Food and Agriculture Organization of the United Nations

SWALIM
Somali Water and Land Information Management

SOMALIA WEEKLY WEATHER FORECAST

Valid From 27th March to 2nd April 2024

Moderate to heavy rains expected over most parts of Somaliland, Jubaland, South West, Hirshabelle, and Galgaduud with dry conditions likely to continue over most parts of Puntland.

Weather Review for the Week Between 20th - 26th March 2024

As the Jilal season comes to an end, the fourth week of March was marked by significant cloudiness across most parts of the country and light to moderate rainfall over a few places. The observed conditions represent a departure from the year 2023 when an early transition into the Gu long rain season was reported.

In the last one week, rain was observed in the southern and northern parts of the country. The following stations (Figure 1) received more than 1 mm of rain since 20th March 2024: Ruqi (40 mm), Baki (34 mm), Qulujed (24 mm), Xariirad (24 mm), Garbodadar (13.5 mm), and Borama (5.5 mm) in Awdal region, Gebiley (23 mm) and Wajaale (6.5 mm) in Waqooyi Galbeed region, Bargaal (10 mm) in Bari region, Luuq (9.8 mm) in Gedo region, and Uusgure (8mm) in Nugaal region. The most intense rains were received at Ruqi (24 mm) in one day on 26th March 2024.

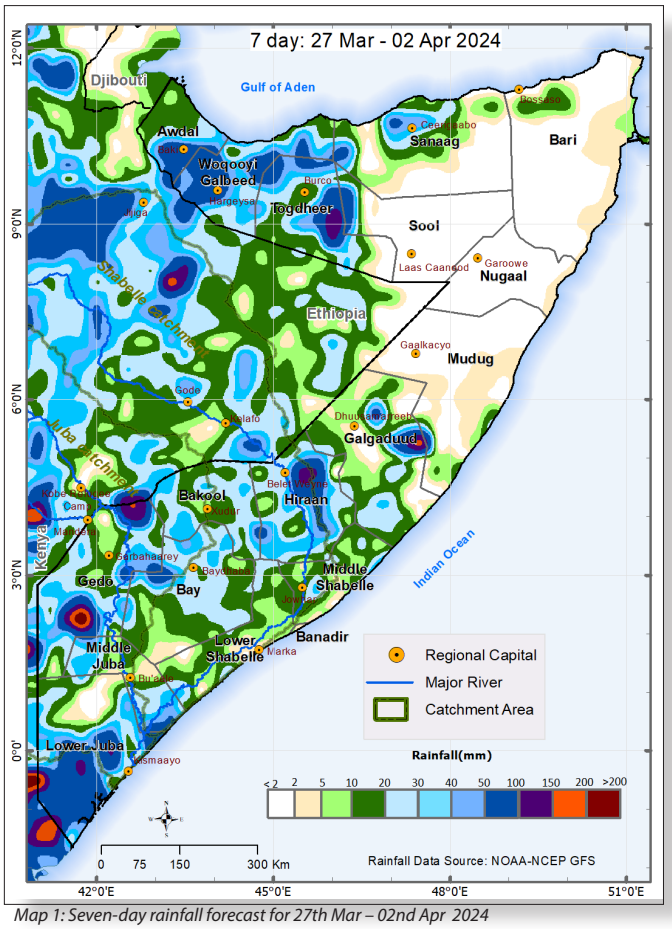
Weather Forecast for the Week Between 27th March and 2nd April 2024

This forecast period marks the transition from the tail-end of Jilal to the forecast Gu season onset. Based on NOAA-NCEP Global Forecasting System (GFS), moderate to heavy rains are expected over most parts of Somaliland, Jubaland, South West, Hirshabelle, and Galgaduud with dry conditions likely to continue over most parts of Puntland. The cloudiness and rains in the northern parts of the country are likely to be mediated by the north easterly winds ascending the east-west oriented elevations. While patches of clouds and isolated rains are likely over the elevated areas in Sanaag and Bari, the intensity of the rains over Awdal and Woqooyi Galbeed on the windward sides of the Harage Highlands across the Ethiopian border. The forecast rains in the southwestern parts of the country are likely to be driven by the arrival of the Inter Tropical Convergence Zone (ITCZ) and therefore signal the onset of Gu rains.

The temporal and spatial distribution of the forecast rainfall (Map 1) are as follows:

Heavy cumulative rainfall between 100 mm and 150 mm is forecast over western parts of Badhaadhe district and central parts of Kismaayo district in Lower Juba region, central areas of Bardheere district and northern areas of Luuq district in Gedo region, central areas of Belet Weyne district in Hiraan region, eastern parts of Dhuusamareeb district in Galgaduud region and eastern parts of Burco district in Togdheer region. The rains over isolated places in these areas particularly Badhaadhe in Lower Juba, Bardheere and Luuq districts in Gedo region and Dhuusamareeb district in Galgaduud region are likely to be more intense leading up to more than 150 mm. As the week progresses the very heavy rains over Bardheere district in Gedo region are likely to sum up to more than 200 mm. It is noteworthy that such rains are likely to fall within the in-country catchments of both Juba and Shabelle Rivers.

Moderate cumulative rainfall of between 50 m and 100 mm is expected over most places in the following areas: Badhaadhe,



Map 1: Seven-day rainfall forecast for 27th Mar – 02nd Apr 2024

Kismaayo and Jamaame districts in Lower Juba region, Bardheere and Luuq districts in Gedo region, Belet Weyne district in Hiraan region, Dhuusamareeb district in Galgaduud region, Burco district in Togdheer region, Gebiley district and western parts of Hargeisa district in Woqooyi Galbeed region, Baki and Borama districts in Awdal region. Moderate rains are also likely over Jilib district in Middle Juba region, Garbahaarey district in Gedo region, Qansax Dheere district in Bay region, Tayeeglow district in Bakool region, Bulo Burte district in Hiraan region, Sheikh district in Togdheer, Berbera district in Woqooyi Galbeed region, and Ceerigaabo district in Sanaag region. The rains in the northern parts of the country particularly those over the northern border between Gebiley and Hargeisa districts are likely to be observed earlier between 27th and 29th March 2024.

Light cumulative rainfall of less than 50 mm is forecast over most of the other places in Awdal, Woqooyi Galbeed, Togdheer, Lower Juba, Gedo, Bay, Bakool, Middle Juba, Lower Shabelle, Middle Shabelle, Hiraan, and Galgaduud regions.

Light rainfall is also likely over most parts of central and northern parts of Ceerigaabo district in Sanaag region and a few places in Bosasso and Qandala districts in Bari region. It is important to point out that the rains over the upper catchments of both Juba and Shabelle Rivers will be light to moderate in intensity.

Dry conditions are likely to prevail over vast areas in Mudug region, Nugaal region, Sool region and Bari region. Dry conditions are also expected over a few places in the following areas: Ceel Afweyn and Laasqoray distrcist in Sanaag region, Cabudwaaq and Ceel Dheer districts in Galgaduud, Balcad district in Middle Shabelle, Qoryooley, Sablaale and Baraawe districts in Lower Shabelle, eastern parts of Bu'aale district in Middle Jubas, northern parts of Afmadow district in Lower Juba region.

Temperature Forecast:

Elevated temperatures of above 40°C are expected over southwestern parts of Somalia. The hot and dry mass is likely to lead to heat stress particularly over most parts of Afmadow district and northern parts of both Badhaadhe and Kismaayo districts in Lower Juba region, border areas between Bay and Lower Shabelle regions. While such heat stress is associated with thermal discomfort, it is the lifting of this hot and moist airmass that will precipitate into the rains in the coming days. A hot but wet air mass is likely to be observed over Garbahaarey, Luuq and Dollow districts in Gedo region. Most parts of the country are likely to observe generally warm conditions of between 30°C and 40°C. The areas that are likely to record temperatures less than 30°C are mostly the elevated areas in the north including places in Ceerigaabo district in Sanaag region, Qandala district in Bari region, Borama district in Awdal region, Gebiley and Hargeisa districts in Woqooyi Galbeed and Sheikh district in Togdheer region. A warm and wet air mass is likely over Burco and Sheikh districts in Togdheer region, Borama districts in Awdal region, Gebiley district and western parts of Hargeisa district in Woqooyi Galbeed region.

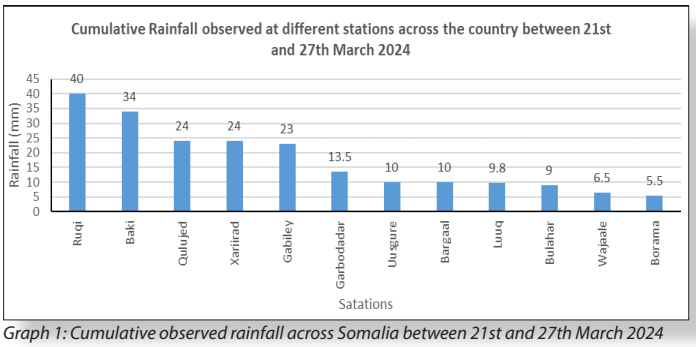
Current River Levels

Along the Shabelle River, the current level at Belet Weyne is almost identical to station Long Term Mean (LTM) and below the 2023 level (Graph 1). At both Bulo Burte and Jowhar, the current river levels are exactly as it was last year in 2023 and above stations' LTMs. Compared to observations taken on 20th March 2024, levels recorded today (27th March 2024) at Belet Weyne (2.08 m) and Bulo Burte (2.22 m) represent steadiness while that at Jowhar (2.30 m) represent a slight rise.

Current levels along the Juba River are above the station LTM and below the 2023 levels at Dollow and Luuq (Graph 2). Compared to observations taken on 20th March 2024, levels recorded today (27th March 2024) at Dollow (2.22 m) and Luuq (2.10 m) represent a slight rise. This is in response to run off from the light rainfall observed within the Juba River catchment within the country.

Impacts Associated with the Weekly Weather Forecast

The isolated heavy rains forecast over places within the in-country catchments of both Juba and Shabelle Rivers are likely to generate sufficient run off to cause a steady rise of in the river levels. Since rains of lesser intensity are anticipated over the upper catchments, the steady river level rise is expected to be below flood risk thresholds. While the rains are expected to increase in both intensity and spread beyond the forecast period, the standard lag between storm events and run off, imply that noticeable peak in river levels will be observed in the second week of April particularly over Shabelle River.



Graph 1: Cumulative observed rainfall across Somalia between 21st and 27th March 2024

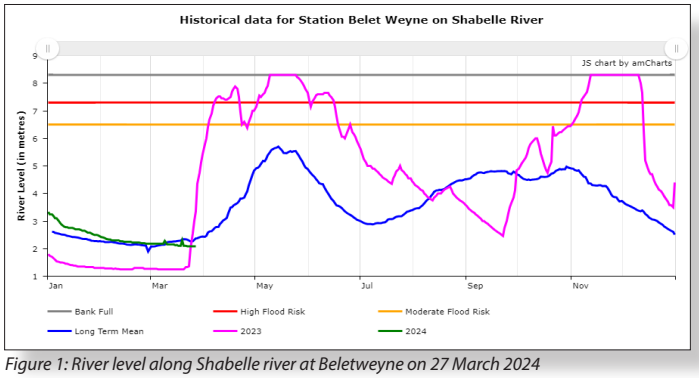


Figure 1: River level along Shabelle river at Beletweyne on 27 March 2024

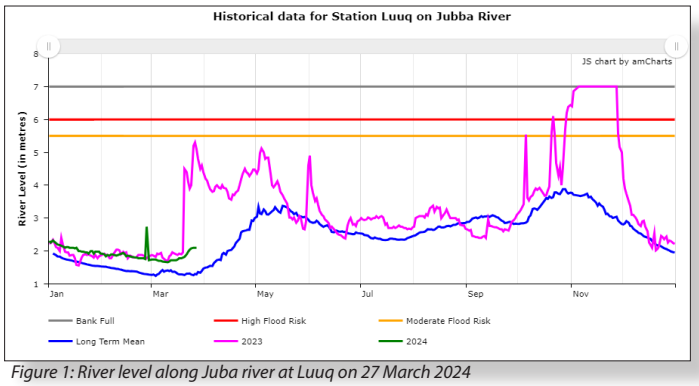


Figure 1: River level along Juba river at Luuq on 27 March 2024

The sensitivity of Juba River levels to rainfall events calls for day by day monitoring of storm events within its catchments.

The onset of rains over the Shabelle and Juba River channels calls for urgency and concert of effort towards the completion of any ongoing structural interventions and logistical prepositioning of other flood related anticipatory action items. The forecast onset of Gu rains in the first week of April calls for sustained provisions of land preparatory activities and inputs in time for early crop and fodder planting so as to take advantage of the prevailing soil warmth and forecast moisture conditions.

The hot and dry mass is likely to lead to heat stress particularly over most parts of Afmadow district and northern parts of both Badhaadhe and Kismaayo districts in Lower Juba region, border areas between Bay and Lower Shabelle regions with negative implications on human thermal comfort. The hot air mass over Garbahaarey, Luuq and Dollow districts in Gedo region is likely to lead to elevated rate of evaporation of the forecast wet soil conditions. Favorable warm and wet conditions are likely particular over Burco and Sheikh districts in Togdheer region, Borama districts in Awdal region, Gebiley district and western parts of Hargeisa district in Woqooyi Galbeed region.

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Ngecha Road, off Lower Kabete Road, Kenya | www.faoswalim.org | swalim@fao.org