TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 19 Cropping Season 2011/12 **March 1 - 10, 2012**

HIGHLIGHTS

- **Moderate soil moisture conditions spread widely across the country with higher amounts centered over the southern coast, reviving the adversely affected and late planted crops over unimodal areas.**
- **Land preparation and planting activities for *Masika season continued* well over bimodal sector.**
- **Pastures and water availability were generally good.**

SYNOPTIC SUMMARY

During the first dekad of March 2012, the northern hemisphere high pressure cells, the Azores and Siberian highs, and Arabian ridge remained intense. Over the southern hemisphere, St. Helena maintained its intensity while the Mascarene high was slightly weak. The strong Arabian ridge over the northern part of the Indian Ocean near Mombasa and Somalia coast was observed during the dekad. This configuration contributed to convergence of winds over central and southwestern highlands which resulted to enhanced rainfall activities over the southern sector of the country and reduction over the remaining half. The rain-making mechanism, i.e. Inter-Tropical Convergence Zone (ITCZ) was gradually fluctuating over the southern Tanzania. Cool Sea Surface Temperature (SSTs) conditions continued to rein over the Equatorial central-eastern Pacific. On the other hand, cool SSTs were established over western Indian Ocean, while warm SSTs were observed over central-eastern Indian Ocean.

RAIFALL SUMMARY

The period under review experienced wide spread of light to moderate seasonal rains as recorded over several areas of the country including those in the bimodal sector that had been seasonably dry. The highest amount of rainfall was obtained at Kilwa Masoko 125.1 mm, followed by Dodoma 112.3 mm, Bukoba 90.8 mm, Mtwara 85.8 mm, Pemba 74.5 mm, Mahenge 68.0 mm, Morogoro 67.4 mm, Zanzibar 65.6 mm, Naliendele 62.6 mm, Songea 56.5 mm, Shinyanga 55.2 mm, Lyamungo 52.4 mm, Mbozi 49.8 mm, Mpanda 46.7 mm, Hombolo 44.6 mm, Singida 44.0 mm, Sumbawanga 42.4 mm, Ilonga 37.8 mm, Tukuyu 31.8 mm, Kibondo 31.4 mm, and Tabora 31.3 mm. Little rainfall recorded over much of northeastern highlands and few areas over northern coast (parts of Tanga region) indicates poor start of *Masika* rains over those areas as shown in Fig.1.

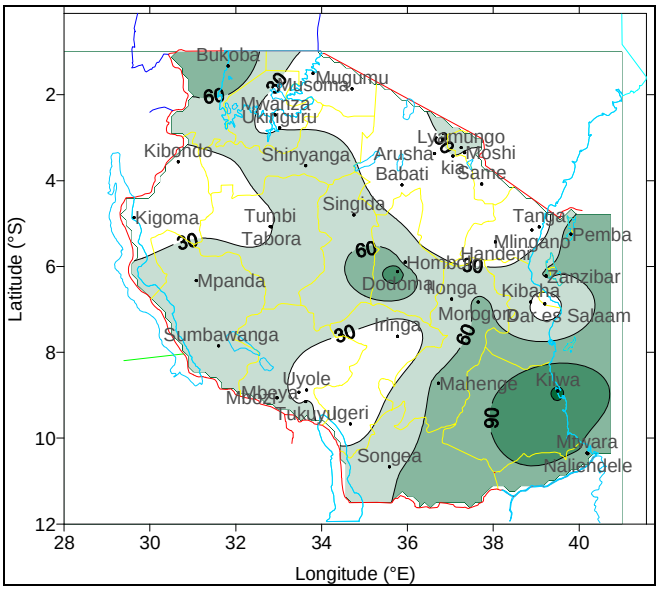

Fig 1: *March 1-10, 2012 Rainfall distribution (mm)*

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

Moderate soil moisture conditions spread widely across much of unimodal areas with higher amounts centered over the southern coast and central areas, reviving the adversely affected and late planted crops over several parts in the central. Most crops over this sector, such as maize was between emergence and flowering, paddy at tasselling and in

good state, beans crop was observed from first planting phase and planned again for second planting mainly over southeastern highlands particularly Mbeya region. As for wheat crop it was reported at emergence stage and in good state, while paddy and sorghum were progressing well at tasselling to flowering stages. Cotton crop as well was in good state at flowering stage.

As for bimodal sector the obtained moisture supply for the period was helpful mainly in the field activities such as land preparation and planting activities that continued as intended for *Masika* season. Likewise pastures and water availability were generally good.

Agrometeorological Outlook

Land preparation and planting carried out over bimodal sector as well as crops at vegetative to flowering stages over unimodal sector are expected to progress well during the period following the likelihood of improved rainfall conditions to prevail in the next dekad.

Hydrological Summary

Water levels in lakes, dams and river flow discharges were maintained mainly 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 relatively hot over northeastern highlands.

EXPECTED SYNOPTIC SYSTEMS DURING MARCH 11-20, 2012

During the coming dekad, the St. Helena and Mascarene high pressure systems are expected to intensify. On the other hand, the northern systems i.e. Azores High, Siberian High and its associated Arabian Ridge are expected to relax. Therefore, the ITCZ is expected to continue migrating towards the north. Significant convergence is expected to continue persisting during the dekad over the southern sector of the country.

EXPECTED WEATHER DURING MARCH 11-20, 2012

Lake Victoria Basin (Kagera, Mwanza, and Mara and Shinyanga regions): Normal to below normal rainfall pattern is expected. **Western regions (Kigoma, Rukwa and Tabora regions):** Normal rainfall pattern is expected. **Northern coast (Dar es Salaam, Morogoro and Tanga regions, the isles of Unguja and Pemba):** Normal to above normal rainfall pattern is expected. **Central areas (Dodoma and Singida regions):** Normal to above normal rainfall pattern is expected. **Northeastern highlands (Kilimanjaro, Arusha and Manyara regions):** Normal rainfall pattern is expected. **Southwestern highlands (Rukwa, Iringa and Mbeya regions):** Normal to above normal rainfall pattern is expected. **Southern Coast (Mtwara and Lindi regions):** Normal to above normal rainfall pattern is expected. **Southern region (Ruvuma region):** Normal to above normal rainfall pattern is expected.

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