



TANZANIA METEOROLOGICAL AGENCY



DEKADAL WEATHER REVIEW

No: 16 2010/11 Cropping Season

February 1-10, 2011

HIGHLIGHTS

Soil moisture supply during the period was fair, particularly over the unimodal sector, enhancing growth and development to field crops, except for a few areas of Morogoro (Ilonga and Ifakara) and Lindi regions which delayed planting following prolonged dry conditions.

SYNOPTIC SITUATION

During the first dekad of February 2011, the northern hemisphere high pressure cells, the Siberian High and its associated Arabian ridge continued to intensify keeping the zonal arm of the Inter-tropical Convergence Zone (ITCZ) further south of Tanzania, similarly the Azores high intensified and slightly pushed the meridional arm of ITCZ towards the western part of the country. The Southern Hemisphere High pressure cells, St Helena high remained weak throughout the dekad while the Mascarene high was observed to be relatively weak at the beginning of the dekad and gradually strengthened towards the end of the dekad. The above configuration contributed to enhanced rainfall over a portion of southern parts of the country. Low level wind flow was associated with relatively dry air and therefore little rainfall. Mainly local scale phenomena and occasional shift of ITCZ contributed for the rainfall activities that were observed over unimodal (Southern sector of the country) areas.

RAINFALL SUMMARY

During the first dekad of February 2011, rainfall activities decreased over much of the country, where the highest rainfall amount recorded was at Mtwara 151.8mm, followed by Igeri 129.3mm, Kilwa 121.8mm, Mahenge 95.7mm, Songea 91.1mm, Tukuyu 87.8mm, mbeya 51.2mm, Uyole 37.7mm, Kigoma 37.2mm, Tumbi 31.1mm, Mbozi

30.9mm, Babati 29.2mm, Tabora 28.6mm, Sumbawanga 27.9mm and Iringa 21.1mm. The rest of the country was generally dry with rainfall not exceeding 20 mm as shown in Fig 1.

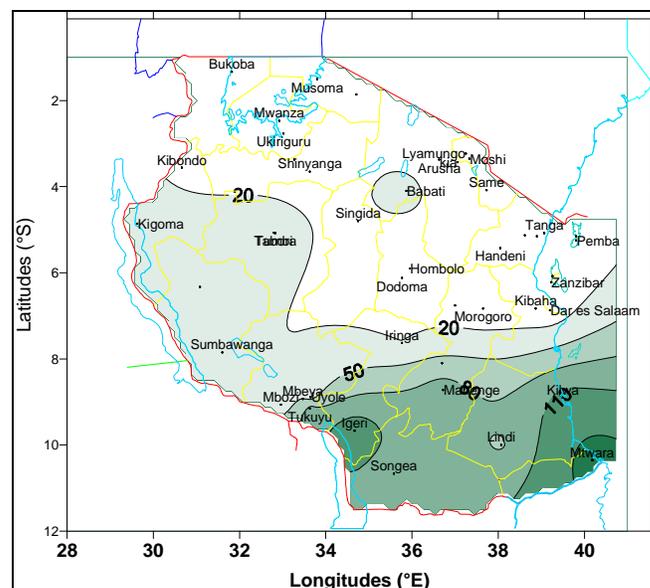


Fig. 1: February 1-10, 2011 Rainfall distribution (mm)

IMPACT ASSESSMENT

Agrometeorological and Crop Summary

Soil moisture supply during the period was fair, particularly over unimodal sector, enhancing growth and development to field crops, except for a few areas of Morogoro (Ilonga and Ifakara) and Lindi regions which were compelled to delay planting following prolonged dry conditions as reported from southern areas. Likewise, in Nzega district the

observed hard dry ponds have hindered growing of paddy crop, although other areas of the sector reported crops between emergence and weeding stage in moderate state. Over the bimodal sector land preparations for continuing. Generally, the crops ranged between poor and moderate.

On the other hand, the soil moisture boost obtained during the period regenerated pastures for livestock and wildlife over most parts of the country

Hydro-meteorological Summary

Water levels in lakes and dams and river flows have decreased, 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 hot coupled with high humidity leading to uncomfortable conditions, and the warming trend will be maintained during the coming dekad.

EXPECTED SYNOPTIC SYSTEMS DURING FEBRUARY 11-20, 2011

The Southern Hemisphere Systems, the St Helena and Mascarene highs are expected to remain slightly strong and confined far south of the continent. In the Northern Hemisphere, the Azores High is expected to remain slightly intense in the beginning of the dekad. The Siberian High and the associated Arabian ridge are expected to remain relatively strong during the dekad. The meridional arm of ITCZ is expected to be active over Congo basin and western part of country; the zonal arm of ITCZ is expected to oscillate over the southern parts of the country. Generally, the migration of the ITCZ northwards is expected to increase rainfall activities along the southern sector of the country

EXPECTED WEATHER SITUATION DURING FEBRUARY 11-20, 2011

Lake Victoria Basin (Kagera, Mara, Shinyanga and Mwanza regions): are expected to experience isolated showers and thunderstorms. Western region (Tabora and Kigoma regions): Isolated showers and thunderstorms are expected. Northern coast and its hinterland (Dar es Salaam, Morogoro, Tanga and Coastal regions, Zanzibar and Pemba Islands): Isolated rain-showers are expected. Southern Coast (Mtwara and Lindi regions): Mostly scattered thundershowers are expected. North-eastern Highlands (Arusha, Kilimanjaro and Manyara regions): Isolated rain-showers are expected, episodes of localized enhanced rainfall are likely.

Southwestern highlands (Rukwa, Mbeya and Iringa regions and southern Morogoro (Mahenge areas): Scattered thundershowers are likely during the dekad. Southern region (Ruvuma region): Mostly scattered showers and isolated thunderstorms are expected.

Central Region (Dodoma and Singida regions): Isolated rain showers are expected with cases of thunderstorms. Relatively enhanced rainfall is expected mainly over the southern parts.

Prepared by

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