

#### THE UNITED REPUBLIC OF TANZANIA

## Ministry of Agriculture

P.O. Box 2182, 40487 DODOMA. Telephone: +255-022-2862064,

Fax: +255-022-2862077, E-mail: ps@kilimo.go.tz

#### **NATIONAL FOOD SECURITY BULLETIN**

Volume 54-2024

http://www.kilimo.go.tz

31 OCTOBER 2024



## 1.0 NATIONAL HIGHLIGHTS

- Post-harvest management and marketing of most of the food crops are currently taking place in regions characterized by both unimodal and bimodal rainfall pattern. In bimodal regions, the 2024/2025 cropping season for the short rainfall *Vuli* has commenced, with farmers actively engaged in planting and other agricultural field activities. On the other hand, farmers in unimodal areas have started land preparation for the 2024/2025 cropping season.
- Cassava is thriving under favorable growing conditions and it is at various growth stages throughout the country.
- Wholesale average prices for maize have recorded the highest levels in the markets of Musoma, Dodoma-Majengo and Babati, while the lowest prices were observed in Arusha- Urban, Mpanda and Tabora markets.
- Similarly, wholesale average prices for rice were highest in the markets of Dar es Salaam- Ilala, Dar es Salaam-Kinondoni and Babati, with lowest prices in the Mpanda and Musoma markets.
- Dry beans prices were highest in Mpanda and Tabora markets and lowest in Iringa-urban and Morogoro.

#### **TABLE OF CONTENTS**

National Highlights1
Major Crop Conditions2
Satellite-based crop Conditions3
Rainfall Outlook5
Food Prices for major crops7
Food Security9
Public Awareness10
Terms and Definitions11



#### 2.0 CROP CONDITIONS FOR MAJOR FOOD CROPS

#### Maize

Land preparation in most areas of Unimodal regions has started. In Bimodal rainfall areas, the 2024/2025 cropping season have started (specifically for short rainfall (Vuli) season, in these areas farmers are continuing with planting activities and other field operations. In some areas of bimodal regions, maize is at tasseling stage.



#### **Beans**

Land preparation has started in October, in most areas of Unimodal regions gearing up for the 2024/2025 cropping season. In Bimodal areas, crops are at various growth stages, benefiting from favorable conditions. For instance, in the Kagera region the bean crop has reached the maturity stage.



#### Cassava

Cassava is typically cultivated at various intervals, depending on the moisture content of the soil, which results in the crop being at different growth stages. Most regions, including Pwani, Tanga, Geita, Kigoma, Lindi, Mara, Mtwara, Mwanza and Tabora have experienced favorable conditions for the growth.



# **Paddy**

In both unimodal and bi-modal regions, the main activity involves the preparation of land.





#### 3.0 SATELLITE-BASED VEGETATIVE CONDITIONS

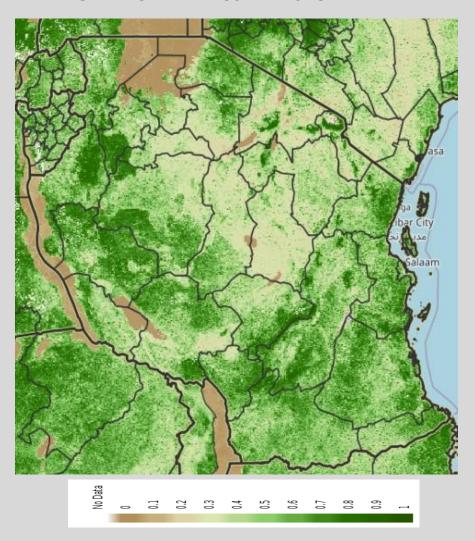
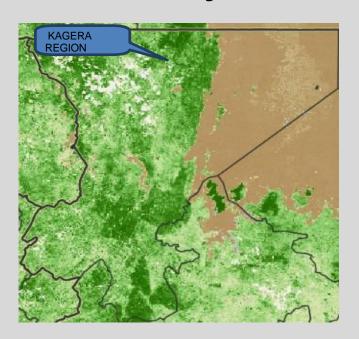
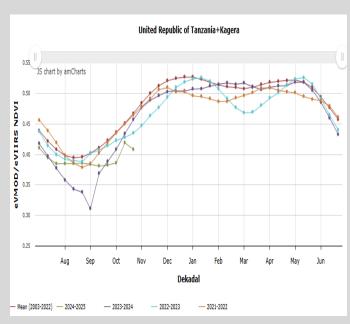


Figure 1: Normalised Difference Vegetation Index (NDVI) for 21-31 October 2024

In October, the vegetation condition continued to improve, particularly in regions benefiting from the "vuli" rains (Bimodal areas). This improvement follows the commencement of the 2024 "vuli" rainy season. Nevertheless, the rainfall distribution for the 2024/2025 "Vuli" season is not satisfactory as compared to the 2023/2024 season in the areas that received the "vuli" rains. In most of the unimodal areas, the onset of the 2024/2025 rainy season is anticipated to occur in mid or late November 2024.

## 3.1Satellite-Based Vegetative Conditions

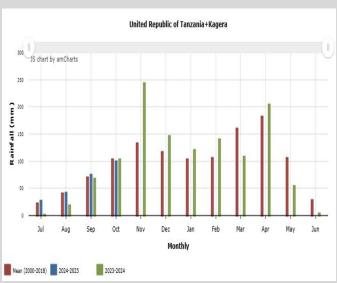




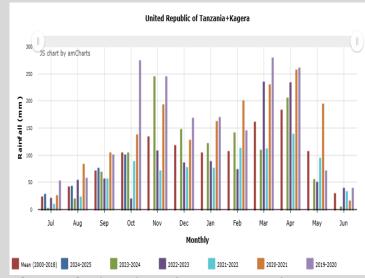
*Figure 2:* Normalized Difference Vegetation Index (NDVI) for Kagera for 21-31 October 2024.

*Figure 3.* 10 days NDVI for October, 2024 as it compares to 2021, 2022, 203 and the long-term.

In comparision to the long-term average NDVI and the NDVI anomalies for the years 2021, 2022 and 2023, the NDVI for Kagera in October 2024 is lower than that of October 2021, 2022 and 2023, as well as below the long-term mean (Fig.3).



**Figure 4 a:** Climatology of Kagera region indicates how rainfall performs in 2024/2025 season as compared to 2023/2024 season

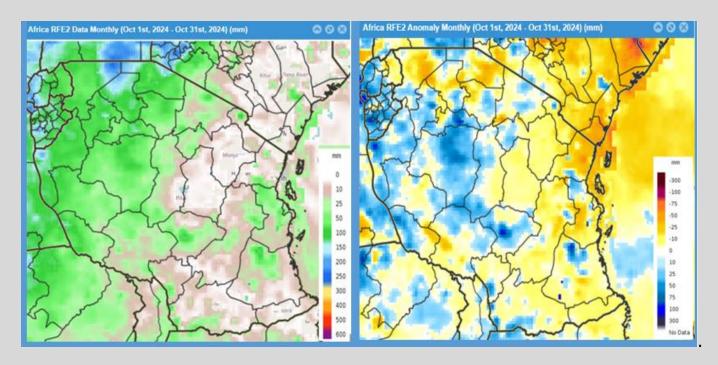


**Figure 4 b:** Climatology of Kagera Region for Five years comparison indicates how rainfall performed for five consecutive years.



## 3.2 Rainfall Performance During October, 2024

The 2024 Vuli rainy season outlook for bimodal areas in Tanzania (including regions like Kagera, Mwanza, Kilimanjaro and Dar es Salaam) was issued on 22<sup>nd</sup> August, 2024. It predicted below normal to normal rainfall over most of the northern coast and northeastern highlands, and normal to below normal rains over the Lake Victoria Basin. The season was expected to feature prolonged dry spells and uneven rainfall distribution. Occasional rains were forecasted to start in the Lake Victoria region by late September and spread to other areas by mid-October. Early observations show that rains have begun in the Lake Victoria Basin and northern coast, but the northeastern highlands are still experiencing dry spells. The Vuli rains are expected to continue as forecasted.



**Figure 5:** Tanzania Rainfall Distribution for 1 - 31 October, 2024; as total (left) and deviation from long term monthly mean (right).

# 3.3 Agrometeorological Impact During October, 2024

Most of Farmers in bimodal areas have proceeded with land preparation and planting activities. Over the unimodal areas, farmers have started land preparations in anticipation of the upcoming Msimu rainy season which is expected to start during the fourth week of October 2024 over Kigoma region, gradually spreading to other unimodal areas in November 2024 and ultimately reaching the Ruvuma region by December 2024.



### 3.4 Weather Outlook for November, 2024:

In November 2024, the Msimu rains are expected to begin in most unimodal regions, while in bimodal areas, rainfall will persist but may have poor distribution in some regions. Some areas of the country are likely to experience slightly enhanced rainfall during the month. Details of the weather outlook as per Tanzania Meteorological Authority is as follows;

# Northern Coast (Tanga, Pwani, Dar es Salaam regions, northern sector of Morogoro region, Mafia, Unguja and Pemba Islands):

Rainfall is expected in some areas with enhanced rains anticipated in few areas between the second and third weeks of the month.

#### North Eastern Highlands (Kilimanjaro, Arusha and Manyara regions):

Rainfall is anticipated in several regions throughout the month. Additionally, some areas are expected to experience an extended dry spell, although a slight increase in rainfall is projected for the fourth week.

## Lake Victoria basin (Kagera, Geita, Shinyanga, Mwanza, Mara and Simiyu regions):

Rainfall is expected in some areas during the month, with a slight enhancement anticipated during the second and third weeks.

#### Western regions (Kigoma, Katavi and Tabora regions):

Rainfall is expected in some areas during the month. A slight enhancement anticipated during the second and third weeks.

## Central areas (Dodoma and Singida regions):

Rainfall is expected in some areas, with a slight enhancement anticipated, particularly between the third and fourth weeks of the month.

# Southwestern Highlands (Rukwa, Songwe, Mbeya, Njombe, Iringa regions and Southern sector of Morogoro region):

Rainfall is expected in some areas during the month. A slight enhancement anticipated during the second and third weeks.

#### **Southern Coast (Mtwara and Lindi regions):**

Periods of light to moderate rainfall is expected in some areas with a slight enhancement during the second and third weeks of the month.

#### **Southern Region (Ruvuma region):**

Periods of light to moderate rainfall are likely in few areas. However, a slight increase in rainfall is expected during the third to fourth week.

## 3.5 Agro-meteorological Outlook for November, 2024

Farmers over the bimodal areas are advised to make use of significantly available soil moisture for accomplishing farm activities including planting and fertilizer application. For unimodal areas, farmers are advised to continue with land preparation and planting drought tolerant and early maturity crops due to the expected normal to below normal rains in some parts of the regions as forecasted by TMA. Farmer are also advised to consult extension officers for optimal use of forecast from TMA and advisory.



### 4.0 WHOLESALE AVERAGE FOOD PRICES FOR MAJOR FOOD CROPS

On weekly basis, the national average wholesale prices for major food crops (Maize, Rice and Beans) varied as follows; Prices for rice increased by 2%. Prices for dry beans and maize decreased by 3% and 1% respectively.

#### **Maize**

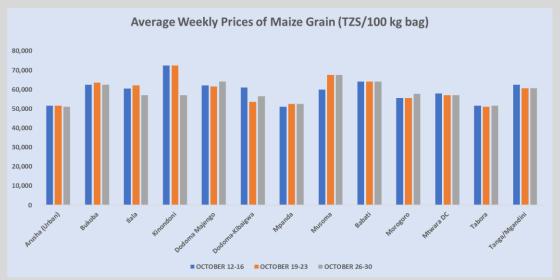


Figure 6: Average weekly prices of maize grain at major markets

 Maize prices were highest in Musoma, Dodoma-Majengo and Babati markets, and lowest in Arusha-Urban, Mpanda and Tabora markets.

## **Rice**

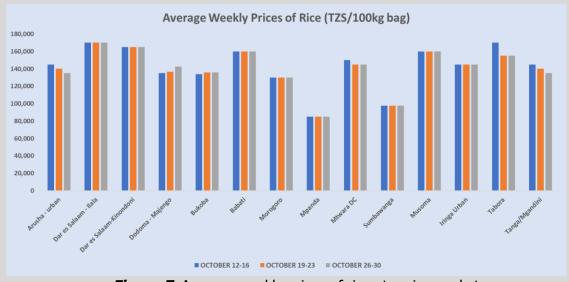


Figure 7: Average weekly prices of rice at major markets



## MINISTRY OF AGRICULTURE NATIONAL FOOD SECURITY BULLETIN, OCTOBER 2024

• Rice wholesale average prices were highest in Dar es salaam- (Ilala and Kinondoni); and Babati markets and lowest in Mpanda and Musoma markets.

## Beans

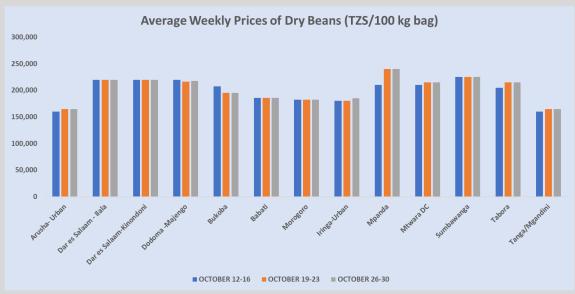


Figure 8: Average weekly prices of dry beans at major markets

• Dry beans prices were highest in Mpanda and Tabora markets and lowest in Iringa-urban and Morogoro markets

#### 5.0 NATIONAL FOOD SECURITY

Over the past four (4) consecutive years, the food security situation in the country has continued to improve, with production increasing from 17,148,290 tons in 2021/2022 to 22,803,316 tons in 2023/2024, which is an increase of 32.9%. Furthermore, based on the Self Sufficiency Ratio (SSR), over the past ten consecutive years, the country has been self-sufficient at a level ranging from 114% to 128%. In 2024/2025, the country has reached a self-sufficiency ratio of 128%, which indicates a surplus status.

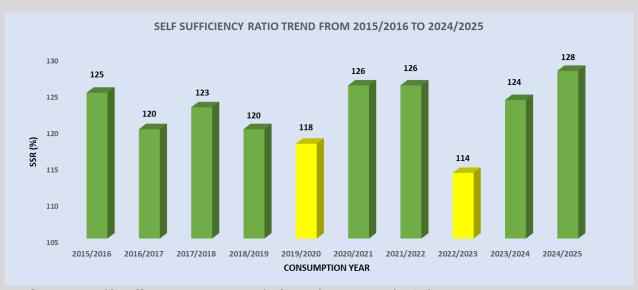


Figure 9: Self Sufficiency Ratio Trends (2015/2016-2024/2025)

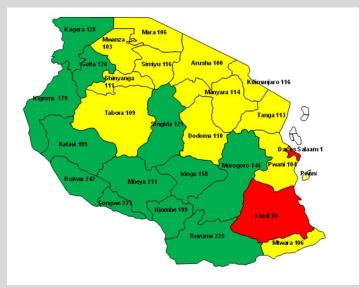


Figure 10: Region Level - Self Sufficiency Ratio for the 2024/2025 consumption year



#### 6.0 PUBLIC AWARENESS

# 6.1 Great Horn of Africa Climate Outlook Forum (GHACOF)-Seasonal Forecast (October, November and December-OND 2024)

The rainfall season occurring in October, November and December is vital for the equatorial region of the Greater Horn of Africa (GHA), as it contributes up to 70% of the annual precipitation in countries such as Kenya and Somalia. For the OND 2024 period, climate models indicate a likelihood of drier-than-usual conditions in certain areas of the eastern Horn of Africa, particularly in southern Ethiopia, much of Somalia, eastern Kenya, and parts of central and southern Tanzania. The probability of experiencing below normal rainfall is highest at 55% in southern Ethiopia and central/northern Somalia.

In contrast, western parts of the region, including southeastern South Sudan, northern Uganda, and western Kenya, are forecasted to experience wetter-than-normal conditions. In other areas, like parts of Uganda, Kenya, and Tanzania, rainfall predictions are more uncertain, with equal probabilities for above, near, and below-normal rainfall.

The timing of the rainfall is also a factor, with models suggesting a higher chance of an early or normal start to the season in the western regions, including southwestern Ethiopia, southern South Sudan, Uganda, and western Kenya. However, delayed onset is expected in areas like southern Somalia, parts of Tanzania, and central Kenya.

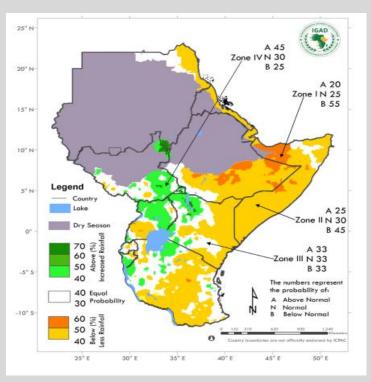


Figure 11: GHA Rainfall Probabilistic Forecast October - December 2024



## 7.0 ACRONYM TERMS AND DEFINITIONS

MoA	Ministry of Agriculture
TMA	Tanzania Metrological Agency
NDVI	Normalized Difference Vegetative Index. The NDVI is used to measure and monitor plant growth, vegetative cover, and biomass production.
MODIS	Moderate resolution Imaging Spectro-radiometer
BIMODAL	Areas receiving rains twice a year. This means that the majority of precipitation falls in two distinct seasons a year i.e. short rains Vuli-September to December, Long rains Masika - March to June.
UNIMODAL	Areas receiving rains once a year Msimu rains i.e. from November to April
GHA	Great Horn of Africa
OND	October, November, December
SSR	Self Sufficiency Ratio

