TANZANIA METEOROLOGICAL AGENCY

DEKADAL WEATHER REVIEW

No: 26. 2013/14 Cropping Season **Review for May 21-31, 2014 and Outlook for June 1-10, 2014**

HIGHLIGHTS

- Rainfall performance over bimodal areas during May 21-31, 2014 was favourable for crops development mostly at final growth stages.
- The expected seasonal dry conditions over the unimodal areas will be favourable for crop harvesting activities.
- Where thundery showers, strong winds and cold nights are expected, community is advised to take precautionary measures for their safety and property

SYNOPTIC SUMMARY DURING MAY 21-31, 2014

During May 21-31, 2014 pressure systems over the northern hemisphere relaxed significantly. In the southern hemisphere, the Mascarene high pressure system continued to intensify and extended a ridge over most parts of the country. The ridge was pushing the zonal arm of the Inter-Tropical Convergence Zone (ITCZ), resulting into mainly dry conditions, strong winds and cool nights over most parts of the country.

WEATHER SUMMARY DURING MAY 21-31, 2014

During the period under review, the country received significant rainfall in a few places, mainly in the bimodal areas. The unimodal areas were generally dry over most areas. Results from Satellite Rainfall Estimates (RFE) merged with gauge data from Tanzania rainfall stations network (Figure 1a) shows a pattern of total rainfall distribution during May 21-31, 2014 whereby a few places of the bimodal areas received significant rainfall between 25 mm to 100 mm during the dekad.

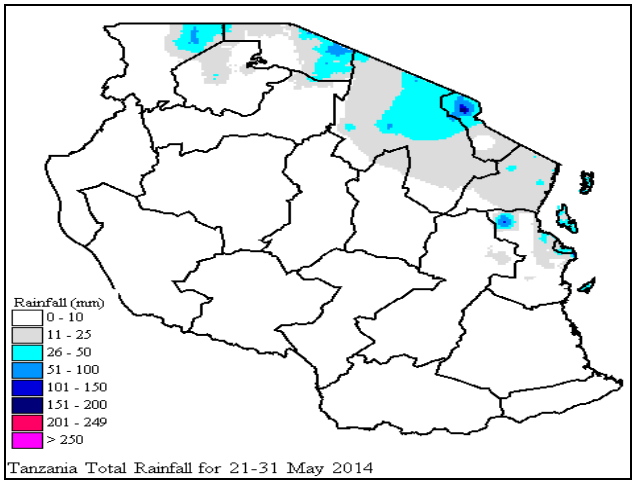

Figure 1a: Satellite Rainfall Estimates (RFE) showing total rainfall distribution during May 21-31, 2014.

The observed rainfall in these areas was between 120 % to slightly above 200% of long term average as indicated in Figure 1b.

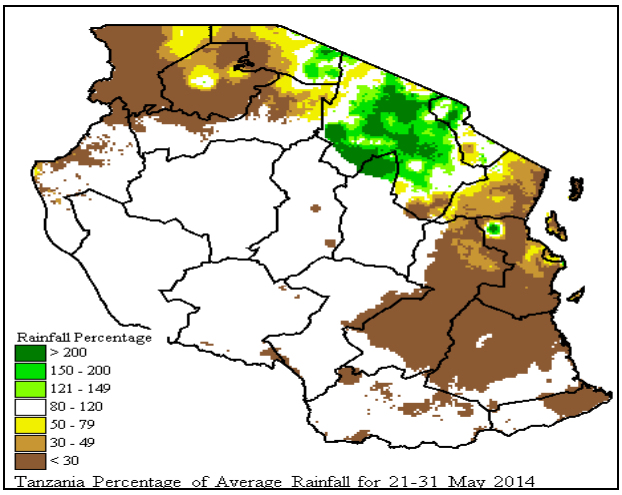

Figure 1b: Satellite Rainfall Estimates (RFE) showing rainfall performance during May 21-31, 2014 as percentage of long term average rainfall.

AGROMETEOROLOGICAL SUMMARY DURING MAY 21-31, 2014

During the period under review, the rainfall received over the bimodal areas was favourable for crops development mostly at final growth stages, including late grown crops. Maize crop over most of the bimodal areas during the period ranged between waxy and full ripeness stages as observed in Mara, Kilimanjaro, Tanga, Coast and Morogoro regions. The crop was generally in average condition and good harvests are expected. Over the unimodal areas, maize crop was already at full ripeness stage with good condition. Pastures and water availability for livestock and wildlife was generally good over much of the country.

HYDROLOGICAL CONDITIONS DURING MAY 21-31, 2014

Water levels in dams and river flows discharges were generally normal over most areas of the country.

ENVIRONMENTAL CONDITIONS DURING MAY 21-31, 2014

During the period, slight cool temperature conditions prevailed in the country.

EXPECTED SYNOPTIC CONDITIONS DURING JUNE 1-10, 2014

During this period, pressure systems over the northern hemisphere are expected to relax significantly while in the southern hemisphere, both the St. Helena and the Mascarene high pressure systems are expected to intensify more. However, during the first half of the period the Mascarene is expected to relax slightly and reduce the strength of the East Africa Ridge. With these configurations, the orientation of the ITCZ is expected to be confined mostly in the northern hemisphere. This situation will influence mainly dry conditions over most parts of the country but with periods of wet conditions over few areas during the first half of the dekad. On the other hand, the meridional arm of ITCZ is expected to shift further west into Congo basin resulting to reduced rainfall over western parts of Lake Victoria basin. The intensification of high pressure systems over the southern hemisphere is expected to cause enhanced wind speed regime over most parts of the country. Neutral to warm Sea Surface Temperatures (SSTs) in south-west Indian Ocean, close to Tanzanian coast, are expected to induce embedded convection over some areas and therefore influence rainfall activities especially over northern parts of the coast strip.

EXPECTED WEATHER DURING JUNE 1-10, 2014

Lake Victoria Basin (Kagera, Geita, Mwanza, Mara, Simiyu and Shinyanga regions including northern parts of Kigoma region):Rain showers and isolated thunderstorms are expected especially during the first half of the dekad. Cold nights and Periods of strong winds are also expected. Northern coast (Dar es Salaam, Morogoro and Tanga regions together with the isles of Unguja and Pemba)**:** Rainshowers especially during the first half of the dekad, cold nights and periods of strong wind over few areas are expected. Northeastern highlands (Kilimanjaro, Arusha and Manyara regions): Rainshowers over few areas especially over high ground are expected especially during the first half of the dekad, cold nights and periods of strong wind over few areas are expected. Western regions (Kigoma, Rukwa and Tabora regions), central areas (Dodoma and Singida regions), south-western highlands (southern Rukwa, Katavi, Njombe, Iringa and Mbeya regions) and southern region (Ruvuma region): Mainly dry conditions, cold nights, and periods of strong winds are expected. Southern Coast (Mtwara and Lindi regions): Mainly dry conditions and cold nights. However, occasional rainshowers and periods of strong winds are expected during the period.

AGROMETEOROLOGICAL OUTLOOK AND ADVISORY DURING JUNE 1-10, 2014

During the period of June 1-10, 2014, the expected rainfall over the bimodal areas will be useful for late grown crops at advanced vegetative stages. The expected seasonal dry conditions over most of the unimodal areas will be favourable for crop harvesting activities. Wherestrong winds and cold nights are expected, community is advised to take precautionary measures for their safety and property. Farmers and livestock keepers are strongly advised to seek professional advice from nearby agricultural and livestock extension officers.

BIMODAL AND UNIMODAL AREAS

1. Bimodal areas: Areas which experience two rainfall seasons (Oct - Dec/Jan and March – May). These are areas covering Lake Victoria Basin (Kagera, Geita, Mwanza, Mara, Simiyu and Shinyanga regions including northern parts of Kigoma region), northern coast (Dar es Salaam, Morogoro and Tanga regions together with the isles of Unguja and Pemba) and northeastern highlands (Kilimanjaro, Arusha and Manyara regions).

2. Unimodal areas: Areas which experience one rainfall season (Nov - Apr). These are areas covering Western regions (Kigoma, Rukwa, Katavi and Tabora regions), central areas (Dodoma and Singida regions), southwestern highlands (Njombe, Iringa and Mbeya region), southern coast (Mtwara and Lindi regions) and southern region (Ruvuma region).

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) agromet1_tz@meteo.go.tz
Dar es Salaam UNITED REPUBLIC OF TANZANIA