

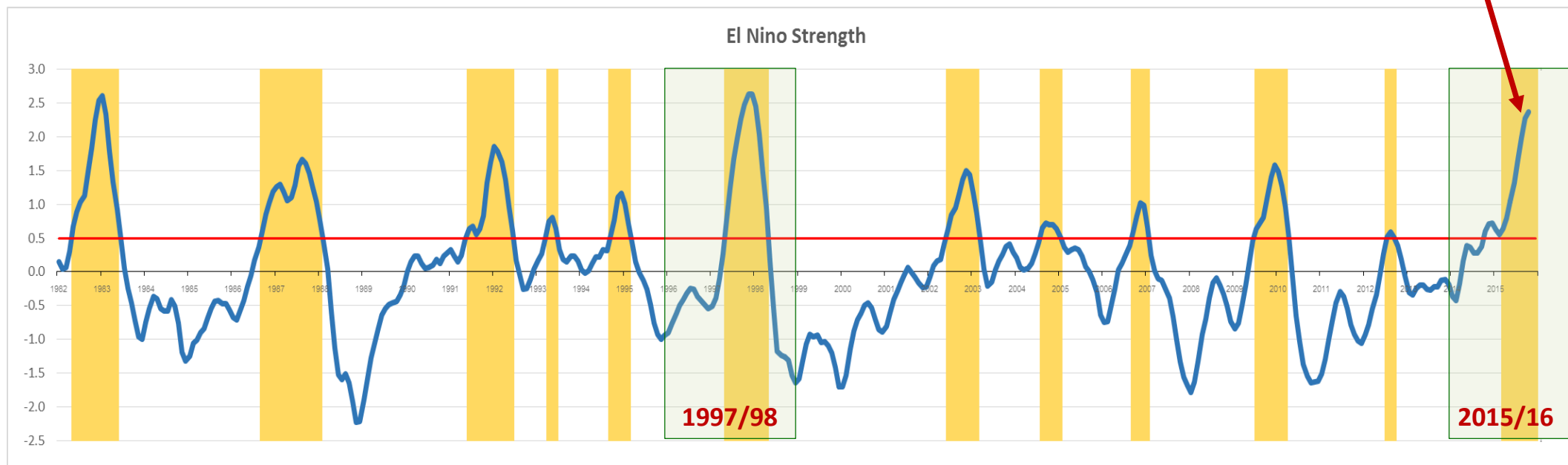
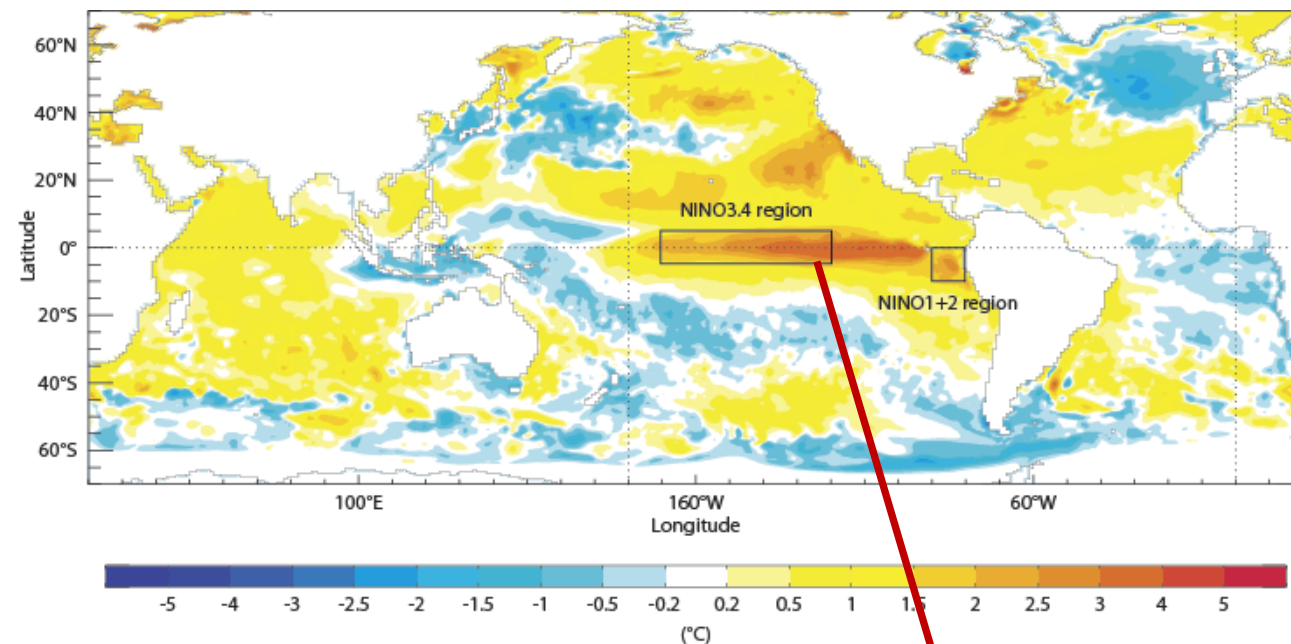
# El Nino 2015: The Story So Far and What To Expect Next

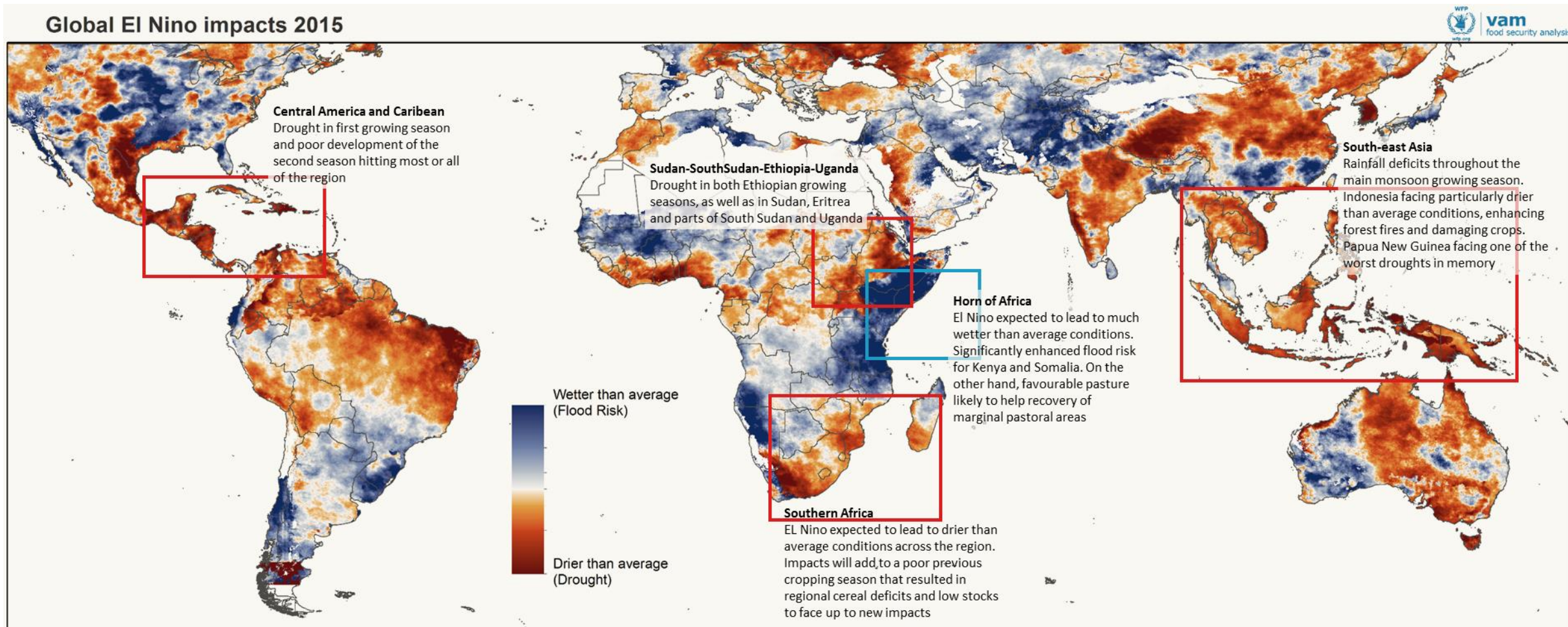


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## The 2015/16 El Nino Event

- Officially declared in March 2015
- Now approaching peak intensity
- Expected to last through 1<sup>st</sup> Quarter 2016
- Long lived and definitely one of the strongest on the long term record.



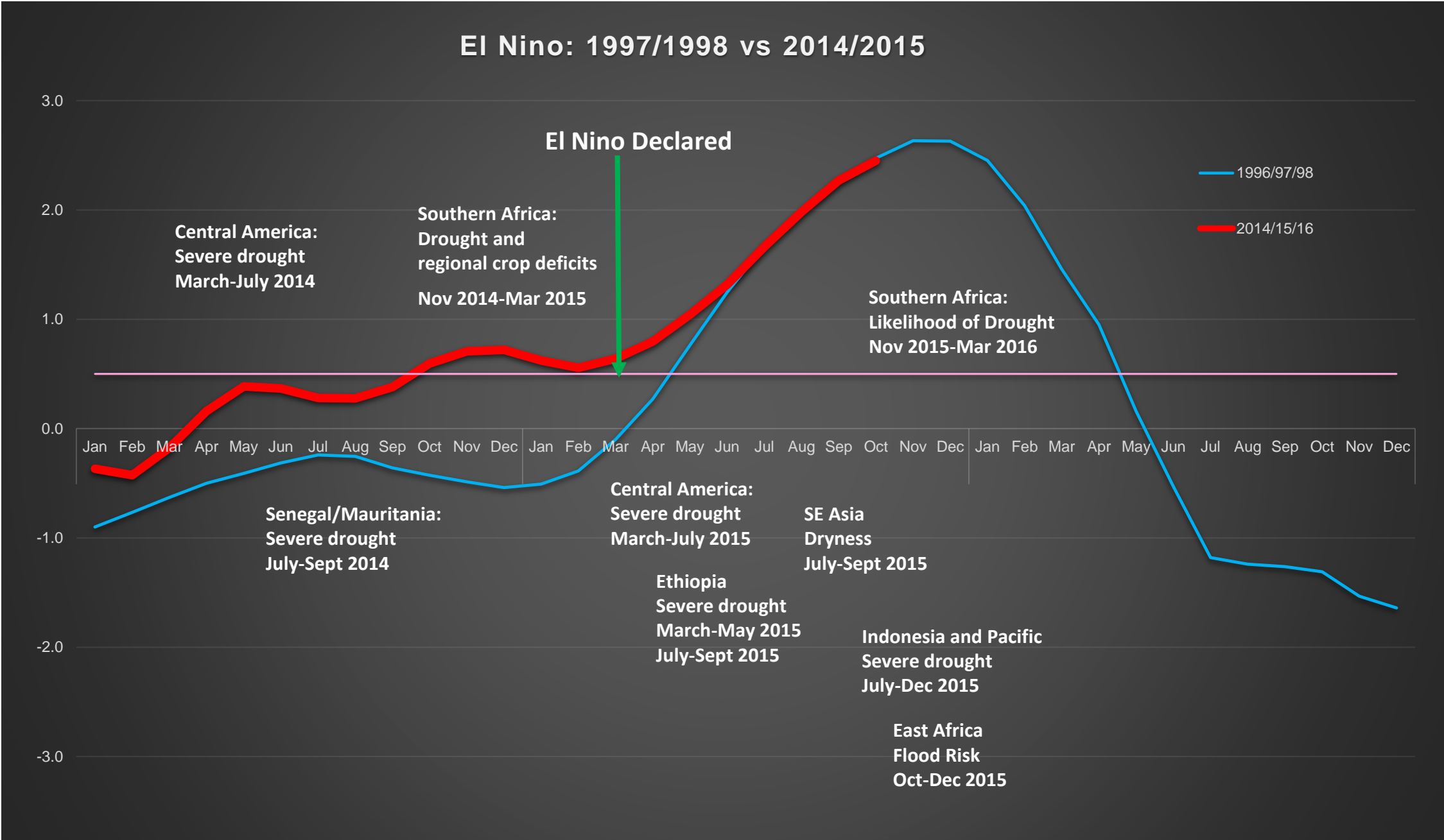


The El Nino events have a global reach, with a variety of impacts spread along the year.



# Evolution and Timeline: A Long Build Up to Record Intensity

El Nino 2015-2016



# WFP Regions: El Nino Impacts So Far

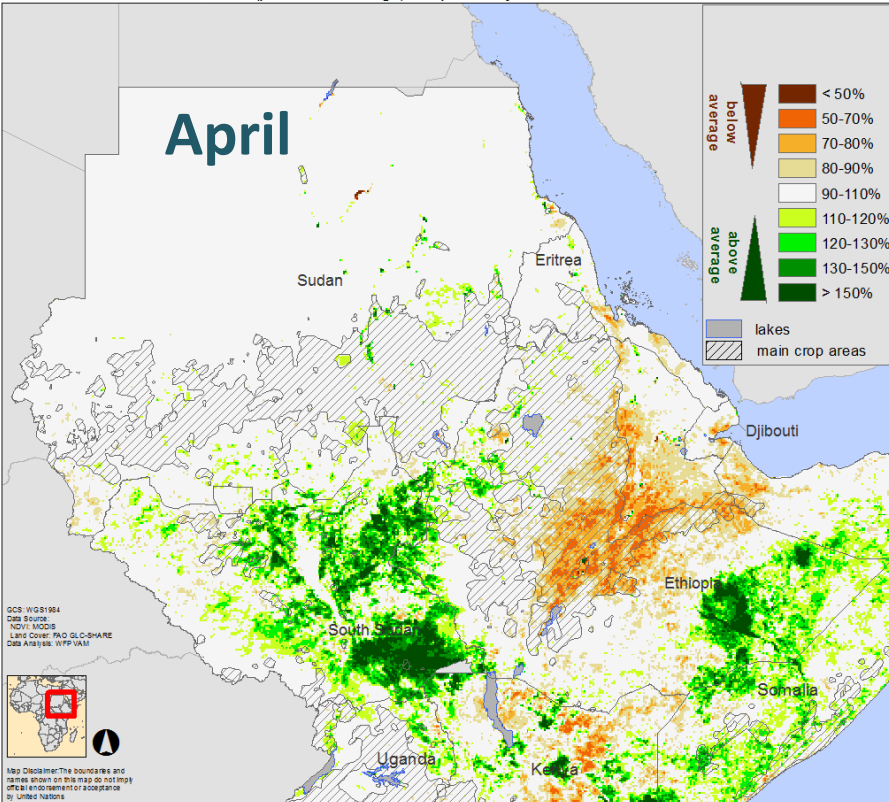


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# East Africa: Ethiopia region, the Sudans, Uganda

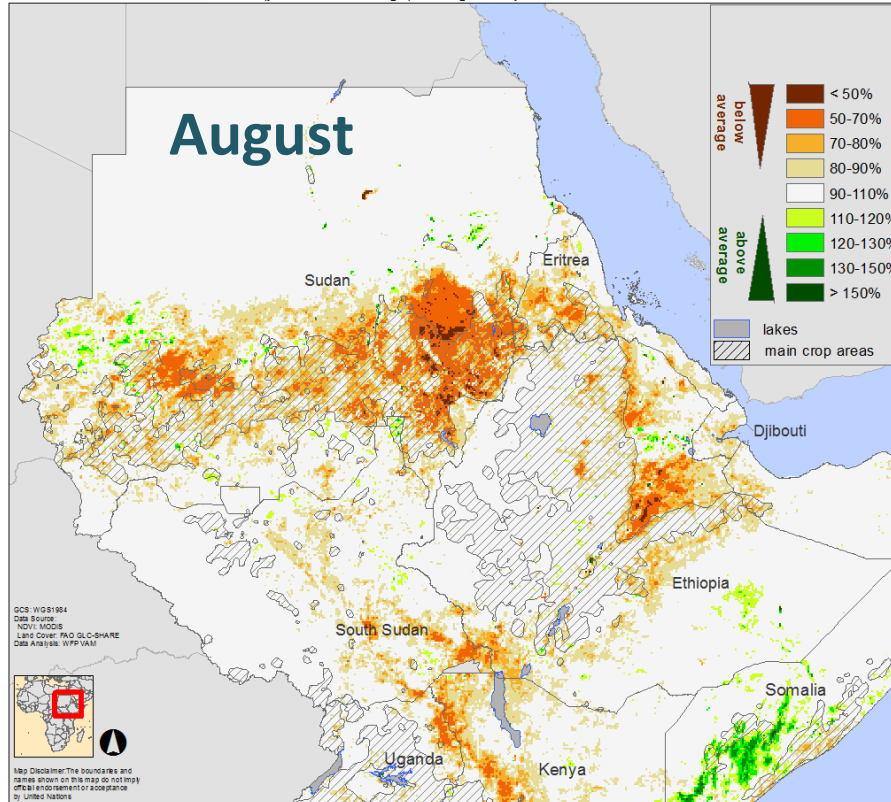
23Apr-09May 2015

SUDAN, SOUTH SUDAN, ERITREA, DJIBOUTI and ETHIOPIA  
NDVI (percent of average) 23Apr-09May 2015



21Aug-06Sep 2015

SUDAN, SOUTH SUDAN, ERITREA, DJIBOUTI and ETHIOPIA  
NDVI (percent of average) 21Aug-06Sep 2015

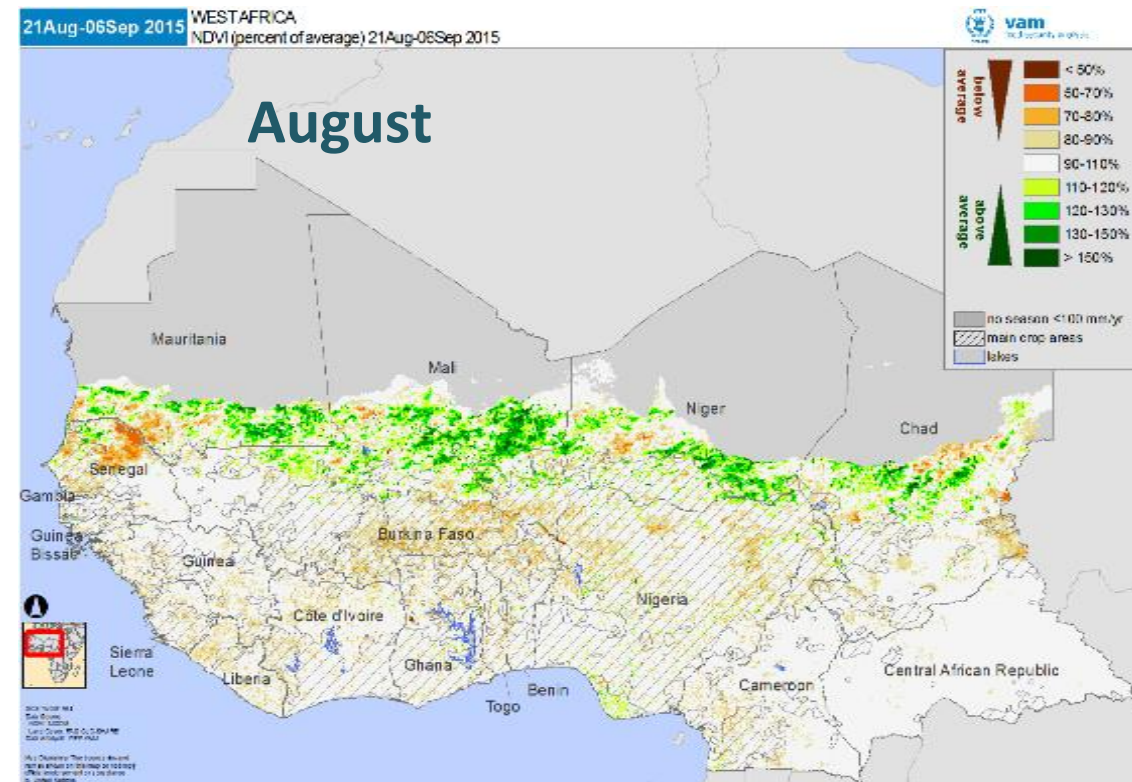
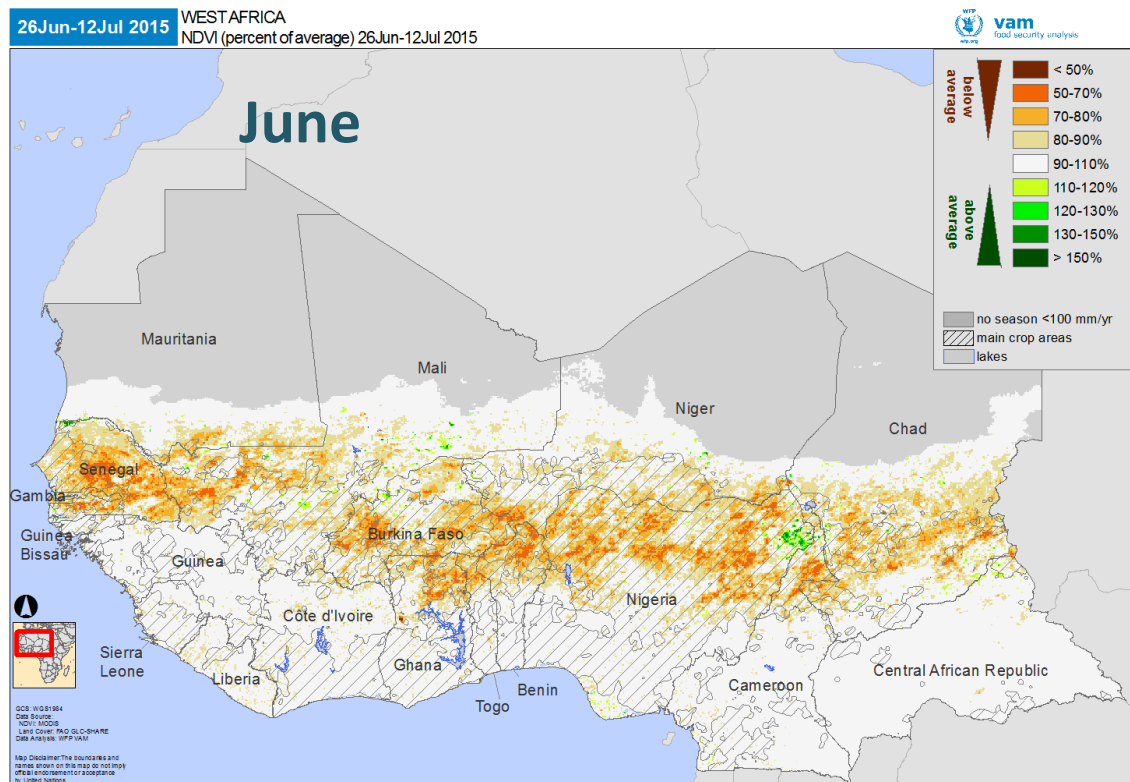


**Ethiopia:** hit by severe drought on both the first and second (main) growing seasons. Pastoral livelihoods severely affected, situation extends to **Djibouti** and **Somaliland**.

**Sudan, Eritrea:** drought on main and marginal cereal producing regions.

**South Sudan-Karamoja (NE Uganda)-Turkana (NW Kenya):** an excellent start followed by very dry conditions from July onwards

# West Africa: Senegal to Chad

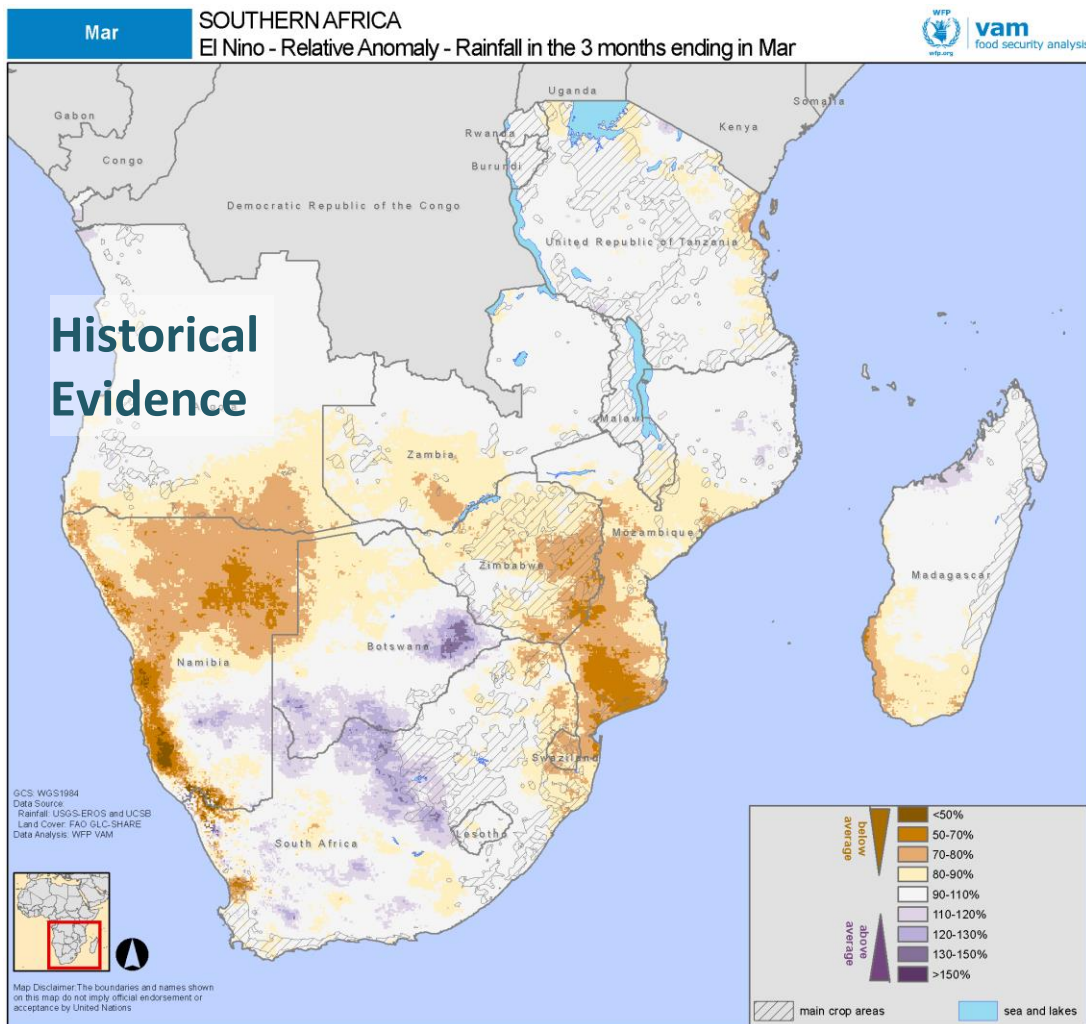


- After a very poor start, a remarkable reversal of conditions led to broadly favourable growing season outcomes.
- Some localized concerns: **Chad**, eastern Niger, and very dry conditions in **Gulf of Guinea** countries (e.g. Ghana)



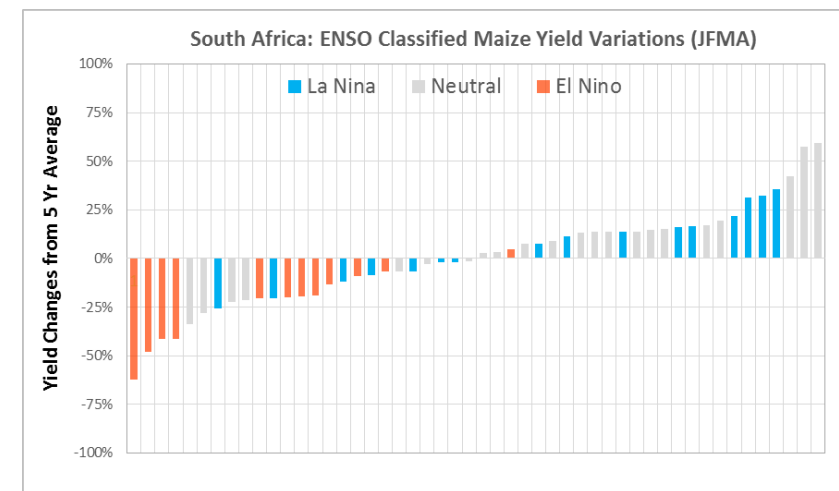
# Southern Africa: Oct 2015 – April 2016

El Nino 2015-2016

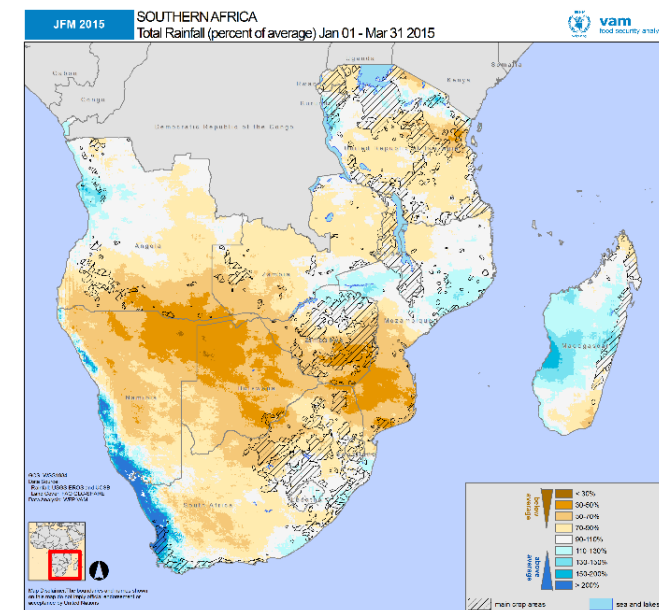


El Nino strongly associated with drier than average conditions from October to April.

Current forecasts confirm this tendency

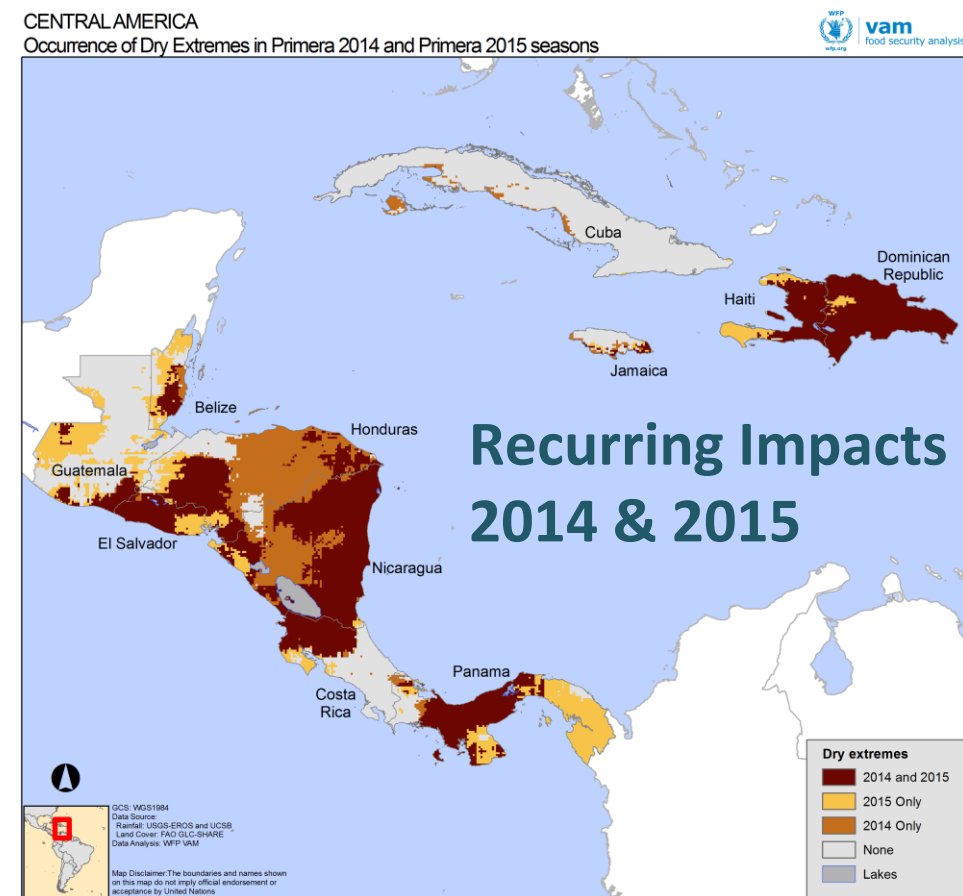
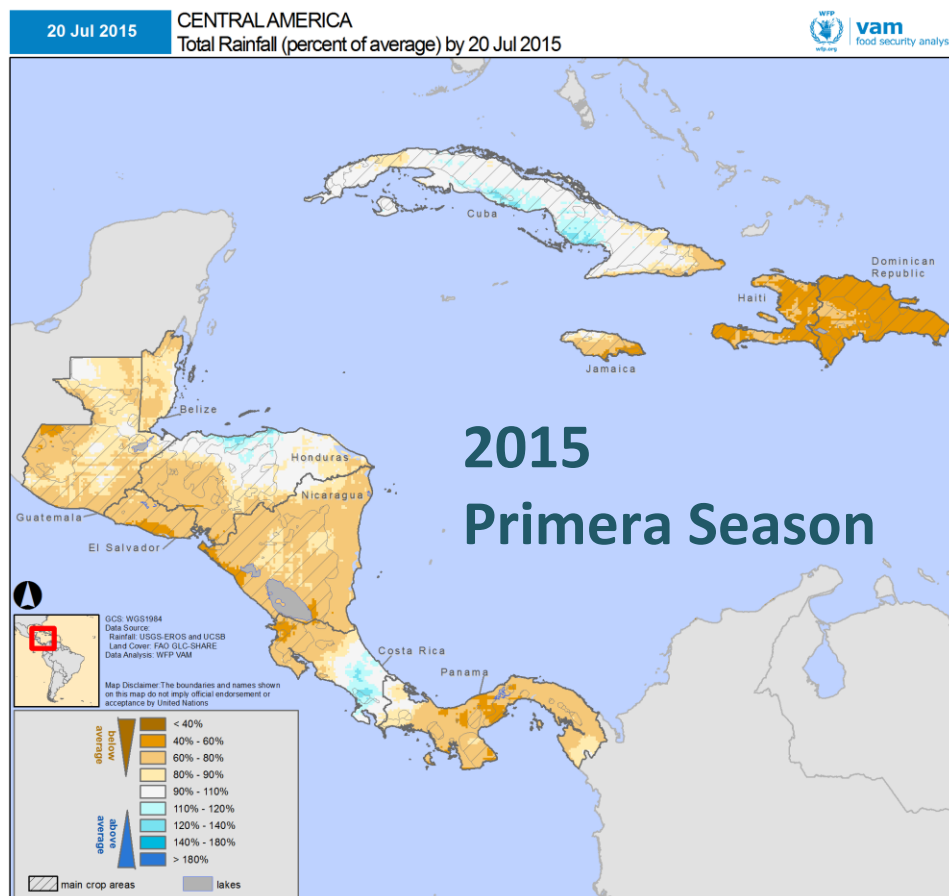


**Outcome:** Maize drops in production



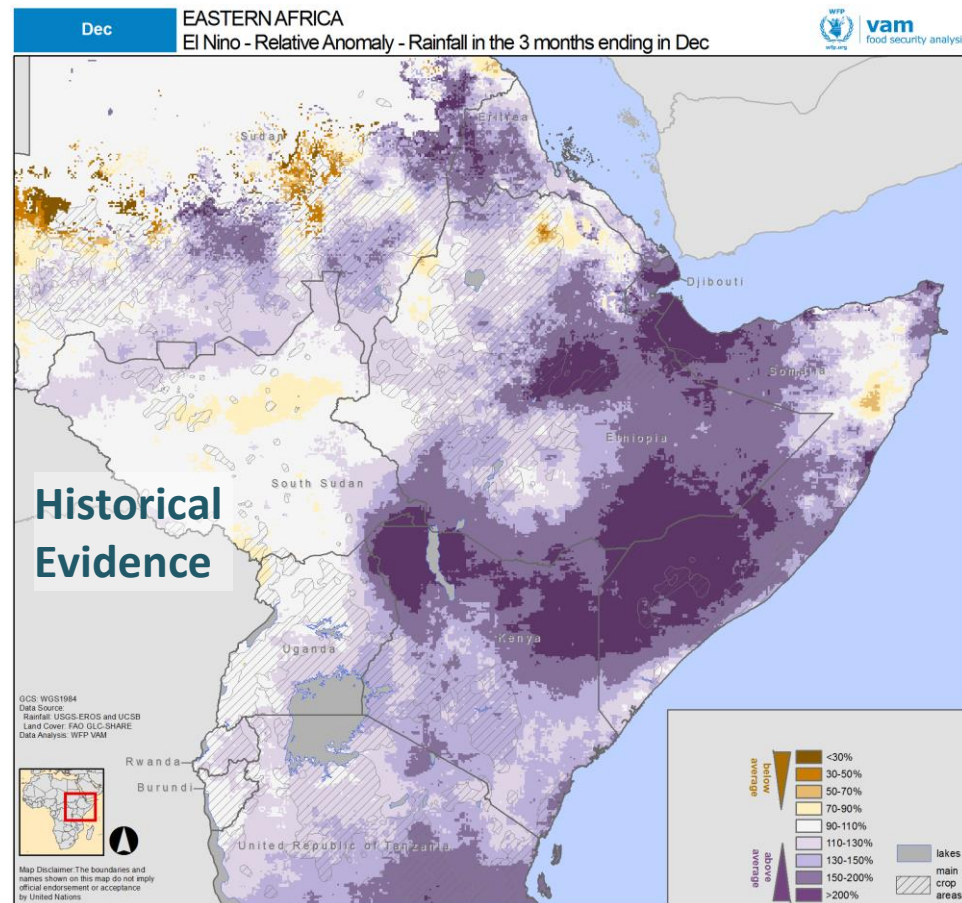
**Context:** Poor previous season, low stocks





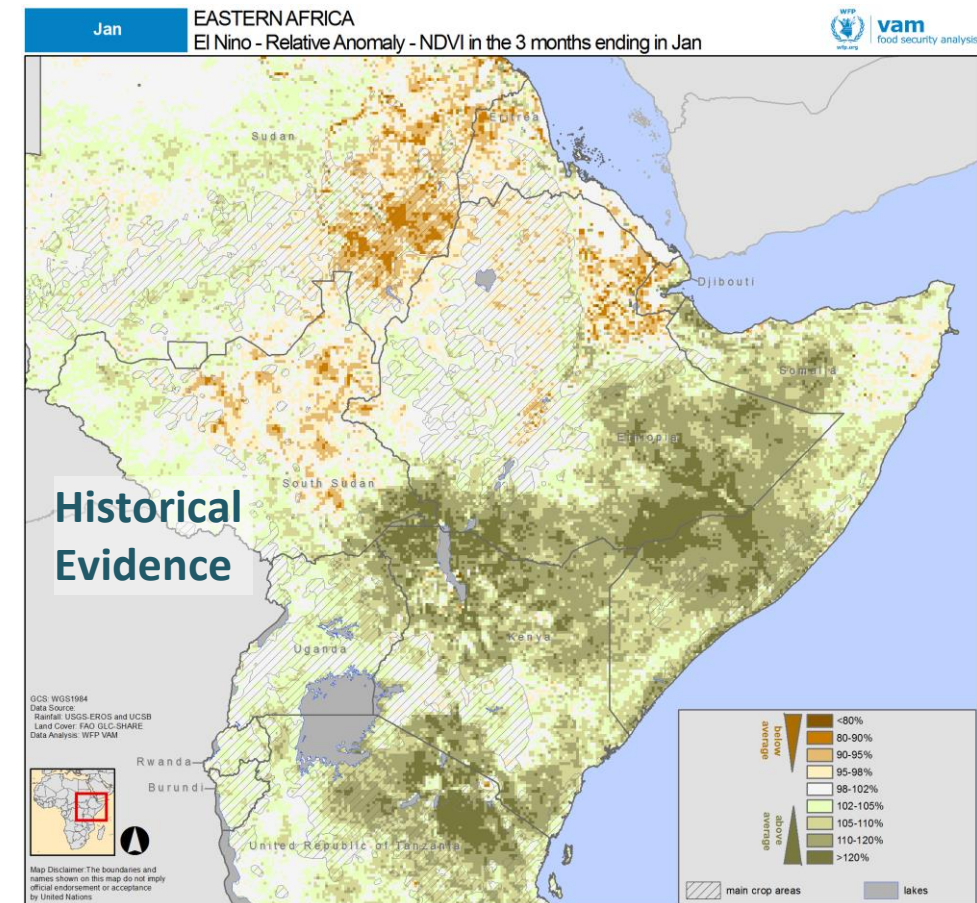
- Widespread drought during the Primera season (April-July) of this year. Second (Postrera) season (August-November) also developing unfavourably.
- Worst hit: **Haiti, Nicaragua, Salvador Honduras and Guatemala.**
- Lingering effects of major Primera season drought in 2014

# Horn of Africa: Short Rains Oct-Dec 2015



El Nino strongly associated with **wetter than average** conditions during October to January. Current forecasts confirm this tendency

**Outcomes:** Possibility of large scale floods in Somalia and Kenya, as in 1981, 1997 and 2006.



Wetter than average season leads to better than usual pasture and crop development.

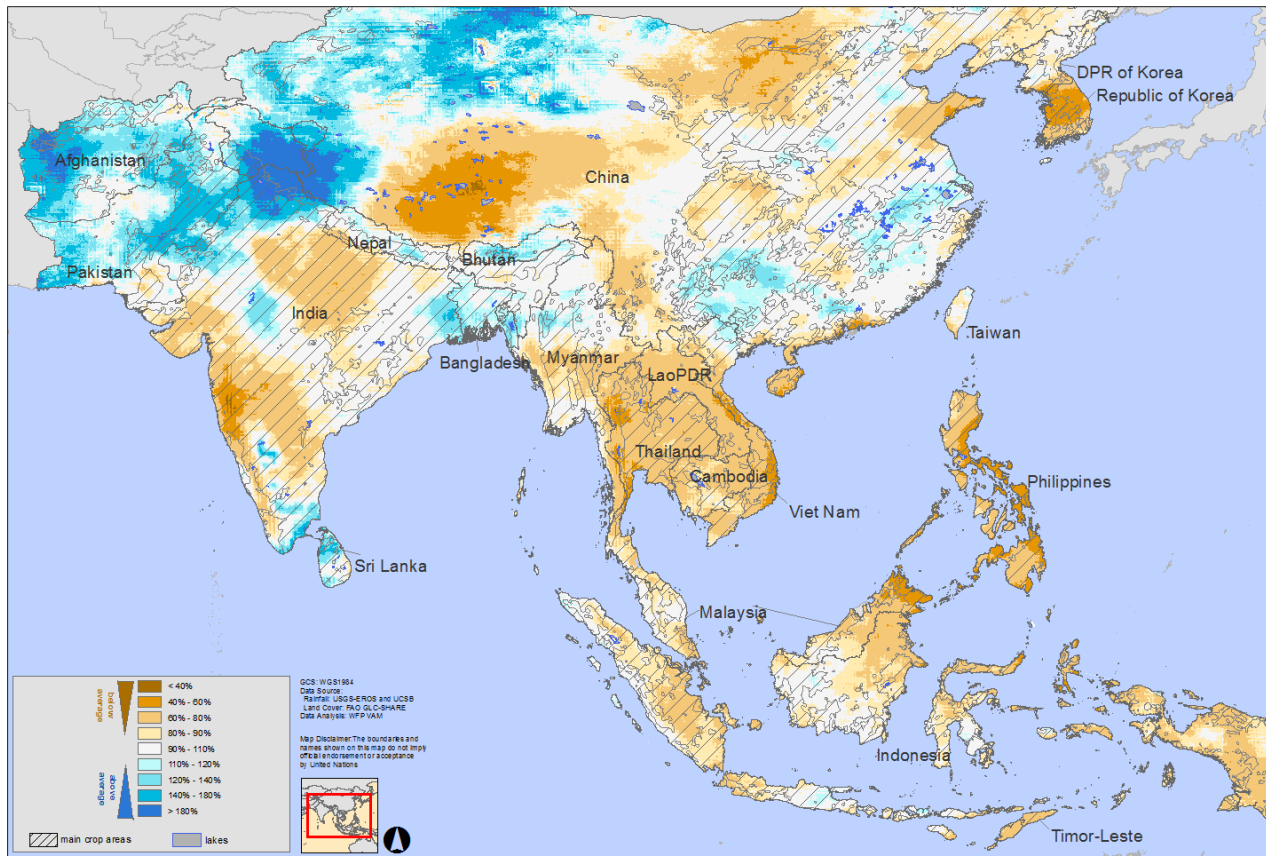
**Outcomes:** Good growing conditions in pastoralist areas, livelihoods asset recovery.

# Asia and the Pacific

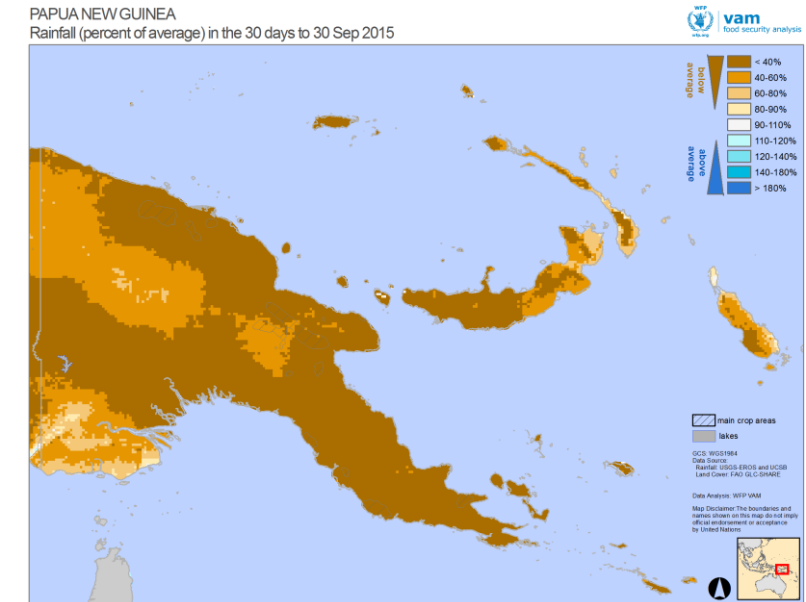
31 Aug 2015

SOUTH-EAST ASIA

Total Rainfall (percent of average) by 31 Aug 2015



PAPUA NEW GUINEA  
Rainfall (percent of average) in the 30 days to 30 Sep 2015



PNG drought

- Pronouncedly drier than average conditions since early in the season across SE Asia, with a drier than average monsoon over **India**. **Thailand** and **Philippines** particularly affected. Also **DPRK**.
- **Indonesia** and **Pacific**: Very dry conditions throughout.
- Worst conditions in PNG in memory.



# El Nino: Summary Highlights for 2015-2016

Red=Negative; Orange=Watch; Green=Positive

Region	Current Status	Outcomes / Outlook	Impacts
Central America	Poor Postrera season now developing (major bean production)	Widespread drought during Primera (first) season (provides >60% of regional maize production). Likely two drought affected growing seasons in the same calendar year.	Most affected are Haiti, Salvador, Honduras, Guatemala and Nicaragua. Affected countries maize production may drop 20% (FAO). Bean crop production shortfalls
West Africa	Rainfall season ended in Sahel	Sahel: after a very poor start, the season ended wetter than average thanks to good late rains and a later than usual end of season Continuing drier than average conditions for Gulf of Guinea countries.	No significant impacts expected in the Sahel, apart from localized worries in Chad. The situation for Gulf of Guinea countries requires monitoring.
East Africa	Main rainfall season ended in Ethiopia (except SE), Sudan, N Eritrea and most of South Sudan	Ethiopia's Belg and Meher growing seasons both affected by drought. Sudan also affected by poor growing season as well as Eritrea and Djibouti. Karamoja (NE Uganda) growing season also performed poorly	Ethiopia expected to face two consecutive poor seasons and severe impacts on Afar pastoral areas. Sudan to face rainfed production shortfall unless later rains improve markedly. South Sudan late season harvests may be affected by late dryness.
Indian subcontinent and South Asia	Early stages of the main season in Indonesia and of the secondary season in the Philippines	Favourable season in Afghanistan. Unfavourable monsoon season in India and most of SE Asia countries. Indonesia, Philippines and Pacific islands endured drier than average conditions until now and are forecast to continue until January 2016.	Strong negative impacts already felt in PNG are likely to worsen. Indonesia expected to face impacts on national crop production, and on livelihoods of poorer communities in eastern province.
Horn of Africa	Early stages of the Short Rains (Oct – December)	Wetter than average conditions across most of the region from SE Ethiopia to Somalia, Kenya and N Tanzania	Above average rainfall may result in large scale flooding along Kenya and Somalia's river systems. Favourable pasture and marginal agricultural conditions in arid and semi-arid areas due to enhanced rainfall.
Southern Africa	Early stages of the 2015/16 season (October to April)	Likelihood of drier than average conditions affecting the growing season over most of the region.	Possible maize production shortfalls in South Africa (main producer), Zimbabwe and Malawi (risk of impact of large cereal deficits on vulnerable populations). Outcomes crucially dependent on rainfall during planting and flowering stages of the maize crop.

# Thank You

## Data Sources:

Rainfall: CHIRPS, Climate Hazards Group, UCSB

Vegetation: MODIS NDVI, EOSDIS-NASA

Seasonal Forecasts: ECMWF, Regional COFs, CPC

## Processing:

VAM software components, ArcGIS

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