

# GU' RAINFALL PERFORMANCE AND PASTURE CONDITION UPDATES IN PUNTLAND

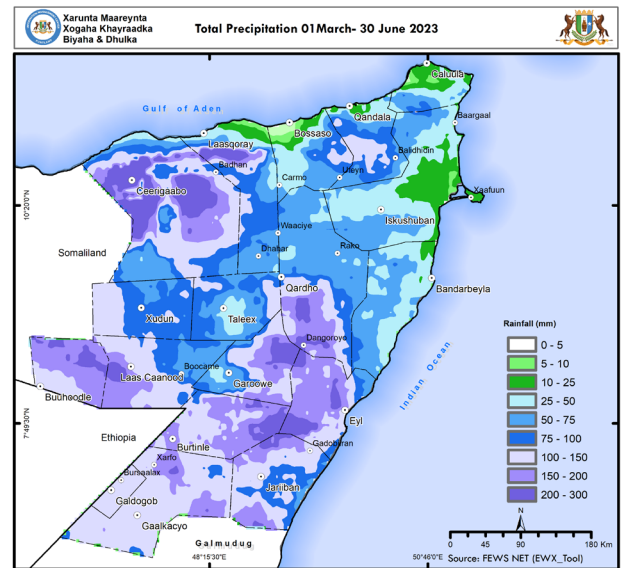
## OVERVIEW

Issued: 18 July 2023

The performance of the 2023 Gu rainy season varied throughout Puntland, with many locations experiencing average to below-average rainfall with the exception of Balli-Dhiddin, Qardho, Garowe, and Las'anod Distircts, which recorded above-normal rainfall in accordance with the observed data from the rain gauge stations.

The annual precipitation began in the second week of March and persisted until the first week of June, and distributed across Puntland regions.

According to the rainfall performance [map1] which shows the cumulative rainfall from March-June (MAMJ), the regions of Nugaal, Karkaar, Haylaan, Sanaag, and some localized areas of the Sool region received good amounts of rain, above **150mm**, whilst the Cayn region and parts of Mudug received moderate rains, in the range of **100mm**.



Map 1: Gu'2023 rainfall performance

The regions Bari, Gardafu, and coastal districts experienced light cumulative rains of less than **50mm**, as shown on the performance map above and observed data from the rain-gauge stations.

## GU' 2023 RECIEVED RAINFALL PER DISTRICT

With the help of time series rainfall data, the below graphic compares the 2023 Gu rains with the long-term average rainfall for the same period in Puntland [Chart 1]. Clearly, the stations recorded rain that was normal to below normal.

In general, Puntland's Gu rainfall result was average to below average, the amount and the distribution of rain varied from one place to another, with the most of it precipitated in the months of April and May as illustrated in Annex 1.

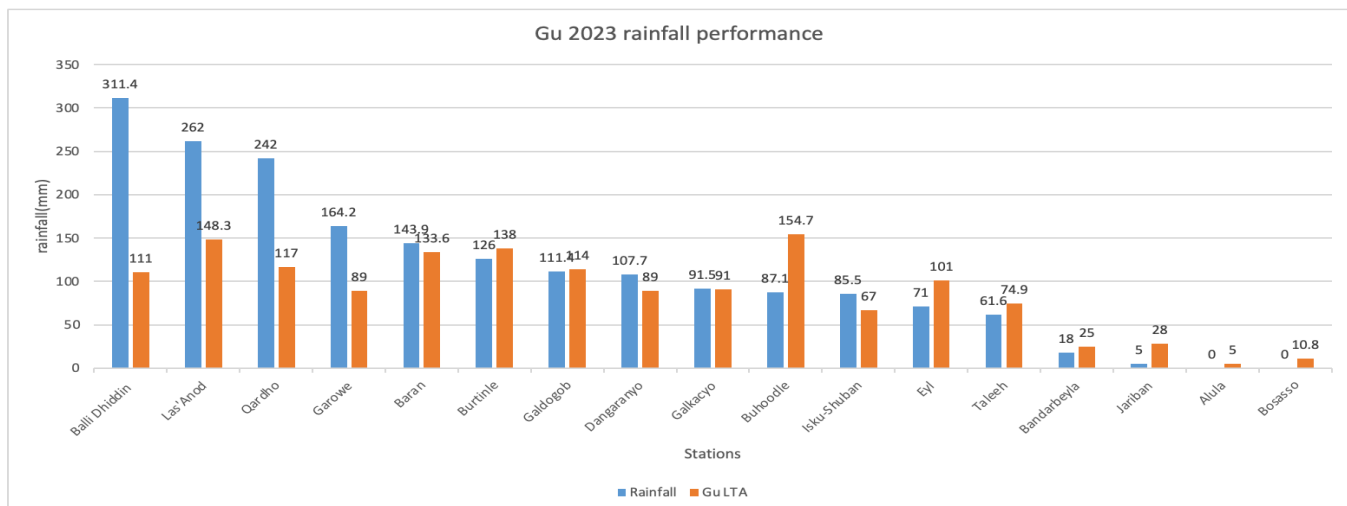


Chart 1 Gu 2023 Rainfall Performance in Puntland

## MAMJ ANOMALIES OVER PUNTLAND

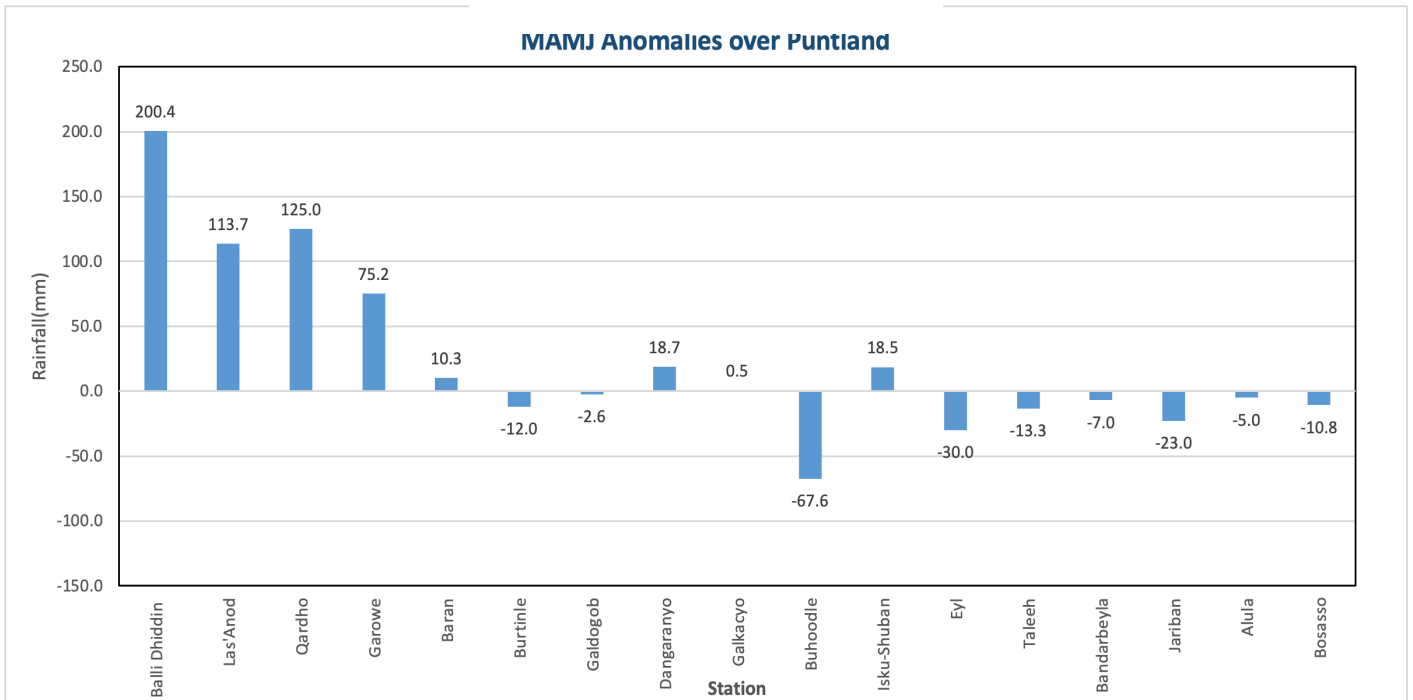


Chart 2: MAMJ Anomalies over Puntland

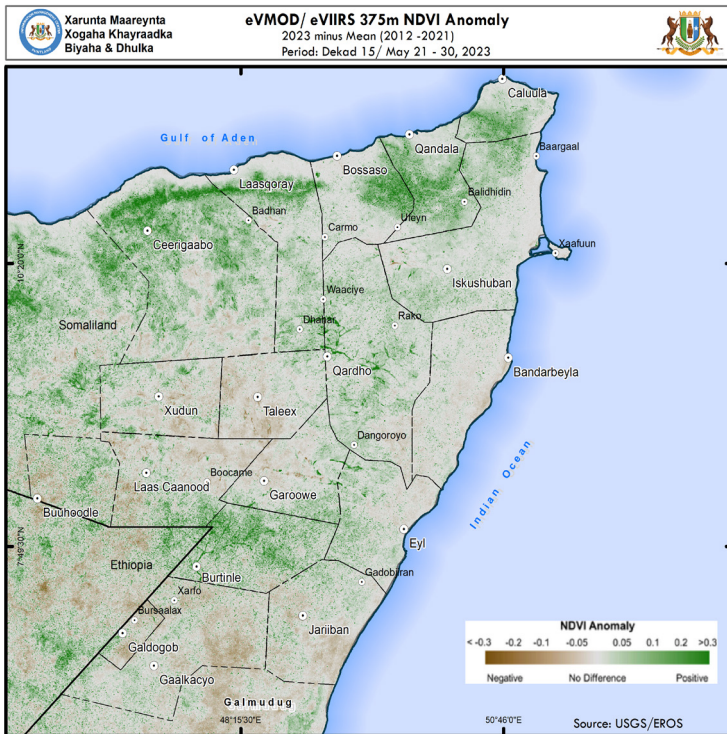
With respect to the long-term average [LTA] rainfall, the above *graph* shows Puntland rainfall anomalies in Gu 2023 [chart 2], The greater amount means the stations has recorded more rainfall than LTA. Meanwhile, a negative value suggests that stations experienced less precipitation than LTA.

## IMPACTS OF MAMJ RAINFALL AND FORECAST FOR JAS

The rains received over the Gu season had some positive aspects including increased visible pasture recovery and increase water availability, which improved the livelihood sectors, including livestock and agriculture. It was also a respite from the severe drought conditions caused by failed five consecutive rainy seasons. During the Gu' rains some areas in Puntland experienced flash floods which had a negative impact on the infrastructures.

The weather forecast for the present month of July is expected to be generally dry, and in the longer JAS season, the same conditions are expected to prevail over Puntland.

## VEGETATION AND PASTURE CONDITIONS IN PUNTLAND



Map 2: Pasture Condition/NDVI

The Normalized Difference Vegetative Index (NDVI) for Dekad 15 of May 2023 [map 2], a satellite-derived indicator of vegetative health, reveals an improvement in Puntland's vegetation conditions in certain regions as a consequence of Average Gu' rains while others remain negative as a result of below-average rainfall amounts.

There are significantly improved vegetation conditions in some areas of the North inland Pastoral for the districts of Qardho, Garowe, Laascaanood, and Dangorayo. Hawd Pastoral zones of Burtinle, Galdogob, and Buhoodle districts as well as parts of Eastern Gollis Pastoral in the districts of Badhan and Ballidhidin.

As a result, the Addun Livelihood zone in the Jerriban and Godobjiran districts, certain portions of the eastern Gollis, including the Alula, Qandala, and Bargal, as well as the coastal Deex districts, did not have substantial change to the pasture conditions.

The observed information from weather stations proves that both the NDVI satellite data for May and the observed data have substantial correlations.

### RECOMMENDATIONS

- Enhancing extension services for pastoralists and agro-pastoralists should be a priority for the ministries of water, livestock, and agriculture. This should include prompt supply of water, vaccination, and fodder in the districts received below average rainfall.
- Scale up the aid assistance from government and humanitarian agencies to the coastal districts and vulnerable people.
- Increasing monitoring, treatment, and vaccination of livestock against anticipated diseases especially in areas that recorded below normal rainfall.
- Encouraging the farmers to adopt effective irrigation techniques.
- Strengthen the weather monitoring in terms of rainfall forecast, early warnings by Installing of gauging stations in the flash flood prone areas, and also, community outreach during the rainy season.

## ANNEX 1—GU 2023 RAINFALL PERFORMANCE

Puntland Gu 2023 Rainfall															
Stations	Mar-23 Dek1	Mar-23 Dek2	Mar-23 Dek3	Apr-23 Dek1	Apr-23 Dek2	Apr-23 Dek3	May-23 Dek1	May-23 Dek2	May-23 Dek3	Jun-23 Dek1	Jun-23 Dek2	Jun-23 Dek3	Rainfall	LTA	% of Normal
Alula	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0
Balli Dhiddin	0.0	0.0	39.6	0.0	40.0	0.0	60.1	101.0	30.0	0.0	40.7	0.0	311.4	111.0	280.5
Bandarbeyla	0.0	0.0	11.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	18.0	25.0	72.0
Baran	0.0	0.0	14.0	0.0	4.8	28.0	15.1	53.2	27.5	0.0	0.0	1.3	143.9	133.6	107.7
Bossaso	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	0.0
Buhoodle	0.0	14.7	8.7	0.0	9.8	8.1	16.1	0.0	29.7	0.0	0.0	0.0	87.1	154.7	56.3
Burtinle	0.0	0.0	12.0	0.0	0.0	40.0	60.0	0.0	14.0	0.0	0.0	0.0	126.0	138	91.3
Dangorayo	0.0	0.0	4.8	0.0	8.7	0.0	72.6	0.0	21.6	0.0	0.0	0.0	107.7	89.0	121.0
Eyl	0.0	0.0	0.0	3.0	10.0	0.0	3.0	0.0	33.0	22.0	0.0	0.0	71.0	101.0	70.3
Galdogob	0.0	1.0	3.0	0.0	0.0	24.0	47.5	0.0	35.9	0.0	0.0	0.0	111.4	114	97.7
Galkacyo	0.0	4.5	13.0	4.0	13.0	54.0	0.0	0.0	3.0	0.0	0.0	0.0	91.5	91	100.5
Garowe	0.0	0.0	19.5	0.0	0.0	9.3	57.5	0.0	38.1	39.8	0.0	0.0	164.2	89.0	184.5
Isku-Shuban	0.0	17.0	25.0	0.0	0.0	4.0	6.0	4.0	18.5	8.0	3.0	0.0	85.5	127.6	67.0
Jariban	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	5.0	28.0	17.9
Las'anod	0.0	10.5	69.0	0.0	27.0	15.0	32.5	5.0	90.0	13.0	0.0	0.0	262.0	148.3	176.7
Qardho	0.0	0.0	31.0	10.0	0.0	8.0	72.0	18.0	71.0	32.0	0.0	0.0	242	117.0	206.8
Taleex	0.0	4.7	0.0	0.0	0.0	0.0	6.7	1.7	17.5	31.0	0.0	0.0	61.6	74.9	82.2

