

Seasonal Climate Update



Food Security and Nutrition Analysis Unit - Somalia



Seasonal Rainfall and NDVI, April - June, 2010

Gu 2010

This seasonal climate update, a joint effort of FSNAU, MARS-JRC, FEWS NET and SWALIM, is produced after each seasonal assessment (Gu and Deyr), to provide an overall view of the seasonal performance. The data and analyses in this publication are based on remote sensing (Rainfall Estimates and Normalised Difference Vegetation Index) and complimented by rain gauge data collected by SWALIM

Highlights

Rainfall

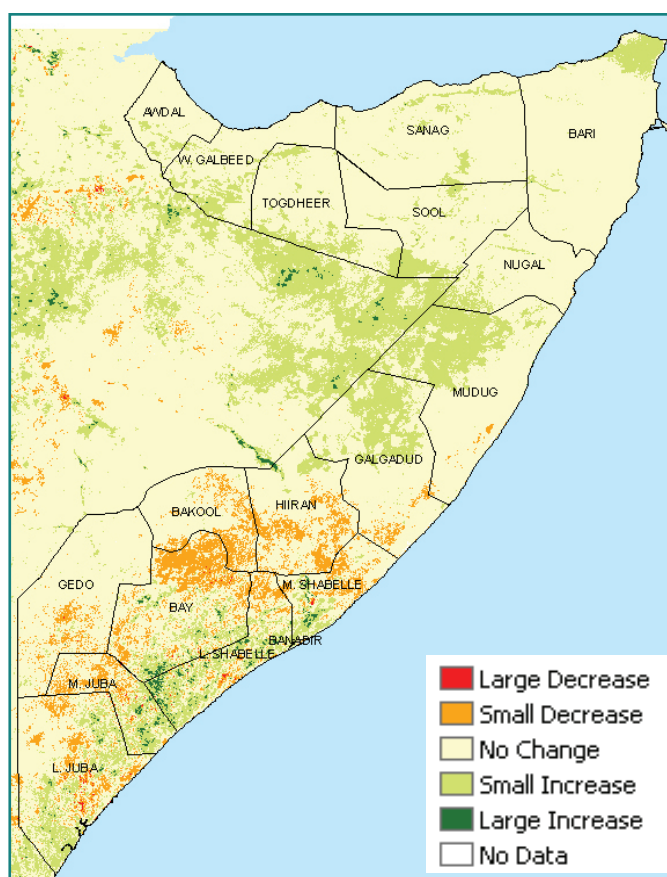
The Gu 2010 seasonal rains were generally good and above average throughout Somalia with the exception of most coastal areas, parts of Sanaag region as well as agropastoral and riverine areas of Hiran region. These are the results of remote sensing rainfall estimates (RFE), which was also confirmed using SWALIM rain gauge data. The Gu season, which occurs from April to June, was preceded by unseasonal rains in most parts of Somalia, with first events observed in February in Gedo, Juba, Awdal and Galbeed regions.

RFE also indicates that the southern regions, particularly Juba, Gedo, Bay and parts of Bakool experienced exceptional rainfall (>200% of long term average). The intense rainfall in Juba regions, especially in the month of April, coupled with the rains in the Ethiopian highlands, led to severe floods along the riverine areas of Jamame, Jilib, Sakow and Buale districts in Juba. Floods have also occurred in the districts of Beletweyne in Hiran and Jowhar in Middle Shabelle. The regions of Northwest, particularly Awdal and Galbeed, received exceptionally well distributed rains during the season, which peaked in May. It is worth noting that many parts of central regions, especially the Hawd Pastoral livelihood, received good rains after more than five consecutive dry seasons.

Normalised Difference Vegetation Index (NDVI)

The NDVI difference from average (Map 1) shows a prevalence of average to above average vegetation conditions in large areas of the country. The most evident is the Hawd pastoral and Nugal valley livelihood zones as well as most agricultural areas of the south.

Map 1: July NDVI absolute difference from long term average



Data Sources

Maps and graphs in this bulletin are produced from three sources:

- Current Rainfall Estimates and NDVI are derived from RFE data provided by FEWSNET and SPOT VEGETATION data provided by the DEVCOCAST project, while the rain gauge data is collected by FAO-SWALIM.
- The seasonal profiles and long term trends on page 2 are produced in collaboration with JRC-MARS and utilise a combination of FAO-Africover and FAO-SWALIM land cover classes to derive RFE and NDVI summaries. For more information visit <http://mars.jrc.ec.europa.eu/mars/About-us/FOODSEC>

Technical and Managerial Support

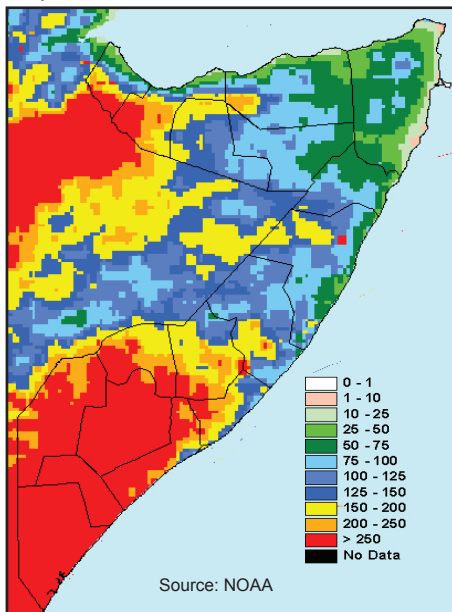


Funding Agencies

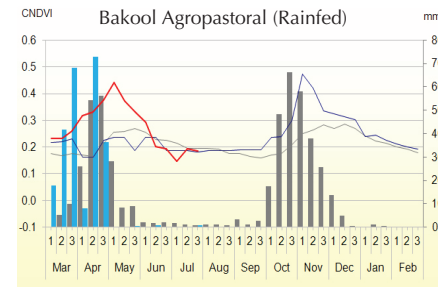
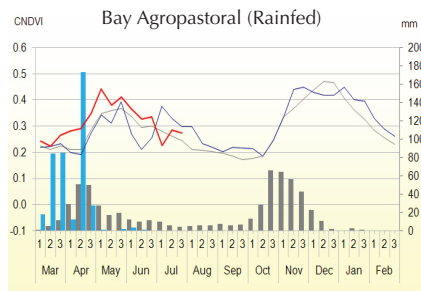
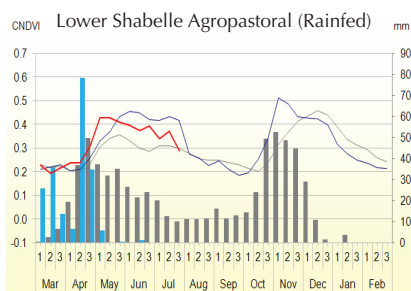
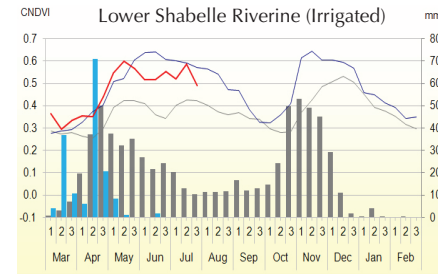
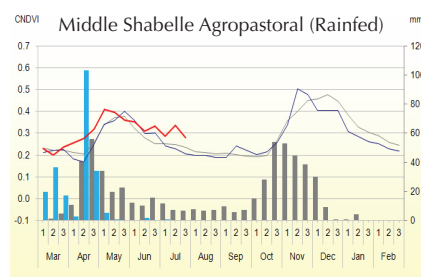
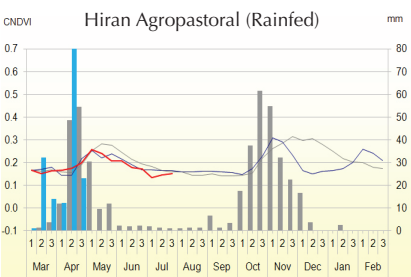
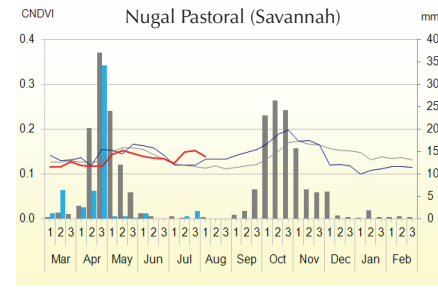
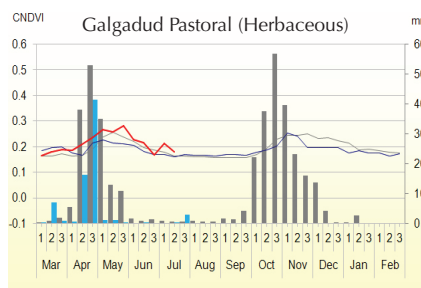
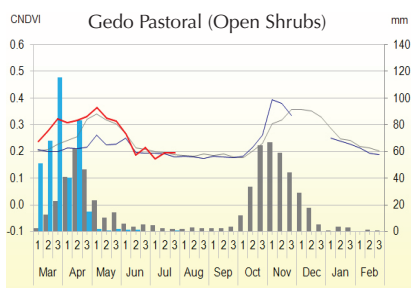
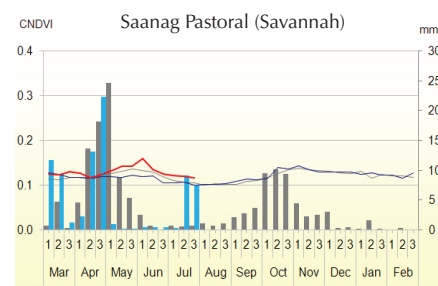
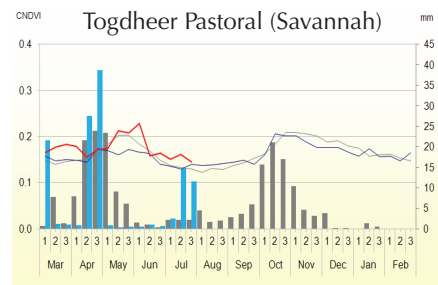
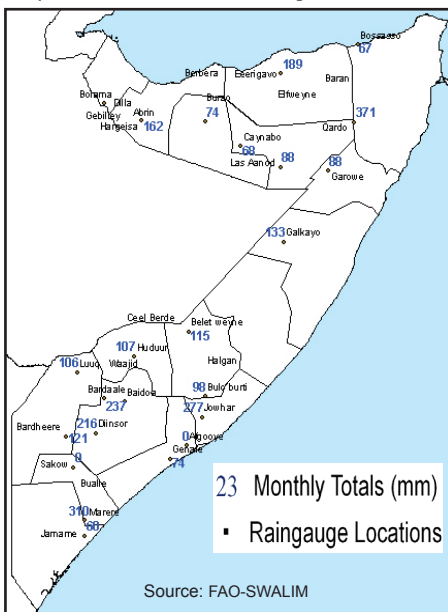


Monthly Rainfall and NDVI

Map 2: Cumulative Rainfall Estimates (mm)



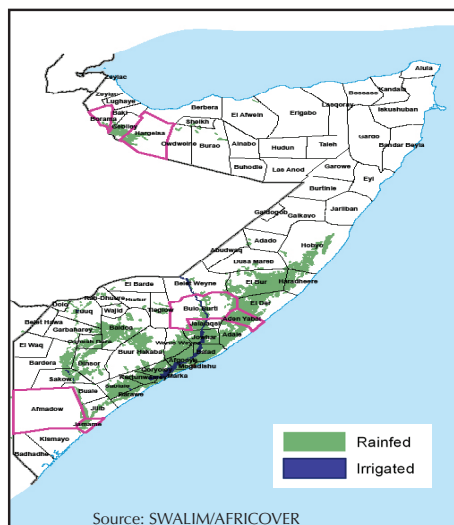
Map 3: Cumulative Rain Gauge Data (mm)



rainfall LTA rainfall 10-11 CNDVI LTA CNDVI 09-10 CNDVI 10-11

Long term seasonal rainfall and NDVI trends for selected agricultural districts

Map 4: Agricultural Areas

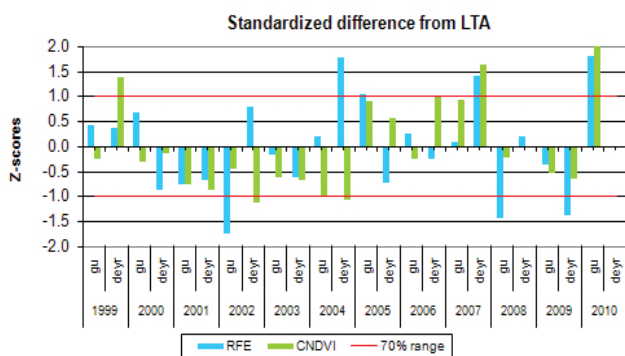


Agriculture

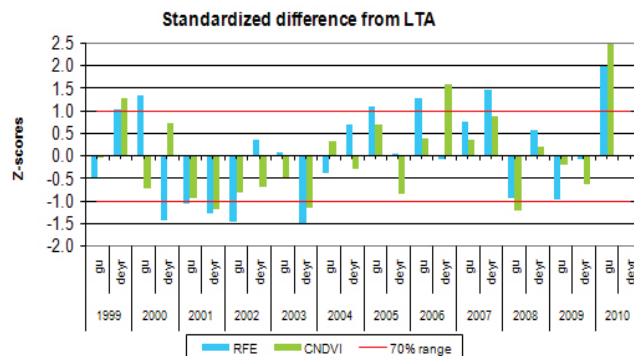
Overall, the 2010 Gu season marks an exceptional year for crop production in Somalia with a bumper harvest expected in most agricultural areas. Seasonal analysis of NDVI and RFE profiles confirms exceptional performance of agricultural vegetation in the sorghum areas of the Northwest such as Hargeisa and Borama districts and maize areas of the South such as Balad and Afmadow districts. Average to good performance prevails in most cereal producing districts of Shabelle and Bay regions. Crop producing districts of Juba riverine however experienced crop losses as a result of flooding.

Selected districts with good crop production

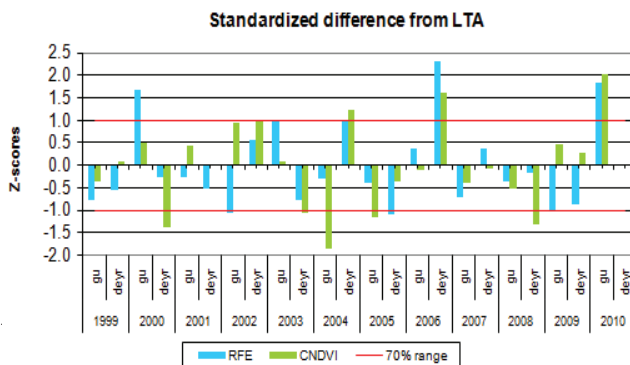
Hargeisa Agropastoral



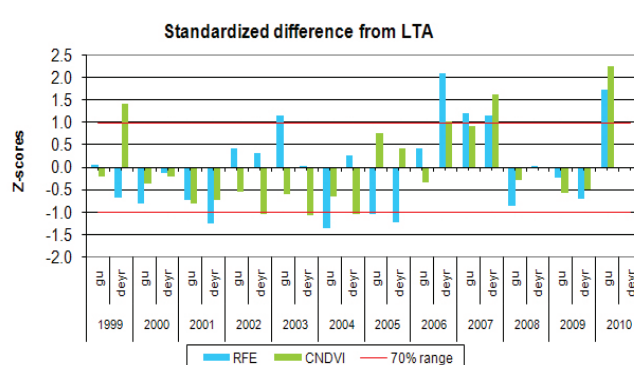
Borama Agropastoral (Irrigated)



Balad Agropastoral

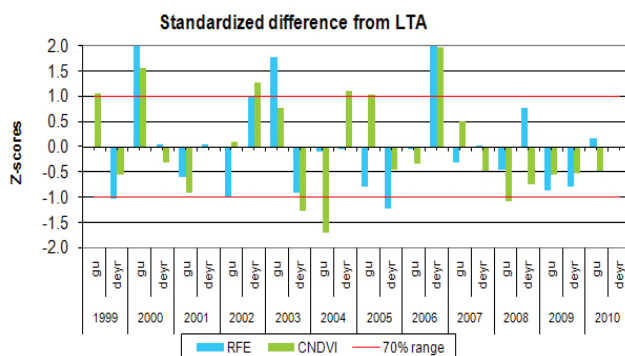


Afmadow Agropastoral

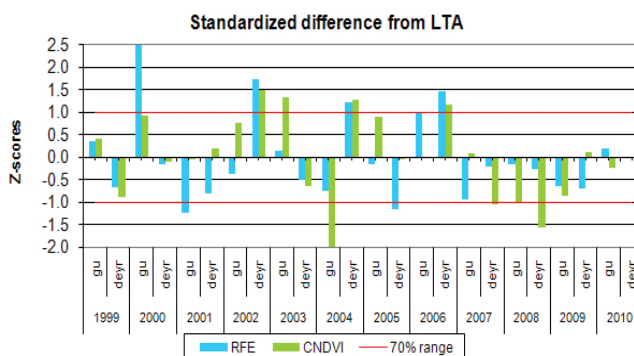


Selected districts with poor crop production

Buloburti Agropastoral

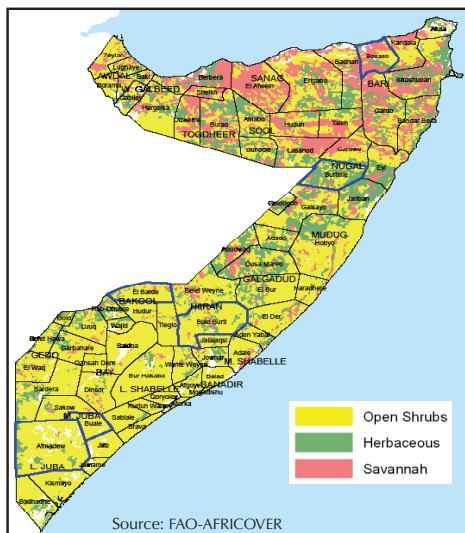


Aden Yabal Agropastoral



Long term seasonal rainfall and NDVI trends for selected pastoral districts

Pastoral Areas

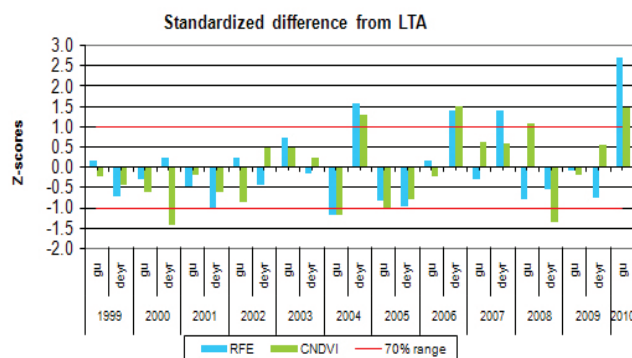


Pasture

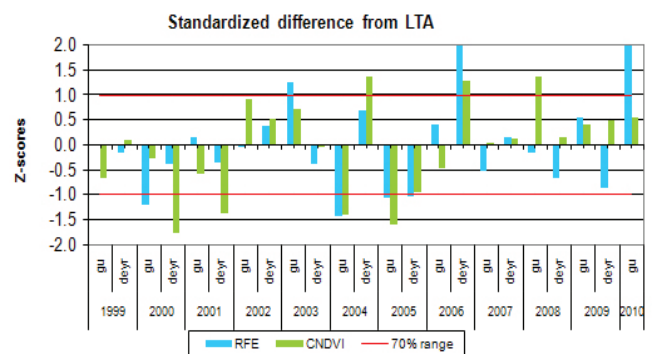
Pasture conditions have generally improved throughout Somalia as compared to the previous year. Large areas in central and northern Somalia are recovering from prolonged drought that extended for over five seasons. Good pastoral conditions prevail in most parts of northern Somalia including the Sool Plateau and Nugal Valley. However, below average vegetation conditions are observed mainly in the coastal livelihood zone of central Somalia (El Der) and in Hiraa region, especially in Jalalaqsi district.

Selected districts with good pasture conditions

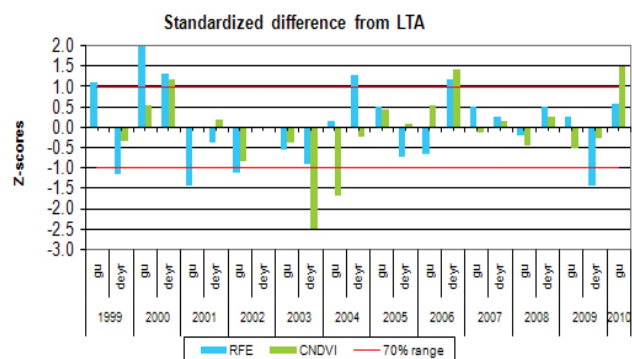
Buale Open Shrubs



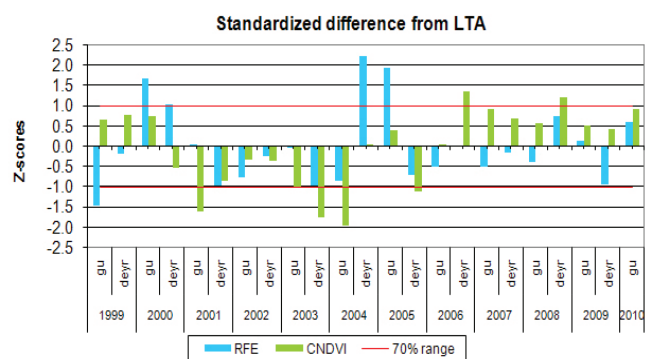
Afmadow Savannah



Burtinle Herbaceous

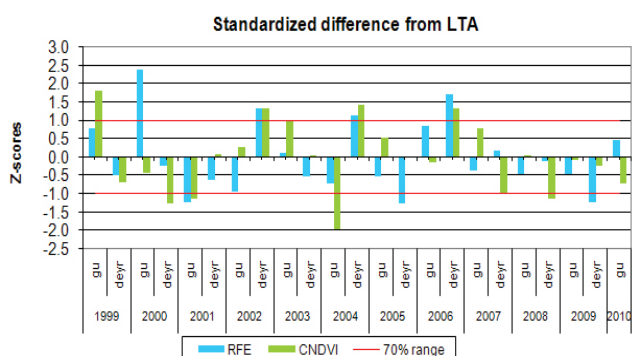


Bossaso Savannah



Selected districts with poor pasture conditions

Elder Open Shrubs



Jalalaqsi Herbaceous

