

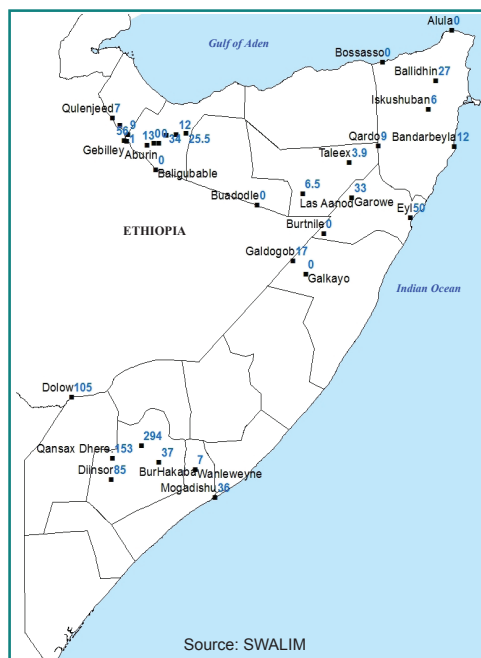
Highlights

The start of the 2017 *Gu* (April – June) season rains in the third dekad of April represents a delayed onset of the *Gu* rains in most parts of Somalia. Rain gauge data confirms that rains started largely in late April. Many stations recorded below average rains indicating poor start of the season. However few stations such as Borama, Garowe, Eyl and Baidoa stations recorded above average rains of 112mm, 33mm, 50mm and 294mm respectively (Map 1 and Table 1). The river levels have started to increase gradually due to increased rainfall activity in the Ethiopian highlands.

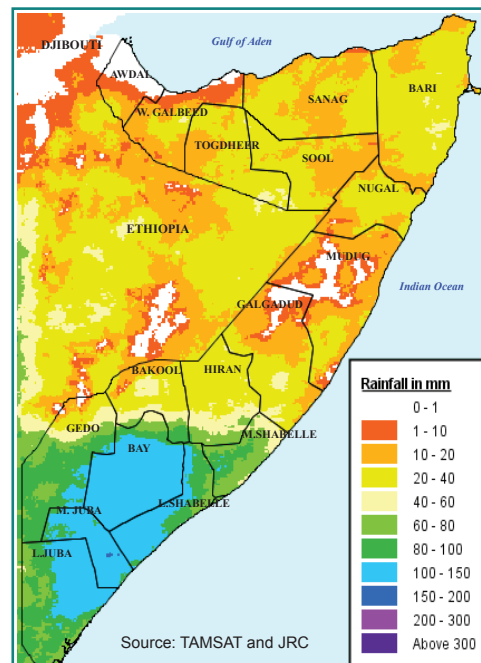
Rainfall estimates (RFE) based on remotely sensed (satellite) data for the month of April indicate rainfall deficit in most parts of the country apart from northwest regions (Maps 2-5 and 9). The Normalized Difference Vegetation Index (NDVI) which measures the extent of vegetation cover indicates well below average vegetation conditions in many areas in the south. The regions showing large deterioration include Hiran, coastal parts of Mudug and Galgaduud, Bay, Bakool, Gedo, Shabelle and Juba regions (Maps 6-8 and 10). Field reports indicate poor pasture in the Cowpea Belt and small to large pocket of Addun pastoral livelihood zones in central Somalia.

The April rains have been favorable for crop germination and development. Crop establishment and maturity will depend on intensification and distribution of *Gu* rains in May and June. Rangeland conditions are expected to improve in May especially in the northern regions that received good rains in late April/early May. Crops are at different stages of development nevertheless planting and re-planting was still on-going in early April. The rains have partially filled surface water catchments thereby providing temporary relief for livestock.

Map 1: April 2017 Monthly Rain Gauge Data

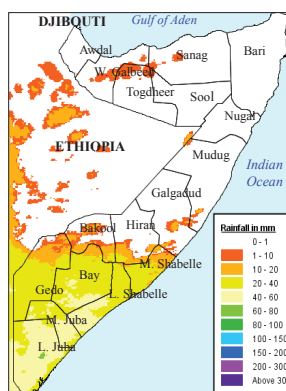


Map 2: April 2017 TAMSAT Monthly Rainfall Estimates

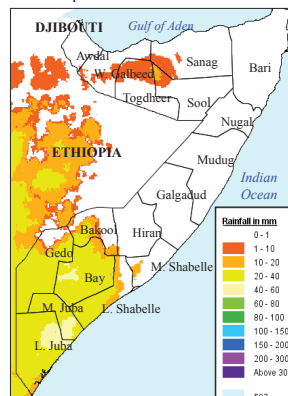


April 2017: Dekadal Rainfall (RFE) Progression

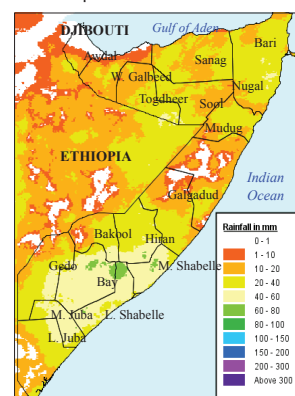
Map 3: 1st Dekad (1-10)



Map 4: 2nd Dekad (11-20)

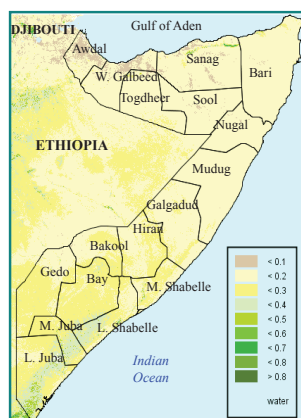


Map 5: 3rd Dekad (21-30)

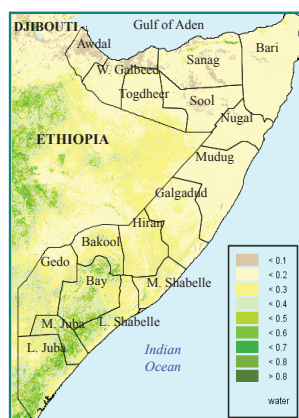


April 2017: Dekadal NDVI (Vegetation Cover) Progression

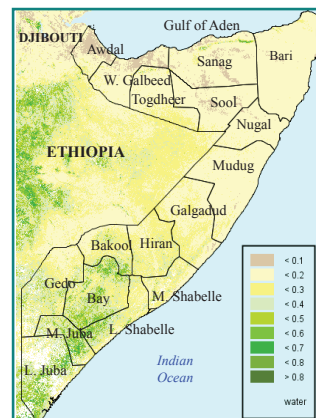
Map 6: 1st Dekad (1-10)



Map 7: 2nd Dekad (11-20)

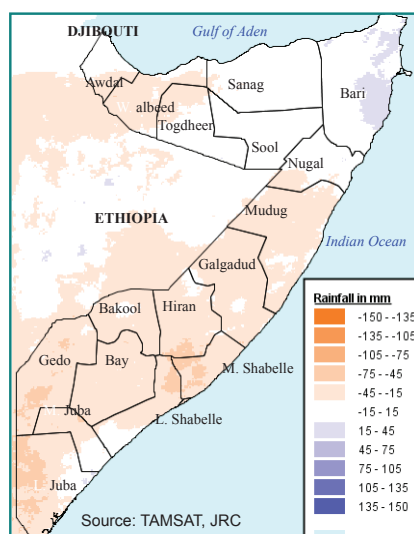


Map 8: 3rd Dekad (21-30)



Monthly rainfall and NDVI performance

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



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

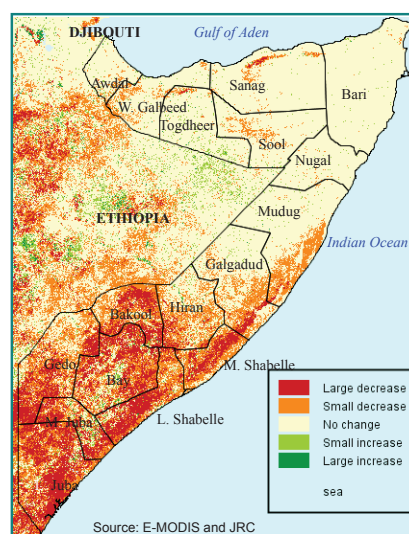


Table 1: Observed rain gauge data compared to long term monthly averages (April 2017)

Northern Regions

Region	Station Name	dek 1	dek 2	dek 3	Apr-15	LTM
Awdal	Borama	0.0	0.0	112.0	112.0	104.0
Awdal	Qulenjeed	0.0	2.0	5.0	7.0	84.0
Bari	Bossasso	0.0	0.0	0.0	0.0	4.0
Bari	Qardo	0.0	0.0	9.0	9.0	26.0
Bari	Ballidhin	0.0	0.0	27.0	27.0	14.0
Bari	Alula	0.0	0.0	0.0	0.0	3.0
Bari	Bandarbeyla	0.0	0.0	12.0	12.0	30.0
Bari	Iskushuban	0.0	0.0	6.0	6.0	22.0
Mudug	Galdogob	0.0	0.0	17.0	17.0	44.0
Mudug	Galkayo	0.0	0.0	0.0	0.0	37.0
Nugaal	Garowe	0.0	0.0	33.0	33.0	30.0
Nugaal	Eyl	0.0	0.0	50.0	50.0	27.0
Nugaal	Burt Nile	0.0	0.0	0.0	0.0	34.0
Sool	Taleex	0.0	0.0	3.9	3.9	27.0
Sool	Las Aanod	0.0	0.0	6.5	6.5	14.0
Togdheer	Buadodle	0.0	0.0	0.0	0.0	50.0
Wogooyi Galbeed	Gebilley	2.0	0.0	54.0	56.0	58.0
Wogooyi Galbeed	Malawle	0.0	0.0	0.0	0.0	79.0
Wogooyi Galbeed	Wajaale	0.0	0.0	1.0	1.0	71.0
Wogooyi Galbeed	Hargeisa	0.0	0.0	0.0	0.0	85.0
Wogooyi Galbeed	Darawayne	0.0	1.0	33.0	34.0	71.0
Wogooyi Galbeed	Cadaadley	7.5	9.0	9.0	25.5	60.0
Wogooyi Galbeed	Dilla	0.0	0.0	9.0	9.0	75.0
Wogooyi Galbeed	Aburin	0.0	0.0	13.0	13.0	77.0
Wogooyi Galbeed	Dhubato	0.0	5.0	7.0	12.0	68.0
Wogooyi Galbeed	Baligubable	0.0	0.0	0.0	0.0	76.0

Southern Regions

Region	Station Name	dek 1	dek 2	dek 3	Apr-15	LTM
Banadir	Mogadishu	0.0	0.0	36.0	36.0	60.0
Bay	Baidoa	0.0	78.0	216	294.0	165.0
Bay	Diinsor	0	0.0	85	85.0	136.0
Bay	Burhakaba	0.0	0.0	37.0	37.0	202.0
Bay	Qansax Dhere	0.0	9.0	144.0	153.0	*
Gedo	Dolow	12.0	82.0	11.0	105.0	*
Lower Shabelle	Wanleweyne	0.0	0.0	7.0	7.0	*

*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 Graph0

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.

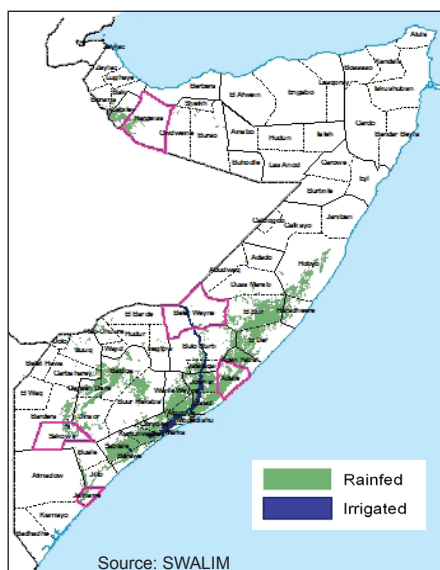
- The seasonal profiles on page 3 and 4 are produced in collaboration with JRC-MARS. For more information visit <http://mars.jrc.europa.eu/mars/About-us/FOODSEC> For more information on NDVI visit <http://earlywarning.usgs.gov/adds> and <http://fsausomali.org/fileadmin/uploads/1308.pdf>

- 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.

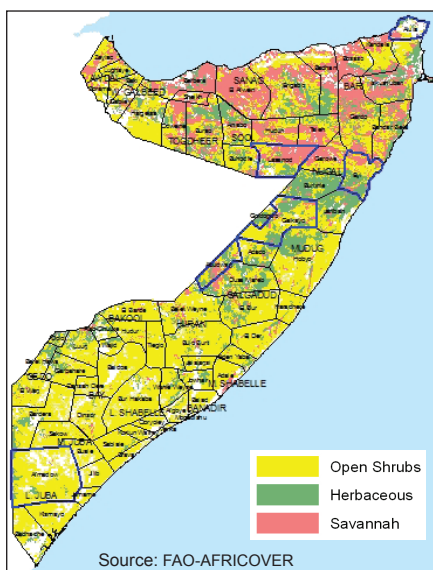
The TAMSAT information is available on <http://www.met.reading.ac.uk/tamsat/about/>

Seasonal rainfall and NDVI trends by region

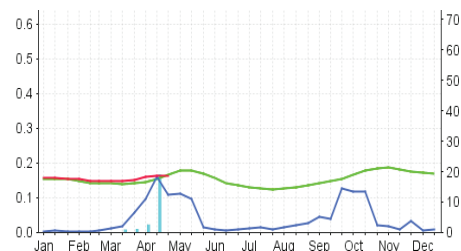
Map 11: Agricultural Areas



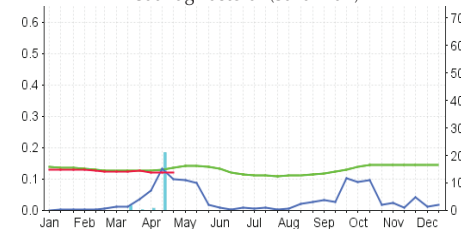
Map 12: Pastoral Areas



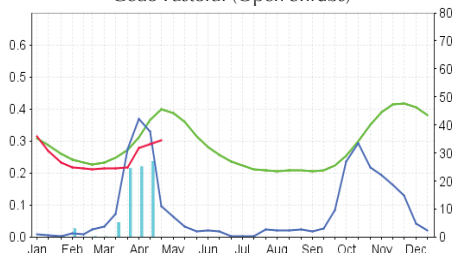
Togdheer Pastoral (Savannah)



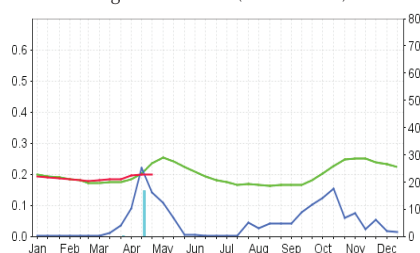
Saanag Pastoral (Savannah)



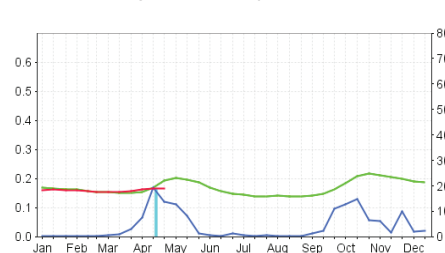
Gedo Pastoral (Open Shrubs)



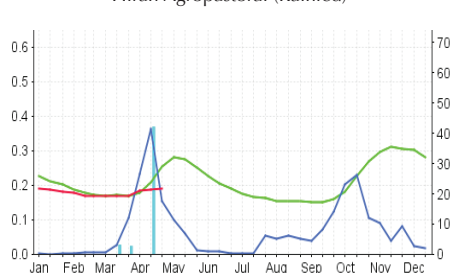
Galgadud Pastoral (Herbaceous)



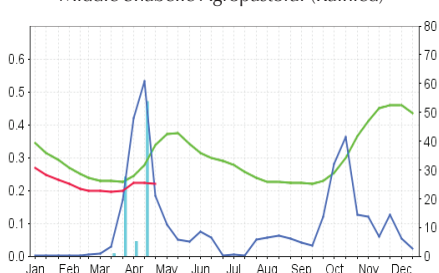
Nugal Pastoral (Open Shrubs)



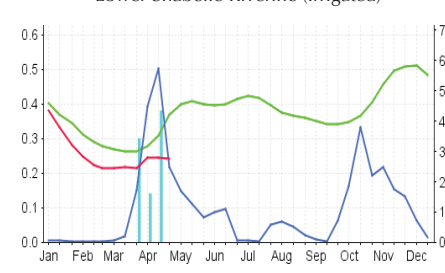
Hiran Agropastoral (Rainfed)



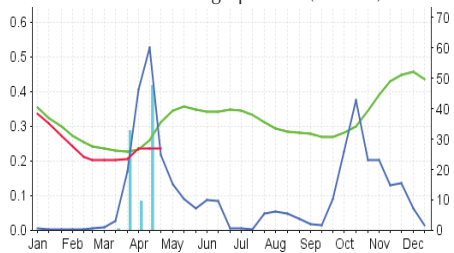
Middle Shabelle Agropastoral (Rainfed)



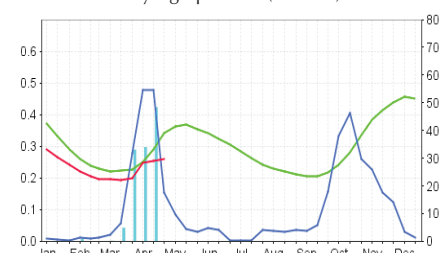
Lower Shabelle Riverine (Irrigated)



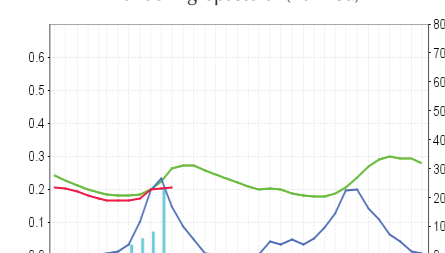
Lower Shabelle Agropastoral (Rainfed)



Bay Agropastoral (Rainfed)



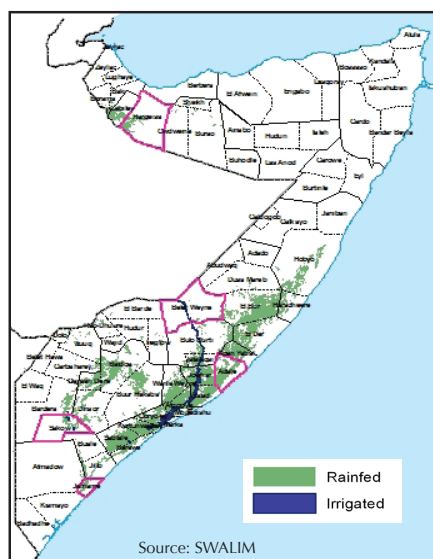
Bakool Agropastoral (Rainfed)



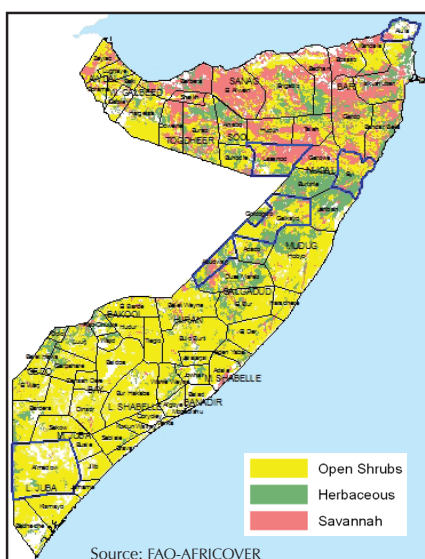
 RFE 2017
  RFE AVG: 2001-2016
  NDVI-C 2017
  NDVI-C LTA MEAN (1999-2016)

Seasonal rainfall and NDVI trends for selected districts

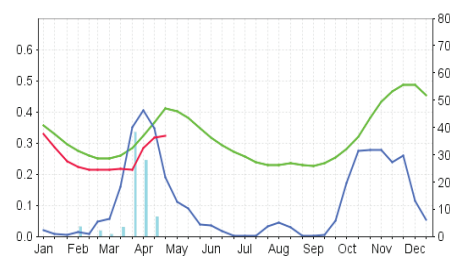
Map 13: Agricultural Areas



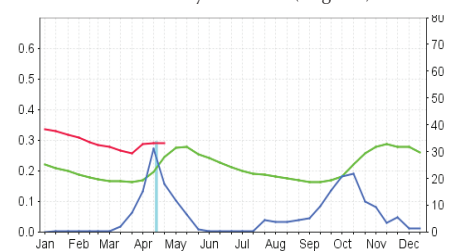
Map 14: Pastoral Areas



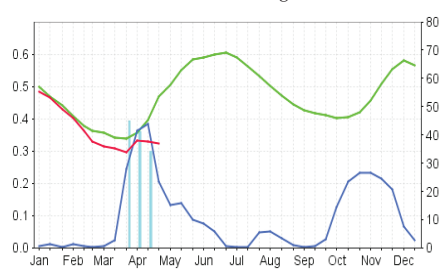
Afmadow Pastoral (Herbaceous)



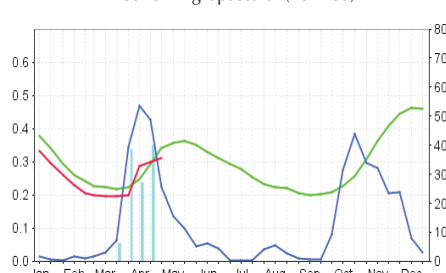
Beletweyn Riverine (Irrigated)



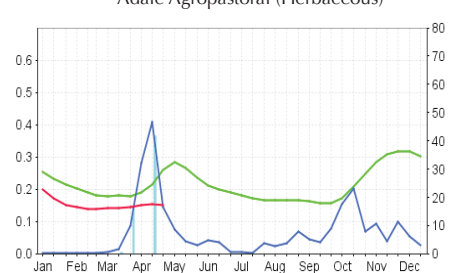
Jamame Riverine (Irrigated)



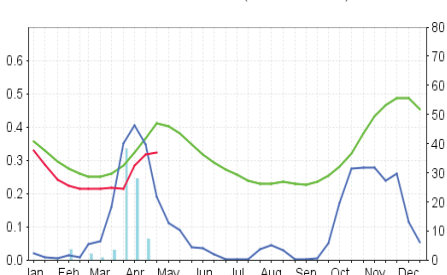
Sakow Agropastoral (Rainfed)



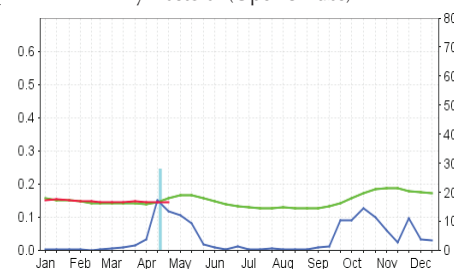
Adale Agropastoral (Herbaceous)



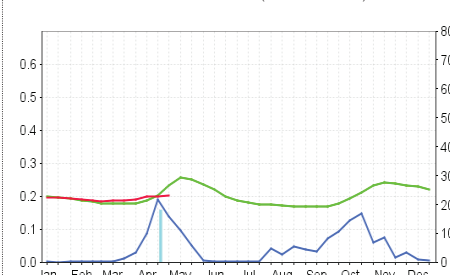
Afmadow Pastoral (Herbaceous)



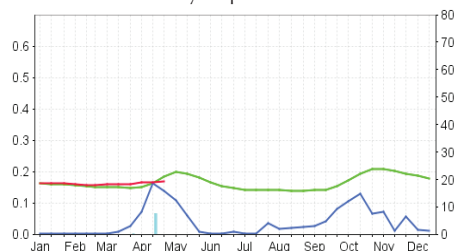
Eyl Pastoral (Open Shrubs)



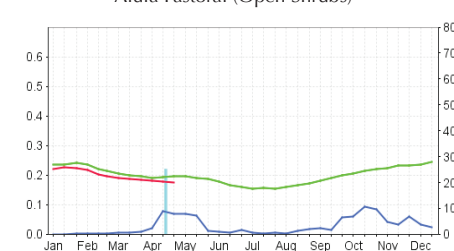
Abudwak Pastoral (Herbaceous)



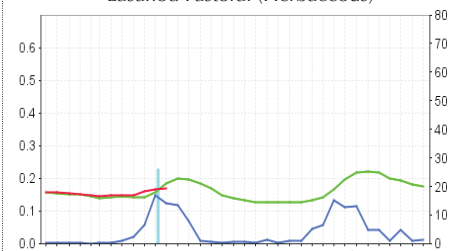
Galkayo Open Shrubs



Alula Pastoral (Open Shrubs)



Lasanod Pastoral (Herbaceous)



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