



Timor-Leste, Start of Rainy Season 2019 - 2020

SAVING LIVES CHANGING LIVES

Timor-Leste Country Office and Bangkok Regional Bureau for Asia and the Pacific

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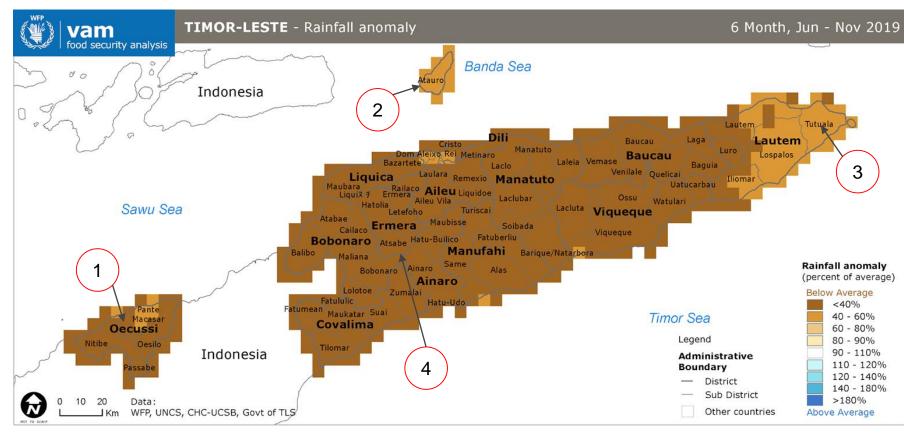
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- Short forecast until end of the year (16 31 Dec 2019)
- Seasonal forecast for the next 3 months (Jan Mar 2020)

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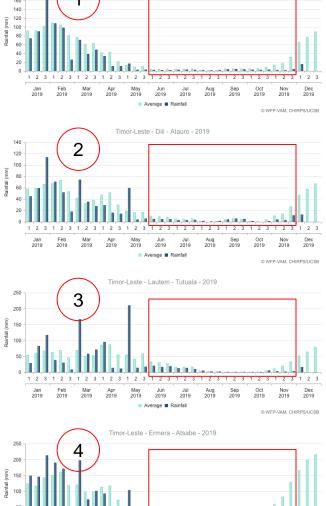
Rainfall performance in the last 6 months





In the last 6 months from June to November 2019, Timor-Leste generally experienced far below normal rainfall, with a number of localized below normal rainfall e.g Los Palos and Tutuala; the eastern part of Lautem.

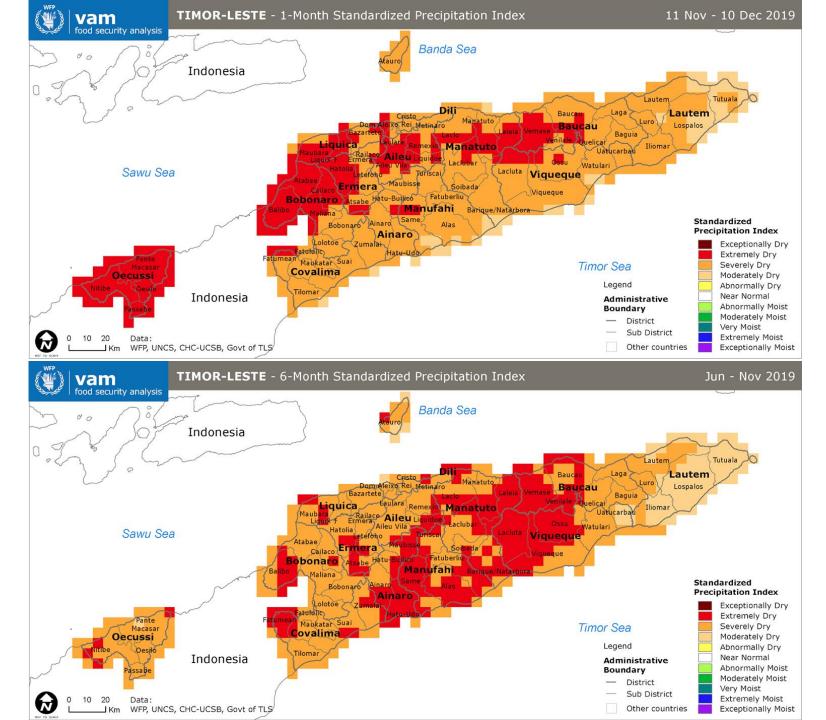
Intensity of rainfall is currently about 40% than long term average. As seen in the graphs, the current data is represented by the dark blue bar while the light blue bar represents the long term average



Timor-Leste - Oecussi - 2019



- Dark blue: current raintall season
- Light blue: long term average (LTA) rainfall



1 and 6 month of Standardized Precipitation Index

On short timescales (1 month, 11 Nov - 10 Dec 2019), the standardized precipitation index (SPI) generally indicates soil moisture.

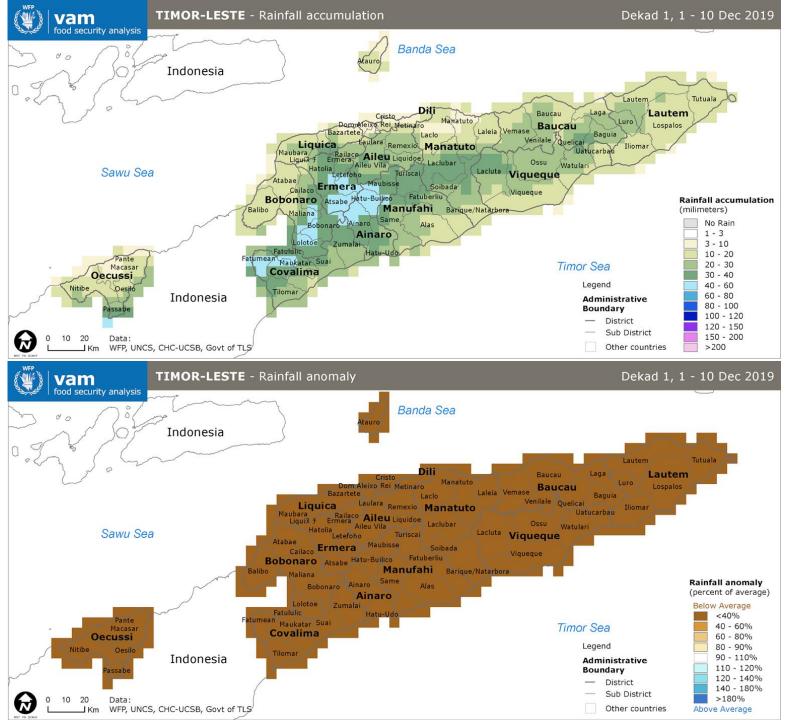
The country is currently entering a rainfall season as most areas have experienced 1-6 consecutive days of wet spell. However, the effects of the rainfall received are not reflected because the soil needs a certain span of permeation time. As such, the SPI analysis still identifies a number of severely dry condition areas (the red grids on the map).

On the other hand, the SPI of longer timescales (**6 months**; **Jun - Nov 2019**) is related to groundwater and reservoir storage.

Over the long time scale, the most affected areas are: Viqueque and parts of Baucau, Manatuto, Manufahi, Ainaro and Manatuto.

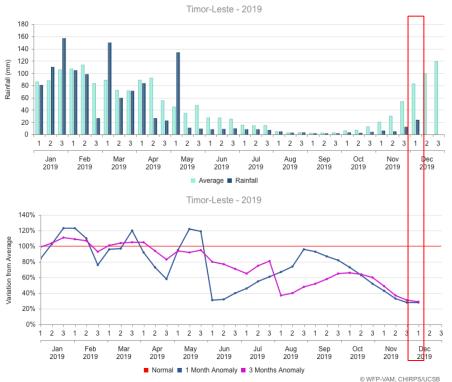
Moderately to severely dry conditions are spreading from Ainaro, Manufahi, Manatuto, and almost all areas in Viqueque.

Data: CHIRPS, CHG UCSB



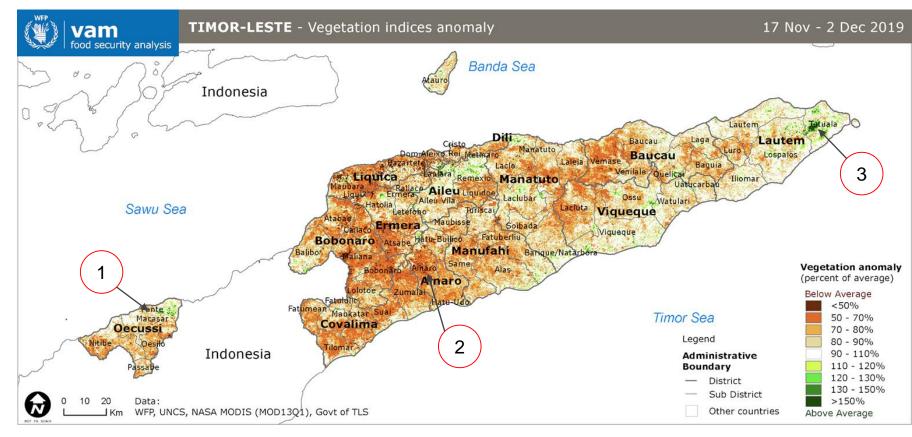
Latest situation Dekad 1, 1 - 10 Dec 2019

In the 10-days ending 10 Dec 2019, all areas in Timor-Leste experienced below normal rainfall, only received rainfall max 40% than long term average (see graphs). However, this does not necessarily mean the whole area experienced dry conditions. Infact, some highland areas e.g. Atsabe in Ermera, Hatu-Builico and Maubisse in Ainaro experience rainfall ie. 40-60 mm in 10 days.



Vegetation status, 17 Nov - 2 Dec 2019





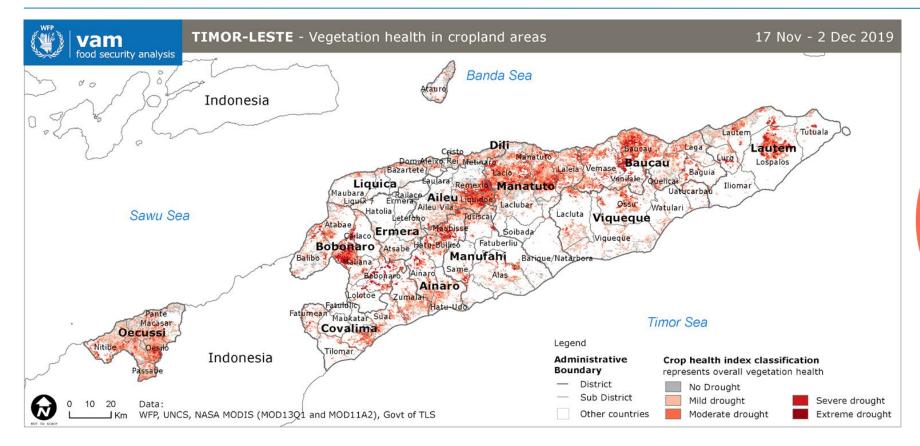
Timor-Leste - Oecussi - Pante Macasar - 2019 Average Rainfall NDVI Average NDV Timor-Leste - Ainaro - Ainaro - 2019 Average ■ Rainfall ■ NDVI Average ■ NDVI @ WFP-VAM. CHIRPS/MODIS Timor-Leste - Lautem - Tutuala - 2019 ■ Average ■ Rainfall ■ NDVI Average ■ NDVI

- Corresponding to SPI analysis, lower rainfall in early November (Dekad 1) is expressed in vegetation status map above. Dry condition remains detected in most areas.
- Low vegetation indices are found in Bobonara, Ermera, Ainaro and some other areas in the highland. Average or normal level of vegetation are maintained in some coastal areas and even above average is detected near Tutuala
 - Dark blue: current rainfall season Dark green: current
 - Light blue: long term average (LTA) rainfall
- Dark green: current vegetation index
- Light green: long term average (LTA) EVI



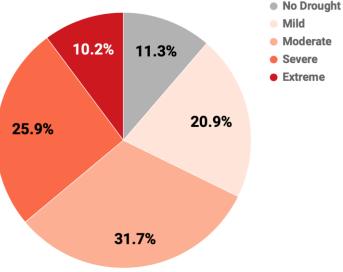
Vegetation health in cropland areas, 17 Nov - 2 Dec 2019





- Similar to vegetation status in general, vegetation health in cropland does not immediately respond to rainfall in late November/early December
- Also, poor vegetation health **does not** necessarily **mean harvest loss**, it instead shows the **potential impact** of a prolonged drought in **food crop areas**.
- The Vegetation Health Index (VHI) combines two components: deviations in land surface temperature and the extent to
 which vegetation density varies from normal patterns. The VHI depicts stress on vegetation and can be used to assess
 potential crops losses. Data: USGS MODIS, MOD11A2 and MOD13Q1

Potential Impact of drought in cropland areas

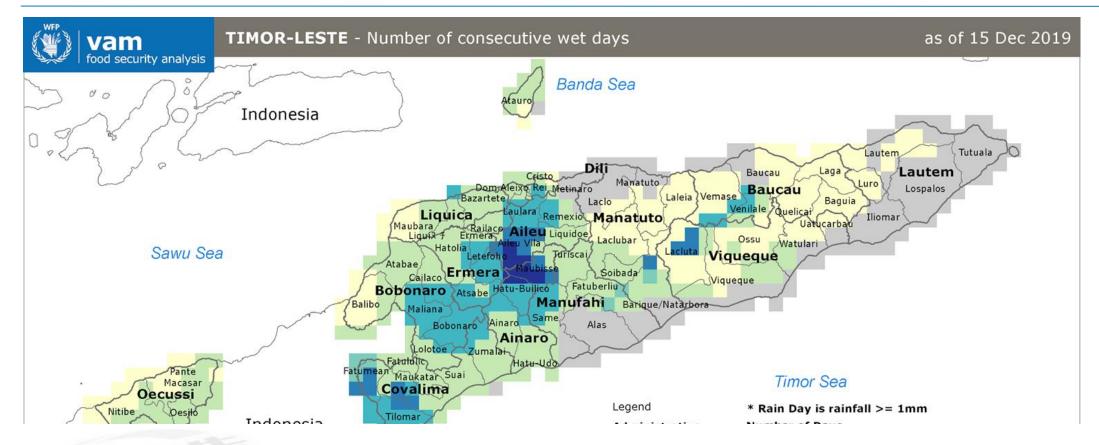


Estimates of hectares and percent of crop areas in drought nation-wide

The above chart displays the national estimates of crop areas in drought. Up to **210,000 hectares** of crop areas are estimated to be in **extreme** or **severe drought** for period 17 Nov - 2 Dec 2019, representing **36%** of all crop areas in **Timor-Leste**.

Wet-spell, as of 15 Dec 2019





预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5_4167

