TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 12 2011/12 Cropping Season | December 21-31, 2011

HIGHLIGHTS

- Excessive soil moisture supply experienced over most areas of the country hampering crops as was for beans at mid stage in Mbeya.
- Pastures were highly boosted and water availability in some areas extended to flood levels during the dekad.

SYNOPTIC SITUATION

During the last dekad of December 2011, the northern hemisphere high pressure cells, the Azores and Siberian highs, and the Arabian ridge were intense causing a southward push of the rain-making mechanism i.e. Inter-Tropical Convergence Zone (ITCZ). The southern hemisphere high pressure cells, St. Helena was relatively strong while the Mascarene high was relatively weak during the dekad. Cool Sea Surface Temperature (SSTs) conditions were established over the Equatorial Central-eastern Pacific, while warm SSTs were observed over eastern Indian Ocean (areas around Indonesia) and the central equatorial Indian Ocean. Northeasterly to northwesterly low level winds prevailed over eastern parts of the country during much of the period. Westerly winds were also observed during the dekad resulting in convergence over the eastern part of the country which led to enhanced activities over southwestern highlands, west, central, some parts of northeastern highlands and the northern coast. .

RAINFALL SUMMARY

During the dekad under review heavy rains were obtained mainly over northern coast (Dar es Salaam), central (Dodoma) and southwestern highlands (Mbeya) as indicated in Fig 1. The highest rainfall amount for the period was recorded at Hombolo 183.7 mm, followed by Dodoma 182.7 mm, Sumbawanga 140.1 mm, Morogoro 107.4 mm, Mwanza 105.3 mm, DIA 102.8 mm, Kibaha 100.5 mm, Uyole 95.6 mm, Mbeya 85.2 mm, Singida 82.2 mm, Tabora 79.9 mm, Igeri 73.6 mm, Mahenge 67.4 mm, Songea 65.2 mm, KIA 59.2 mm, Kilwa 55.8 mm, Iringa 55.4 mm, and Pemba 54.7 mm. Remaining stations in our sample recorded rainfall below 50mm as depicted in Figure 1 below.

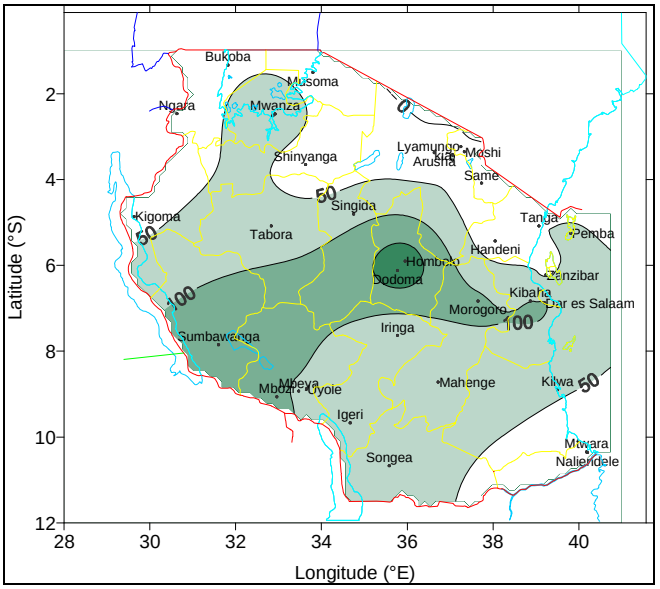

Fig 1: December 21-31, 2011 Rainfall distribution (mm)

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

Excessive soil moisture supply experienced over most areas of the country slightly hampered crops such as beans at mid stage as reported in Mbeya region. Maize crop was mostly flourishing mainly at early to advanced vegetative stages, with some few areas in bimodal areas reporting maize at dough stage and beans at ripeness to harvesting maturity as observed over Lake Victoria basin. On the other hand beans crop over unimodal areas was at vegetative stage and in moderate state due to

excessive soil moisture experienced during the dekad. Paddy was at transplanting to near flowering as observed over both unimodal and bimodal sectors with the latter consisting of mostly advanced crop stages. However, few areas mainly over low grounds experienced prolonged soil moisture deficits from mid stage that negatively affected crops at later stages as observed mainly around areas of Moshi, Same, Korogwe and Handeni districts where the improved soil moisture supply during the dekad did not help much in the recovery of the poor state of crops. Pastures were highly boosted and water availability in some areas across the country extended to flood levels during the dekad.

Hydro-meteorological Summary

Water levels in lakes, dams and river flow discharges were highly boosted.

Environmental Summary

Temperatures mostly over high ground areas in the country were fairly cool, while the coastal belt and inland areas were generally warm.

EXPECTED SYNOPTIC SYSTEMS DURING JANUARY 1-10, 2012

The Azores and Siberian highs together with the associated Arabian ridge are expected to continue intensifying. St. Helena high is expected to strengthen thus pushing the meridional component of the ITCZ towards the western part of the country. The Mascarene high is expected to weaken slightly. Warm SSTs are expected to prevail over the southwestern Indian Ocean.

The above configuration is expected to result in a penetration of westerly winds over the western areas towards the central parts of the country. On the other hand north-easterly to northwesterly winds are expected to prevail over the eastern sector of the country, resulting in convergence over the eastern half of the country.

EXPECTED WEATHER DURING JANUARY 1-10, 2012

Rainfall is expected to resume over a large part of the country during by mid-dekad and continue up to the end of the dekad. Lake Victoria Basin (Kagera, Mwanza, Mara, and Shinyanga regions): These areas are expected to experience normal rains. Western regions (Kigoma, Rukwa and Tabora regions): These areas are expected to experience normal to above normal rains. Northern coast (Dar es Salaam, Morogoro and Tanga regions, the isles of Unguja and Pemba): The areas are expected to experience normal to above normal rains. Central areas (Dodoma and Singida regions): Are expected to feature normal to above normal rains. Northeastern highlands (Kilimanjaro, Arusha and Manyara regions): These areas are expected to experience normal rains. Southwestern highlands (Southern 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): Is expected to feature normal to above normal rain.

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