Food and Agriculture Organization of the United Nations

SWALIM
Somali Water and Land Information Management

SOMALIA WEEKLY WEATHER FORECAST

Valid From 10 to 16 April 2024

Light to moderate rains expected over several isolated areas in Jubaland, Southwest and Galgaduud with dry conditions in Somaliland and Puntland.

Weather Review for the Week Between 2 and 9 April 2024

The last week of March was marked by significant cloudiness across most parts of the country with moderate to heavy rainfall received over some places particularly in Awdal, Waqooyi Galbeed, Gedo, Hiiraan, Middle Shabelle and Bay regions.

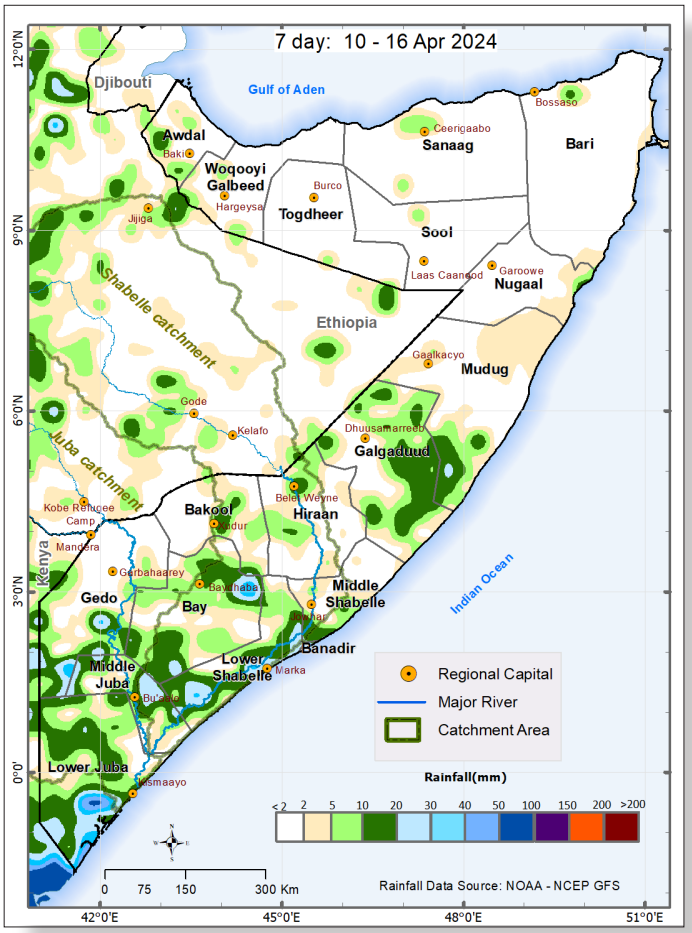
The following stations (Figure 1) received more than 1 mm of rain between 2 and 9 April 2024: Gumburaha (117.0 mm), Las Dacawo (70.0 mm), Dhubato (59.5 mm), Allaybaday (54.0 mm), Gebilley (50.0 mm), Botor (46.0 mm), Sheikh (42.5 mm), Wajaale (38.5 mm), Hargeisa (35.0 mm), Dararweyne (32.0 mm), Cada (30.0 mm), Geeddeeble (30.0 mm), Gacan-libah (28.0 mm), Cadaadley (20.0 mm), Malawle (19.0 mm), and Berbera (3.0 mm) in Waqoooyi Galbeed region, Baki (92.5 mm), Taysa (68.0 mm), Ruqi (68.0 mm), Aburin (51.0 mm), Dilla (48.0 mm), Borama (46.5 mm), Qulujeed (37.0 mm), Amoud (35.0 mm), Xeego (25.0 mm), Harirad (17.0 mm), Boon (8.0 mm) and Lughaye (5.0 mm) in Awdal region, Baardheere (190.0 mm) and Dollow (4.5 mm) in Gedo region, Jawhar (14.5 mm), Bullo burte (5.8 mm), in Hiiran region, Balcad (26.0 mm) in Middle Shabbele, Burhakaba (10.0 mm) in Bay region.

Weather Forecast for the Week Between 10 and 16 April 2024

During the week between 10 and 16 April 2024, and based on NOAA-NCEP GFS, light to moderate rains is predicted over several isolated areas in Jubaland, Southwest and Galgaduud with dry conditions in Somaliland and Puntland. It is important to point out that ICPAC's forecast based on WRF anticipates wetter conditions particularly over Gedo region. The chances of wetter conditions might be supported by the prolonged presence of MJO index over the Indian Ocean region. This stagnation of the MJO over this region indicates the presence of heavy rainfall producing conditions. The prevalent dry conditions over most parts of Puntland are likely to be driven by the low-level easterly winds blowing parallel to the coastline and therefore limiting the injection of water vapor inland. The anticipated spread of the rains from Jubaland into South West and possibly Galgaduud is favored by the northward movement of the Inter Tropical Convergence Zone (ITCZ).

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

Heavy cumulative rainfall between 100 m and 150 mm is likely over some isolated areas over Jubaland. Based on consensus such heavy rainfall is anticipated over Kismaayo district in Lower Juba region and, Bardheere and Ceel Waaq districts in Gedo region. According to ICPAC's forecast, the rains over Ceel Waaq district might be particularly heavy accumulating to above 150 mm. It is noteworthy that such projected heavy rains will fall within the catchment of Juba River.



Map 1:Cumulative rainfall forecast over Somalia between 10 and 16 April 2024

Moderate cumulative rainfall between 50 mm and 100 mm is likely over very isolated areas in Jubaland, Dinsoor and Qansax Dheere districts in Bay region, Sablaale, Baraawe, Wanla Weyne and Afgoye districts in Lower Juba region, Jowhar and Balcad districts in Middle Shabelle region.

Light cumulative rainfall of less than 50 mm is forecast over most other places in Jubaland, South West, Hirshabelle and Galgaduud. Isolated light rains are also likely over some areas in the northern parts of the country particularly the windward sides of the mountainous and hilly areas. Such rains are likely over Borama district and southern parts of both Baki and Zeylac districts in Awdal region, and Qandala district in Bari region.

Dry conditions are likely to prevail over vast areas of Puntland and Somaliland. Specifically, such dry conditions are likely over Mudug, Nugaal, Bari, Sool, Sanaag, Togdheer and Woqqoyi Galbeed. Some forecasts also anticipate dry conditions over some areas in Hirshabelle and Bakool region.

Temperature Forecast:

Moderately high temperatures of above 35°C are expected over Hiraan region, and most of the inland parts of the following regions: Lower Juba, Middle Juba, Lower Shabelle, Middle Shabelle, Galgaduud and Mudug. Such moderately high temperatures are also likely over Garbahaarey, Luuq and Doolow districts in Gedo region, and Waajid, Rab Dhuure and Tayeeglow districts in Bakool region. In the north such temperatures are likely over Garowe district in Nugal region, Iskushuban district in Bari region, Laas Anod and Xudun districts in Sool region, northern parts of Cel Afweyn district in Sanaag region, Berbera district in Woqooyi Galbeed region and northern parts of Baki district in Awdal region.

Current River Levels

Along the Shabelle River, the current level at Belet Weyne is below the station Long Term Mean (LTM) and exactly equal to the 2023 level (Graph 1). At Bulo Burte, the current river level is exactly equal to the station LTM and exactly equal to the level it was on the same day last year. Compared to observations taken on 2 April 2024, levels recorded on 10 April 2024 at Belet Weyne (2.78 m) represent 73 cm rise. Interestingly, the levels at Bulo Burte (2.20 m) and at Jowhar (2.28 m) represent 2 cm and 8 cm drop. The demonstrates general steadiness in the river response to run off from the light rains observed in the last week.

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 2 April 2024, levels recorded on 10 April 2024 at Dollow (3.18 m) and Luuq (2.80 m) represent 74 cm and 52 cm rise, respectively, in response to run off from the rainfall observed within the Juba River catchment. Even with the unavailability of measurements from the traditional gauging stations at Bardheere and Bu'aale , it is anticipated that a similar steady rise in the levels are likely along the central and lower sections of the Juba River.

Impacts Associated with the Weekly Weather Forecast

The heavy rains that are likely to fall within some isolated areas with the middle catchments of Juba River are likely to generate sufficient run off to cause a rise in the river levels. Given that light to moderate rain is forecast over most other places in the upper catchments of Juba and Shabelle Rivers, the rise in the levels is expected to be below high flood risk threshold along the Juba River and below moderate flood risk level along the Shabelle River. While cumulative rains over some places may increase in amounts, the standard lag between storm events and run off implies that the moderate flood risk levels will not be attained until the end of the forecast period. However, the known high sensitivity of the 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 catchments affirms the call for no-regret sustained and concerted effort towards the completion of any ongoing structural interventions and logistical prepositioning of other flood related anticipatory action items. It also calls for sustained provisions of land preparatory activities and inputs in time for early crop and fodder

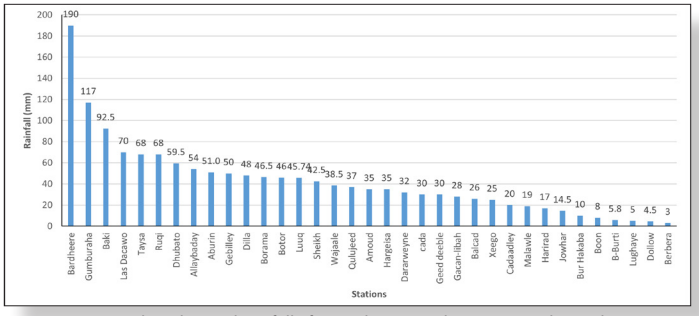
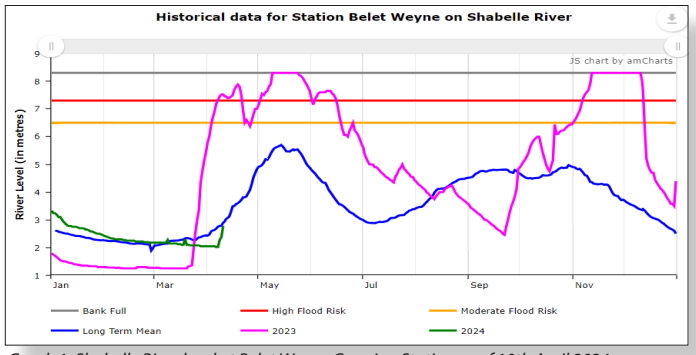
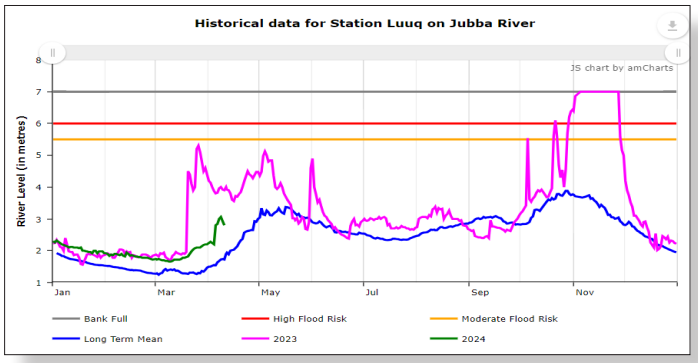


Figure 1: Stations that observed rainfall of more than 1 mm between 3 and 8 April 2024



Graph 1: Shabelle River level at Belet Weyne Gauging Station as of 10th April 2024



Graph 2: Juba River level at Luuq Gauging Station as of 10th April 2024

planting so as to take advantage of the prevailing soil warmth and forecast moisture conditions.

The forecast cloudiness is expected to alleviate the human heat stress associated with elevated temperatures previously observed over the southwestern parts of Somalia with improved human thermal comfort.

The forecast warm and wet airmass is likely to favor agropastoral activities over Bardheere and Ceel Waaq districts in Gedo region, some parts in Bay region particularly Baydhaba and Dinsoor districts, and some parts of southern Awdal region particularly Borama district.

The forecast hot and dry mass over most inland parts of the following areas is likely to lead to elevated rate of evapotranspiration with negative implications on agropastoral livelihood and natural vegetation: Mudug, Nugaal, Bari, Sool, Sanaag, Togdheer and Woqqoyi Galbeed. Such elevated rates of evapotranspiration may also be observed over some areas in Hirshabelle and Bakool region.

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

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Agency for Development and Cooperation SDC

British Embassy Mogadishu

RÉPUBLIQUE FRANÇAISE
Liberté
Égalité
Fraternité

USAID FROM THE AMERICAN PEOPLE