TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

Na: 15 Cropping Season 2011/12 **January 21- 31, 2012**

HIGHLIGHTS

- Adequate supply of soil moisture over unimodal rainfall pattern enhanced growth and development of crops, whereas the decreased supply over bimodal sector maintained normal seasonal trend for the period.
- Rainfall is expected to continue over unimodal areas and mainly dry conditions are expected to prevail over the bimodal areas.

SYNOPTIC SUMMARY

During the third dekad of January 2012, the northern hemisphere high pressure cells, the Azores and Siberian highs, and Arabian ridge continue to be intense. This maintained the rain-making mechanism i.e. Inter-Tropical Convergence Zone (ITCZ) in the south. The southern hemisphere high pressure cells, St Helena and the Mascarene were relatively strong. Cool Sea Surface Temperature (SSTs) conditions were established over the Equatorial central-eastern Pacific, while neutral to slightly warm SSTs were observed over eastern Indian Ocean (areas around Indonesia) and central equatorial Indian Ocean. Northeasterly and occasionally northwesterly low level wind prevailed over eastern parts of the country during much of period. Westerly winds were also observed during the dekad which resulted into convergence over the southern sector of the country enhancing activities over the southwestern highlands, western and southern areas. During this dekad two tropical disturbance *FUNSO* and *ETHEL* were observed over the Mozambique Channel and east of Madagascar respectively. The two systems triggered active weather over the southern sector of the country.

RAIFALL SUMMARY

During the third dekad of January, 2012 significant amounts of rainfall were observed over parts of unimodal rainfall pattern mainly southern region and southwestern highlands where dekadal total amounts of around 90 mm were recorded. The highest rainfall was observed at Songea station with 99.0 mm for the period. Following were Mbeya 92.1 mm, Mbozi 63.8 mm, Mpanda 58.7 mm, Mahenge 55.6 mm, Dodoma 37.0 mm, Singida 32.5 mm, Mtwara 31.1 mm, Igeri 28.1 mm and Iringa 26.7 mm. The rest of the stations mainly those bordering bimodal areas received below 20 mm. The lowest amounts including zero rainfall as shown in Figure 1 below were recorded mostly over bimodal areas signify end of the short rain season, *Vuli*.

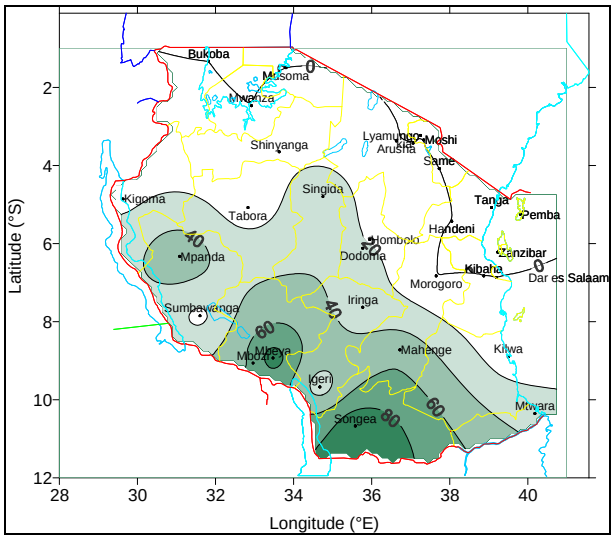

Fig 1: January 21-31, 2012 Rainfall distribution (mm)

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

Adequate supply of soil moisture over unimodal rainfall pattern enhanced crop growth and development, whereas the ended supply experienced over bimodal sector maintained normal seasonal trend for the period.

Crops condition over unimodal areas was progressing well with maize at between 9th leaf and

flowering, beans at flowering to pod setting, paddy and sorghum at vegetative stage. As for bimodal sector the crops have reached harvesting maturity as reported over Kagera, Mara, and Tanga regions although some areas encountered soil moisture deficits that resulted into poor crop performance as reported from Magu district and parts of Musoma district, both in the Lake Victoria basin. For crops like wheat in southwestern highlands (Mbeya and Iringa regions) and paddy in northern coast particularly Coast region are still under preparations for planting sometime later. Cotton crop was doing well at stages between third leaf and budding stages. However, a few areas mainly the low grounds around Moshi, Same, Korogwe and Handeni districts that previously experienced prolonged soil moisture deficits at mid stages of the crops, are anticipated for low crop yield.

Improved pastures and water availability was evident in some areas across the country although shortage over low lands in the northeastern highlands is at hand.

Hydrological Summary

Water levels in lakes, dams and river flow discharges were moderately increased over southern parts of the country.

Environmental Summary

Temperatures mostly over high ground areas in the country were fairly cool, while over the coastal belt and inland areas they were on rising to relatively hot over northeastern highlands.

EXPECTED SYNOPTIC SYSTEMS DURING FEBRUARY 1-10, 2012

For the coming dekad, the Azores and the Siberian highs, and Arabian ridge are expected to remain intense. The Mascarene and St Helena high pressure systems are expected to gradually becoming strong thus slightly set off the northward movement of the rain making mechanisms (ITCZ). Below average Sea Surface Temperatures (SSTs) are expected over central-eastern equatorial Pacific Ocean. Neutral to slightly warm SSTs conditions are expected to prevail over the great part of the Indian Ocean, including southwestern Indian Ocean. Northeasterly to northwesterly low level winds are expected to dominate over the most parts of the country during the dekad.

EXPECTED WEATHER DURING FEBRUARY 1-10, 2012

Rainfall is expected to continue over unimodal areas and mainly dry conditions are expected to prevail over the bimodal areas. Moreover few showers are expected during the second part of the dekad over the northern coast areas. **Lake Victoria Basin (Kagera, Mwanza, and Mara and Shinyanga regions):** These areas are expected to feature normal rains. **Western regions (Kigoma, Rukwa and Tabora regions):** These areas are expected to experience normal to below normal rains. **Northern coast (Dar es Salaam, Morogoro and Tanga regions, the isles of Unguja and Pemba):** These areas are expected to experience normal rains. **Central areas (Dodoma and Singida regions):** These areas are expected to feature normal to below normal rains. **Northeastern highlands (Kilimanjaro, Arusha and Manyara regions):** These areas are expected to feature normal to below normal rains. **Southwestern highlands (Southern Rukwa, Iringa and Mbeya region):** These areas are expected to feature normal rains. **Southern Coast (Mtwara and Lindi regions):** These areas are expected to feature normal rains. **Southern region (Ruvuma region):** These areas are expected to feature normal rains

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