## Climate



August 2017 Monthly Rainfall and NDVI (Issued September 29, 2017)

## Highlights

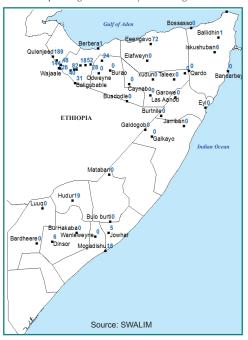
Karan rains in August were generally confined to Northwest (Awdal, W Galbeed, Togdher and parts of Sanaag) while Hagaa light rains were concentrated in the South (Shabelle, and parts of Juba). Heavy Karan rains of more than 140mm were recorded in Borama, Qulenjeed and Gebiley. Moreover Erigabvo and Aburin stations recorded above average rains of 72mm and 82mm respectively. Other stations that recorded significant rains include: Sheikh (24mm), Hargeisa (40mm), Mogadishu (18mm) and Hudur (19mm). Field reports indicate prevalence of light rains in Bay (Baidoa and Qansadere) and East Golis of Iskushuban and Qandala districts as well as along the coastal area and parts of the Southern Rainfed Maize Agropastoral (Map 1; Table 1).

Satellite-derived rainfall estimates show Karan rainfall occurrence in northwest with unconfirmed light rains in parts of Hawd of Galgadud and localized areas in Bari ,Bakol, Gedo, and the Jubas (Maps 2-5 and 9). The August 2017 Normalized Difference Vegetation Index (NDVI) which measures vegetation cover, shows close to normal vegetation conditions in large areas of the country, apart from small areas in Northwest agropastoral of Awdal and W. Galbeed, Golis of Sanaag as well as parts of Bay, and Gedo that exhibit stressed biomass. Areas with large vegetation deficits include: Southern Rainfed Maize Agropastoral livelihood zone of Lower Shabelle, the Cowpea belt , parts of Sorghum High Potential of Shabelle regions and small to large pastoral areas in Juba (Maps 6-8 and

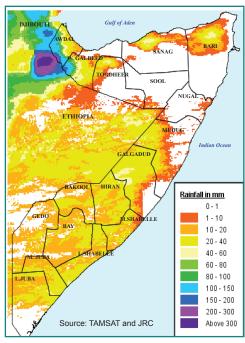
The 2017 Gu season cereal crop harvest was almost completed in August in southern parts of the country. While in the Northwest region, cereal crops are at varying stages of development. Rainfall during August has been beneficial in improving browse and water conditions in many parts of the country. However water scarcity has been reported in East Golis of Alula and Burhakaba and Baidoa districts in Bay. Land preparation activities for the *Deyr* (October-December) season are ongoing in agropastoral livelihoods in the South.

According to the 47th Forum of Greater Horn of Africa Climate Outlook (21-22 August 2017) there is an increased likelihood of normal to below normal October to December *Deyr* rainfall performance in all most parts of Somalia. However, latest information from other sources such as NOAA and USGS indicate that there is an increased likelihood for a La Nina and with it, there is an increased chance of belowaverage Deyr rainfall in Somalia.

Map 1: Aug 2017 Monthly Rain Gauge Data

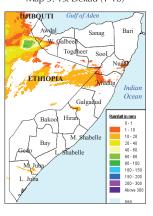


Map 2: Aug 2017 TAMSAT Monthly Rainfall Estimates

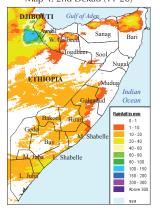


August 2017: Dekadal RFE Progression

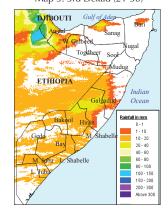
Map 3: 1st Dekad (1-10)



Map 4: 2nd Dekad (11-20)

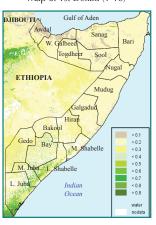


Map 5: 3rd Dekad (21-30)

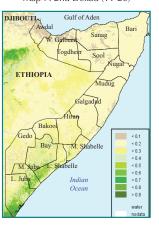


August 2017: Dekadal NDVI Progression

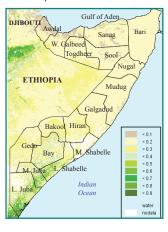
Map 6: 1st Dekad (1-10)



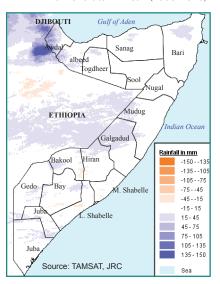
Map 7: 2nd Dekad (11-20)



Map 8: 3rd Dekad (21-30)



Map 9: Aug 2017 TAMSAT Rainfall Difference from short term mean (1999-2016)



Map 10: Aug 2017 NDVI Absolute Difference from Short Term Mean (2001- 2016)

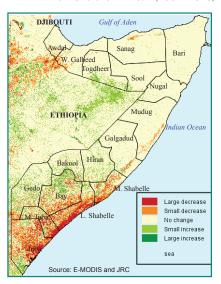


Table 1: Observed rain gauge data compared to long term monthly averages (August 2017)

Northern Regions

Southern Regions

Region	Station_Name	dek 1	dek 2	dek 3	Aug-17	LTM
Awdal	Borama	69.0	29.0	55.0	153.0	107.0
Awdal	Qulenjeed	27.0	57.0	105.0	189.0	102.0
Bari	Bossasso	0.0	0.0	0.0	0.0	0.0
Bari	Qardo	0.0	0.0	0.0	0.0	4.0
Bari	Dangoroyo	0.0	0.0	0.0	0.0	3.0
Bari	Ballidhin	0.0	0.0	1.0	1.0	4.0
Bari	Alula	0.0	0.0	0.0	0.0	0.0
Bari	Bandarbeyla	0.0	0.0	0.0	0.0	3.0
Bari	Iskushuban	0.0	0.0	0.0	6.0	4.0
Mudug	Galdogob	0.0	0.0	0.0	0.0	3.0
Mudug	Jarriban	0.0	0.0	0.0	0.0	3.0
Mudug	Galkayo	0.0	0.0	0.0	0.0	1.0
Nugaal	Garowe	0.0	0.0	0.0	0.0	6.0
Nugaal	Eyl	0.0	0.0	0.0	0.0	1.0
Nugaal	Burtnile	0.0	0.0	0.0	0.0	6.0
Sanaag	Eeerigavo	0.0	8.0	64.0	72.0	31.0
Sanaag	Elafweyn	0.0	0.0	0.0	0.0	18.0
Sool	Caynabo	0.0	0.0	0.0	0.0	15.0
Sool	xudun	0.0	0.0	0.0	0.0	9.0
Sool	Taleex	0.0	0.0	0.0	0.0	8.0
Sool	Las Aanod	0.0	0.0	0.0	0.0	3.0
Togdheer	Burao	0.0	0.0	0.0	0.0	8.0
Togdheer	Sheikh	0.0	7.0	17.0	24.0	47.0
Togdheer	Odweyne	0.0	0.0	0.0	0.0	40.0
Togdheer	Buadodle	0.0	0.0	0.0	0.0	14.0
Wogooyi Galbeed	Gebilley	55.0	46.0	43.0	144.0	82.0
Wogooyi Galbeed	Malawle	0.0	0.0	55.0	55.0	65.0
Wogooyi Galbeed	Wajaale	14.0	9.0	3.0	26.0	91.0
Wogooyi Galbeed	Hargeisa	9.0	11.0	20.0	40.0	55.0
Wogooyi Galbeed	Daraweyne	5.0	9.0	4.0	18.0	58.0
Wogooyi Galbeed	Cadaadley	10.0	0.0	18.0	28.0	43.0
Wogooyi Galbeed	Dilla	14.0	12.0	22.0	48.0	95.0
Wogooyi Galbeed	Aburin	0.0	19.0	63.0	82.0	68.0
Wogooyi Galbeed	Dhubato	37.0	15.0	0.0	52.0	54.0
Wogooyi Galbeed	Baligubable	0.0	0.0	31.0	31.0	66.0
Wogooyi Galbeed	Berbera	0.0	0.0	0.0	1.0	3.0

Region	Station_Name	dek 1	dek 2	dek 3	Aug-17	LTM
Bakool	Hudur	15.0	2.0	2.0	19.0	*
Banadir	Mogadishu	0.0	18.0	0.0	18.0	39.0
Вау	BurHakaba	0.0	0.0	0.0	0.0	6.0
Вау	Wanleweyne	0.0	0.0	0.0	0.0	*
Вау	Dinsor		4.0	2.0	6.0	*
Gedo	Luuq	0.0	0.0	0.0	0.0	1.0
Gedo	Bardheere	0.0	0.0	0.0	0.0	5.0
Hiraan	Bulo burti	0.0	0.0	0.0	0.0	3.0
Hiraan	Mataban	0.0	0.0	0.0	0.0	4.0
Middle Shabelle	Jowhar	0.0	5.0	0.0	5.0	12.0

\*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 FOODSEC Action of 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 FEWSNET.
- 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://fsausomali.org/ fileadmin/uploads/1308.pdf
- This report is a compilation of climate data and field reports on Somalia that FSNAU and FEWS NET regularly review for analysis. For more information on data sources, please refer to page 2.

The TAMSAT informatio is available on <a href="http://www.met.reading.ac.uk/tamsat/about/">http://www.met.reading.ac.uk/tamsat/about/</a>

