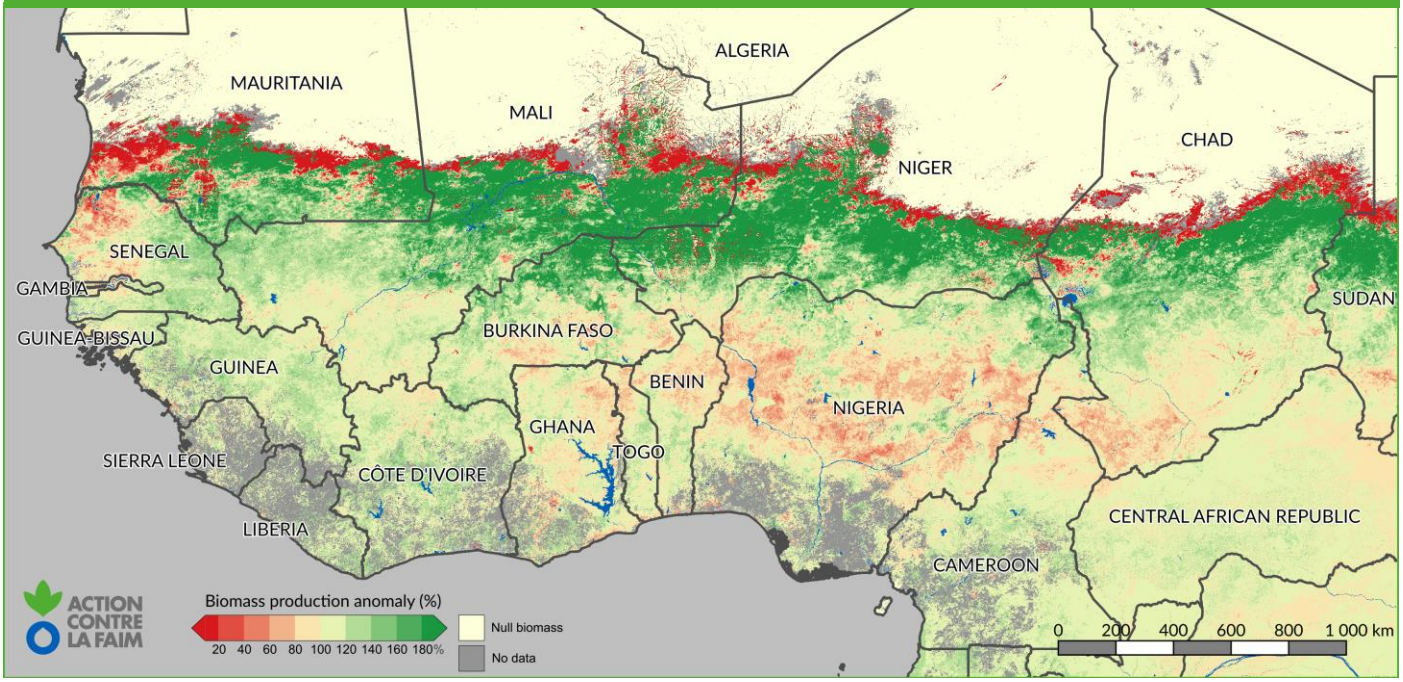
BIOMASS PRODUCTION AT RAINY MID-SEASON 2025

SAHEL REGIONAL BULLETIN

CHÉRIF ASSANE DIALLO
ÉVE-MARIE LAVAUD
ERWANN FILLOL

ACTION AGAINST HUNGER
ACTION CONTRE LA FAIM

MAP 1: ANOMALY OF BIOMASS PRODUCTION AT END OF AUGUST 2025



HIGHLIGHTS

- Early to normal start of the rainy season in the Sahel; late onset in coastal countries
- Above-average biomass production across the Sahelian belt
- Low to very low biomass production in southwestern Mauritania, western Senegal, and the northern edge of the Sahelian belt
- Weak biomass production in coastal countries, more pronounced in Nigeria
- River flows above average, causing flooding
- Favorable end of the rainy season expected across the Sahel
- Potential vulnerability for herders in areas with low to very low biomass production

INTRODUCTION

This mid-season report provides an overview of vegetation production across the Sahel region of West Africa at mid-season of the 2025 rainy period, as of late August.

The 2025 rainy season follows a remarkably wet year in 2024, where high biomass yields helped herders manage the pastoral lean season with minimal hardship.

This year, the onset of the rainy season was early to normal across the Sahelian zone, but late to slightly delayed in the Sudano-Sahelian and Guinean zones. By the end of August, conditions were generally wet despite some north–south disparities. This situation shapes both biomass production and its development.

At this stage of the season, the progression of rainfall is favorable for pastoral and agro-pastoral communities. However, these populations remain exposed to several vulnerability factors linked to climate change, interannual rainfall variability, and ecosystem degradation.

At the regional level, broader issues can also hinder the effective use of forage and water resources. These are mainly social, political, economic, and security challenges. Indeed, the regional context is marked by persistent insecurity and the fragmentation of territories. This situation affects herders by restricting their mobility, limiting access to resources and markets, and creating uncertainty about their future.

.

DESCRIPTION OF THE SYSTEM

WHAT IS BIOMASS AND HOW IS IT MEASURED?

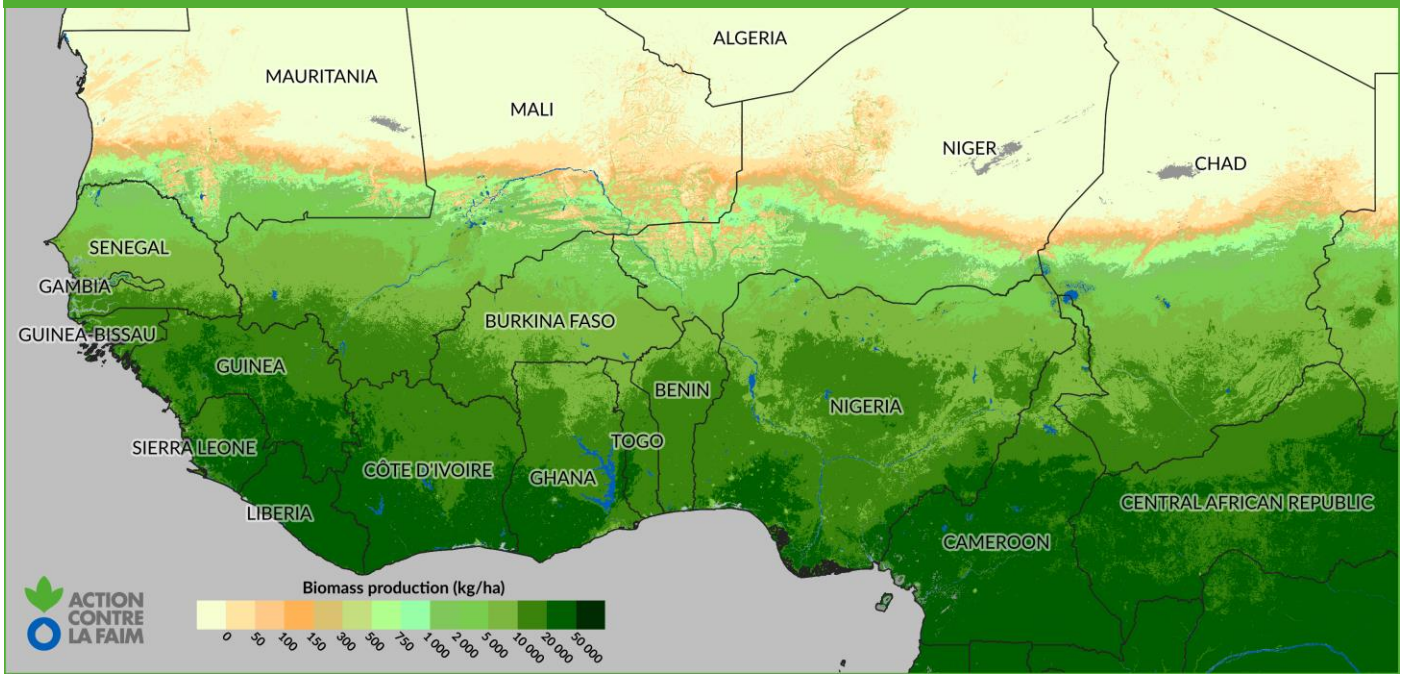
Biomass is the total production of vegetal matter measured in kilograms of dry matter per hectare (kg/ha). The term dry matter is used to describe any form of vegetation above the ground regardless of its water/moisture content. For an analysis of the pastoral situation, biomass is an effective way to measure the availability of fodder resources.

Biomass production is calculated from satellite images collected by the European Space Agency's SPOT-VEGETATION, PROBA-V and SENTINEL-3 satellites and provided, in form of 10-day products, by the European COPERNICUS programme through the Flemish Institute of Technology VITO.

The method for calculating daily biomass productivity (kg/ha/day) is based on an algorithm integrating biophysical parameters obtained from satellite images as well as climatic parameters of temperature and solar irradiance.

The BioGenerator tool developed by ACF integrates all these data to produce an annual biomass production map calculated over the growing season coinciding with the rainy season in the Sahel. The spatial resolution is 1 km, which corresponds to that of the satellite products used. The period covered is the one of the available satellite archives from 1999 to the present.

MAP 2: AVERAGE ANNUAL BIOMASS PRODUCTION 1999-2024



WHAT ARE THE INDICATORS GENERATED?

The first indicator is the annual biomass production calculated over the growing season:

- Annual production in kg/ha

The annual biomass production is compared to the average calculated over all the years since 1999 in order to highlight the anomaly which is represented in two ways:

- Anomaly expressed as a percentage of the mean value %
- Normalised anomaly expressed as the number of standard deviations σ from the mean

A vulnerability index linked to biomass availability, named « VI » (Vulnerability Index), is calculated recursively by weighting the most recent years in order to take into account the sequence of dry or rainy events:

- Vulnerability Index VI

Indicators are visualisable and downloadable at the following links:

- geosahel.info
- data.humdata.org/organization/acf-west-africa

BIOMASS PRODUCTION AT MID-SEASON 2025

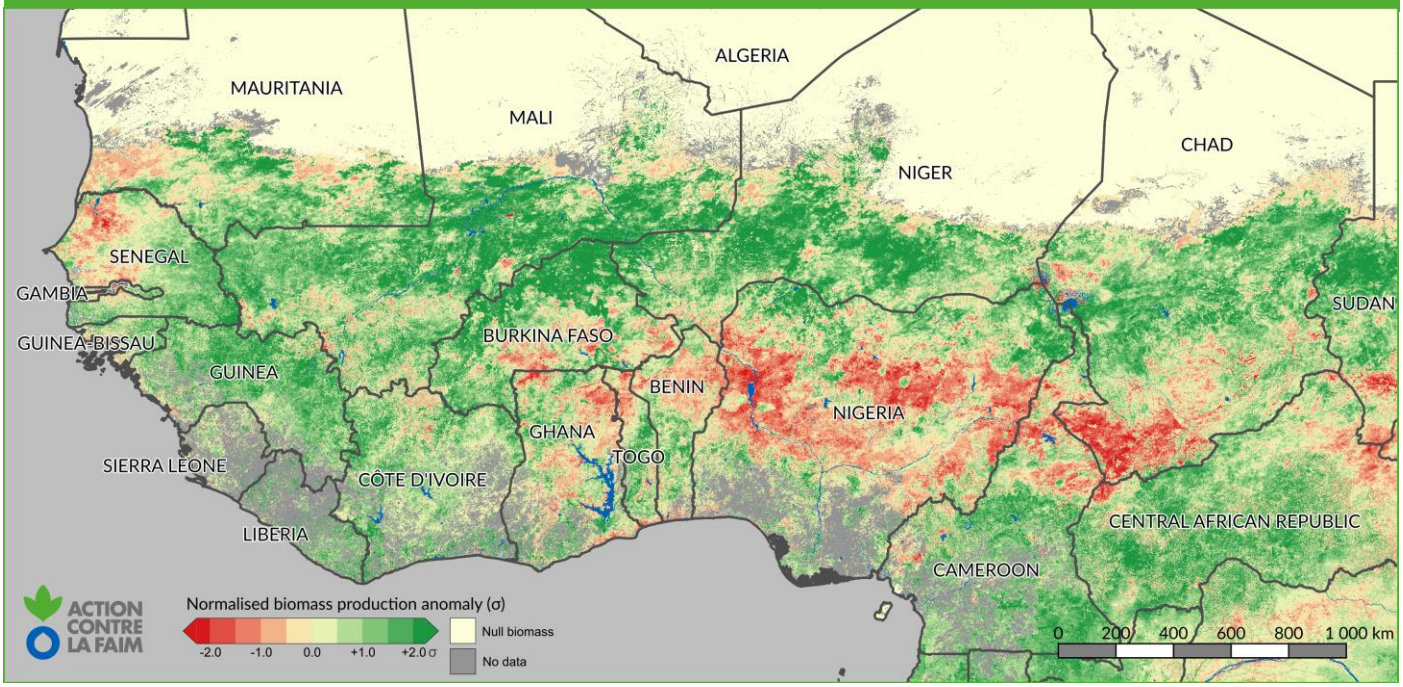
MAPPING THE BIOMASS PRODUCTION ANOMALY

Map 1 shows mid-season biomass production anomalies in the Sahel, expressed as percentages of the average, reflecting absolute variations in quantity of biomass produced. Map 3 presents the same anomaly but expressed in standard deviation units (σ) from the mean—called normalised anomaly—highlighting relative variations in biomass quantity.

At mid-season, biomass production is generally good to very good, despite a few localized deficits. The most notable of these are in the western fringe, specifically western Senegal and southwestern Mauritania, where a late start to the rainy season and subsequent dry spells have hurt production. Additionally, the area stretching from eastern Ghana to southern Chad—particularly central Nigeria—is also experiencing deficient production.

Consistent with recent seasons, biomass production in the Sahelian zone remains above average, with strong positive anomalies. This outcome is attributable to the early onset of the rainy season and the substantial precipitation received.

MAP 3: NORMALISED BIOMASS PRODUCTION ANOMALY AT END OF AUGUST 2025



THE 2025 GROWING SEASON

The figure on the following page shows the instantaneous biomass production profiles for selected representative regions (administrative level 1).

In Burkina Faso, the Sahel region started with strong growth. This year's excellent rainy season production is the highest recorded in the region in the last 25 years.

In Niger, the Tillabéri region had a normal production start with above-average growth. Despite a dry spell that slowed growth, very good overall production is expected.

In the Mopti region of Mali, vegetation growth is excellent. As of mid-season, production is close to the best ever recorded.

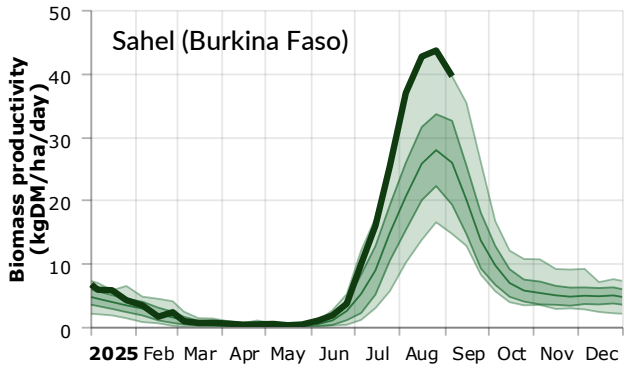
In the Louga region of Senegal, production started late and has been affected by dry periods, with below-average growth. While production could improve, it will likely remain below average.

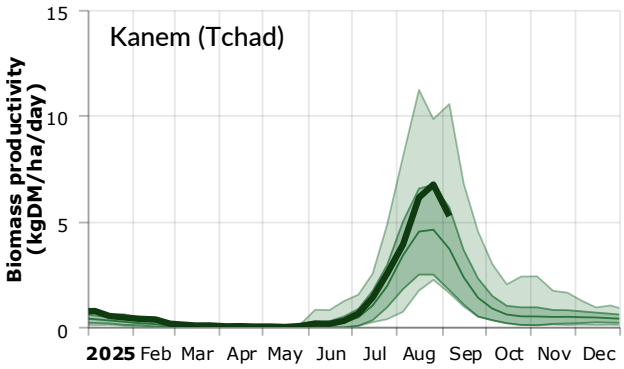
In the Hodh Ech Chargui governorate of Mauritania, in addition to a normal start, growth is strong to very strong. At mid-season, despite dry spells, production is very good.

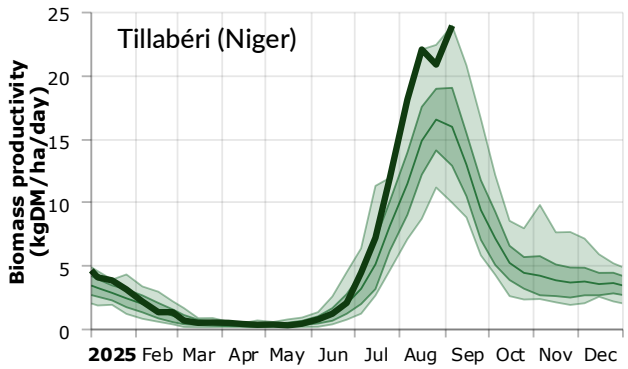
In the Kanem province of Chad, the start was normal with good growth. Despite a recent drop-off, mid-season production is above average.

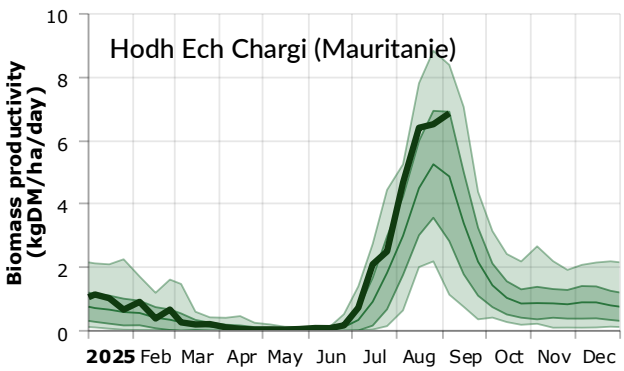
In Côte d'Ivoire, the Bounkani region experienced a normal start. The saw-tooth pattern of growth is due to dry spells. Nevertheless, mid-season production remains above average.

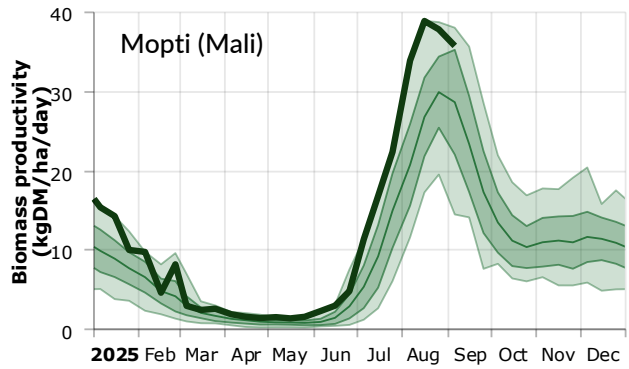
In the coastal countries, production remains below average. Late starts, dry spells, and reduced rainfall justify this decline. For example, in the Savanes region of Togo, production remains below average in addition to a late start.

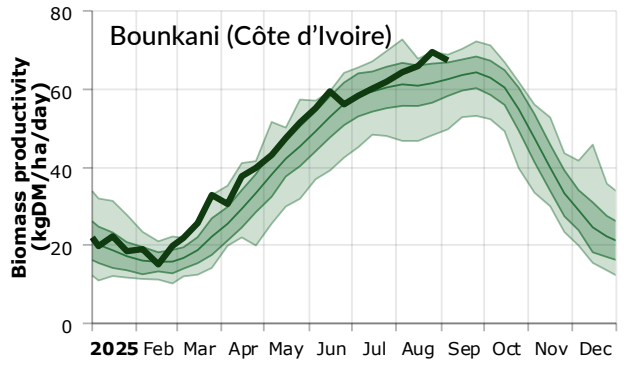


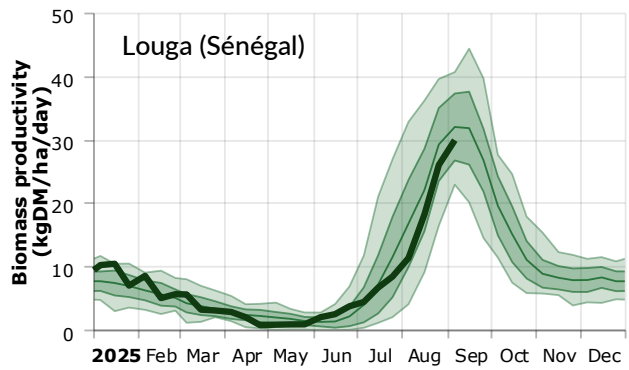


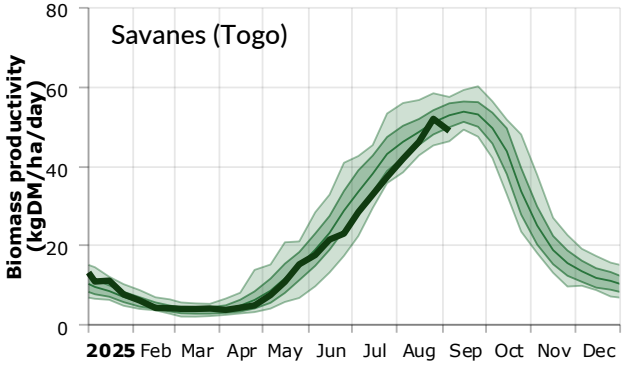








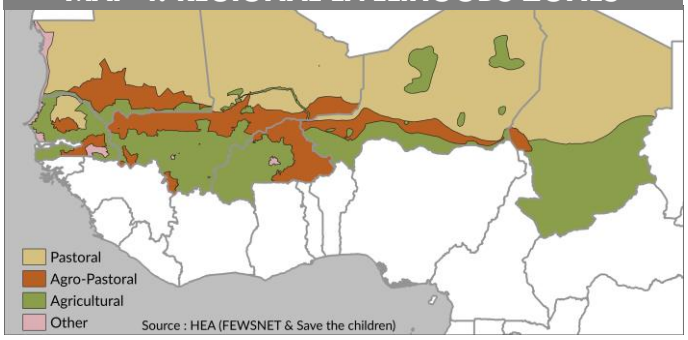




INTER-ANNUAL VARIATION IN BIOMASS PRODUCTION

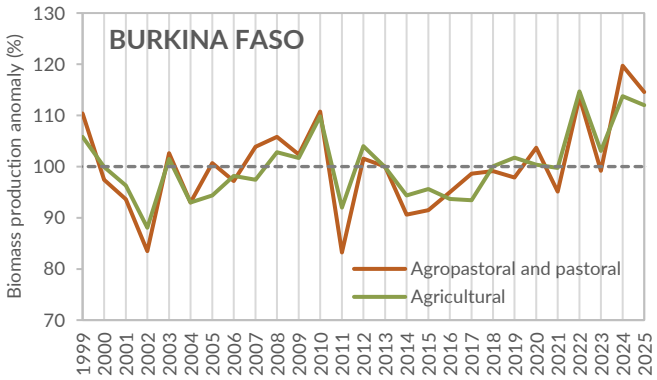
Using the livelihood zone classification (Map 4), it is possible to observe inter-annual variations in biomass production based on land use: Agricultural, Pastoral, and Agropastoral (source: Household Economy Analysis HEA / FEWSNET and Save the Children).

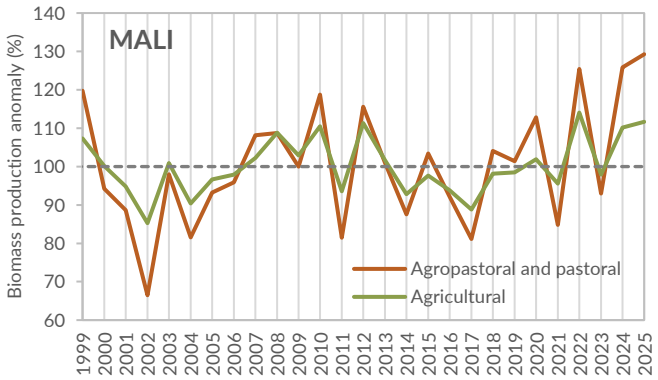
MAP 4: REGIONAL LIVELIHOODS ZONES

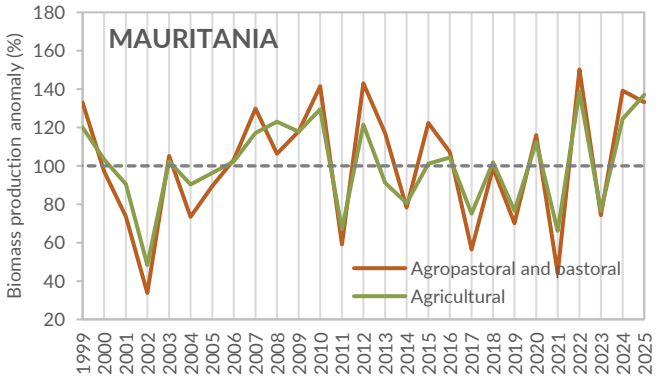


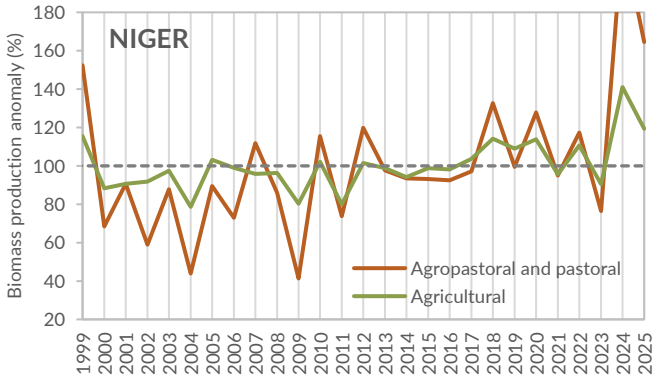
For the purpose of these comparisons, the initial Agropastoral and Pastoral classes were merged to obtain statistics for the entire pastoral land-use area. The graphs below show that 2025 is overall a good to very good year, significantly exceeding the normal values (1999–2024). It is better than 2023 but remains below 2024, which was exceptional in some areas.

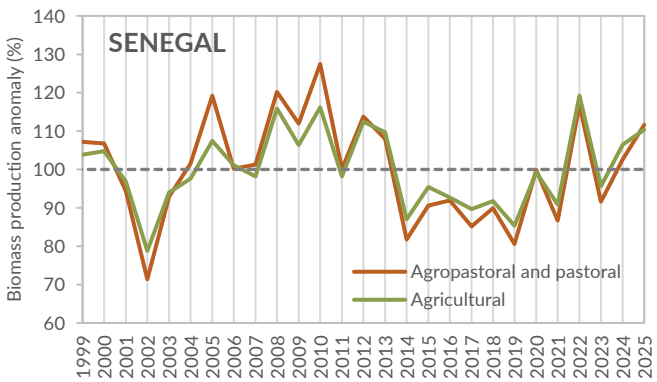
At the country level, Niger and Chad recorded the best production, particularly in pastoral zones, with production anomalies of 140%. The lowest production values are observed in Senegal, with anomalies of 110%—still positive. Meanwhile, in Chad, agricultural production is just at the average.

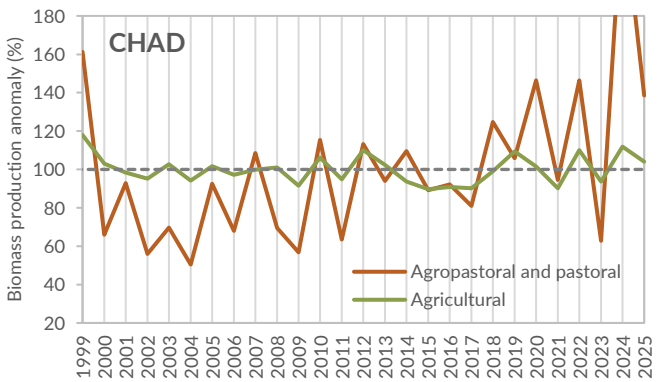












COMPARISON OF 2025 WITH RECENT YEARS

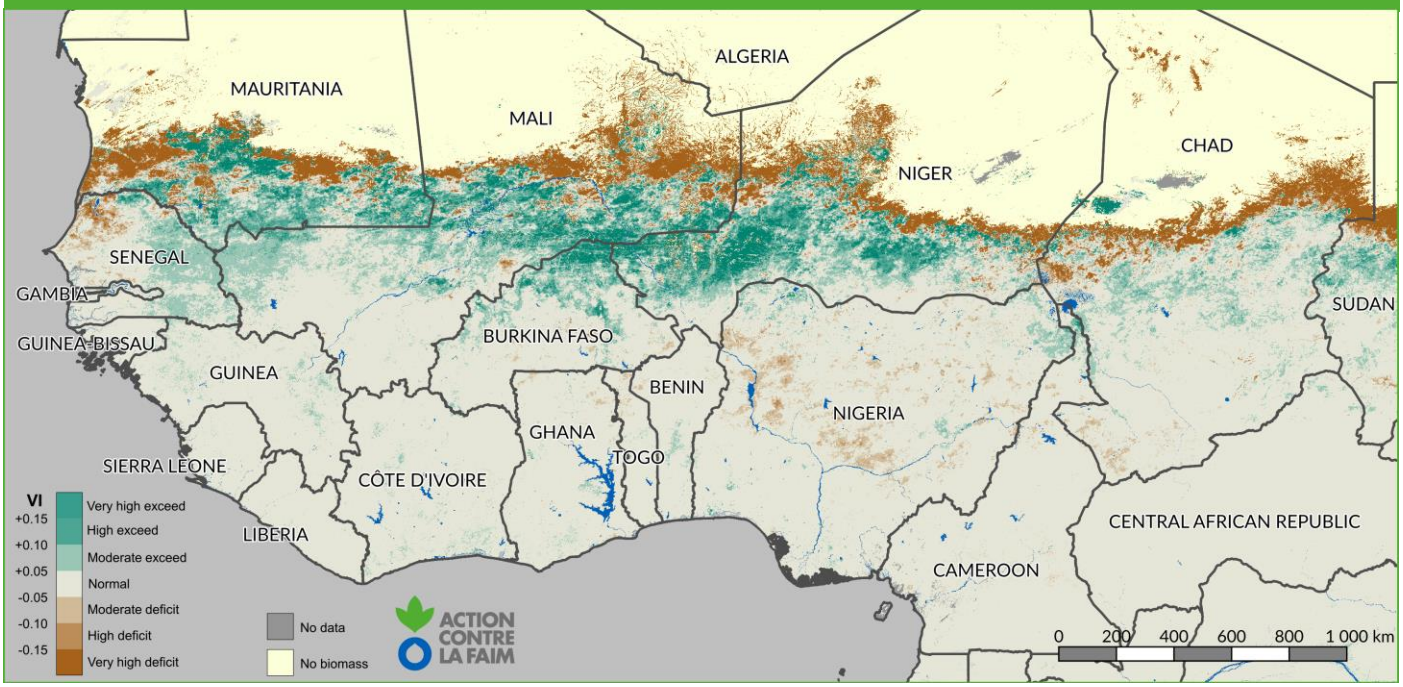
The biomass-related Vulnerability Index (VI), shown in Map 5, is sensitive to production variations from recent years and highlights zones with successive biomass deficits.

The VI calculated at the end of August 2025 shows a low (or normal) vulnerability exposure across the entire southern part of the Sahelian zone, including coastal countries, despite moderate deficits in Nigeria. The Sahelian belt from Senegal to Niger is showing a situation of moderate to significant excesses. This is due to a succession of years with good rainfall in this part of the region.

The entire northern limit of the Sahel is exposed to vulnerability with significant to very significant deficits. These deficits are more pronounced in the southwestern part of Mauritania and northern Senegal.

The evolution of the end of the rainy season will be crucial for estimating these vulnerabilities. The confirmation of deficits in pastoral zones would lead to an early depletion of resources and major transhumance movements towards areas with better pastoral conditions. These deficits will also determine the evolution of livelihoods and the capacity of communities to overcome the pastoral lean season.

MAP 5: BIOMASS VULNERABILITY INDEX END OF AUGUST 2025



The following table displays biomass production anomalies, expressed as both the number of standard deviations (σ) from the mean and as a percentage of the mean, for the seven monitored countries and according to administrative level 1 divisions (regions, provinces, or states).

The table highlights highly contrasting anomalies for 2025 from one region to another. At mid-season, the best production anomalies are recorded in the Central Sahel, particularly in the Sahel regions of Burkina Faso at +2.5σ (155%), Gao in Mali at +1.6σ (189%), and Tahoua in Niger at +1.8σ (161%).

Conversely, the regions with the poorest production are in Senegal, notably Louga at -0.6σ (89%), and in Chad in the Logone Occidental province at -2.3σ (83%).

Country	Region/Wilaya	Area (km2)	Anomaly 2021	Anomaly 2022	Anomaly 2023	Anomaly 2024	Anomaly 2025	VI 2025
Burkina Faso	Boucle du Mouhoun	33614	-0.4σ (096%)	+1.9σ (117%)	+0.2σ (102%)	+2.0σ (118%)	+2.2σ (120%)	+0.03
	Cascades	18054	+0.9σ (106%)	+2.3σ (116%)	+1.3σ (109%)	+2.1σ (115%)	+2.1σ (115%)	+0.02
	Centre	2773	+0.8σ (107%)	+2.6σ (123%)	+0.1σ (101%)	+0.7σ (106%)	-0.1σ (099%)	-0.02
	Centre-Est	14234	-0.1σ (099%)	+1.5σ (110%)	+0.3σ (102%)	+1.8σ (112%)	+0.7σ (105%)	-0.00
	Centre-Nord	19180	-0.4σ (094%)	+1.6σ (123%)	+0.5σ (107%)	+2.3σ (132%)	+2.2σ (131%)	+0.05
	Centre-Ouest	21433	-0.1σ (099%)	+1.3σ (107%)	-0.6σ (096%)	+1.3σ (108%)	-0.5σ (097%)	-0.01
	Centre-Sud	11742	+0.3σ (102%)	+1.7σ (112%)	+0.3σ (102%)	+1.8σ (112%)	+1.0σ (107%)	+0.01
	Est	46592	-0.7σ (095%)	+1.3σ (110%)	-0.6σ (095%)	+1.9σ (114%)	+0.6σ (105%)	+0.01
	Hauts-Bassins	25729	-0.3σ (098%)	+1.6σ (110%)	-0.0σ (100%)	+1.8σ (111%)	+1.7σ (110%)	+0.02
	Nord	16421	-0.8σ (089%)	+1.9σ (126%)	+0.3σ (104%)	+1.5σ (121%)	+2.0σ (127%)	+0.05
	Plateau Central	8977	+0.2σ (102%)	+2.3σ (119%)	-0.6σ (095%)	+0.9σ (108%)	-0.3σ (097%)	-0.02
	Sahel	36088	-0.3σ (093%)	+1.3σ (129%)	+0.3σ (106%)	+2.2σ (149%)	+2.5σ (155%)	+0.10
	Sud-Ouest	16327	+0.5σ (104%)	+2.5σ (118%)	+1.4σ (110%)	+1.6σ (111%)	+1.5σ (111%)	+0.01
	Entire country	272386	-0.2σ (099%)	+2.0σ (115%)	+0.3σ (102%)	+2.2σ (116%)	+1.8σ (113%)	+0.03
Cameroon	Extreme Nord	33408	-1.2σ (089%)	+1.3σ (111%)	-0.1σ (100%)	+2.2σ (120%)	+0.7σ (106%)	+0.01
	Nord	66043	-1.4σ (094%)	+0.6σ (103%)	+0.3σ (101%)	+0.2σ (101%)	-0.6σ (097%)	-0.01
	Entire country	465284	+1.6σ (108%)	+2.4σ (112%)	+2.1σ (110%)	+1.8σ (109%)	+1.1σ (105%)	-0.00
Côte d'Ivoire	Bagoue	9817	-0.5σ (097%)	+1.0σ (106%)	-0.2σ (099%)	-0.5σ (097%)	+0.9σ (105%)	+0.01
	Bounkani	21905	+0.5σ (104%)	+2.1σ (116%)	+1.5σ (111%)	+0.4σ (103%)	+1.3σ (110%)	+0.01
	Folon	6809	-0.9σ (094%)	+0.4σ (103%)	-0.7σ (095%)	-1.2σ (092%)	+0.8σ (105%)	+0.02
	Poro	12735	-0.1σ (099%)	+0.6σ (104%)	-0.4σ (098%)	-0.6σ (097%)	+0.3σ (102%)	+0.01
	Tchologo	17806	+0.9σ (105%)	+1.9σ (112%)	+0.8σ (105%)	+0.3σ (102%)	+1.5σ (109%)	+0.01
	Entire country	320771	-0.2σ (099%)	+1.5σ (108%)	+0.1σ (101%)	-0.1σ (100%)	+1.4σ (108%)	+0.01
Mali	Bamako	200	-1.0σ (084%)	-0.8σ (088%)	-1.5σ (075%)	-1.2σ (081%)	-0.3σ (096%)	+0.04
	Gao	100820	-0.3σ (086%)	+0.8σ (142%)	-0.3σ (086%)	+3.0σ (265%)	+1.6σ (189%)	-0.06
	Kayes	121931	-1.1σ (089%)	+1.5σ (115%)	-0.6σ (094%)	+0.3σ (103%)	+1.5σ (116%)	+0.04
	Kidal	148391	+0.2σ (133%)	+0.5σ (163%)	-0.1σ (089%)	+3.5σ (569%)	+0.7σ (196%)	-0.23
	Koulikoro	89917	-0.7σ (093%)	+1.7σ (116%)	-0.9σ (092%)	+1.1σ (111%)	+1.2σ (111%)	+0.03
	Menaka	77489	+0.4σ (129%)	+0.3σ (120%)	+0.0σ (101%)	+3.5σ (378%)	+1.4σ (210%)	-0.11
	Mopti	79584	-0.4σ (092%)	+1.8σ (136%)	+0.3σ (107%)	+2.0σ (140%)	+1.8σ (137%)	+0.06
	Segou	61972	-0.5σ (093%)	+1.6σ (123%)	+0.2σ (103%)	+2.2σ (131%)	+1.5σ (121%)	+0.03
	Sikasso	71877	-0.3σ (098%)	+2.1σ (111%)	-0.2σ (099%)	+0.8σ (104%)	+1.5σ (107%)	+0.01
	Tombouctou	498297	-0.5σ (077%)	+1.4σ (164%)	-0.3σ (089%)	+1.8σ (182%)	+1.9σ (185%)	-0.00
	Entire country	1257151	-0.7σ (093%)	+1.8σ (118%)	-0.3σ (097%)	+1.6σ (115%)	+1.7σ (117%)	-0.01
Mauritania	Adrar	220687	-0.7σ (010%)	+1.7σ (317%)	-0.0σ (097%)	+1.1σ (242%)	+0.0σ (102%)	-0.21
	Assaba	35239	-1.6σ (051%)	+2.3σ (167%)	-0.9σ (074%)	+1.0σ (131%)	+1.4σ (140%)	+0.02
	Brakna	32734	-0.8σ (058%)	+1.5σ (180%)	+0.5σ (126%)	+0.8σ (142%)	+1.0σ (153%)	-0.04
	Dakhlet-Nouadhibou	37920	-0.3σ (004%)	+0.2σ (145%)	-0.3σ (008%)	-0.3σ (012%)	+0.0σ (104%)	-0.04
	Gorgol	13812	-0.8σ (073%)	+1.6σ (153%)	-0.4σ (086%)	+1.3σ (144%)	+1.0σ (135%)	+0.04
	Guidimakha	10914	-1.1σ (073%)	+2.3σ (155%)	-0.6σ (085%)	+1.6σ (137%)	+1.6σ (138%)	+0.07
	Hodh Ech Chargi	182159	-1.1σ (058%)	+1.0σ (137%)	-0.9σ (065%)	+1.1σ (140%)	+1.1σ (141%)	-0.03
	Hodh El Gharbi	50287	-1.9σ (042%)	+1.5σ (147%)	-0.9σ (072%)	+1.4σ (143%)	+1.4σ (142%)	+0.03
	Inchiri	31504	-0.4σ (001%)	+0.6σ (246%)	-0.4σ (005%)	-0.1σ (083%)	-0.0σ (097%)	-0.11
	Nouakchott	1137	-0.5σ (022%)	+0.0σ (102%)	+0.3σ (148%)	-0.3σ (057%)	-0.1σ (084%)	-0.09
	Tagant	99789	-0.9σ (021%)	+1.7σ (241%)	+0.1σ (111%)	+1.8σ (251%)	+1.6σ (239%)	-0.06
	Tiris-Zemmour	258552	-0.2σ (000%)	-0.2σ (000%)	-0.2σ (000%)	-0.2σ (001%)	-0.0σ (099%)	-0.03
	Trarza	66032	-0.3σ (089%)	+1.5σ (153%)	+0.8σ (128%)	+0.6σ (121%)	+0.0σ (101%)	-0.22
	Entire country	1040397	-1.5σ (057%)	+1.8σ (152%)	-0.7σ (080%)	+1.3σ (139%)	+1.3σ (139%)	-0.04
Niger	Agadez	622088	+0.3σ (130%)	+0.2σ (120%)	-0.3σ (076%)	+3.6σ (421%)	+1.2σ (207%)	-0.16
	Diffa	145423	+0.2σ (107%)	+1.5σ (145%)	-0.8σ (075%)	+3.1σ (195%)	+1.1σ (133%)	-0.05
	Dosso	30935	-0.6σ (094%)	+0.4σ (104%)	-2.2σ (077%)	+1.8σ (119%)	+0.9σ (110%)	+0.05
	Maradi	38874	-0.4σ (092%)	+0.8σ (119%)	+0.1σ (101%)	+3.1σ (172%)	+1.4σ (131%)	+0.04
	Niamey	506	-1.1σ (080%)	-0.8σ (085%)	-1.2σ (078%)	-0.3σ (095%)	+0.9σ (116%)	+0.10
	Tahoua	107482	+0.1σ (102%)	+0.2σ (108%)	-0.7σ (076%)	+3.0σ (200%)	+1.8σ (161%)	+0.04
	Tillabéri	91413	-0.3σ (095%)	-0.2σ (097%)	-0.8σ (088%)	+2.3σ (136%)	+2.1σ (132%)	+0.08
	Zinder	146807	-0.0σ (099%)	+1.0σ (130%)	-0.1σ (097%)	+3.2σ (199%)	+1.6σ (149%)	+0.02
	Entire country	1187491	-0.1σ (098%)	+0.7σ (115%)	-0.6σ (088%)	+3.2σ (171%)	+1.7σ (137%)	-0.00

Country	Region/Wilaya	Area (km2)	Anomaly 2021	Anomaly 2022	Anomaly 2023	Anomaly 2024	Anomaly 2025	VI 2025
Senegal	Dakar	606	-0.2σ (097%)	-0.0σ (099%)	-0.6σ (090%)	-0.9σ (086%)	-0.5σ (091%)	-0.00
	Diourbel	4586	-0.9σ (086%)	+1.6σ (125%)	-0.3σ (095%)	+1.0σ (115%)	-0.2σ (097%)	-0.02
	Fatick	7080	-0.4σ (095%)	+2.3σ (127%)	+0.1σ (101%)	+1.1σ (113%)	-0.0σ (100%)	-0.01
	Kaffrine	10878	-1.0σ (085%)	+1.5σ (121%)	-0.8σ (089%)	+0.2σ (103%)	-0.6σ (092%)	-0.01
	Kaolack	5541	-0.9σ (089%)	+2.6σ (131%)	-0.2σ (098%)	+0.7σ (109%)	-0.4σ (095%)	-0.02
	Kedougou	16821	-0.6σ (095%)	+1.3σ (111%)	-0.5σ (096%)	+0.3σ (102%)	+2.3σ (119%)	+0.04
	Kolda	13778	-1.1σ (091%)	+1.6σ (114%)	-0.6σ (095%)	+0.5σ (104%)	+1.4σ (112%)	+0.03
	Louga	25653	-0.6σ (089%)	+1.0σ (117%)	-0.6σ (089%)	+0.5σ (109%)	-0.6σ (089%)	-0.04
	Matam	28560	-1.1σ (077%)	+1.3σ (125%)	-0.5σ (091%)	+0.3σ (106%)	+1.1σ (122%)	+0.05
	Saint Louis	19615	-0.0σ (099%)	+0.7σ (118%)	-0.1σ (098%)	+0.1σ (103%)	+0.5σ (113%)	+0.01
	Sedhiou	7398	-0.7σ (095%)	+2.4σ (119%)	-0.2σ (098%)	+1.1σ (109%)	+1.2σ (110%)	+0.02
	Tambacounda	43144	-1.0σ (087%)	+1.5σ (118%)	-0.5σ (093%)	+0.1σ (102%)	+1.7σ (121%)	+0.05
	Thies	6924	+0.1σ (101%)	+1.9σ (125%)	+0.8σ (111%)	+1.7σ (122%)	+0.4σ (105%)	-0.02
	Ziguinchor	7592	+0.6σ (105%)	+2.6σ (121%)	+0.4σ (103%)	+1.5σ (112%)	+1.4σ (111%)	+0.01
	Entire country	198320	-0.8σ (091%)	+1.7σ (119%)	-0.4σ (095%)	+0.5σ (106%)	+1.1σ (112%)	+0.02
Chad	Barh-El-Gazel	49876	-0.6σ (077%)	+1.3σ (149%)	-0.5σ (083%)	+2.9σ (209%)	+1.2σ (145%)	-0.04
	Batha	90543	-0.1σ (098%)	+1.6σ (147%)	-1.0σ (071%)	+2.7σ (181%)	+1.2σ (135%)	-0.00
	Borkou	149318	+0.0σ (102%)	+0.3σ (156%)	-0.4σ (020%)	+4.7σ (1004%)	+0.5σ (198%)	-0.22
	Chari-Baguirmi	46298	-0.7σ (092%)	+1.4σ (115%)	+0.1σ (102%)	+2.2σ (124%)	+1.1σ (112%)	+0.02
	Ennedi Ouest	123959	+0.0σ (102%)	+0.1σ (122%)	-0.4σ (037%)	+4.6σ (816%)	+0.6σ (195%)	-0.23
	Ennedi-Est	83306	-0.0σ (095%)	+0.2σ (129%)	-0.3σ (056%)	+4.6σ (879%)	+0.6σ (195%)	-0.27
	Guera	60921	-1.1σ (091%)	+1.4σ (112%)	-0.6σ (095%)	+1.1σ (110%)	+0.5σ (104%)	+0.01
	Hadjer-Lamis	29085	-0.4σ (093%)	+1.6σ (130%)	-0.1σ (098%)	+2.7σ (150%)	+1.4σ (126%)	+0.03
	Kanem	72851	-0.5σ (077%)	+1.4σ (166%)	-0.5σ (077%)	+3.5σ (261%)	+0.7σ (135%)	-0.05
	Lac	21746	+0.6σ (109%)	+2.3σ (132%)	-0.8σ (089%)	+2.4σ (133%)	+0.5σ (107%)	-0.05
	Logone Occidental	8640	-1.7σ (087%)	-1.1σ (092%)	-0.5σ (097%)	-1.1σ (092%)	-2.3σ (083%)	-0.03
	Logone Oriental	23840	-1.8σ (092%)	+0.1σ (100%)	+0.3σ (101%)	-0.4σ (098%)	-1.9σ (092%)	-0.02
	Mandoul	17388	-1.6σ (092%)	+0.6σ (103%)	-1.0σ (095%)	-1.0σ (095%)	-1.6σ (092%)	-0.02
	Mayo Kebbi Est	18395	-2.1σ (084%)	+0.3σ (102%)	-0.2σ (098%)	+1.2σ (109%)	+0.1σ (100%)	+0.01
	Mayo-Kebbi Ouest	12551	-2.2σ (085%)	+0.0σ (100%)	-0.3σ (098%)	+0.1σ (101%)	-1.9σ (087%)	-0.03
	Moyen-Chari	40810	-1.5σ (092%)	+1.4σ (108%)	-0.9σ (095%)	+0.4σ (102%)	-0.2σ (099%)	+0.00
	N'Djamena	471	-1.2σ (082%)	+0.4σ (106%)	-0.3σ (096%)	+1.4σ (121%)	+0.5σ (108%)	+0.02
	Ouaddai	29689	-0.1σ (098%)	+1.9σ (137%)	-0.8σ (084%)	+2.1σ (142%)	+0.9σ (118%)	+0.02
	Salamat	68151	-1.7σ (085%)	+0.5σ (104%)	-1.3σ (089%)	+0.1σ (101%)	+0.6σ (105%)	+0.02
	Sila	36285	-0.8σ (091%)	+1.2σ (113%)	-1.3σ (086%)	+0.9σ (110%)	+0.7σ (107%)	+0.02
	Tandjile	17850	-2.1σ (087%)	-0.7σ (095%)	-0.8σ (095%)	+0.1σ (100%)	-0.8σ (095%)	+0.00
	Tibesti	210958	-0.3σ (021%)	-0.3σ (013%)	-0.0σ (100%)	+4.6σ (1511%)	+0.1σ (117%)	-0.26
	Wadi Fira	52068	+0.1σ (105%)	+0.9σ (142%)	-0.6σ (074%)	+3.1σ (237%)	+1.1σ (151%)	+0.03
	Entire country	1272128	-1.1σ (091%)	+1.4σ (112%)	-0.9σ (093%)	+2.1σ (118%)	+0.7σ (106%)	-0.03

RAINFALL CONTEXT

The West African and Sahel region, characterized by a strong dependence on seasonal rainfall, is subject to marked rainfall variability. This climatic instability compromises the resilience of local socio-economic systems, especially those related to agriculture and pastoralism.

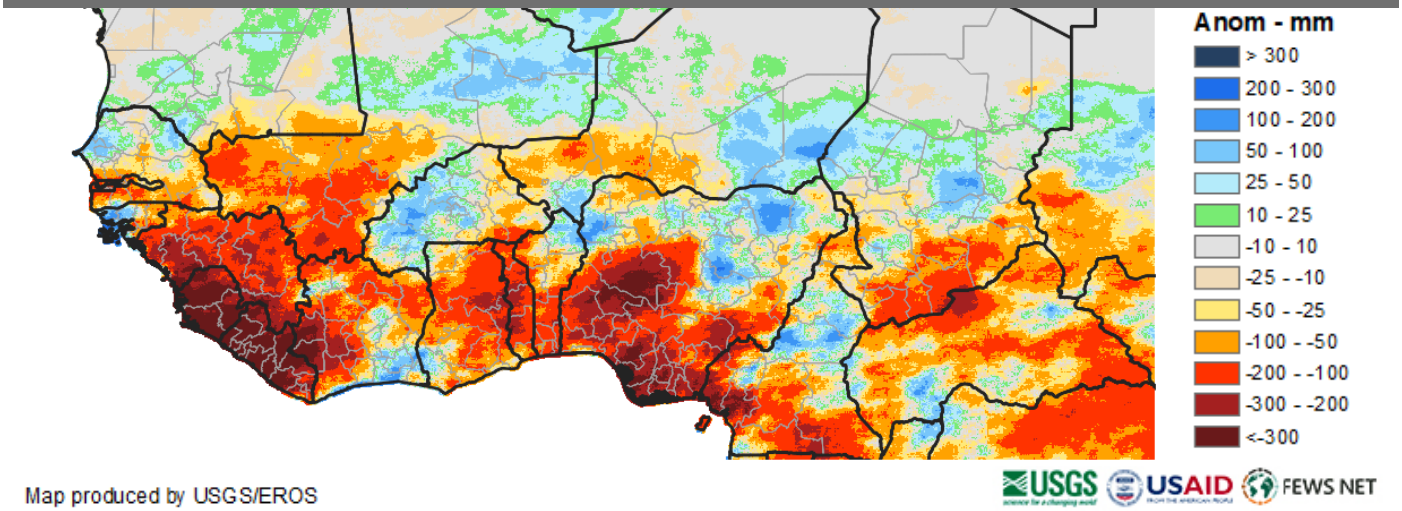
In the Sahel, the first half of the 2025 rainy season was characterized by an early start and generally above-normal rainfall, particularly across the Sahelian belt.

In contrast, in the southern part and coastal countries, the start was late, and cumulative rainfall is in deficit.

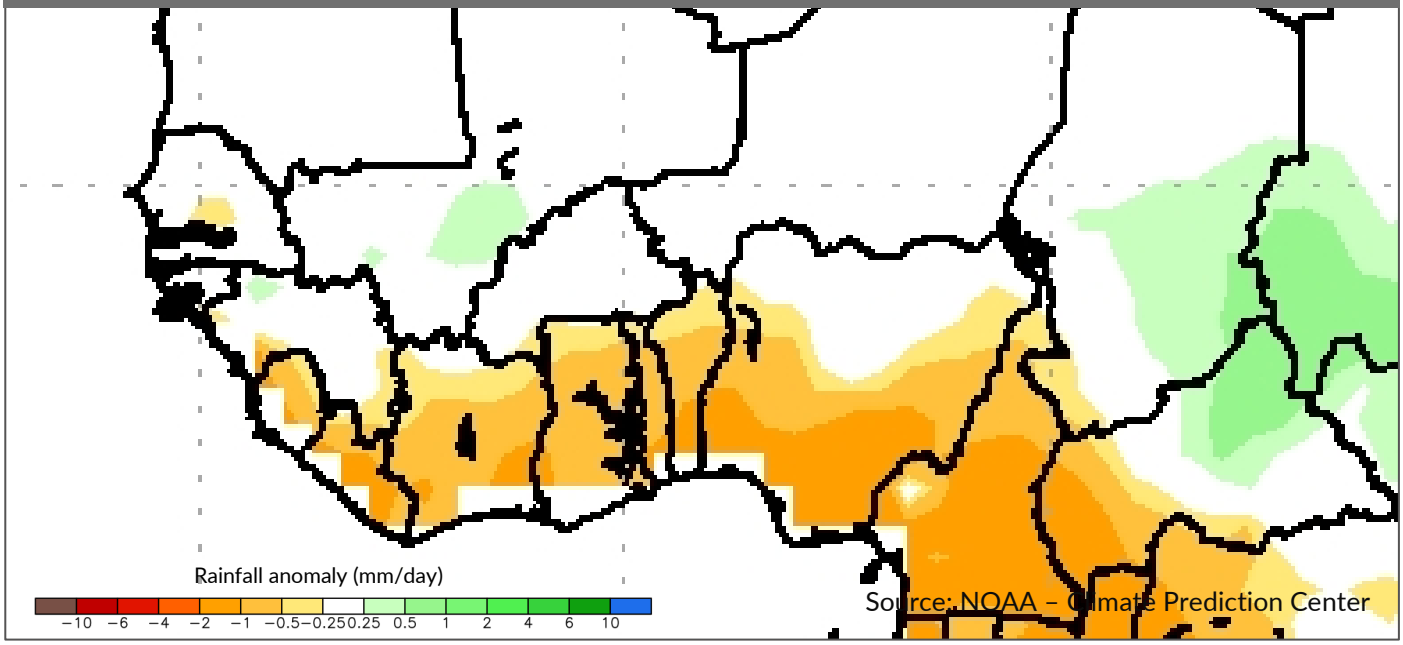
Map 6 shows high spatial variability. Marked deficits, with anomalies reaching -300 mm, are observed in the southwest and center, while the northeast shows moderate excesses. These contrasts highlight rainfall imbalances that are likely to impact agricultural and pastoral activities. Heavy rains have also caused urban flooding and overflowing rivers.

Map 7 illustrates a decrease in precipitation from the normal in most areas. This decrease could negatively affect agricultural yields and the availability of forage resources.

MAP 6: RAINFALL ANOMALIES MAY-AUGUST 2025 (USGS)



MAP 7: RAINFALL FORECAST FOR SEPTEMBER 2025 (NOAA-CPC)



CONCLUSION

2025 RAINY SEASON

At mid-season, biomass production in West and Central Africa is generally good, although with significant disparities. In the Sahelian belt, from eastern Senegal to Sudan, conditions remain favorable, comparable to those of the previous year. In contrast, southwestern Mauritania, western Senegal, and the northern limit of the Sahel are recording low to very low production. In coastal countries, particularly Nigeria, levels remain low despite a slight improvement compared to 2024.

The prolongation of the rainy season in the Sahel supports sustainable vegetative growth due to soil moisture and increased water availability, which should improve agricultural yields and forage resources. Conversely, in coastal countries, the early end of the rains reduces vegetation development and is already affecting pasture quality.

These rainfall disparities directly influence pastoral and agropastoral systems. While the Sahel benefits from a favorable end of the season, coastal countries see their resources decrease. This geographical complementarity, which is essential for transhumance, is now compromised by insecurity and mobility restrictions. Close monitoring of agro-climatic conditions and pastoral movements is therefore essential to anticipate needs and strengthen the resilience of herders in the region.

RECOMMENDATIONS

- Advocate for the recognition of the importance of transhumant livestock farming for the functioning of the Sahelian agrarian system.
- Facilitate pastoral mobility.
- Develop services for herders and their herds (animal health, vaccination, etc.).
- Improve pastoral infrastructure, which should be considered a priority for the stability and socio-economic development of the countries.
- Conduct regular monitoring during the end of the rainy season in the targeted areas, especially those with low to very low production.
- Facilitate transhumance, particularly cross-border transhumance, to reduce the vulnerability of pastoral communities subject to biomass production deficits and persistent insecurity.
- Establish a rapid anticipation and intervention mechanism for agropastoral communities in the "three-border" region.
- Follow the specific recommendations that will be formulated during the end-of-rainy-season analysis in the regional and national reports produced by ACF and expected in November 2025.
- Operationalize the regional livestock feed reserve.
- Strengthen the capacity of agents from national structures in the use of new technologies, particularly GIS for monitoring the pastoral situation.
- Identify and monitor key host areas, particularly those for displaced people with livestock.

The data used for the calculation of biomass production comes from the data generated by the COPERNICUS ground service, the European Commission's Earth observation programme. The research that led to the current version of the product was funded by various European Commission research and technical development programmes. The product is based on data from the SENTINEL-3, PROBA-V and SPOT-VEGETATION satellites of the European Space Agency ESA.

Action contre la Faim
Regional Office for West and Central Africa ROWCA
Ngor Almadies N°13 Bis, Rue NG 96, BP 29621, Dakar, Senegal

Surveillance and Data Analysis Department: Erwann FILLOL
Email: erfillol@wa.acfspain.org
Portal: www.sigsahel.info

ACTION AGAINST HUNGER
ACTION CONTRE LA FAIM