World Food Programme

Minimum Expenditure Basket in Malawi

A Look at Food Prices and Availability in Times of COVID-19

Rounds 39 & 40: 4—8 and 18—22 October 2021

Picture credits: Badre Bahaji, WFP

SAVING LIVES
CHANGING LIVES

Key Highlights

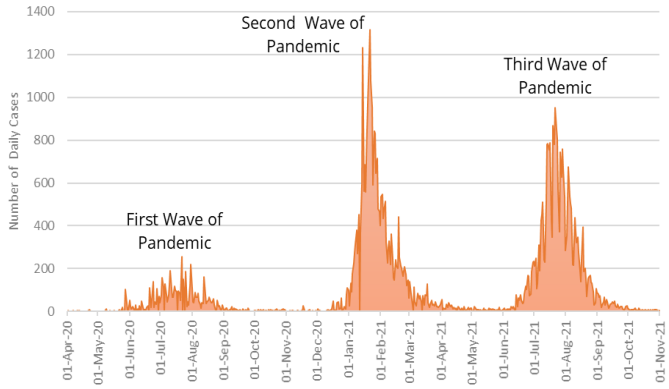
Note: *This report looks at price data and trends over three rounds: Round 38 (mid September) and Rounds 39 & 40 (October), aggregated. For the sake of simplicity, the aggregated rounds (Rounds 39 & 40) will be referred to as Round 40.*

- During this reporting period, the Survival Minimum Expenditure Baskets (SMEBs) rose across all regions in the country. In urban areas, the SMEB increased by 5.0 percent. The rural Northern, Central and Southern Regions registered an increase of 8.4 percent, 7.0 percent, and 3.8 percent, respectively. The increase in SMEBs mainly emanated from a significant rise in prices of cooking oil, cassava, and firewood.
- Maize grain was trading at an average price of MK 151 per kg, slightly above the Government-set minimum farm gate price of MK 150 per kg. The current price represents a one percent rise from the Round 38 price of MK 149 per kg (collected between 20 and 24 September 2021). The price of maize grain this cycle is expected to peak between January and February 2022.
- Beans are currently selling at a record high price February 2021 of MK 1,082. This represents a two percent increase from the price in the last round (Round 38).
- Cowpea prices slightly decreased by one percent to MK 605 per kg, while the price of pigeon peas remained at MK 514 per kg between Round 38 and Round 40.

COVID-19 Update

There is a downward trend of COVID-19 cases. As the number of daily cases of COVID-19 continues to significantly decline, this may indicate the end of the third wave of the pandemic that took place between June and September 2021 (*Figure 1*). According to Malawi Ministry of Health data, the number of active cases fell by over 46 percent from 3,630 cases on 1 October 2021 to 1,950 cases on 31 October 2021. Only two cases of COVID-19 were recorded on 31 October 2021, compared to the record high of 952 cases recorded on 23 July 2021 during the third wave. Cumulatively, the country has recorded a total of 61,796 cases (as of 31 October 2021), with a case fatality rate of 3.72 percent and a recovery rate of 92.8 percent.

Figure 1: COVID-19 prevalence from 1 May 2020 to 1 November 2021



Government further relaxes COVID-19 measures. On 8 October 2021, the Government announced the relaxation of most of the COVID-19 restrictions. The relaxed measures now allow people from all countries to visit the country; remove working shifts; allow indoor gatherings of up to 500 people and outdoor gatherings of up to 2,000 people; and increase public transport capacity from 75 to 100 percent. However, measures such as wearing face masks, observing social distancing, and washing hands are still being enforced. The relaxation of COVID-19 measures will likely result in an uptick in trade and commercial activities in the country.

Deriving the Minimum Expenditure Basket

The minimum expenditure basket (MEB) looks at the needs that are covered—partially or fully—through the market. It sets a monetary threshold, which is defined as what households require to meet their essential needs. While the MEB is defined as what a household requires to meet their essential needs, on a regular or seasonal basis, and its average cost, the SMEB is the absolute minimum amount required to maintain existence and cover lifesaving needs, which could involve the deprivation of certain human rights. However, the concepts of an SMEB and MEB are sometimes used interchangeably.

A SMEB is the absolute minimum amount required to maintain existence and cover lifesaving needs, which could involve the deprivation of certain rights.

There are several ways in which to construct an SMEB. The World Food Programme (WFP) Malawi Country Office constructed its SMEB in line with a rights-based approach based on previously-assessed needs by collecting expenditure data. Data for the construction of both the rural and urban area SMEBs was collected using a WFP in-house call centre (mobile Vulnerability Assessment and Mapping—mVAM), reaching over 100 traders in some 70 rural and urban local markets. Contacted traders provided the market prices of available food and non-food items between 4 to 8 October (week 1) and 18 to 22 October (week 3) for Rounds 39 and 40. For the analysis detailed on the following pages, WFP has aggregated data for Rounds 39 and 40 (hereafter referred to as Round 40). The detailed methodology on the construction of the SMEB as well as the key assumptions employed are depicted in *Annex B*. Once constructed, the MEB itself serves as a key input in the essential needs' assessment set of indicators, as it is used to assess which households have the economic capacity to cover their needs through the market.

What does the Round 40 Survival Minimum Expenditure Basket show?

SMEBs have increased across all regions of the country. Between mid-September 2021 (Round 38) and throughout October 2021 (Rounds 40), the SMEBs increased in both rural and urban areas across the country. Over this period, the SMEB increased the most in the rural Northern Region and the least in the Rural Southern Region. Increases in both the food and non-food expenditure components resulted in the rise in the SMEBs. The increase in SMEBs implies that households required additional income to meet their survival needs. *Table 1* provides details on the SMEB values for the urban and rural areas as well as illustrates the changes in expenditure between Round 38 and Round 40.

Table 1: SMEB values by region and their percentage change between Round 40 and Round 38

Area of Coverage	Total SMEB		Food Expenditure		Non-Food Expenditure	
	In MK	% Change	In MK	% Change	In MK	% Change
Urban	66,529	↑+5.0	38,469	↑+6.2	28,060	↑+3.5
Rural North	41,867	↑+8.4	36,518	↑+7.0	5,348	↑+18.5
Rural Centre	42,748	↑+7.0	37,168	↑+5.5	5,580	↑+18.7
Rural South	47,161	↑+3.8	38,675	↑+0.7	8,487	↑+20.6

In urban areas, the SMEB increased by 5 percent. The minimum survival expenditure for a typical urban dweller in the four cities across the country increased from MK 63,355 to MK 66,529 per month. This translated into an additional MK 3,174 per month for a household to meet its basic survival needs between September and October 2021. In these cities, food and non-food expenditure also increased by 6.2 percent and 3.5 percent, respectively. The increase in food expenditure largely emanated from significant increases in the prices of maize, cooking oil, and green vegetables.

Rural Northern Region registered an 8.4 percent increase in SMEB. A typical household living in the rural North required an additional income of MK 3,229 per month between mid-September and October 2021. Total expenditure increased from MK 38,638 in the previous round (September) to MK 41,867 in October 2021. Food expenditure increased by 7.0 percent as the prices of cooking oil, cassava, vegetables and sugar increased in this region. A sharp increase of 18.5 percent on non-food expenditure observed in the rural Northern Region is mainly due to an increase in the prices of firewood and laundry soap as well as a rise in the cost of milling. The rise in fuel prices may affect the rural Northern Region more than the other regions due to its distance from manufacturing industries. Most of the manufactured goods (including soaps and cooking oil) are produced in Lilongwe and Blantyre cities and thus high transportation costs are incurred to get these commodities to the north. Further, the cost of milling may also have significantly risen due to increase fuel prices as a number of milling plants operate on diesel.

Rural Central Region SMEB rose by 7 percent. The minimum expenditure required for the survival of a typical household in the Central Region rose by MK 2,809 from MK 39,939 in the last round (Round 38) to MK 42,748 in mid-October. During the same period, food and non-food expenditure rose by an average of 5.5 percent and 18.7 percent, respectively, in this region. A notable rise in the prices of beans, cooking oil, cassava, firewood and laundry soap necessitated the increases for both components of the SMEB.

In the rural Southern Region, the SMEB rose by 3.8 percent. In this region, household minimum monthly expenditure rose to MK 47,161 from September's SMEB value of MK 45,447. This represents an increase in a typical Southern-based household's monthly expenditure by MK 1,714. Food expenditure marginally rose by 0.7 percent, while expenditure on non-food commodities sharply rose by 20.6 percent when compared to September. A significant increase in the prices of cooking oil, firewood and laundry soap contributed to the increase in expenditure.

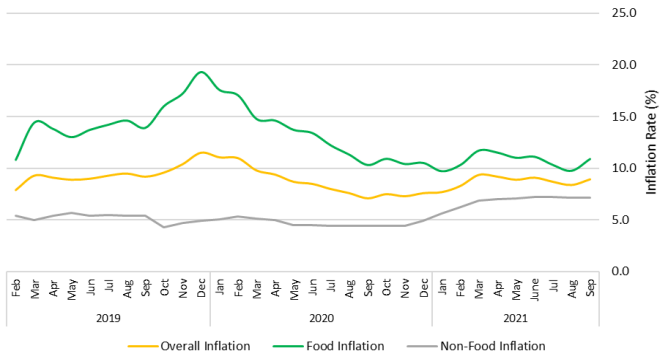
Main drivers of expenditure increment

Data shows that increases in expenditure in October 2021 largely emanated from increases in the prices of cooking oil, green vegetables, cassava, and firewood/charcoal. Green vegetables are usually expensive during the dry season; thus, this is in-line with normal trends. Cassava is an important substitute staple to maize, and therefore its prices tend to move in the same direction as maize, rising with the onset of the lean season. Currently, maize prices are peaking as the commodity's stock gets depleted due to both consumption and exportation. The price of cooking oil has been continuously rising since the introduction of a 16.5 percent value added tax (VAT) on the commodity a year ago and continues to do so due to an increase in the cost of raw materials used to manufacture cooking oil.

Key market factors to watch

Inflation rate on the rise: Both the month-to-month headline (overall) and food inflation rates rose between August and September 2021. Headline inflation and food inflation increased by 0.5 percentage points and 1.2 percentage points, respectively, between August and September 2021. In September 2021, the country registered an overall inflation of 8.9 and a food inflation rate of 10.9 percent (*Figure 2*). Several factors likely contributed to this general rise in the prices of goods that constitute the Consumer Price Index (CPI)—a basket used to compute inflation. Among the recent developments that are likely contributing to the rising inflation include the weak exchange rate against major foreign currencies and the rising food commodity prices as the lean season begins. For example, the average retail maize grain prices moved up by approximately 6 percent from MK 143 per kg in August to MK 151 per kg in September 2021. Maize constitutes 46 percent of the CPI.

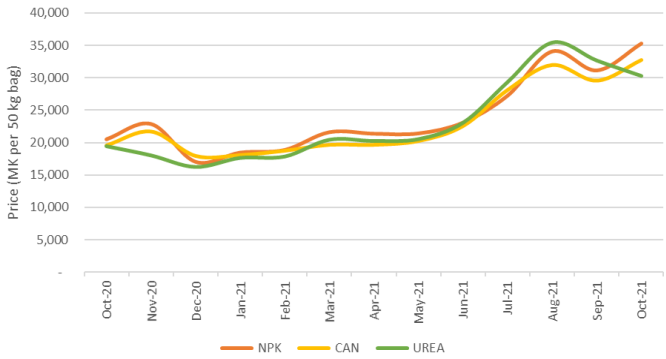
Figure 2. Trend of rate of inflation since 2019



Weakening exchange rate: The Malawi kwacha continues to weaken against global currencies, having lost approximately 10 percent of its value against the United States Dollar (USD) since November 2020.

Fertilizer prices at record high: Fertilizer prices have increased by over 70 percent compared to last year—due to an uptick in the global prices of raw materials. This will hopefully be partially offset by the Government's Affordable Inputs Programme, which will be selling at subsidized prices.

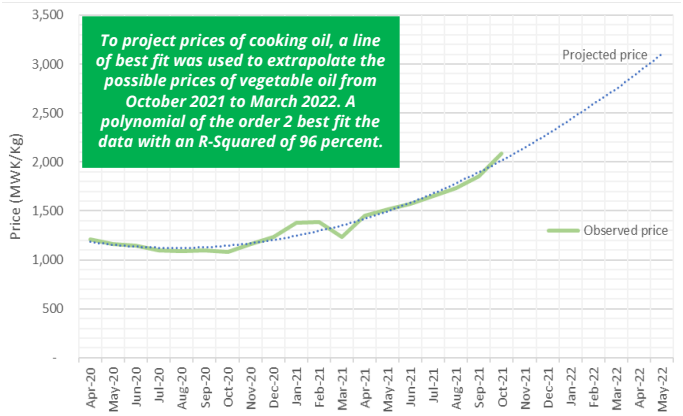
Figure 3. Fertiliser prices trend upwards since October 2020



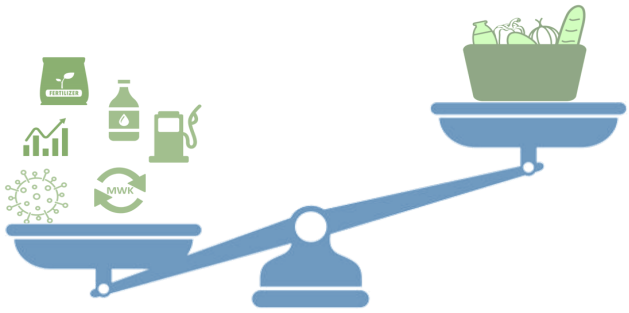
Recent hike in pump prices: The recent hike in fuel pump prices by an average of 25 percent on 9 October 2021 will adversely impact the prices of food and non-food commodities as the cost of transportation also increases. In turn, this may further exacerbate the inflation rate, making it more costly for smallholder farmers to access markets.

Rise in Cooking Oil: WFP data shows that cooking oil prices are rising, with traders citing soybean shortages as well as the introduction of VAT (late 2020) as the primary reasons. Cooking oil is an important food and nutrition security commodity in Malawian diets (*Figure 1*) and thus the large price uptick is negatively affecting overall food expenditure. With the current trend, the price of cooking oil is expected to continue rising for the foreseeable future, as inflation continues to rise and the exchange rate worsens.

Figure 4. Actual and projected prices of vegetable oil



Evolution and impacts of COVID-19: The COVID-19 pandemic continues to adversely impact market operations, influencing market forces for the demand and supply of goods and services. The pandemic has greatly altered the normal seasonal trend of commodity prices, making it even more difficult to make price projections.



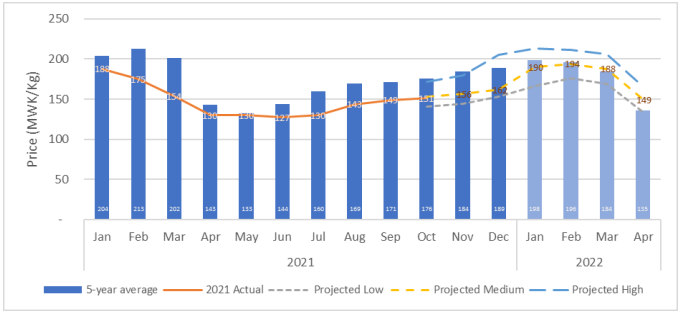
The prices of various commodities (including maize, pulses, cooking oil and other essential non-food commodities) are expected to continue to fluctuate due to other external forces such as rising inflation and an unstable exchange rate as well as global commodity and raw material shortages. As such, this year's lean season response planning will require closely monitoring the market dynamics.

Maize Grain Retail Prices

Maize grain is trading just above the minimum farmgate price. As per the data covering the month of October 2021, the price of maize was trading at an average price of MK 151 per kg, slightly above the Government-set minimum farm gate price of MK 150 per kg. The October 2021 price represents a 23 percent drop from last year's price of MK 195 per kg for the month. The five-year month-to-month average price for October is MK 176 per kg, 14 percent above the current price.

The price of maize grain is expected to peak between January and February 2022. Using the Grand Seasonal Index (GSI), the projected highest maize grain price during the 2021/2022 lean season is MK 194 per kg to be observed in February 2022, just below ADMARC's current selling price of MK 205 per kg. The prices will generally remain high until March 2022, when the prices are expected to significantly drop (*Figure 5*). However, using the middle-projected trend, maize grain prices are expected to remain below the five-year month-to-month prices throughout the 2021/2022 lean season.

Figure 5. Maize actual and projected monthly average retail prices



The Grand Seasonal Index (GSI) Model was used to project the monthly retail prices for maize and pulses. Using this model, data on monthly average prices of maize grain from January 2008 to September 2021 was used to make these projections. Price projections for pulses used monthly data from January 2015 to September 2021. The GSI gives the projections at three levels, namely the projected lowest, medium, and highest price. In this analysis, prices from a projected trendline (low, medium, or high) that compared well with the actual price trend were used to estimate the transfer values.

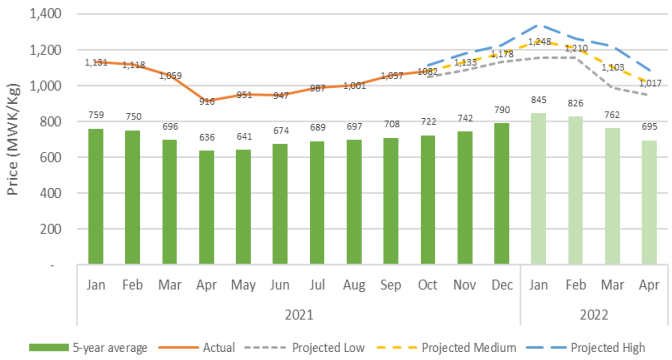
Prices of Pulses

During this reporting period, there have been mixed movements in the prices of pulses (beans, cowpeas and pigeon peas). While there was an increase in the price of beans, the price of cowpeas decreased. During this same period, no significant change in the price of pigeon peas was registered. Overall, the prices of all pulses are showing an upward trend as the 2021/2022 lean season commences.

In addition, the 2020/2021 harvest season experienced the relatively poor production of pulses as compared to most of the previous years. In the 2020/21 season, the country received relatively more rains, which are not ideal for production of pulses. This in turn pushed prices of these pulses upwards in the current year. All pulses traded above their five-year month-to-month average prices.

Beans are selling at a record high price since February 2021. The average price of beans in Round 40 was MK 1,082 per kg, increasing by two percent from the price recorded in late September (Round 38). The current price is the highest recorded since February 2021. The price of beans has been slowly rising since April 2021, as shown in *Figure 6*. In addition, in the current year, the prices of beans have remained above the five-year month-to-month average prices. Since January 2020, the highest recorded price of beans was MK 1,131 per kg at the peak of the 2020/2021 lean season in January 2021.

Figure 6: Beans actual and projected monthly average retail prices

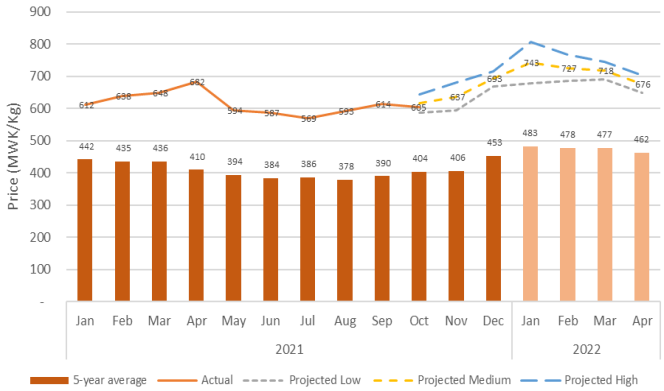


The price of beans will continue to rise until January 2022. Price projections (as shown by *Figure 6*) indicate that the price of beans will continue to increase and peak in January 2022, before declining. Using the GSI medium trend price projections, the price of beans will peak at MK 1,248 per kg and will fall thereafter.

Cowpea prices slightly decreased by 1 %. Cowpea prices decreased to MK 605 per kg in the current round, from MK 615 per kg in the previous round. This price decrease may be temporal and is likely induced by some unexpected increases in supply in some of the mVAM-monitored markets.

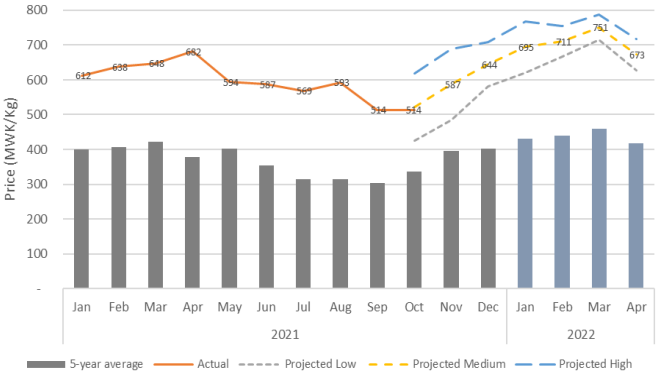
The price of cowpeas is expected to sharply increase during the 2021/2022 lean season, reaching an average price of MK 743 per kg in January 2022 before starting to fall (*Figure 7*). *Figure 7* also shows that in the current year, cowpeas have consistently traded above the five-year average monthly prices.

Figure 7: Cowpeas actual and projected monthly average retail prices



There was no movement in pigeon pea prices. The price of pigeon peas remained at MK 514 per kg since the last half of September 2021. However, this lean season's price projections indicate that the price will drastically increase from the current price to as high as MK 751 per kg in March 2022 (*Figure 8*).

Figure 8: Pigeon pea actual and projected monthly average retail prices



Annexes

Annex A: Regional Trends for Survival Minimum Expenditure Basket

Figure 9A. Trends for Survival MEB for the Urban Areas

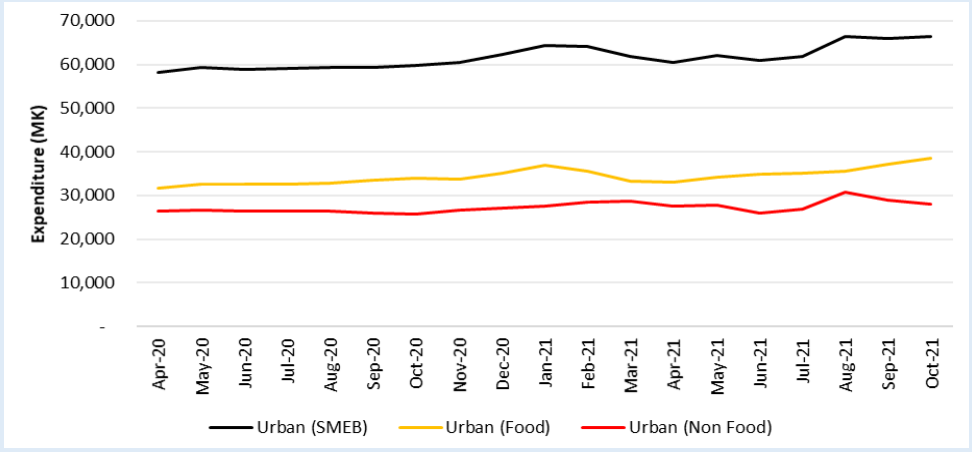


Figure 9B. Trends for Survival MEB for the rural Northern Region

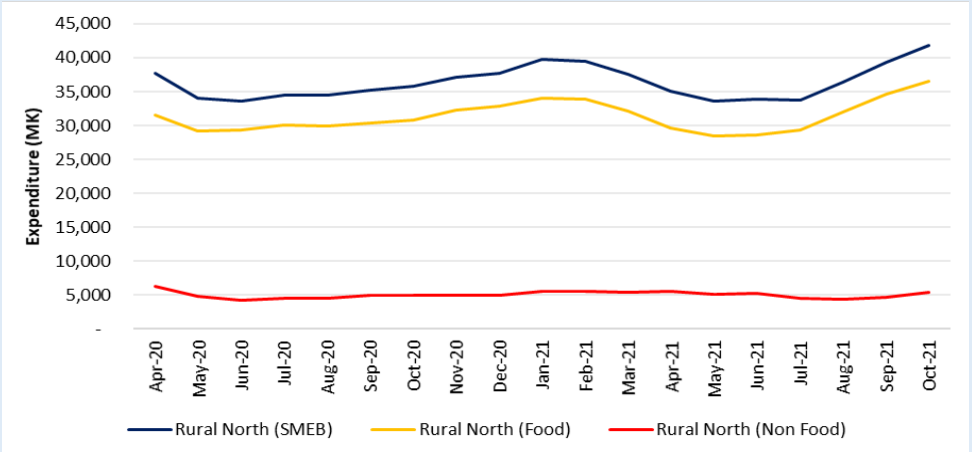


Figure 9C. Trends for Survival MEB for the rural Central Region

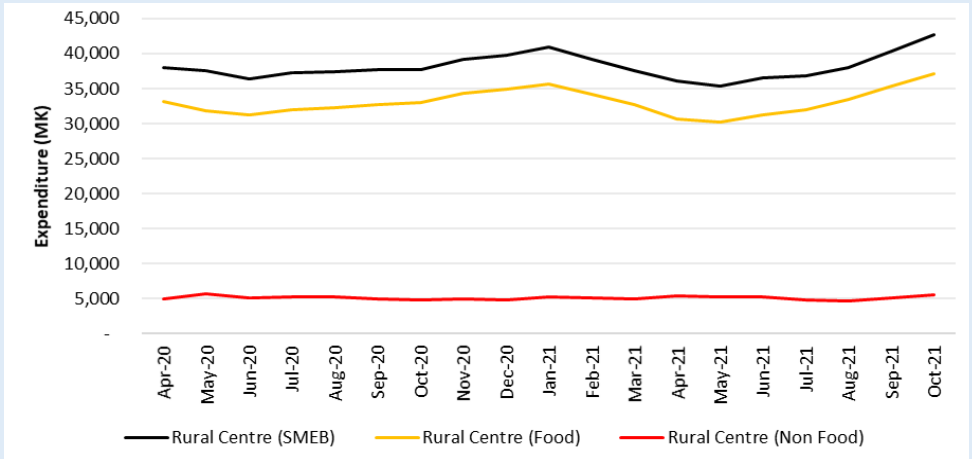
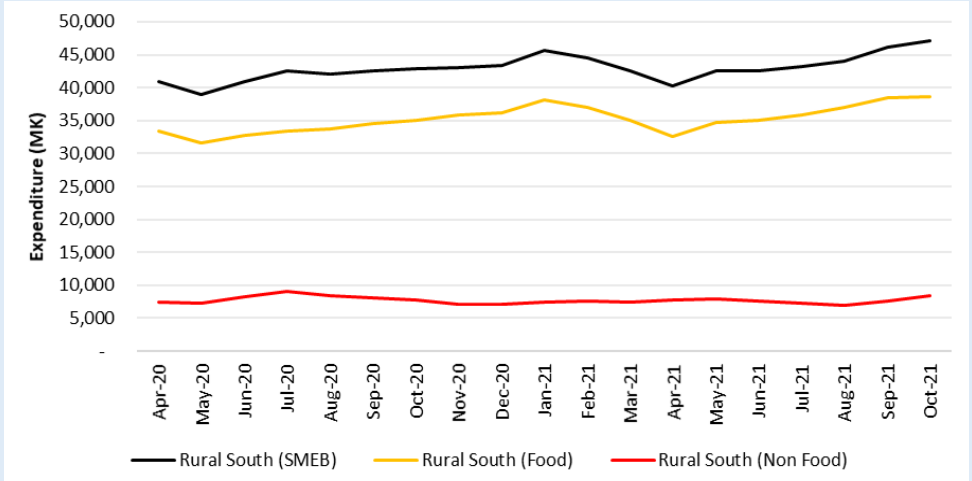


Figure 9D. Trends for Survival MEB for the rural Southern Region



Annex B: Tables for Survival Minimum Expenditure Basket

Table 2A. Survival MEB for the Urban Areas

Commodity	Quantity per person per month	Unit of measure	Unit Price	Cost per person per month	MEB Round (Household Size = 4.5)	
					Current (Round 40)	Previous (Round 38)
Food commodities						
Cereals (Maize)	12.60	Kg	164	2,070	9,316	8,151
Pulses	1.50	Kg	1,141	1,711	7,700	7,695
Cooking Oil	0.75	Kg	2,117	1,588	7,144	6,514
Roots and Tubers	0.60	Kg	340	204	918	918
Salt, Iodized	0.15	Kg	500	75	338	338
Vegetables	3.00	Kg	225	676	3,042	2,574
Eggs	0.15	Kg	1,867	280	1,260	1,296
Fish (dried)	0.60	Kg	2,400	1,440	6,480	6,480
Sugar	0.60	Kg	842	505	2,273	2,268
Sub-Total for Food Cost				**8,549**	**38,469**	**36,233**
Non-Food Items (NFI's)						
Charcoal	50	Kgs	250	12,500	12,500	11,510
Match Box	4	boxes	50	200	200	200
Electricity charges	10	times	100	1,000	1,000	1,000
Electrical charging	15	times	100	1,500	1,500	1,500
Milling	4	times	433	1,733	1,733	1,760
Soap Laundry	2	Pcs	138	277	277	272
Soap bar bathing	2	Pcs	425	850	850	880
House rent	1	month	10,000	10,000	10,000	10,000
Sub-Total for NFIs Cost				**28,060**	**28,060**	**27,122**
TOTAL MEB					**66,529**	**63,355**

Table 2B. Survival MEB for the Rural Northern Region

Commodity	Quantity per person per month	Unit of measure	Unit Price	Cost per person per month	MEB Round (Household Size = 4.5)	
					Current (Round 40)	Previous (Round 38)
Food commodities						
Cereals (Maize)	12.60	Kg	110	1,390	6,256	6,237
Pulses	1.50	Kg	805	1,208	5,434	5,400
Cooking Oil	0.75	Kg	2,115	1,586	7,139	6,364
Roots and Tubers	0.60	Kg	440	264	1,189	858
Salt, Iodized	0.15	Kg	300	45	203	203
Vegetables	3.00	Kg	464	1,393	6,270	4,590
Eggs	0.15	Kg	2,117	317	1,429	1,350
Fish (dried)	0.60	Kg	2,253	1,352	6,084	6,789
Sugar	0.60	Kg	932	559	2,516	2,334
Sub-Total for Food Cost				**8,115**	**36,518**	**34,124**
Non-Food Items (NFI's)						
Fuel wood	50	Lump-sum	34	2,142	2,142	1,661
Match Box	4	Boxes	50	200	200	200
Milling	4	Times	448	1,793	1,793	1,557
Soap Laundry	2	Pcs	185	370	370	253
Soap bar bathing	2	Pcs	422	843	843	843
Sub-Total for NFIs Cost				**5,348**	**5,348**	**4,513**
TOTAL MEB					**41,867**	**38,638**

Table 2C. Survival MEB for the Rural Central Region

Commodity	Quantity per person per month	Unit of measure	Unit Price	Cost per person per month	MEB Round (Household Size = 4.5)	
					Current (Round 40)	Previous (Round 38)
Food commodities						
Cereals (Maize)	12.60	Kg	134	1,689	7,602	7,406
Pulses	1.50	Kg	1,083	1,624	7,310	6,834
Cooking Oil	0.75	Kg	2,107	1,581	7,112	6,391
Roots and Tubers	0.60	Kg	360	216	972	841
Salt, Iodized	0.15	Kg	300	45	203	203
Vegetables	3.00	Kg	279	838	3,770	3,630
Eggs	0.15	Kg	2,053	308	1,386	1,356
Fish (dried)	0.60	Kg	2,389	1,434	6,451	6,255
Sugar	0.60	Kg	875	525	2,363	2,323
Sub-Total for Food Cost				**8,260**	**37,168**	**35,239**
Non-Food Items (NFI's)						
Fuel wood	50	Lump-sum	52	2,579	2,579	1,709
Match Box	4	Boxes	50	200	200	200
Milling	4	Times	418	1,674	1,674	1,733
Soap Laundry	2	Pcs	144	288	288	233
Soap bar bathing	2	Pcs	420	839	839	825
Sub-Total for NFIs Cost				**5,580**	**5,580**	**4,700**
TOTAL MEB					**42,748**	**39,939**

Table 2D. Survival MEB for the Rural Southern Region

Commodity	Quantity per person per month	Unit of measure	Unit Price	Cost per person per month	MEB Round (Household Size = 4.5)	
					Current (Round 40)	Previous (Round 38)
Food commodities						
Cereals (Maize)	12.60	Kg	164	2,064	9,289	9,198
Pulses	1.50	Kg	1,139	1,708	7,685	7,747
Cooking Oil	0.75	Kg	2,075	1,556	7,004	6,362
Roots and Tubers	0.60	Kg	274	164	740	740
Salt, Iodized	0.15	Kg	300	45	203	203
Vegetables	3.00	Kg	321	963	4,333	4,523
Eggs	0.15	Kg	2,051	308	1,385	1,369
Fish (dried)	0.60	Kg	2,092	1,255	5,649	5,923
Sugar	0.60	Kg	885	531	2,389	2,345
Sub-Total for Food Cost				**8,594**	**38,675**	**38,409**
Non-Food Items (NFI's)						
Fuel wood	50	Lumpsum	54	5,354	5,354	4,077
Match Box	4	Boxes	50	200	200	200
Milling	4	Times	427	1,709	1,709	1,634
Soap Laundry	2	Pcs	145	289	289	251
Soap bar bathing	2	Pcs	468	935	935	876
Sub-Total for NFIs Cost				**8,487**	**8,487**	**7,038**
TOTAL MEB					**47,161**	**45,447**

Annex C: Construction of the Survival MEB (SMEB) and Assumptions

The Survival Minimum Expenditure Basket (SMEB) is the bare minimum amount a household requires to maintain existence and cover lifesaving needs. There are several ways in which to construct an MEB. For this analysis, WFP has elected to construct a Survival Minimum Expenditure Basket (SMEB), which is defined as the bare minimum amount a household requires to maintain existence and cover lifesaving needs. This is done in-line with a rights-based approach based on previously assessed needs.

To do this, WFP began by reviewing existing expenditure data that was collected in late 2019 and 2020 as part of its regular monitoring to better understand the typical expenditure (starting with food), then bringing elements of the household's needs/rights, thus looking at essential non-food items.

The food commodities selected to calculate the SMEB are those that make up a typical rural and urban survival diet and include cereals, roots and tubers (cassava and sweet potatoes), pulses, oil, vegetables, fish, eggs, sugar, and salt. Using the *Nutval*, a spreadsheet application for planning and monitoring the nutrition content of food found on the local market, WFP determined a ration that meets the basic energy requirement of 2,100 kilocalories per person per day. Of the total energy, 12 percent is provided from proteins (requirement range is 10-12 percent) and 20 percent is from fats (requirement is at least 17 percent of energy should come from fats). Approximately 62 percent of the total food basket is attributed to cereals (maize).

While WFP strives to promote enhanced dietary diversity, historical data collected in late 2019 and 2020 on the expenditure of severely food insecure households residing in rural areas indicates that households are still spending the vast majority of their in-come on cereals, specifically maize. Since we are striving to understand how price fluctuations and commodity availability are affecting those most vulnerable, the food portion of the MEB has been constructed with this in mind, reflecting the reality of those most vulnerable.

In addition, WFP included the following essential non-food commodities when constructing its basket:

- **Firewood**: Assumes that households are purchasing firewood as opposed to collecting it themselves. This practice varies from location to location.
- **Matches**: Assumes that an average household uses approximately four match boxes per month
- **Electricity bills**: Assumes that urban-based households are incurring costs for using electricity mainly for lighting and that this amount remains relatively constant over the course of a month regardless of the household size. This may not be the case for all households but is included in the urban SMEB. Thus, if an urban-based household does not have electricity, then said household's SMEB would be reduced. This item is excluded when calculating the rural SMEB.
- **Soap (Laundry and bathing)**: Assumes that over the course of one month the entire household uses two bars of soap for washing and another two bars for bathing.
- **Electricity Charges (phones, torch):** Assumes that urban-based households are incurring charging costs for either a mobile phone and/ or torch, regardless of household size. This may not be the case for all households but is included in the urban SMEB. This item is excluded when calculating the rural SMEB.
- **Other Exclusions**: The survival basket also excludes education costs (notably because public primary education is free), health service fees and basic medicines, and agricultural input costs. Further information is being collected and is available upon request.

In addition, for the construction of the MEB, it is important to note the following:

- **Food Basket**: Constructed based on food items that are commonly available across the country and widely consumed by the typical Malawian household.
- **Meat, Eggs, and Dairy**: The food component of the SMEB excludes both meat and milk, because these products are rarely consumed, especially by those classified as extremely vulnerable. The basket further assumes that the average weight of an egg is approximately 50 grams. This SMEB thus translates into the consumption of approximately 14 eggs per month for a household size of 4.5.

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