Climate



June 2018 Monthly Rainfall and NDVI (Issued July 20, 2018)

Highlights

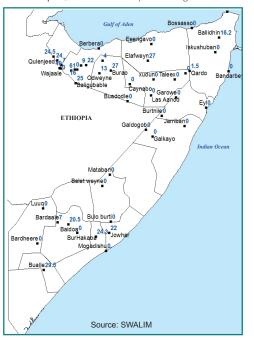
The Gu 2018 seasonal rains (April-June) persisted in most of the northern regions and some areas in the South. However, this significantly reduced in terms of intensity with poor spatial and temporal distribution. rainfall activities were experienced in the 3rd dekad of June, with most of the stations recording below average rains in the month of June except a few stations including; Bilidhin (16mm), Elafweyn (27mm), Burao (27mm), Aburin (61mm) and Baidoa (20mm) {Table 1 and Map1}. Shabelle river level has significantly dropped due to reduction of rainfall activities in the upper catchments. However, it is still supportive of crop irrigation activities especially in Hiran.

Rainfall estimates (RFE) derived from tropical applications of Meteorology using satellite (TAMSAT) confirms gradual end of Gu rains in large parts of the country (Maps 3-5). Analysis of Normalized Difference Vegetation Index (NDVI) derived from E-Modis show substantial improvement in vegetation conditions in key pastoral and agropastoral areas which is attributed to effective rainfall in April and May. However, depressed vegetation is evident in small pockets of agropastoral of Shabelle, Northern Inland Pastoral (NIP) and pastoral livelihoods in the Juba's and Gedo (Maps 6-8 and 10).

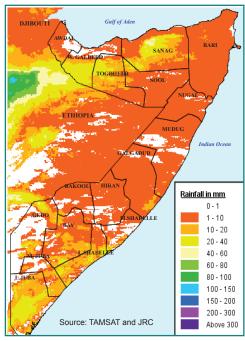
Field reports confirm that pasture and water conditions in many parts of the country have improved and remain favorable while opportunistic normal livestock migration in search for better pasture is observed across the country.

In localized areas in NIP and Coastal *Deeh*, pasture and browse availability is still limited. In Bay, the early-planted crops are at maturity stage. Lateplanted crops (Soghurm, maize and sesame) are in good condition and are at establishment stages. They are expected to be harvested in late August to early September 2018. In the flood affected areas along Shabelle River, some farmers replanted crops and benefitted from recession cultivation.

Map 1: June 2018 Monthly Rain Gauge Data

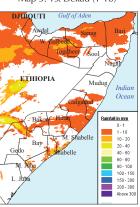


Map 2: June 2018 Monthly Rainfall Estimates (TAMSAT)

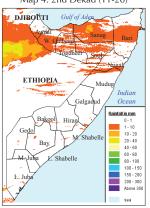


June 2018: Dekadal Rainfall (RFE) Progression

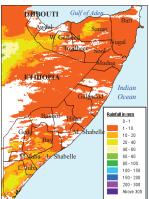
Map 3: 1st Dekad (1-10)



Map 4: 2nd Dekad (11-20)

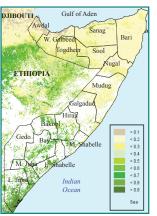


Map 5: 3rd Dekad (21-30)

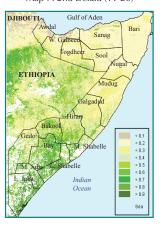


June 2018: Dekadal Vegetation Cover (NDVI) Progression

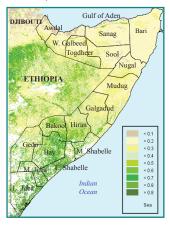
Map 6: 1st Dekad (1-10)



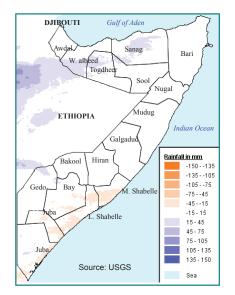
Map 7: 2nd Dekad (11-20)



Map 8: 3rd Dekad (21-30)



Map 9: June 2018 Estimated Rainfall Difference (in mm) From Short Term Mean (1999-2017)



Map 10: June 2018 Vegetation Cover (NDVI) Absolute Difference from Short Term Mean (2001- 2017)

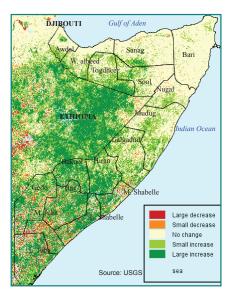


Table 1: Observed rain gauge data compared to long term monthly averages (June 2018)

Northern Regions

Region	Station_ Name	dek 1	dek 2	dek 3	Jun-18	LTM
Awdal	Borama	0.0	8.0	16.0	24.0	27.0
Awdal	Qulenjeed	0.0	0.0	24.5	24.5	40.0
Bari	Bossasso	0.0	0.0	0.0	0.0	0.0
Bari	Qardo	0.0	0.0	1.5	1.5	4.0
Bari	Dangoroyo	0.0	0.0	0.0	0.0	4.0
Bari	Ballidhin	16.2	0.0	0.0	16.2	4.0
Bari	Alula	0.0	0.0	0.0	0.0	0.0
Bari	Bandarbeyla	0.0	0.0	0.0	0.0	2.0
Bari	Iskushuban	0.0	0.0	0.0	0.0	2.0
Mudug	Galdogob	0.0	0.0	0.0	0.0	7.0
Mudug	Jarriban	0.0	0.0	0.0	0.0	6.0
Mudug	Galkayo	0.0	0.0	0.0	0.0	6.0
Nugaal	Garowe	0.0	0.0	0.0	0.0	9.0
Nugaal	Eyl	0.0	0.0	0.0	0.0	0.0
Nugaal	Burtnile	0.0	0.0	0.0	0.0	9.0
Sanaag	Eeerigavo	0.0	0.0	0.0	0.0	38.0
Sanaag	Elafweyn	0.0	0.0	27.0	27.0	19.0
Sool	Caynabo	0.0	0.0	0.0	0.0	17.0
Sool	xudun	0.0	0.0	0.0	0.0	10.0
Sool	Taleex	0.0	0.0	0.0	0.0	9.0
Sool	Las Aanod	0.0	0.0	0.0	0.0	1.0
Togdheer	Burao	0.0	0.0	27.0	27.0	23.0
Togdheer	Sheikh	0.0	0.0	4.0	4.0	68.0
Togdheer	Odweyne	13.0	0.0	0.0	13.0	28.0
Togdheer	Buadodle	0.0	0.0	0.0	0.0	16.0
Wogooyi Galbeed	Gebilley	0.0	5.0	44.0	49.0	51.0
Wogooyi Galbeed	Malawle	0.0	0.0	0.0	0.0	36.0
Wogooyi Galbeed	Wajaale	0.0	0.0	0.0	0.0	49.0
Wogooyi Galbeed	Hargeisa	0.0	0.0	16.0	16.0	33.0
Wogooyi Galbeed	Daraweyne	0.0	0.0	9.0	9.0	31.0
Wogooyi Galbeed	Cadaadley	0.0	0.0	4.0	4.0	26.0
Wogooyi Galbeed	Dilla	0.0	0.0	7.0	7.0	48.0
Wogooyi Galbeed	Aburin	10.0	7.0	44.0	61.0	38.0
Wogooyi Galbeed	Dhubato	0.0	0.0	22.0	22.0	31.0
Wogooyi Galbeed	Baligubable	0.0	0.0	25.0	25.0	38.0
Wogooyi Galbeed	Berbera	0.0	0.0	0.0	0.0	0.0

Southern Regions

Region	Station_Name	dek 1	dek 2	dek 3	Jun-18	LTM
Bakool	Hudur	5.5	0.0	0.5	6.0	0.0
Bakool	Elbarde	0.0	0.0	0.0	*	5.0
Banadir	Mogadishu	0.0	0.0	0.0	0.0	86.0
Bay	Baidoa	10.0	2.5	8.0	20.5	19.0
Bay	Bardaale	1.5	2.0	3.5	7.0	14.0
Bay	BurHakaba	0.0	0.0	0.0	0.0	13.0
Bay	Wanleweyne	19.5	4.8	0.0	24.3	*
Gedo	Luuq	0.0	0.0	0.0	0.0	2.0
Gedo	Bardheere	0.0	0.0	0.0	0.0	10.0
Hiraan	Belet weyne	0.0	0.0	0.0	0.0	15.0
Hiraan	Bulo burti	0.0	0.0	0.0	0.0	5.0
Hiraan	Mataban	0.0	0.0	0.0	0.0	11.0
Lower Shabelle	Balad	0.0	0.0	0.0	*	71.0
Middle juba	Bualle	12.0	11.5	6.0	29.5	72.0
Middle Shabelle	Jowhar	22.0	0.0	0.0	22.0	41.0

^{*}indicates missing data

Monthly rainfall and NDVI perfomance maps

The Mapped NDVI and RFE above represent the differences from Long Term Mean.E-MODIS NDVI is presented as absolute difference from Long Term Mean for the same period (current - long term mean), while TAMSAT-RFE is presented as the relative difference from Long Term Mean (Current*100)/LTM.

Seasonal Trend Graph

The maps and graphs on pages 3 and 4 are produced in collaboration with the Joint Research Centre of the European Commision. The graphs present seasonal trends of crop specific NDVI (Normalised Difference Vegetation Index) as lines and rainfall values (RFE) as bars for each of the delineated land cover and administrative units (regions and districts). For more information or request on available data, please send an email to: data@fsnau.org.

Primary data sources are NOAA/USGS, European Centre for Medium- range Weather Forecast (ECMWF), MARS-JRC, FSNAU and SWALIM. Maps and graphs on this bulletin are produced from four sources.

- Current Rainfall Estimates and NDVI data are derived from NOAA/CPC and DEVCOCAST (www.devcocast.eu) respectively, while the rain gauge data is collected by FAO-SWALIM and FFWSNFT
- The seasonal profiles on page 3 and 4 are produced in collaboration with JRC-MARS. For more information visit http://mars.jrc.europa.eu/mars/About-us/FOODSEC For more information on NDVI visit http://earlywarning.usgs.gov/adds and http://fsausomall.org/fileadmin/unlpads/1308.pdf
- This report is a compilation of climate data and field reports on Somalia that FSNAU and FEWS NET regularly review for analysis.

The TAMSAT informatio is available on http://www.met.reading.ac.uk/tamsat/about/

