TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 9. 2010/11 Cropping Season | November 21-30, 2010

HIGHLIGHTS

Delayed soil moisture supply caused a major hindrance to seasonal field activities over most parts of bimodal rainfall regime (Lake Victoria basin, northern coast and northeastern highlands).

SYNOPTIC SITUATION

During the 3rd dekad of November 2010, the northern hemisphere high pressure cells (Azores and Siberian High pressure) intensified at times while the Southern Hemisphere High pressure cells (Mascarene and St Helena High pressure) weakened slightly. The situation continued to push the zonal component of the rain-band system, the Inter tropical Convergence Zone (ITCZ) southwards. However, this system remained diffused over the northern coast of the country due to persistence of cold Sea Surface Temperatures (SSTs) off Somali coast.

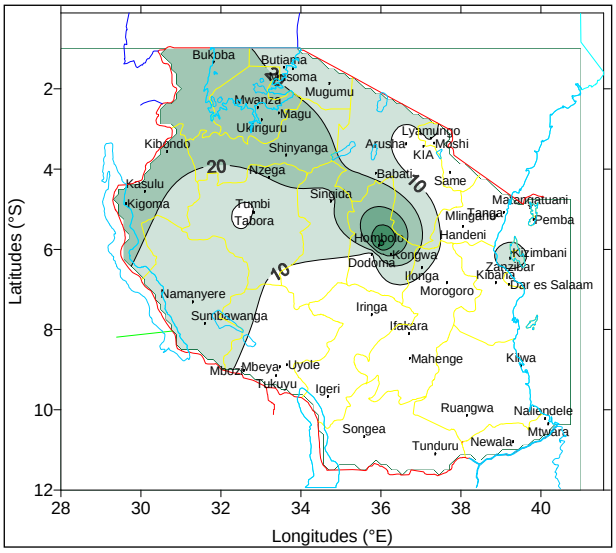

Figure 1: November 21-30, 2010, Rainfall distribution

RAINFALL SUMMARY

Most parts of the country recorded amounts of rainfall not exceeding 20 mm, except for a few stations over the central and Lake Victoria basin. The highest rainfall amount of 55.0 mm was reported over Hombolo in the central region, followed by Mwanza 29.4mm, Shinyanga 26.5mm, Bukoba 23.5 mm, and Kigoma 23.0. The remaining stations from our sample stations recorded rainfall below 20 mm, as shown in Figure 1 below. The dekad indicated significant decrease in rainfall activities when compared with the second dekad of the month.

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

Delayed soil moisture supply caused a major hindrance to seasonal field activities over most parts of bimodal rainfall regime (Lake Victoria basin, northern coast and northeastern highlands).

Late planting was carried out over almost the whole of northern coast areas comprising Tanga and Coast regions (Pangani, Handeni, Kisarawe, Kibaha and Bagamoyo districts), also parts of Kilimanjaro region (Same district) following inadequate soil moisture levels obtained and reported for the period. The episode also led to poor maize and beans crops performance at between emergence and tasseling stages as reported over Tarime, Musoma,

Biharamulo, Kibondo, Sengerema, Ngara and Misungwi. Crops in these areas are in moderate state. However, in unimodal rainfall areas land preparation was progressing normally.

Soil moisture obtained during the period is expected to trigger regeneration of pastures for livestock and wildlife, mostly over northeastern highlands (Arusha, Manyara, and Kilimanjaro regions), and some parts of central (Dodoma and Singida regions) areas of the country.

Hydro-meteorological Summary

Water levels in lakes and dams and river flows have declined and the prevailing rains have not been able to improve it, thus water for human and industrial usage and hydropower generation should be used sparingly.

Environmental Summary

Temperatures over most areas in the country were generally warm leading to uncomfortable conditions. The trend is towards warming during coming dekad.

EXPECTED SYNOPTIC SYSTEMS DURING DECEMBER 1-10, 2010

In the Southern Hemisphere Systems, the St Helena and Mascarene highs with the associated East African ridge are expected to weaken slightly. In the Northern Hemisphere, the Azores High is expected to intensify slightly at times while Siberian High and the associated Arabian ridge are likely to intensify. The warming over Indonesia is expected to deflect the low-level wind flow towards the Indian Ocean while a Low pressure over the Northeast of Great Horn of Africa (Over the Indian Ocean) is also expected to deflect the Low-level wind towards there. The relatively dry low level northeasterly is expected to dominate the northeastern and northern coast of the country while easterly over the Southern areas.

At the end of the dekad, weak westerly from Congo Basin are expected converge with northeasterlies over the Central areas, Lake Victoria Basin and western areas. The zonal arm of the ITCZ is expected to remain relatively diffused resulting into isolated cases of rainfall activities over the eastern sector of the country while the Meridional arm is expected to be slightly active over the Central, Lake Victoria Basin, Southern region and western areas, this will result into rainfall activities over the areas.

EXPECTED WEATHER OUTLOOK DURING DECEMBER 1-10, 2010

Lake Victoria Basin (Kagera, Mara, Shinyanga and Mwanza regions) is expected to feature isolated cases of showers and thunderstorms are likely but scattered cases will be experienced towards the end of the dekad. Western region (Tabora and Kigoma regions): Isolated cases of showers and thunderstorms are likely but scattered cases will be experienced towards the end of the dekad. Northern coast and hinterland (Dar es Salaam, Morogoro, Tanga and Coastal regions, Zanzibar and Pemba Islands): are likely to experience mainly dry conditions. Southern Coast (Mtwara and Lindi regions): Isolated cases of rain showers are expected. North-eastern Highlands (Arusha, Kilimanjaro and Manyara regions) isolated cases of light rain showers are likely. Southwestern highlands (Rukwa, Mbeya and Iringa regions and Mahenge areas): Rain-showers and thunderstorms are expected but scattered cases at the end of the dekad. Southern region (Ruvuma region): Isolated cases of rain-showers and thunderstorms are expected but scattered cases at the end of the dekad. Central Region (Dodoma and Singida regions): Isolated cases of rain-showers and thunderstorms are expected but scattered cases at the end of the dekad.

Prepared by
TANZANIA METEOROLOGICAL AGENCY
3rd, 4th 5th & 10 th Floors - Ubungo Plaza – Morogoro Road.
P.O. Box 3056 Tel. 255 -(0) 22 – 2460706-8 ; Fax: 255 - (0) 22 – 2460718 E-mail: met@meteo.go.tz
Dar-es-Salaam UNITED REPUBLIC OF TANZANIA