



# TANZANIA METEOROLOGICAL AGENCY



## DEKADAL WEATHER REVIEW

No: 17 2010/11 Cropping Season

February 11-20, 2011

### HIGHLIGHTS

Improved soil moisture supply was experienced during the dekad over much of the country, except for some pockets around Tabora and Shinyanga regions, northeastern highlands and northern coast which observed the lowest levels.

### SYNOPTIC SITUATION

During the second dekad of February 2011, the northern hemisphere high pressure cells, the Siberian high and its associated Arabian ridge remained intense keeping the zonal arm of the Inter-Tropical Convergence Zone (ITCZ) further south of Tanzania. Similarly, the Azores high was intense and the meridional arm of ITCZ was slightly pushed westwards over central parts of Congo DR. The southern hemisphere high pressure cells, St Helena and Mascarene high remained weak throughout, and remained further southeast of South Africa. Development of the tropical cyclone "Bingiza" contributed to enhanced rainfall over much of the country. Low level wind flow was associated with enhanced moisture from Indian Ocean and Congo areas.

### RAINFALL SUMMARY

During the period under review, rainfall activities increased over much of the country, with the highest recorded amount of 209.3 mm at Mtwara Airport, and a closeby station Naliendele recorded 198.5mm for the period. Other stations were Mbozi 122.2 mm, Dar es Salaam Airport 103.8 mm, Morogoro 103.7 mm, Kigoma 102.2 mm, Songea 98.9 mm, Babati 94.8 mm, Mbeya 92.2 mm, Mahenge 90.0 mm, Hombolo 87.6 mm, Kilimanjaro Airport 84.2 mm, Bukoba 81.6 mm, Iringa 76.7 mm, Uyole 71.1 mm, Handeni 64.3 mm, Dodoma 64.2

mm, Kibondo 62.0 mm, Kilwa 56.4 mm and Musoma 55.8 mm. A few areas notably those around Tabora and northern coast including south of northeastern highlands recorded lowest amounts of below 40 mm as shown in Fig 1.

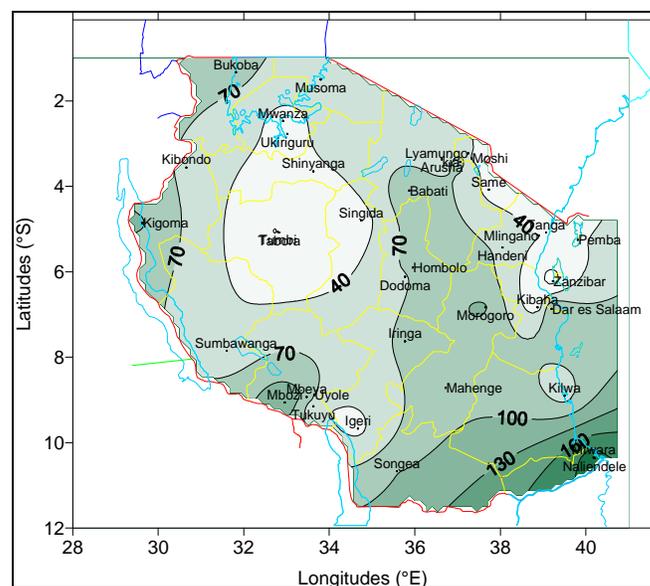


Fig. 1: February 11-20, 2011 Rainfall distribution (mm)

### IMPACT ASSESSMENT

#### Agrometeorological and Crop Summary

Improved soil moisture supply was experienced during the dekad over much of the country except for some pocket areas around Tabora and Shinyanga regions, some parts of northeastern highlands and the northern coast that obtained lowest levels. The soil moisture obtained was generally conducive to the field work carried out

over both sectors, which included planting to weeding activities (northeastern highlands, south, southern coast, central) and land preparation to planting (northern coast, northeastern highlands, Lake Victoria basin, Kigoma north).

Generally, field crops mainly maize, beans, paddy and sorghum at various stages mainly early to mid vegetative improved to moderate state during the dekad due to favorable soil moisture status.

Likewise, the soil moisture boost obtained during the period regenerated wildlife over most parts

### ***Hydro-meteorological Summary***

Water levels in lakes and dams and river flows have remained low, thus water for human and industrial usage and hydropower generation should be used sparingly.

### ***Environmental Summary***

Temperatures over most areas in the country were generally hot coupled with high humidity leading to uncomfortable conditions, and the warming trend will be maintained during the coming dekad.

### **EXPECTED SYNOPTIC SYSTEMS DURING FEBRUARY 21-28, 2011**

The Southern Hemisphere Systems, the St Helena and Mascarene highs are expected to remain slightly strong and confined far south of the continent.

In the Northern Hemisphere, the Azores High is expected to remain slightly intense in the beginning of the dekad and gradually relax towards the end of the period. The Siberian High and the associated Arabian ridge are expected to remain relatively strong.

The meridional arm of ITCZ is expected to be active over Congo basin and extreme western part of country; the zonal arm of ITCZ is expected to oscillate over the southern parts of the country. Generally the migration of the ITCZ northwards is expected to sustain rainfall activities along the southern sector of the country.

### **EXPECTED WEATHER SITUATION DURING FEBRUARY 21-28, 2011**

Lake Victoria Basin (Kagera, Mara, Shinyanga and Mwanza regions): are expected to experience isolated showers and thunderstorms. Western region (Tabora and Kigoma regions): Isolated showers and thunderstorms are expected. Northern coast and its hinterland (Dar es Salaam, Morogoro, Tanga and Coastal regions, Zanzibar and Pemba Islands): Mainly partly cloudy conditions are expected. Southern Coast (Mtwara and Lindi regions): Moderate thundershowers are expected. North-eastern Highlands (Arusha, Kilimanjaro and Manyara regions): Isolated rain-showers are expected mainly over high grounds.

Southwestern highlands (Rukwa, Mbeya and Iringa regions and southern Morogoro (Mahenge areas): Scattered thundershowers are likely during the dekad. Southern region (Ruvuma region): Mostly scattered showers and isolated thunderstorms are expected. Central Region (Dodoma and Singida regions): Isolated rain showers are expected.

*Prepared by*

**TANZANIA METEOROLOGICAL AGENCY**

**3<sup>rd</sup>, 4<sup>th</sup> 5<sup>th</sup> & 10<sup>th</sup> Floors - Ubungo Plaza – Morogoro Road.**

**P.O. Box 3056 Tel. 255 -(0) 22 – 2460706-8 ; Fax: 255 - (0) 22 – 2460718 E-mail: (1) [met@meteo.go.tz](mailto:met@meteo.go.tz) (2) [agromet1\\_tz@meteo.go.tz](mailto:agromet1_tz@meteo.go.tz)**

**Dar-es-Salaam UNITED REPUBLIC OF TANZANIA**