

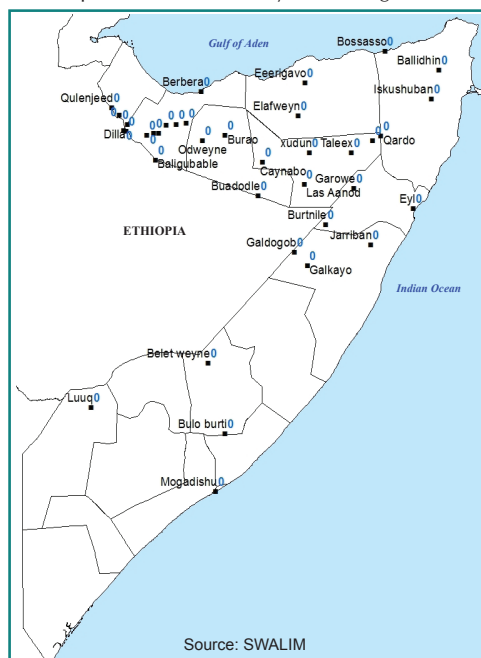
Highlights

Hotter and drier than normal weather conditions prevailed in most parts of Somalia during the *Jilal* (January–March) season. As expected, there was no rainfall recorded at rain-gauge stations nationwide (Map1 and Table 1) in the month of January. Field reports confirm continued dry and hot weather conditions across the country. Observed river levels in Juba and Shabelle have significantly reduced due to poor *Deyr* (October – December 2016) rainfall experienced in the upper catchments in Ethiopia and within Somalia coupled with increased use of the river water.

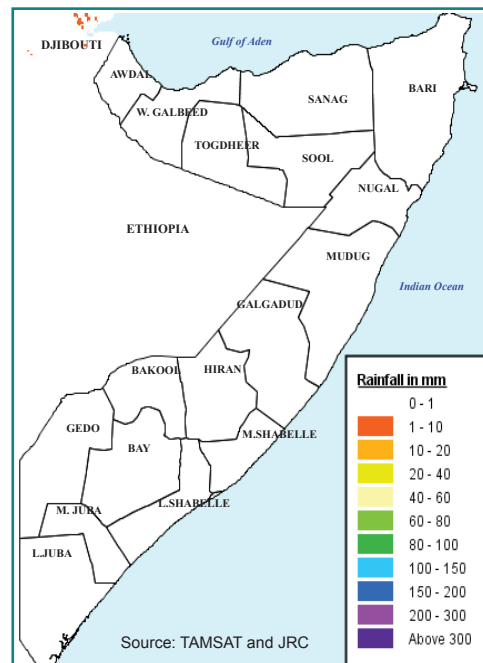
Rainfall estimates (RFE) derived from Tropical Applications of Meteorology using SATellite (TAMSAT) also indicate the absence of rainfall in January 2017 across the country including in the Northwest where Hays rains (December–January) are normally expected. Normalized Difference Vegetation Index (NDVI) derived from E-Modis satellite indicates biomass conditions have continued to deteriorate further compared to Long Term Mean (LTM) of 2001–2016 in large areas of Somalia, with large vegetation cover deficits prevalent in southern Somalia. The most affected areas according to NDVI include; Cowpea Belt, Sorghum High Potential, Southern Rainfed maize, Southern Hiran/agropastoral livelihoods and small to large pastoral areas in Gedo and the Jubas. However NDVI also depicts greener vegetation in localised pastoral livelihoods in L. Shabelle and the Jubas (Maps 3–5 and 7).

Following the largely below average *Deyr* (October–December 2016) rains and poor and erratic rains which followed during the *Gu* 2016 (April–June 2016) season, pasture and water conditions have continued to deteriorate in most areas of the country which is currently facing severe to extreme drought conditions. The Northern Inland Pastoral of

Map 1: Jan 2017 Monthly Rain Gauge Data

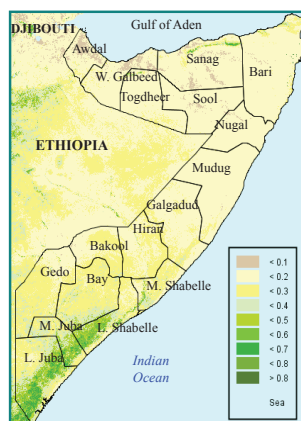


Map 2: Jan 2017 TAMSAT Monthly Rainfall Estimates

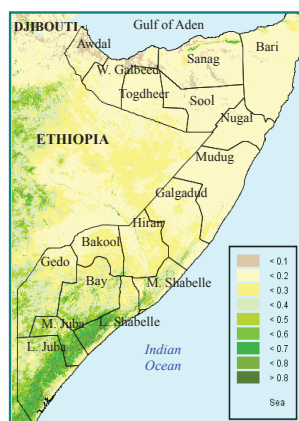


January 2017: Dekadal NDVI Progression

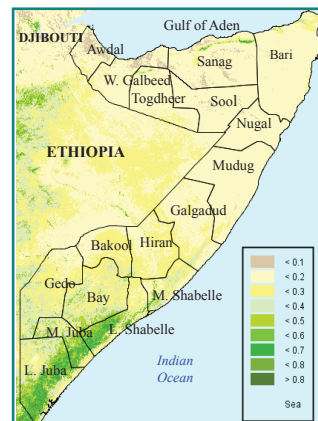
Map 3: 1st Dekad (1-10)



Map 4: 2nd Dekad (11-20)



Map 5: 3rd Dekad (21-30)



Sool, Sanaag, Bari and Nugal regions, East Golis of (Sanag and Bari) and large parts of *Addun* in Central regions are the worst affected areas. Widespread water trucking and increased and abnormal livestock migration leading to faster depletion of the limited pasture and water resources in drought affected areas.

Drought is expected to worsen until the start of the 2017 *Gu*

rains in April. Shabelle river levels have already started drying up in lower parts of the catchment around Jowhar with adverse impact on riverine and agropastoral livelihoods. This includes reduced possibility of water trucking in these areas.

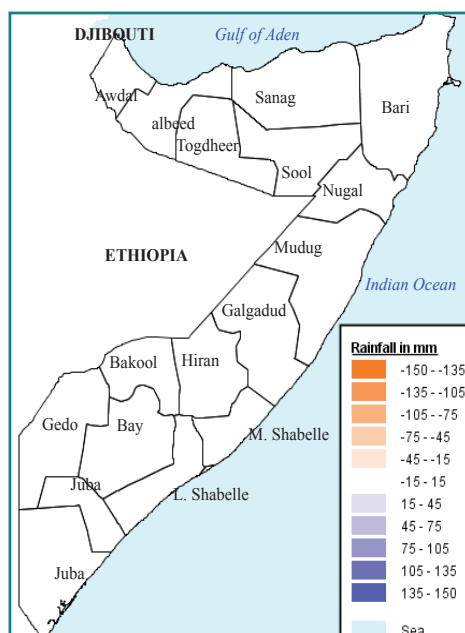
The rainfall forecast from Greater Horn of Africa Climate Outlook Forum (GHACOF 45) released on

7th February 2017 by IGAD for March to May 2017 rains indicates a high likelihood of below normal to near normal rains across most parts of the country during the coming *Gu* 2017 rainy season.

Therefore, even after the start of the 2017 *Gu* rains in April, drought conditions and impact are expected to persist.

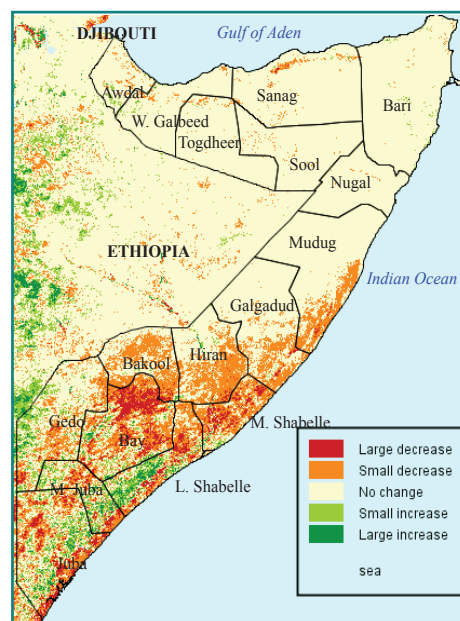
Monthly rainfall and NDVI performance

Map 6: Jan 2017 TAMSAT Rainfall Difference from short term mean (1999-2015)



Source: TAMSAT, JRC

Map 7: Jan 2017 NDVI Absolute Difference from Short Term Mean (2001-2015)



Source: E-MODIS and JRC

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

Northern Regions							Southern Regions						
Region	Station Name	dek 1	dek 2	dek 3	Jan-17	LTM	Region	Station Name	dek 1	dek 2	dek 3	Jan-17	LTM
Awdal	Borama	0.0	0.0	0.0	0.0	4.0	Banadir	Mogadishu	0.0	0.0	0.0	0.0	*
	Qulenjeed	0.0	0.0	0.0	0.0	*	Bay	Baidoa	*	*	*	*	3.0
Bari	Bossasso	0.0	0.0	0.0	0.0	0.0		Diinsor	*	*	*	*	3.0
	Qardo	0.0	0.0	0.0	0.0	0.0		Bardaale	*	*	*	*	*
	Iskushuban	0.0	0.0	0.0	0.0	*	Gedo	Bardheere	*	*	*	*	3.0
	Dangoroyo	0.0	0.0	0.0	0.0	*		Luuq	0.0	0.0	0.0	0.0	1.0
	Ballidhin	0.0	0.0	0.0	0.0	*	Hiraan	Belet weyne	0.0	0.0	0.0	0.0	0.0
Mudug	Jarriban	0.0	0.0	0.0	0.0	*		Bulo burti	0.0	0.0	0.0	0.0	3.0
	Galdogob	0.0	0.0	0.0	0.0	*	Lower Juba	Afmadow	*	*	*	*	5.0
Nugaal	Garowe	0.0	0.0	0.0	0.0	*		Jamame	*	*	*	*	2.0
	Eyl	0.0	0.0	0.0	0.0	5.0	Lower Shabelle	Genale	*	*	*	*	2.0
Sanaag	Burntile	0.0	0.0	0.0	0.0	*	Middle Juba	Marere	*	*	*	*	2.0
	Eerigavo	0.0	0.0	0.0	0.0	10.0		Bualle	*	*	*	*	*
Sool	Elafweyn	0.0	0.0	0.0	0.0	*	Middle Shabelle	Jowhar	*	*	*	*	0.0
	Caynabo	0.0	0.0	0.0	0.0	*	Mudug	Galkayo	0.0	0.0	0.0	0.0	0.0
	Las Aanod	0.0	0.0	0.0	0.0	1.0							
	Xudun	0.0	0.0	0.0	0.0	*							
	Taleex	0.0	0.0	0.0	0.0	*							
Togdheer	Burao	*	*	*	*	2.0							
	Odweyne	0.0	0.0	0.0	0.0	*							
	Wajaale	0.0	0.0	0.0	0.0	*							
	Buadodde	0.0	0.0	0.0	0.0	*							
Wogooyi Galbeed	Hargeisa	0.0	0.0	0.0	0.0	2.0							
	Dilla	0.0	0.0	0.0	0.0	*							
	Gebilley	0.0	0.0	0.0	0.0	1.0							
	Aburin	0.0	0.0	0.0	0.0	*							
	Berbera	0.0	0.0	0.0	0.0	6.0							
	Malawle	0.0	0.0	0.0	0.0	*							
	Darawayne	0.0	0.0	0.0	0.0	*							
	Cadaadley	0.0	0.0	0.0	0.0	*							
	Dhubato	0.0	0.0	0.0	0.0	*							
	Baligubable	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@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.devcoast.eu) respectively, while the rain gauge data is collected by FAO-SWALIM and FEWS-NET.

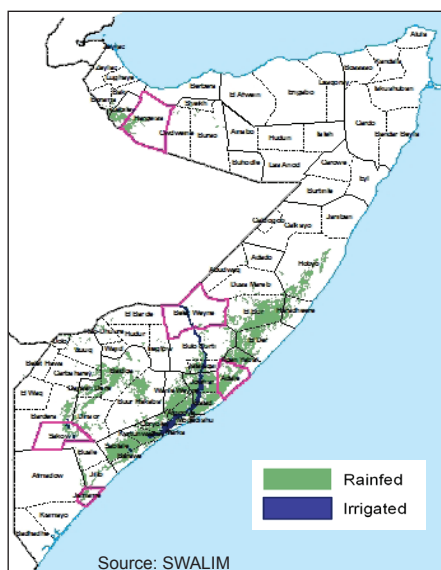
• The seasonal profiles on page 3 and 4 are produced in collaboration with JRC-MARS. For more information visit <http://mars.jrc.europa.eu/mars/About-us/FOODSEC> For more information on NDVI visit <http://earlywarning.usgs.gov/adds> and <http://fsausomali.org/fileadmin/uploads/1308.pdf>

• 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.

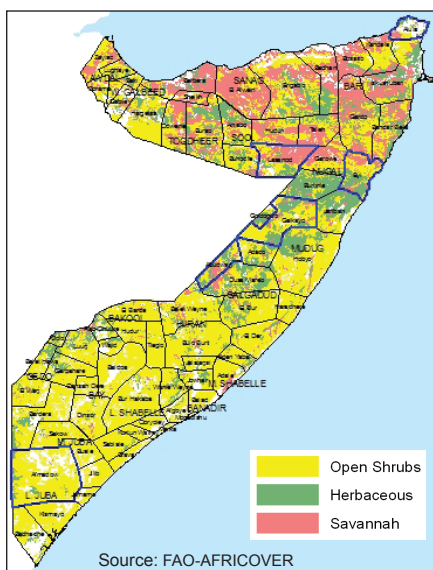
The TAMSAT informatio is available on <http://www.met.reading.ac.uk/tamsat/about/>

Seasonal rainfall and NDVI trends by region

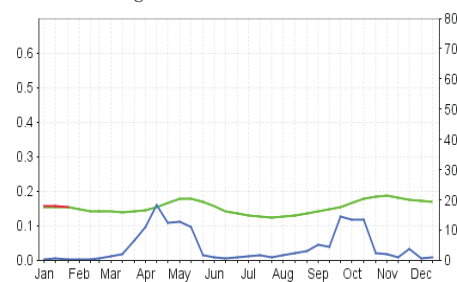
Map 8: Agricultural Areas



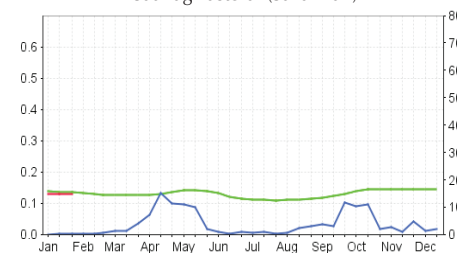
Map 9: Pastoral Areas



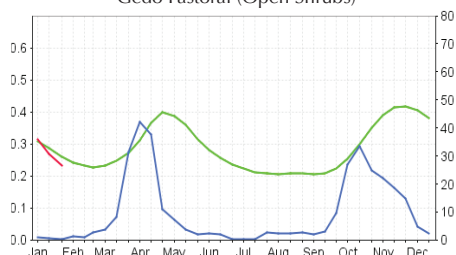
Togdheer Pastoral (Savannah)



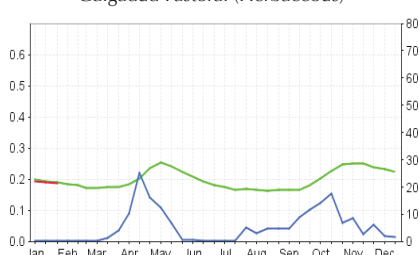
Saanag Pastoral (Savannah)



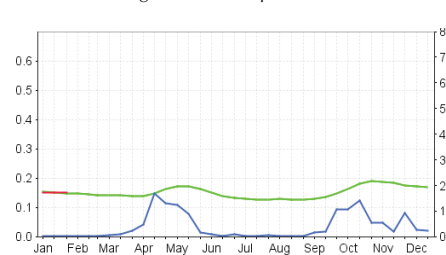
Gedo Pastoral (Open Shrubs)



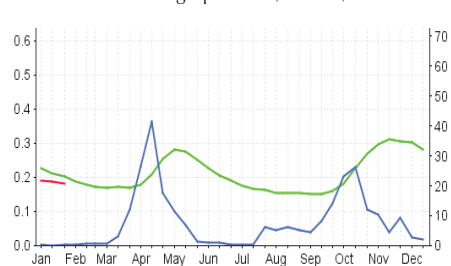
Galgadud Pastoral (Herbaceous)



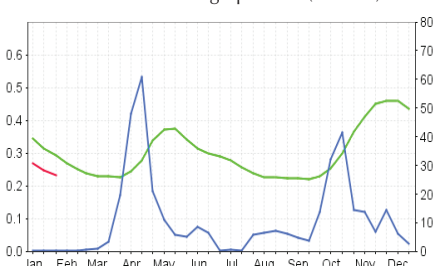
Nugal Pastoral (Open Shrubs)



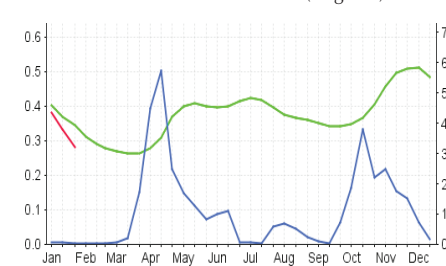
Hiran Agropastoral (Rainfed)



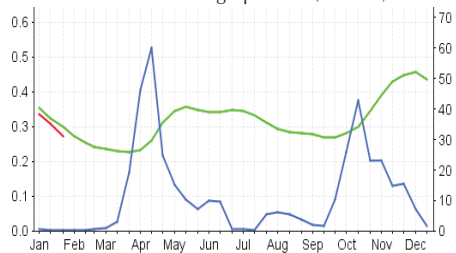
Middle Shabelle Agropastoral (Rainfed)



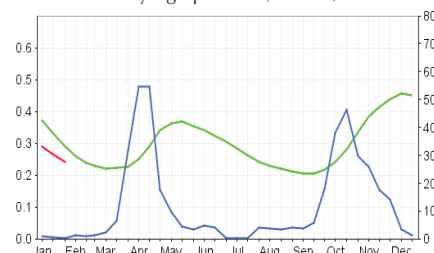
Lower Shabelle Riverine (Irrigated)



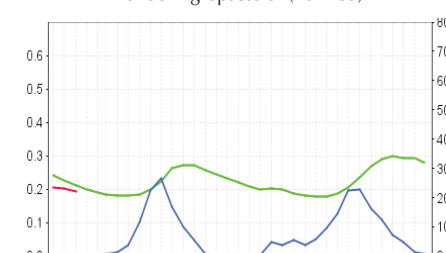
Lower Shabelle Agropastoral (Rainfed)



Bay Agropastoral (Rainfed)



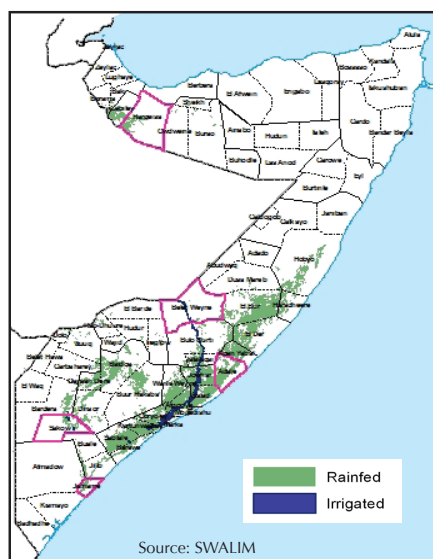
Bakool Agropastoral (Rainfed)



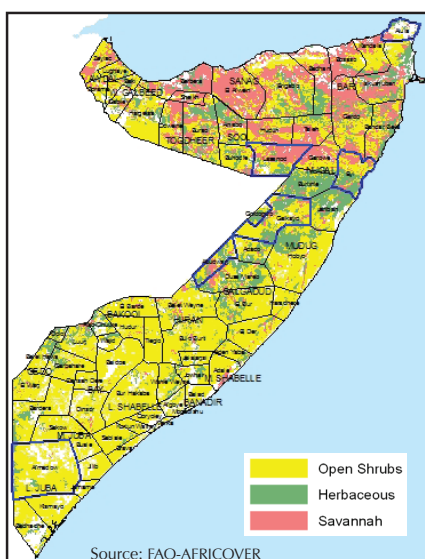
 RFE 2017
  RFE AVG: 2001-2016
  NDVI-C 2017
  NDVI-C LTA MEAN (1999-2016)

Seasonal rainfall and NDVI trends for selected districts

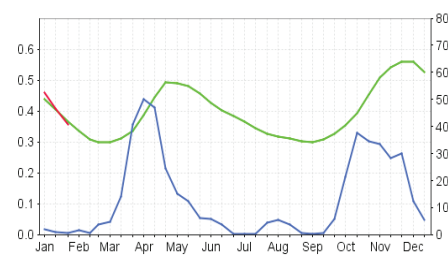
Map 10: Agricultural Areas



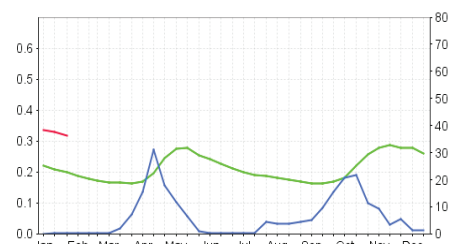
Map 11: Pastoral Areas



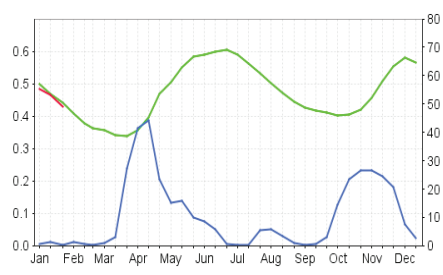
Afmadow Pastoral (Open Shrubs)



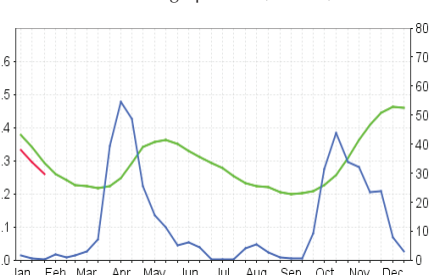
Beletweyn Riverine (Irrigated)



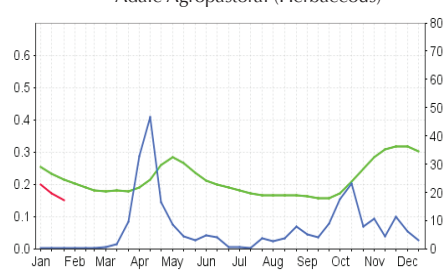
Jamame Riverine (Irrigated)



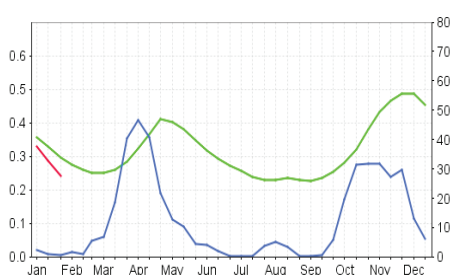
Sakow Agropastoral (Rainfed)



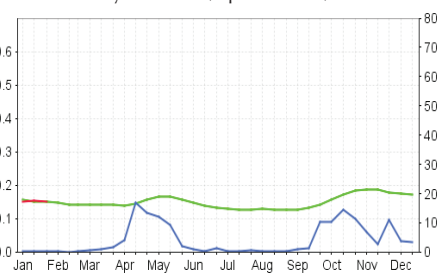
Adale Agropastoral (Herbaceous)



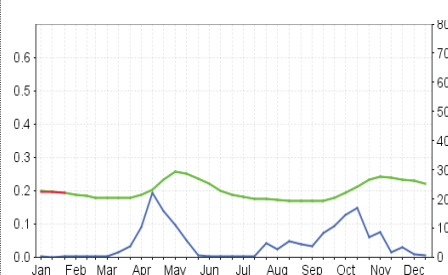
Afmadow Pastoral (Herbaceous)



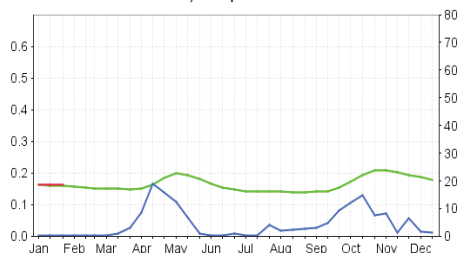
Eyl Pastoral (Open Shrubs)



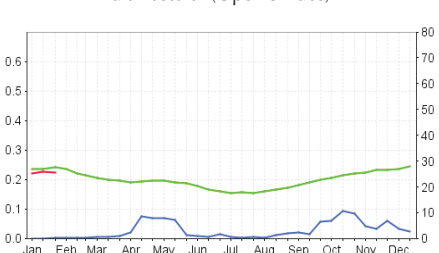
Abudwak Pastoral (Herbaceous)



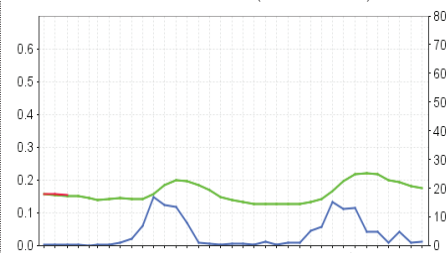
Galkayo Open Shrubs



Alula Pastoral (Open Shrubs)



Lasanod Pastoral (Herbaceous)



 RFE 2017
  RFE AVG: 2001-2016
  NDVI-C 2017
  NDVI-C LTA MEAN (1999-2016)