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PRESS RELEASE

CLIMATE OUTLOOK FOR MARCH – MAY, 2013 RAINFALL SEASON

This statement gives a review of the performance of the October to December (OND), 2012 short rainfall season, the ongoing seasonal rainfall over central, western, southwestern highlands, southern and southern coast, and an outlook for the March to May (MAM), 2013 long rainfall season (*Masika*).

A: SUMMARY

The performance of the October to December 2012 short rains (*Vuli*) was noted to be normal over most parts of the country with pockets of above normal rainfall except for some areas of Dar es Salaam, Tanga, and island of Unguja where below normal rains were recorded. Generally, the season was characterized by poor temporal and spatial rainfall distribution. However, severe weather events such as strong winds and heavy rains that caused catastrophic disasters including loss of life and destruction of properties over some parts of the country were recorded. The spatial distribution of the rains in January and February 2013 was generally good over unimodal areas while over bimodal areas episodes of heavy rains were recorded in January 2013.

The outlook for the March to May, 2013 rainfall season indicates that most parts of the bimodal areas (Lake Victoria Basin, northeastern highlands and northern coast) are expected to receive normal to below normal rains. The ongoing seasonal rains over the unimodal areas are expected to be below normal except for Mbeya, Njombe, Ruvuma regions and southern parts of Iringa and Morogoro region where normal rains are expected.

The principal contributing factors to the predicted MAM 2013 seasonal rains include warming over eastern Atlantic Ocean (off the coast of Angola), suppressed westerly wind flow from the Congo basin, and neutral SST anomalies with weak easterly wind flow over the western Indian Ocean.

B: RAINFALL PERFORMANCE DURING OCTOBER TO DECEMBER 2012

The performance of the October to December 2012 short rains (*Vuli*) was observed to be normal over most parts of the country with pockets of above normal rainfall except for some areas of Dar es Salaam, Tanga, and island of Unguja where below normal rains were recorded. Generally the season was characterized by poor temporal and spatial rainfall distribution. However, severe weather events such as strong winds and heavy rainfall that caused catastrophic disasters including loss of life and destruction of properties over some parts of Lindi, Mtwara, Singida, Dodoma, Mbeya, Tabora, Kagera and Mwanza regions. The temporal and spatial distribution of the ongoing rainfall in the unimodal areas particularly in central regions were generally normal to above normal. The recorded rainfall amounts in millimeters for some selected stations with their respective percentages of long term means in brackets are indicated below:

BIMODAL AREAS

Northern Coast and hinterlands: Matangatuani recorded 623.6 mm (130.3%), Pemba 259.8mm (94.3%), Amani 415.7mm (80.3%), JNIA 191.1mm (61.1%) Zanzibar 422.9mm (66.4%) and Morogoro 152.5mm (77.6%) of rainfall.

Northeastern highlands: Moshi recorded 155.4mm (111.6%), Arusha 377.7(174.8%), Lyamungo 200.9 mm (94.1%), Same 208.1mm (125.8%) and KIA 158.9mm (145.4%) of rainfall.

Lake Victoria Basin: Mwanza recorded 605.9mm (158.8%), Bukoba 492.5 mm (88.8%), Musoma 226.7mm (93.1%) and Shinyanga 264.5mm (90.4%) of rainfall.

UNIMODAL AREAS

Western areas: Tabora recorded 265.2mm (77.5%), Kibondo 320.3mm (80.2%), Tumbi 246.9mm (73.3%) and Kigoma 376.9mm (66.3%) of rainfall.

Central areas: Dodoma recorded 146.7mm (96.8%), Hombolo 92.6mm (55.3%) and Singida 228.9mm (108.1%) of rainfall.

Southwestern highlands: Iringa recorded 211.8mm (144.1%), Mbeya 193.7mm (74.3%), Tukuyu 437.2mm (121.0%), Sumbawanga 324.3mm (108.1%), Mahenge 239.1mm (44.6%) and Igeri 198.5mm (60.3%) of rainfall.

Southern areas: Mtwara recorded 59.7mm (25.1%), Naliendele 52.5mm (19.4%) Kilwa 259.9mm (109.2%) and Songea 247.8mm (103.6) of rainfall.

It should be noted that: *Rainfall amounts below 75% of long term averages are categorized as below normal while those ranging from 75 to 125% are categorized as near normal and those greater than 125% of long term averages are categorized as above normal.*

C: CLIMATE SYSTEMS OUTLOOK

This outlook is based on a review of the current and expected state of global climate systems and their likely impacts on the upcoming March to May (MAM), 2013 rainfall season in the country.

Currently, the Sea Surface Temperatures (SSTs) indicates a slight warming over the Western Indian Ocean (off the coast of East Africa) that is expected to persist through March, 2013 tending to neutral conditions for the remaining part of the season (April-May, 2013). The observed and projected SSTs conditions are expected to enhance rainfall over the eastern sector of the country in March, 2013 while the neutral SSTs anomaly in April and May are likely to be associated with weak easterly winds along the eastern parts of the country thus reducing moisture intrusion from the Indian Ocean.

Observed warming over eastern Atlantic Ocean (off the coast of Angola) is expected to persist throughout the season and thus suppressing moisture rich westerly winds from Congo basin hence reducing rainfall particularly over the western sector of the country. Moreover, the projected above average sea surface Temperature off the Somalia coast, suggests the possibility of diffused rainfall making mechanism (Inter Tropical Convergence Zone) over the coastal areas of the country leading to suppressed rainfall during period of April-May 2013.

D: MAM 2013 RAINFALL OUTLOOK

(i) Long Rainfall Season (*Masika*)

The long rainfall season in the northern sector (bimodal areas) of Tanzania is due to commence in the first week of March, 2013. The details are as follows:

Lake Victoria basin: Mwanza, Mara, Shinyanga, Simiyu and Kagera regions) Rains are expected to start in the first week of March, 2013 in Kagera and Geita regions and gradually spreading over t Mwanza, Mara, Shinyanga and Simiyu regions in the second week of March. Most parts of Kagera and Mara regions are likely to experience normal rains, while Mwanza, Shinyanga, Geita and Simiyu regions are expected to receive below normal rains.

Northern coast and hinterlands (Dar es Salaam, Tanga, Coast, northern part of Morogoro regions and isles of Unguja and Pemba): Rains are expected to start during the first week of March, 2013. The *Masika* rains over much of Dar es Salaam, Tanga, northern areas of Coast region and isles of Unguja and Pemba are likely to be normal, while north of Morogoro and south of Coast region below normal rains are expected.

Northeastern highlands (Kilimanjaro, Arusha and Manyara regions): The onset of rainfall is expected during the first week of March, 2013 and the rains are likely to be normal over much of these areas.

(ii) Seasonal Rains (the ongoing rainfall season)

Western areas (Kigoma, Tabora and Katavi regions): The ongoing seasonal rains over these areas are expected to be mainly below normal for the remaining period. These rains are expected to recede during the fourth week of April, 2013.

Central areas (Singida and Dodoma regions): The ongoing seasonal rains are expected to be below normal to normal. These rains are expected to recede during the second week of April, 2013.

Southern coastal areas (Mtwara and Lindi regions): The ongoing seasonal rains in most of these areas are expected to be mainly below normal. Cessation of rains is expected during the second week of April, 2013.

Southern areas (Ruvuma): The ongoing seasonal rains in these areas are expected to be mainly normal. Cessation of the rains is expected during the second week of April, 2013.

Southwestern highland areas (Mbeya, Iringa, Njombe and southern part of Morogoro regions): The ongoing seasonal rains in most of these areas are expected to be mainly normal. However, below normal rainfall are expected over northern parts of Iringa and Mbeya regions. These rains are expected to end during the third week of April, 2013.

It should be noted that heavy rainfall events are common even in below normal rainfall conditions.

*Tanzania Meteorological Agency will continue to monitor developments of weather systems including **Tropical Cyclones over the southwestern Indian Ocean**, which could influence the rainfall patterns in the country. Updates will be issued whenever necessary.*

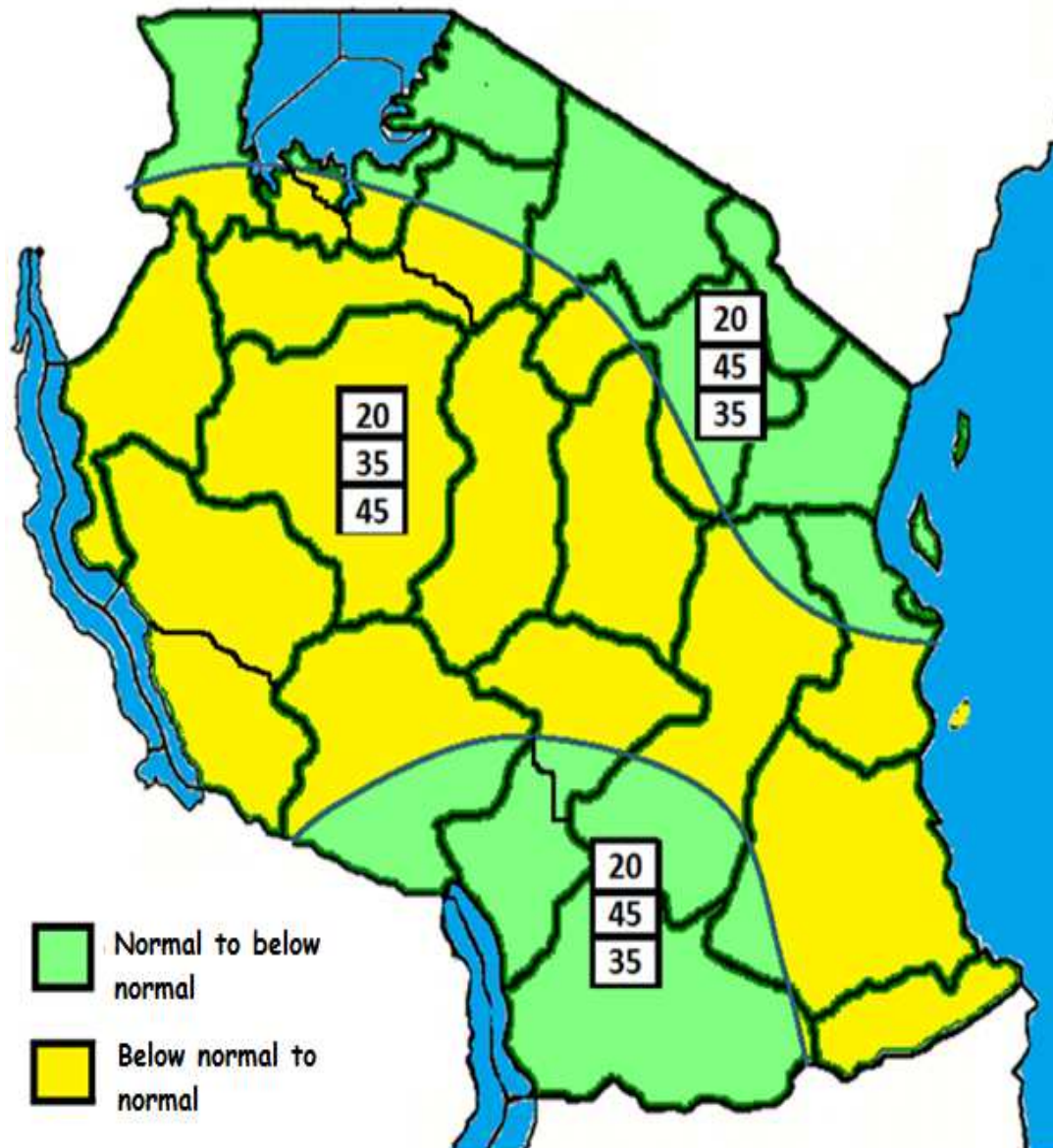


Figure 1:
Rainfall Outlook for March to May 2013

Note:

The colours in the map indicate the probabilities of rainfall in each of the three categories - above-, near-, and below-normal. The top number indicates the probability of rainfall occurring in the above-normal category; the middle number is for near-normal and the bottom number for the below-normal category. For example, the light green covering Ruvuma, Njombe, Tanga and Arusha there is 20% probability of rainfall occurring in the above-normal category; 45% probability of rainfall occurring in the near-normal category; and 35% probability of rainfall occurring in the below-normal category.

E: EXPECTED IMPACTS AND ADVISORY

Agriculture and Food Security

Sufficient soil moisture condition is likely to be featured over much of northern coast including islands of Unguja and Pemba, north eastern highlands, Lake Victoria basin, southwestern highlands and southern areas during the season while the rest of the country is expected to experience moisture deficits particularly during April and May.

Over northern coast (Dar es Salaam, Coast and Tanga regions together with Unguja and Pemba islands), north eastern highlands (Manyara, Arusha and Kilimanjaro regions) and Lake Victoria basin (Mara and Kagera regions) farmers are advised to go for normal *Masika* cropping season. However, farmers in Mwanza, Shinyanga, Geita, Simiyu regions and northern Morogoro region are advised to plant drought tolerant and early maturing crops.

Over western (Kigoma Tabora and Katavi regions), central (Dodoma and Singida regions), and southern coast (Lindi and Mtwara regions) farmers are strongly advised to seek more advice from agricultural extension officers. While areas over southwestern highlands (Njombe, Iringa and Rukwa), southern region (Ruvuma) including southern Morogoro farmers are advised to continue with normal agronomic practices as crops get into maturity.

Energy and water

Water levels over the lakes, dams and rivers are not expected to have significant improvement from the current levels thus improved power generating plan with regards to energy mix is advised.

Pasture and Water for Livestock and wildlife

Pasture and water availability for livestock and wildlife are likely to be good in bimodal areas while for unimodal areas no significant change is expected. Pastoralists and agro-pastoralists are advised to harvest and conserve pasture for use during dry periods. *However, pastoralists and agro-pastoralists are strongly encouraged to seek more advice from livestock extension officers.*

On the other hand areas expected to receive normal rains are likely to have improved biodiversity, plant flowering, honey/wax production and reduced animal migration thus reduce human wildlife conflicts. There is also likelihood of decreased bush fires. In areas which expect to receive below normal rains, conservation and wildlife managers are advised to take necessary precautions.

Local Authorities

In spite of the expected normal to below normal rains, chances of heavy rainfall episodes cannot be ruled out. Therefore Municipals are advised to open up and clear drainage systems to avoid water accumulation due to surface runoff so as to reduce the impacts of heavy rains that may result into floods.

Health sector

Although normal to below normal rains are expected over the country, still there is a likelihood of waterborne and water related diseases such as malaria, trachoma and cholera thus necessary

precautions should be taken.

Disaster Management

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.

The Agency strongly advises all users including agriculture, food security, livestock, wildlife, water resources, energy, health sectors, etc to seek more advice from experts in their respective sectors

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