

Highlights

In the month of September, *Karan* rains were reported in northwest but with moderate to light intensity in most livelihoods. Localised areas of Guban pastoral received enhanced rains while some of the agropastoral areas such as Borama and Baki received insignificant light rains. Some of the rain gauges recorded above average rains and include: Gebiley (103mm), Dhubato (96mm), Wajaale (70mm), and Borama (39mm).

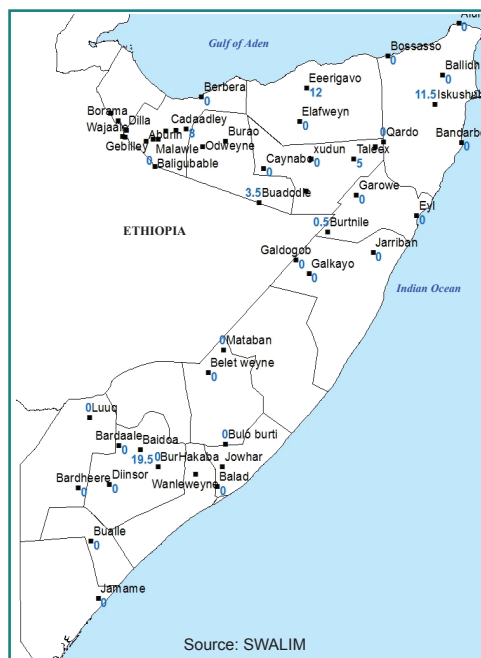
Hagaa (July – September) light showers which are usually concentrated in the coastal areas in the southern regions have been reported in Bay (Dinsor and Burhakaba) and M and L. Shabelle. In the south Baidoa station recorded 20 mm of rain (Table 1, Map 1). The *Hagga* rains have been erratic with poor spatial distribution.

Rainfall estimates derived from satellite confirm prevalence of light rains in northwest and parts of Shabelle (Maps 3-5). Normalized Difference Vegetation Index (NDVI) shows close to average vegetation conditions in large areas of the country. However, there is small to large decrease in vegetation vigor in Southern Rainfed livelihood zone (Jubas and L. Shabelle), Cowpea Belt (M. Shabelle), and Juba Pastoral as well as parts of Bay region in the South. The time series profiles (Page 3 and 4) indicate deterioration of vegetation when compared to the Long term Mean (LTM) in many regions of the country for September. Northern Inland Pastoral (NIP) in Sool, Sanaag, Bari and Nugal regions which received successive poor rains are likely to be more affected (Maps 6-8 and 10).

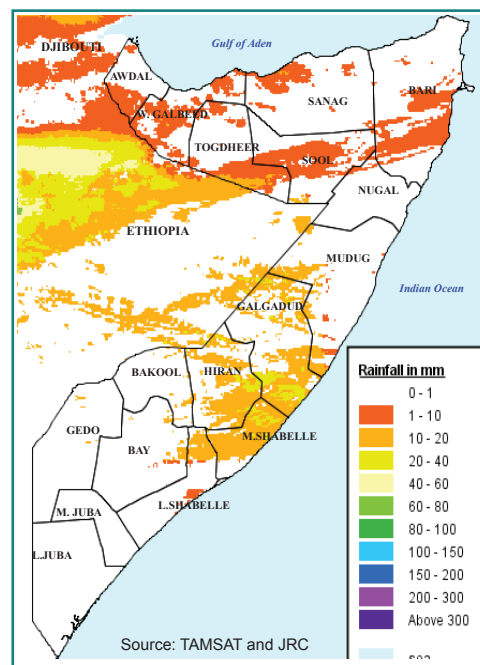
Field reports indicate that pasture and water conditions have deteriorated significantly in pastoral livelihoods in Bari, Sool, Sanaag and Galmudug. Most of the temporary water catchments such as Berkads have dried up pushing up prices. Better-off households have resorted to water trucking and feeding weak animals. There is a large influx of animals towards relatively better grazing areas in Sanaag from pasture deficit areas of Bari, Nugaal and parts of Sanaag. Due to poor browse and water conditions, livestock body conditions have significantly deteriorated in above mentioned areas. Livestock death have been reported in Sanaag (NIP and East Golis), Sool (NIP) and Bari (NIP). Land preparation, canal de-siltation and dry planting is currently on-going in most of riverine and agropastoral areas in the South.

Late planted Gu season crops are currently being harvested in M. Shabelle.

Map 1: Sept 2016 Monthly Rain Gauge Data

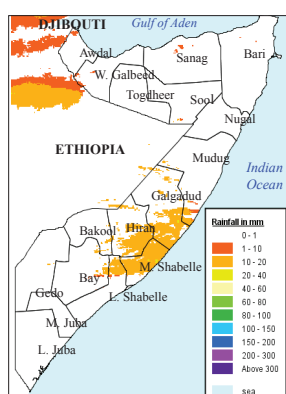


Map 2: Sept 2016 TAMSAT Monthly Rainfall Estimates

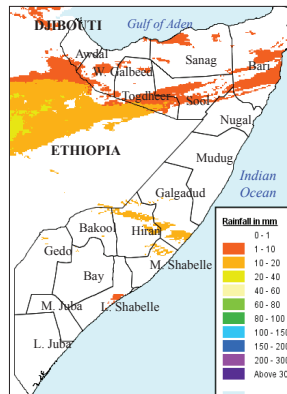


September 2016: Dekadal RFE Progression

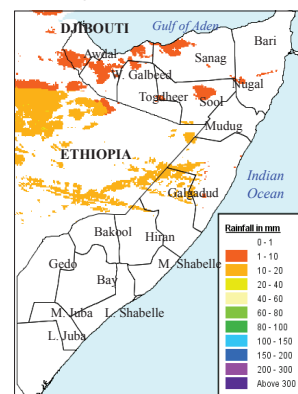
Map 3: 1st Dekad (1-10)



Map 4: 2nd Dekad (11-20)

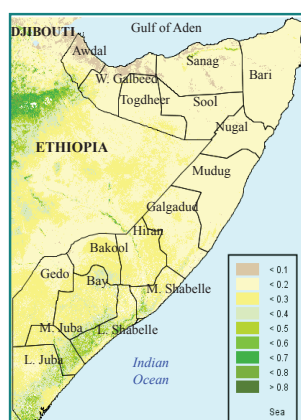


Map 5: 3rd Dekad (21-30)

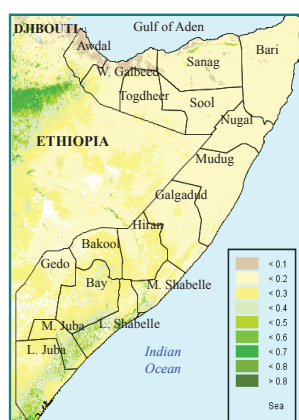


September 2016: Dekadal NDVI Progression

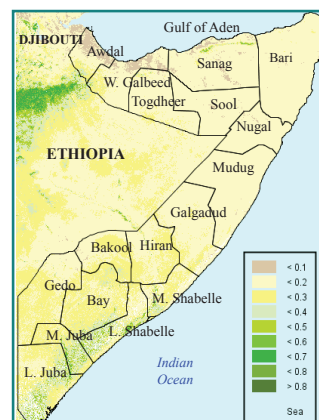
Map 6: 1st Dekad (1-10)



Map 7: 2nd Dekad (11-20)

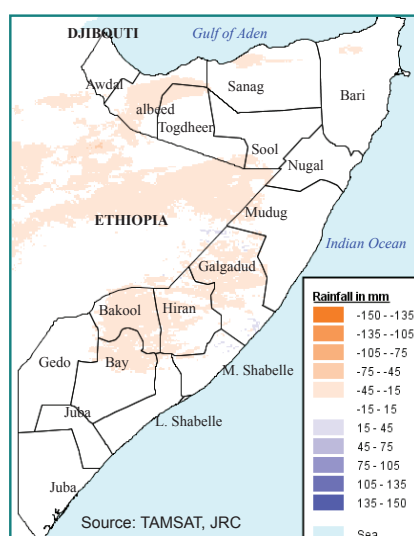


Map 8: 3rd Dekad (21-30)



Monthly rainfall and NDVI performance

Map 9: Sept 2016 TAMSAT Rainfall Difference from short term mean (1999-2015)



Map 10: Sept 2016 NDVI Absolute Difference from Short Term Mean (2001- 2015)

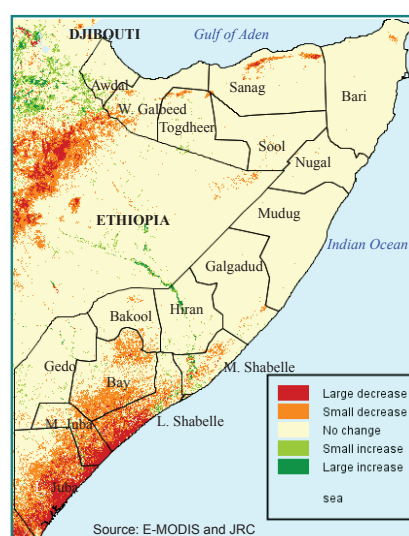


Table 1: Observed rain gauge data compared to long term monthly averages (September 2016)

Northern Regions

Region	Station_Name	dek 1	dek 2	dek 3	Sep-16	LTM
Awdal	Borama	9.0	27.5	2.0	38.5	80.0
Awdal	Qulenjeed	14.5	11.0	5.0	30.5	76.0
Bari	Bossasso	0.0	0.0	0.0	0.0	1.0
Bari	Qardo	0.0	0.0	0.0	0.0	8.0
Bari	Dangoroyo	0.0	0.0	0.0	0.0	9.0
Bari	Ballidhin	0.0	0.0	0.0	0.0	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	4.0	7.5	0.0	11.5	7.0
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
Nugaal	Garowe	0.0	0.0	0.0	0.0	17.0
Nugaal	Eyl	0.0	0.0	0.0	0.0	2.0
Nugaal	Burnile	0.0	0.0	0.5	0.5	17.0
Sanaag	Eerigavo	12.0	0.0	0.0	12.0	80.0
Sanaag	Elafweyn	0.0	0.0	0.0	0.0	37.0
Sool	Caynabo	0.0	0.0	0.0	0.0	33.0
Sool	xudun	0.0	0.0	0.0	0.0	23.0
Sool	Taleex	0.0	0.0	5.0	5.0	19.0
Sool	Las Aanod	0.0	0.0	0.0	0.0	15.0
Togdheer	Burao	0.0	0.0	0.0	0.0	27.0
Togdheer	Sheikh	4.0	9.0	12.0	25.0	74.0
Togdheer	Odweyne	10.0	0.0	0.0	10.0	51.0
Togdheer	Buadodle	0.0	0.5	3.0	3.5	31.0
Wogooyi Galbeed	Gebilley	17.0	64.0	22.0	103.0	59.0
Wogooyi Galbeed	Malawle	0.0	0.0	0.0	0.0	66.0
Wogooyi Galbeed	Wajaale	31.0	34.0	4.5	69.5	70.0
Wogooyi Galbeed	Hargeisa	2.0	14.0	6.0	22.0	65.0
Wogooyi Galbeed	Darawayne	0.0	0.0	5.0	5.0	59.0
Wogooyi Galbeed	Cadaadley	3.5	0.0	4.5	8.0	49.0
Wogooyi Galbeed	Dilla	14.0	42.0	2.0	58.0	73.0
Wogooyi Galbeed	Aburin	4.0	5.5	6.0	15.5	67.0
Wogooyi Galbeed	Dhubato	19.0	44.0	33.0	96.0	56.0
Wogooyi Galbeed	Baligubable	0.0	0.0	0.0	0.0	65.0
Wogooyi Galbeed	Berbera	0.0	0.0	0.0	0.0	3.0

Southern Regions

Region	Station_Name	dek 1	dek 2	dek 3	Sep-16	LTM
Bay	Baidoa	0.0	19.5	0.0	19.5	13.0
Bay	Diinsor	0.0	0.0	0.0	0.0	11.0
Bay	Bardaale	0.0	0.0	0.0	0.0	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	12.0
Lower Juba	Jamame	0.0	0.0	0.0	0.0	29.0
Lower Shabelle	Balad	*	*	*	0.0	13.0
Middle juba	Bualle	0.0	0.0	0.0	0.0	21.0
Middle Shabelle	Jowhar	0.0	0.0	0.0	0.0	6.0

*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.

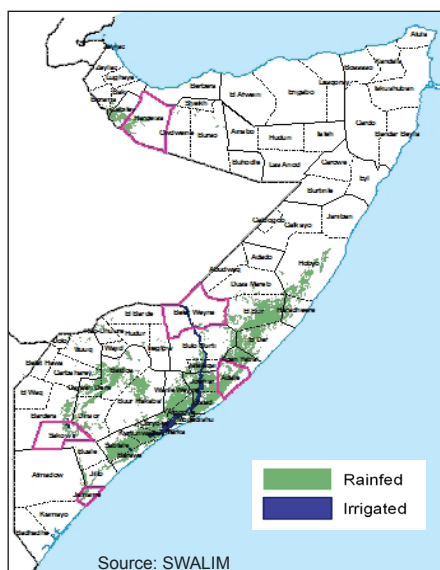
- The seasonal profiles on page 3 and 4 are produced in collaboration with JRC-MARS. For more information visit <http://mars.jrc.europa.eu/mars/About-us/FOODSEC> For more information on NDVI visit <http://earlywarning.usgs.gov/adds> and <http://fsausomali.org/fileadmin/uploads/1308.pdf>

- 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.

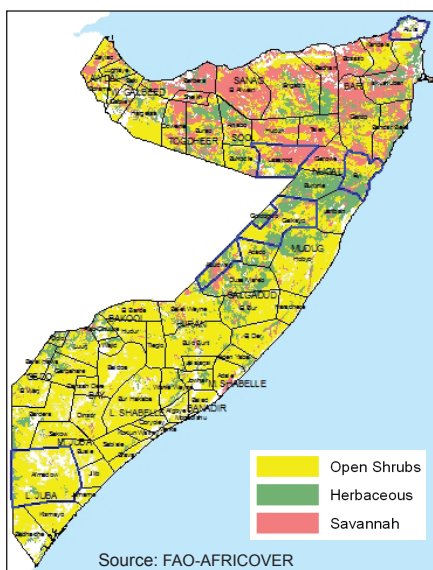
The TAMSAT informatio is available on <http://www.met.reading.ac.uk/tamsat/about/>

Seasonal rainfall and NDVI trends by region

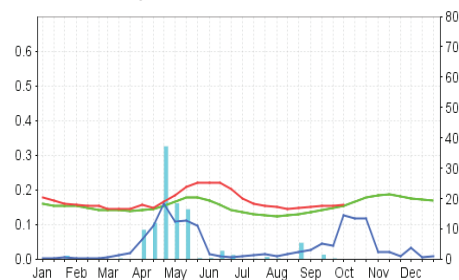
Map 11: Agricultural Areas



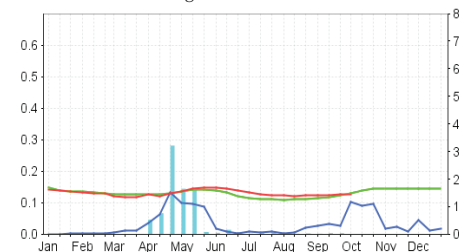
Map 12: Pastoral Areas



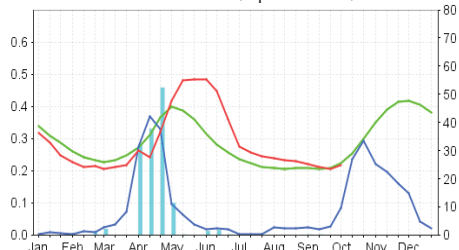
Togdheer Pastoral (Savannah)



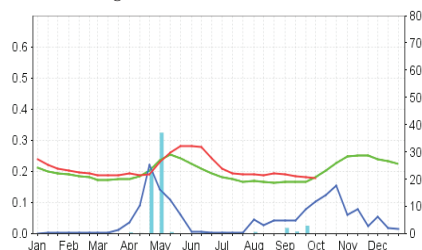
Saanag Pastoral (Savannah)



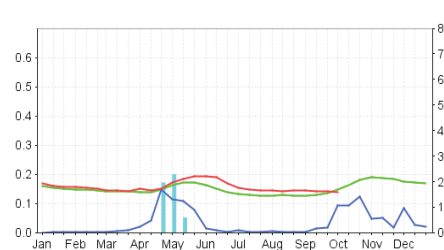
Gedo Pastoral (Open Shrubs)



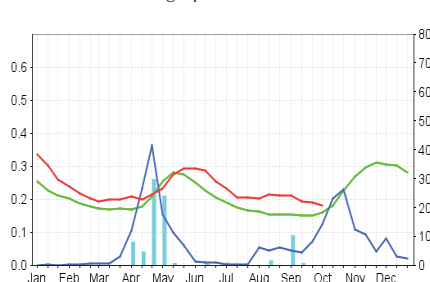
Galgadud Pastoral (Herbaceous)



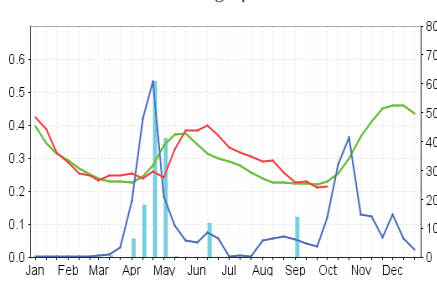
Nugal Pastoral (Open Shrubs)



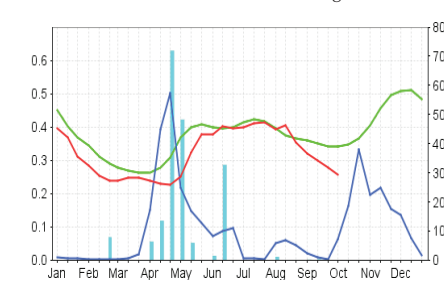
Hiran Agropastoral (Rainfed)



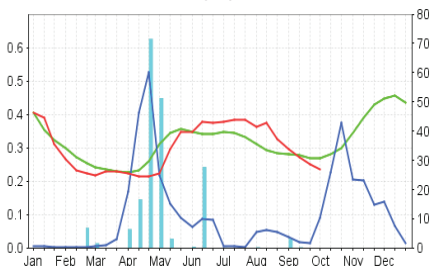
Middle Shabelle Agropastoral (Rainfed)



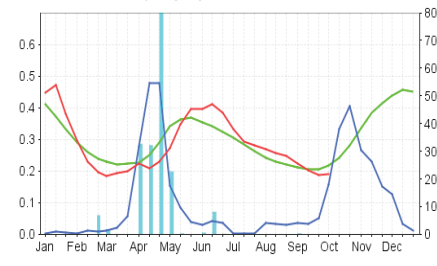
Lower Shabelle Riverine (Irrigated)



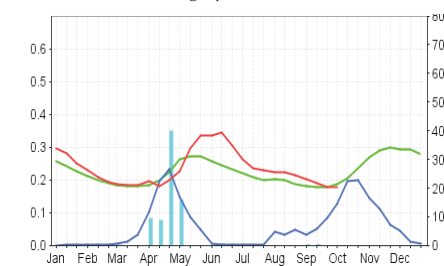
Lower Shabelle Agropastoral (Rainfed)



Bay Agropastoral (Rainfed)



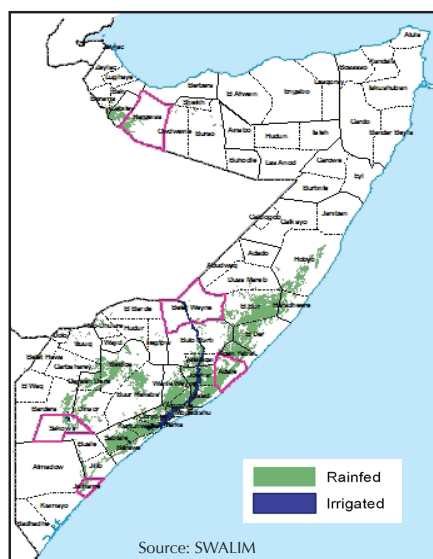
Bakool Agropastoral (Rainfed)



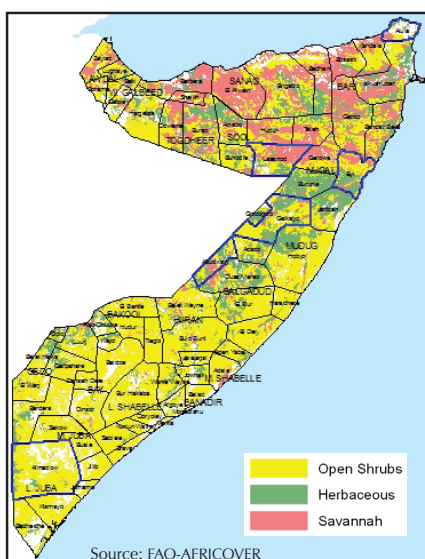
 RFE 2016
  RFE AVG: 2001-2015
  NDVI-C 2016
  NDVI-C LTA MEAN (1999-2015)

Seasonal rainfall and NDVI trends for selected districts

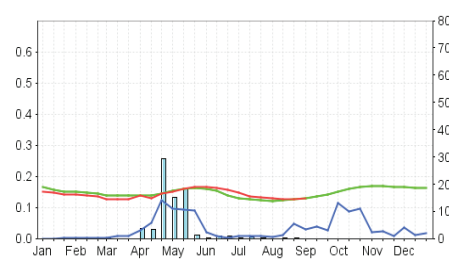
Map 13: Agricultural Areas



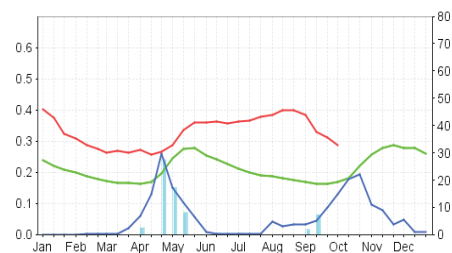
Map 14: Pastoral Areas



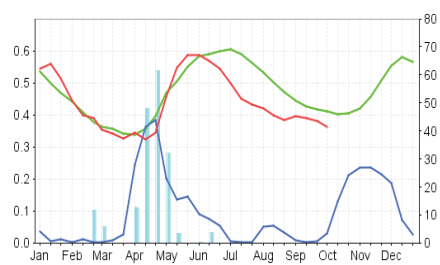
Erigabo Pastoral (Open Shrubs)



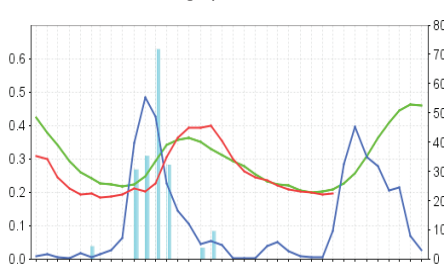
Beletweyn Riverine (Irrigated)



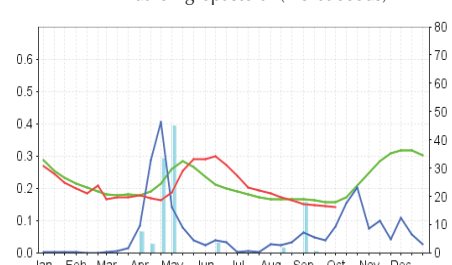
Jamame Riverine (Irrigated)



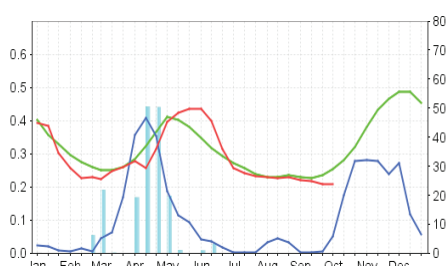
Sakow Agropastoral (Rainfed)



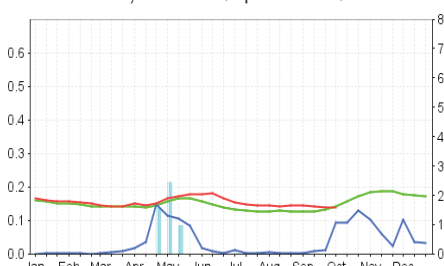
Adale Agropastoral (Herbaceous)



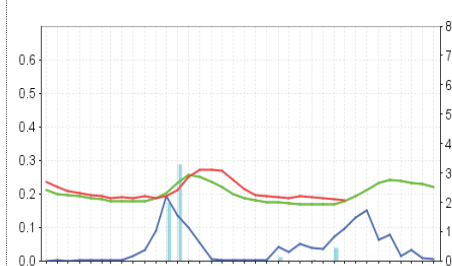
Afmadow Pastoral (Herbaceous)



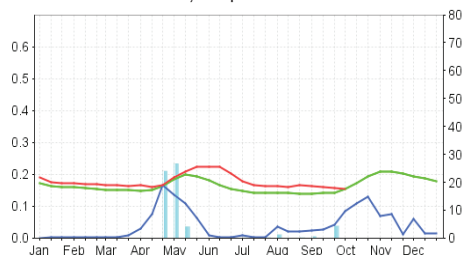
Eyl Pastoral (Open Shrubs)



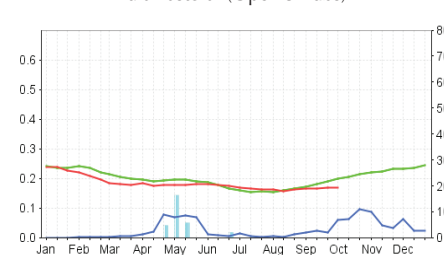
Abudwak Pastoral (Herbaceous)



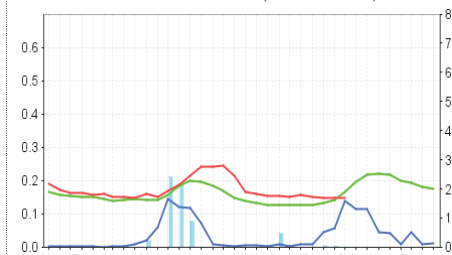
Galkayo Open Shrubs



Alula Pastoral (Open Shrubs)



Lasanod Pastoral (Herbaceous)



RFE 2016 RFE AVG: 2001-2015 NDVI-C 2016 NDVI-C LTA MEAN (1999-2015)