



Summary

The Bulletin contains a brief review of the performance of March to May 2011 rainfall season, and evolution of the climate systems, and outlook for the October to December (OND) 2011 rainfall season, and advisories on the likely impacts. Outlook for October to December (OND), 2011 rainfall season indicates that the eastern Lake Victoria basin, much of Arusha region and northern coast are expected to receive above normal rains while southern coast (Mtwara and Lindi regions) is expected to receive mainly normal rainfall. The remaining areas which comprise much of the country are expected to experience normal to above normal rainfall. This Outlook is relevant only for seasonal time scales and over relatively large areas and some variations may occur. It should be noted that heavy and short duration episodic events are common even in below normal rainfall conditions.

RAINFALL PERFORMANCE

March to May 2011 Rainfall Season

During the March to May 2011 long rain season, the Lake Victoria Basin, parts of north-eastern highlands (Same areas), parts of Morogoro region and large parts of southern regions (Ruvuma, Mtwara and Lindi regions) received normal to above normal rains. Parts of Manyara, Dodoma, Singida, Tabora, northern Kigoma and Shinyanga regions experienced extremely below normal rains. Moreover, mainly normal rains were observed over parts of northern coast (Coastal region, Isles of Zanzibar and Pemba). However, most areas of western parts of Kilimanjaro and Dar es Salaam regions observed below-normal rainfall. South-western highlands featured mainly normal rains with pockets of above normal rainfall.

EXPECTED CLIMATE SYSTEMS AND WEATHER DURING OCTOBER- DECEMBER 2011

Expected Climate Systems during October- December 2011

This outlook is based on a review of the past, current and expected state of global climate systems and its likely impacts on the upcoming October to December, 2011 rainfall season in the country. In the October-December 2011, season the SSTs show a trend towards cooling which imply a likelihood of a weak La-Nina conditions across the equatorial Pacific Ocean. The current warming over western Indian Ocean (coast of Eastern Africa) coupled with slightly cooling over Indonesia indicates presence of a mild positive Indian Ocean Dipole during the first two months of the season. However, these SSTs over western Indian Ocean are expected to

become neutral towards the end of the year 2011. Expected low level easterly winds towards the country are likely to decline slightly from November 2011. Westerly wind flow is likely to be enhanced and influence rainfall activities over greater part of the country from December 2011. The coming season is likely to be influenced by occurrences of Tropical Cyclones over south western Indian Ocean.

RAINFALL OUTLOOK DURING OCTOBER- DECEMBER 2011

From the prevailing climate systems explained above, the October - December 2011 rainfall outlook is described below and the map is shown in Figure 1.

Short Rains (Vuli)

The short rains season in the northern sector (bimodal areas) of Tanzania is due to commence from second week of September over Lake Victoria basin and gradually spread to other areas of bi-modal region.

Lake Victoria basin (Kagera, northern Kigoma, Mara, Mwanza and northern Shinyanga regions): Rains are expected to start during the second week of September 2011 over Kagera region and gradually spreading to other areas (Mwanza, Shinyanga, northern Kigoma (Kibondo) and Mara regions) during the second week of October, 2011. The rains are expected to be mainly above- normal over most areas.

Northern coastal areas and hinterland (Dar es Salaam, Tanga and Coast regions, northeastern of Morogoro regions, and Isles of Unguja and Pemba): The rains are expected to commence during the second week of October 2011. These rains are expected to be above normal over most areas.

Northeastern highlands (Kilimanjaro, Arusha and Manyara regions): Rains are expected to commence during the third and fourth week of October and are likely to be normal to above normal.

Seasonal Rains (Msimu): November 2011 to April 2012

The November to April rainfall (*Seasonal rains*) is more important for the Western, Central, Southwestern highlands, Southern regions and Southern coast. The rains are likely to be normal to above normal over most of unimodal regions. However, parts of southern Lindi, eastern parts of Ruvuma and Mtwara regions rains are expected to be mainly normal during October to December, 2011.

The western areas (Tabora, Rukwa and Kigoma regions): Rains are expected to start during the third and fourth week of November and are expected to be normal to above normal.

Central (Singida and Dodoma regions): Rains are expected to start during the fourth week of November and are likely to be normal to above normal.

Southwestern highlands (Mbeya, Iringa and Southern Morogoro): Rains are expected to start during the third week of November and are likely to be normal to above normal.

Southern region and Southern Coast: (Ruvuma, Mtwara and Lindi regions): Rains are expected to start during the fourth week of November and are likely to be normal to above normal over western parts of Ruvuma region and mainly normal over eastern Ruvuma, southern Lindi and Mtwara regions.

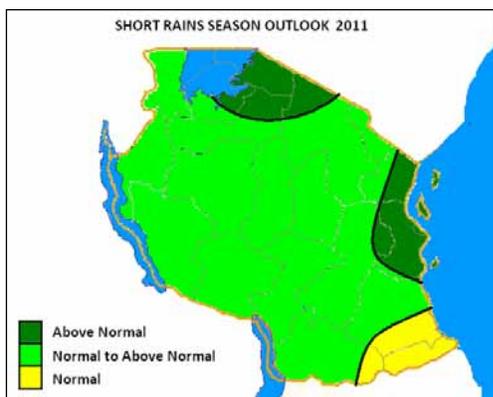


Fig. 1: Rainfall outlook for October to December 2011

IMPACTS AND ADVISORY

Agriculture and Food Security

Over much of the country, farmers are advised to continue with normal cropping season as normal to above normal rains are expected. However, above normal rains may lead to excessive soil moisture condition which is likely to impede crop development. Farmers are therefore encouraged to seek advice from agricultural extension officers.

Pastures and Water for Livestock

Pastures for livestock and wildlife are expected to improve over most part of the country. However, livestock keepers are encouraged to seek advice from livestock extension officers.

Water and Energy

Water for livestock, pasture, wildlife and other economical activities is expected to be adequate over the most part of the country. However water should be well managed and rain water harvesting should be practiced where appropriate. *Vuli* rains are expected to improve water levels in hydro-power Dams. However such improvement may not be sufficient due to the fact that most Dams are currently below minimum levels.

Health

There is a high chance of Malaria and cholera, outbreaks over the areas which are expected to receive above normal rainfall while normal transmission elsewhere, necessary precautions should be taken over those areas.

Disaster Management and Local Authorities

The Disaster Management Authorities and other stakeholders are advised to take necessary measures that would ensure preparedness, response and mitigation of any negative impacts resulting from the expected weather conditions such as flash flood over areas expected to receive normal to above normal rainfall. Municipalities over areas where above normal rains are expected are advised to open up drainage systems to avoid water accumulation due to surface runoff so as to reduce the impacts of flash floods.

Note

It should be noted that this year rainfall is likely to be slightly influenced by a mild positive Indian Ocean Dipole associated with cooling over Indonesia and warming over western Indian Ocean coupled with La-Nina conditions. The coming season is expected to be associated with enhanced rainfall over eastern parts of Lake Victoria Basin and parts of northern coast. While occasional suppression of rainfall over western parts and southern coast of the country areas may occur during October-December 2011.