

THE UNITED REPUBLIC OF TANZANIA

Ministry of Agriculture

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National Food Security Bulletin



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1.0 NATIONAL HIGHLIGHTS

- ▲ Favorable rainfall conditions were observed across much of the Southern Highlands, Lake Victoria and Western, supporting healthy crop growth and development.
- ▲ In unimodal areas, maize and beans were observed at various growth stages. Favorable conditions prevailed in the Southern Highlands and Western regions, while stressed (Watch) conditions were noted in Dodoma, Singida, Lindi and Mtwara due to prolonged dry spells.
- ▲ In bimodal areas, maize and bean harvesting activities were ongoing, though some crops were still maturing due to late planting. Land preparation for the Masika season was underway.
- ▲ Satellite-based NDVI data showed strong vegetation health in the Southern Highlands and Lake Victoria Zones, moderate in the Western and Eastern Zones, and poor in parts of the Central and Northern Zones

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- △ Soil moisture levels remained high in the Southern Highlands and Western Zones, supporting crop growth. However, moisture deficits persisted in the Southern, Eastern, and parts of Central Zones.
- ▲ Maize wholesale prices were highest in Pwani, Dar es salaam, Lindi and Morogoro markets and lowest in Rukwa, Geita and Ruyuma markets.
- A Rice wholesale prices were highest in Arusha, Dar es salaam, Lindi and Iringa markets and lowest in Shinyanga and Katavi markets.
- △ Dry beans wholesales prices were highest in Morogoro and Dar es salaam markets and lowest in Songwe markets.

2.0 CROP CONDITIONS FOR MAJOR FOOD CROPS

Maize

In bimodal areas, maize harvesting was underway in most parts, except in a few locations where late planting delayed crop development, with maize still at grain filling to maturity stages. However, stressed conditions were reported in parts of Manyara, Arusha, and Kilimaniaro due to reduced soil moisture. In unimodal areas, maize was at various growth stages, from vegetative to reproductive phases (tasseling to Maturity). Generally, favorable conditions prevailed across much of the Southern Highlands and Western regions, while stressed (Watch) conditions were observed in parts of Lindi, Mtwara, Dodoma, and Singida due to prolonged dry spells leading to insufficient soil moisture.



Source: Makete DC in Njombe Region

Beans

In unimodal areas, beans were mostly at the vegetative stage, with favorable conditions in some locations. However, stressed (Watch) conditions were noted in parts of Lindi, and Mtwara due to limited soil moisture. In areas with early planting, the crop had advanced to grain filling and maturity stages. In bimodal areas, bean harvesting was nearly complete, and farmers were preparing their fields for the upcoming Masika rainy season.



Source: Monduli DC in Arusha region

Paddy

In both unimodal and bimodal areas, field management activities were ongoing across most regions, with crops observed at various growth stages—from vegetative to reproductive phases. Stressed (Watch) conditions were reported in parts of Lindi, Mbeya, Tabora, Dodoma, and Singida, attributed to prolonged dry spells resulting in insufficient soil moisture.

Note: In some irrigation schemes, harvesting activities were Source: Shinyanga DC in Shinyanga Region completed, farmers are proceeding with land preparation and planting.



Cassava

Cassava is typically planted at different times depending on soil moisture availability, resulting in various growth stages across the country. Favorable conditions were reported in most regions.



Source: Sikonge DC in Tabora Region

3.0 SATELITE-BASED INFORMATION

3.1 Satelite-Based Vegetative Conditions

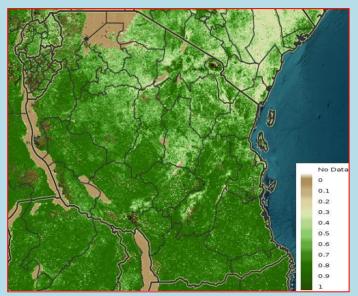


Figure .1a: Normalized Difference Vegetation Index (NDVI) for 21st -31st March 2025

Source: (EWX)

https://earlywarning.usgs.gov/fews/ewx/index.html?region=af

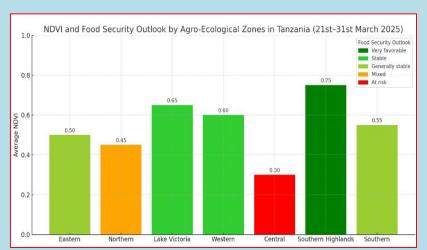


Figure 1b: Average NDVI and Food Security Outlook by Agro-Ecological Zones in Tanzania

During the late March period of 2025, satellite-derived NDVI values indicated distinct patterns of vegetation health across Tanzania's agro-ecological zones, which directly influence food security outcomes.

The Southern Highlands Zone (Rukwa, Katavi, Songwe, Mbeya, Njombe, Iringa, and Ruvuma) showed the highest NDVI values (averaging around 0.75). This suggests dense and healthy vegetation, most likely driven by favorable rainfall. As a result, the food security outlook for this zone is very favorable.

The Lake Victoria Zone (Kagera, Geita, Shinyanga, Mwanza, Mara, and Simiyu) also recorded strong NDVI readings (around 0.65), indicating healthy vegetation and strong crop performance. This region benefits from bimodal rainfall, supporting both food and cash crop farming. The food security outlook here is stable.

In **the Western Zone**, (Kigoma and Tabora), NDVI values averaged around 0.60. These moderate-to-high readings indicate decent growing conditions. The food security outlook is stable, though localized dry spells could pose some risks if they occur.

The **Southern Zone** (Mtwara and Lindi) showed NDVI values around 0.55, reflecting moderate vegetation health. Overall outlook is generally stable. However, the region may experience variation in crop performance depending on rainfall distribution.

In the **Eastern Zone** (Tanga, Pwani, Dar es Salaam, and Morogoro), NDVI values average around 0.50. The food security outlook is also generally stable, but it's important to note that this zone includes urban areas like Dar es Salaam where food systems are heavily dependent on external supply chains.

The Northern Zone (Kilimanjaro, Arusha, and Manyara) had NDVI values of approximately 0.45. This suggests a mixed outlook including some stressed conditions.

Finally, **the Central Zone** (Dodoma and Singida) showed the lowest NDVI values, averaging around 0.30. This indicates sparse vegetation and significant moisture stress. As a largely semi-arid zone reliant on rainfed agriculture, this zone is at risk of crop failure if current conditions persist.

3.2 Bulletin's NDVI for Specific Region



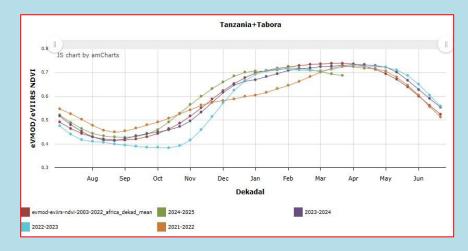


Figure 2: Normalized Difference Vegetation Index (NDVI) for Tabora for 21-31 March, 2025

Figure 3. 10 days NDVI for March, 2025 as it compares to 2022, 2023, 2024 and the long term mean for Tabora Region.

Source: (EWX) https://earlywarning.usgs.gov/fews/ewx/index.html?region=af

The NDVI analysis for **Tabora region** shows a decreasing trend in vegetation condition during the end of March 2025 season as compared to March 2024, 2023 and 2022 and the long-term average (2003–2022). This indicates sparse vegetation and significant moisture stress.

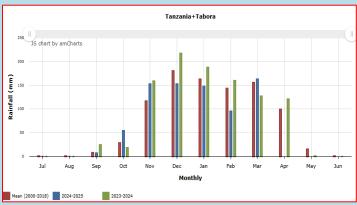


Figure 4 a: Climatology of Tabora region indicates how rainfall performs in 2024/2025 season as compared to 2023/2024 season

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

Source: (EWX) https://earlywarning.usgs.gov/fews/ewx/index.html?region=af

In Figure 4a, the rainfall performance for the 2024/2025 season (blue bars) is compared to the 2023/2024 season (green bars) and the long-term mean (2000–2018) (red bars). The data shows that Tabora experienced significantly above-average rainfall during March 2024/2025 season.

3.3 Satelite-Based Moisture Conditions and Food Security Implications by groecological zone

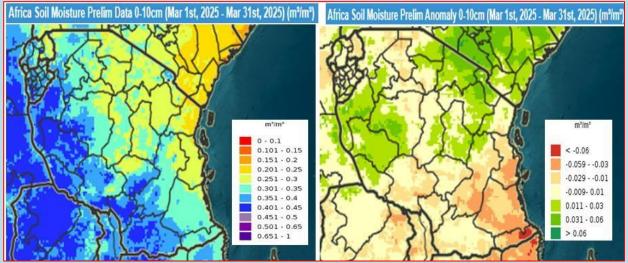


Figure 5: Soil Moisture condition for $1^{st} - 31^{th}$ March, 2025; Observed soil moisture (left) and deviation from long term monthly mean (right).

Source: (EWX) https://earlywarning.usgs.gov/fews/ewx/index.html?region=af

Western Zone (Kigoma and Tabora): This zone exhibited high soil moisture content (0.35–0.45 m³/m³), especially in southern Kigoma. Anomaly data indicates near-normal or slightly positive deviations, pointing to favorable conditions for crop growth and pasture availability. This supports improved food production, boosting food security in the region. However, in some areas anomaly data indicates slightly negative deviation especially in some parts of Tabora.

Southern Highlands Zone (Rukwa, Katavi, Songwe, Mbeya, Njombe, Iringa, and Ruvuma): These areas showed very high soil moisture levels (up to $0.45 \text{ m}^3/\text{m}^3$) with neutral to slightly positive anomalies, reflecting consistent rainfall. These optimal conditions are favorable for crop development.

Lake Victoria Zone (Kagera, Geita, Shinyanga, Mwanza, Mara, Simiyu): Moderate to high soil moisture levels were observed (0.30–0.40 m³/m³), with anomaly maps showing normal to above- normal conditions, especially in Kagera and Geita. This supports crop growth and continued food availability.

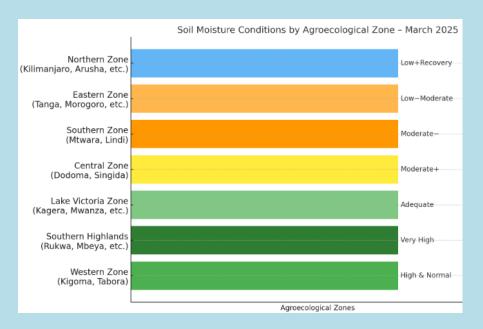
Central Zone (Dodoma and Singida): Moderate soil moisture values (0.25–0.35 m³/m³) were recorded. The anomaly map suggests normal to slightly above-normal moisture, indicating moderate crop performance. This zone, typically semi-arid, shows encouraging trends for improved harvests compared to average years. However, in some areas anomaly data indicates slightly negative deviation.

Southern Zone (Mtwara and Lindi): Despite slightly higher soil moisture (0.25–0.35 m³/m³), the anomaly map highlights significant deficits (below -0.06 m³/m³). This suggests that, although soils appear moist, they are below historical norms, raising concerns for crops at critical growth stages. Localized food stress may emerge if dry spells persist.

Eastern Zone (Tanga, Pwani, Dar es Salaam, Morogoro): Soil moisture was low to moderate, with anomalies showing deficits especially in southern Morogoro and Pwani. These conditions may result into poor crop growth and development.

Northern Zone (Kilimanjaro, Arusha, Manyara): This zone recorded low soil moisture (below 0.25 m³/m³) but had some positive anomalies, particularly in Kilimanjaro and Arusha. This implies recent improvements in rainfall relative to long-term averages. While moisture is still -limited, the trend suggests recovery potential.

Here's a **summary chart** showing soil moisture conditions across Tanzania's agro ecological zones in **March 2025** and their implications for **food security**:



4.0 Rainfall Performance During March, 2025

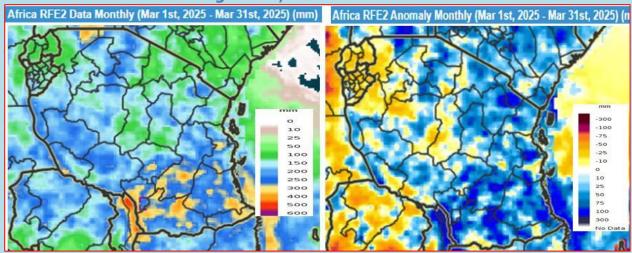


Figure 6: Tanzania Rainfall Distribution for $1^{st} - 31^{th}$ March, 2025; as total (left) and deviation from long term monthly mean (right).

During March 2025, most parts of Tanzania experienced favorable **rainfall** conditions, with significant above-average rainfall recorded across the Southern Highlands, Western and Lake Victoria Zones. Overall, the March 2025 rainfall trend suggests enhanced crop growth and development in most parts of the country, though close monitoring of dry-prone areas remains essential.

4.1 Agrometeorological Impact During March, 2025

During the month of March, 2025, most areas of the country experienced rainfall, particularly from the second week of the month. Additionally, heavy rainfall was reported in some areas, leading to flooding, water logging, damage to infrastructure and property and disruptions to economic activities.

4.2 Weather Outlook for April, 2025

During the month of April, 2025 seasonal rains are anticipated to continue across most areas of the country. Additionally, some areas are likely to experienced enhanced rainfall, which may lead to localized flooding, water logging, and potential disruptions to some economic activities. Conversely, temperatures are expected to slightly decrease during the month, particularly in areas experiencing persistent rainfall. However warm to slightly hot conditions are expected to persist in areas with insufficient rainfall. Details of the weather outlook are as follows;

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

Rainfall is expected to continue in some areas during the month. However, slightly enhanced rains are anticipated during the first and second weeks of the month.

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

Rainfall is anticipated over some areas during the month, with increased rainfall expected between the first and second weeks of the month.

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

Rainfall is expected to continue over some areas during the month. Enhanced rainfall is anticipated over few areas during the first and second weeks.

Western regions (Kigoma, Katavi and Tabora regions):

Rainfall is expected over some areas during the month, with a slight enhancement anticipated over a few areas during the first and second weeks.

Central areas (Dodoma and Singida regions):

Rainfall is expected over some areas, with a slight enhancement anticipated over few areas during the second week of the month.

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

Rainfall is expected to continue over some areas during the month. A slight enhancement is anticipated in a few areas during the first and second weeks.

Southern Coast (Mtwara and Lindi regions):

Rainfall is expected over some areas, with a slight enhancement anticipated during the first and second weeks of the month.

Southern Region (Ruvuma region):

Rainfall is expected over some areas. However, a slight increase in rainfall is anticipated during the first week of the month.

4.3 Further Outlook for the Month of May, 2025

During May, 2025 rainfall is expected to continue in some parts of the country, particularly in bimodal areas. Additionally, slightly enhanced rainfall is anticipated in a few areas.

5.0 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;

Maize

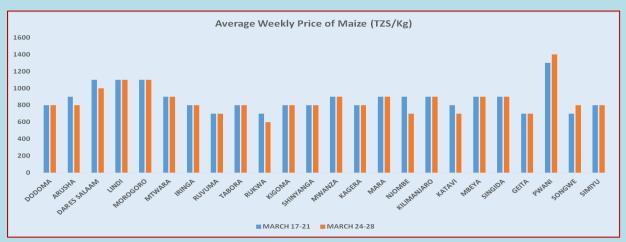


Figure 7: Average weekly prices of maize grain at major markets

Maize wholesale prices were highest in Pwani, Dar es salaam, Lindi and Morogoro markets and lowest in Rukwa, Geita and Ruvuma markets.

Rice

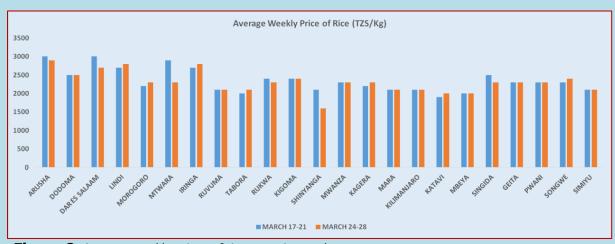


Figure 8: Average weekly prices of rice at major markets

Rice wholesale prices were highest in Arusha, Dar es salaam, Lindi and Iringa markets and lowest in Shinyanga and Katavi markets.

Beans

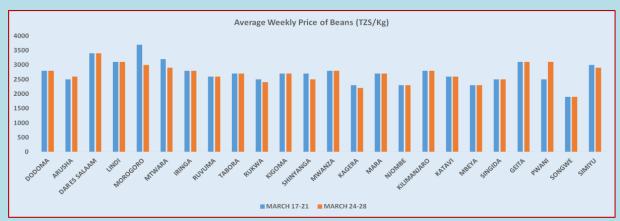


Figure 9: Average weekly prices of dry beans at major markets

Dry beans wholesales prices were highest in Morogoro and Dar es salaam markets and lowest in Songwe markets.

6.0 Number of Permits and Quantity (MT) of Maize, Maize Flour, Rice, and Beans Issued During the Month of March 2025 to Various Countries

In March 2025, the Cereals and Other Produce Regulatory Authority (COPRA) issued a number of export permits for Food crops, including 129 permits for maize, 11 permits for Maize flour, 80 permits for Rice, and 79 permits for Beans. Additionally, out of 129 permit amounted to 65,294 Tons of Maize, a total of 40,398 Tons were exported. Other agricultural produce and their respective permits, the consignments and quantities that had already been exported during this period are detailed in **table 1**.

Table 1. Number of Permits and Quantity (MT) of Maize, Maize Flour, Rice, and Beans Issued During the Month of March 2025

	Quantity and Number of Permits issued on March, 2025				Quantity and Number of Consignment Exported on March, 2025		
No	Food Crop/Commodity	Number of permits	Quantity (MT)	No	Food Crop/Commodity	No. of Consignment	Quantity (MT)
1	Maize	129	65,294	1	Maize	1,329	40,398
2	Maize flour	11	5,880	2	Maize flour	78	2,454
3	Rice	80	33,110	3	Rice	711	22,640
4	Beans	79	11,060	4	Beans	493	8,216

7.0 NATIONAL FOOD SECURITY

Over the past four consecutive years, food security situation in Tanzania has progressively improved, with production increasing from 17,148,290 tons in 2021/2022 to 22,803,316 tons in 2023/2024, representing a 32.9% increase. 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.



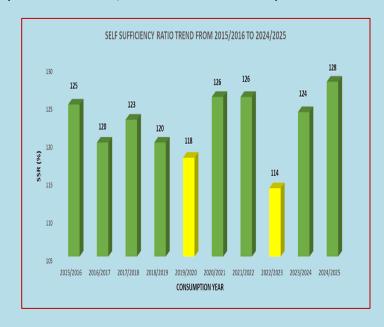


Figure 10: Region Level - Self Sufficiency Ratio for the 2024/2025 consumption year

Figure 11: Self Sufficiency Ratio Trends (2015/2016-2024/2025)

8.0 PUBLIC AWARENESS

8.1 Africa Crop Monitor for Early Warning in March, 2025

In **East Africa**, there is concern for short rains cereals in much of Ethiopia and for main season cereals in parts of Rwanda, Burundi, Uganda, Kenya, and the United Republic of Tanzania due to a poor start to the seasonal rains. In **West Africa**, land preparation and planting of main season cereals are ramping up along the South, and agro-climatic conditions are favorable as rains received in March are supporting planting and germination. Across the **Middle East & North Africa**, a poor start to the seasonal rains significantly hindered crop development. Despite recent rainfall improvements, yields are expected to be below-average in parts of Morocco and Algeria. In **Southern Africa**, mid-season rainfall improvements have significantly benefitted ongoing crop development, except in southern Angola, northern Malawi, and northern Madagascar where dry concerns remain and parts of Mozambique and southern Madagascar where storm impacts may reduce yields.

Source: www.cropmonitor.org

9.0 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.
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 May.
UNIMODAL	Areas receiving rains once a year Msimu rains i.e. from November to April
SSR	Self Sufficiency Ratio
EWX	Early Warning explorer