





# SOMALIA WEEKLY WEATHER FORECAST

### Valid From 25th to 31st October 2023

## Moderate to heavy rains expected over Woqooyi Galbeed, Togdheer, Gedo, Bakool and Hiraan regions.

#### Review of the Weather for the Period 18th to 25th October 2023

During the review period, twenty-eight (28) stations spread across the country observed rainfall amounting to 30 mm and above (Graph 1). The following eleven (11) stations received substantial rainfall amounting to 60 mm and above: Wanlaweyne (207.2 mm), Baidoa (106 mm), Qansahdere (110.5 mm), Hudur (109.5 mm), Dinsor (103.0 mm), Bardaale (89.5 mm), El Barde (85.0 mm), Bulo Burte (84.5 mm), Luug (83.0 mm), Gumburaha (77.0 mm) and Jowhar (65.5 mm). The longest rainy periods were observed at Wanlewayne (5 days), Baidoa (6 days), Qansahdere (6 days), Hudur (5 days) and Bardaale (6 days). While the most intense rains were received at Taleex (53.0 mm in a day), most of the stations that recorded 40 mm and below actually observed just one rainy day. The rains over Wanlaweyne represents 73% of its total Deyr Long Term Mean (285 mm) and are comparable in amounts to those received in the entire year in 2022 (210.2 mm). The rains received over Baidoa represent about half (46 %) of the total Deyr LTM (230.5 mm).

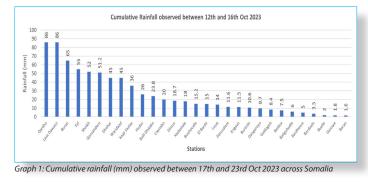
Significant fluctuations in water levels were observed along both Juba and Shabelle Rivers in the last one week. Following heavy rains, flash floods leading to river level rise to high flood

#### Forecast of the Weather for the Period 25th to 31st October 2023

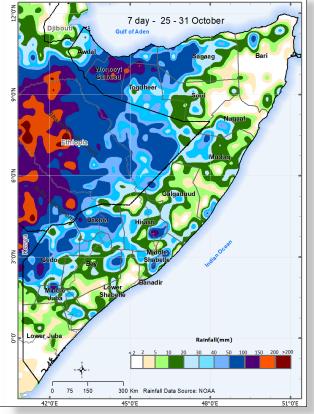
Moderate to heavy rains are expected over Woqooyi Galbeed, Togdheer, Gedo, Bakool and Hiraan regions. Given the general light rainfall activity in the next 7-days (*Map 1*), much of the rains are likely to be observed between 28th and 31st October 2023. The spatio-temperal variation of the forecast rainfall is described below:

Heavy rainfall of between 100 mm and 150 mm is forecast over several areas in the central parts of Woqooyi Galbeed region and the northern parts of Owdweyne district in Togdheer region, central parts of Gedo region, Bulo Burte district in Hiraan region, and Saakow district in Middle Juba region. Heavy localized rains over these areas are likely to exceed 150 mm with possible cumulative amounts of about 200 mm in Wogooyi Galbeed, northern parts of Owdweyne district in Togdheer region and Bulo Burte in Hiraan region. Very heavy rainfall of above 200 mm is likely over the upper catchments of both Juba and Shabelle Rivers in Ethiopian Highlands.

Moderate rainfall of between 50 mm and 100 mm is expected over Baki district in Awdal region, southern parts, Sheikh and Berbera districts in Woqooyi Galbeed region, northern parts of Burco district in Togdheer region, Ceel Afwyene and Ceerigaabo districts in Sanaag region, and Bosasso district in Bari region. Moderate rains are also anticipated over several areas in both Gedo and Bakool regions, Saakow district in Middle Juba region, and Bur Hakaba district in Bay region. In the central parts of the country, rainfall of similar amounts is likely over Gaalkacyo in risk levels were reported at Luuq on 21st October 2023 and at Bardheere on 22nd October without significant riverine flooding incidences. Heavy localized rains (88.2 mm) received on 21st October 2023 resulted in flash floods in Beletweyne which affected population, assets, and livestock particularly at the bridge near the ex-livestock market and in Hawo Taako and Kooshin villages. The IDPs are reported to have been safely evacuated to Ceel Jaale. Moderate rainfall (31.5 mm) received in Jowhar on 23rd October 2023 led to flash floods that affected Badda Cas IDP camp interrupting livelihood activities.



Mudug region, Cabuudwaaq in Galgaduud region, Bulo Burte district in Hiraan region, and Cadale and Balcad districts in middle Shabelle region.



Map 1: 7 - Days Cumulative rainfall forecast over Somalia

**Light rainfall of below 50 mm** is likely over the rest of the country except for the following areas where **dry conditions** are expected to prevail: several areas in Bari, Lower Juba and Middle Shabelle regions, southern parts of Bay region, non-coastal parts of Ceel Dheer district in Galgaduud region, non-coastal parts of Xarardheere district in Mudug region, Garowe district and coastal parts of Eyl district in Nugaal region, and Las Anod district.

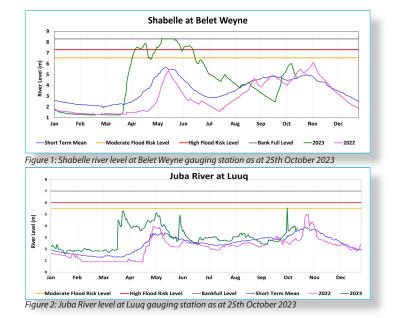
**Temperature Forecast:** Elevated temperatures between 35°C and 45°C are likely over Lower Juba, Middle Juba, Lower Shabelle, southern parts of Dinsor and Bur Hakaba districts in Bay region, Jowhar district in Middle Shabelle region, and Sheikh district in Woqooyi Galbeed region. Milder temperatures of between 20°C and 25°C are likely over the highlands in central parts of Sanaag region and northern parts of Bari regions. The rest of the country is expected to observe moderate temperatures between 25°C and 35°C.

# **Current River Levels**

Significant fluctuations in water levels were observed along both Juba and Shabelle Rivers in the last one week. Compared to observations taken on the 18th October 2023 along Juba River, today's (25th October 2023) water levels represent a slight decrease from 3.86 m to 3.78 at Dollow, an increase from 3.84 m to 4.58 m at Luuq, an increased from 6.20 m to 7.10 m at Bardheere, and a significant increase from to 5.70 m to 7.4 m at Bualle. High flood risk level was surpassed by 10 cm at Luuq on 21st October 2023 with decreasing trend thereafter. Downstream at Bardheere, the water level rose from 8.00 m on 21st October to 9.00 m and crossing high-risk threshold (8.20 m) on 22nd October before receding back to 8.00 m on 23rd October. The downstream flow of the flood wave led to a 1.1 m rise in the water level at Bualle on 23rd October which has since dropped way below flood risk level.

# Impacts Associated with the Weekly Weather Forecast

The very heavy rainfall of above 200 mm predicted over the Ethiopian highlands and the moderate rains over both Juba and Shabelle river catchment areas within the country are likely to result in voluminous runoff into the river streams with about one-week long lag period. Following the approximately three-weeks long rains, the accelerated run off over the already saturated soils will lead to a rise in water levels along the Juba and Shabelle rivers posing high risk of flooding from the end of the forecast period onwards. There is an added potential high risk of flash flooding in susceptible built-up areas in Wogooyi Galbeed, northern parts of Owdweyne district in Togdheer region and Bulo Burte in Hiraan region because of anticipated isolated heavy storms. The potential risk of flash floods over Hiraan is predicted earlier between 25th and 27th October 2023. Residents living within these vulnerable areas are strongly advised to remain vigilant and take necessary precautions. It is imperative to proactively implement both riverine and flash flood anticipatory measures, especially in vulnerable areas, as an integral component of the early warning system.



Compared to observations made on 18th October 2023 along Shabelle River, today's (25th October 2023) water levels represent a significant increase from 4.75 m to 6.22 m at Beletweyne, a slight increase from 5.00 m to 5.48 m at Bulo Burte, and a slight increase from 4.00 m to 4.28 m at Jowhar. The water level at Beletweyne (6.44 m) was only 6 cm below the moderate flood risk threshold on 21st October.

Figures 1 and 2 above show the current river levels against the Short Term Mean and 2022 levels for Belet Weyne and Luuq stations respectively.

The anticipated moderate to heavy rainfall expected over the agropastoral livelihood zones over northwestern, central, and southwestern parts of the country, specifically in Gedo, Bakool, Hiraan, Woqooyi Galbeed, and in the northern parts of Togdheer, will be favorable for crop as well as fodder growth. The elevated temperatures likely over Lower Juba, Middle Juba, Lower Shabelle, southern parts of Dinsor and Bur Hakaba districts in Bay region, Jowhar district in Middle Shabelle region, and Sheikh district in Woqooyi Galbeed region could result in significant evapotranspiration. However, the wet soil conditions associated with the seasonal rainfall projection will still favor crop, pasture, and fodder production. The least evapotranspiration will be observed over the highlands in central parts of Sanaag region and northern parts of Bari regions where milder temperatures are expected.

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