EARLY WARNING BULLETIN FOR FOOD SECURITY

No. 2023/05

IN THE GAMBIA





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Focal Point: Department of Water Resources TEL: (+220) 4227631 / 422 28 72/ 4224122 FAX: (+220) 422 50 09 / E-MAIL: dwr@gamtel.gm



Period: August 21 - 31, 2023



1.0 PROGRESS OF THE RAINY SEASON

1.1 Synoptic Situation

The mean surface position of the Inter-Tropical Discontinuity (ITD), a boundary layer that separates the dry North-easterly Trade winds from the moist South-westerly winds has reached its northern maximum limit with its western axis lying over Southwest Mauritania and stretching across northern Mali, then slopping onto Central Niger and Chad.

Places to the north of the ITD remained dry and stable, with hazy conditions observed over northern parts of Algeria and Libya. Places to the south of the ITD were characterised by convective activities resulting to heavy rains and thunderstorms, occasionally associated with strong winds, especially over Sahel belt including The Gambia.

1.2 Weather Outlook for the next Dekad (1st - 10th September 2023)

The first dekad of September 2023 is expected to remain humid across the country with occurrences of convective activities that will result to rain and heavy thunderstorms, occasionally associated with strong winds. Slight to moderate rain and thunderstorms, occasionally heavy are expected in the country during the period from 01^{st} - 05^{th} and 07^{th} - 08^{th} September 2023.

1.3 Rainfall Situation

During this dekad (August 21-31) significant rainfall both in terms of frequency and intensity was recorded across the country. Single day rainfall of more than 50mm was recorded in Banjul (63.0mm) and Kerewan (122.8mm) in the Western Third, and in Kaur (58.2mm) and Jenoi (60.3mm) in the Middle Third. The number of rainy days varied from 5 to 9 days leading to end-of-dekad totals to range from 25.5mm over Janjanbureh to 274.2mm over Jenoi, both in the Middle Third of the country (fig. 1a).

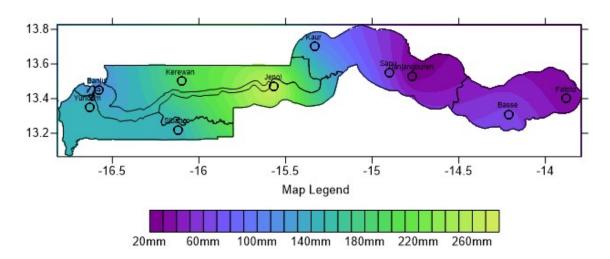


Figure 1a: Dekadal rainfall totals from 21^{st} – 31^{st} August 2023.

The seasonal total rainfall accumulated from May 1 to August 31, 2023 has also improved significantly across the country, and ranged from a minimum of 476.1mm recorded over Janjanbureh in the Middle Third to a maximum of 926.1mm over Sibanor in the Western Third of the country (Fig 1b).

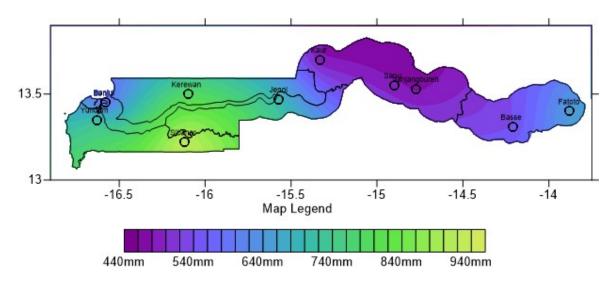


Figure 1b: Seasonal rainfall totals 1st May - 31st August 2023.

In comparison, this year's country average as of 31st August 2023, stood at 634.8mm, which is 7% below last year same period (686.7mm). Deficits ranging from 30.3mm to 337.1mm were recorded across the country (table 1). Only Sibanor, Jenoi and Fatoto recorded surplus ranging from 79.9mm to 386.8mm as compared to the same period last year.

Table 1: Comparisons of May 1st to August 31st seasonal sums for 2023 and 2022 rainy seasons

Station Name	2023 Seasonal sums	Number of Rainy Day in 2023	2022 Seasonal sums	Number of Rainy Days in 2022	Deficit	Surplus
WESTERN THIRD						
Banjul	578.2	32	868.3	35	290.1	
Yundum	724.5	37	1061.6	42	337.1	
Kerewan	785.6	30	816.5	37	30.3	
Sibanor	926.1	39	575.2	43		386.8
MIDDLE THIRD						
Kaur	482.6	26	539.3	28	56.7	
Jenoi	701.9	27	622.0	39		79.9
Sapu	486.0	25	606.5	35	120.5	
Janjanbureh	476.1	30	571.5	31	95.4	
EASTERN THIRD						
Basse	538.7	35	752.2	33	213.5	
Fatoto	648.8	29	453.5	35		195.3

2.0 AGROMETEOROLOGICAL SITUATION

During the dekad under review, the mean temperature recorded was 28°C across the country. Extreme temperatures reached a minimum of 21°C in Eastern Third and maximum temperatures peaked of 34°C, also recorded over the Eastern Third of the country.

Winds across the country generally varied from low to moderate. However, occasional strong winds were recorded during the dekad, with maximum wind gust of about 62.4km/h recorded in the eastern and middle Thirds on the 22nd of August 2023.

Average sunshine duration recorded during this dekad dropped to 5 hours which could be attributed to enhanced cloud coverage during the dekad,

Mean Relative Humidity (RH %) recorded across the country remained high (80%) indicating that the atmosphere is saturated with moisture that led to moderate to heavy downpours.

3. 0 AGRICULTURAL SITUATION

3.1 General situation

Generally, crop performance across the country is impressive in terms of growth and development. However, the phenological development of crops varied across the country which is attributed to the different dates of sowing, caused by varying rainfall onset in June and July. Low rainfall as a result of

dry spells at the beginning of the season, also delayed crop development particularly in the Lower River Region and parts of Central River and Upper River Regions.

Meanwhile, despite the varying crop development across the country, the production of major agricultural crops, groundnuts, maize and millet have increased significantly as compared to the preceding cropping season, 2022.

North Bank Region ((NBR)

Crops in this region are doing well (fig. 2). According to the regional agricultural directorate and a few farmers interviewed, the area of production for groundnut, maize and rice has increase compared to last year, due to inputs support received from Projects before the start of the cropping season.

Early planted groundnut fields are now at pegging and others flowering. Maize fields are at phenological phases ranging from tasseling to cob formation, while the late planted ones are at vegetative stages. Early millet fields that were planted early are at booting stages and late planted ones are at vegetative stage, while rice fields (both lowland and upland) are at their vegetative stages.

Land preparation for the production of watermelon is in progress.



Figure 2: Groundnut field at Ngayen Sanjal

Central River Region North (CRRN)

In the Central River Region-North, the agricultural situation is also impressive, but crop phases also vary. Most maize fields are now tasseling, and others are at cob formation. Groundnut fields are at pod filling or pegging stages, and early millet fields are at booting stage.

In the lowlands around Kuntaur, some farmers are still harvesting and threshing of rice (fig. 3), while others are on land preparation for rainy season production. The delay could be as result of late start of dry season production due to inadequate farm implements such as power tillers and tractors. Another constraint that rice growers are facing in Kuntaur area is the inadequate rice threshing machines which may cause post-harvest losses.



Figure 3: Threshing rice in CRR/N

The area under production for low land rice in Kuntaur area has decline this year due to inadequate farm implements, dilapidated water control structures (canal and gate problems) at the rice field. Meanwhile, as in NBR the production of maize, millet and groundnut in CRR-N has increased compared to last year due to inputs support and availability of fertilizer at a subsided price to farmers.

Central River Region South (CRRS)

The agricultural situation in this region is promising but with varying phonological phases. Maize fields are at cobbing stages while late planted fields are at vegetative stages. Early millet fields are at booting stages whilst groundnuts fields are at pegging stages. Land preparation and transplanting of low land rice is in progress (fig. 4) as low land rice is widely grown in this region.

The area under production for field crops such as groundnut and maize has increased compared to last year. This could be linked to huge support of inputs given to farmers from Agricultural projects. However, in the low land rice fields, production has declined this year due to inadequate farm implements such as tractor and power tillers as well as poor irrigation infrastructures as most of the fields are flooded with rainwater.



Figure 4: Transplanted rice field at tillering stage.

Upper River Region (URR)

In this region, the crops are performing well, despite the dry spelt at the beginning of the rains in July and part of August. Maize fields are at the cobbing stage while early millet fields are at the booting stages, and groundnut fields are at begging. Sorghum, which is widely grown in this region, the fields are still at the vegetative stage (fig. 5). Some Rice fields on the upland are almost at the booting stage while in the low land, they are at vegetative stages and others are still transplanting. Some farmers are still weeding late-planted groundnut farms. The area put on production has increased compared to last year.



Figure 5: Sorghum at vegetative stage, URR

Lower River Region (LRR)

The major field crops in this region such as maize and groundnut registered poor germination due to the dry spell in the months of June and July. Crop phenological phases in this region like in other regions defer. Early planted maize fields are at tasseling whilst most of the farmers who planted their fields late due to a prolonged dry spell are at vegetative stages. Groundnut fields are at pegging while others are at vegetative stage. In the low land some started transplanting while others have not.



Figure 6: Maize field in LRR, poor germination due to dry spell.

West Coast Region (WCR)

In the WCR, the agricultural situation is almost the same as in other regions, meanwhile, there is no serious dry spelt compared to other regions. The upland rice fields are at the vegetative stage, and in the lowland, farmers are still transplanting.

Early planted maize fields are at tasseling or cob formation whereas late planted fields are at vegetative stage. The early millet fields are at the booting stage while the late planted ones are at vegetative stages. Groundnut fields are pegging while late planted ones are at vegetative stage.



Figure 7: Newly transplanted rice field in Kombo East

Rainy season vegetable production (WCR)

Rainy season vegetable production took centre stage in most of the gardens in West Coast Region if not all. Vegetable crops which include okra, eggplant, butternut squash, sweet pepper, bitter tomatoes, shallot, potatoes, and sorrel. Onions, tomatoes and chilli are widely promoted by WACOMP / TARUDE Project which increases the number of actors in the rainy season vegetable production across WCR.



Figure 8a/b: Rainy season eggplant and Bitter tomato plant production

3.2 Pests and diseases situation

Fall Army Warms as a field pest are reported in all regions during the dry spell in maize fields. However, with the technical advice of extension workers to farmers on how to control Fall Army Warms as well as the result of heavy downpour of rains, has flushed out the said pest. The attack of the pests did not cause any serious effects on the performance of the crops.



Figure 9: Fall Army Warm on maize plant

The Red Spider Mites were also reported in Njau, CRR-N in an individual farmer open field on Bitter Tomato. The farmers did not adhered or adapt the extension advice and this led to the total failure of the crop.



Figure 10: Red Spider Mites in an open field in Njau, CRR-N.

4.0 LIVESTOCK SITUATION

Feed and water are important prerequisites for the enhancement of animal health, production, and productivity. Current indicators of the livestock situation in the country showed improvement in these areas.

According to livestock specialists across the country, there are no major disease outbreaks so far in this year's cropping season. However few cases of Farmer-Livestock owners conflict was reported around CRR-N but was taken care of amicably.

The issue of increasing bushfires during the dry season was also highlighted by some livestock experts, particularly in URR. According to these officials, some animals are yet to fully recover from the effects of last year's bushfires in the region.



Figure 11: Cattle grazing in Sandu District, Upper River Region

Banjul, September 04, 2023 National MWG of The Gambia

Composition of MWG:

Department of Water Resources (DWR) – Focal Point Department of Planning - MOA Department of Agriculture (DOA) Department of Livestock Services (DLS) Plant Protection Services - DOA National Disaster Management Agency (NDMA)

Direct your comments and questions to:

The Director
Department of Water Resources
7 Marina Parade, Banjul
The Gambia
Tel: (+ 220) 422 76 31 / 998 38

Tel: (+ 220) 422 76 31 / 998 38 45 Email: touraylm@yahoo.co.uk