TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 18 2012/13 Cropping Season **February 21- 28, 2013**

HIGHLIGHTS

- **Crop growth continued well mainly over the unimodal sector with maize, beans, and sorghum crops reaching advanced stages and in good state**
- **Pastures and water availability for livestock and wildlife over much of the country was generally good.**

SYNOPTIC SUMMARY

During the third dekad of February, 2013, the southern hemisphere high pressure cells were gradually relaxing. On the other hand, Azores and Siberian high pressure cells over the northern hemisphere were noted to significantly intensify with time. As a result, the Meridional arm of the Inter-Tropical Convergence Zone (ITCZ) was slightly located in the extreme western side of the country while the zonal arm of the ITCZ moved southwards to southern sector of the country. These settings caused penetration of the northeasterlies over most parts of the country. Sustained slightly warm and cool sea surface temperatures (SSTs) patterns were observed over the eastern Indian Ocean and central Indian Ocean respectively while warm to neutral conditions were observed over western Indian Ocean. The warming over the Mozambique Channel contributed to development of Tropical storm "***Haruna"*** *which* ***caused*** penetration of the westerlies towards Tanzania from Congo basin leading to showers over some parts of the Country**.**

RAINFALL SUMMARY

During the third of February, 2013, high rains were recorded over some areas of the country particularly over South western highlands and western, central and northeastern highlands areas of the country received moderate rainfall as shown in figure 1a and 1b.The highest rainfall amount was recorded at Igeri 103.9 mm, Tukuyu 103.9 mm, Uyole 48.3 mm, Mahenge 32.1 mm, Sumbawanga 28.0 mm, Songea 23.4 mm, Mpanda 21.0 mm,Mbeya 20.5 mm, Mbozi 15.9 mm, Kilwa masoko 15.6mm, Morogoro 9.8 mm, Ilonga 8.4 mm, Handeni 7.6mm,Kigoma 7.5 mm, Same 6.4 mm, Naliendele 5.8 mm, Ukiriguru 4.8 mm, and Arusha 3.7 mm. Remaining areas mainly over the Northern Coast *received rainfall less than 1mm for the period as shown in Figure 1a.*

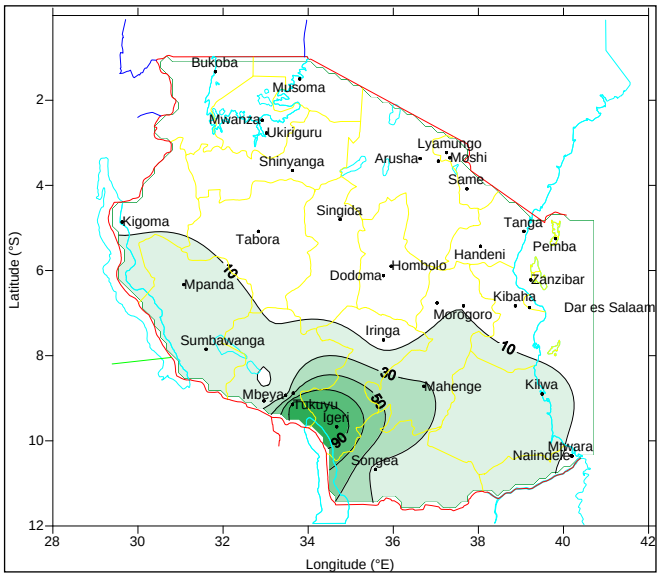

Figure 1a: February 21-28, 2013 Rainfall distribution (mm)

The Geospatial Water Requirement Satisfaction Index (GeoWRSI) model with inputs from Satellite Rainfall Estimates (RFE) merged with gauge data from Tanzania rainfall stations network also indicates similar pattern of the far decreased rainfall performance during the dekad whereby most parts across the country received rainfall less than 50% of the long term average as shown in Figure 1b.

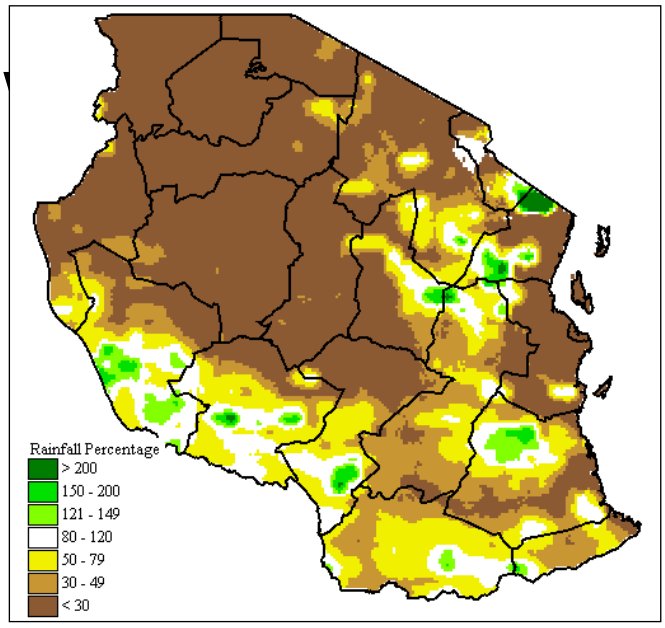

Figure 1b: February 21-28, 2013 Percentage of average rainfall from GeoWRSI

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

Decreased soil moisture levels was experienced over much of the country. However, crop growth continued well over much of the unimodal sector where maize, beans, sorghum and cassava crops were at stages ranging from advanced vegetative to near maturity stages in moderate state as reported over southwestern highlands, southern coast and southern regions. Farmers over bimodal areas involved with land preparation and planting of *Masika* crop as reported over Kagera, Mwanza and Mara regions where onset of masika rains are expected during early March.

Pastures and water availability for livestock and wildlife over much of the country was good and expected to improve during March.

Hydrological Summary

Water levels in dams and rivers have not changed much during the dekad under review.

Environmental Summary

Temperatures remained generally high over much of the country as well as warm to humid air observed mainly over the coastal areas that occasionally caused discomfort.

EXPECTED SYNOPTIC SYSTEMS DURING MARCH 1-10, 2013

During this period, the southern pressure systems particularly the Mascarene are expected to maintain relatively low intensity, while their counterpart to the north are expected to continue intensifying. Thus, is expected to maintain the ITCZ over unimodal areas of the country including; western, south-western highlands, southern regions, southern coast regions and central regions of the country.

EXPECTED WEATHER DURING MARCH 1-10, 2013

During first dekad of March many areas in the country are expected to experience normal rains. The March-May (MAM) rainfall outlook indicates much of bimodal areas are likely to experience start of Masika rains during first dekad of March 2013.

AGRO METEOROLOGICAL OUTLOOK DURING MARCH 1-10, 2013

Growing crops over the unimodal sector, and planting over bimodal areas of the country are likely to benefit from the expected soil moisture improvements during the first dekad of March 2013.

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