

No. 11 Special Issue: October to December, 2014 rain Season

Issued on 4th September, 2014

Summary

The Bulletin contains a brief review of the performance of March to May (MAM), 2014 long rain season (*Masika*), and outlook for the October to December (OND), 2014 short rain season (*Vuli*) in Tanzania and advisories on the likely impacts. Outlook for October to December (OND), 2014 short rain season indicates that, sufficient rains are expected over most areas of the country with periods of suppressed rainfall over the Southern region. Early onset of rains is expected over the Lake Victoria basin, north-eastern highlands and northern coast.

RAINFALL PERFORMANCE

March to May, 2014 Rainfall Season

During the long rain season (*Masika*) of March to May (MAM) 2014, most parts of the country experienced normal to above normal rainfall with pockets of below normal rainfall over parts of Mwanza, Singida and Dodoma regions. The occurrence of Tropical Cyclone "HELLEN" in Mozambique channel over South Western Indian Ocean contributed to enhanced rainfall over Northern Coast areas. Figure 1 below shows the rainfall performance during the *Masika* season in various areas of the country as percentages of long term average rainfall.

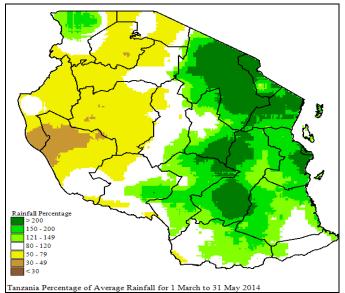


Fig. 1: March to May, 2014 rainfall performance as percentage of long term average rainfall (mm).

EXPECTED CLIMATE SYSTEMS AND WEATHER DURING OCTOBER TO DECEMBER 2014

During October to December, 2014 rainfall season, anomalous warming over Western and South-Western Indian Ocean coupled with neutral SSTs over Eastern Indian Ocean (Indonesia) are expected to enhance easterly to north easterly wind flow. Expected cooling over Atlantic Ocean, is likely to support moist westerly wind flow from Congo Basin. Slightly warming over Central Equatorial Pacific is likely to persist during the October to December, 2014 rainfall season and contribute to enhanced rainfall over bimodal areas. Moreover, warming across much of the South-western Indian Ocean during the month of November and December, 2014 is likely to trigger occurrence of tropical cyclones.

RAINFALL OUTLOOK DURING OCTOBER - DECEMBER 2014

From the prevailing climate systems explained above, the October to December, 2014 rainfall season is expected to feature as follows:

(i) Short Rainfall Season (Vuli) over Bimodal areas

The onset of the short rainfall season (*Vuli*) is expected to commence in September, 2014 over Lake Victoria Basin and gradually spreading to other areas. However, early onset of the rains is also expected over areas in the Northern coast (Mainly Dar es Salaam, Pwani and Tanga including Unguja and Pemba Isles).

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Lake Victoria Basin: (Kagera, Mara, Mwanza, Geita, Simiyu and Shinyanga regions): Rains are expected to start during the first and second week of September, 2014 over Kagera, and northern Kigoma and then gradually spreading to Mwanza, Geita, Shinyanga, Mara and Simiyu regions. The rains are expected to be above normal over Kagera, Geita, Mwanza, Mara, Simiyu and northern Kigoma regions while over Shinyanga region, rains are expected to be normal to above normal. Northern coast areas and hinterlands: (Dar es Salaam, Tanga, and Coast regions, extreme northern Morogoro areas and Isles of Unguja and Pemba): Rains are expected to commence in the first week of September. The rains are likely to be normal to above normal over most areas. North-eastern highlands: (Kilimanjaro, Arusha and Manyara regions): Rains are expected to commence in the second to third week of September, 2014 and are likely to be above normal over much of Kilimanjaro, Arusha and northern part of Manyara regions. However, southern parts of Manyara region are likely to experience normal to above normal rains.

(ii) **Seasonal Rains (Msimu) during** November to April over Unimodal areas.

November to April rainfall season is more significant for the western, central, southwestern highlands, southern region and southern coast. Rains are likely to be normal to above normal over most areas during the months of November to December 2014. Western areas: (Tabora, Rukwa, Katavi and Kigoma regions): Rains are expected to start in the second week of November, 2014 The rains are expected to be above normal over southern part of Kigoma, Rukwa and Katavi regions while much parts of Tabora region rains are expected to be normal to above normal. Central (Singida and Dodoma regions):

Rains will commence on the third week of November, 2014 and are expected to be normal to above normal over much of Singida and Dodoma regions. Southwestern highlands: (Mbeya, Iringa, and Njombe regions and southern Morogoro areas): Rains over these regions are expected to start during the first to second week of November, 2014. The rains are expected to be normal to above normal over most areas while the western parts of Mbeya region are expected to experience above normal rains. Southern region and Southern Coast: (Ruvuma, Mtwara and Lindi regions): Rains are expected to start during the first to second week of November, 2014 and are expected to be normal to above normal rows areas. However, pockets of below normal rains are expected over Ruvuma region. The October to December, 2014 rainfall outlook is as shown in figure 2.

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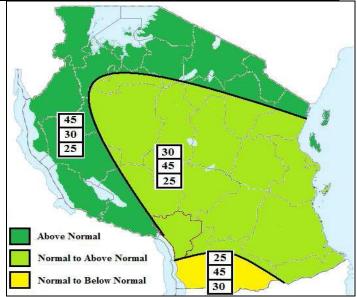


Fig. 1: Rainfall outlook for October to December 2014

EXPECTED IMPACTS AND ADVISORY

i. Agriculture and Food Security

Sufficient soil moisture levels are likely to favor normal cropping season over much of the country except for southern sector of the country (mainly Ruvuma region) where periods of reduced rainfall are expected mainly during crop establishment. Excessive soil moisture levels associated with above normal rainfall are likely to favor weeds and impede crop development, thus high use of agricultural inputs is likely to raise production costs. Farmers are advised to prepare their farms and acquire agricultural inputs early enough while making appropriate land use management and right choice of crop varieties to plant.

ii. Pastures and Water for Livestock and Wildlife

Pasture and water availability for livestock and wildlife over much of the country is likely to be good. However, famers are encouraged to produce and stock animal feeds for use during the dry season. Due to high likelihood of disease outbreak, regular dipping and vaccination against pests and diseases are highly recommended. Wildlife-human conflicts due to wildlife migration and agricultural activities are likely to be minimal during the season.

iii. Water and Energy

River flow discharges and water levels in dams are expected to improve from their current levels over much of the country. In spite of the expected normal and above normal rains, water should be used sparingly. Water harvesting and storage practices are recommended.

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iv. Health sector

There is a likelihood of water borne diseases outbreaks due to stagnant waters and uncontrolled sewerages. Relevant Authorities and individuals are advised to take appropriate health measures need to minimize the expected negative health impacts.

v. Local Authorities

Water drainage systems should be opened and cleaned to avoid water accumulation due to surface runoff as floods cause destruction of infrastructures, loss of lives and property.

vi. **Disaster Management**

The disaster management authorities and other stakeholders are advised to take necessary measures such as good practice of environmental conservations and ensure preparedness, response, and mitigation plan to reduce any negative impacts that may result from the expected above normal rainfall.

vii. Media

The media is advised to obtain, make regular follow-ups and disseminate weather and climate information and warning as provided by Tanzania Meteorological Agency (TMA). Moreover, Media is encouraged to seek and obtain inputs from relevant sectors when preparing and relaying cross cutting issue on Weather and Climate to the Public.

NOTE: The current status of seasonal forecasting allows for prediction of spatial and temporal averages and may not fully account for physical and dynamical factors that influence short term national climate variability. Users of this outlook are, therefore urged to make good use of daily, ten day and monthly updates issued by the Tanzania Meteorological Agency. Tanzania Meteorological Agency will continue to monitor developments of the systems and issue relevant updates.

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