

Zambia Markets and Prices Bulletin

A Joint Publication of the Disaster Management and Mitigation Unit and World Food Programme







Introduction

During the 2023/24 rainfall season, Zambia experienced its worst drought in decades, affecting 84 of 116 districts. Driven by El Niño, the drought threatens national food security, water, and energy supplies. Food production, prices and market functionality have been affected.

In response, the World Food Programme (WFP) and the Disaster Management and Mitigation Unit (DMMU), with support from the UK Government, established a remote market monitoring system in June, using trained call center operators to regularly assess food prices and market functionality in affected districts. The Annex includes a map of the monitored markets and the background and methodology.

This information is essential for designing, implementing, and monitoring emergency response and social assistance programs, including transfer modalities like cashbased transfers, in-kind food, and vouchers. Monitoring market functionality helps assess market resilience, availability, accessibility, and affordability of essential goods, which are crucial for household food security and economic well-being.

This bulletin primarily covers the months of June to November 2024. In November. market remote monitoring covered 82 districts, 165 markets and 1,227 traders.

When available, data from March and May is included in some charts.

Content includes the prices of four essential food commodities (mealie meal breakfast, beans, cooking oil, and salt), the cost of the basic food basket, and the Market Functionality Index (MFI) at national and provincial levels, together with risks and mitigation measures. The Annex includes macroeconomic factors, the seasonal calendar and rainfall forecasts for 2024-25 for context.

For more information, please contact:

WFP

- emmanuel.kilio@wfp.org
- siamunza.mwiinga@wfp.org
- patrick.kabanda@wfp.org

DMMU

- mayala.bwembya@dmmuovp.gov.zm
- <u>Chikwanka.Maipambe@dmmu-</u> ovp.gov.zm

Content

Introduction	2
Market functionality	
Market functionality index: national Market functionality index: provincial Risks and mitigation measures	4 5 6
National food prices Price of food basket commodities Cost of a basic food basket	8 9
Annexes	
Annex 1: Macroeconomic factors Annex 2: Market locations Annex 3: Background and methodology Annex 4: MFI dimensions Annex 5: MFI scale Annex 6: MFI scores by province Annex 7: Seasonal calendar Annex 8: Rainfall performance/forecast	11 12 13 14 15 16 17 18

Market functionality

Ser Sul race

Market functionality index - national

The Market Functionality Index (MFI) is a quantitative measure designed by WFP to benchmark market functionality along multiple dimensions (see Annex 4 and 5 for a detailed overview of the MFI dimensions and the MFI scale). The MFI produces normalised dimension scores and overall scores for each market from 0 to 10, where 0 indicates low market functionality and 10 indicates high market functionality. The overall MFI score was 5.8, 5.6, 5.9, 5.4, 5.9 and 4.5 in June, July, August, September, October and November, respectively. These scores suggest that while markets are functioning, there are significant challenges that may hinder their effectiveness in providing essential goods and services. The price dimension consistently scored the lowest across this six-month period due to unpredictable and unstable prices of cereals and non-food items. The resilience of supply chains scored the highest during this period due to the ability of the markets to withstand external shocks. The results also emphasize the importance of a balanced strategy that ensures vulnerable populations receive the appropriate modality of assistance without negatively impacting the local economy or affected communities.



Market functionality index - provincial

In November, the Market Functionality Index (MFI) scores show varying levels of functionality and resilience across provinces. Central and Western provinces lead with high overall scores of 6.1 and 5.5, respectively, supported by strong resilience and assortment of goods. However, Lusaka, Southern, Muchinga and Copperbelt face significant challenges, with lower overall scores of 3.4, 4.5, 4.8 and 4.9, respectively, driven mostly by low price scores and limited availability for Muchinga province. Price stability remains a concern across all provinces, with price scores below 5.4, indicating volatility that could impact affordability. Although Muchinga and Western provinces show high resilience scores of 9.9 and 9.6, respectively, their overall functionality is hampered by moderate availability and price instability.

For a more detailed comparison of MFI scores across provinces in the months of June, July, August, September, October and November, see **Annex 6**.

MFI SCORES IN NOVEMBER 2024					
Province	Assortment	Availability	Price	Resilience	MFI
Central	6.4	7.7	5.2	10.0	6.1
Western	7.3	5.7	5.4	9.6	5.5
Eastern	7.9	6.6	4.0	10.0	5.4
North-Western	7.6	6.5	3.4	9.9	5.2
Copperbelt	6.0	7.8	2.9	9.3	4.9
Muchinga	8.3	4.7	3.0	9.9	4.8
Southern	7.2	8.3	1.9	9.9	4.5
National Average	7.1	7.6	2.3	9.1	4.5
Lusaka	7.6	7.9	0.3	8.2	3.4

Risks and mitigation measures

The following table provides risks and proposed mitigation measures for each of the MFI dimensions for the months of June to November.

MFI Dimension*	Risk	Mitigation Measures
Assortment	The assortment score ranging between 6.3 - 8.5 has been relatively strong. This score indicates that markets generally carry a suitable range of items for beneficiaries to be able to meet their essential needs, including cereals, non-cereal foods and non-food items. However, if product variety falls short of dietary requirements, there remains a risk of nutritional deficiencies.	 Establish market support initiatives, commodity coupons, and a hybrid approach of both cash and in-kind assistance to ensure the availability of diverse, nutrient-dense meals and essential goods.
Availability	The availability score (6.9 - 7.6) has equally been relatively strong. This score indicates that generally few items are scarce or running out. However, there may be some shortages in certain areas or products, which may compromise customer confidence and market stability.	 Improve supply chain efficiency and implement market support initiatives, such as preferred supplier agreements, to ensure a steady supply of nutrient-dense meals and hard-to-find products. Introduce a voucher system and a hybrid approach of both cash and in-kind support model to secure stock availability and supplement unmet market needs.
Price	The price score (2.3 – 6.3) has mostly been fairly weak. This score indicates serious issues with price stability, both recent fluctuations and unpredictability. Price volatility, influenced by inflationary pressures, can lower households' purchasing power and create uncertainty, especially for the most vulnerable.	 Monitor price changes, promote pricing agreements between market committees and traders, and implement vouchers with fixed price caps while conducting regular minimum expenditure basket (MEB) calculations and GAP analyses. Increase delivery frequency to help dealers restock more effectively and adjust transfer values every two months in response to significant market fluctuations.
Resilience	The resilience score (7.8 - 10.0) has been mostly very strong. This score indicates that traders are confident in the supply chains they use and are generally able to restock easily and quickly. However, there is some risk that supply chain disruptions could occur due to external shocks, such as droughts, lack of enough stocks in the country for staple foods and delayed importation affecting the availability of goods.	 Strengthen supply chain infrastructure by investing in logistics, collaborating with the Food Reserve Agency (FRA), and improving the availability of staple commodities through Community Sale Points. Partner with the private sector, develop contingency plans, and provide traders with demand forecasts to ensure steady supply and address potential supply chain disruptions.
Overall MFI score	The overall market functionality score has ranged from 4.5 to 5.9 in the period under review, indicating generally functional markets across Zambia. However, drought, low production, and financial hardships may disrupt access for vulnerable populations, highlighting the need for risk mitigation measures.	 Implement cash-based assistance and in-kind food distributions, alongside financial support and livelihood programs, to ensure access to necessities and strengthen the resilience of vulnerable households.

*Refer to **Annex 4 and 5** for a detailed overview of the MFI dimensions and the MFI scale.

National food prices



Ð

5

WE

BREA

Your Family's Number

ompany Ltd

Price of Food Basket Commodities

The charts present the price trends for essential food commodities converted to the monthly cost of a basic food basket for a household of five people.



Cost of a basic food basket

The average cost of a basic food basket for a household of five people is a useful indicator to track food affordability and access. The basic food basket includes 400 grams of maize meal, 120 grams of beans, 25 milliliters of cooking oil, and 5 grams of salt per person per day to meet the recommended 2,100 kilocalories. At the national level, the average cost of a basic food basket rose from ZMW 1,210 in March to ZMW 1,802 in July before declining to ZMW 1,700 in October and increasing to ZMW 1,772 in November. This downward trend can be attributed to government maize imports from Tanzania and community maize sales through the Food Reserve Agency (FRA), whereas the upward trend is attributed to the rising inflation rates.

Western Province has the highest cost of the food basket at 1,937 ZMW, closely followed by North-Western Province at 1,801 ZMW. Lusaka Province also shows a relatively high cost at 1,797 ZMW. In contrast, Muchinga province recorded the lowest price at 1,624 ZMW. Fluctuations in the cost of the food basket caused by commodity price shifts can have a substantial influence on household food security, with greater costs frequently related with changes in meal frequency, portion size, and dietary diversification.





23/201

Annex 1: Macroeconomic factors



Source: ZAMSTATS 2024.



Global growth is anticipated to stay at 2.6% in 2024 and increase marginally to 2.7% in 2025–2026 while **Zambia's economy** is projected to grow at 4.5% in 2024 and 2025, as the mining, services, and manufacturing sectors continue to recover, and global copper prices rebound. The current account balance is expected to improve from a deficit of 1.1% in 2023 to surpluses of 3.3% in 2024 and 8.4% in 2025 as copper output rises.

Inflationary pressures have persisted, with inflation rising to an average of 16.5 percent in November 2024 from 15.7 percent recorded in October 2024. This means that, on average, the prices of goods and services increased by 16.5 percent between November 2023 and 2024. This was mainly attributed to increases in prices of food items, such as fish, milk, eggs, dried beans and sweet potatoes. Month on month inflation (MoM) on food items as well as petrol recorded no change at 0% while annual inflation and diesel recorded MoM inflation of 5.1% and 4.15% respectively.

The Zambian kwacha has been persistently depreciating against major currencies in the fourth quarter of 2024, with an average volatility of 10.9 percent against the US dollar. Starting in January 2024 at an exchange rate of ZMW 22.7 per US dollar, the rate remained relatively stable in February and March, averaging ZMW 22.67. By November 2024, the currency had depreciated further, recording a 1.13 percent decline from ZMW 26.5 in September to ZMW 26.7 in October and subsequently to ZMW 27.1 in November.

In November 2024, the **average price of petrol** remained unchanged at ZMW 32.7 while **diesel increased** to ZMW 30.11 from ZMW 28.9 in October.

Source: Energy Regulation Board (ERB) 2024.

Annex 2: Market locations



Annex 3: Background and methodology

In **March 2024**, the Food Security Cluster in Zambia conducted a **rapid food security assessment** to determine humanitarian needs and identify suitable response options for the drought-affected population in the worst-affected provinces (Western, Central, Lusaka, Southern and Eastern). In addition to household level information, this assessment also collected data on food prices and market functionality in selected districts. Data from March in this bulletin is from this rapid food security assessment.

In **May 2024**, WFP, in cooperation with the Zambia Statistical Agency (ZAMSTATS), conducted a **market mapping survey** in the 84 districts affected by the drought to identify markets for regular monitoring (see Annex 2 for market locations). Based on the size of the store, the commodities sold, and the purpose of the market, a sample of traders was chosen from each market. The sample includes, if feasible, both wholesalers and retailers, as well as small, medium, and large stores that sell cereals, non-cereal foods, and non-food items. The markets were divided into two primary groups: 1) major markets, where an interview with a minimum of 11 traders was mandatory, and 2) small markets, where an interview with a minimum of 6 traders was necessary. Only the chosen traders were given the questionnaires. Data from May in this bulletin is from this market mapping exercise.

In **June 2024**, WFP and DMMU commenced monthly **remote market monitoring** (also known as mobile VAM, or mVAM) by a team of trained call center operators with a structured questionnaire administered to sampled traders (see above). Data entry responses were recorded in real-time using digital forms while data entry protocols ensured that records were accurately captured and securely stored in a central database. Data collection was followed by robust data quality assurance which included the automation of outliers for both low and high prices in Tableau. The cleaned dataset was then analyzed in Databridges and published on the tableau dashboard as shown in the illustration below. Data from June, July, August, September, October and November (also known as MFI round 1, 2, 3. 4, 5 and 6, respectively) in this bulletin is from this remote market monitoring exercise. For each monthly round, the coverage by number of districts, markets and traders is provided in the table below.

Month	MFI round	# of Districts	# of Markets	# of Traders
June	1	36	90	559
July	2	82	163	1111
August	3	82	163	1095
September	4	. 82	164	1148
October	5	82	161	1120
November	6	82	165	1227

Databridges Processed Markets Database

Analytics Data Source Tableau Dashboard

Annex 4: Market functionality index dimensions

The full Market Functionality Index (MFI) includes nine dimensions: assortment of essential goods, physical availability of goods in sufficient quantities, affordable and stable-predictable prices, the underlying resilience of supply chains, competition among sellers, services that facilitate market transactions, infrastructure, food quality and safety as well as access and protection. The reduced MFI includes four dimensions: assortment, availability, price and resilience of supply chains. Each dimension in the reduced MFI is indexed on a scale of 0 to 10, with a higher value indicating better market functionality at the time of monitoring. The overall MFI is an aggregation of the four dimensions. <u>Detailed methodology of the MFI</u>.

Assortment	Availability	Availability Price	
This dimension evaluates the variety of goods available in the market, ensuring that a diverse range of products meets consumer needs and preferences.	This assesses the consistent presence of essential goods in the market, ensuring that critical items are always in stock and accessible to consumers.	This dimension looks at the stability and affordability of key commodities, reflecting how accessible these goods are to the general population and the overall market equilibrium.	This measures the robustness and reliability of the supply chain, including the ability to withstand and recover from disruptions, ensuring continuous market operations.
Competition	Service Infrastructure		Food Quality and Safety
This evaluates the level of competition among sellers, which can influence prices, quality, and variety of goods, promoting a healthier market environment.	This dimension examines the availability and quality of supplementary services that facilitate market transactions, such as credit facilities, banking services, and information dissemination.	This assesses the physical condition and adequacy of market facilities, including storage, transportation, and utilities, which are essential for smooth market operations.	This dimension ensures that food items sold in the market meet safety and quality standards, protecting consumer health and maintaining trust in the market.
Access and Protection	This evaluates the ease with which consur security, as well as measures in place to p	ners can physically reach the market, consic rotect consumers and vendors from exploit	dering factors like transportation and ation and harm.

Annex 5: Market functionality index scale

1	ASSORTMENT	Low Risk	Medium Risk	High Risk	Very High Risk
	Threshold	10 <= Score <= 5	5 < Scor	e <= 2.5	2.5 < score <= 0
	Rational	At least EITHER cereals OR other food & other essential goods are BOTH not scarce AND traders are not likely to run out their stocks in a week.	At least EITHER cereals (are EITHER not scarce O run out their s	DR other essential goods R traders are not likely to tocks in a week	
	% of Markets	93.6%	5	%	1.5%

2	AVAILABILITY	Low Risk	Medium Risk	High Risk	Very High Risk
	Threshold	10 <= Score <= 5	5 < Sco	ore <= 2	2 < score <= 0
	Rational	At least EITHER cereals OR other food & other essential goods are BOTH not scarce AND traders are not likely to run out their stocks in a week.	At least EITHER cereals are EITHER not scarce O run out their s	OR other essential goods R traders are not likely to tocks in a week	
	% of Markets	87.6%	6.	2%	6.2%

3	PRICE	Low Risk	Medium Risk	High Risk	Very High Risk
	Threshold	10 <= Score <= 5	5 < Scor	e <= 2.5	2.5 < score <= 0
	Rational	At least EITHER cereals OR other food & other essential goods prices are BOTH stable and predictable.	At least EITHER cereals essential goods price: predi	OR other food & other s are EITHER stable OR ctable.	
	% of Markets	59.1%	18.7%		22.2%

4	RESILIENCE	Low Risk	Medium Risk	High Risk	Very High Risk
	Threshold	10 <= Score <= 6.3	6.3 < Sco	ore <= 5	5 < score <= 0
	Rational	Traders supply BOTH last at least one week AND replenishment is within a week. EITHER cereals OR other food & essential goods supply chain is not vulnerable to disruption.	Traders supply EITHER la replenishment is within OR other food & essentia not vulnerable	st at least one week OR a week. EITHER cereals al goods supply chain is to disruptions.	
	% of Markets	77.4%	18.	8%	3.9%

In order to enable global comparability, markets are hence rated globally on a scale from 0 to 10. Every value on the score, which goes from 0 to 10, corresponds to a distinct degree of market functionality:

A score of 0-1 indicates that there are no markets at all, or that they are severely dysfunctional;

A score of 2-3 indicates that there are poor markets with very little availability of goods and services;

A score of 4-5 indicates that there is moderate functionality in the market, with basic goods and services available at reasonably stable prices;

A score of 6-7 indicates that there are stable functional markets, with a wide range of goods and services available at reasonably stable prices; and

A score of 8-9 indicates that the market is robust, with a variety of dependable suppliers of goods and services and stable prices as well as good market access.

A market with a score of 10 is said to be extremely resilient and functional, with a robust supply of goods and services, steady pricing, and good market access.

Annex 6: Market functionality index scores by province

Since the risks and mitigation strategies are market specific, rather than at an aggregate level, i.e., at the district and provincial levels, the analysis and interpretation of these results should be done at the market level in the **analytics dashboard**.

	Month	Assortment	Availability	Price	Resilience	MFI
Central	June	6.5	7.9	6.8	10	7.1
	July	6.4	8.4	6.3	10	6.3
	August	8.8	7	4.9	9.9	6.3
	September	8	4.6	4.7	10	4.7
	October	7.8	7.5	7.2	10	7.4
	November	6.4	7.7	5.2	10	6.1
Copperbelt	June	6.8	7.1	5.2	9.6	5.7
	July	7.1	5.5	6	9.2	6
	August	7.8	4.8	5.8	9.1	5.1
	September	7.2	4.9	6.4	9.1	5.3
	October	9	8.1	4.4	10	6.1
	November	6	7.8	2.9	9.3	4.9
Eastern	June	7	5.6	4	9.9	5.2
	July	7.5	7	4.8	9.2	5.9
	August	7.5	7.5	7	9.5	7
	September	7.3	7.5	7.4	9.5	7
	October	8.2	6.8	9.5	9.9	7.8
	November	7.9	6.6	4	10	5.4
Lusaka	July	4.8	8.2	4.1	8.1	5
	August	6.6	8.2	4.2	8.2	5.7
	September	4.4	7.7	6.4	5.4	4.6
	October	8.6	6.5	3.4	9.9	4.9
	November	7.6	7.9	0.3	8.2	3.4
Southern	July	7.9	7.1	5.3	8.9	6.1
	August	7.7	6.9	5.3	8.8	6.2
	September	7.7	7.1	4.3	8.8	5.6
	October	7.9	7.2	5.8	10	6.3
	November	7.2	8.3	1.9	9.9	4.5
Western	June	7.7	8	4.7	9.9	6.1
	July	7	7.1	6.7	10	6.4
	August	7.6	7.3	8	9.5	7.1
	September	7.3	6.6	8.6	10	7.1
	October	8.2	7.7	4.6	10	6.2
	November	7.3	5.7	5.4	9.6	5.5

Annex 7: Seasonal calendar

The current neutral phase of the El Niño-Southern Oscillation (ENSO) is projected to transition to a weak La Niña phase during the 2024/2025 rainfall season. This weak La Niña, characterized by below-normal Sea Surface Temperatures (SSTS) in the tropical eastern Pacific Ocean, is expected to primarily influence Zambia's rainfall pattern during the season. According to the Zambia Meteorological Department (ZMD), the 2024/2025 rainfall season is likely to exhibit the following characteristics:

Normal Rainfall	Normal to Below Normal Rainfall	Onset of Rains	Delayed Onset of Rains	
Over most parts of Zambia, with episodic heavy rainfall and flooding in flood-prone areas.	In the northeastern parts of the country.	In October over western province and the northern parts of Luapula and northwestern provinces.	In mid December over the extreme northeastern parts, including Luangwa, Chirundu, Gwembe, and Sinazongwe districts.	
Cessation of Rains	In March 2025 over the southern half and by the end of April over eastern, including the northern parts of Luapula and nort provinces.			

Source: Zambia Metrological Department (ZMD) and analysis by WFP.





Source: FEWS NET.

17

Annex 8: Rainfall Performance and Forecast

1. Rainfall Performance from 1 October to 25 November 2024



Figure-1: Cumulative Rainfall received from 1stFigure-2: Rainfall Anomally (Surplus/Deficits)October to 25th Novemberfrom 1st October to 25th November

2. Rainfall Forecast From 1 to 10th December 2024



Figure-1: Cumulative rainfall (*October 1 - November 25, 2024*). Green indicates high rainfall, while shades of brown show the lowest rainfall. Northern Zambia had the most rain, while Southern Zambia experienced the least. Central Zambia had moderate rainfall.

Figure-2: Rainfall anomaly **(October 1 -November 25, 2024**). Green shades indicate significantly more rain than average, while brown shades show significantly less than average for the period. Northern Zambia saw excess rain, while Southern and portions of western Provinces experienced below-average rainfall.

Green: high rainfall areas (>60mm) **Yellow**: Moderate to low rainfall (20-60mm) **Brown**: low rainfall (<20mm)

Figure-3: The map shows a 10-day rainfall forecast for Zambia.

Figure-4: 10-day rainfall anomaly forecast for Zambia. Different colours indicate rainfall deviation from the average: **Browns:** Dry conditions (*below average rainfall*) **Greens:** Excess rainfall (*above average*)

Large parts of Zambia will experience drier conditions.