SAVING LIVES
CHANGING LIVES

# Rainy Season Monitoring
## World Food Programme
## Angola

WFP
World Food Programme

## Highlights

- Provinces of Zaíre, Uíge, Bengo, Luanda, Cuanza Norte, Malange and Cuanza Sul had 90% to 120% of normal rainfall in November 2021.
- Provinces of Lunda Norte, Lunda Sul, Bié, Moxico, Huila and Cuando Cubango had less than 80% of the average rainfall in November 2021.
- Provinces of Cuanza Sul, Benguela, Huambo, Namibe, Huila and Cunene provinces, the most affected by drought in 2020/2021, had below-average vegetation cover in October and November 2021.

## Methodology

The report analyzes rainfall and vegetation cover trends based on the remote rainfall monitoring and Normalized Difference Vegetation Index (NDVI) available on the World Food Programme's DataViz Platform (dataviz.vam.wfp.org). The NDVI is an indicator of vegetation cover; therefore, it can be used to predict agricultural production and grazing conditions as well as to monitor drought. For each geographic region, the precipitation and NDVI data are analyzed by comparing the normal situation values (average values) with the values observed in the present season. The analysis assumes that there is no other phenomenon, such as fires, that could affect vegetation in addition to the climate.

## Rainy Season Performance

As in other years, some provinces started to receive precipitation from the last week of August 2021 (Cuanza Sul, Benguela and Huambo), while in others the precipitation started later. For example, in Namibe and Huíla it began in October and September 2021, respectively.

The November 2021 rainfall balance indicates that northwestern provinces in Angola, including some parts of Benguela and Namibe, received average or above-average rainfall, while northeastern and southeastern provinces, including some regions of Huíla, received less than 80% of average precipitation.

For the months of October and November 2021, the balance suggests that the province of Huíla, some parts of Huambo and Bié, the south of Cuando Cubango, the east of Lunda Norte and Lunda Sul and a part from Moxico were the regions that registered the lowest rainfall compared to the average levels, that is, between 60% and 80% of the average. The southwestern part of Uige, the provinces of Bengo and Luanda, the western part of the Cuanza Norte and Cuanza Sul, the central part of Namibe and the eastern part of Moxico received above average rainfall.
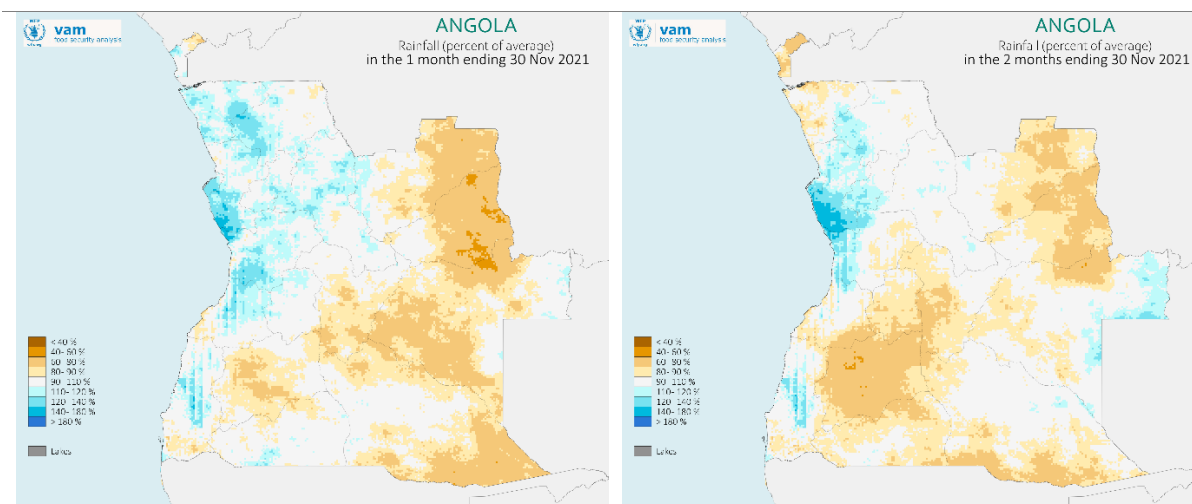
**Map 1:** November 2021 Rainfall Anomaly



**Map 2:** October-November 2021 Rainfall Anomaly

Regarding the NDVI levels, the data suggest that in the first half of November 2021, the situation was critical in the southwest region, including the provinces of Benguela, Huambo, Namibe, Huíla and Cunene, with 50% to 80% of the average coverage for the reporting period. The province of Cuando Cubango is the one that presents the best situation in terms of vegetation cover compared to the average for the period under analysis.
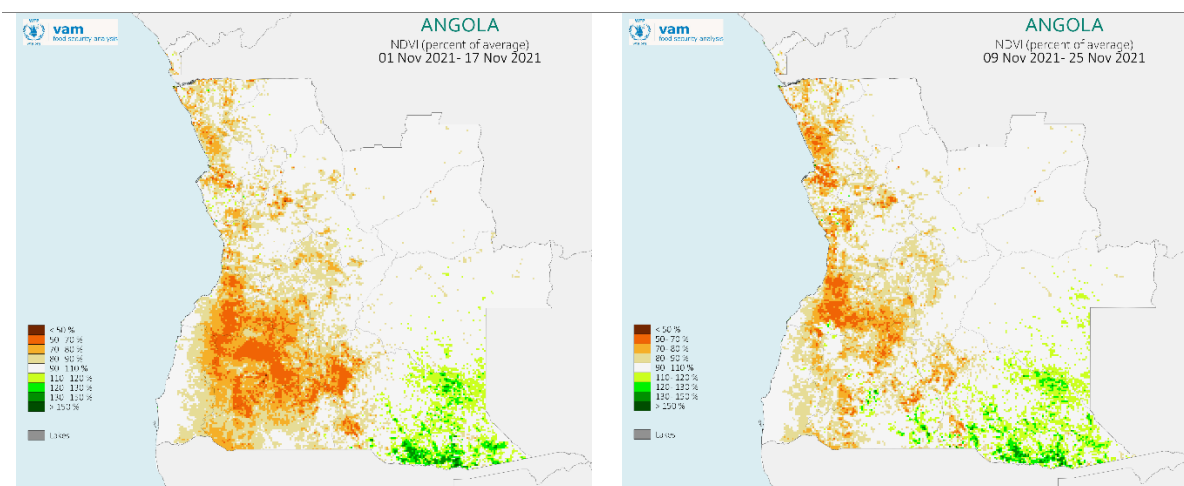


**Map 3:** NDVI anomaly from 1 to 17 November 2021



**Map 4:** NDVI anomaly from 9 to 25 November, 2021

In this issue of the rainy season monitoring reports we continue to analyze the precipitation and vegetation cover trends in the provinces most affected by drought in the 2020/2021 rainy season (Cuanza Sul, Benguela, Huambo, Namibe, Huíla and

Cunene), and in the provinces with low rainfall in the current rainy season 2021/2022 (Cuando Cubango, Bié, Moxico, Lunda Norte and Lunda Sul).
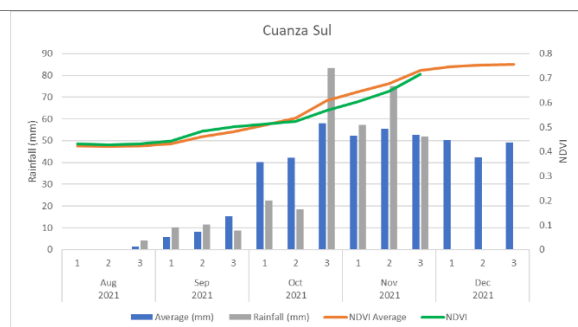


In the province of Cuanza Sul rainfall started at the end of August 2021 and from the last decade of October to mid-November 2021 was above average. Vegetation cover has been below average since October 2021, and it will continue getting closer to the average in coming weeks as a result of the good rainfall observed since October.
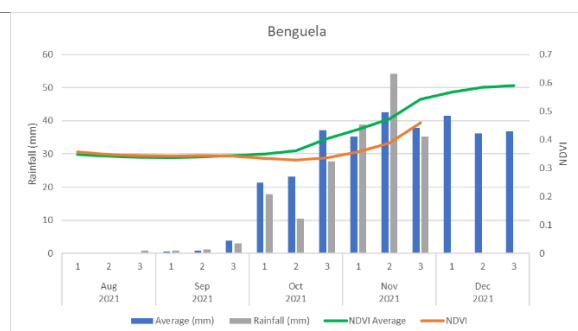


In Benguela rainfall started at the end of August 2021 and continued to be below average until the end of October. The province received above average rainfall in the first two decades of November 2021. The vegetation cover index remains below average and with a growth rate below average.
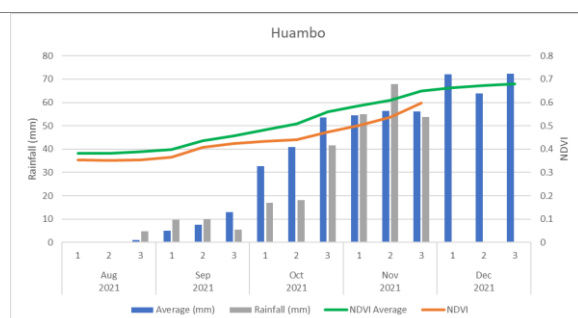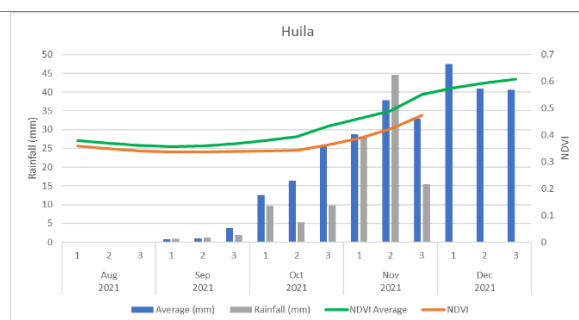


In Huambo province, rainfall started at the end of August 2021, and from the last third of September to mid-October the rainfall has dropped significantly, to less than 50% of the average. By mid-November 2021 rainfall had risen to above normal. The vegetation cover index remains below average but is expected to improve in the coming weeks due to improved rainfall.
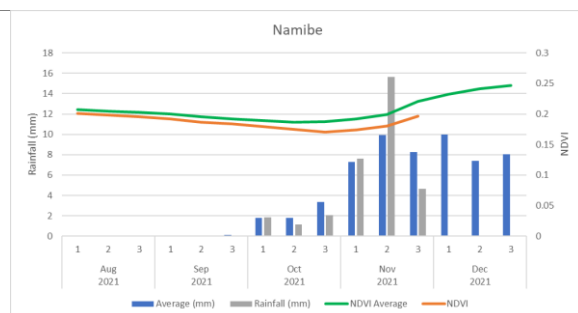


Contrary to the other provinces, in Namibe the rainfall started in October and reached above average levels by mid-November 2021. The vegetation cover index remains below average, but following the same pattern as the average. With the reduction in precipitation in the last decade of

November, it is expected that the vegetation cover will decrease in the coming days.



In Huila province rainfall started in September 2021 and continued below average until the end of October 2021, having improved at the beginning of November 2021. The vegetation cover index remains below average, but growing in line with the trend of the average.
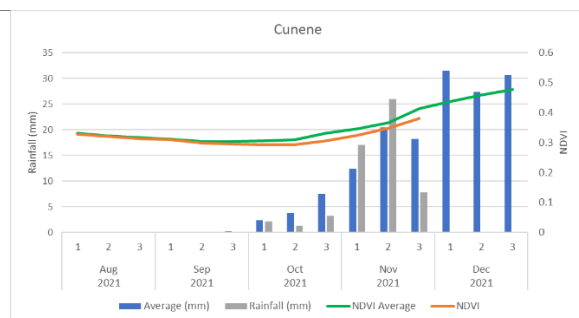


As in Namibe province, in Cunene rainfall also started in October, reaching above average levels in November 2021, followed by a drastic reduction to less than 50% of the average after November 20th. The vegetation cover index remains slightly below average, but getting closer to the average level.

The vegetation cover index remains above average in the provinces of Lunda Norte, Lunda Sul, Bié, Moxico and Cuando Cubango, although they received little rainfall compared to the average in the months of October to November 2021, with the exception of Bié province.

## Implications for Food Security and Nutrition

The rainfall observed in the months of October and November 2021 created conditions for families to start sowing and also contributed to the improvement of pasture conditions. However, as it is still the beginning of the agricultural season, nothing can be concluded yet about the performance of the present agricultural harvest.

The results of the food and nutrition security assessment carried out by the Ministry of Agriculture and Fisheries, in the provinces of Cunene, Huíla and Namibe, indicate that most of the households did not have seed reserves for the present agricultural field (2021/2022).

With the exception of the municipalities of Moçamedes with 32%, Jamba with 29%, Cuanhama with 20% and Cuvelai with 13%, in the remaining municipalities less than 10% of households stated that they had seeds for the 2021/2022 agricultural season.
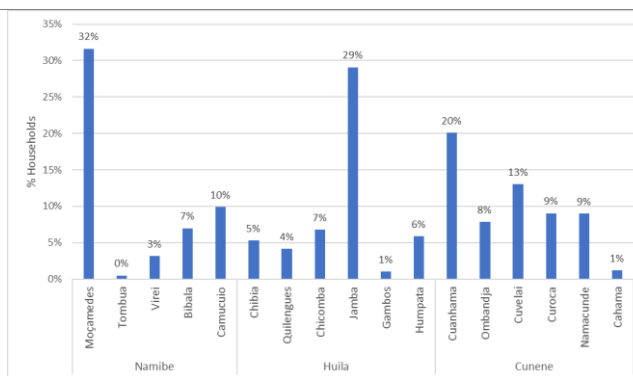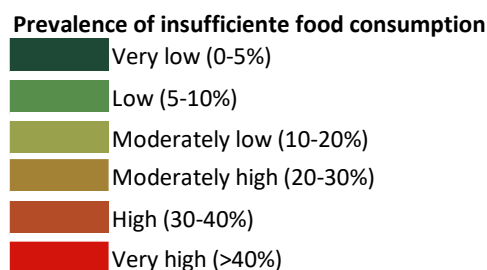


**Source:** AVSAN/MINAGRIP, 2021.

**Fig. 1:** Percentage of households with seeds for the 2021/2022 agricultural season.

The data suggest that even in case of high rainfall levels, many households will not be able to take advantage of this rain due to lack of seeds, which could maintain the current situation of acute food insecurity in the post-harvest period, that is, from April 2022 onwards.

Updated mVAM data as of December 15, 2021, indicate that the provinces of Huambo, Huíla, Cunene and Cuando Cubango have the highest proportions of households with insufficient food consumption, i.e. poor or inadequate consumption, that is from 30% to 40%. On the IPC scale, insufficient food intake (FCS poor or inadequate) corresponds to IPC Phase 3+. Note that Map 5 is not an IPC classification.



**Prevalence of insufficiente food consumption**

Very low (0-5%)
Low (5-10%)
Moderately low (10-20%)
Moderately high (20-30%)
High (30-40%)
Very high (>40%)

**Map 5:** Prevalence of insufficient food consumption (poor or inadequate Food Consumption Score).

## Recommendations

To guarantee the full use of the current rainy season, it is necessary to provide seeds as soon as possible to the most vulnerable households that lost all seeds in the past agricultural season due to drought, mainly in the provinces of Namibe, Huíla and Cunene.

There is a need to monitor the current rainy season performance with special attention to the provinces most affected by the drought in the past season (2020/2021), namely the provinces of Cuanza Sul, Benguela, Huambo, Namibe, Huila and Cunene, where most of the households are still have not recovered from acute food insecurity and malnutrition.

## Contacts

1. Michele Mussoni
   Head of Office for WFP Angola
   Email: michele.mussoni@wfp.org

2. Antonio Paulo
   VAM Officer
   Email: antonio.paulo@wfp.org