TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 7. 2010/11 Cropping Season November 1-10, 2010

HIGHLIGHTS

Slight soil moisture improvements experienced over some areas surrounding Lake Victoria favored the earlier planted beans at flowering stage and maize at early vegetative stage.

SYNOPTIC SITUATION

During the first dekad of November 2010, the northern hemisphere high pressure cells, the Azores High remained relatively weak while Siberian high together with the Arabian ridge slightly intensified. This in turn pushed the zonal component of the rain-band system, the Inter Tropical Convergence Zone (ITCZ) southwards. However, this system remained to be relatively diffused due to persistence of cold Sea Surface Temperatures (SSTs) off the Somali coast. In the Southern Hemisphere the St. Helena and, Mascarene highs together with the associated East African ridge remained slightly strong but less push of moisture from Indian Ocean to the country persisted due to the prevailing cold Sea Surface Temperatures. Following this situation, less rainfall activities continued to be observed over most parts of the country. The meridional component of the ITCZ continued to influence rainfall over the Lake Victoria Basin and parts of western regions. In this regard westerly to northwesterly low level wind was observed over the Lake Zone area and Kigoma which resulted into weak convergence over these areas. Generally, the overall low level wind flow over the remaining parts of the country was observed to vary from northeasterly to southeasterly.

RAINFALL SUMMARY

During the first dekad of November 2010 dry conditions were experienced across much of bimodal areas of the country. The recorded amounts of rainfall for the period were below 50 mm signifying poor start of the season. The highest was Zanzibar 45.6 mm and followed by Bukoba 40.0 mm, Musoma 36.2 mm, Tanga 26.4 mm, Mwanza 20.0 mm, Kibondo 13.7 mm, Lyamungu 12.0 mm, DIA 11.6 mm, Kibaha 11.5 mm, Pemba 11.3 mm and Ukiriguru 6.1 mm. A few of the remaining stations from our sample stations recorded rainfall below 5 mm, as shown in Figure 1.

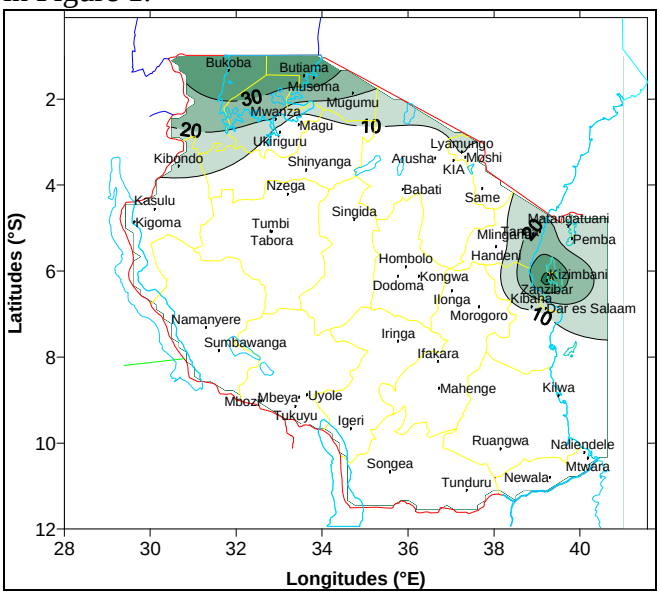

Figure 1: November 1-10, 2010, Rainfall distribution

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

Slight soil moisture improvements experienced over some areas surrounding Lake Victoria favored the earlier planted beans at flowering stage and maize at

early vegetative stage during the dekad as reported from those areas particularly Biharamulo and Kibondo districts. Likewise, the soil moisture levels also helped maize crop at emergence to weeding stage over parts of Tarime district in Mara region. Remaining areas mainly northeastern highlands (Simanjiro, Loliondo, Monduli districts) continued with land preparations, while the rest of the sector (northern coast) was impeded by poor soil moisture supply. Over unimodal areas land preparations are expected to start in November 2010.

On the other hand, dry conditions have adversely affected availability of water and pasture for livestock and wildlife mostly over northeastern highlands (Arusha, Manyara, and Kilimanjaro regions), central (Dodoma and Singida regions) and parts of southern coast regions of the country.

Hydro-meteorological Summary

Water levels in lakes and dams and river flows have declined due to the prevailing dry season, thus water for human and industrial usage, and hydro-power 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 NOVEMBER 11-20, 2010

During the first dekad of November 2010, the southern hemisphere systems, the St Helena and Mascarene highs with the associated East African ridge are expected to remain relaxed. In the northern hemisphere, the Azores high is expected to remain slightly weak while Siberian high and the associated Arabian ridge are likely to slightly intensify at times.

The zonal arm of the ITCZ is expected to slightly push southwards in eastern Africa resulting in slightly increased rainfall activities over some parts of the country mainly over northern coastal areas and parts of north-eastern highlands. Enhanced low level easterly flow is expected over most parts of the Tanzania coast with weak north easterlies dominating the extreme northern coast and parts of northeastern highlands. Westerly wind flow is also expected through the Congo area towards western part of the country particularly along Lake Victoria basin and Kigoma areas and some parts of southwestern highlands. Low level convergence is therefore expected over these areas. However, the enhanced low level easterly and westerly winds are expected to weaken towards the end of the dekad and hence reduction of activities.

EXPECTED WEATHER OUTLOOK DURING NOVEMBER 11-20, 2010

Lake Victoria Basin (Kagera, Mara, Shinyanga, and Mwanza regions) is likely to experience scattered rain-showers and thunderstorms with isolated cases towards the end of the dekad. Over western areas (Tabora and Kigoma regions), scattered rain-showers and thunderstorms are likely with isolated cases towards the end of the dekad.

Northern coast and hinterlands (Dar es Salaam, Morogoro, Tanga and Coastal regions, Zanzibar and Pemba Islands) are likely to experience scattered rain showers. Isolated to scattered rain showers are likely over northeastern highlands (Arusha, Kilimanjaro and Manyara regions).

Southern coast (Mtwara and Lindi regions) is expected to feature scattered rain-showers at the beginning of the dekad becoming isolated towards the end of the dekad. Southwestern highlands (Rukwa, Mbeya and Iringa regions and Mahenge areas) are expected to feature isolated rain-showers. Occasional rainfall activities are expected over southern (Ruvuma region) and central (Dodoma and Singida) regions.

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