TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

Na: 14 Cropping Season 2011/12 January 11-20, 2012

HIGHLIGHTS

- **Continued supply of adequate soil moisture mainly over unimodal sector favored field crops (cereals, beans), while decreasing supply over bimodal sector was a normal 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 second dekad of January, 2012, the northern hemisphere high pressure cells, the Azores high, Siberian high and its associated Arabian ridge remained 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 slightly weak, but slightly intensified towards the end of the dekad. 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 winds prevailed over eastern parts of the country during much of period. Westerly winds observed during the dekad resulted in convergence over the eastern part of the country which led to enhanced activities over the southwestern highlands, west and central areas. During the dekad two tropical disturbances *DANDO* and *ETHEL* were observed over the Mozambique Channel and east of Madagascar respectively. The two systems enhanced rainfall activities over the southern sector of the country.

RAIFALL SUMMARY

The dekad under review experienced relatively decreased amounts of rainfall over several parts of the county mainly the bimodal sector which signifies the end of *Vuli* season. On the other hand, over unimodal sector wet conditions prevailed over much of the sector. The highest amount for the dekad was obtained at Kilwa Masoko 163.0 mm, followed by Songea 88.5 mm, Sumbawanga 88.3 mm, Bukoba 83.8 mm, Tabora 72.8 mm, Morogoro 62.5 mm, Mahenge 57.0 mm, Kibondo 52.0 mm, Igeri 51.6 mm, Tukuyu 50.6 mm, Ilonga 49.3 mm, Mpanda 46.9 mm, Mtwara 46.1 mm, Mbimba 41.6 mm, Singida 40.6 mm, Hombolo 40.4 mm, Dodoma 39.2 mm, Babati 31.0 mm, Mbeya 30.5 mm, Iringa 28.2 mm, Tumbi 27.0 mm, Shinyanga 23.6 mm and Zanzibar 22.1 mm. Stations in bimodal areas where the season has ended recorded rainfall below 30 mm as depicted in Figure 1 below.

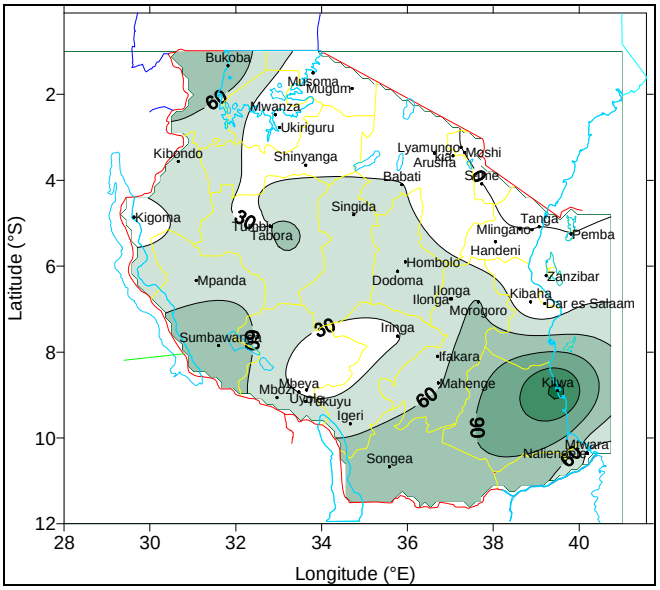

Fig 1: January 11-20, 2012 Rainfall distribution (mm)

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

Continued supply of adequate soil moisture observed mainly over unimodal sector favored field crops mostly cereals and legumes while, decreasing supply over bimodal sector was a normal trend for the period. Maize, beans, sorghum and paddy over unimodal sector were at stages ranging from early to mid vegetative stages and in good state whereas in bimodal sector the stages have reached harvesting maturity as reported over Kagera, Mara, and Tanga regions. For crops like wheat in southwestern highlands (Mbeya and Iringa regions) and paddy in northern coast particularly Coast region were still in under preparations for planting sometime later. For cash crops like cotton for instance was between third leaf and budding stage and in good state. However, few areas mainly the low grounds around Moshi, Same, Korogwe and Handeni districts experienced prolonged soil moisture deficits from mid stage of the crops, thus low crop yield is anticipated. 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 temperatures were on the increase and particularly hot over north eastern highlands.

EXPECTED SYNOPTIC SYSTEMS DURING JANUARY 21-31, 2012

The Azores, Siberian high pressure, and Arabian ridge are expected to intensify. St. Helena high is expected to maintain its strength thus keeping the meridional component of the ITCZ at its current position. The Mascarene high is expected to become slightly weak. Slight warm Sea Surface Temperatures (SSTs) are expected to prevail over the south-western Indian Ocean. The above configuration is expected to allow westerly winds across the country particularly over the southern sector. On the other hand north-easterly to northwesterly winds are expected to continue prevailing over the eastern sector of the country, resulting in convergence over the eastern half of the country.

EXPECTED WEATHER DURING JANUARY 21-31, 2012

Rainfall is expected to continue over unimodal areas and mainly dry conditions are expected to prevail over the bimodal areas. Lake Victoria Basin (Kagera, Mwanza, Mara, and Shinyanga regions): These areas are expected to experience normal rainfall conditions. Western regions (Kigoma and Tabora regions): These areas are expected to experience normal to below normal rains. Northern coast (Dar es Salaam, Morogoro and Tanga regions, the islands of Unguja and Pemba): These areas are expected to experience normal rainfall conditions. Central areas (Dodoma and Singida regions): Are expected to feature normal to below normal rains. Northeastern highlands (Kilimanjaro, Arusha and Manyara regions): These areas are expected to experience normal rains. Southwestern highlands (Rukwa, Iringa and Mbeya region): These areas are expected to experience 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 to above normal rain.

Prepared by
TANZANIA METEOROLOGICAL AGENCY
3rd, 4th & 10 th 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 (2) agromet_tz@meteo.go.tz
Dar-es-Salaam UNITED REPUBLIC OF TANZANIA