

West Africa Seasonal Monitor

2020 Season



vam
food security analysis

World Food Programme, Regional Bureau Dakar

01-10 October 2020

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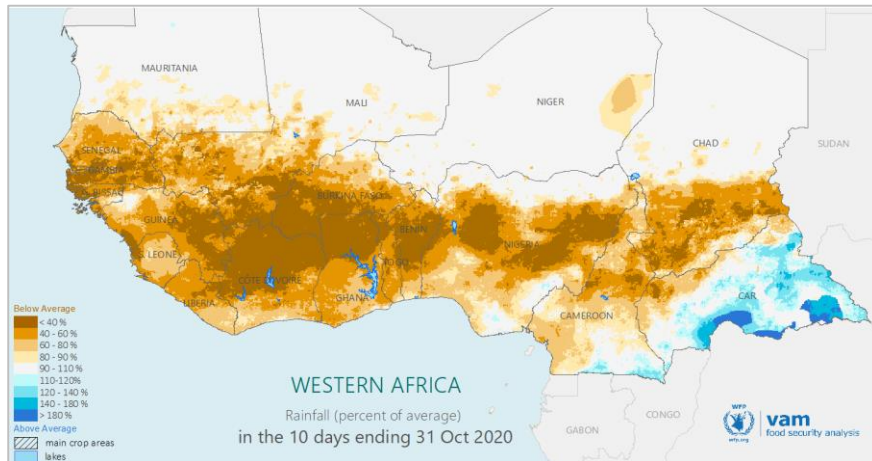
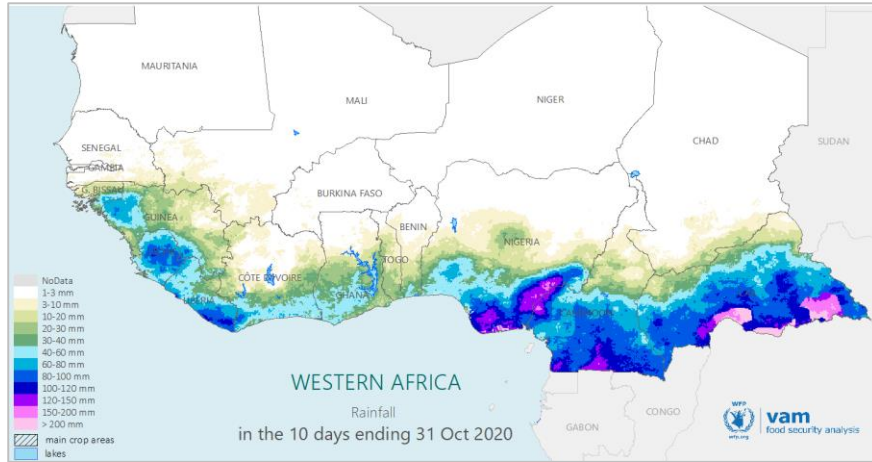
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Highlights

- Short - range forecasts up to 31th October, marking the end of the season shows continued favorable seasonal conditions in most of the region except some localized pockets of moderate dryness. It is thus likely that the rainy season will be abnormally late particularly in the Sahel region.
- Early October, the end of the rainy season in the Sahel, West Africa has been characterized by mostly adequate and well-distributed rains: this results in average to above-average seasonal rainfall The Sahel region benefited the most from very good conditions with well above-average seasonal rains, while below-average rainfall spread over the southernmost part of the region across the Gulf of Guinea. The cumulative heavy rainfall recorded from mid-August to September resulted in flooding, that have affected about 760,000 people in Burkina Faso, Cameroon, Chad, Ghana, Mali, Niger, Nigeria, and Senegal with at least 111 fatalities.
- As a result of increase in rainfall since late July and wetter conditions in August and September: a pattern of strongly above-average vegetation emerged during September and October in all of the Sahel. Agricultural areas benefitted from very good seasonal conditions. Good production prospects are certain this year in the region (in biomass and crops production). As a result of good seasonal performance in mid-October water resources remain at a good level. Overall they have reached their highest level throughout the West African region.
- Across the Sahel, harvest has started for main season millet and sorghum crops in southern Mali, Burkina Faso, southern Niger, and eastern Senegal. Meanwhile favourable harvesting of main season crops reached completion in Liberia, Côte d'Ivoire, southern Ghana, southern Togo, Benin, and central Cameroon, while crops are still developing in Guinea, northern Cameroon, Guinea-Bissau, Togo, and northern Nigeria under generally favourable conditions. Despite localized floods impacting the Sahel and drier-than-average conditions along the Gulf of Guinea countries, overall conditions are favourable except in conflict-affected northern Burkina Faso, the Central African Republic, and northeast Nigeria along with the conflict and flood-affected Far North region of Cameroon.

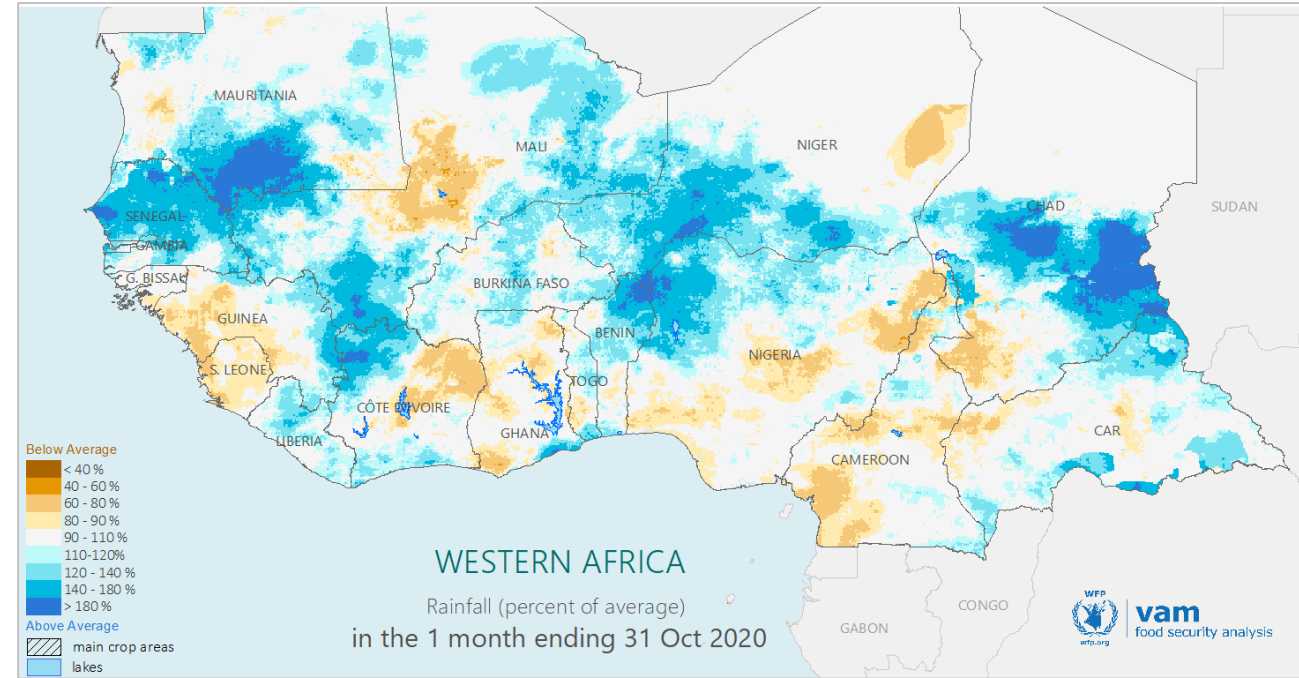
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Short-term Forecasts



Short range CHIRPS-GEFS forecasts for 20-31 October 2020

Above: forecast rainfall amounts and Below: Corresponding anomaly



Rainfall for the month ending October 31 (composed of actual and forecast rainfall) as a percent of the long term average.

Blues for wetter than average conditions, browns for drier than average conditions.

Short-range forecasts provide estimates of rainfall up to October 30. In late October, will spread well below average dekadal rainfall In West Africa region except most of CAR average to above-average.

These forecasts into a one-month rainfall analysis - shows continued favorable seasonal conditions in most of the region except some localized pockets of moderate dryness. It is thus likely that the rainy season will be abnormally late particularly in the Sahel region.

NOTE: The short-range CHIRPS-GEFS forecasts are a bias-corrected and downscaled version of the NCEP Global Ensemble Forecast System precipitation forecasts from the Climate Hazards Centre (CHC/UCSB). They are consistent with the CHIRPS rainfall estimate used in this Bulletin and provide a short-range outlook on rainfall.

Forecast information should be considered carefully since these products always have a margin of error

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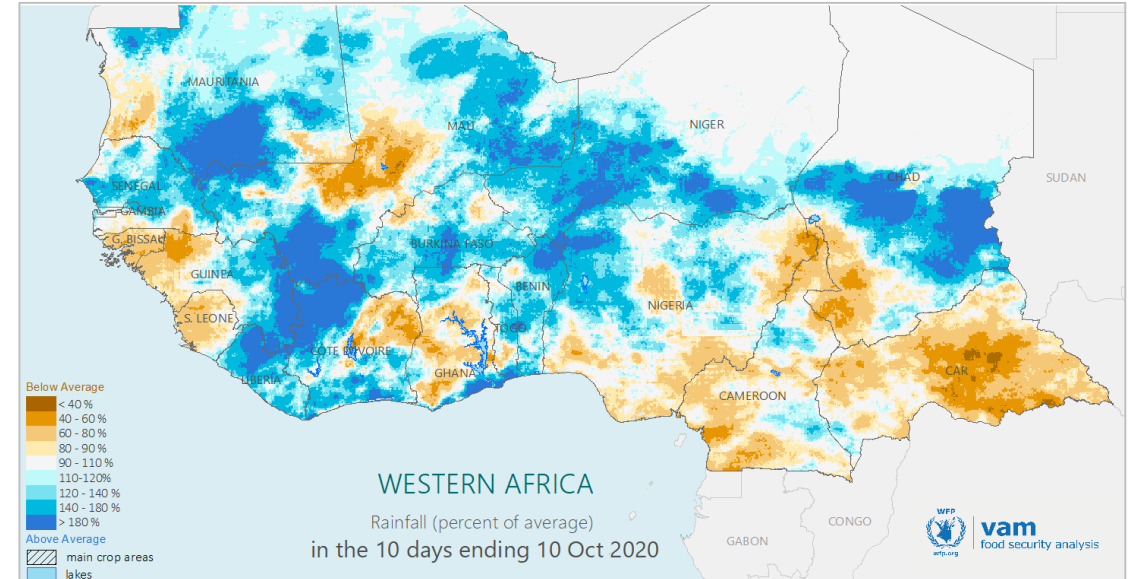
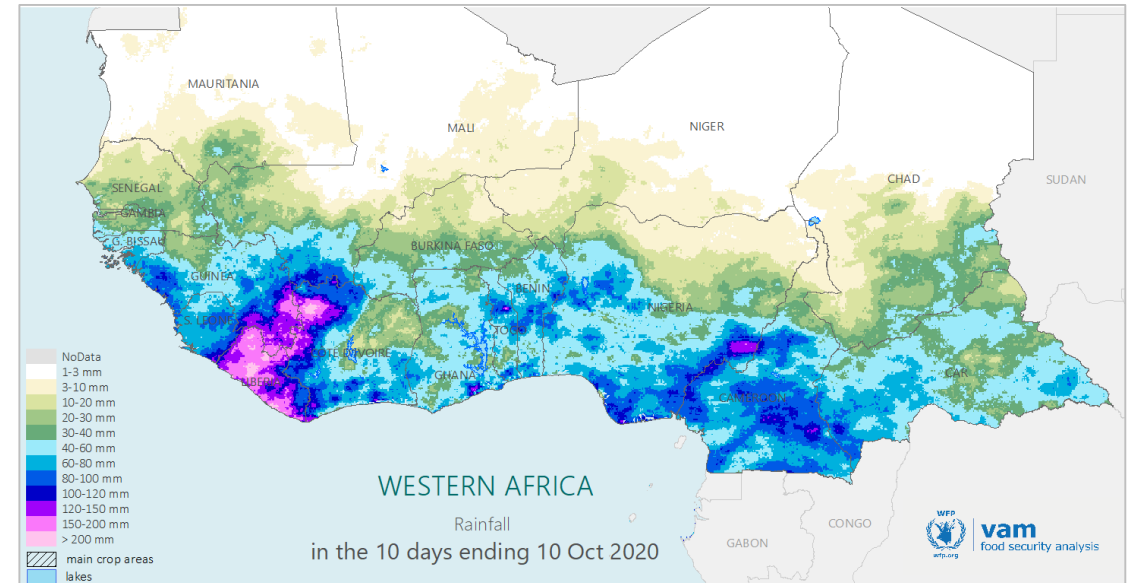
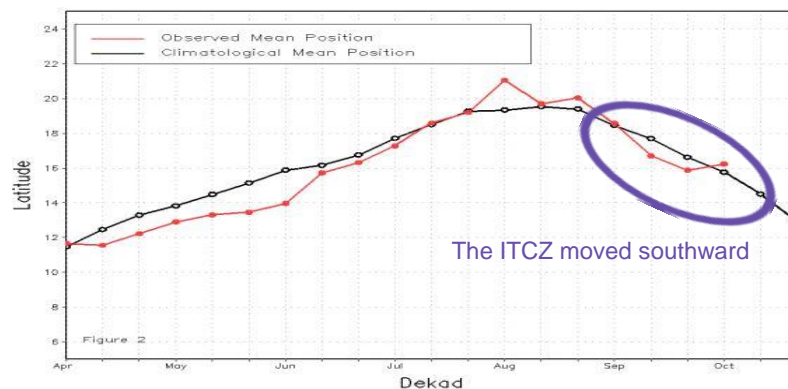
Latest Developments, October 1 – 10, 2020

Early October seasonal rainfall was observed in the southernmost of the region. These changes in rainfall confirm the end of the rainy season in much of the Sahel due to the southward movement of the Intertropical Front (ITF). Light to moderate rainfall was received in the Sahel region, meanwhile, eastern Guinea, Liberia, southern Côte d'Ivoire recorded dekadal above-average rainfall.

Early October, the Inter-Tropical Convergence Zone (ITCZ), continues its southward retreat, moving slightly southward compared to the previous dekad. The western portion of the ITCZ regressed northward to the previous dekad. This corresponds to some abnormal rainfall observed in the Sahel (over Northern Senegal and Southern Mauritania). In contrast, the eastern portion moved southward from its position in the previous dekad but is still north of its climatological average.

(*) ITCZ: Inter-Tropical Convergence Zone. It's the border between dry areas and areas where the rainfall season is ongoing. It moves northwards as the monsoon advances, backtracking southwards as the monsoon wanes. Delays (advances) in this movement lead to drier (wetter) conditions on the ground.

Current ITCZ position (red)
and long term average
position (black)

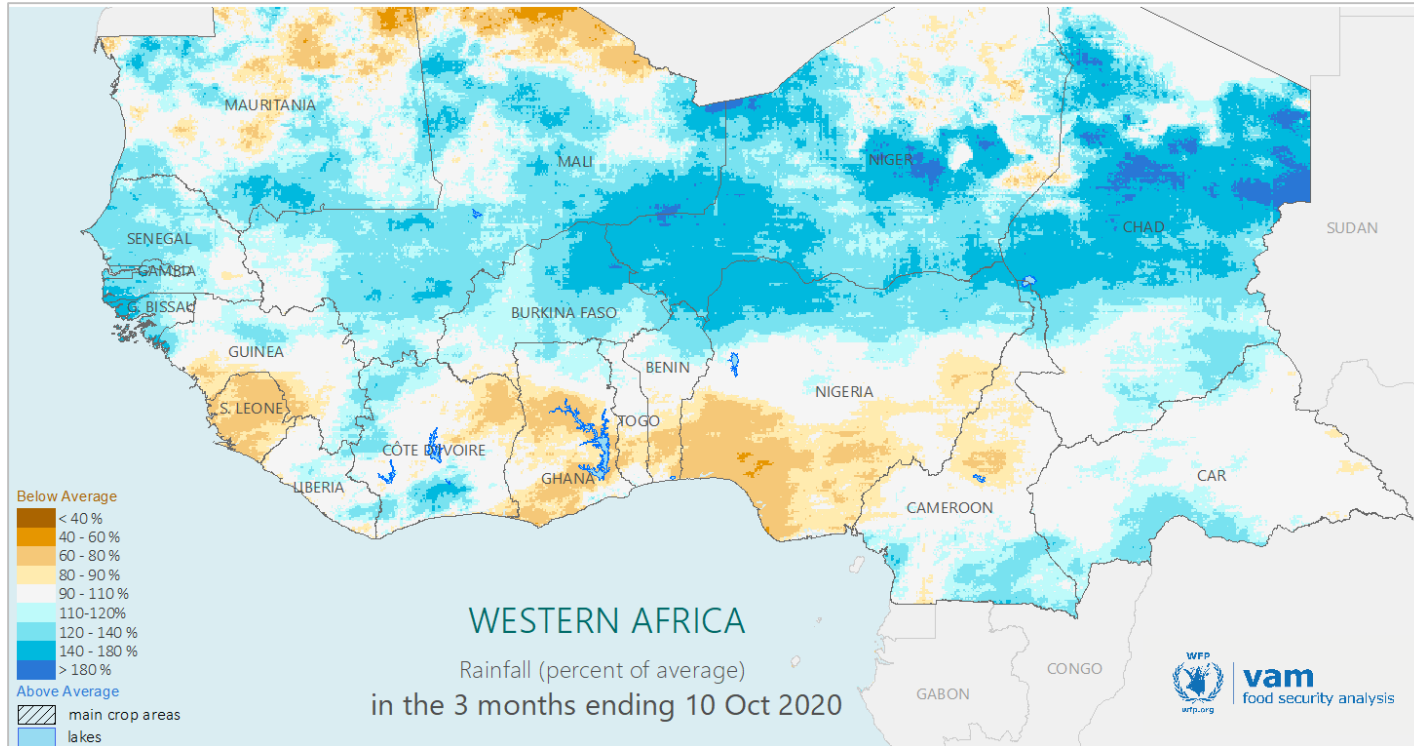


Rainfall amounts from 01 to 10 October 2020 (above).

Same as a proportion of the long term average (below). Blues for wetter than average, browns for drier than average.

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Current Status – early October



Rainfall in the three months up to October 10 as a percent of the average. Blues for wetter than average conditions, browns for drier than average conditions.

By early October, the rainy season across West Africa has been characterized by mostly adequate and well-distributed rains while below-average rainfall spread over the southernmost part of the region across the Gulf of Guinea.

This results in average to above-average seasonal rainfall characteristics in West Africa. The Sahel region benefited the most from very good conditions with well above-average seasonal rains. The eastern part of this region experienced excess moisture from far eastern Mali, Niger, Burkina Faso to Chad.

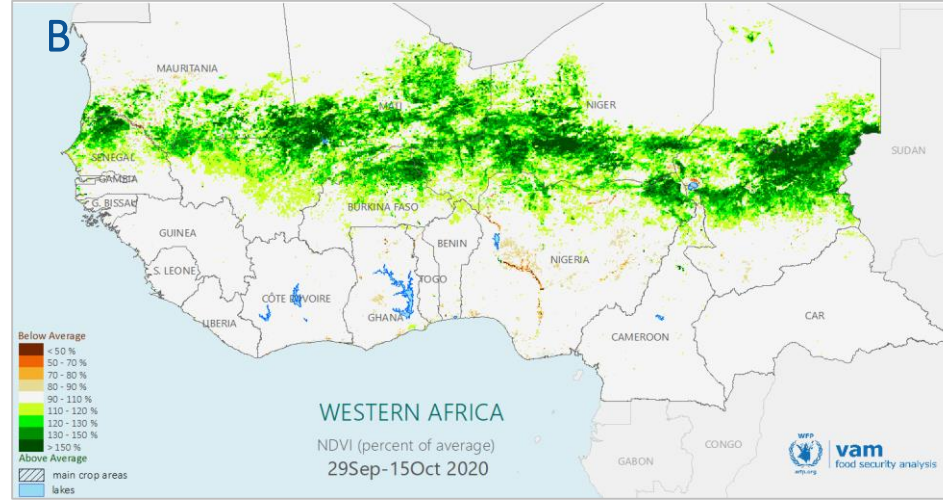
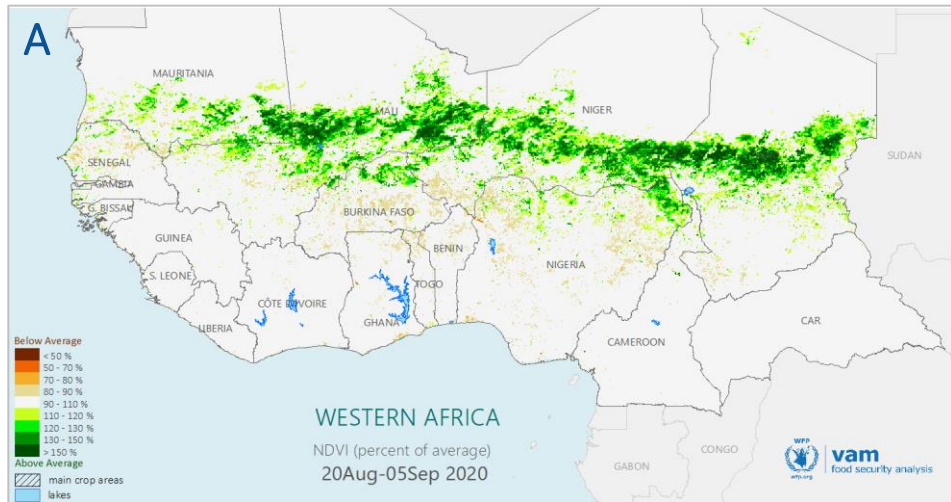
Due to recent rainfall, moisture deficits conditions improved in the southernmost part of the region over Mano river's and Gulf of Guinea's regions. Liberia and most of Côte d'Ivoire have received average to above-average rainfall since the beginning of September while over southern Ghana, Togo, Benin, Nigeria extended to Central Cameroon deficits have been mostly light to moderate. Conditions in Sierra Leone remain below average.

Despite, the continuous seasonal rainfall across the southern coastal areas in Mano rivers and Gulf Guinea, current deficits deserve to be closely monitored.

The cumulative heavy rainfall recorded in these past weeks over most of the region from mid-August to early September, and high soil moisture resulted in flooding in many parts of the region. These floods have affected approximately 760,000 people in Burkina Faso, Cameroon, Chad, Ghana, Mali, Niger, Nigeria, and Senegal with at least 111 reported fatalities ([Reuters](#) and OCHA).

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Seasonal Development



As a result of good seasonal performance, water resources have been maintained at a good level throughout the West African region. In areas over northern Senegal, south-eastern Mauritania, the neighbouring region between Burkina Faso, Mali and Niger and, Eastern Chad) where observed concerns in late July, but there has been total recovery.

In mid-October water resources reached their highest level.

NDVI as a percent of average. Greens for above average, browns for below average. A: late August - early September ; B : late September mid - October

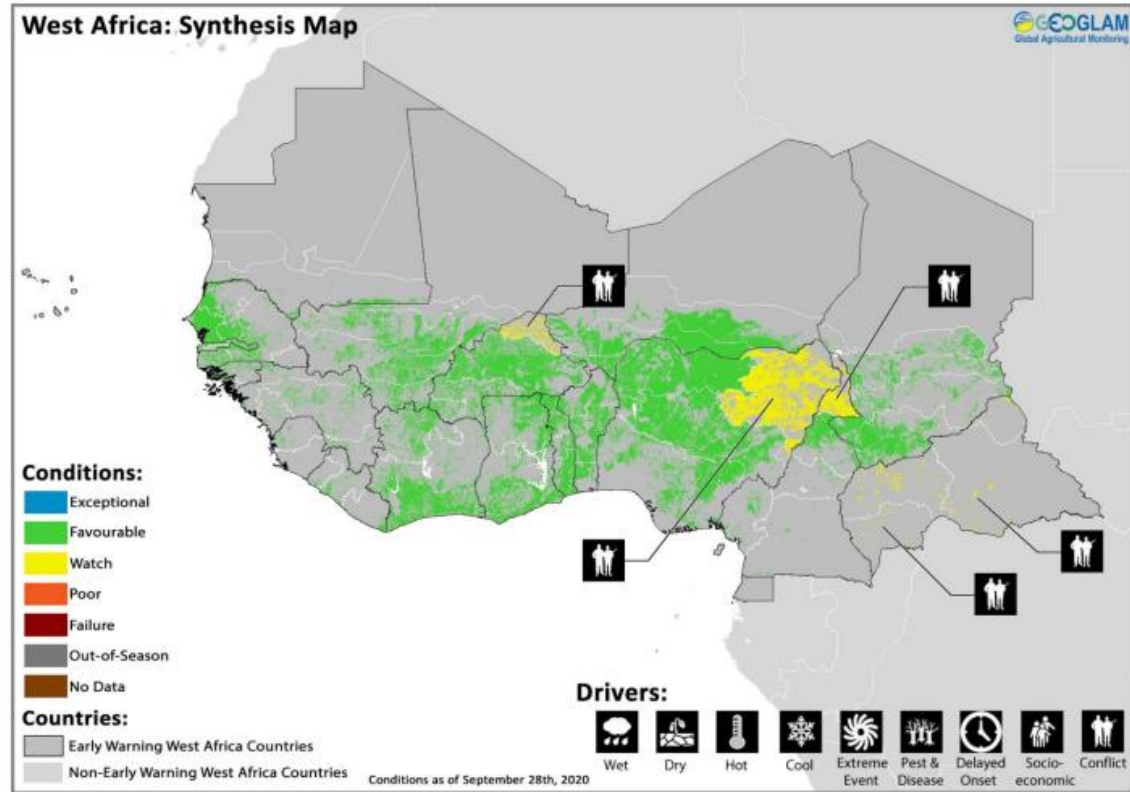


Water point status across the Sahel. Good: Higher than long term level (LTL), Watch: Between 50 to 100% of LTL, Alert: Between 3% and 50% of LTL, Near-Dry: Below 3% of LTL

A pattern of strongly above-average vegetation emerged during September and October: this is particularly noticeable in the whole Sahel across Senegal, Mauritania, Mali, Burkina Faso, Niger, and Chad. An improvement in rainfall since late July, and wetter conditions in August and September led to a continuous, vigorous response from grasslands causing above-average vegetation levels. Agricultural areas benefitted from very good seasonal conditions. Production prospects are expected to show an increase this year in the region considering biomass yield and crop production.

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Seasonal Development



Crop condition map synthesizing information for all Crop Monitor for Early Warning crops as of September 28th. Crop conditions over the main growing areas are based on a combination of inputs including remotely sensed data, ground observations, field reports, national, and regional experts

In the southern region of West Africa; harvesting of main season crops reached completion in Liberia, Côte d'Ivoire, southern Ghana, southern Togo, Benin, and central Cameroon, while crops are still developing in Guinea, northern Cameroon, Guinea-Bissau, Togo, and northern Nigeria under generally favourable conditions. Planting of second season crops is now underway in southern Côte d'Ivoire, southern Ghana, southern Togo, and southern Benin.

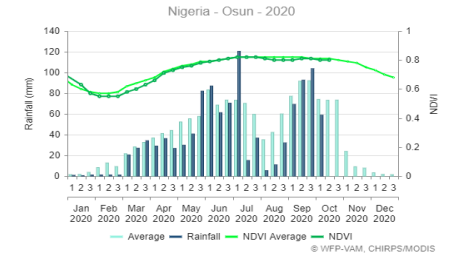
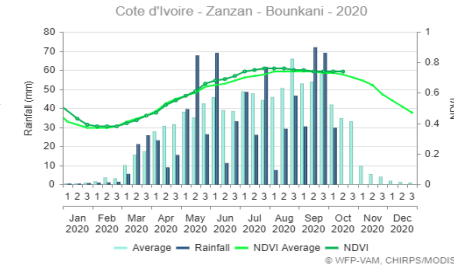
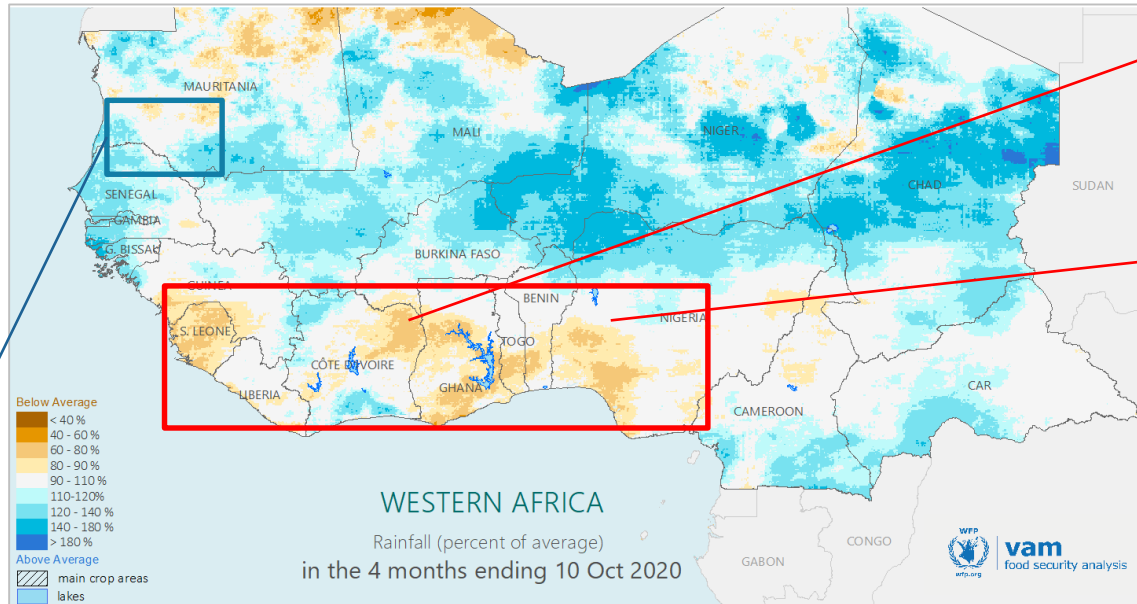
In the Sahel, harvest has started for main season millet and sorghum crops in southern Mali, Burkina Faso, southern Niger, and eastern Senegal while elsewhere, main season cereal crops are in the vegetative to reproductive stage. Despite localized floods impacting the Sahel and drier-than-average conditions along the Gulf of Guinea countries, overall conditions are favourable except in conflict-affected northern Burkina Faso, the Central African Republic, and northeast Nigeria along with the conflict and flood-affected Far North region of Cameroon.

Above-average seasonal rainfall since July in most countries, particularly in the Sahel, in combination with above-average rainfall in September, has resulted in normal crop development and is expected to increase crop yields. However, localized flooding in July and August resulted in livelihood losses and crop damage. Additional rainfall in September led to oversaturation, flooding, fatalities, and submerged farmland over several areas, including parts of Senegal, Mauritania, Guinea, Mali, Burkina Faso, Ghana, Niger, Nigeria, Cameroon, and Chad.

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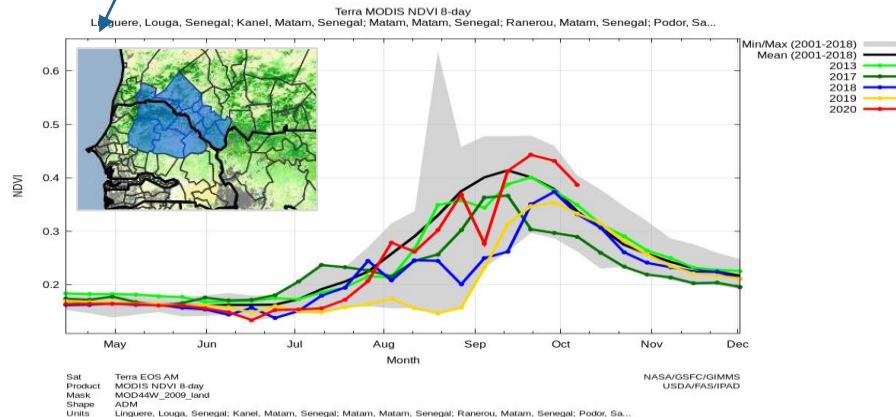
Focus Areas

Rainfall in the four months up to October 10 as a percent of the average. Blues for wetter than average conditions, browns for drier than average conditions.



From June to early September, Mano river countries extended to the Gulf of Guinea have been affected by poor rainfall time distribution, leading to abnormally dryness.

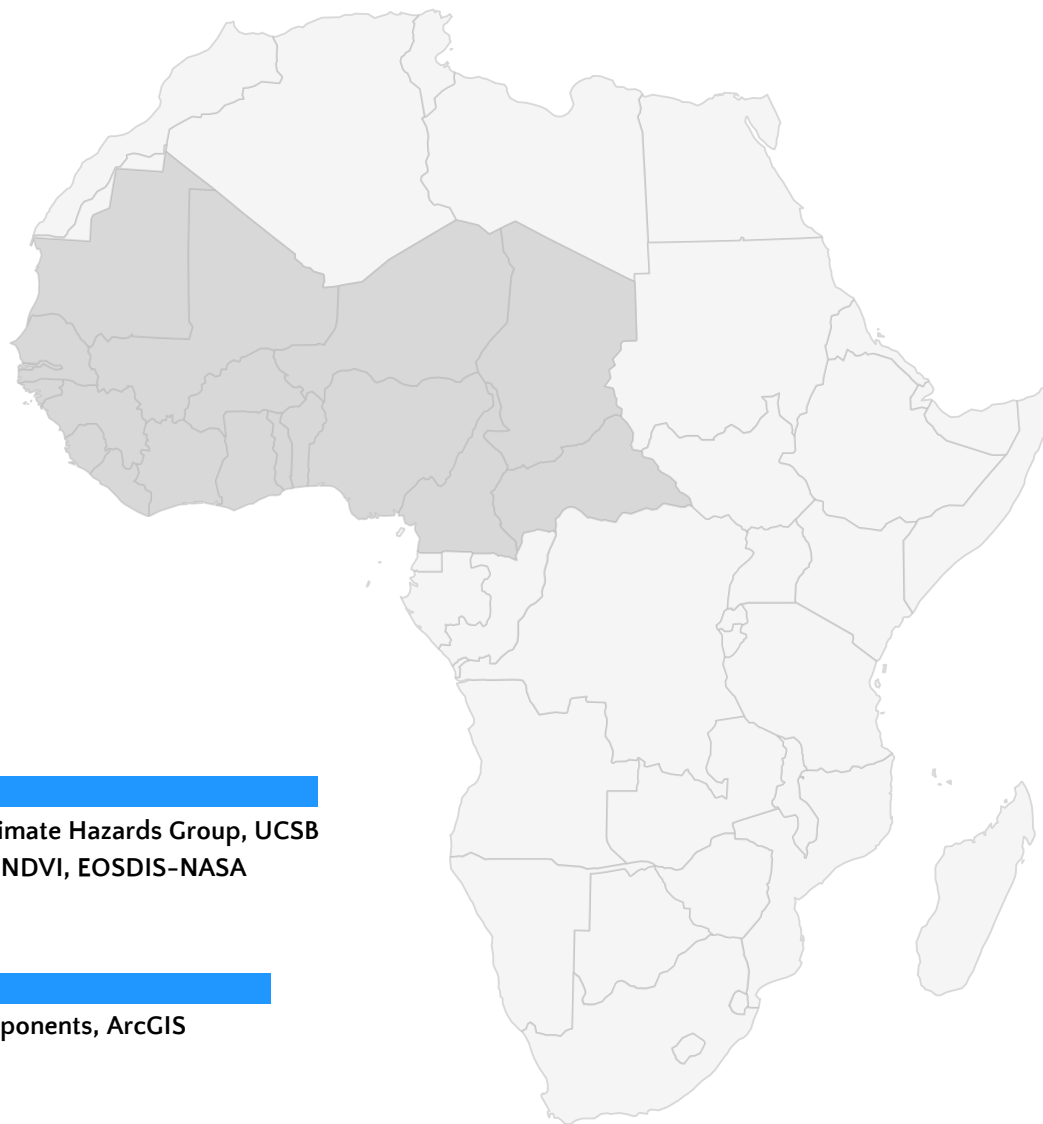
The recent rainfall improvement have mostly improved slightly the rainfall deficits. Conditions in Sierra Leone remain below average.



In far western areas (over Northern Senegal and Southern Mauritania) seasonal rainfall deficits persisted during these past consecutive years (2019, 2018, 2017...) In 2020 conditions are more favorable compared to 2019, 2018, 2017, 2013. Mid-August in Western Mauritania, deficits have been largely relieved and conditions remain favourable.

<https://glam1.gsfc.nasa.gov/>

https://dataviz.vam.wfp.org/seasonal_explorer/rainfall_vegetation/visualizations



DATA SOURCES:

Rainfall: CHIRPS, Climate Hazards Group, UCSB
Vegetation: MODIS NDVI, EOSDIS-NASA

PROCESSING:

VAM software components, ArcGIS

FOR FURTHER INFORMATION:

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