

Highlights

January marks the beginning of the typically dry *jillal* (January- March) season across Somalia. In January 2021, harsh and drier than normal weather conditions prevailed throughout the country, with none of the rain gauge stations countrywide reporting any rainfall (see Map 1 and Table 1). Satellite estimated rainfall for January 2021 indicates localized light showers (<10mm) in the first dekad of the month in southern parts of Bay and Gedo, parts of Middle Shabelle, Lower Shabelle, Middle Juba and Lower Juba (see Map 2-5). There was no rainfall in the second and third dekads of January in any part of Somalia.

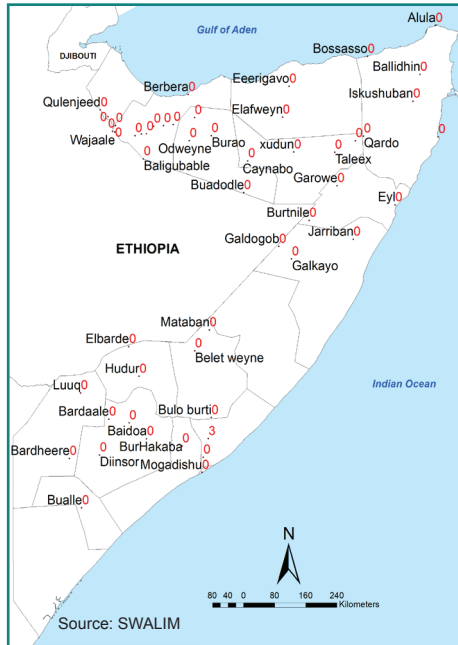
Vegetation cover measured through the Normalized Difference Vegetation Index (NDVI) indicates that biomass conditions have continued to deteriorate further compared to the Short Term Average (STA) for 2001-2020 in most of southern regions of Somalia and adjacent parts of central Somalia (see map 10). Significant deterioration in vegetation conditions is evident in Cowpea Belt, Sorghum High Potential Agropastoral, Southern Rain-fed Maize Agropastoral, Southern Inland Pastoral and Southern Agropastoral of Hiiraan livelihoods as well as most livelihoods of Gedo and Juba regions. Vegetation cover in coastal and adjacent areas of northwestern and northeastern regions that benefited from atypical rainfall in November have favorable vegetation conditions.

Shabelle and Juba rivers which flooded in July and November 2020 are currently low and within the normal range for January. Following the largely below average October to December 2020 Deyr season rainfall performance, pasture and water conditions have continued to deteriorate in most areas of the country, with water scarcity reported in many areas. Extensive and earlier than normal water trucking and atypically high water prices have been reported in several parts of northern and central Somalia. Livestock body conditions of small ruminants have started to deteriorate, with further deterioration expected until the start of the 2021 *Gu* season rainfall in April. Improved browse conditions created by atypical rainfall and cyclone *Gati* in northern Somalia have also created favorable conditions for continued Desert Locust breeding which in turn poses a continued threat to vegetation and crop cultivation through mid-2021. Moderate to severe Desert Locust damage on late-planted off-season crops have been reported in Hiiraan, parts of Middle Shabelle and Juba regions.

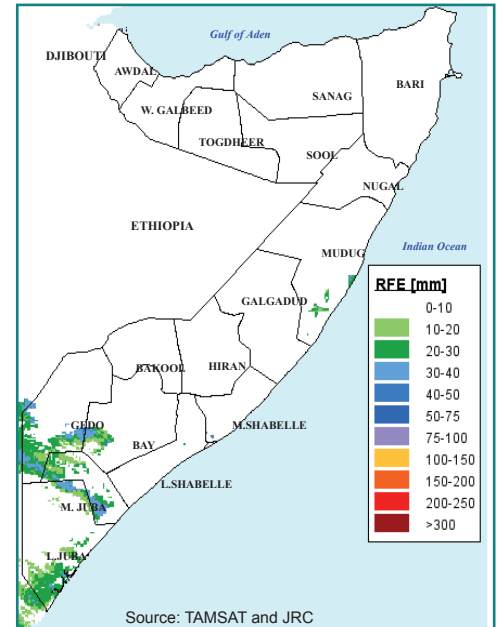
The latest forecast from the Greater Horn of Africa Climate Outlook Forum (GHACOF57) issued on 17 February 2021 by IGAD/ICPAC indicates equal chances of a below average, above average, and average rainfall occurring between March and May 2021 in most parts of Somalia, with some parts of northeastern Somalia likely to receive average to above average rainfall. In contrast, forecast from FEWS NET's science partners (NOAA/CPC, NASA/GFSC and CHC) indicates: (1) cumulative rainfall during the March-June 2021 long rains/*Gu* season in Somalia is most likely to be below-average in Somalia, (2) *Gu* season rainfall onset is likely to be poor or delayed, and (3) there is an increased likelihood that the rainfall amounts will be widely below average in May, which may signal an earlier-than-normal end of the rainfall season.

FSNAU will continue to monitor the situation closely and provide further updates.

Map 1: January 2021 Monthly Rain Gauge Data (mm)

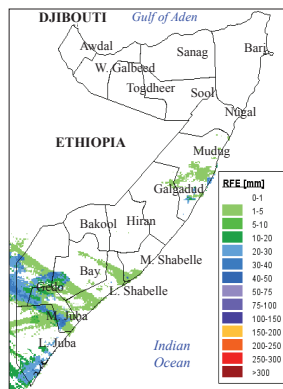


Map 2: January 2021 Monthly Rainfall Estimates (mm)

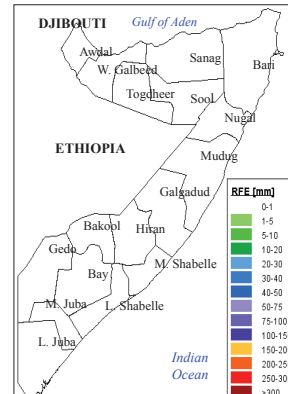


January 2021: Dekadal Rainfall Estimates (RFE) Progression

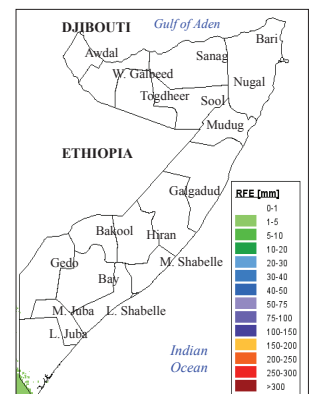
Map 3: 1st Dekad (1-10)



Map 4: 2nd Dekad (11-20)

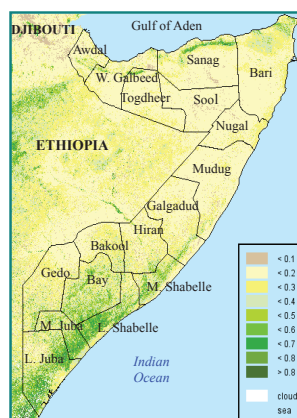


Map 5: 3rd Dekad (21-30)

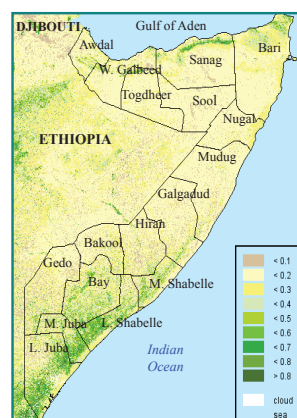


January 2021: Dekadal Vegetation Cover (NDVI) Progression

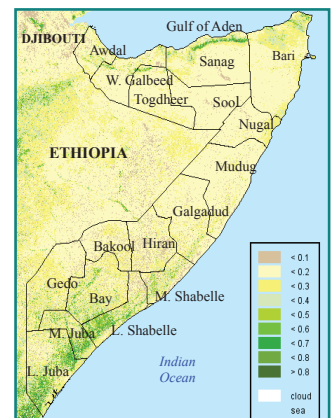
Map 6: 1st Dekad (1-10)



Map 7: 2nd Dekad (11-20)

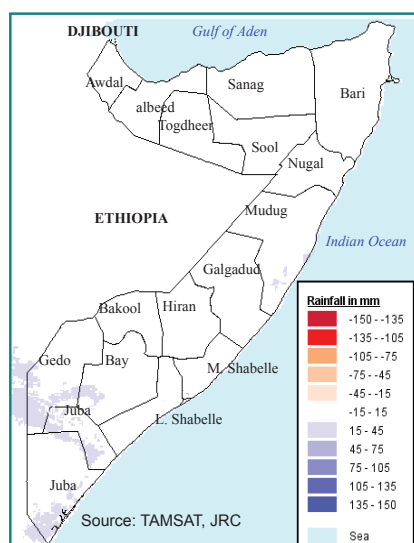


Map 8: 3rd Dekad (21-30)



Monthly rainfall and NDVI performance

Map 9: January 2021 Rainfall Difference from Short Term Average (2001-2020)



Map 10: January 2021 NDVI Absolute Difference from Short Term Average (1999- 2020)

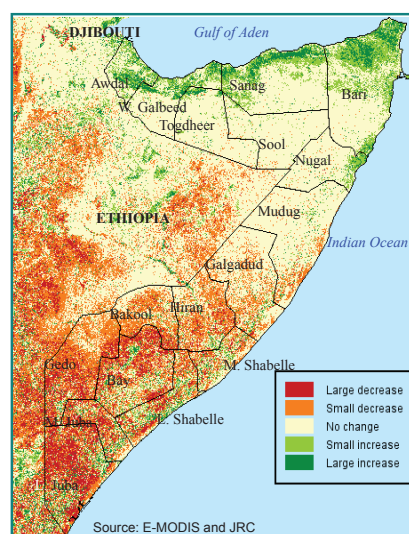


Table 1: Observed rain gauge data compared to Short term averages - STA (January 2021)

Northern Regions

Station Name	Region	dek 1	dek 2	dek 3	Jan 21	STA
Borama	Awdal	0.0	0.0	0.0	0.0	4.0
Qulenjeed	Awdal	0.0	0.0	0.0	0.0	6.0
Gebilley	Wogooyi Galbeed	0.0	0.0	0.0	0.0	1.0
Malawle	Wogooyi Galbeed	0.0	0.0	0.0	0.0	4.0
Wajaale	Wogooyi Galbeed	0.0	0.0	0.0	0.0	4.0
Hargeisa	Wogooyi Galbeed	0.0	0.0	0.0	0.0	2.0
Darawayne	Wogooyi Galbeed	0.0	0.0	0.0	0.0	4.0
Cadaadley	Wogooyi Galbeed	0.0	0.0	0.0	0.0	4.0
Dilla	Wogooyi Galbeed	0.0	0.0	0.0	0.0	5.0
Aburin	Wogooyi Galbeed	0.0	0.0	0.0	0.0	4.0
Dhubato	Wogooyi Galbeed	0.0	0.0	0.0	0.0	4.0
Baligubable	Wogooyi Galbeed	0.0	0.0	0.0	0.0	5.0
Berbera	Wogooyi Galbeed	0.0	0.0	0.0	0.0	6.0
Burao	Togdheer	0.0	0.0	0.0	0.0	3.0
Sheikh	Togdheer	0.0	0.0	0.0	0.0	5.0
Odweyne	Togdheer	0.0	0.0	0.0	0.0	4.0
Buadodle	Togdheer	0.0	0.0	0.0	0.0	3.0
Eerigavo	Sanaag	0.0	0.0	0.0	0.0	10.0
Elafweyn	Sanaag	0.0	0.0	0.0	0.0	4.0
Caynabo	Sool	0.0	0.0	0.0	0.0	3.0
Xudun	Sool	0.0	0.0	0.0	0.0	2.0
Taleex	Sool	0.0	0.0	0.0	0.0	2.0
Bossasso	Bari	0.0	0.0	0.0	0.0	0.0
Qardo	Bari	0.0	0.0	0.0	0.0	1.0
Dangoroyo	Bari	0.0	0.0	0.0	0.0	3.0
Ballidhin	Bari	0.0	0.0	0.0	0.0	2.0
Alula	Bari	0.0	0.0	0.0	0.0	1.0
Bandarbeyla	Bari	0.0	0.0	0.0	0.0	2.0
Iskushuban	Bari	0.0	0.0	0.0	0.0	0.0
Garowe	Nugaal	0.0	0.0	0.0	0.0	2.0
Eyl	Nugaal	0.0	0.0	0.0	0.0	5.0
Burtnile	Nugaal	0.0	0.0	0.0	0.0	3.0
Galdogob	Mudug	0.0	0.0	0.0	0.0	1.0
Jarriban	Mudug	0.0	0.0	0.0	0.0	3.0
Galkayo	Mudug	0.0	0.0	0.0	0.0	0.0

Southern Regions

Station Name	Region	dek 1	dek 2	dek 3	Jan-21	STA
Hudur	Bakool	0.0	0.0	0.0	0.0	0.0
Elbarde	Bakool	0.0	0.0	0.0	0.0	0.0
Baidoa	Bay	0.0	0.0	0.0	0.0	3.0
Diinsor	Bay	0.0	0.0	0.0	0.0	3.0
Bardaale	Bay	0.0	0.0	0.0	0.0	2.0
Burhakaba	Bay	0.0	0.0	0.0	0.0	0.0
Wanleweyne	Bay	0.0	0.0	0.0	0.0	0.0
Luuq	Gedo	0.0	0.0	0.0	0.0	1.0
Bardheere	Gedo	0.0	0.0	0.0	0.0	2.0
Belet weyne	Hiraan	0.0	0.0	0.0	0.0	0.0
Bulo burti	Hiraan	0.0	0.0	0.0	0.0	3.0
Mataban	Hiraan	0.0	0.0	0.0	0.0	1.0
Balad	Lower Shabelle	0.0	0.0	0.0	0.0	0.0
Mogadishu	Banadir	0.0	0.0	0.0	0.0	0.0
Buulle	Middle juba	0.0	0.0	0.0	0.0	1.0
Jowhar	Middle Shabelle	0.0	0.0	0.0	0.0	0.0

*indicates missing data

Monthly rainfall and NDVI performance 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 Commission. 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@fsnao.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.devcoast.eu) respectively, while the rain gauge data is collected by FAO-SWALIM and FEWSNET.

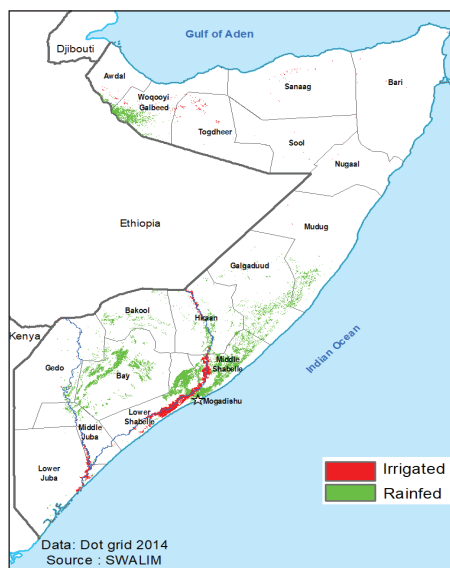
- The seasonal profiles on page 3 and 4 are produced in collaboration with JRC-MARS. For more information visit <http://mars.jrc.europa.eu/mars/about-us/FOODSEC> For more information on NDVI visit <http://earlywarning.usgs.gov/adds> and <http://fsausomali.org/fileadmin/uploads/1308.pdf>

- 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.

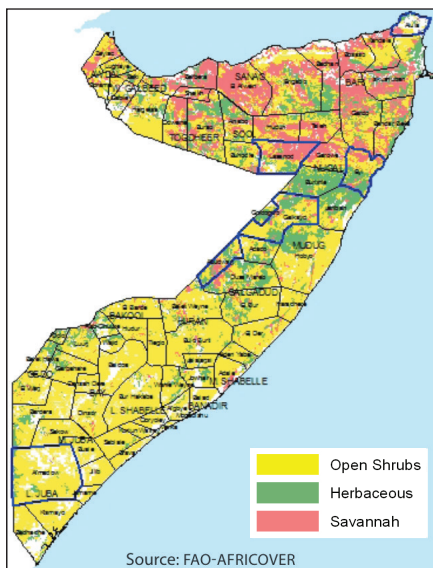
The TAMSAT informatio is available on <http://www.met.reading.ac.uk/tamsat/about/>

Seasonal rainfall and NDVI trends by region

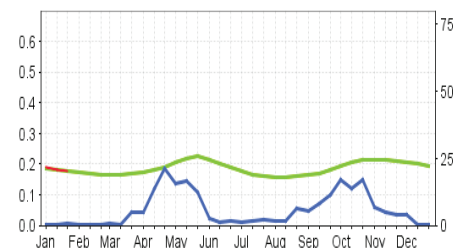
Map 11: Agricultural Areas



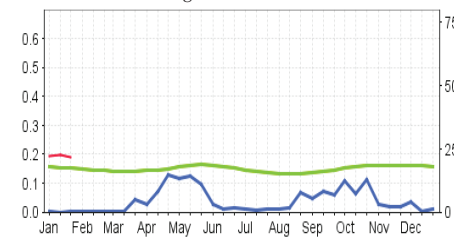
Map 12: Pastoral Areas



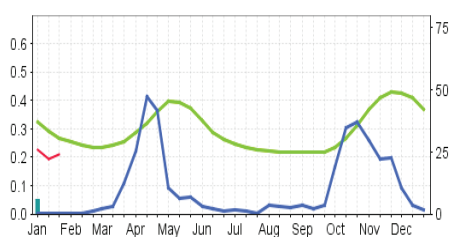
Togdheer Pastoral (Savannah)



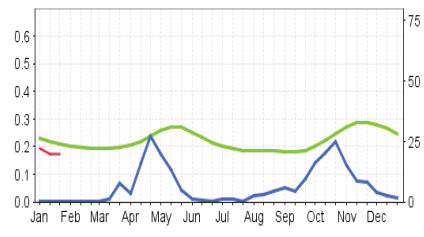
Saanag Pastoral (Savannah)



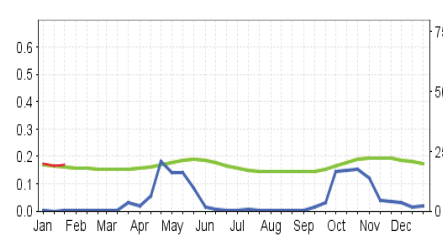
Gedo Pastoral (Open Shrubs)



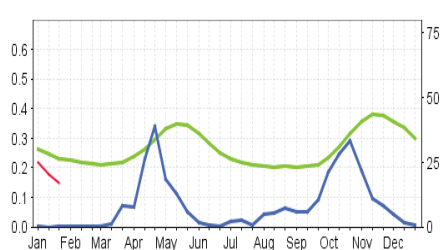
Galgaduud Pastoral (Herbaceous)



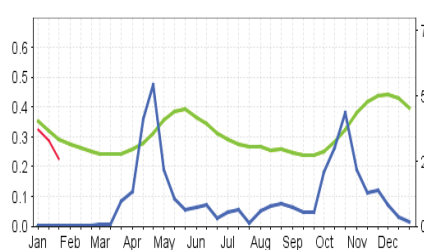
Nugaal Pastoral (Open Shrubs)



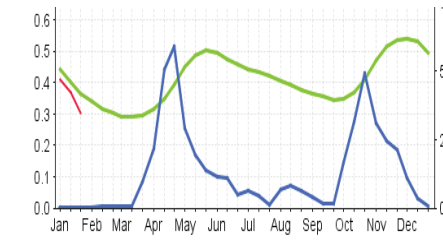
Hiran Agropastoral (Rainfed)



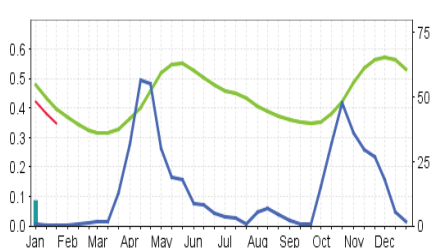
Middle Shabelle Agropastoral (Rainfed)



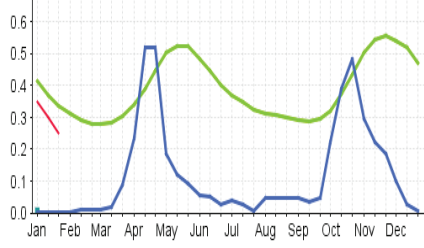
Lower Shabelle Riverine (Irrigated)



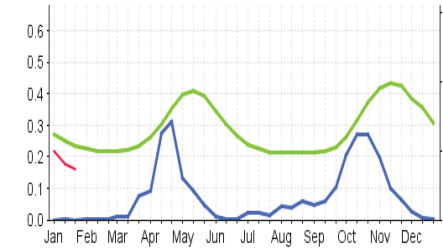
Middle Juba Agropastoral (Rainfed)



Bay Agropastoral (Rainfed)

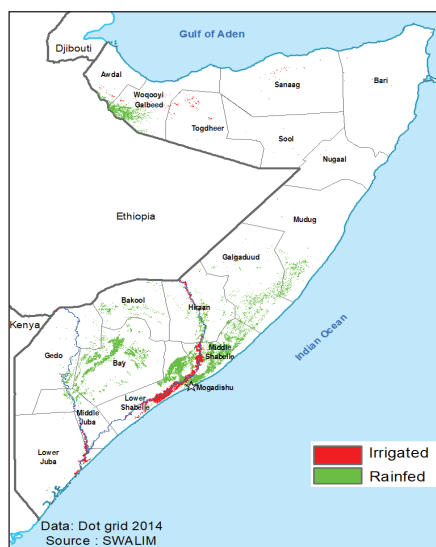


Bakool Agropastoral (Rainfed)

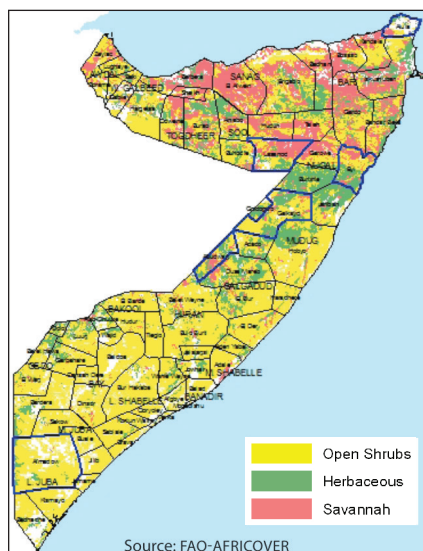


Seasonal rainfall and NDVI trends for selected districts

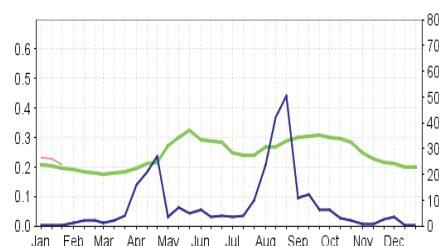
Map 13: Agricultural Areas



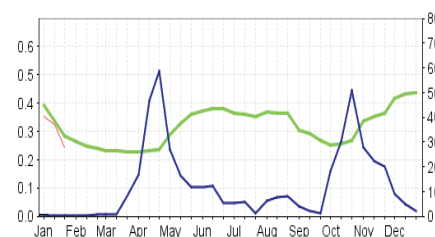
Map 14: Pastoral Areas



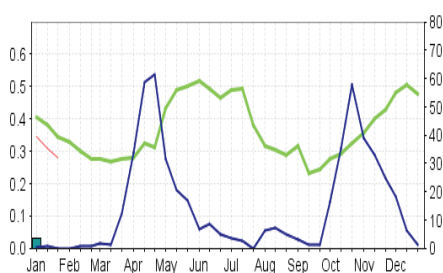
Gebiley Pastoral (Open Shrubs)



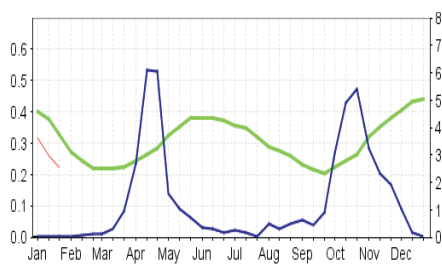
Afgooye Riverine (Irrigated)



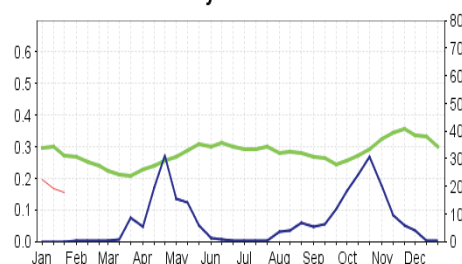
Afmadow Riverine (Irrigated)



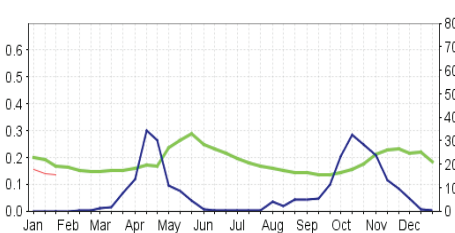
Baidoa Agropastoral (Rainfed)



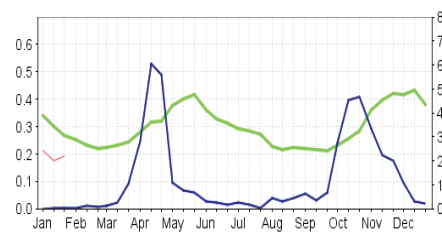
Beletwyne Agropastoral (Herbaceous)



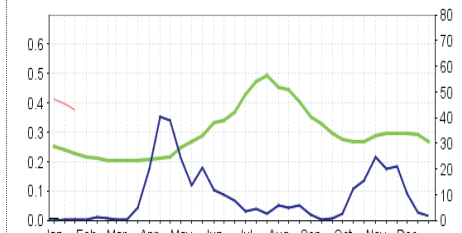
Rab Dhuure (Open Shrubs)



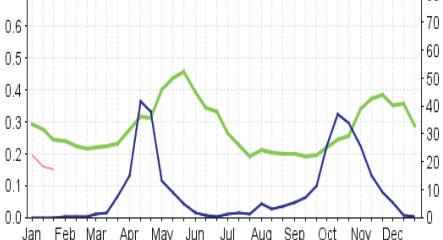
Garbahaarey (Open Shrubs)



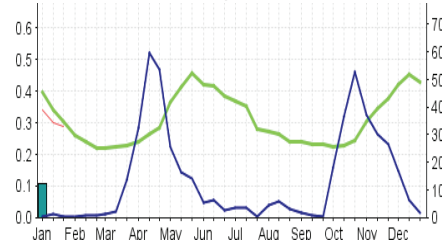
Jamame Pastoral (Herbaceous)



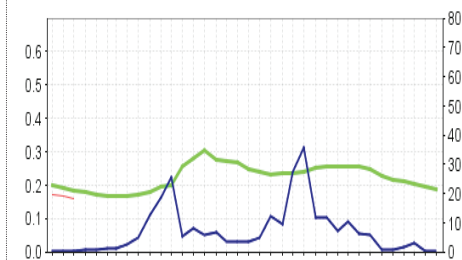
Wajid Pastoral (Herbaceous)



Saakow (Open Shrubs)



Hargeysa (Open shrubs)



 RFE 2021
  RFE STA (2001-2020)
  NDVI 2021
  NDVI STA (1999-2020)