
EARLY WARNING BULLETIN FOR FOOD SECURITY

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IN THE GAMBIA

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Government of The Gambia

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Multidisciplinary Working Group

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1. SYNOPTIC SITUATION

The prominent high-pressure cell centered over North Atlantic Ocean (the Azores) had intensified, whilst its counterpart over the South Atlantic Ocean, St. Helena high pressure cell weakened during the period under review. This resulted to the persistent north to westerly wind regime into the Senegambian coast line, hence the dry spell experienced during the dekad.

This pressure configuration also influenced the surface position of the Inter-Tropical Discontinuity (ITD) to oscillate over northern Senegal, stretching across south-eastern Mauritania, central Mali and then sloping onto Niger and Chad during the period under review. Over South of the ITD, convective clouds evolved leading to rain and thunderstorm over Benin, Togo, Nigeria, Burkina Faso and Gulf of Guinea States. Places to the North of the ITD were generally dry and stable with patches of dust haze reported over central Algeria and Libya.

2. WEATHER OUTLOOK FOR THE NEXT DEKAD (21ST - 31ST JULY 2019)

The atmosphere will be generally humid and warm with high chances of rain and thunderstorm on the 25th July while slight to moderate rain is expected from 27th July towards the end of the dekad

3. UPDATE ON THE 2019 SEASONAL RAINFALL FORECAST FOR THE GAMBIA

The Department of Water Resources under the Ministry of Fisheries and Water Resources is pleased to present the update of the **climate forecast** for this **2019 Rainy Season**.

The initial forecast issued in June was in favour of normal to slightly above normal rainfall over the country for the entire period of July, August and September, which was based on the evolution of the Sea Surface Temperatures over the North and South Tropical Atlantic Ocean and Central Equatorial Pacific Ocean.

However, the cold Sea Surface Temperatures (SSTs) over the Tropical North Atlantic Ocean that were observed in the month of May continued to persist until the second dekad of July. This situation affected the predicted onset of rains that is after 15th June in the Eastern Half (Upper River Region - URR and Central River Region - CRR) of the country; and after 25th June in the Western Half (West Coast Region, Kanifing Municipal Council, Banjul City Council, North Bank Region and Lower River Region). Actually, the rains started around these predicted dates, but were followed by sporadic and uneven distribution of rainfall leading to long dry spells experienced during the period.

Meanwhile, the cooling of SSTs over the Tropical North Atlantic Ocean is now gradually weakening, while weak El Niño over Tropical Equatorial Pacific Ocean is expected to persist through the Northern Hemisphere summer of 2019. This situation is expected to enhanced precipitation trend from the 25th of July with intense rainfall during the month of August and September.

Consequently, the updated forecast for 2019 rainy season is in favour of **Normal rainfall category** with a probability of getting **45% Normal**, which is a threshold of at least 580mm of rainfall in The Gambia.

The cessation of rainfall is expected **after 15 October** in the Eastern Half **and after 25 October** in the Western Half. However, dry spells of about 4 to 12 days are also expected towards the end of the seasons.

On the hydrological forecast, inflows in The Gambia River basin were expected to be normal to slightly above normal compared to mean flows of the reference period 1981 - 2010. However, the current weather situation will have a bearing on the forecast. The updated expectation is that there is likely going to be **normal river flows during the 2019 season**.

The currently experienced long dry spell will delay the recession of the saline front this year. It is not expected to recede as far as Ballingho in the next few weeks.

With expected intense rainfall events, flash floods are still expected during these periods. The effects of flashfloods coupled with the effects of the expected short rainy season will reduce the normal recharge volume of groundwater this season.

The forecast is highly recommended for use in the planning of interventions in several socio-economic sectors.

4. RAINFALL SITUATION

The rainfall situation continues to vary across the country. During this dekad, highest 10-days totals of 92.4mm were recorded over Sibanor in the Western Third, whilst in the area (Western Third), some stations recorded little (less than 5 mm) or no rainfall in the dekad (see table 1). Similar dry conditions prevailed in the Middle Third of the country, as rainfall varied from 0 to 5mm. Meanwhile, in the Eastern Third, recorded dekadal totals were above 20mm.

Rainless days coupled from the preceding dekad varied from 8 to 14 days as indicated in the table hereunder.

Table 1: Dekadal rainfall totals and dry spell duration.

Station	Dekadal total (mm)	Dry spell duration (days)
Western Third		
Yundum Airport	4.2	8
Banjul	4.1	14
Sibanor	92.4	8
Kerewan	0.0	14
Middle Third		
Kaur	0.0	12
Jenoi	5.2	11
Janjanbureh	0.0	11
Sapu	1.3	9
Eastern Third		
Basse	34.9	8
Fatoto	22.1	5

Seasonal cumulative totals improved slightly for some stations, whilst in other stations it remained the same as it were during the last dekad. Basse and Fatoto in the Eastern third continue to dominate countrywide in terms of cumulative totals of above 150mm. In the Middle Third Seasonal totals ranged from 60 to 110mm, with the exception of Jenoi that recorded less than 50mm. The Western Third received the lowest seasonal rainfall totals which ranged from 10 to 110mm (figure 1).

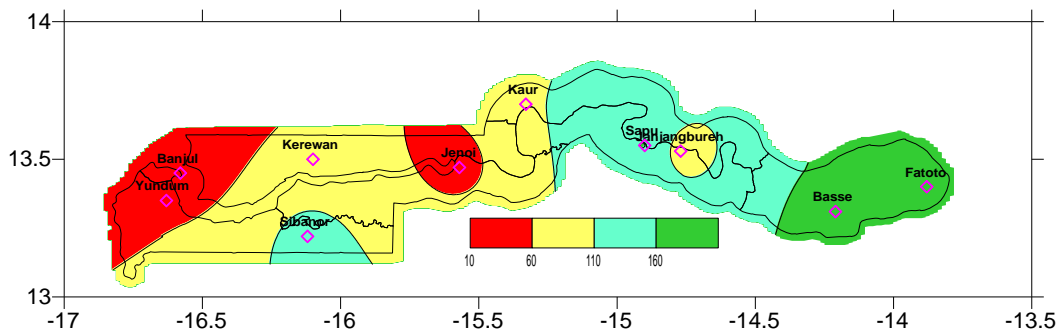


Figure 1: Seasonal rainfall totals from 1st May 2019 - 20th July 2019.

In Comparison, this year's country average as at 20th July 2019 is 13.4mm, which is 91% below last year this time (162.8mm), and 93% below the country average (1981_2010), which is 197.6mm.

5. AGROMETEOROLOGICAL SITUATION

Average temperatures during this dekad were similar to those recorded during the last dekad. Recorded figures varied between 26°C in the Eastern Third to 30°C over the rest of the country. Minimum

temperature varied from 19°C over the Eastern Third to 24°C and 25°C over the Western and Middle Thirds respectively; whereas maximum temperature varied between 33°C in the Eastern third and 40°C over the Middle Third. Recorded extreme temperatures were 15°C minimum and a maximum of 42°C both occurred over the Middle Third of the country.

Winds were generally light to moderate in speed, with few occasions when highest wind speed exceeded 25km/h over the entire country.

Average sunshine recorded during this dekad varied between 6 hours over the Western and Eastern thirds to 9 hours over the Middle Third of the country.

Minimum Relative Humidity (RH %) recorded during the dekad was 25% over the Middle Third whereas Maximum RH recorded was 90% and above across the country.

6. AGRICULTURAL SITUATION

The agricultural situation in the country varied slightly as field activities continued to be dictated mostly by the rainfall situation in the country. Due to moisture deficit as a result of the prolonged dry spells experienced during the dekad in most parts of the country especially in the Western and Middle Thirds, sowing activities are minimal. However earlier sown crops in the Eastern and some other parts of the country have germinated and are doing well in few areas. Farmers were also engaged in input distribution, ploughing and tilling as well as vegetable gardening.

Banjul July 23, 2019.

National MWG of The Gambia

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