

Highlights

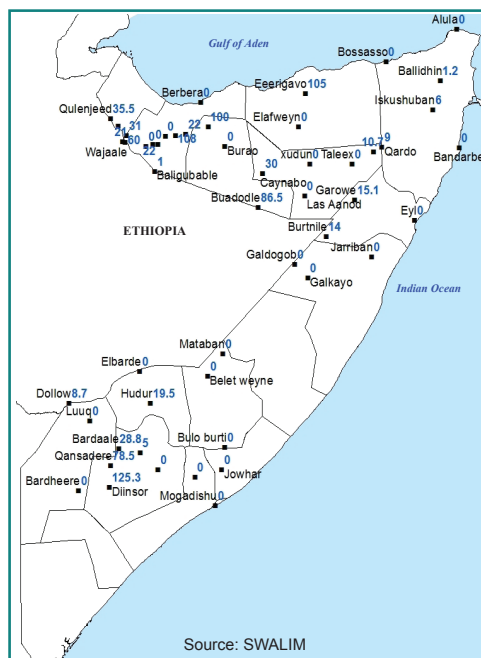
During September 2018, the climate situation indicates persistence of *Karan* (July - September) rains in northwest and parts of northeast whereas in the south *Hagaa* (July-September) showers prevailed. *Hagaa* rains were enhanced in the third *dekad*. Above average *Karan* rains of over 100mm has been recorded in Sheikh, Dhubato and Eerigavo i Northern Somalia. In the South, Dinsor and Qansadere stations recorded above average rains of 72mm and 82mm respectively. Field reports indicate prevalence of light and sporadic rains in Middle and Lower Juba. (Map 1; Table1)

Satellite derived rainfall estimates (RFE) show a build-up of rainfall activity from northeast towards the south in the third *dekad* of September, thus confirming the gradual cessation of *Karan**Hagaa* rains (Map 2-5). Vegetation cover measured through the Normalized Difference Vegetation Index (NDVI) shows close to normal vegetation conditions in large areas of the country with regions such as Awdal, W.Galbeed, Togdher, Hiran, Bakool, Gedo and parts of Bay showing improved vegetation biomass. However, in some parts of East Golis of Sanag, Southern Rainfed maize, Juba Pastoral, small pockets in the Cowpea Belt as well as Sorghum High potential agropastoral in Shabelle exhibit stressed biomass. (Maps 6-8 and 10).

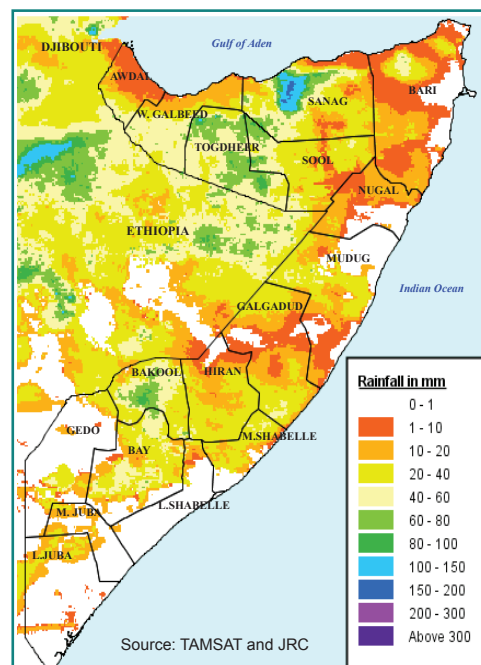
In the South *Hagaa* rains have been beneficial for the improvement of both crops at different stages such as maize, cowpea, sesame, late planted sorghum and other cash crops. In general pasture and surface water condition have improved albeit marginally.

However in northeast and central regions where dry weather conditions exist, pasture and water remain scarce. Increased demand for water for human and livestock use and water trucking has been reported in Bandarbeyla in Bari region while livestock body conditions have deteriorated, with the worst being sheep and camel that calved recently. In Riverine livelihood of the South off-season harvest which normally starts at the end of September or early October is ongoing whereas early dry planting of maize has been reported in Gedo. Favorable *Karan* rains in northwest is expected to improve cereal harvest prospects in November although the overall cereaal harvest in northwest is expected to remain below average due to dry spells and moisture stress early in th *Gu*/*Karan* season.

Map 1: Sept 2018 Monthly Rain Gauge Data

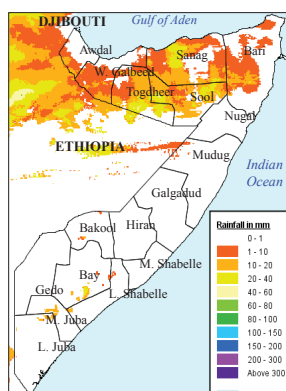


Map 2: Sept 2018 TAMSAT Monthly Rainfall Estimates

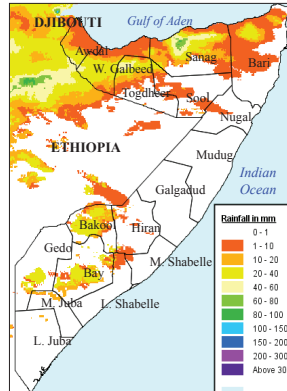


September 2018: Dekadal Rainfall (RFE) Progression

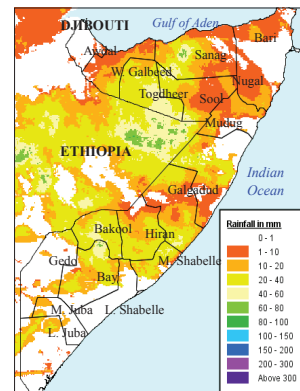
Map 3: 1st Dekad (1-10)



Map 4: 2nd Dekad (11-20)

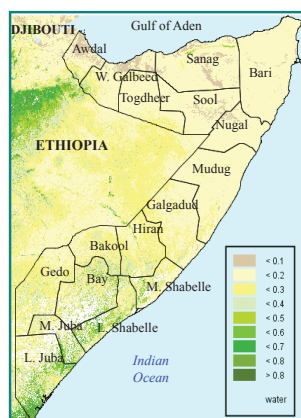


Map 5: 3rd Dekad (21-30)

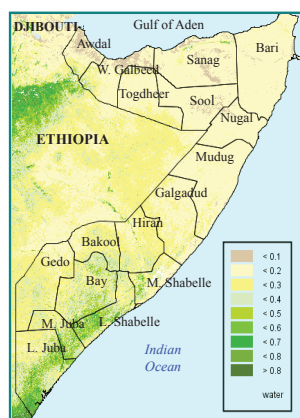


September 2018: Dekadal Vegetation Cover (NDVI) Progression

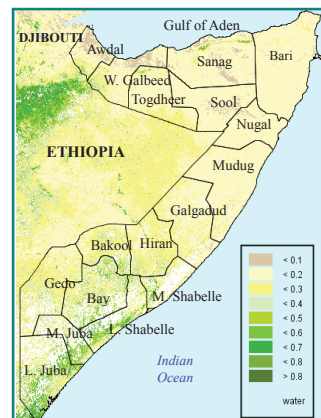
Map 6: 1st Dekad (1-10)



Map 7: 2nd Dekad (11-20)

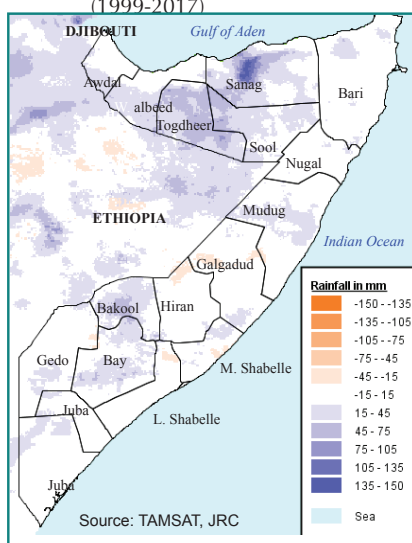


Map 8: 3rd Dekad (21-30)



Monthly rainfall and Vegetation Cover performance

Map 9: September 2018 TAMSAT Rainfall Difference from short term mean (1999-2017)



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

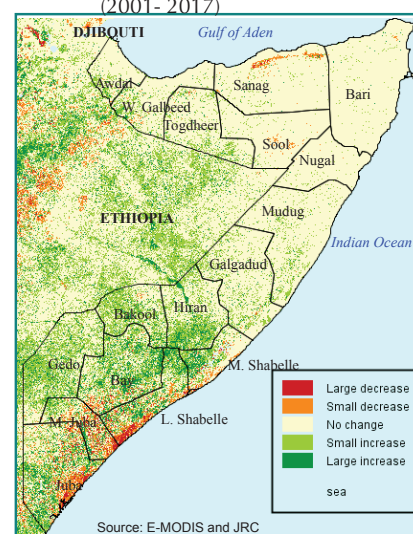


Table 1: Observed rain gauge data for September 2018 compared to long term monthly averages (LTM)

Northern Regions

Region	Station Name	dek 1	dek 2	dek 3	Sep 18	LTM
Awdal	Borama	20.5	23.0	0.0	43.5	80.0
Awdal	Qulenjeed	13.0	22.5	0.0	35.5	76.0
Wogooyi Galbeed	Gebilley	0.0	21.0	0.0	21.0	59.0
Wogooyi Galbeed	Malawle	0.0	0.0	0.0	0.0	66.0
Wogooyi Galbeed	Wajaale	30.0	30.0	0.0	60.0	70.0
Wogooyi Galbeed	Hargeisa	18.0	4.0	0.0	22.0	65.0
Wogooyi Galbeed	Daraweyne	0.0	0.0	0.0	0.0	59.0
Wogooyi Galbeed	Cadaadley	0.0	22.0	0.0	22.0	49.0
Wogooyi Galbeed	Dilla	14.0	17.0	0.0	31.0	73.0
Wogooyi Galbeed	Aburin	0.0	0.0	0.0	0.0	67.0
Wogooyi Galbeed	Dhubato	25.0	53.0	30.0	108.0	56.0
Wogooyi Galbeed	Baligubable	0.0	1.0	0.0	1.0	65.0
Wogooyi Galbeed	Berbera	0.0	0.0	0.0	0.0	3.0
Togdheer	Burao	0.0	0.0	0.0	0.0	27.0
Togdheer	Sheikh	3.0	73.0	24.0	100.0	74.0
Togdheer	Buadodde	0.0	0.2	86.3	86.5	31.0
Sanaag	Eerigavo	18.0	87.0	0.0	105.0	80.0
Sanaag	Elafweyn	0.0	0.0	0.0	0.0	37.0
Sool	Caynabo	0.0	26.0	4.0	30.0	33.0
Sool	xudun	0.0	0.0	0.0	0.0	23.0
Sool	Taleex	0.0	0.0	0.0	0.0	19.0
Sool	Las Aanod	0.0	0.0	0.0	0.0	15.0
Bari	Bossasso	0.0	0.0	0.0	0.0	1.0
Bari	Qardo	0.0	0.0	9.0	9.0	8.0
Bari	Dangoroyo	0.0	0.0	10.7	10.7	9.0
Bari	Ballidhin	0.0	1.2	0.0	1.2	9.0
Bari	Alula	0.0	0.0	0.0	0.0	0.0
Bari	Bandarbeyla	0.0	0.0	0.0	0.0	9.0
Bari	Iskushuban	2.0	4.0	0.0	6.0	7.0
Nugaal	Garowe	0.0	0.0	15.1	15.1	17.0
Nugaal	Eyl	0.0	0.0	0.0	0.0	2.0
Nugaal	Burtnile	0.0	0.0	14.0	14.0	17.0
Mudug	Galdogob	0.0	0.0	0.0	0.0	10.0
Mudug	Jarriban	0.0	0.0	0.0	0.0	11.0
Mudug	Galkayo	0.0	0.0	0.0	0.0	4.0

Southern Regions

Region	Station Name	dek 1	dek 2	dek 3	Sep 18	LTM
Bakool	Hudur	1.0	3.0	15.5	19.5	8.0
Bakool	Elbarde	0.0	0.0	0.0	0.0	35.0
Bay	Baidoa	0.0	0.0	5.0	5.0	13.0
Bay	Diinsor	10.8	87.8	26.7	125.3	11.0
Bay	Bardaale	0.0	0.0	28.8	28.8	12.0
Bay	Burhakaba	0.0	0.0	0.0	0.0	18.0
Bay	Wanleweyne	0.0	0.0	0.0	0.0	*
Gedo	Luuq	0.0	0.0	0.0	0.0	3.0
Gedo	Bardheere	0.0	0.0	0.0	0.0	8.0
Hiraan	Belet weyne	0.0	0.0	0.0	0.0	13.0
Hiraan	Bulo burti	0.0	0.0	0.0	0.0	8.0
Hiraan	Mataban	0.0	0.0	0.0	0.0	12.0
Banadir	Mogadishu	0.0	0.0	0.0	0.0	17.0
Middle Shabelle	Jowhar	0.0	0.0	0.0	0.0	6.0
Gedo	Dollow	0.0	0.0	8.7	8.7	*
Bay	Qansadere	8.5	0.0	70.0	78.5	*

*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 FEWSNET.

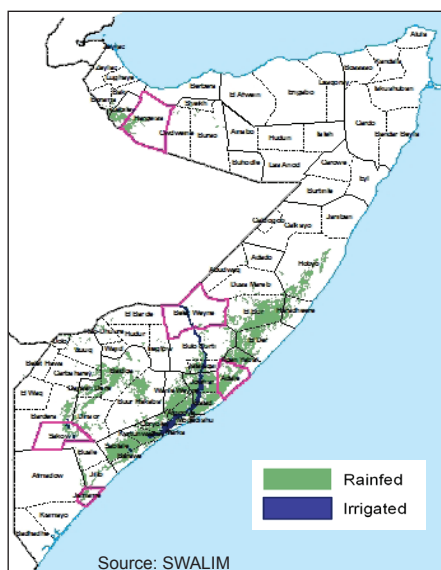
- The seasonal profiles on page 3 and 4 are produced in collaboration with JRC-MARS. For more information visit <http://mars.jrc.europa.eu/mars/About-us/FOODSEC> For more information on NDVI visit <http://earlywarning.usgs.gov/adds> and <http://fsausomali.org/fileadmin/uploads/1308.pdf>

- 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.

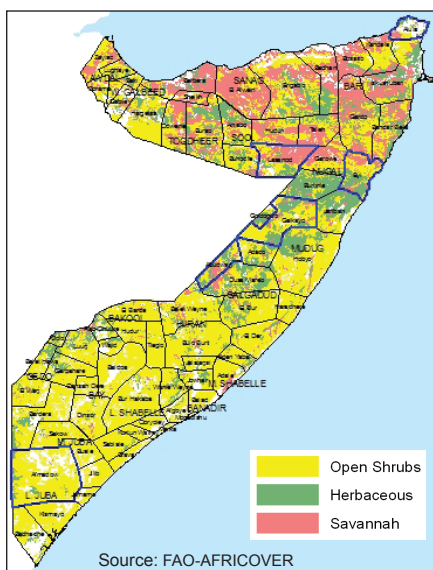
The TAMSAT information is available on <http://www.met.reading.ac.uk/tamsat/about/>

Seasonal rainfall and Vegetation Cover trends by region

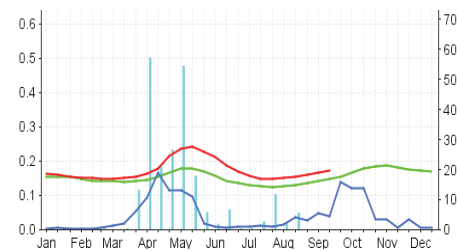
Map 11: Agricultural Areas



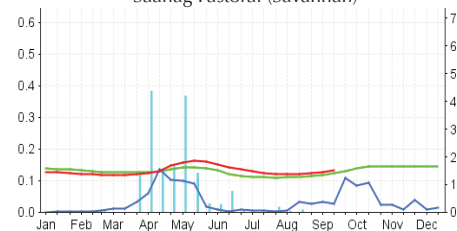
Map 12: Pastoral Areas



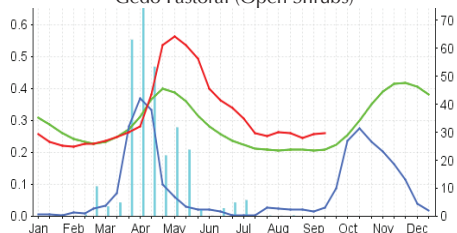
Togdheer Pastoral (Savannah)



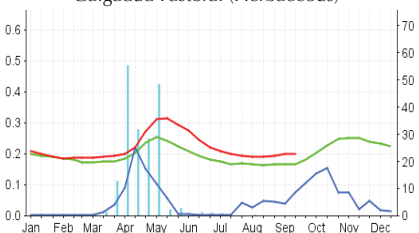
Saanag Pastoral (Savannah)



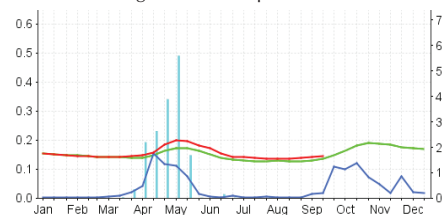
Gedo Pastoral (Open Shrubs)



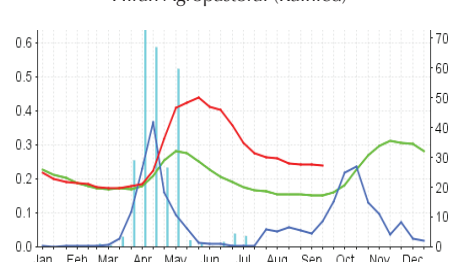
Galgadud Pastoral (Herbaceous)



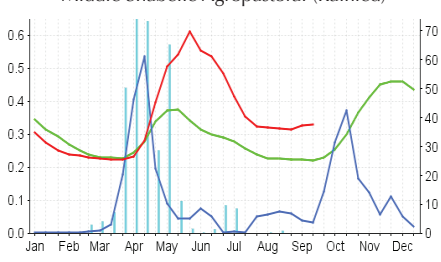
Nugal Pastoral (Open Shrubs)



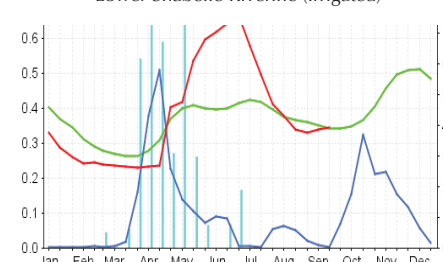
Hiran Agropastoral (Rainfed)



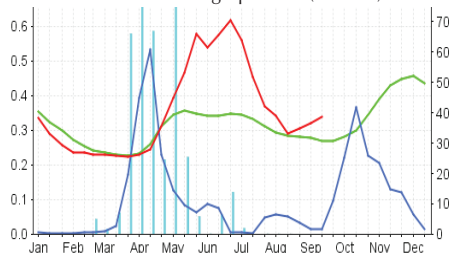
Middle Shabelle Agropastoral (Rainfed)



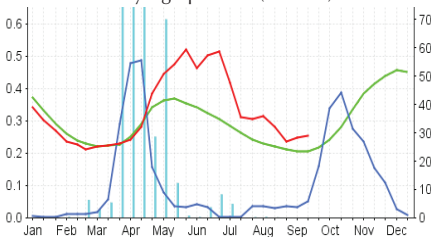
Lower Shabelle Riverine (Irrigated)



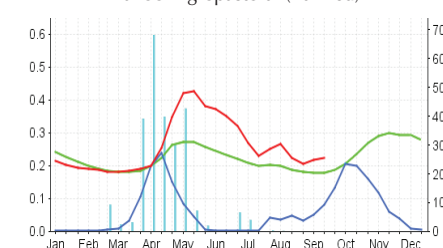
Lower Shabelle Agropastoral (Rainfed)



Bay Agropastoral (Rainfed)



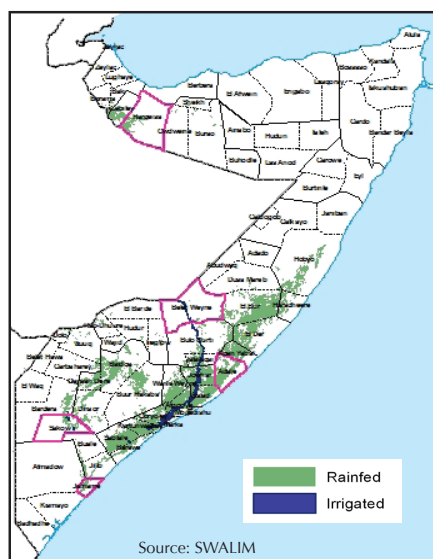
Bakool Agropastoral (Rainfed)



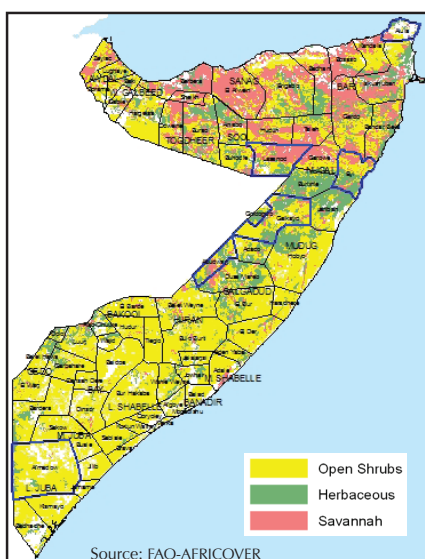
RFE 2018
 RFE AVG: 2001-2017
 NDVI-C 2018
 NDVI-C LTA MEAN (1999-2017)

Seasonal rainfall and Vegetation Cover trends for selected districts

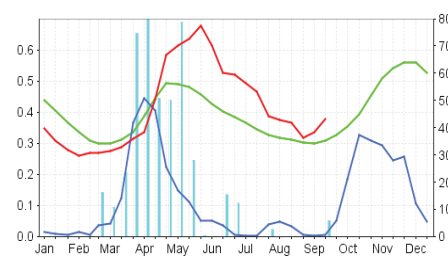
Map 13: Agricultural Areas



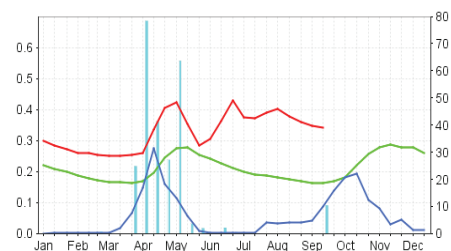
Map 14: Pastoral Areas



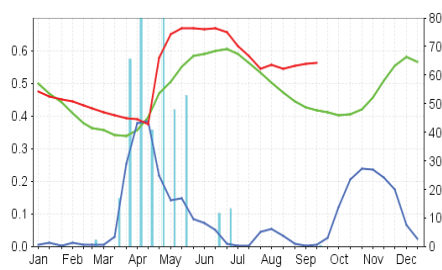
Afmadow Pastoral (Open Shrubs)



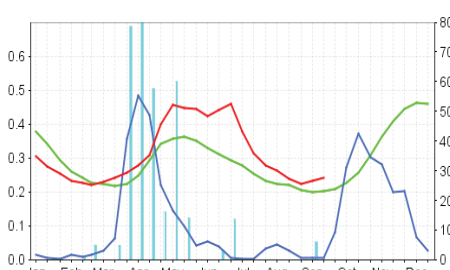
Beletweyn Riverine (Irrigated)



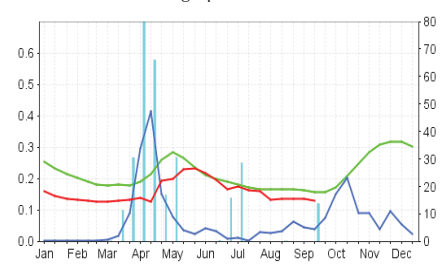
Jamame Riverine (Irrigated)



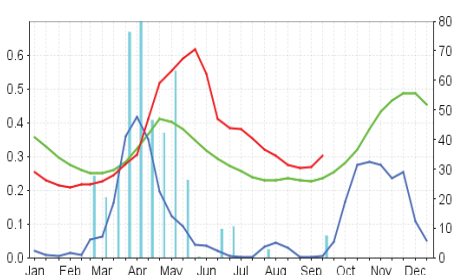
Sakow Agropastoral (Rainfed)



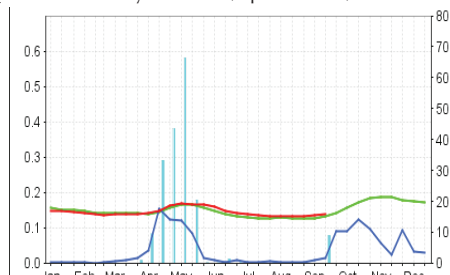
Adale Agropastoral (Herbaceous)



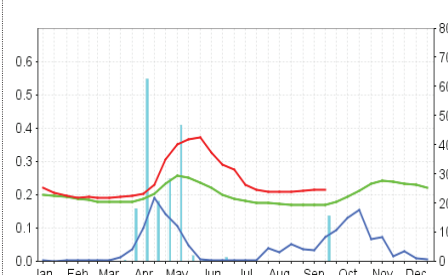
Afmadow Pastoral (Herbaceous)



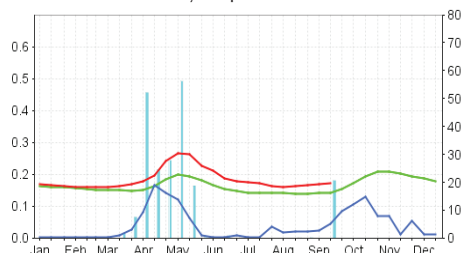
Eyl Pastoral (Open Shrubs)



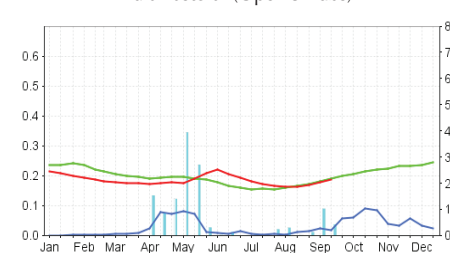
Abudwak Pastoral (Herbaceous)



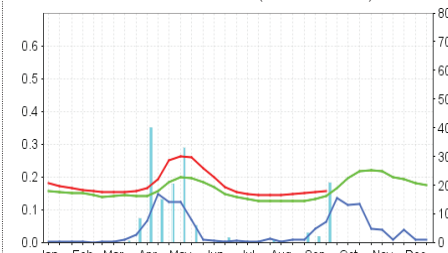
Galkayo Open Shrubs



Alula Pastoral (Open Shrubs)



Lasanod Pastoral (Herbaceous)



RFE 2018
 RFE AVG: 2001-2017
 NDVI-C 2018
 NDVI-C LTA MEAN (1999-2017)