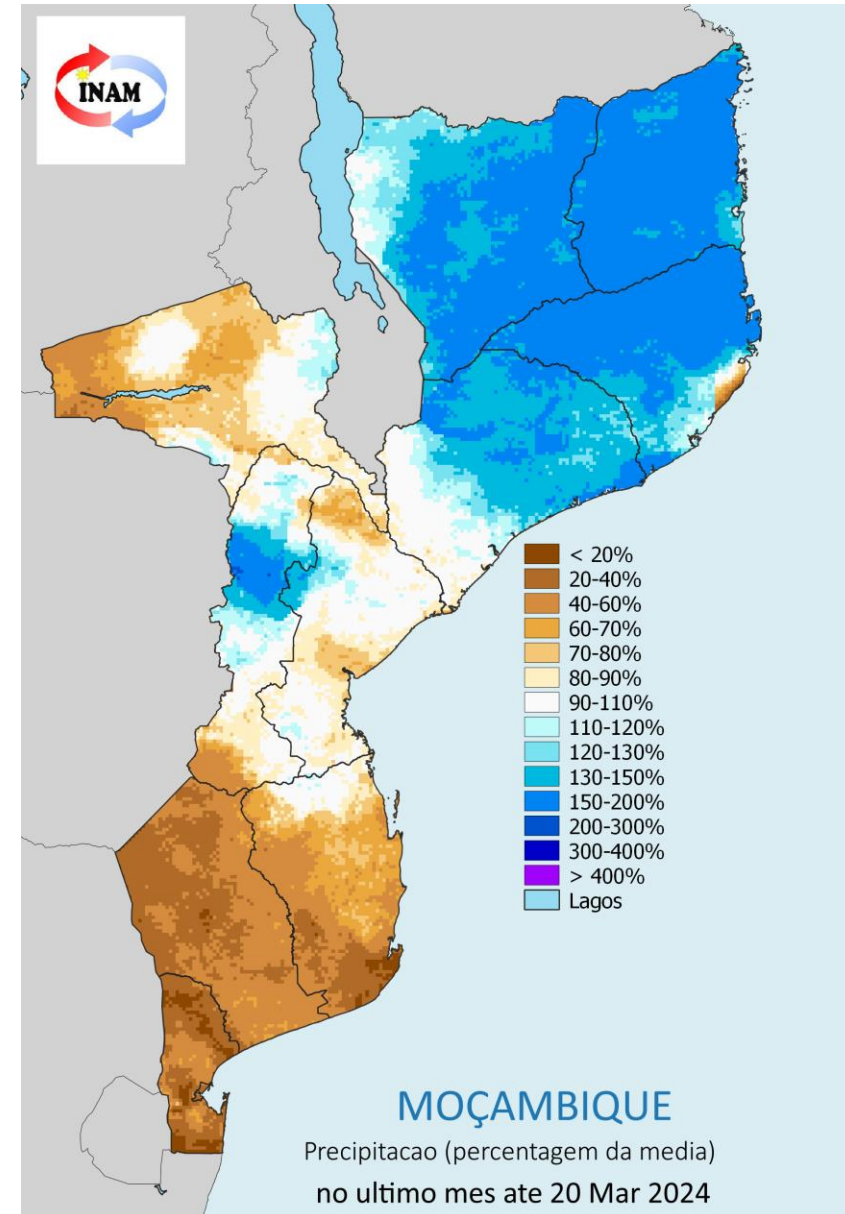


## January and February:

Persistent dryness, many areas getting only half of the usual rainfall.

Hotter than average conditions: High water demand

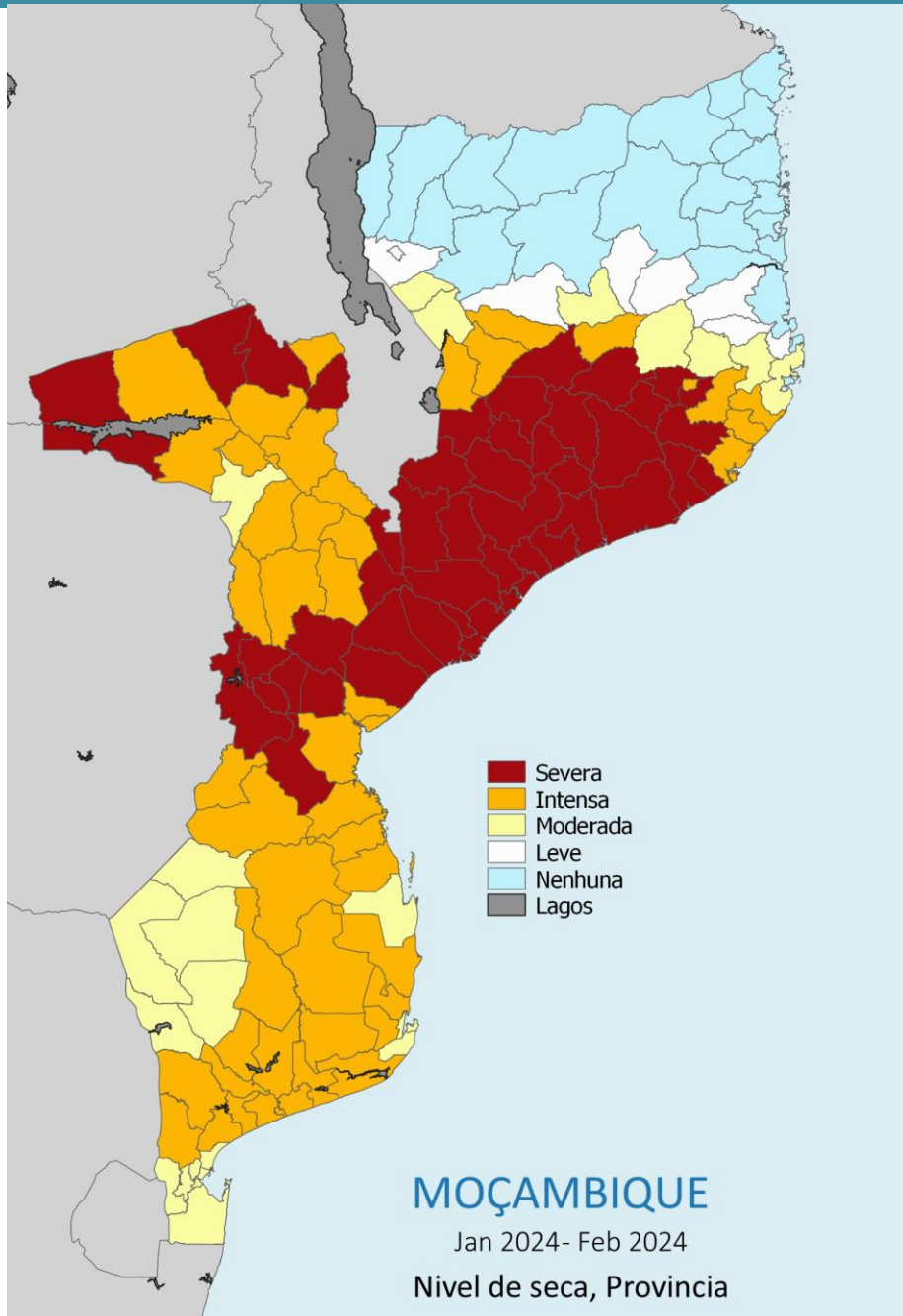
## Extend to March







# El Niño in Mozambique: Drought Index



MOÇAMBIQUE

Jan 2024- Feb 2024

Nível de seca, Provincia

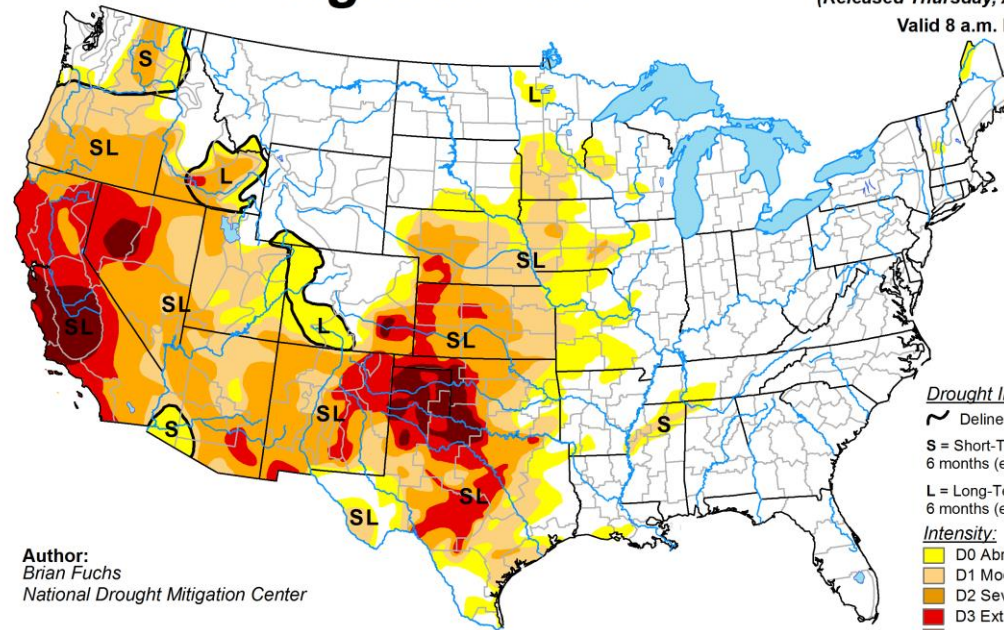
## Combined Drought Index, District-Level: Seasonal Jan-Feb

### U.S. Drought Monitor

April 15, 2014

(Released Thursday, Apr. 17, 2014)

Valid 8 a.m. EDT



Author:  
Brian Fuchs  
National Drought Mitigation Center

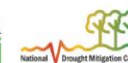
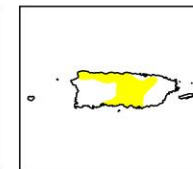
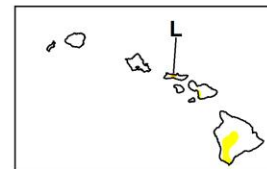
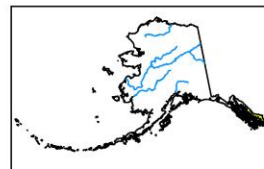
#### Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

#### Intensity:

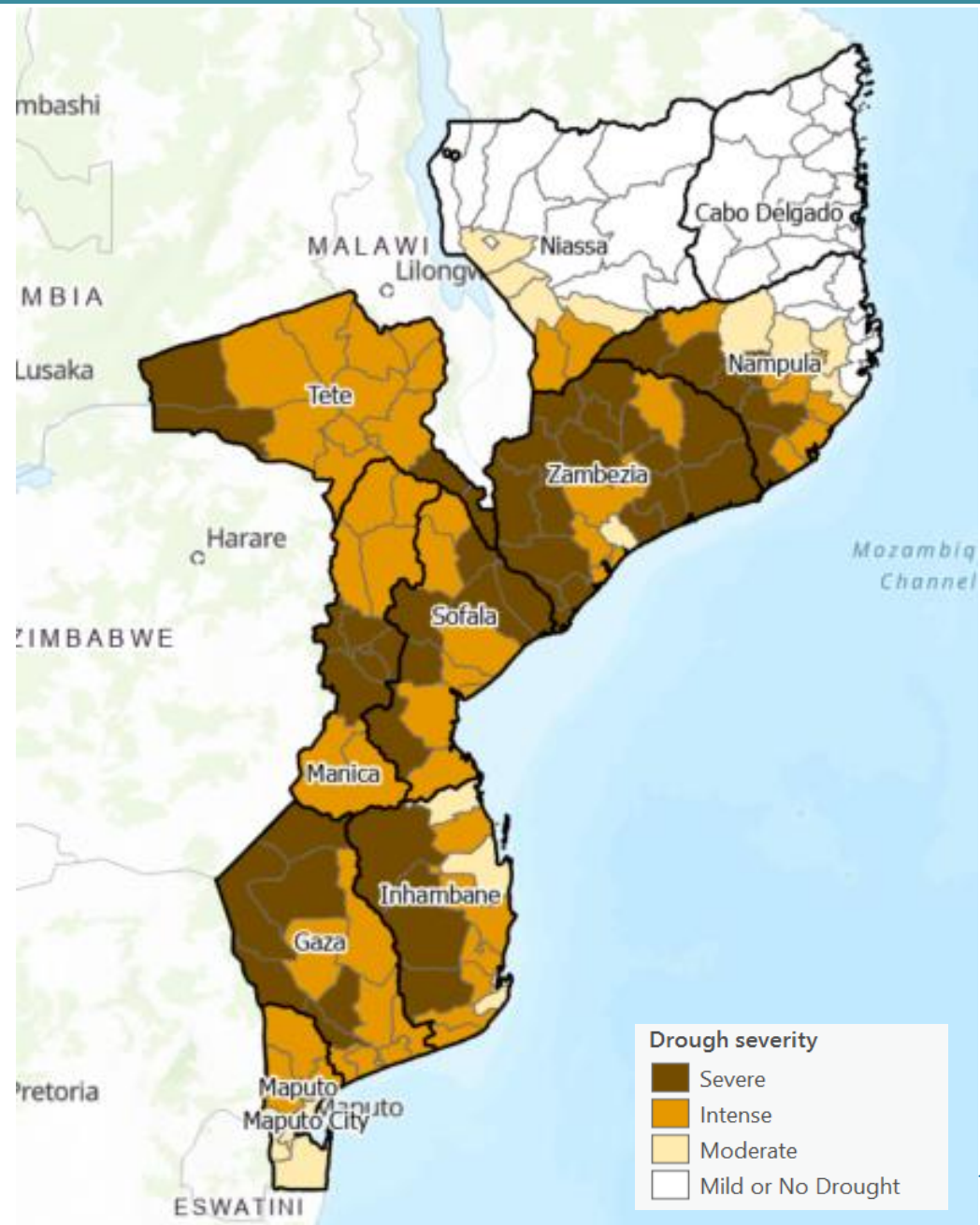
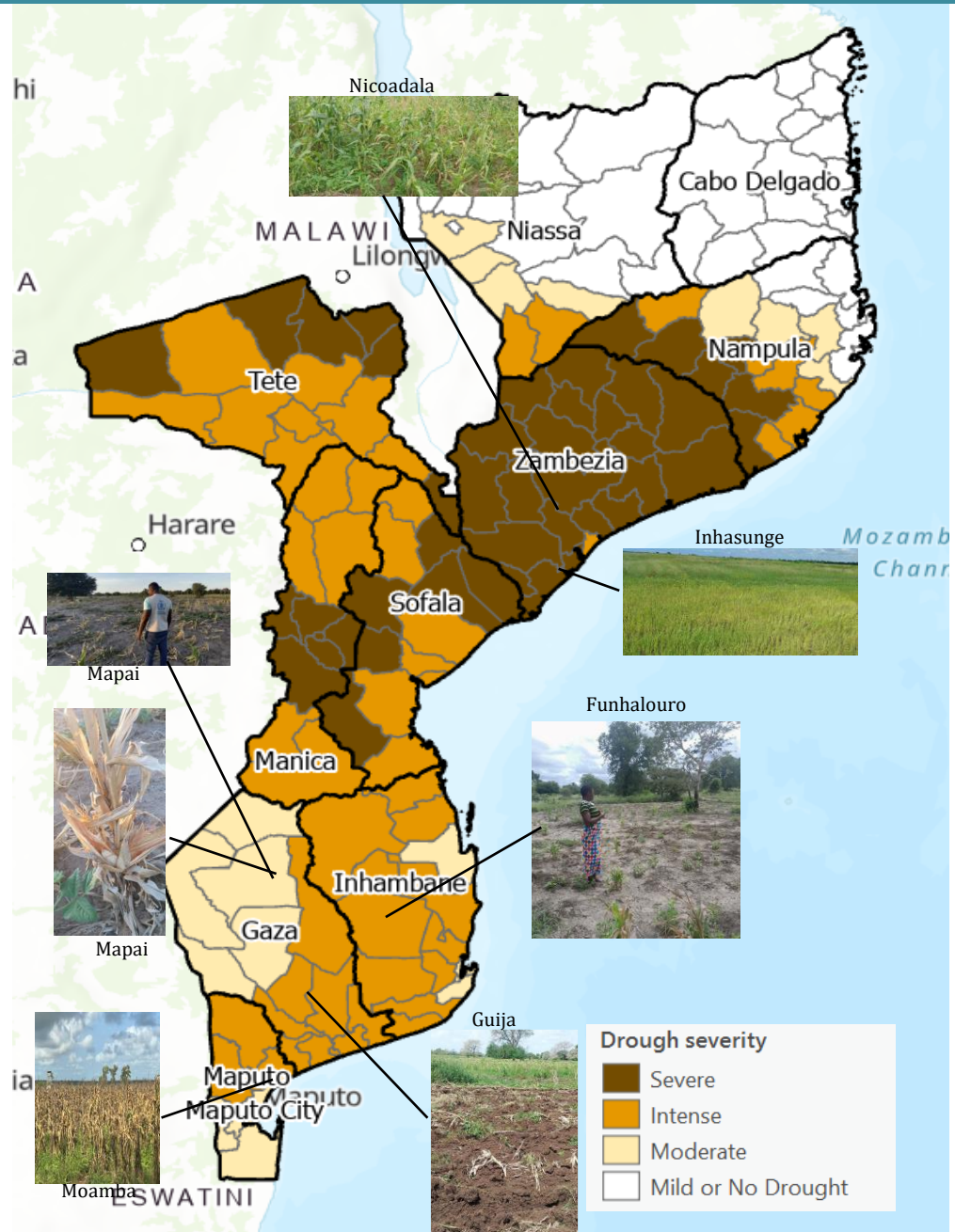
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



<http://droughtmonitor.unl.edu/>

# El Niño in Mozambique: drought index blended with field observations



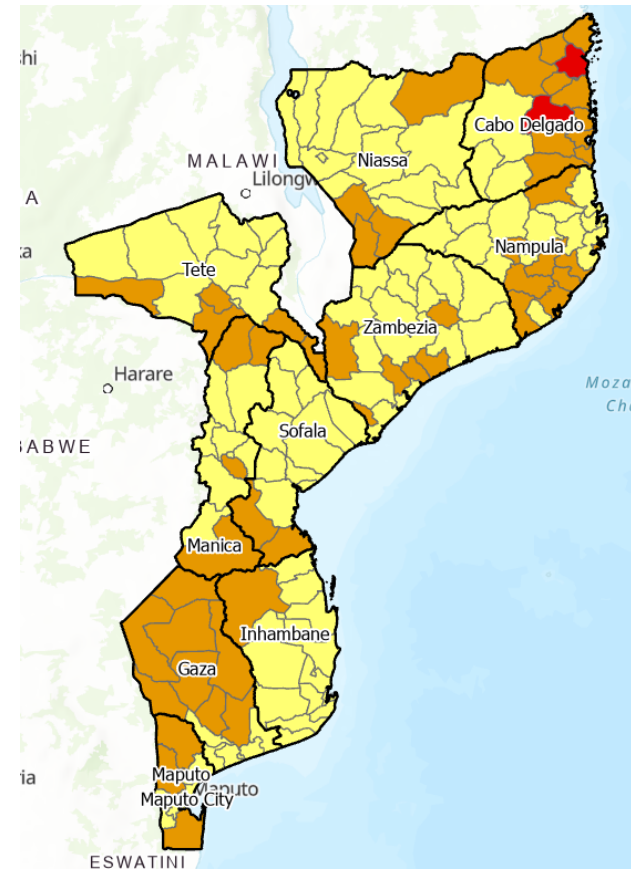


# El Niño in Mozambique: estimated impact on food insecurity

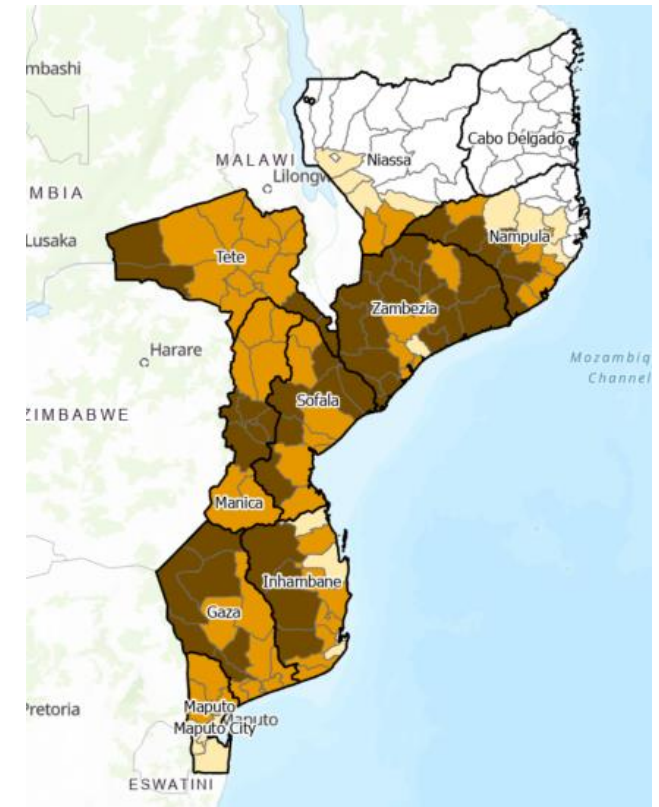
The **WFP Drought Hotspot Analysis** for Mozambique uses a composite drought index (CDI), information from rapid drought crop assessments and the latest food security data (MOZVAC/IPC) to estimate the number of people affected by El Niño-induced drought.

The 2023 MOZVAC was conducted in 67 of the 158 districts in Mozambique, for the remaining once information from the IPC analysis conducted in 2022 was considered, being the most updated source for food insecurity data in the country.

**Food Insecurity Status pre - El Nino**



**Drought impact analysis**

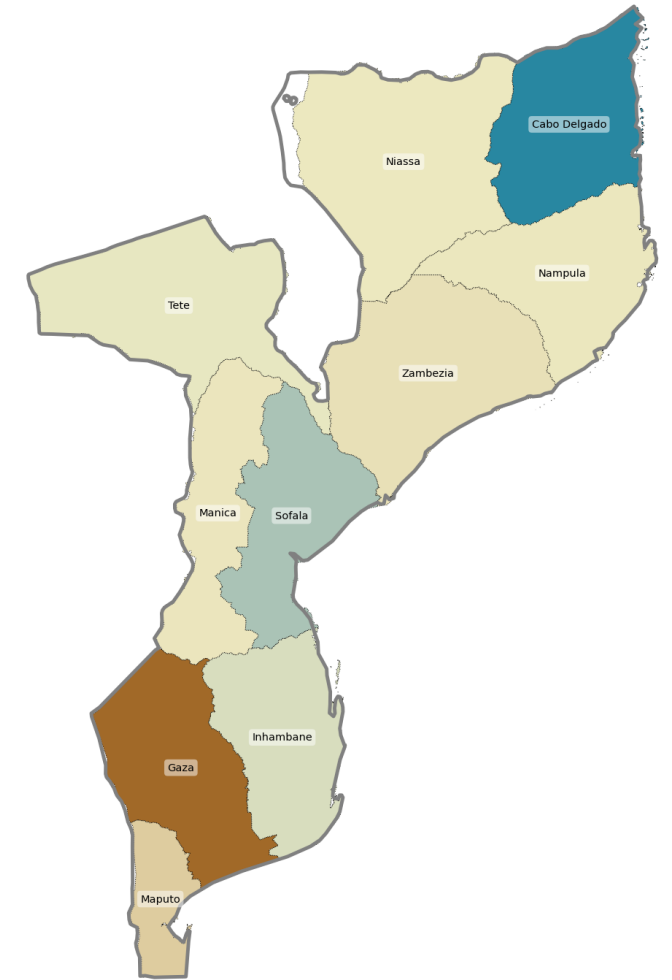


	Exposed to Drought	Drought Affected In IPC3+	IPC 3+ facing severe drought	IPC 4+ facing severe drought	Total Population
	Population exposed to drought condition	Food insecure people exposed to drought conditions	Food insecure people exposed to severe drought conditions	Critically food insecure people exposed to severe drought conditions	Population of Mozambique
Mozambique	20,430,000	2,670,000	1,253,000	91,065	32,970,000

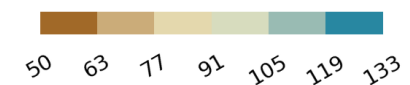


# Impact of El Niño on agriculture production

- During past moderate to strong El Niño years, **the southern and central regions of Mozambique have often received below-normal rainfall during the key months of the growing season**, as well as above-average daytime temperatures.
- The combination of these events has historically led to slight **deficits in national maize production**.
- In 2024, maize yield forecast estimates based on earth observation data from November 2023 to beginning of March 2024, indicate a **high likelihood that Mozambique will harvest a below-average maize crop**.
- All provinces are predicted to attain yields lower than the five-year average, except for Sofala and Cabo Delgado (though conflict is likely to mean that yields/production in CD are not high – the model does not incorporate the effects of conflict on crop productivity).
- FAO (through GIEWS) has a strong partnership with NASA Harvest - University of Maryland, to improve the use of remote sensing data and analysis to bolster capacities in MOAs in the context of Climate Change.



**% of 5-year Median Yield  
Maize, 2024**



150 km

Source: NASA Harvest/University of Maryland

# Impact of El Niño on key food staples prices and markets

- The lean season typically reaches its peak between January and March in Mozambique, the period when food assistance needs are highest.
- The timing of peak needs in 2024 may shift depending on the severity of rainfall deficits and the behaviour of rainfall distribution at key points in the crop cultivation period.
- **In April and May 2024, the likely below-average 2024 harvest in southern and central Mozambique is expected to provide poor households with short-term stability in food availability and food access.**
- Poor households in southern and central Mozambique are likely to **remain dependent on market purchases in the post-harvest period to supplement their 2024 harvest.**





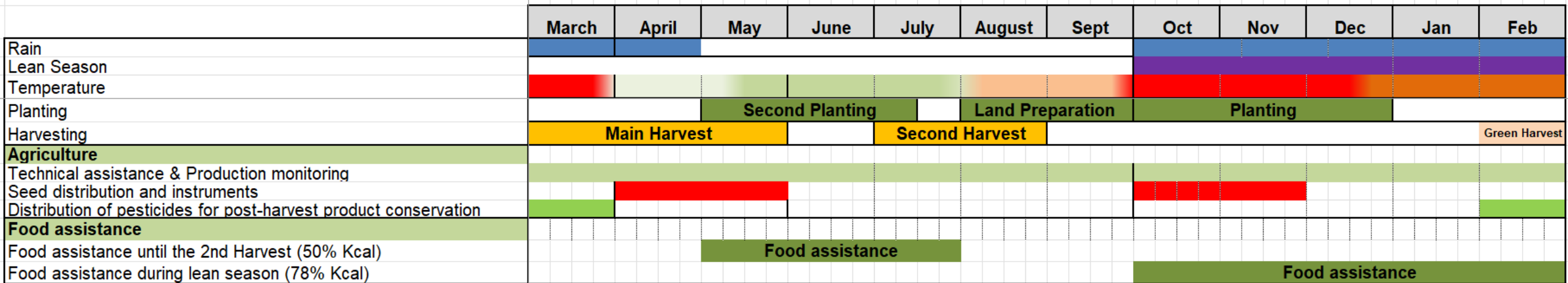
# Priority interventions

- **Enhance multi-stakeholder coordination** to foster synergies and create a collective impact
- **Provide food assistance** to the most food-insecure population until the next harvest
- **Support with agricultural inputs (horticulture, main crops, etc)** for the 2nd planting season and incoming winter season
- **Support good agricultural, water management, post-harvest practices**
- **Boost off-season food production**





# Timeline for possible response



## CONSIDER:

- Lead period to be considered / options for 2<sup>nd</sup> season ?
- Needs will be high – very low coverage expected
  - Prioritization will be key
- Multisectoral response to the same people / districts / communities ?

## Useful links

- [Google Drive FSC Resources](#)
- [FSC Mozambique website](#)
- [WFP RAM Mozambique Hub](#)
- [FAO GIEWS Resources](#)

# Obrigado

