

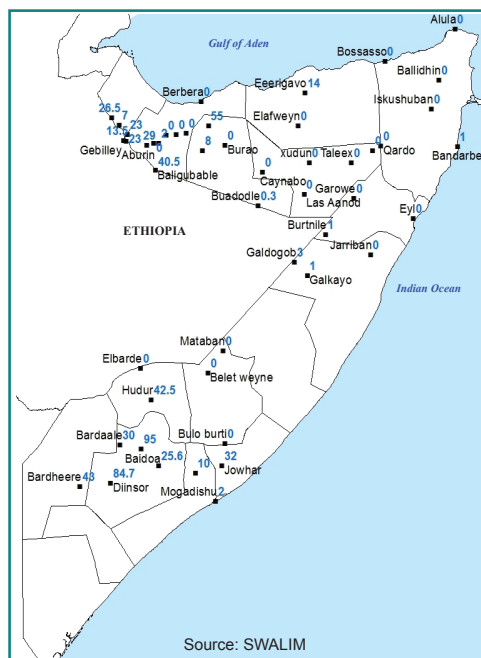
Highlights

The end of March typically marks the cessation of dry weather conditions (*jilaal*) and in some areas such as northwest and parts of southern Somalia regions marks the early onset of the *Gu* (April-June) rains. In the Northwest, unusual *Gu* light rains started as early as in the first dekad of March and were further enhanced in the third dekad. However in the south of Somalia the early rains were reported only in the third dekad of March. Some of the stations that recorded significant rains in March include: Baligubadle (40mm), Sheikh (55mm), Qulenjeed (27mm) Hudur (43mm), Baidoa (95mm), Dinsor (85mm), Burhakaba (26mm) and Bardheere (43mm) (Map 1 and Table1). Favorable rains in the Ethiopian highland catchment areas has led to moderate increase of river water levels in Juba and Shabelle.

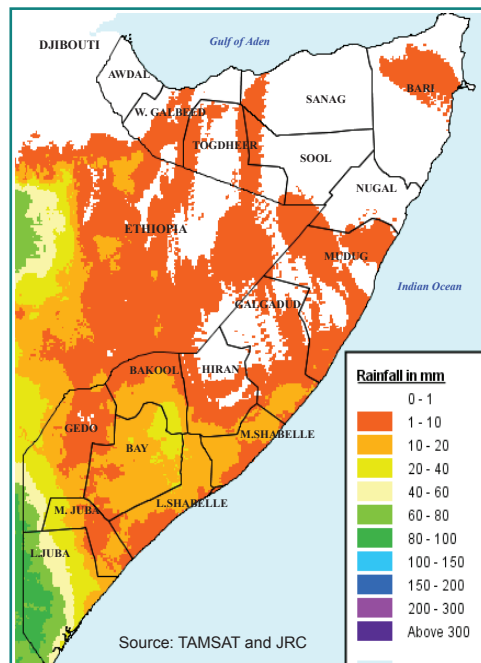
Satellite derived Rainfall estimates also confirmed the start of the 2018 *Gu* rainfall season in March. Satellite data indicates that large areas in southern regions of Juba and pocket areas in Bay and Bakool Low potential Agropastoral livelihood zones received enhanced rainfall. Normalized Difference Vegetation Index (NDVI) which measures vegetation cover shows sustained decrease in biomass in small to large areas across the country (Map 6-8 and 10). Pasture and vegetation improvement is expected in April as a result of early *Gu* rains received in March.

The unusual early March rains that covered most parts of southern regions in the country have encouraged many farmers to start early planting of crops. Main agricultural activities include land preparation, dry planting and rainwater harvest in agriculture-dependent rural areas of the country. The continued rise of the Shabelle and Juba rivers in March and April will enhance opportunities for crop cultivation, especially in riverine area of Hiraan, Middle Shabelle and upper parts of Lower Shabelle including Afgoye and Marka. Opportunistic livestock migration to areas where pasture is better was observed in the areas that received early rains in March.

Map 1: March 2018 Monthly Rain Gauge Data

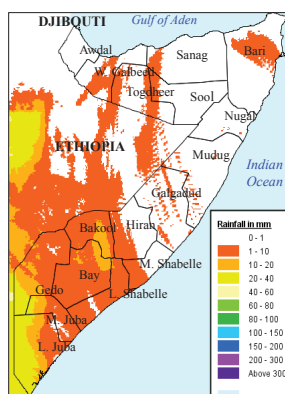


Map 2: March 2018 Monthly Rainfall Estimates (TAMSAT)

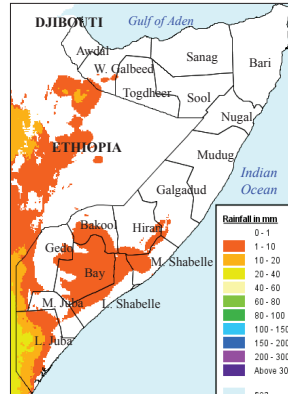


March 2018: Dekadal RFE Progression

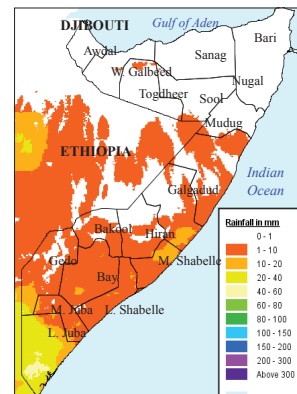
Map 3: 1st Dekad (1-10)



Map 4: 2nd Dekad (11-20)

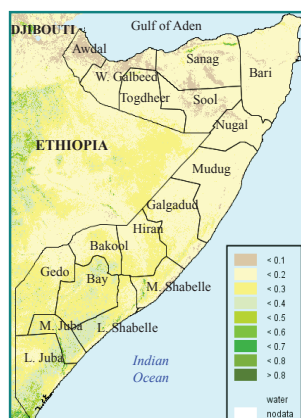


Map 5: 3rd Dekad (21-30)

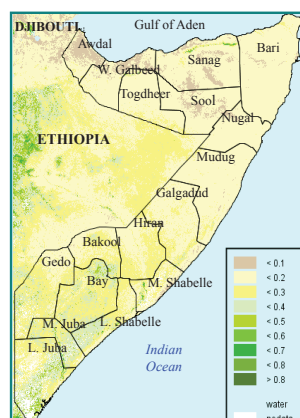


March 2018: Dekadal NDVI Progression

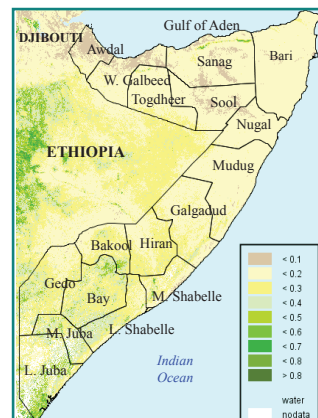
Map 6: 1st Dekad (1-10)



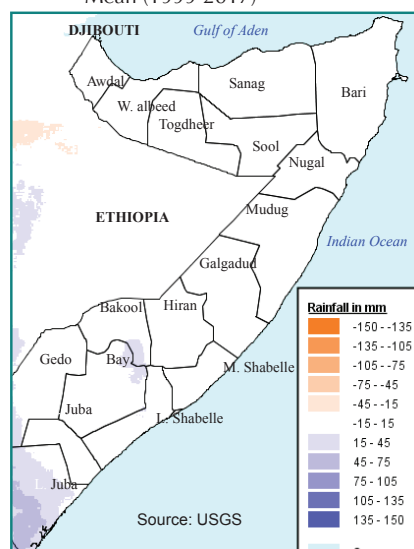
Map 7: 2nd Dekad (11-20)



Map 8: 3rd Dekad (21-30)



Map 9: March 2018 Estimated Rainfall Difference (in mm) From Short Term Mean (1999-2017)



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

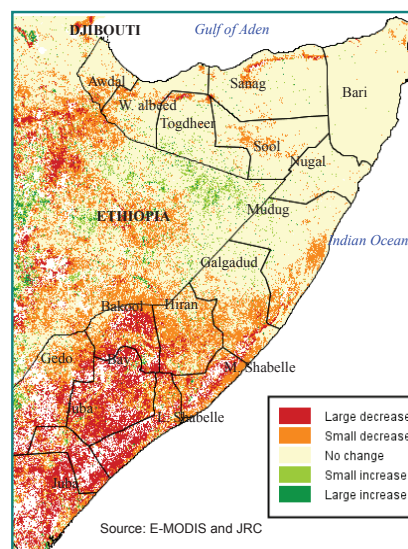


Table 1: Observed rain gauge data compared to long term monthly averages (March 2018)

Northern Regions

Region	Station Name	dek 1	dek 2	dek 3	Mar 2018	LTM
Awdal	Borama	7.0	0.0	0.0	7.0	44.0
Awdal	Qulenjeed	6.5	20.0	0.0	26.5	40.0
Wogooyi Galbeed	Gebilley	7.5	6.0	0.0	13.5	30.0
Wogooyi Galbeed	Malawle	0.0	0.0	0.0	0.0	28.0
Wogooyi Galbeed	Wajaale	18.0	5.0	0.0	23.0	36.0
Wogooyi Galbeed	Hargeisa	2.0	0.0	0.0	2.0	25.0
Wogooyi Galbeed	Darawayne	0.0	0.0	0.0	0.0	25.0
Wogooyi Galbeed	Cadaadley	0.0	0.0	0.0	0.0	22.0
Wogooyi Galbeed	Dilla	17.0	6.0	0.0	23.0	36.0
Wogooyi Galbeed	Aburin	19.0	10.0	0.0	29.0	29.0
Wogooyi Galbeed	Dhubato	0.0	0.0	0.0	0.0	25.0
Wogooyi Galbeed	Baligubable	40.5	0.0	0.0	40.5	30.0
Wogooyi Galbeed	Berbera	0.0	0.0	0.0	0.0	0.0
Togdheer	Burao	0.0	0.0	0.0	0.0	5.0
Togdheer	Sheikh	55.0	0.0	0.0	55.0	33.0
Togdheer	Odweyne	8.0	0.0	0.0	8.0	21.0
Togdheer	Buadodde	0.0	0.0	0.3	0.3	12.0
Sanaag	Eerigavo	8.0	0.0	6.0	14.0	22.0
Sanaag	Elafweyn	0.0	0.0	0.0	0.0	12.0
Sool	Caynabo	0.0	0.0	0.0	0.0	12.0
Sool	xudun	0.0	0.0	0.0	0.0	8.0
Sool	Taleex	0.0	0.0	0.0	0.0	7.0
Sool	Las Aanod	0.0	0.0	0.0	0.0	4.0
Bari	Bossasso	0.0	0.0	0.0	0.0	0.0
Bari	Qardo	0.0	0.0	0.0	0.0	7.0
Bari	Dangoroyo	0.0	0.0	0.0	0.0	6.0
Bari	Ballidhin	0.0	0.0	0.0	0.0	5.0
Bari	Alula	0.0	0.0	0.0	0.0	0.0
Bari	Bandarbeyla	0.0	0.0	1.0	1.0	5.0
Bari	Iskushuban	0.0	0.0	0.0	0.0	3.0
Nugaal	Garowe	0.0	0.0	0.0	0.0	7.0
Nugaal	Eyl	0.0	0.0	0.0	0.0	5.0
Nugaal	Burtnile	0.0	0.0	1.0	1.0	7.0
Mudug	Galdogob	0.0	0.0	3.0	3.0	4.0
Mudug	Jarriban	0.0	0.0	0.0	0.0	6.0
Mudug	Galkayo	0.0	0.0	1.0	1.0	5.0

Southern Regions

Region	Station Name	dek 1	dek 2	dek 3	Mar 2018	LTM
Bakool	Hudur	10.5	0.0	32.0	42.5	5.0
Bakool	Elbarde	0.0	0.0	0.0	0.0	13.0
Bay	Baidoa	0.0	0.0	95.0	95.0	23.0
Bay	Diinsor	0.0	0.0	84.7	84.7	26.0
Bay	Bardaale	0.0	0.0	30.0	30.0	17.0
Bay	Burhakaba	4.6	21.0	0.0	25.6	9.0
Bay	Wanleweyne	0.0	0.0	10.0	10.0	
Gedo	Bardheere	0.0	0.0	43.0	43.0	27.0
Hiraan	Belet weyne	0.0	0.0	0.0	0.0	9.0
Hiraan	Bulo burti	0.0	0.0	0.0	0.0	11.0
Hiraan	Mataban	0.0	0.0	0.0	0.0	11.0
Banadir	Mogadishu	0.0	0.0	2.0	2.0	4.0
Middle Shabelle	Jowhar	0.0	0.0	32.0	32.0	14.0

*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 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.

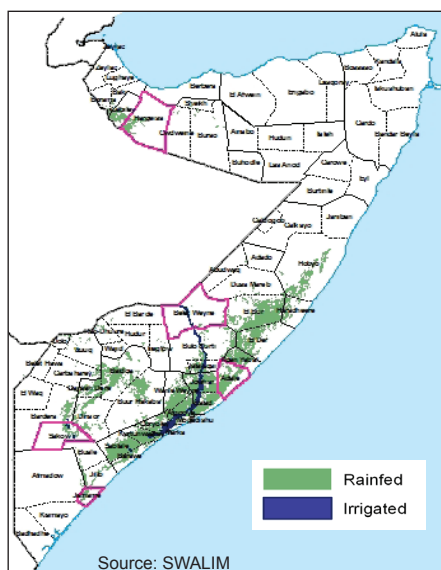
- Current Rainfall Estimates and NDVI data are derived from NOAA/CPC and DEVCOCAT (www.devcoast.eu) respectively, while the rain gauge data is collected by FAO-SWALIM and FEWSNET.

- 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>

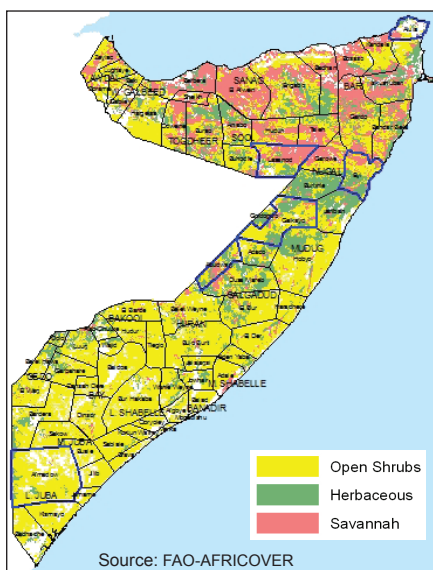
- This report is a compilation of climate data and field reports on Somalia that FSNAU and FEWS NET regularly review for analysis.

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

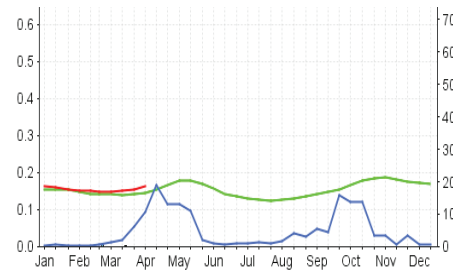
Map 12: Agricultural Areas



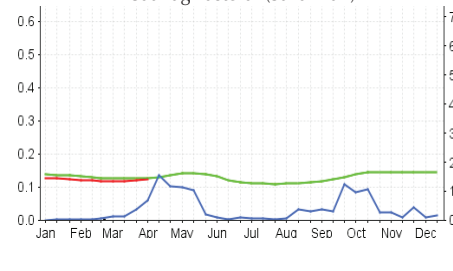
Map 13: Pastoral Areas



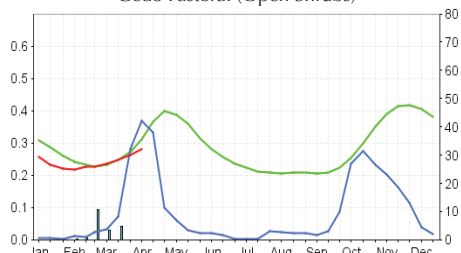
Togdheer Pastoral (Savannah)



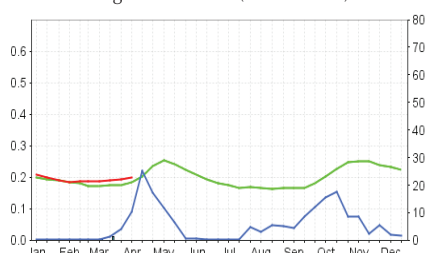
Saanag Pastoral (Savannah)



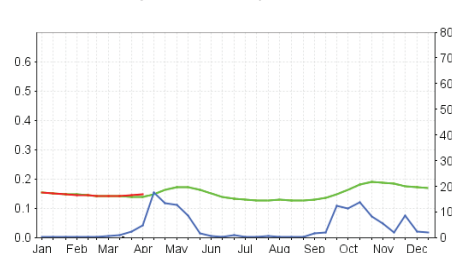
Gedo Pastoral (Open Shrubs)



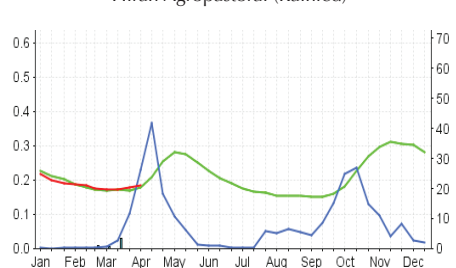
Galgadud Pastoral (Herbaceous)



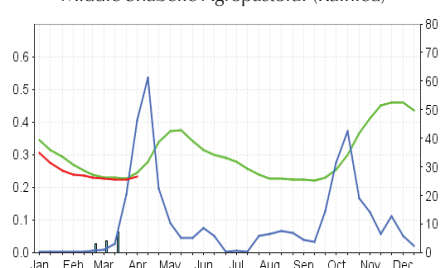
Nugal Pastoral (Open Shrubs)



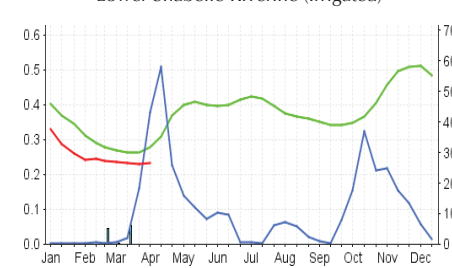
Hiran Agropastoral (Rainfed)



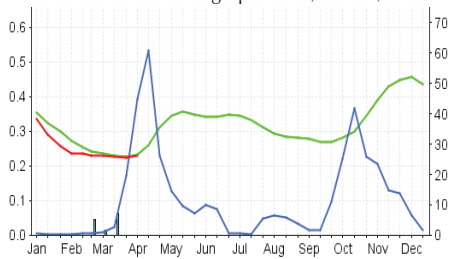
Middle Shabelle Agropastoral (Rainfed)



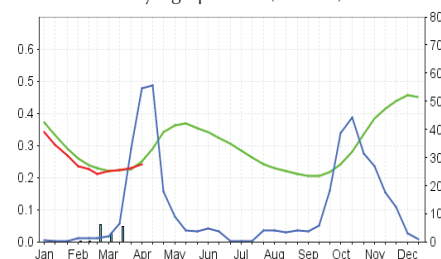
Lower Shabelle Riverine (Irrigated)



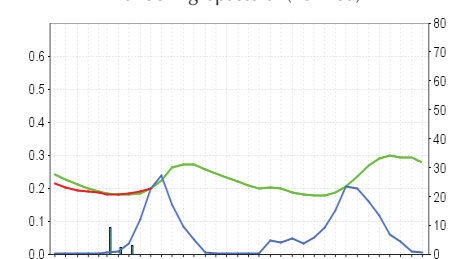
Lower Shabelle Agropastoral (Rainfed)



Bay Agropastoral (Rainfed)

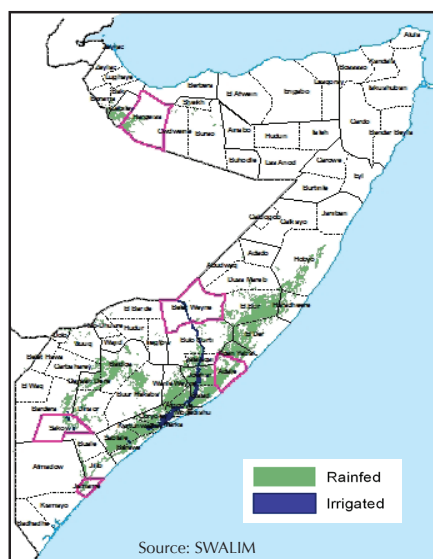


Bakool Agropastoral (Rainfed)

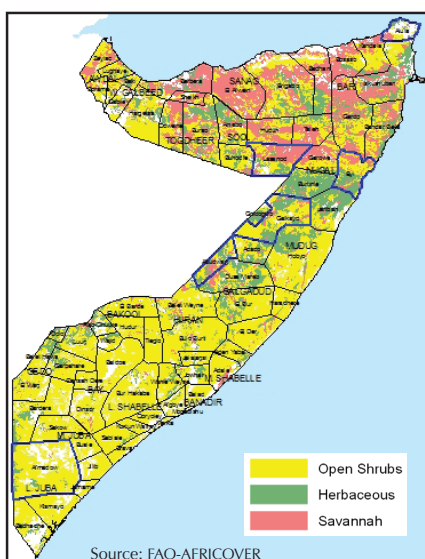


RFE 2018
 RFE AVG: 2001-2017
 NDVI-C 2018
 NDVI-C LTA MEAN (1999-2017)

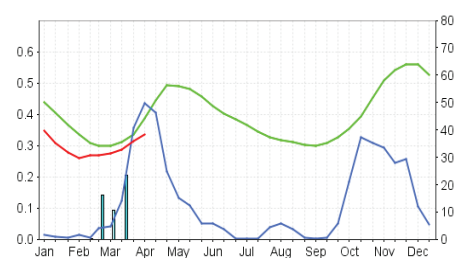
Map 14: Agricultural Areas



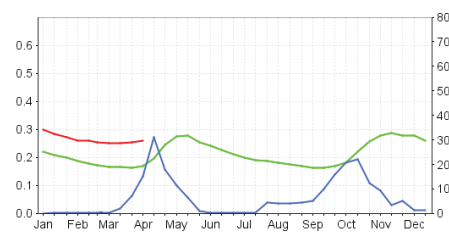
Map 15: Pastoral Areas



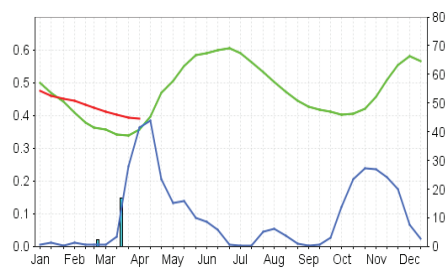
Aimadow Pastoral (Open Shrubs)



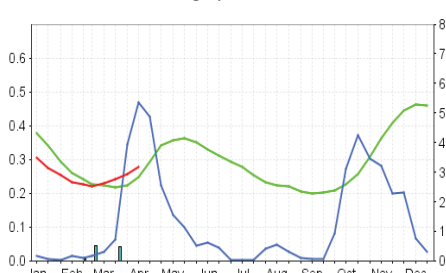
Beletweyn Riverine (Irrigated)



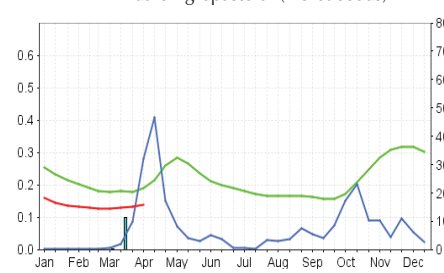
Jamame Riverine (Irrigated)



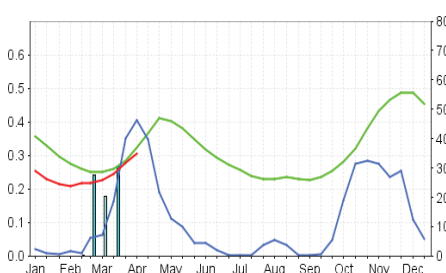
Sakow Agropastoral (Rainfed)



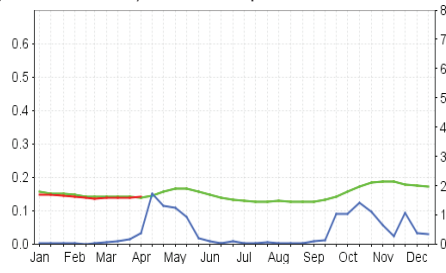
Adale Agropastoral (Herbaceous)



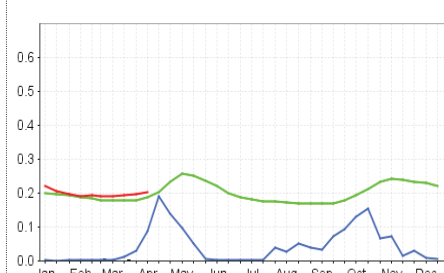
Aimadow Pastoral (Herbaceous)



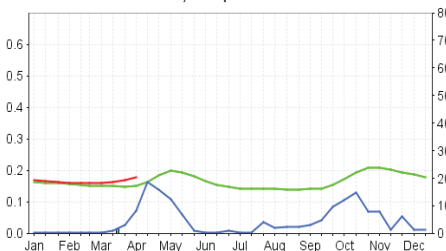
Eyl Pastoral (Open Shrubs)



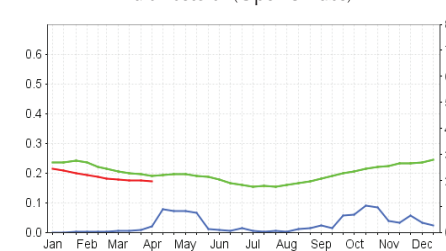
Abudwak Pastoral (Herbaceous)



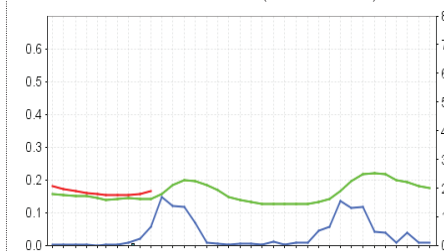
Galkayo Open Shrubs



Alula Pastoral (Open Shrubs)



Lasanod Pastoral (Herbaceous)



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