



# TANZANIA METEOROLOGICAL AGENCY



## DEKADAL WEATHER REVIEW

No. 13, 2009/10 Cropping Season

January 1-10, 2010

### HIGHLIGHTS

- Planting still continuing in some unimodal rainfall areas (Morogoro region), while in bimodal rainfall areas weeding was carried along with delayed land preparation and planting over upland areas of northeastern highland. Armyworm outbreaks have been reported in unimodal areas.
- Good pastures and water availability for livestock, improved livestock conditions.

### SYNOPTIC SITUATION

During the first dekad of January 2010, the southern hemisphere systems (St. Helena and Mascarene anticyclones) continued to relax while the Siberian and Azores anticyclones in the northern hemisphere remained strong allowing the rain making mechanism Inter-Tropical Convergence Zone (ITCZ) to continue being active over the country. A westerly wind flow dominated over most parts of the country and resulted into low level wind convergence. This configuration associated with abundant moisture brought from the Congo basin contributed to enhanced rainfall activities over most parts of the country. Coupling of low pressure cells and the distant Tropical Cyclone Edzani had a partial contribution to the weather enhancement over some parts of the country.

### RAINFALL SUMMARY

During the first dekad of January 2010, most areas of the country still received plenty of rainfall although less than in the previous dekad. Some stations recorded rainfall far above normal levels for the period. This resulted into flooded rivers that caused damages to homes and infrastructure particularly in Mpwawa and Kongwa (Dodoma region), Kilosa (Morogoro region) and Babati (Manyara region). The highest recorded amount for the period was obtained at Songea station, 174.0

mm, followed by Mahenge, 169.9 mm, Amani Mailitano, 168.3 mm, Babati, 159.8 mm, Igeri, 155.6 mm, Handeni, 143.1mm, Tanga, 126.6 mm, Kilwa Masoko, 119.4mm, Ilonga, 113.1 mm, Tabora, 11.2mm and Kibondo, 104.1mm. Other stations in our sample stations recorded rainfall below 100 mm with a few recording less than 50 mm as shown in Figure 1.

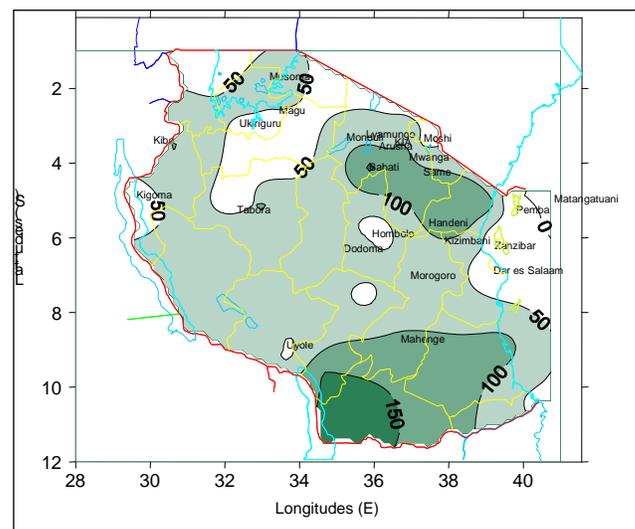


Figure 1: January 1-10, 2010 Rainfall distribution

### IMPACT ASSESSMENT

Soil moisture supply during the dekad continued to favor field crops over most areas of the country where crops such as maize particularly over bimodal areas was between weeding and wax ripeness stage

in good state, while a few areas were in late planting activity due to delayed onset of the rains but eventually followed by excessive supply of soil moisture causing difficulty in the use of ploughs as reported from northeastern highlands (Simanjiro, Monduli and Loliondo).

Over the unimodal areas early planted maize crop was from emergence to weeding stage whereas few areas were engaged in late planting caused by delayed supply of favorable soil moisture as observed in areas such as Ifakara and Ilonga (Morogoro region) where land preparation and planting were the major activities for the period. However, over Lake Victoria basin particularly over Kagera excessive rains were unfavorable to maturing beans. For north eastern areas crops (maize and beans) during this period were from advanced vegetative stage to wax ripeness and in good state but in areas like Pangani district over northern coast the maize crop was extremely poor while beans at vegetative stage in Rombo was also poor due to excessive soil moisture. Armyworm outbreaks have been reported in unimodal areas.

Market supply for cassava over several areas continued fairly well.

Pasture and water availability are good and livestock conditions are normalizing.

### **Hydro-meteorological Summary**

The ongoing rains have highly boosted water levels in lakes and dams and flooded some rivers and their respective catchments. Water availability for human, industrial and energy generation purposes has improved.

### **Environmental Summary**

Temperatures over most parts of the county were high along with humidity levels making it rather uncomfortable particularly over the coastal belt.

### **EXPECTED SYNOPTIC SYSTEMS DURING JANUARY, 11-20, 2010**

During the second dekad, the southern hemisphere systems (St. Helena and Mascarene anticyclones) are expected to remain relaxed whereas the Azores and Siberian anticyclones in the northern

hemisphere are expected to remain intense, thus, allowing the ITCZ to move further south of the country. Sea Surface Temperatures (SSTs) in January 2010 are projected to be generally warm over western tropical Indian Ocean but warmer over a greater part of tropical Central Indian Ocean. The weekly SSTs are also showing a persistent warming trend. The above configuration is expected to continue to support cloud development and precipitation over a greater part of the country. Westerly wind flow is likely to support influx of moisture over most parts of the country particularly western, central, southwestern highlands and southern regions.

### **EXPECTED WEATHER DURING JANUARY, 11-20, 2010**

Lake Victoria Basin (Kagera, Shinyanga, Mara and Mwanza regions, and Kibondo district): likely to experience normal rainfall. Northern coast and hinterland (Dar es Salaam, Morogoro, Tanga, Coastal regions together with the Islands of Unguja and Pemba) are expected to experience near normal to above normal rainfall conditions. Southern Coast (Mtwara and Lindi regions): Most areas are expected to experience normal rainfall. Northeastern Highlands (Arusha, Kilimanjaro and Manyara regions) the extended off seasonal rains are expected to persist and are expected to be normal to above normal over some areas. Southwestern highlands (Rukwa, Mbeya and Iringa regions) are expected to feature enhanced rainfall activities over most areas. Western areas (Tabora and Kigoma regions) are expected to feature enhanced rainfall over some areas. Central (Dodoma and Singida regions) are expected to feature normal rainfall activities. Southern region (Ruvuma region) is expected to feature normal to above normal rainfall. During the coming 10 days there is a likelihood of persistence of heavy to moderate rainfall activities over some parts of the country particularly Central areas (Dodoma and Singida), southwestern highlands (Mbeya, Iringa and Rukwa), western and southern parts of the country.

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