



# TANZANIA METEOROLOGICAL AGENCY



## DEKADAL WEATHER REVIEW

No. 16, 2009/10 Cropping Season

February 1-10, 2010

### HIGHLIGHTS

- Soil moisture stress badly hampered most crops at between vegetative and wax ripeness stages over most areas of both bimodal and unimodal including northern coast, northeastern highlands, western, central, coast, southern and parts of Lake Victoria basin.
- Armyworm outbreaks spoiled young maize and paddy crops in some unimodal areas and in the Island of Zanzibar.

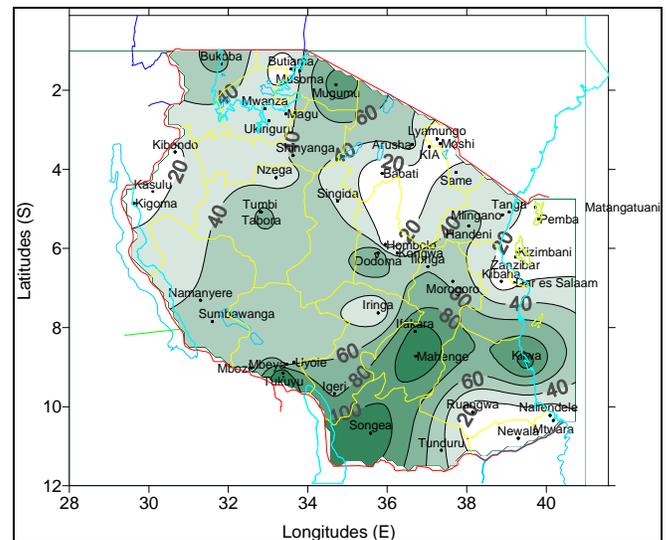
### SYNOPTIC SITUATION

During the first dekad of February 2010, the Southern Hemisphere systems (St. Helena and Mascarene anticyclones) continued to relax while the Siberian anticyclone in the Northern Hemisphere relaxed slightly thus causing the rain making mechanism Inter-Tropical Convergence Zone (ITCZ) to oscillate back to the southern sector of the country from Northern Mozambique while the Azores anticyclone maintained a moderate strength. The Meridional component of the ITCZ maintained a moderate strength over the western part of the country. The occurrence of tropical depression 'FAMI' (from 1st to 3rd February) over South-western Indian Ocean contributed to the presence of ITCZ over extreme northern Mozambique in first quarter of this dekad.

### RAINFALL SUMMARY

During this dekad most parts of the country both bimodal and unimodal areas received significant amounts of rainfall. The highest recorded amount was at Tukuyu 124.7mm, followed by Mahenge 122.4mm, Songea 119.7mm, Kilwa 112.3mm, Ifakara 108.9mm, Mugumu 93.7mm, Dodoma 85.5mm, Igeri 76.4mm, Bukoba 67.0mm, Tabora 65.9mm, Tumbi 61.9mm, Uyole 55.6mm, Morogoro 55.1mm, Mbeya and Mbozi each recorded 52.4mm. Some stations in our sample stations recorded

rainfall below 50 mm while other stations received much less rainfall below 10mm as depicted in Figure 1 below.



**Figure 1: February 1-10, 2010 Rainfall distribution**

### IMPACT ASSESSMENT

#### Agrometeorological and crop summary

During the dekad soil moisture supply declined to extreme levels over several areas across the country, hampering crops mainly maize, beans, sorghum and paddy that were at various growth and development stages ranging from emergence to wax ripeness. Over both bimodal and unimodal areas including northern coast, northeastern highlands, western, central, coast, southern and parts of Lake Victoria

basin (Magu and Lyamungo) experienced wilting to temporary wilting of the crops, whereas Kasulu, Nzega, Kongwa, Babati, Kibaha, Ruangwa and Meatu districts were hit by temporary wilting due to persistent dry spells. Planting, replanting and gap filling were the field activities that continued over Ifakara and Ilonga (Morogoro region) following replenishment of soil moisture observed for the period, while over Simanjiro, Monduli and Loliondo districts (in northeastern highlands) the field progress was fair.

Generally, field crops over both unimodal and bimodal rainfall areas ranged from emergence to ripeness stage where the early planted maize crop has reached ripeness stage in moderate state.

Armyworm outbreaks spoiled young crops in some unimodal areas and in the Island of Zanzibar but brought into control.

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 maintained water levels in lakes and dams and flooded some rivers. 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 FEBRUARY 11-20, 2010**

During the 5th dekad, the southern hemisphere systems (the St. Helena and the Mascarene anticyclones) are expected to keep its intensity whereas the Azores and Siberian anticyclones in the northern hemisphere are likely to slightly relax allowing the zonal component of the ITCZ to slightly move northwards over the southern sector of the country. Sea Surface Temperatures (SSTs) in

February 2010 are projected to be warm over southwestern towards central Indian Ocean with pockets of cooling over the coast of Tanzania. This configuration is likely to sustain a low level wind convergence along the extreme western areas of the country.

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

Lake Victoria Basin (Kagera, Shinyanga, Mara and Mwanza regions, and Kibondo district): is likely to experience a few thundershowers. Northern coast and its hinterland (Dar es Salaam, Morogoro, Tanga, Coastal regions together with the Islands of Zanzibar and Pemba) are expected to experience partly cloudy conditions, showers with isolated cases of thunderstorms and sunny periods. Southern coast (Mtwara and Lindi regions): Most areas are expected to experience mainly partly cloud conditions, showers with occasional thunderstorms. Northeastern highlands (Arusha, Kilimanjaro and Manyara regions) are expected to experience generally dry conditions with occasional showers mainly over high grounds. Southwestern highlands (Rukwa, Mbeya and Iringa regions), southern region (Ruvuma region) and Mahenge are expected to experience enhanced rainfall activities over most areas. Western areas (Tabora and Kigoma regions) are expected to feature normal rainfall over some areas. Central (Dodoma and Singida regions) are expected to feature generally normal rainfall activities and are likely to experience enhanced rainfall over few areas.

Generally, during the coming 10 days especially towards the end there is a likelihood of near normal rainfall activities over some parts of uni-modal areas; southwestern highlands (Mbeya, Iringa and Rukwa), central and southern parts of the country (Ruvuma, Mahenge) occasionally including, Lindi and Mtwara regions.