TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 18 Cropping Season 2011/12 **February 21 - 29, 2012**

HIGHLIGHTS

- **Resumed soil moisture supply experienced from mid of the dekad revived the temporarily wilted maize and paddy crops at vegetative to tasselling stages for the most of central unimodal sector.**
- **Land preparations for the *Masika* season and early planting were progressing over parts of the bimodal sector.**

SYNOPTIC SUMMARY

During the third dekad of February 2012, the northern hemisphere high pressure cells, the Azores and Siberian highs, and its associated Arabian ridge continued weakening. Over the southern hemisphere, St. Helena maintained its intensity while the Mascarene high weakened during the first half of the dekad and gradually intensified towards the end of the dekad. Moreover, towards the end of the dekad a low pressure system was observed over Madagascar and moved into the Mozambique Channel and continued to deepen becoming a moderate tropical storm (*Irina*). A 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 most of the country which resulted in enhanced rainfall activities over much of the country. The rain-making mechanism, the Inter-Tropical Convergence Zone (ITCZ), was oscillating over 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 off-seasonal rains that amounted to significant levels as recorded over several areas of the country including those in the bimodal sector. The highest amount was recorded at Sumbawanga station 187.6 mm, followed by Bukoba 130.5 mm, Mbozi 121.5 mm, Dodoma 115.5 mm, Mbeya 105.9 mm, Same 85.2 mm, Igeri 82.4 mm, Kibondo 77.1 mm, Uyole 72.1 mm, Iringa 65.1 mm, Handeni 65.0 mm, Tukuyu 63.6 mm, Hombolo 59.8 mm, Mtwara 58.7 mm, Shinyanga 58.5 mm, Mahenge 58.4 mm, Naliendele 56.2 mm, Moshi 55.87 mm, Arusha and Songea each recorded 52.4 mm, Morogoro 41.8 mm, Babati 35.8 mm, Singida 31.6 mm, Musoma 31.2 mm, and Ukiriguru 30.4 mm. A few remaining stations from sampled stations recorded rainfall below 30 mm for the period as shown in Figure 1 below.

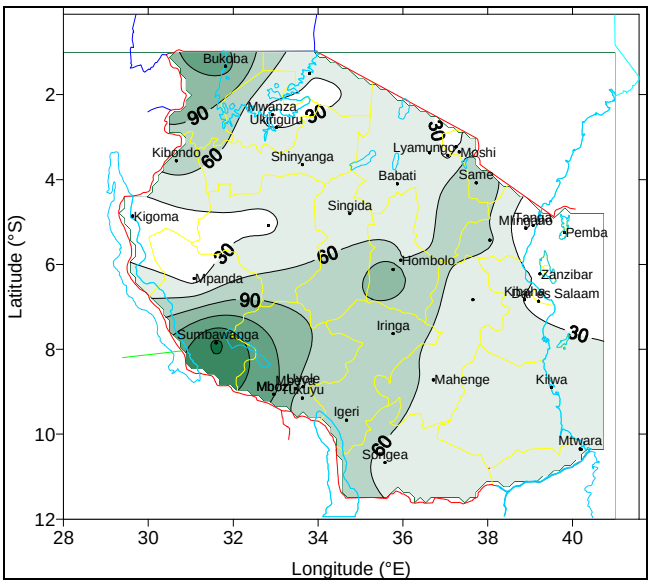

Fig 1: February 21-29, 2012 Rainfall distribution (mm)

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

Resumed soil moisture supply from the middle of the dekad revived the crops mainly maize and paddy which were almost at temporary to permanent wilting point following a long spell of soil moisture

deficit that the crops encountered while entering vegetative and tasselling stages particularly over most of central unimodal sector. However, land preparation for the next season *Masika* and a few planting activities were reported over some parts of the bimodal sector. Other areas mainly the southern, southwestern highlands, and southern coast obtained below average soil moisture supply which later increased to optimal growth and development requirements of the crops in those areas with maize crop in particular reported at tasselling phase and in good state. Likewise, preparation for the second planting phase of beans crop was underway. As for wheat crop, it was reported at emergence stage and in good state, while paddy and sorghum were progressing well at vegetative stage. Cotton crop at flowering stage was also doing well.

Pastures and water availability were declining over low grounds of northeastern highlands and central areas.

Agrometeorological Outlook during 1-10 March 2012

Land preparations and planting 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 conducive rainfall conditions to prevail. Water and pasture conditions are likely to improve slightly.

Hydro-meteorological Summary

Water levels in lakes, dams and river flow discharges were maintained mainly over southern parts of the country, and are likely to improve during next dekad.

Environmental Summary

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

EXPECTED SYNOPTIC SYSTEMS DURING MARCH 1-10, 2012

During the coming dekad, the Mascarene high shows signs of intensification, while St. Helena is expected to maintain its intensity. On the other hand, the northern systems; the Azores and Siberian highs and Arabian Ridge are expected to relax. Thus, the ITCZ is expected to continue migrating northwards. Significant convergence is expected to continue developing during the dekad over the southern sector of the country.

EXPECTED WEATHER DURING MARCH 1-10, 2012

Lake Victoria Basin (Kagera, Mwanza, and Mara and Shinyanga regions): Normal to above normal rainfall pattern is expected. Western regions (Kigoma, Rukwa and Tabora regions): Normal to above 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 to above 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 rainfall pattern is expected. Southern region (Ruvuma region): Normal rainfall pattern is expected.

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