

Issue 19 | April 2013

# The Market Monitor

## Trends and impacts of staple food prices in vulnerable countries

This bulletin examines trends in staple food and fuel prices, the cost of the basic food basket, terms of trade and consumer price indices for 65 countries in the first quarter of 2013 (January to March)<sup>1</sup>. The **"Special Focus Series"** features **Niger**, where the price of millet has taken an abnormal seasonal turn upwards, and **Malawi**, where economic policies are having a major impact on food prices.

## Global Highlights

- The global cereal price index increased by **8.8% on a year-on-year basis in the January-March 2013 quarter**. This increase is driven by increases in real prices of maize and wheat (+8% and +13%, respectively).
- However, on a quarterly basis (Q1-2013 vs. Q4-2012), global **maize, wheat and rice prices fell by respectively 7%, 13%, and 5%**, respectively. For wheat, the decline is mostly attributable to favourable harvest prospects due to improved weather in major growing regions. In Q1-2013, wheat prices are 28% lower than during their peak period in 2008. Maize prices are still 9% higher than during Q2-2008 and 8% above the same period in 2012. The price of rice is stable compared to the same period in 2012.
- Dynamics and price trends for domestic markets are quite different than global trends. The **impact of domestic price changes on the food basket cost in the last quarter was high (5-10%) or severe (above 10%) in one third of the 65 countries monitored**. The most severe effects are driven by prices of maize in Malawi

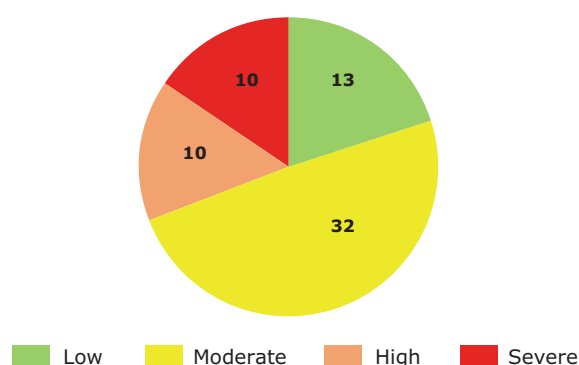
### REAL PRICE ADJUSTED FOR CHANGES IN US CONSUMER PRICE INDEX (2005 = 100)

Quarterly Change	Maize	Wheat	Rice	Note: Comparison to
q1-2013 vs. q4-2012	-7%	-13%	-5%	Last quarter in 2012
q1-2013 vs. q1-2012	8%	13%	1%	Same quarter in 2012
q1-2013 vs. q1-2008		-28%		Global wheat price peak period in 2008
q1-2013 vs. q2-2008	9%			Global maize price peak period in 2008

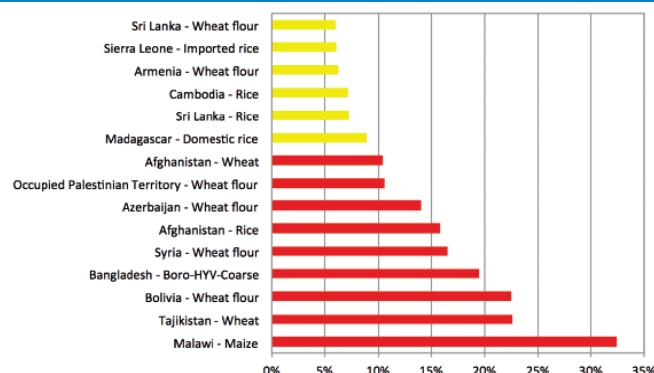
(32%), wheat in Tajikistan (23%) and wheat flour in Bolivia (22%).

- Overall the **purchasing power of Malawians has deteriorated sharply as a result of the devaluation of the local currency (Kwacha)** in May 2012. The average monthly inflation rate has soared to 38% in February 2013. The price of maize is more than four times its price two years ago in some markets.
- Despite a good 2012/2013 crop year, **local prices in Niger have not recovered from the 2011/2012 production deficit** in the Sahel. Millet prices at most markets are unusually high and are expected to increase in the coming months with the start of the lean season.

### Number of countries by impact of price changes on the cost of the basic food basket (out of 65 countries monitored)



### Commodities having the most significant impact on the cost of the food basket (Q1-2013)



New!

A new tool to provide alerts on abnormal seasonal food price spikes -ALPS- is now available at <http://foodprices.vam.wfp.org/ALPS-Chart.aspx>

1. Data were collected and collated by WFP country offices and are available at: <http://foodprices.vam.wfp.org>. Further data-sources are FAO Food Price Index, FAO/GIEWS Food Price Data and Analysis Tool and IMF Primary Commodity Prices as of April 18<sup>th</sup>, 2013.

2. Prices are adjusted by the US Consumer Price Index (<ftp://ftp.bls.gov/pub/special.requests/cpi/cpiiai.txt>)

# Price trends and impacts by region

## (Change from last quarter)

**Impact Codes** Low (< 0%) Moderate (0-5%) High (5-10%) Severe (> 10%)

### Latin America and Caribbean

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket in January to March is severe in **Bolivia** and moderate in all other monitored countries.

#### • Staple commodity prices:

Overall, nominal prices of all major staples in the LAC region remained relatively stable in Q1-2013 compared to Q4-2012, except in Honduras (maize, +14%) and Bolivia (wheat flour, +14%). However, the picture is different for seasonally adjusted prices of the main caloric contributor of each country. Seasonally adjusted price of wheat flour increased by 55% in **Bolivia**, rice increased in **Panama** (+12%), **Costa Rica** (+8%) and **Ecuador** (+6%), and

maize increased in **Guatemala** (+12%) and **Honduras** (+11%).

• **Fuel prices:** No major change in fuel prices was reported.

• **Purchasing power:** Reported annual inflation rate is low (below 5%) in all the countries within the region, except in **Haiti** (7.7%), **Costa Rica** (6.3%), and **Honduras** (5.6%), where the situation remains similar to the previous quarter.



### Southern Africa\*

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket in January to March is severe in **Malawi** (see special focus), high in **Madagascar** and moderate in all other countries except Tanzania where the impact is low.

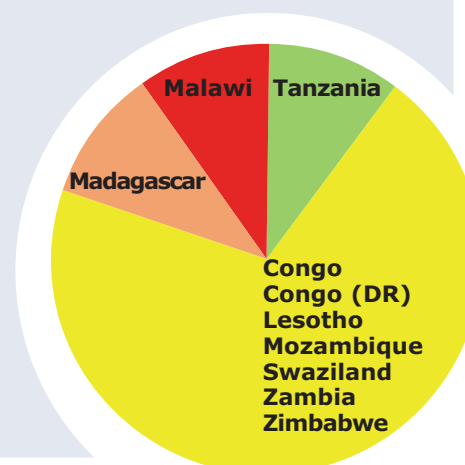
#### • Staple commodity prices:

In Q1-2013, seasonally adjusted prices have generally increased from Q4-2012. **Malawi** suffered the biggest change with a 61% surge in seasonally adjusted price of maize. Other sharp increases were observed for maize in **Zambia** (+22%, s.a.), wheat flour in **Congo** (+19%, s.a.), rice in **Madagascar** (+18%, s.a.) and **Mozambique** (+14%, s.a.). Overall, compared to the previous quarter, the nominal price of each major caloric contributor remained relatively stable in Congo and DR Congo for cassava, and Lesotho and Tanzania for maize. However, nominal prices of maize increased significantly in Zambia (+10%), Mozambique (+13%), Zimbabwe (+25%) and Malawi (+76%).

• **Fuel prices:** Compared to last year, a surge in fuel prices is recorded in **Malawi**: +117% for gasoline and +93% for diesel in April. **Tanzania** also experienced a significant increase in energy and fuel prices in March: +22.6% compared to last year and +6.5% compared to February 2013. This is largely due to monthly increases in prices of charcoal by 12.6% and petrol by 2% in March.

• **Purchasing power:** Annual inflation is alarmingly high in **Malawi** at about 37.9%, and moderately high in Tanzania at 9.8% compared to March 2012.

\* As of February 2013, Congo, DR Congo, and Tanzania are administered by the Regional Bureau for Southern Africa.



## Central and Eastern Africa

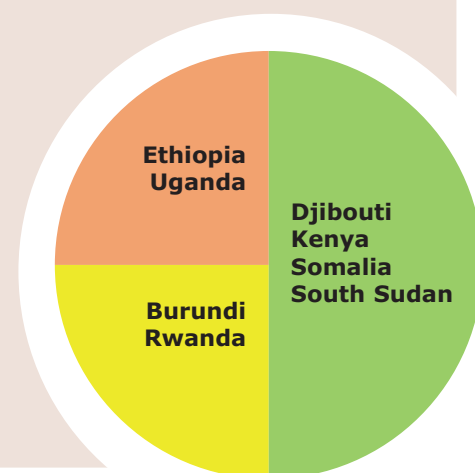
**Hotspots:** The impact of staple food price changes on the cost of the basic food basket in January to March is high in **Ethiopia** and **Uganda** and moderate in **Burundi** and **Rwanda**.

- **Staple commodity prices:**

In Q1-2013, nominal prices have either remained stable or decreased since last quarter. Prices are stable in Burundi (except for sweet potatoes - 20%), Djibouti, Ethiopia, Kenya and Uganda (except maize flour +32%). They have decreased in Rwanda, Somalia and South Sudan. Seasonally adjusted prices of the major staple commodities have decreased in **Burundi** for sweet potatoes (-26%), **South Sudan** for sorghum (-14%) and **Kenya** for maize (-11%). In contrast, increases are observed for beans and maize in **Rwanda** (+17% and +14%, respectively) and maize in **Ethiopia** (+14%). Cassava flour remained relatively stable in **Uganda**.

- **Fuel prices:** Kenyan prices for murban crude oil used for local petroleum refineries decreased by 4.7% compared to February 2013.

- **Purchasing power:** In **South Sudan**, high food prices continue to deter households' purchasing power illustrated by a year-on-year inflation of +24.1% in February. In **Ethiopia**, although the consumer price index is still increasing slightly, year-on-year inflation has continued to regularly drop since August 2011, from an average of +40% in Q3-2011 down to +10% in Q1-2013 (and more specifically +7.7% in March).



## West Africa

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket in January to March is severe in **Sierra Leone**, high in **Côte d'Ivoire** and **Ghana**, and moderate in **Benin**, **Mauritania** and **Senegal**.

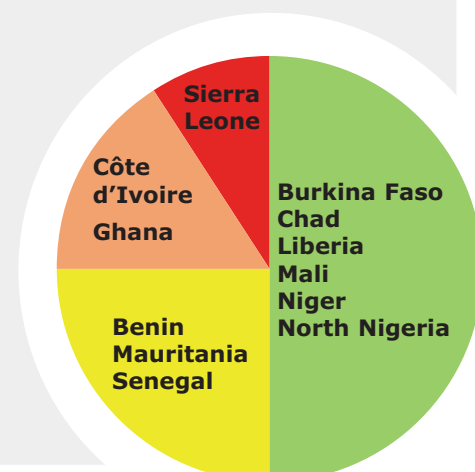
- **Staple commodity prices:**

Compared to the last quarter in 2012, prices of locally produced staple foods are stable or decreasing in most countries, except in **Sierra Leone**, **Benin**, **Côte d'Ivoire**, and **Senegal**. Seasonally adjusted prices of palm oil and maize increased by 26% and 14% respectively in **Côte d'Ivoire**. Prices of yam and plantains increased by 18% and 39% in **Ghana**. In **Sierra Leone**, rice price rose by 15% and palm oil price surged by 63%. Increasing nominal price trends are also recorded for millet in **Niger** (+10%) and **North Nigeria** (+8%).

- **Fuel prices:** In March 2013, the price of gasoline increased by 20% in **Ghana**, compared to

February. In **Liberia**, gasoline price decreased by 7% in January compared to December, though still +8% higher than last year. In **Côte d'Ivoire**, the government announced an automatic pegging of domestic fuel prices to global prices and a reduction of 30% on subsidized cooking gas (B28) price, effective as of April 1, 2013.

- **Purchasing power:** As during the previous quarter and despite local currency stabilization and deceleration of inflation in **Ghana**, year-on-year inflation is still relatively high at +10% in February 2013. Similarly, **Nigeria** and **Sierra Leone** recorded +11.7% and +11.5% year-on-year inflation in February.



## Middle East, North Africa and Central Asia\*

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket in January to March is severe in **Syria, Azerbaijan, the occupied Palestinian territories, and Tajikistan**. It is high in **Armenia** and moderate in other monitored countries.

• **Staple commodity prices:** The price of wheat or wheat flour, the main staple food in the Middle East and Central Asia, increased significantly during the first quarter of 2013 when compared to Q4-2012. The highest increases in seasonally adjusted prices are recorded particularly in **Armenia** (+16%), **Azerbaijan** (+25%), **Tajikistan** (+42%) and the **occupied Palestinian territories** (+27%). This is most likely due to the fact that the region has not fully recovered from the transmission effects of the summer droughts that hit wheat production in Russia and Kazakhstan. The crisis in **Syria** continues to have detrimental effects on food commodity prices. The nominal price of wheat flour continues to rise, with a 42% increase from the previous quarter. In **Sudan**, nominal sorghum prices increased by 7% compared to the previous quarter, though seasonally adjusted prices

are down by 27%. Noteworthy is also a 30% increase in nominal prices of potatoes in **Kyrgyzstan**.

- **Fuel prices:** In March, **Yemen** reported a 28.6% annual decrease in petrol price against a 12.4% increase for gasoline. In the **occupied Palestinian territories**, the price of gasoline increased in February by 2% compared to the previous month and 5.8% compared to 2012.
- **Purchasing power:** Year-on-year inflation is still moderately high in Egypt (+8.2% - March) and Yemen (+7.1% - January). For Egypt this is due to food price increases and a continuous depreciation of the Egyptian pound against the US dollar since December 2012.

\* As of February 2013, Sudan is administered by the Regional Bureau for the Middle East, North Africa, Eastern Europe and Central Asia.

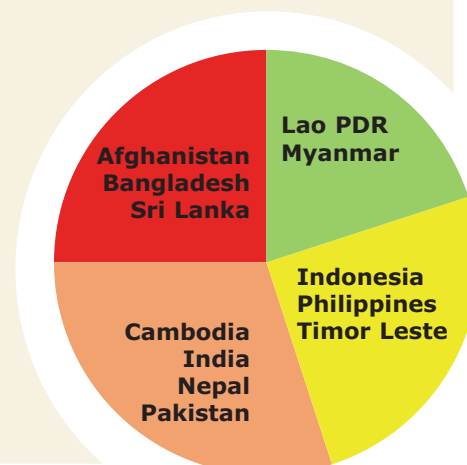


## Asia

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket in January to March is severe in **Afghanistan, Bangladesh and Sri Lanka** and high in **Cambodia, India, Nepal and Pakistan**. Attention is also warranted in **Indonesia, Philippines and Timor-Leste**, where the impact is moderate.

• **Staple commodity prices:** During the first quarter of 2013, prices of cereals (rice and wheat/flour) increased significantly compared to Q4-2012 across the region, except in Myanmar, Lao PDR, the Philippines and Timor-Leste. The highest increases in seasonally adjusted prices are recorded for rice in **Afghanistan** (+72%) and **Bangladesh** (+28% for Boro-HYV Coarse) and for wheat flour in **Sri Lanka** (+43%). Significant price increases are also recorded in **Nepal** and **Pakistan** for rice (+11% and +16%, respectively) and wheat flour (+16% each).

- **Fuel prices:** Moderate year-on-year gasoline price increases are reported in the Philippines (+6%) and Sri Lanka (8.7%). Afghanistan reports a decrease in year-on-year prices of Gasoline (-3.5%).
- **Purchasing power:** In February the Consumer Price Index increased by 10% in **Nepal** compared to February 2012. Following an 8.1% year-on-year increase of the CPI in January, **Pakistan** reported a +6.6% inflation rate in March. Inflation rates stood at +7.7% in **Bangladesh** (March) and +7.3% in **Afghanistan** (February).



# Special Focus 1

## Niger: Are abnormally high millet prices an early sign of a looming food crisis?

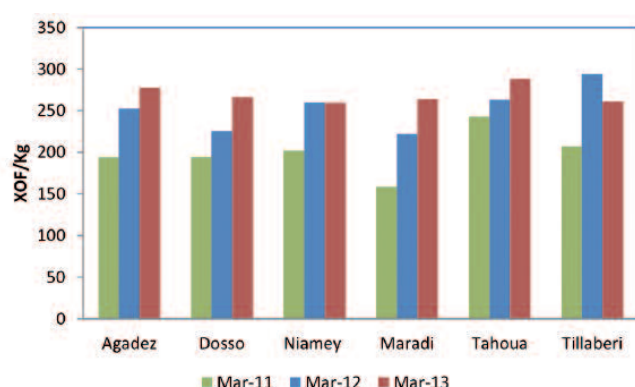
- Despite a good 2012/2013 crop year, local prices in Niger have not recovered from the 2011/2012 Sahel food crisis. The price of millet, the main staple, is above last year's crisis levels and is expected to further increase in the coming months, during the lean season.
- Most millet markets, particularly those in the main producing areas are on alert; above expected seasonal levels since the beginning of the 2012 harvest.
- Disruption of food commodity trade with Nigeria, producer storage strategies and government procurement are maintaining millet prices high.

### Local prices of millet are higher than the 2012 crisis prices

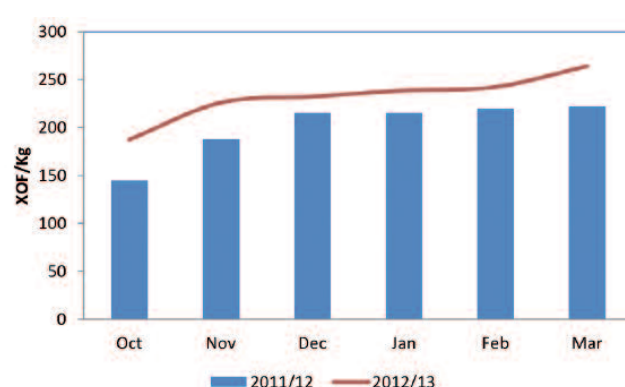
**There are signs of persistent higher millet prices than normal despite the reported good harvest in late 2012.** The 2012/13 millet production is estimated at about 3.9 million tons, 40% up from last year's below average production and 24% higher than the 5-year (2007-2011) average<sup>3</sup>. However, despite the above average harvest, millet prices have remained high since October 2012. The continued increase is partly due to stock replenishment strategies. Sustained demand from

market actors to rebuild depleted stocks after the 2012 crisis is not met with increased sales of millet by producers. In addition, import flows from Nigeria are lower than normal, owing to unfavourable price differentials for grain imports, floods in Nigeria, and high levels of insecurity in northern Nigeria. Government purchases through the Office des Produits Vivriers du Niger (OPVN) at above-market prices have also contributed to the upward pressure on millet prices.

**Retail prices of millet on selected markets (March 2011-2013, XOF/kg)**



**Retail prices of millet on Maradi market (2011/12-2012/13, XOF/kg)**



**New!**

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3. République du Niger/Ministère de l'Agriculture/Direction des Statistiques (2013): Evaluation des récoltes de la campagne agricole d'hiver-nage 2012 et résultats définitifs 2012-2013, Rapport National de Synthèse.

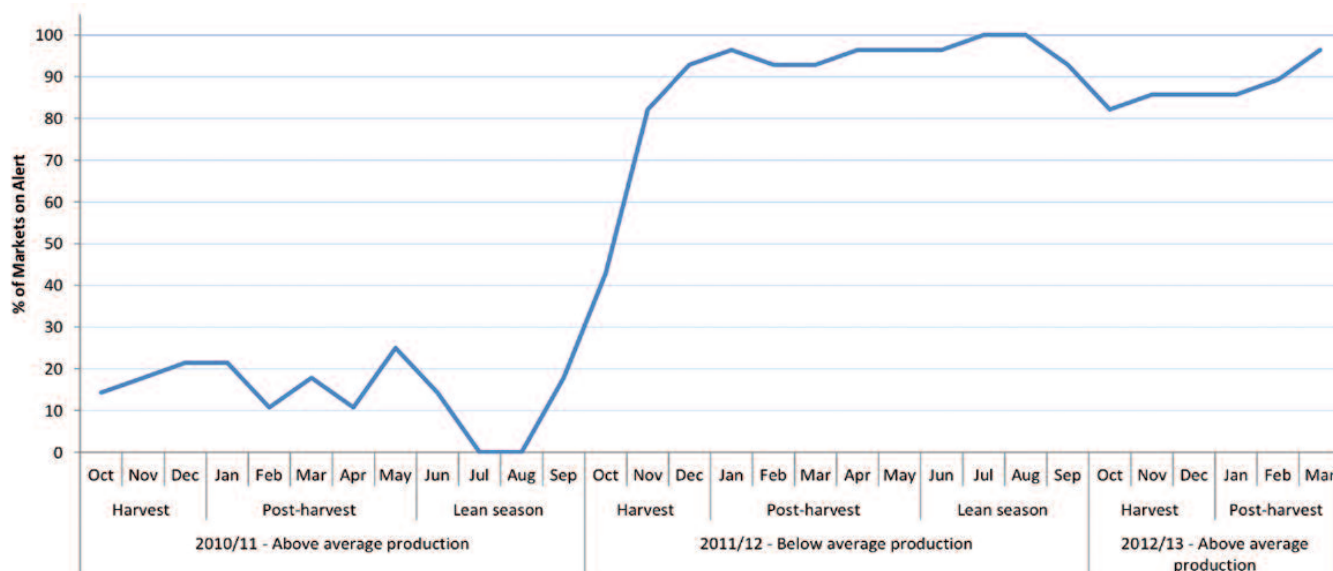


## Abnormal seasonal price highs are expected to persist during the lean season

**Most markets show atypical seasonal millet prices.** The number of markets on alert, i.e., showing abnormal seasonal highs, increased steadily since the harvest (see graph). The number of markets on alert in Q1-2013 is similar to the 2012 food crisis year. Given that millet markets are relatively well integrated within

Niger and across the border with Nigeria, price increases observed on the main wholesale markets in the producing areas are likely to spread to all markets. Local food prices are expected to further increase in the coming months, especially during the lean season (June-September).

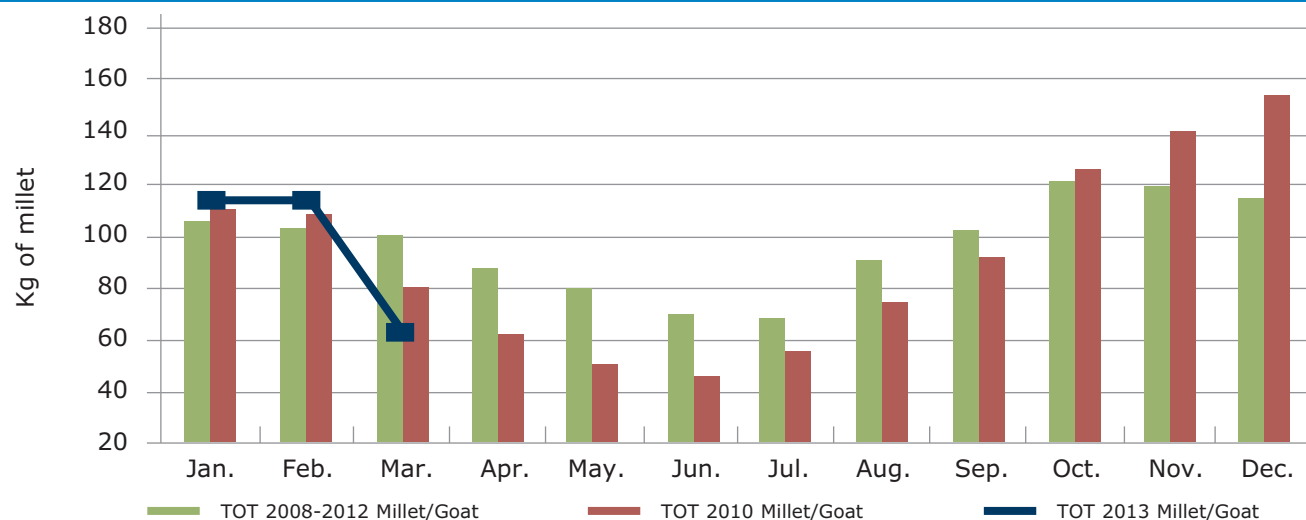
Proportion of millet markets on alert (out of 28 monitored markets)<sup>4</sup>



**Close monitoring of food markets and the food security situation is necessary.** There are indications of recent decreases in the terms of trade of pastoralists. In March, the terms of trade between goat and millet reached alert levels with a goat trading for much less than 100 kg of millet, a threshold indicative of inadequate purchasing power for pastoralists.

Available casual labour opportunities and incomes generated by cash crops (horticulture and onions) so far contain the deterioration of the purchasing power among other livelihood groups. As the lean season reaches its peak in July-September, further increases in cereal prices will reduce vulnerable households' economic access to food.

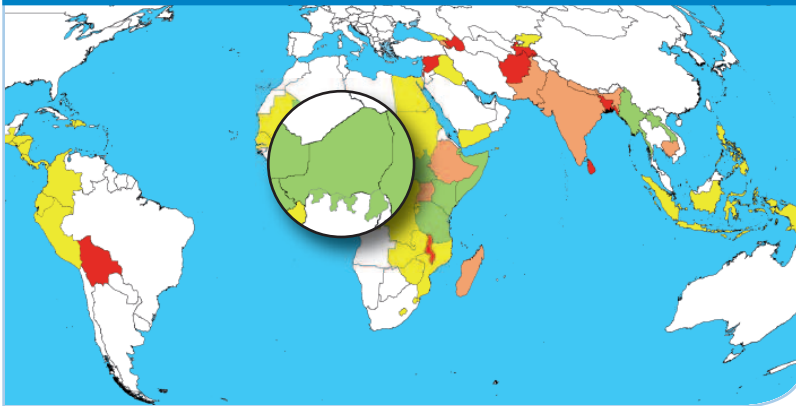
Millet/Goat Terms of Trade



Source: Albichir No.41, March 2013

4. All major wholesale and consumer markets in each region are included.

## Focus on Niger - Q1-2013 (January to March 2013)



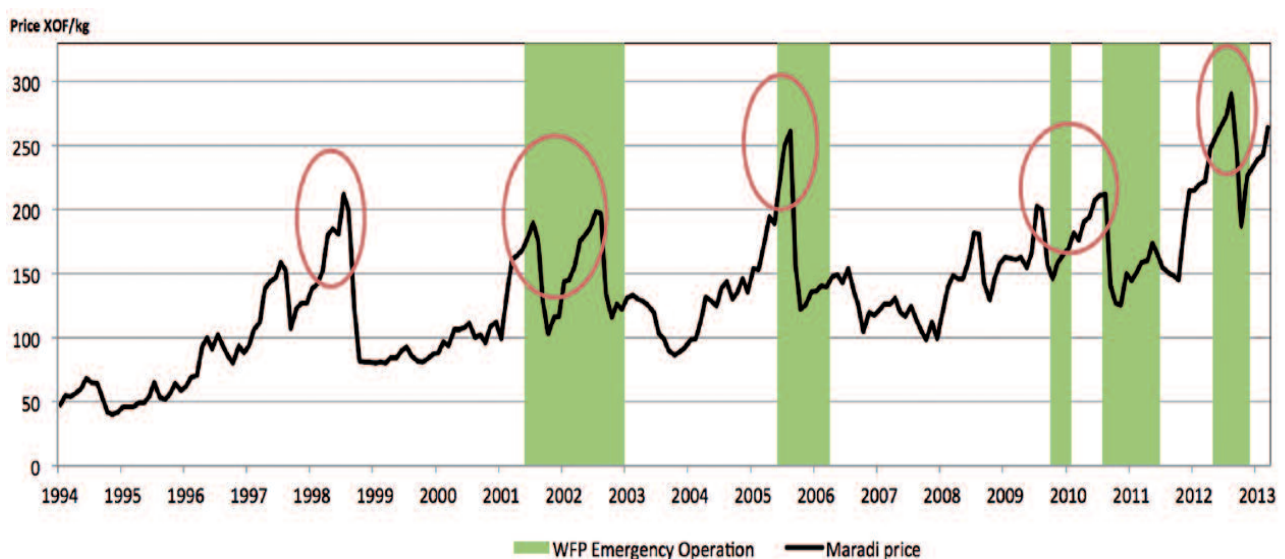
## Impact Codes

Low (< 0%)	Moderate (0-5%)
High (5-10%)	Severe (> 10%)

## Why an alert on cereal prices in Niger?

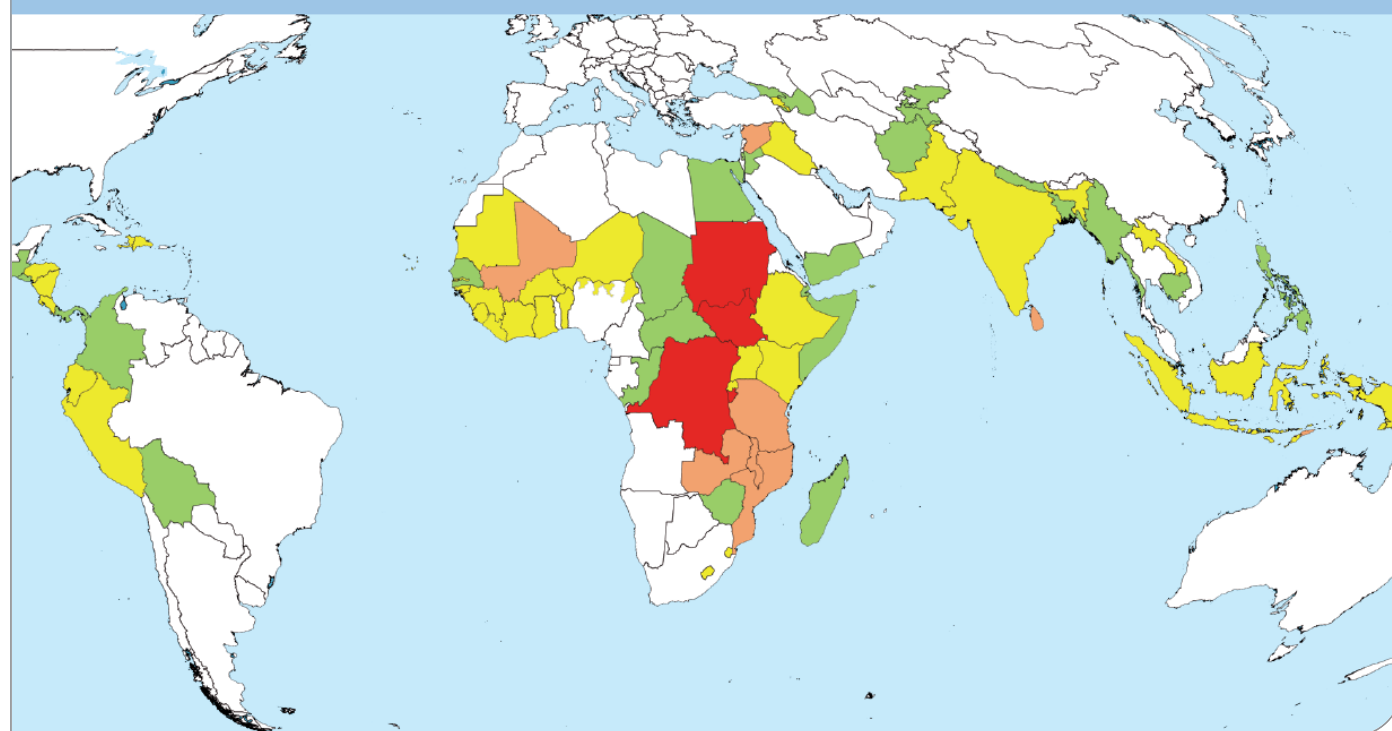
- Persistent food price spikes can cause food access problems and lead to food security crises. Food prices provide information on the supply (availability) and the demand (access) conditions over time. Food prices reflect expectations of agents (suppliers and consumers) on future supply and demand conditions. Food prices reflect the seasonal agricultural calendar, showing highs during the hunger season.
- In Niger, food price spikes coincide generally with food security crises. Local cereal prices follow a seasonal pattern: high on average during the lean season (June-September) and low with the arrival of the new harvest (October-December). The early signs of a looming food security crisis are generally detected at the beginning of the harvest, on average 3-4 months before an actual crisis occurs.

## WFP emergency operations and millet price fluctuations in Maradi (Niger)

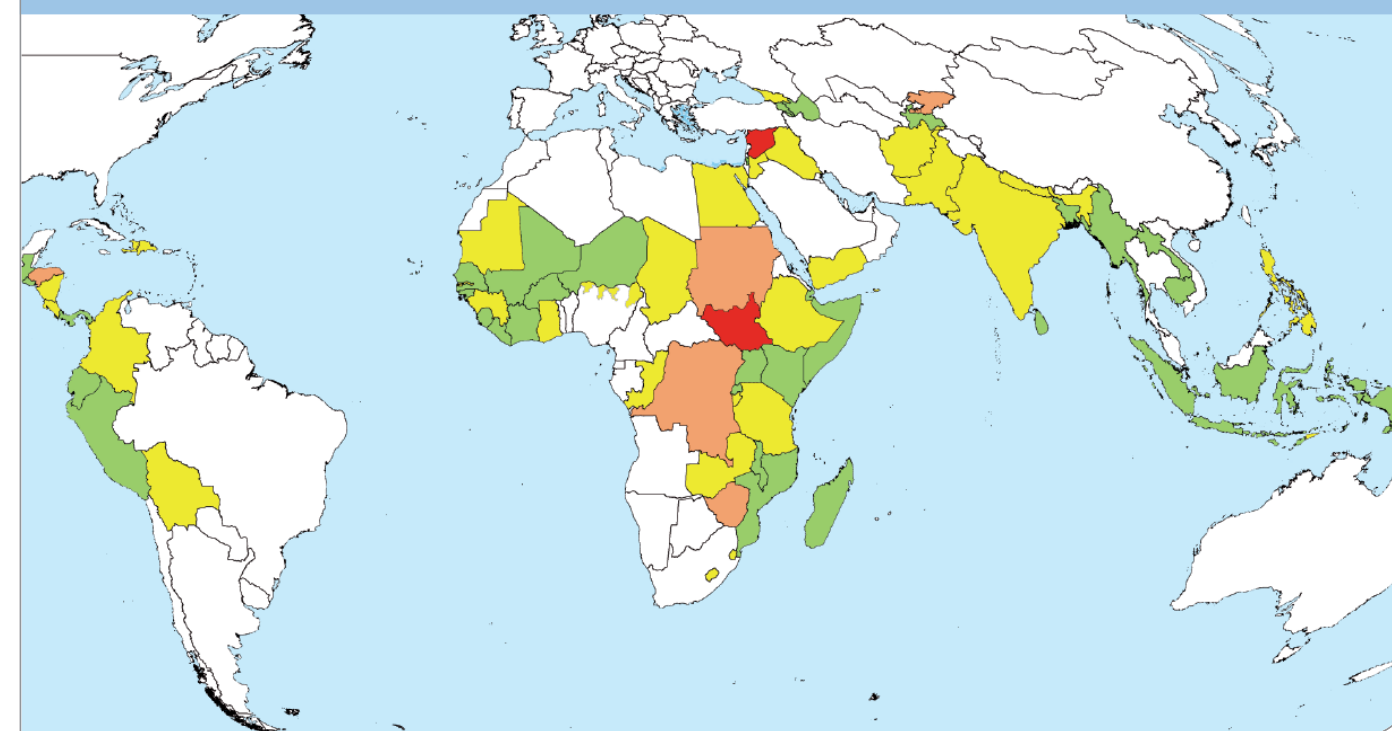


# Impact of staple commodity price changes on the cost of the basic food basket

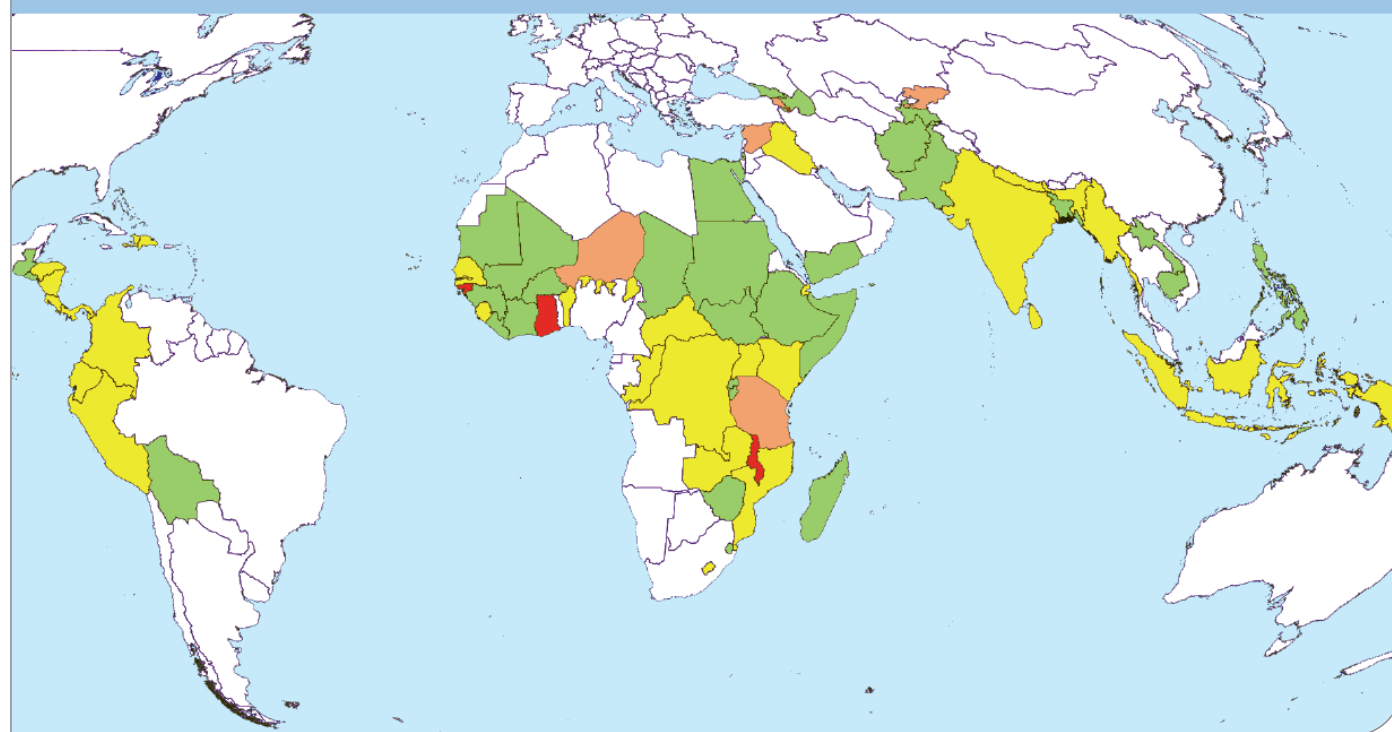
**Q2-2012** (April to June 2012)



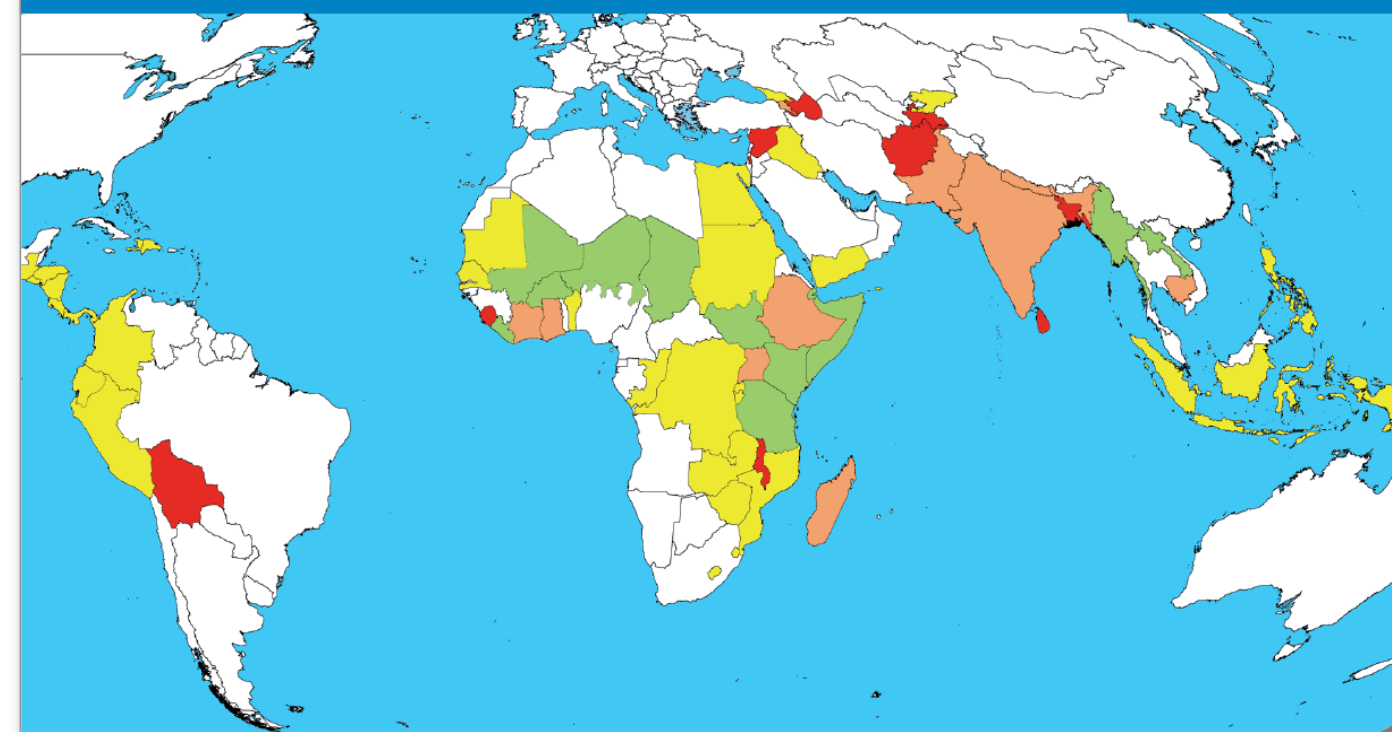
**Q4-2012** (October to December 2012)



**Q3-2012** (July to September 2012)



**Q1-2013** (January to March 2013)



**Impact Codes**

<span style="color: green;">■</span> Low (< 0%)	<span style="color: yellow;">■</span> Moderate (0-5%)	<span style="color: orange;">■</span> High (5-10%)	<span style="color: red;">■</span> Severe (> 10%)
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**Note:** Map based on pages 12-15 (Column J)  
Map produced by: VAM - Food Security Analysis (OSZA)  
Data sources: WFP, GAUL.

The boundaries and names shown and the designations used in this map do not imply official endorsement or acceptance by the United Nations.



## Special Focus 2

### Malawi: Is socio-political stability at risk due to sharply declining household purchasing power?

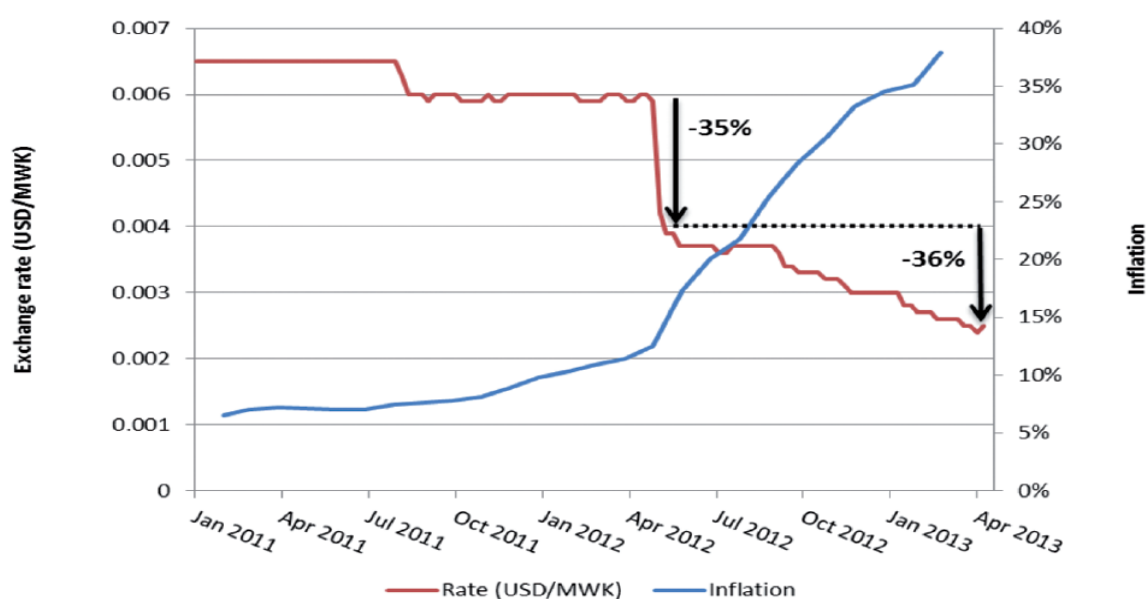
- The purchasing power of Malawians has deteriorated sharply as a result of economic measures taken in 2012. Following the devaluation of the local currency (Kwacha), the average monthly inflation rate has soared to 38% in February 2013. The price of maize, the main staple food, is more than double its price two years ago. Other important food commodities such as rice and beans have also experienced substantial price increases.
- Despite efforts to curb down soaring living costs, social unrests have recently heightened, raising concerns about socio-political stability.

#### Food purchasing power has deteriorated alarmingly as a result of currency devaluation

**The devaluation of the Kwacha has resulted in widespread food price hikes.** On May 7, 2012, the Malawian Central Bank scrapped the Kwacha's implicit peg to the dollar, causing the local currency to devalue by around 35% almost overnight. Since then, the Kwacha devalued further by another 36%. In other words, the price of 1 USD has increased by

140%, a major constraint to an economy that is dependent on imports. As a result, official year-on-year inflation rose to a historical 37.9% in February 2013, and is likely to increase further in the following months. Rice, groundnuts, and beans prices have increased by 33%, 41%, and 38% respectively since last year.

Malawi: Kwacha Exchange Rate & Inflation Rate trends (2011-2013)



Source: Accessed at [www.oanda.com](http://www.oanda.com) & [www.tradingeconomics.com](http://www.tradingeconomics.com)

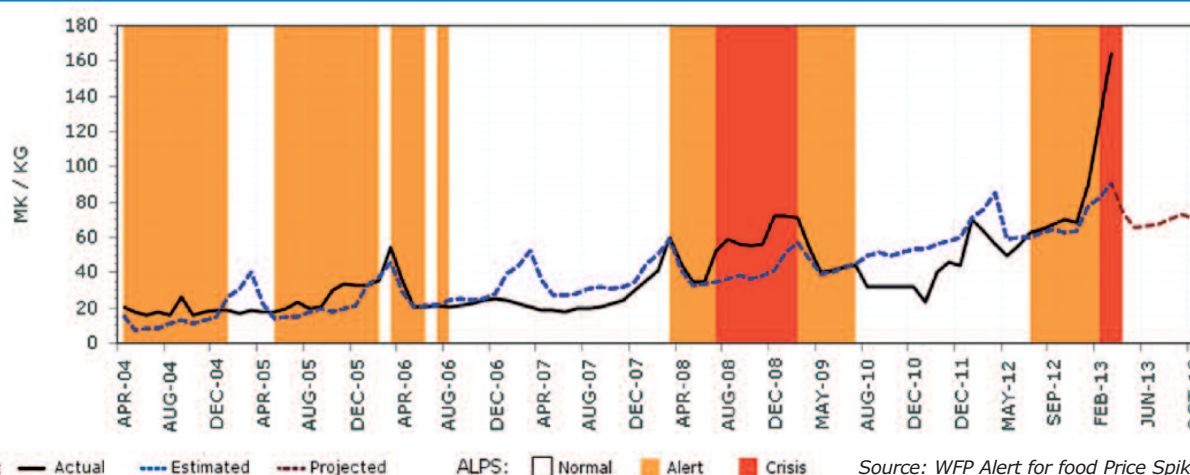
**The price of maize, the main staple food commodity, is showing unprecedented increase.** The average increase from a year before is about 177%. In addition to the currency crisis, the maize

harvest was disappointing in 2011/2012. In most markets, maize prices have more than quadrupled over the last two years. Most of the price rise occurred in late 2012 early 2013, as seen in the graph below.

**New!**

A new tool to provide alerts on abnormal seasonal food price spikes -ALPS- is now available at <http://foodprices.vam.wfp.org/ALPS-Chart.aspx>

## Malawi: Maize price trends in Lilongwe



## Policy measures have yet to ease the burden on people's living conditions

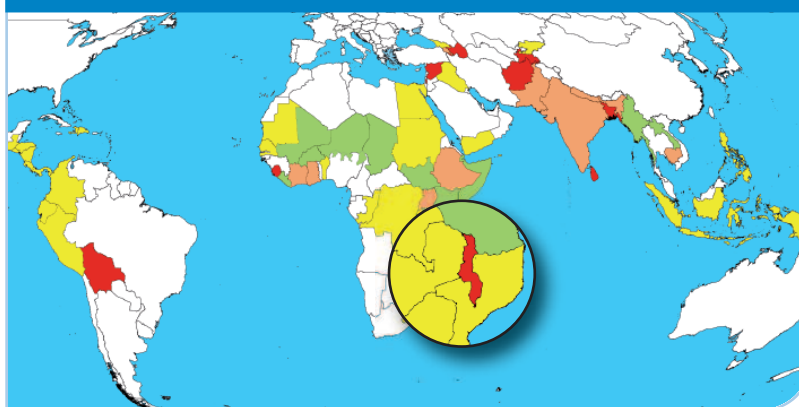
**Fuel prices have been hit by the price effect of devaluation at a time when global fuel prices are rather low.** Compared to a year ago, April 2013 diesel prices are up 93%, gasoline 117% and industrial paraffin 259%. Malawi is heavily dependent on fuel imports. In an attempt to mitigate fuel supply shortages, the government adopted an automatic pricing mechanism (APM) as part of the country's economic reforms. The policy is designed to stimulate lower domestic fuel prices as global prices drop. However the price effect of the currency devaluation is limiting the benefits of the recent reduction in global fuel prices.

**Maize supplies on the market are tight and strategic grain stocks are low. Maize supply on many markets is low.** There have been challenges in terms of stock management. Recently, there was a report of 30,000 MT of maize going bad due to storage problems. The government-controlled ADMARC (Agricultural Development and Marketing Corporation) has put in place rationing measures since January. The on-going harvest is expected to be average; however harvest estimates are not yet available. Some farmers have reportedly harvested immature green maize two months ahead of schedule, raising concerns regarding the early depletion of household food stocks.

**Tobacco export revenues are expected to recover from 2012 and benefit farmers.** Tobacco is an important cash-crop in Malawi, with as many as 70% of the country's workers directly or indirectly dependent upon the tobacco sector. The 2013 tobacco-marketing season was opened on March 11th and official projections estimate the output will be around 156,000 tonnes, almost doubling from last year's disappointing harvest. However, this is still substantially below the 2011's 235,000 tonnes. Export earnings from tobacco are projected at US\$ 300m in 2013, 69% up from 2012. This increase in revenue is expected to help households mitigate the effects of the rapidly rising living costs.

**Other developments which will also ease some of the burden of soaring living costs include salary increases for workers.** In February 2013, the government increased public workers' salaries in response to widespread strikes in the public sector. The increases range from as high as 61% for the lowest paid government workers, to 5% for the highest paid workers. Within the UN System itself, national staff have also been affected. A strike of UN local staff was ended on April 13th, after an agreement to increase salaries by 30%.

## Focus on Malawi - Q1-2013 (January to March 2013)



## Impact Codes

Low (< 0%)	Moderate (0-5%)
High (5-10%)	Severe (> 10%)

## Magnitude of quarterly price changes and contribution to the cost of the food basket, by country and commodity

									Color code	Impact (columns J-K)		Price trend (columns L-M)
									Low	< 0%	< 25%	Decreasing (< 0%)
									Moderate	0-5%	25-50%	Stable (0-5%)
									High	5-10%	50-75%	Slightly increasing (5-10%)
									Severe	> 10%	> 75%	Increasing (> 10%)
Region	Country	Main staple food	Caloric contribution (%)	Change from last quarter (% change)	Seasonally adjusted quarterly change (% change)	Monthly change from last year (% change)	Quarterly change from last year (% change)	Quarterly change from 5-year average (% change)	Contribution to the cost of the food basket (%)		Price trend	Main trend (single arrow = main staple only; double arrow = all reported staples)
									Cumulative quarterly impact from previous quarter	from 5-year av. (2003-2007)		
A	B	C	D	E	F	G	H	I	J	K	L	M
Latin America and Caribbean	Bolivia	Wheat flour	19	+14	+55	+11	+4	+892			↑	↑↑
		Rice	14	+5	+23	+9	+4	+60	+28	+182	↑	
		Maize	13	0	+11	+12	+4	+34			↑	
	Colombia	Maize	13	+7	+2	+6	0	+33			→	→
		Rice	12	+7	+7	N/A	N/A	+36	+1	+16	↗	
		Wheat flour	8	-4	-1	+9	+13	+88			↓	
	Costa Rica	Rice	17	-3	+8	N/A	N/A	+38	+1	+6	↗	↗
		Maize	3	-1	N/A	+2	+9	N/A			↓	
	Dominican Republic	Rice	17	-6	N/A	+4	+4	N/A	0	N/A	↓	↓
	Ecuador	Rice	19	+4	+6	0	+4	+32	+2	+14	↗	↗
		Wheat flour	13	+1	+3	+7	+10	+63			→	
	El Salvador	Maize	25	-2	N/A	+3	+6	N/A			↓	↓
		Beans	4	-6	+3	-20	-24	+17	+1	+1	→	
		Rice	4	-16	+9	-26	-29	+1			↗	
	Guatemala	Maize	36	-1	+12	-4	-3	+45	0	+16	↑	↑
	Haiti	Imported rice	23	-3	-1	-8	-7	+51			↓	↓
		Wheat flour	12	-2	+3	+9	+8	+61	+1	+24	→	
		Domestic maize	9	-2	+9	+3	+1	+58			↗	
	Honduras	Maize	26	+14	+11	+24	+21	+56	+3	+15	↑	↑↑
		Rice	5	+10	N/A	+30	+17	N/A			↑	
	Nicaragua	Maize	23	-1	N/A	-5	-2	N/A	+2	N/A	↓	↓
		Rice	17	+8	N/A	+21	+19	N/A			↗	
	Panama	Rice	24	+1	+12	+3	+5	+107	+3	+26	↑	↑
		Maize	7	+2	N/A	+2	+3	N/A			→	
	Peru	Rice	21	-4	N/A	-5	-16	N/A			↓	↓
		Wheat	14	0	+4	-1	-1	+5	+1	+6	→	
		Potatoes	8	+1	+5	+3	+2	+32			↗	
		Maize	7	+3	-1	-1	+4	+42			↓	



Region	Country	Main staple food	Caloric contribution (%)	Change from last quarter (% change)	Seasonally adjusted quarterly change (% change)	Monthly change from last year (% change)	Quarterly change from last year (% change)	Quarterly change from 5-year average (% change)	Contribution to the cost of the food basket (%)		Price trend	Main trend (single arrow = main staple only; double arrow = all reported staples)
									Cumulative quarterly impact from previous quarter	from 5-year av. (2003-2007)		
A	B	C	D	E	F	G	H	I	J	K	L	M
Southern Africa	Congo	Cassava	32	+1	N/A	+3	+4	N/A	+4	+10	→	→
		Wheat flour	18	+10	+19	+5	+7	+53			↑	
	Congo (DR)	Cassava products	53	+2	N/A	+18	+26	N/A	0	N/A	→	→
		Maize	14	-10	N/A	+21	+14	N/A			↓	
	Lesotho	Maize	56	0	N/A	+14	+15	N/A	0	N/A	→	→→
		Wheat flour	14	+2	N/A	+4	+4	N/A			→	
	Madagascar	Domestic rice	49	+2	+18	-2	-3	+25	+9	+12	↑	↑
	Malawi	Maize	53	+76	+61	+179	+117	+366	+32	+194	↑	↑
	Mozambique	Maize	20	+13	+8	+56	+50	+139	+3	+41	↗	↗
		Rice	8	+2	+14	+7	+4	+169			↑	
	Swaziland	Maize meal	25	-5	+3	+16	+21	+338	0	+85	→	→
		Rice	8	-2	N/A	+2	+2	N/A			↓	
	Tanzania	Maize	26	-1	N/A	-6	-6	N/A	-1	+20	↓	↓↓
		Rice	10	+15	-5	+69	+75	+202			↓	
Zambia	Maize	51	+10	+22	+15	+15	+131	+1	+67	↑	↑	
Zimbabwe	Maize	41	+25	+4	+34	+31	+59	+2	+24	→	→	
Central and Eastern Africa	Burundi	Sweet potatoes	17	-20	-26	-9	-7	+113	+1	+78	↓	↓
		Beans	16	+4	+30	+42	+33	+151			↑	
		Cassava flour	13	-2	+2	0	+3	+150			→	
		Maize	13	+2	+2	+27	+27	+114			→	
	Djibouti	Wheat flour	34	0	N/A	-4	-3	N/A	-1	N/A	→	→
		Rice	17	-4	N/A	-8	-7	N/A			↓	
	Ethiopia	Maize	21	0	+15	+4	+5	+290	+6	+113	↑	↑↑
		Wheat	12	0	+15	-3	-3	+218			↑	
		Sorghum	12	-3	+11	+19	+16	+216			↑	
	Kenya	Maize	35	-5	-11	+8	-4	+118	-4	+41	↓	↓
	Rwanda	Beans	11	-13	+17	+26	+17	+108	+3	+17	↑	↑↑
		Maize	5	-1	+14	-2	+1	+111			↑	
	Somalia	Sorghum	29	-9	N/A	N/A	N/A	N/A	-4	N/A	↓	↓↓
		Imported rice	9	-10	N/A	N/A	N/A	N/A			↓	
	South Sudan	Sorghum	26	-8	-14	+16	+5	+358	-6	+93	↓	↓↓
		Wheat Flour	15	-14	N/A	+23	+19	N/A			↓	
	Uganda	Cassava flour	13	+2	-3	-8	+1	+166	+5	+47	↓	↓
		Maize flour	9	+32	+41	+18	+38	+212			↑	
Beans		5	+2	+5	+8	+7	+125	↗				



Region	Country	Main staple food	Caloric contribution (%)	Change from last quarter (% change)	Seasonally adjusted quarterly change (% change)	Monthly change from last year (% change)	Quarterly change from last year (% change)	Quarterly change from 5-year average (% change)	Contribution to the cost of the food basket (%)		Price trend	Main trend (single arrow = main staple only; double arrow = all reported staples)
									Cumulative quarterly impact from previous quarter	from 5-year av. (2003-2007)		
A	B	C	D	E	F	G	H	I	J	K	L	M
West Africa	Benin	Maize	19	+7	+7	+3	+2	+59			↗	↗
		Cassava products	16	+2	+3	+15	+14	+53	+3	+28	→	
		Rice	13	0	+6	0	0	+61			↗	
	Burkina Faso	Sorghum	26	-5	-7	-11	-8	+53			↓	↓↓
		Millet	22	-14	-13	-6	-1	+64	-5	+36	↓	
		Maize	16	-1	-4	-9	-8	+50			↓	
	Chad	Sorghum	18	+6	+2	-7	-6	+57			→	→
		Millet	15	-2	-5	-9	-9	+42	-1	+20	↓	
		Maize	5	-7	-6	-26	-24	+41			↓	
		Imported rice	3	-1	-2	+1	+8	+36			↓	
	Côte d'Ivoire	Imported rice	20	-2	+7	-13	-13	+39			↗	↗
		Palm oil	9	+5	+26	+12	+14	+49	+5	+16	↑	
		Maize	7	+5	+14	+19	+21	+52			↑	
	Ghana	Cassava	21	+20	+1	+83	+88	+319			→	→
		Maize	12	0	-2	-18	-18	+245			↓	
		Yams	11	+20	+18	+35	+41	+375	+6	+183	↑	
		Plantains	10	+20	+39	+21	+61	+332			↑	
		Local rice	8	-2	+5	+10	+5	+155			↗	
	Liberia	Rice	32	N/A	N/A	N/A	N/A	N/A			N/A	↓
		Cassava	21	-13	N/A	-15	-13	N/A	-4	+17	↓	
		Palm oil	15	-4	-5	+4	+19	+112			↓	
	Mali	Rice	21	+1	+2	-5	-5	+29			→	→
		Millet	20	-20	-17	-16	-12	+77	-3	+35	↓	
		Sorghum	13	-18	0	-25	-23	+60			→	
		Maize	9	-8	+1	-21	-21	+58			→	
	Mauritania	Wheat	30	0	N/A	-4	-3	N/A	+1	+4	→	→
		Imported rice	11	+6	+6	+19	+18	+37			↗	
	Niger	Millet	39	+10	-4	+8	+5	+64			↓	↓
		Sorghum	11	+4	-5	+9	+4	+60	-2	+36	↓	
		Imported rice	7	-1	+2	-1	0	+51			→	
		Maize	1	+1	-2	+8	+5	+53			↓	
	North Nigeria	Sorghum	13	+5	-5	+20	+12	+61			↓	↓↓
		Millet	11	+8	-3	+19	+12	+66	-2	+23	↓	
		Rice	8	+1	-7	+6	+3	+37			↓	
		Maize	8	+6	-2	+12	+10	+62			↓	
	Senegal	Imported rice	30	+2	+7	-12	-10	+36			↗	↗
		Maize	10	-3	-2	+1	+4	+61	+2	+20	↓	
		Millet	8	+1	+2	+4	+7	+36			→	
	Sierra Leone	Imported rice	40	+15	N/A	+4	+4	N/A	+12	N/A	↑	↑↑
		Palm oil	9	+63	N/A	+82	+82	N/A			↑	

Region	Country	Main staple food	Caloric contribution (%)	Change from last quarter (% change)	Seasonally adjusted quarterly change (% change)	Monthly change from last year (% change)	Quarterly change from last year (% change)	Quarterly change from 5-year average (% change)	Contribution to the cost of the food basket (%)		Price trend	Main trend (single arrow = main staple only; double arrow = all reported staples)
									Cumulative from previous quarter	Quarterly impact from 5-year av. (2003-2007)		
A	B	C	D	E	F	G	H	I	J	K	L	M
Middle East, North Africa and Central Asia	Armenia	Wheat flour	40	0	+16	+27	+22	+54	+6	+22	↑	↑
	Azerbaijan	Wheat flour	57	-3	+25	+4	+3	+125	+14	+71	↑	↑
	Egypt	Wheat flour	35	+4	N/A	+7	+4	N/A	+2	N/A	→	→
		Rice	12	+9	N/A	-18	-9	N/A			↗	
	Georgia	Wheat flour	41	-5	+4	+7	+3	+58	+2	+24	→	→
	Iraq	Wheat flour	25	-1	N/A	+2	+2	N/A			↓	
		Rice	8	0	N/A	+6	+6	N/A	0	N/A	→	↓
		Bread	8	-1	N/A	+2	+1	N/A			↓	
	Kyrgyzstan	Wheat	40	-2	N/A	+22	+19	N/A			↓	
		Milk	12	+6	N/A	+10	+6	N/A	+3	N/A	↗	↓
		Potatoes	8	+30	N/A	+83	+75	N/A			↑	
	Occupied Palestinian Territory	Wheat flour	40	+3	+27	-6	+7	+53			↑	
		Rice	7	-2	+4	-13	-13	+28	+11	+25	→	↑
		Olive oil	5	-3	+7	-5	-4	+33			↗	
	Sudan	Sorghum	60	+7	-27	-8	+9	+343	+1	+236	↓	↓
		Millet	9	+4	+2	+21	+27	+340			→	
	Syria	Wheat flour	39	+42	N/A	+116	+134	N/A	+17	N/A	↑	↑
		Sugar	13	+6	N/A	+13	+29	N/A			↗	
Asia	Tajikistan	Wheat	54	0	+42	+13	+8	+256	+23	+138	↑	↑
	Yemen	Wheat	38	+3	N/A	+5	+5	N/A	+1	N/A	→	→
	Afghanistan	Wheat	58	+4	+18	+12	+11	+117			↑	
		Rice	22	+10	+72	+47	+46	+137	+26	+98	↑	↑↑
	Bangladesh	Boro-HYV-Coarse	70	+10	+28	+4	-3	+66			↑	
		Atta-Packet	9	+2	+16	+5	+10	+62	+21	+52	↑	↑↑
	Cambodia	Rice	65	-6	+11	-5	-3	+102	+7	+66	↑	↑
	India	Rice	31	+4	+10	+22	+21	+124	+5	+57	↑	↑
		Wheat	22	+4	+9	+25	+25	+85			↗	
	Indonesia	Rice	50	+2	+5	+3	+3	+140	+3	+70	↗	↗
	Lao PDR	Rice	64	-2	N/A	-13	-12	N/A	-1	N/A	↓	↓
	Myanmar	Rice	55	-8	N/A	-32	-32	N/A	-5	N/A	↓	↓
	Nepal	Rice	32	+2	+11	+9	+7	+90			↑	
		Wheat flour	15	+6	+16	+16	+15	+85	+6	+42	↑	↑↑
	Pakistan	Wheat flour	37	+8	+16	+17	+17	+165			↑	
		Rice	6	+2	+16	+19	+19	+250	+7	+76	↑	↑↑
	Philippines	Rice	48	0	+4	-1	-1	+65	+2	+31	→	→
	Sri Lanka	Rice	41	-4	+18	+2	+1	+74	+13	+57	↑	↑↑
		Wheat flour	14	+2	+43	+22	+23	+192			↑	
	Timor-Leste	Rice	32	+2	N/A	-10	-10	N/A			→	
		Maize	26	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	→





# Approach

This bulletin provides information on price changes for staples and their impact on the cost of the basic food basket. Staples contribute 40 – 80 percent of energy intake for the most vulnerable population groups in developing countries. Therefore, even a small increase in staple food prices has a high impact on overall food consumption, especially when the food basket is composed of very few food items. In other words, households with diverse calorie sources are likely to be less affected by price rises than households with a single calorie source, unless significant price increases are witnessed for each major caloric contributor of the food basket. The analysis is based on quarterly price indices<sup>5</sup> of the main caloric contributors to average household food consumption (table on pages 12-15):

- i) Nominal price changes from the last quarter (column E) are calculated as a percentage change of quarterly averaged nominal prices from the previous quarter.
- ii) Seasonally adjusted price changes from the last quarter (column F) are calculated as a percentage change of quarterly averaged real prices from the previous quarter. Real prices are calculated by dividing each monthly nominal price by their corresponding 5-year (2003-2007) average (a.k.a. long-term seasonal averages).
- iii) Monthly (year-on-year) price changes (column G) are calculated as a percentage change of monthly nominal prices from the same month in the previous year. When data for the third month of the quarter is not available for both years, data for the second or first month of the quarter is used, as available.
- iv) Quarterly price changes from the last year (column H) are calculated as the quarterly averages of the three relevant months' year-on-year percentage change.
- v) Quarterly price changes from the 5-year baseline period (column I) are calculated as the quarterly averages of the three relevant months' percentage changes from the corresponding 2003-2007 average prices. This estimate indicates whether there is a structural shift of the current price from its long-term seasonal pattern<sup>6</sup>.

The percentage changes of these quarterly price indices indicate the extent to which recent price changes can be considered normal or abnormal as compared to the relevant reference period (i.e. the previous quarter, the preceding year, or the 5-year reference period). Column D displays the contribution of each food item to households' total energy intake.

Assuming that the caloric contribution is a proxy of the relative importance of the food item in the food basket<sup>7</sup>, the likely impact of the last quarter's average price change on the cost of the food basket is presented in column J (i.e. the percentage price change in column F weighted by the caloric contribution of the food item in column D). The estimated change since the 5-year baseline is presented in column K (i.e. the percentage price change in column I weighted by the caloric contribution of the food item in column D). The likely impact of recent price changes on the cost of the food basket (Column J) is considered low when the weighted average price change is below 0, moderate when it is between 0 and 5%, high between 5 and 10%, and severe above 10%. The estimated cumulative change since the baseline (Column K) is considered low when the weighted average price change is between 0 and 25%, moderate when it is between 25 and 50%, high between 50 and 75%, and severe above 75%.

While this approach can help to gauge how vulnerable households are likely affected by food price changes, results should be interpreted with caution as they do not capture the impact of the long-term trend in food prices. Furthermore, the approach measures only direct impacts using a reduced food basket while an indirect impact is not accounted for. For instance, substitution and income effects due to price changes are disregarded. Similarly, it does not provide insights into the causes of the price increases. Finally, this approach does not account for the severity of the likely impact; it may differ between households due to different incomes and food baskets according to wealth or livelihoods groups and coping capacity.

5. Prices are calculated as indices, using reference years, i.e., last year to capture 12-month percentage changes and last 5 years to capture percentage changes from the long term patterns.

6. Prices normally vary throughout a year due to seasonal patterns of the production cycle. Accounting for seasonality helps differentiating between normal seasonal price variations and additional changes which can be considered abnormal, depending on the magnitude of those changes.

7. Caloric contributions are based on FAO 2005-2007 estimates. Comparing FAO estimates of calorie contribution of each food item with a study by Reardon (1993) for selected countries in Africa, it appears in rural areas that the majority of households get most of their calorie intake from a few food items. The national patterns will likely reflect the rural patterns, assuming most of households live in rural and semi-urban areas in the developing countries.

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