

SOMALIA WEEKLY WEATHER FORECAST

Valid: 8 to 14 May 2024

Light rains are expected over most parts of the country with moderate rains likely over Lower Shabelle and coastal parts of Lower Juba.

Weather Review for the Week Between 30 April and 6 May 2024

The first week of May was marked by light to heavy rains received at fifty-seventh (57) stations (*Figure 1*) spread across the country particularly in the following regions: Waqooyi Galbeed, Togdheer, Sanaag, Sool, Nugaal, Hiiraan, Bari region, Awdal, Lower Shabelle, Middle Shabelle, Bay, Lower Jubba and Mudug regions.

The following individual stations received more than 40 mm of cumulative rain between 30 April and 6 May 2024: Buloburti (144.8 mm), Belet weyne (77.2 mm) and Mataban (55 mm) in Hirshabelle region; Balli Dhiiddin (113.9 mm) in Bari region; Eyl (105 mm) and Garowe (88.3 mm) in Nugaal region; Baligubadle (77.0 mm), Gumburaha (71.0 mm), Lasso Dacawo (56.0 mm) in Waqooyi Galbeed region; Dhahar (202.0 mm) and Garadag (73.0 mm) in Sanaag region; Xudun (78.4 mm), Waridaad (68.0 mm) and Las Anod (67.0 mm) in Sool region and Balidhiig (89.0 mm), Xaaji Saalah (57.0 mm) in Togdheer region.

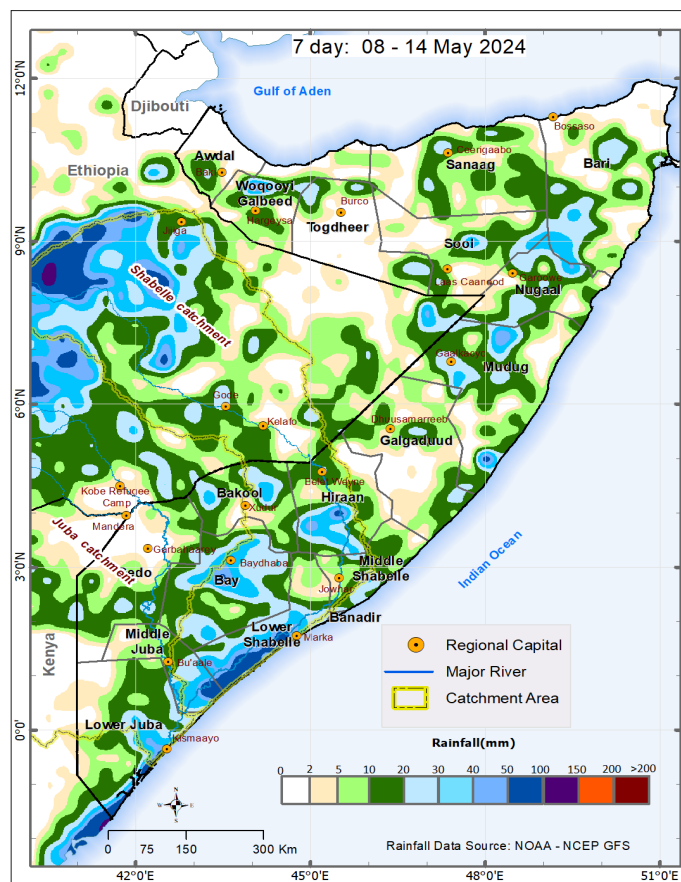
The very heavy rainfall (117.5 mm) received on the night of 6 May at Doolow led to destructive flash floods disrupting people's movements and supplies and destroying latrines and water supply especially in displacement sites. The moderate to heavy rains received at Belet Weyne is reported to have caused flash floods in four villages (Kooshin, Hawa Taako, Howl Wadaq and Oktober) within Belet Weyne town affecting 28 IDP camps.

Having landed at Mafia Island in Tanzania on 4th May, tropical cyclone Hidaya did not have significant impact on the rains, winds, and ocean waves over the Somalia coastline.

Weather Forecast for the Week Between 8 and 14 May 2024

During the week between 8 and 14 May 2024, and based on NOAA-NCEP GFS, light rains are expected over most parts of the country with moderate rains likely over Lower Shabelle and coastal parts of Lower Juba. Based on climatology, the observed and anticipated northward spread of the rains into the central and northern parts of Somalia is favored by the northward movement of the Inter Tropical Convergence Zone (ITCZ). The ITCZ's arrival will attract low-level incursions of precipitable water inland, mitigating prolonged dry conditions over Bari.

After the prolonged stagnation, the Madden Julian Oscillation (MJO) index has now propagated eastwards from our region. This is likely to favor a week-long break from the moderate to heavy rains received in the region. The forecast return of the index is likely to drive moderate to heavy rains from 15 May 2024. The forecast rains in the third week of May (15 – 21 May) are associated with better skill and reliability. The rains are likely to decrease thereafter marking the end of the Gu season particularly in Jubaland, South West and Hirshabelle. The effect of the sea surface temperature (SSTs) difference between the eastern and western Indian Ocean on the rains cannot also be ruled out. According to Australian Bureau of Meteorology, the warming in the Indian Ocean indicates a likelihood of positive Indian Ocean Dipole (IOD) developing earlier than usual. However, it has been reported that MJO events occurring during positive IOD have weaker convection and less organized wind anomalies which restricts local low-level moisture transport thus explaining the low likelihood of very extreme rainfall this season. Week by week and day-to-day monitoring is therefore advised.



Map 1: Cumulative rainfall forecast over Somalia between 8 and 14 May 2024

The temporal and spatial distribution of the forecast rainfall (*Map 1*) according to NOAA-NCEP GFS are as follows:

Moderate cumulative rainfall between 50 mm and 100 mm is likely over Lower Shabelle region particularly Barawe, Marka and southern parts of both Sablaale and Kurtunwaarey districts. Similar moderate rains are likely over the coastal parts of Lower Juba region particularly Badhadhe, Kismaayo and Jamaame districts. The rains, according to ICPAC weekly forecast may be more intense (100 mm to 200 mm) over Hirshabelle region including the Shabelle River catchment within the country and upstream in Ethiopia.

Light cumulative rainfall of less than 50 mm is forecast across the most other parts of the country particularly in Waqooyi Galbeed, Sanaag, Nugaal, Mudug, Hirshabelle, Bay, Bakool, Middle Shabelle, and Middle Juba regions.

Dry conditions are particularly likely over the Zeylac, Lughaye and Baki districts in Awdal region; Berbera district and eastern parts of Hargeisa district in Waqooyi Galbeed region; Odweine, Burao and Buhoodle districts in Togdheer region; Ceel Afweyn district in Sanaag region; and Bossaso, Qandala, Calula, Isku-shuban and Bandarbeyle districts in Bari region. Towards the central part of the country dry conditions are also expected over western parts of both Burtinle and Garowe and coastal parts of Eyl district in Nugaal region; Xarardheere, Hobyo and Jariiban districts in Mudug region; and Ceel Buur and Cadaado districts in Galgaduud region.

Dry conditions are also expected western parts of Afmadow district in Lower Juba region; Doolow and Belet Xaawo districts, western parts of both Luuq and Garbahaarey districts and southern parts of Baardheere district in Gedo region; Saakow district in Middle Shabelle region; Xudur in Bakool region; Wanla Weyn district in Lower Shabelle region; and western parts of Jowhar district in Middle Shabelle region.

Temperature Forecast:

Moderately high temperatures of between 35°C and 40°C are likely over the central parts of the country particularly over Cadaado, Cabudwaaq, Dhuusamarreeb, and Ceel Buur districts in Galgaduud region; central and eastern parts of Gaalkacyo district and vast inland parts of both Hobyo and Jariiban districts in Mudug region; central, eastern, and southern parts of Belet Weyne district and central and eastern parts of Bulo Burte district in Hiraan region; and Jowhar and Adan Yabaal districts in Middle Shabelle region; and central parts of Wanla Weyn district in Lower Shabelle region. Towards the north similar temperatures are likely over central parts of Garowe and western parts of Eyl district in Nugaal region; narrow strip in the central parts of Laas Caanood district in Sool region; Bossaso, Caluula, and Iskushuban districts in Bari region; Ceel Afwyn district in Sanaag region, Berbera district in Woqooyi Galbeed region; and Baki, Lughaye and Zeylac districts in Awdal region. Similar temperatures are also expected in the south particularly over Doolow district and

western parts of Luuq district and northern parts of Garbahaarey district in Gedo region.

Moderate temperatures of between 30°C and 35°C are likely over Bay, Bakool, Lower Juba, Middle Juba, and Togdheer regions. Similar temperatures are also expected over Sablaale, Baraawe, Kurtunwaarey, Qoryooley, Marka and Afgoye districts in Lower Shabelle region; Balcad and Cadale districts in Middle Shabelle region; Jalalaqsi district in Belet Weyne; and Ceel Dheere district and northwestern and southwestern parts of Gaalkacyo district in Galgaduud region. Towards the north, such temperatures are likely over Burtinle district and northern parts of both Garowe and Eyl districts in Nugaal region; and Qardho and Bandarbeyla districts in Bari region. Similar temperatures are expected in the northwestern part of the country including over Caynabo, Xudun and Taleex districts in Sool region; Laaasqoray district and southern part of Ceerogaabo district in Sanaag region, Hargeysa district and northern parts of Gebiley district in Wooyi Galbeed region; and Borama district and southern parts of Baki district in Awdal region.

Temperatures less than 30°C are anticipated over the central the central northern parts of Cerigaabo district in Sanaag region, Qandala district in Bari region and northern parts of Odweyne district in Togdheer region.

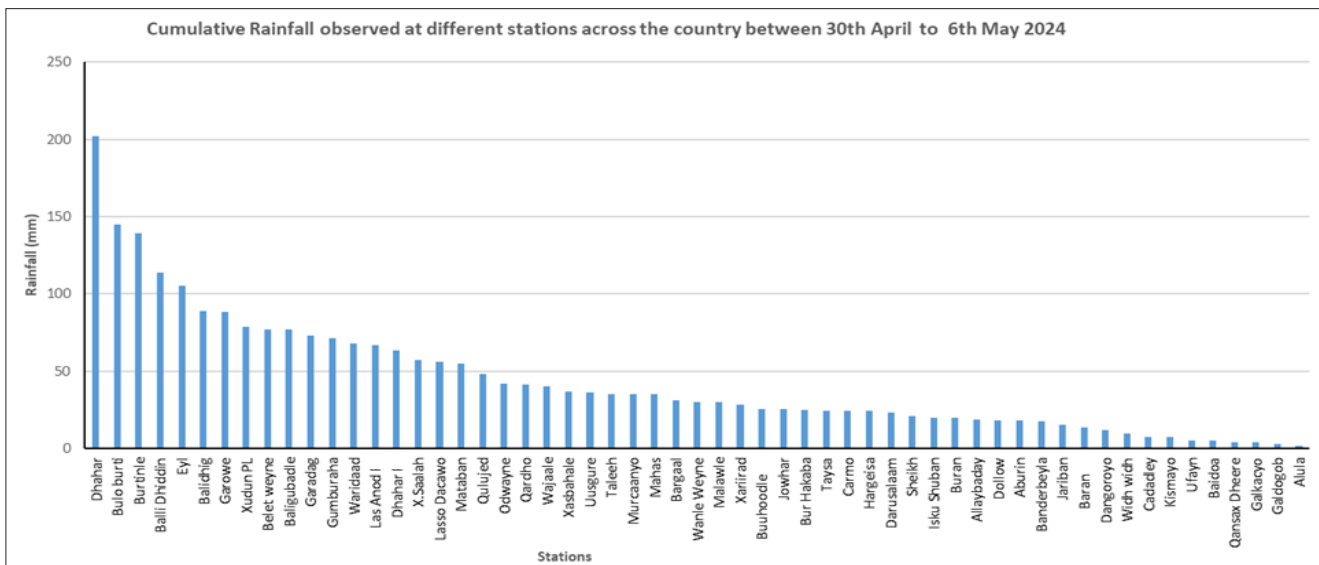


Figure 1: Stations that observed rainfall of more than 1 mm between 30 April and 6 May 2024

Current River Levels

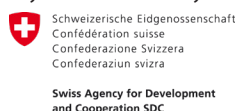
The levels along the Shabelle River have risen following the moderate to heavy rains received in the last week. At 18 cm above high flood risk threshold, the current river level at Belet Weyne is above the station Long Term Mean (LTM) and below the 2023 level (Graph 1). At Bulo Burte, the current river level is slightly above the station LTM and below the 2023 level. The level at Jowhar has dropped from flood risk levels and is now at the same level as the Long-Term Mean (LTM) and above the 2023 level. Compared to observations taken on 1 May 2024, levels recorded on 8 May 2024 at Belet Weyne (7.48 m) and at Bulo Burte (5.14 m) represent 98 cm and 68 cm rise respectively. The observation at Jowhar (4.55 m) represents a 5 cm drop.

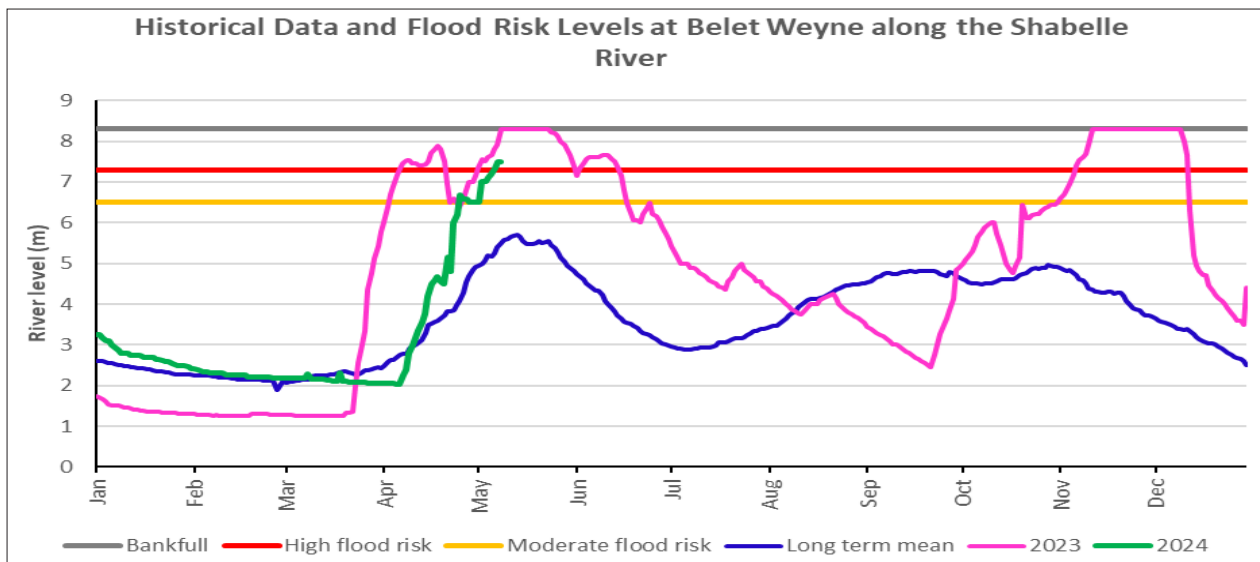
The runoff from the very heavy rainfall on 6th May led to a sharp rise in Juba River level to above high flood risk level at Doolow. While the river at Doolow has since dropped to below high-risk level, it is still above both station LTM and 2023 level. The Juba River at Luuq (Graph 2) has risen to above moderate flood risk level and above both the station LTM and the 2023 level. Compared to observations taken on 1 May 2024, levels recorded on 8 May 2024 at Doolow (4.86 m) and Luuq (5.62 m) represent 1.60 m and 1.90 m rise, respectively. Even with the unavailability of measurements from the traditional gauging stations at Bardheere and Bu'aale, it is anticipated that a similar rise in the levels is likely as the water flows downstream along the central and lower sections of the Juba River.

SWALIM is a multi-donor project managed by FAO and currently funded by The European Union, SDC, FCDO, Government of France and USAID

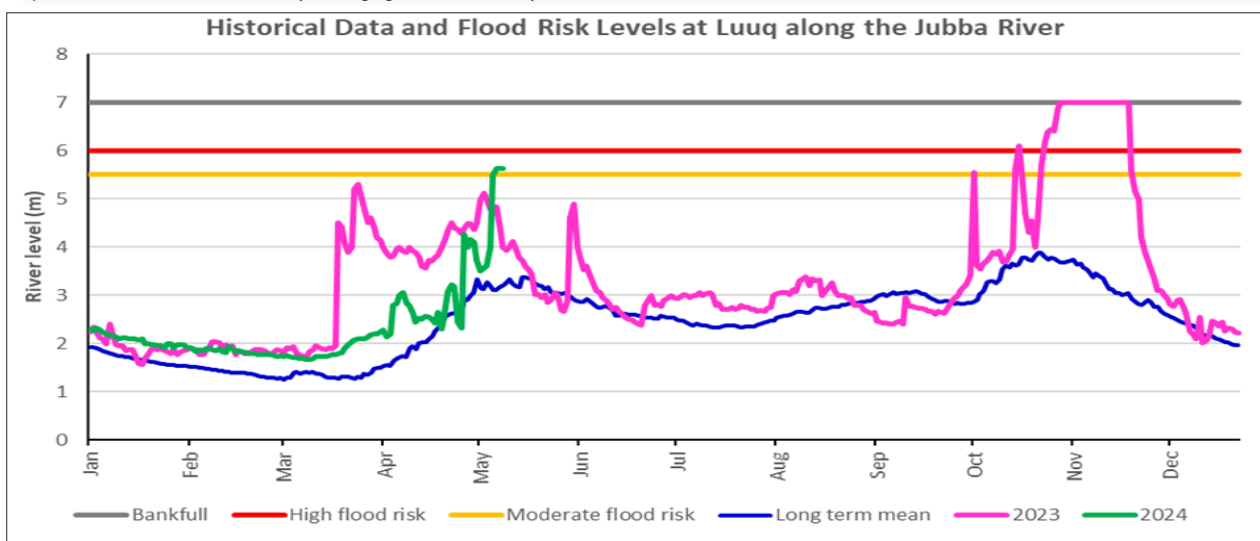


Funded by the European Union





Graph 1: Shabelle River level at Belet Weyne Gauging Station as of 8 May 2024



Graph 2: Juba River level at Luuq Gauging Station as of 8 May 2024

Impacts Associated with the Weekly Weather Forecast

Considering the current saturated soil conditions, the moderate rains forecast within the Shabelle river catchment is likely to generate sufficient run off to sustain the high river level posing high flood risk particularly at existing vulnerable breakage points within Belet Weyne town. As the water flows downstream, it is expected that the river will also rise to moderate flood risk level at Bulo Burte, Jalalaqsi, Jowhar and Balcad within the coming week. **There is therefore sustained flash flooding and high riverine flooding risk at Belet Weyne and moderate riverine flooding risk at Bulo Burte.**

The light to moderate rains expected along the entire Juba River are likely to sustain the high levels at Doolow and Luuq, and lead to a rise in levels at Baardheere, Bu'aale and Jilib within the next one week. **There are therefore sustained flash floods and moderate riverine flooding risk at Doolow and Luuq and downstream at Baardheere, Bu'aale and Jilib within the coming week.** However, due to the known high sensitivity of the Juba River levels to rainfall events, day by day monitoring is advised. Given the inherent Gu forecast uncertainty, **the activated flash and riverine flood response plans should be sustained along the entire reach of both Juba and Shabelle Rivers.**

The observed rains across the country and forecast rains over some areas, are beneficial to agropastoral livelihoods in many aspects including favorable soil moisture conditions for crop and fodder production, and replenishment of surface and ground water sources. The **forecast warm and moist airmass** over the following regions will particularly favor agropastoral livelihoods: Lower Shabelle region particularly Baraawe, Marka and southern parts of both Sablaale and Kurtunwaarey districts, coastal parts of Lower Juba region particularly Badhadhe, Kismaayo and Jamaame districts, and central parts of Ceerigaabo district in Sanaag region.

The forecast **hot and dry airmass** over the following areas will be harsh to agropastoral livelihoods due to enhanced evapotranspiration: Cadaado and Ceel Buur districts in Galgaduud region, vast inland parts of both Hobyo and Jariiban districts in Mudug region; western parts of Jowhar; central parts of Wanla Weyn district in Lower Shabelle region; Doolow district and western parts of Luuq district in Gedo region; Berbera district in Woqooyi Galbeed region; Baki, Lughaye and Zeylac districts in Awdal region; Ceel Afwyn district in Sanaag region; and Bossaso, Caluula, and Iskushuban districts in Bari region.

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