



Issue 26 | January 2015

# 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, and consumer price indices for 68 countries in the fourth quarter of 2014 (October to December).<sup>1</sup> The maps on pages 6–7 disaggregate the impact analysis to sub-national level.

## Global Highlights

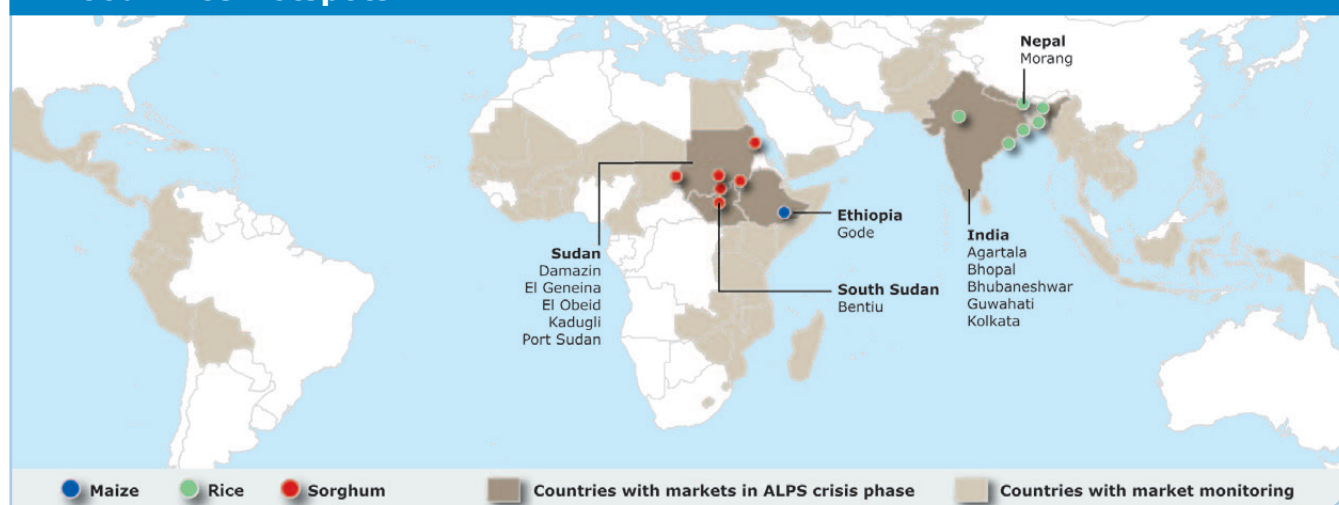
- During Q4-2014, **FAO's global cereal price index decreased by 7%** year-on-year, but on average, it remained at the level of the previous quarter.
- Real prices<sup>2</sup> of maize have fallen by 14% since Q4-2013.** They are up 1% from the previous quarter.
- Real prices of rice fell and are down by an average 2% since Q3-2014.** Global export supplies are at a record high, as are consumption projections for 2014/15.
- In Q4-2014, **real prices for crude oil dropped by a third** compared to the year before.
- Despite the low global price levels for staple foods, the **cost of the minimum food basket increased severely (>10%) during Q4-2014 in Armenia, Chad, Guinea-Bissau, the Kyrgyz Republic, South Sudan and Syria.** High increases (5–10%) were seen in Burkina Faso, Honduras, Kenya, Liberia and Northern Nigeria. In the other 56 monitored countries, the impact of commodity price changes was low or moderate (<5%).
- Price spikes, as monitored by **ALPS** (Alert for Price Spikes), are evident in **Ethiopia, India, Nepal, South Sudan and Sudan** (see the map below).<sup>4</sup> These spikes indicate crisis levels for the most important staple in the country, whether it is maize, sorghum or rice.

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

Quarterly Change	Maize	Wheat	Rice	Note: Comparison to
q4-2014 vs. q3-2014	1%	0%	-2%	Third quarter in 2014
q4-2014 vs. q4-2013	-14%	-17%	-8%	Same quarter in 2013
q4-2014 vs. q1-2008		-42%		Global wheat price peak in 2008
q4-2014 vs. q2-2008	37%		-59%	Global maize and rice price peak in 2008

- On average, real prices of wheat remained constant between Q3 and Q4-2014.** Global wheat supplies for 2014/15 are projected to rise by 19 million tons against 2013/14 estimates<sup>3</sup> thanks to increased production and beginning stocks; thus price levels in Q4-2014 are 17% lower than a year ago.

## Food Price Hotspots<sup>4</sup>



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

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 on 16 January 2015.

2. Nominal prices are adjusted by the [US Consumer Price Index](#).

3. USDA: [World Agricultural Supply and Demand Estimates](#), January 2015.

4. A market is designated as a hotspot when prices for the country's most important caloric contributor reached ALPS crisis level during Q4, and they did not return to normal levels by the end of the quarter. Note that for some markets/countries, prices are monitored but the price series may not necessarily qualify for ALPS calculation (see [ALPS website](#) for details).

# 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 from October to December 2014 compared to the previous quarter was high in **Honduras**; moderate in **Colombia**, the **Dominican Republic**, **Guatemala** and **Mexico**; and low in the other countries.

#### • Staple commodity prices:

Food price trends from Q3 to Q4-2014 were stable or decreasing in most countries of the region. Seasonally adjusted quarterly prices for red beans decreased in Q4 in **El Salvador** (-19%), **Honduras** (-3%) and **Nicaragua** (-16%) thanks to the *Postrera* harvest. Nonetheless, red bean prices remained far above the five-year baseline (**El Salvador** +55%; **Honduras** +89%; **Nicaragua** +110%) because of low red bean production in 2014 and the shift of planted land to black bean production. Seasonally adjusted prices of maize rose sharply in Q4 compared to Q3 in **El Salvador** (+13%), **Honduras** (+13%) and **Nicaragua** (+19%), reflecting the reduced *Primera* harvest in August/September. In **Haiti**, maize was 7% more expensive in

Q4 after seasonal adjustments. Major reductions in import flows from Venezuela after the partial border closure in August led to sharp increases in the nominal price of cooking oil in **Colombia**. Quarterly oil prices were 43% higher than the baseline.

• **Fuel prices:** Between Q3 and Q4-2014, **Guatemala** saw a sharp fall in the average prices of gasoline (-12.6%) and diesel (-9.7%). Similarly, in **Honduras** gasoline prices fell by 9.5%, while diesel was down 8.5%. In **Colombia**, the price of diesel decreased just slightly from the previous quarter (-0.7%).

• **Purchasing power:** The average headline quarterly inflation in Latin America and the Caribbean was low and stable in most countries between Q3 and Q4-2014.

Quarterly food inflation was moderate in **Dominican Republic** (+2.2%) and **Nicaragua** (+3.7%). Year-on-year (y/y) food inflation increased in **Nicaragua** (+12.9%) and **Honduras** (+6.2%). It continued to decelerate in **Bolivia** (+4.3%).



### Southern Africa

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket from October to December 2014 compared to the previous quarter was moderate in **Madagascar** and low in the other countries of the region.

#### • Staple commodity prices:

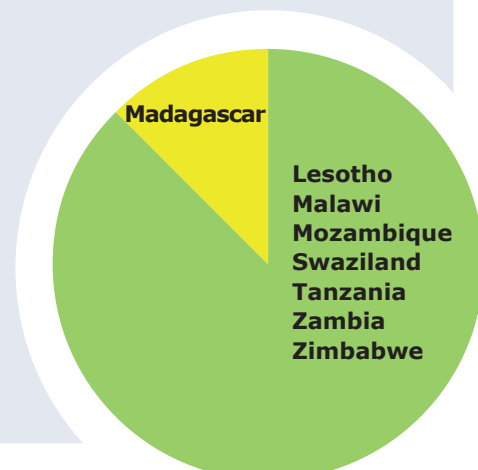
Price trends remained generally stable or decreasing in the region between Q3 and Q4-2014. Thanks to the bumper maize harvest of 2014, seasonally adjusted quarterly prices for maize were far below the previous quarter's levels in **Malawi** (-17%), **Tanzania** (-19%) and **Zambia** (-26%), as well as in **Mozambique** (-3%) and **Zimbabwe** (-6%). By contrast, seasonally adjusted prices soared for cassava meal in **Zambia** in the *Southern* (+21%), *North-Western* (+35%) and *Lusaka* (+15%) regions. The **ALPS** indicator also showed that several Zambian

markets were at *alert* level in December for maize grain.

• **Fuel prices:** In **Tanzania**, retail prices fell for gasoline (-5.3%) and diesel (-5.1%) in Q4-2014 compared to the previous quarter. Prices remained constant in **Madagascar**.

• **Purchasing power:** Quarterly changes in the Consumer Price Index (CPI) and in the food CPI have been low or negative in most countries. The exception is **Malawi**, where quarterly inflation climbed in Q4-2014 (+8.6%) because of the (partly seasonal) increase in food prices (q/q food CPI increased by 14.2%) and the depreciating

Kwacha currency. Y/y headline inflation was moderate in **Tanzania** (+5.5%) and **Zambia** (+8%), mainly driven by food inflation.



## Central and Eastern Africa

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket from October to December 2014 compared to the previous quarter was severe in **South Sudan**, high in **Kenya**, and moderate in **Djibouti**, **Ethiopia** and **Somalia**.

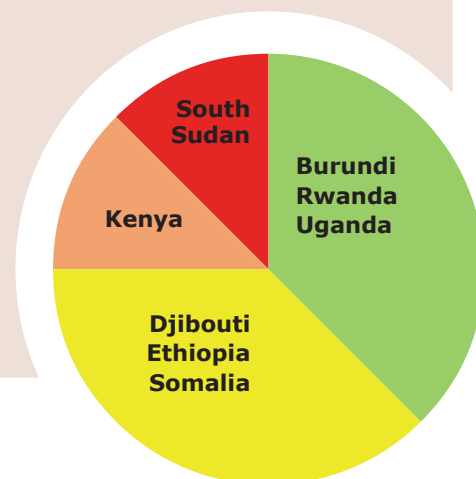
- **Staple commodity prices:**

Commodity price trends in the region were mixed compared to the previous quarter. In **South Sudan**, **Somalia** and **Kenya**, seasonally adjusted prices for the main commodities increased. In **South Sudan**, seasonally adjusted prices rose for sorghum (+13%) and millet (+30%) compared to Q3-2014, as the ongoing conflict affected agricultural activities and reduced planted areas. In the state of *Unity*, for instance, nominal sorghum prices were 70% higher than in Q3. In **Somalia**, seasonally adjusted sorghum prices increased in the *Woqooyi Galbeed* (+7%), *Awdal* (+12%) and *Nugaal* (+7%)

regions because of consecutive below-average cereal production, trade disruption caused by civil conflict and reduced humanitarian assistance. In **Kenya**, increases in seasonally adjusted food prices affected bread (+9%), cooking oil (+19%) and milk (+7%).

- **Fuel prices:** In **Ethiopia**, petrol was slightly less expensive than in Q3 (-2.1%), as was diesel (-1.6%). Consequently, the y/y inflation rate decreased for gasoline (+3.9%) and diesel (+5.1%). Prices in Kenya also fell for gasoline (-15%) and diesel (-7.7%) against the previous quarter.

- **Purchasing power:** In central and eastern African countries, Q4 quarterly food and headline inflation was low. In spite of a decrease, headline y/y inflation remained fairly high in **Ethiopia** (+6.2%) and **Kenya** (+6.2%).



## West Africa

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket from October to December 2014 was severe in **Chad** and **Guinea-Bissau**; high in **Burkina Faso**, **Liberia** and **northern Nigeria**; and moderate in **Cape Verde**, **Côte d'Ivoire**, **Ghana**, **Mali**, **Niger** and **Senegal**.

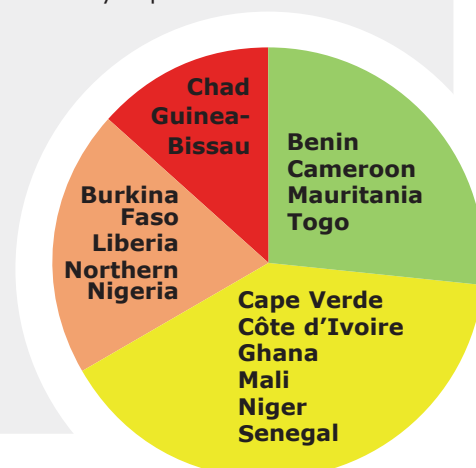
- **Staple commodity prices:**

Inadequate rainfall reduced crop yields in **Chad** with consequent price increases for sorghum (+18%). The conflict in the **Central African Republic** has also disrupted livestock trade and increased the number of refugees in **Chad**. As a result, seasonally adjusted staple food prices soared in the southern regions: sorghum prices rose by 29% in *Logone Occidental* and by 62% in *Logone Oriental*; millet prices rose by 15% in *Barh Koh* and by 57% in *Logone Oriental*. Staple prices also increased around Lake Chad as a consequence of both trade restrictions with **Nigeria** and insecurity: maize cost 26% more in the *Lac* region in **Chad**, and millet cost 11% more in **Niger's Diffa** region. The conflict in northern **Nigeria** pushed up seasonally adjusted prices for sorghum (+10%), millet (+10%), rice (+12%) and maize (+13%). It also affected trade with **Niger**,

where seasonally adjusted prices for sorghum increased in *Maradi* (+12%), *Tillabéri* (+11%) and *Zinder* (+10%). In **Ghana**, a prolonged dry season damaged harvest prospects for maize: the seasonally adjusted price rose by 21% in Q4-2014 and reached *ALPS crisis* level in several markets in October. In **Liberia**, persistent restrictions to cross-border movements and currency depreciation pushed up the seasonally adjusted price of imported rice by 15%. Seasonally adjusted cassava prices increased by as much as 65% in the Ebola-affected province of *Grand Bassa* in **Liberia**. In **Guinea-Bissau**, seasonally adjusted prices were up for local millet (+16%), sugar (+19%) and imported rice (+11%) because of below-average production.

- **Fuel prices:** Diesel prices increased significantly in **Gambia** (+4.6%) in Q4-2014.

- **Purchasing power:** The quarterly headline inflation rate was negative in **Benin** (-3.4%), driven by negative quarterly changes in the food CPI. In **Senegal**, the economy has been in a deflationary period since February 2014, predominantly caused by low international food prices. **Ghana** saw high quarterly headline inflation (+3.4%) and y/y headline inflation (+17%), because of the continued impact of currency depreciation.



## Middle East, North Africa and Central Asia

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket from October to December 2014 was severe in **Armenia, Kyrgyz Republic, and Syria**. It was moderate in **Palestine and Tajikistan**.

### • Staple commodity prices:

Most staple commodity prices were stable or falling between Q3 and Q4-2014. Nevertheless, seasonally adjusted potato prices soared in **Armenia** (+48%) in Q4-2014 because of significant crop failure in the main producing area of the country. In the **Kyrgyz Republic**, seasonally adjusted potato prices increased by 26%, and the **ALPS** indicator was at *alert* level in four monitored markets in November. Seasonally adjusted wheat prices were also up in the **Kyrgyz Republic** (+5%) because of below-average yields in September-October and the effects of currency depreciation on import prices. In **Syria**, nominal prices for wheat flour, sugar and oil rose by between 9 and 15%. A favourable harvest in Sudan saw seasonally adjusted prices fall for sorghum (-15%) and millet (-11%). However, prices remained

above 2013 levels (+34% for sorghum and +58% for millet) because of fast stock depletion, the intensification of informal exports to **South Sudan** and a persistent rise in transportation costs. The largest y/y price increases for millet were seen in *Blue Nile* (+85%), *South Kordofan* (+83%) and *Kassala* (+83%). Staple food prices fell in **Yemen**: seasonally adjusted quarterly prices decreased for imported rice (-11%), sugar (-11%) and vegetable oil (-7%) following a drop in fuel prices. Wheat prices were lower in all Yemeni markets (-13%) although they remained at **ALPS** stress level in the conflict-affected province of *Sa'ada*.

• **Fuel prices:** In **Yemen**, prices fell for gasoline (-13.5%) and diesel (-11.8%). However, they were significantly higher than 2013 levels (+20% for gasoline and +50% for diesel).

### • Purchasing power: Egypt

registered the highest y/y headline inflation (+10.3%) and y/y food inflation (+9%), attributable to the cut in fuel subsidies in July 2014. In **Palestine**, falling oil and international food prices dragged down the q/q (-2.2%) and y/y food inflation (-1.6%), which turned negative in spite of a rise in domestic wheat and sugar prices.



## Asia

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket from October to December 2014 was moderate in **Cambodia, Indonesia, Lao PDR, Pakistan, Sri Lanka and Thailand**. It was low in the remaining countries of the region.

• **Staple commodity prices:** For all reported staple commodities, national average prices were either falling or fairly stable between Q3 and Q4-2014. Seasonally adjusted prices for rice fell in **Bangladesh** (-4%), **Cambodia** (-9%), **India** (-6%), **Myanmar** (-3%), **Nepal** (-2%) and **Pakistan** (-3%), thanks to a favourable winter harvest. In **Sri Lanka**, the nominal rice price rose in Q4-2014 (+7%) and was 31% higher than last year because of poor yala rice output in August-September, estimated to be 30% below 2013 levels. Moreover, **ALPS** still shows *alert* and *crisis* levels for two thirds of the monitored markets in India in December. Despite a good harvest season, quarterly wheat prices in **Afghanistan** were 9% higher than last year because of currency depreciation since August 2014.

Annual increases were registered in the border provinces of *Hirat* (+14%), *Badakhshan* (+16%) and *Fayrab* (+10%). In **India**, seasonally adjusted wheat prices fell by 4% in Q4-2014 thanks to a combination of ample reserves and weak exports. Nonetheless, prices were 3% higher than last year because of government purchases at higher minimum prices.

• **Fuel prices:** In Q4-2014, **India** saw lower quarterly prices for gasoline (-8.9%) and diesel (-5.9%). Prices also fell in **Lao PDR** (petrol -4.3% and diesel -3.2%) and **Pakistan** (petrol -5.3% and diesel -4.3%). Quarterly diesel prices dropped significantly in **Afghanistan** (-7.4) and **Sri Lanka** (-7.5%).

• **Purchasing power:** Quarterly changes in the CPI were low or

slightly negative in most countries. Despite the general reduction in staple commodity prices, y/y headline inflation in **Indonesia** was 6.7%. Y/y inflation was moderate in **Lao PDR** (+2.8%), Philippines (+3.6%), **India** (+ 5%) and **Pakistan** (+4.7%).





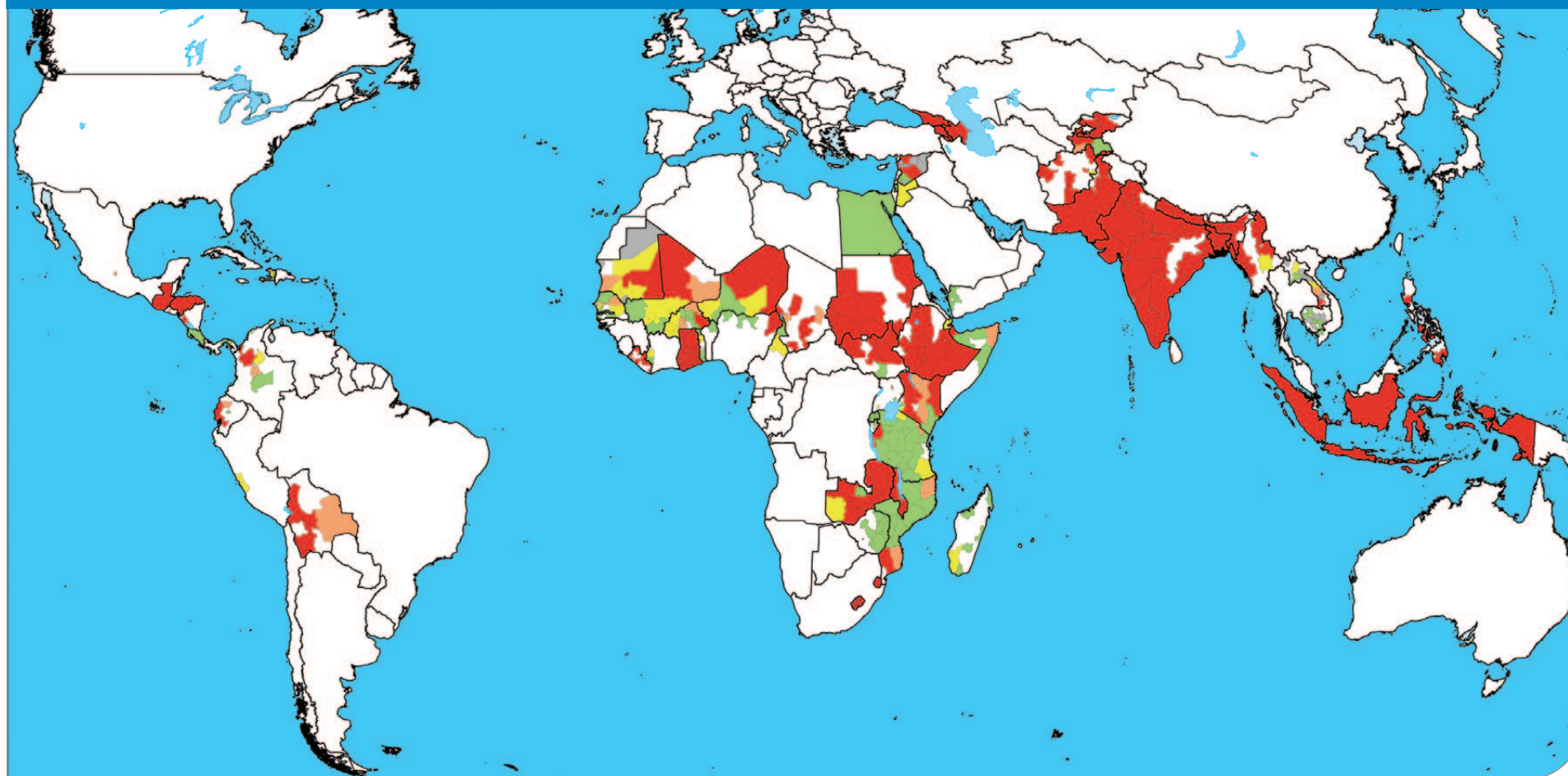
## Consumer Price Index and Fuel Prices

Region	Country	Quarterly and Yearly Changes in Q4-2014 (October-December)							
		Quarter-on-Quarter				Year-on-Year			
		General CPI	Food CPI	Gasoline	Diesel	General CPI	Food CPI	Gasoline	Diesel
Latin America and Caribbean	Bolivia	0.62%	0.26%			4.42%	4.28%		
	Colombia	0.17%		-1.17%	-0.72%	3.20%		2.50%	1.12%
	Costa Rica	-0.11%	0.91%			5.57%	6.15%		
	Dominican Republic	0.09%	2.24%			2.64%	5.60%		
	Ecuador	0.75%	0.78%			3.73%	4.48%		
	El Salvador	-0.41%				1.37%			
	Guatemala	0.42%		-12.58%	-9.73%	3.32%		-12.50%	-13.90%
	Haiti	1.67%	1.14%			6.44%	5.67%		
	Honduras	0.56%	1.08%	-9.47%	-8.50%	6.18%	6.20%		
	Mexico	1.36%	1.41%			3.86%	5.72%		
	Nicaragua	1.06%	3.71%			6.89%	12.88%		
Southern Africa	Panama	-3.17%				-1.42%			
	Peru	0.30%				3.15%			
	Lesotho	0.10%	-2.82%			3.83%	2.47%		
	Madagascar	0.89%		0.00%	0.00%	5.11%			
	Malawi	8.57%	14.21%			20.91%	17.55%		
	Mozambique	0.02%				1.65%			
	Tanzania	0.62%	0.76%	-5.34%	-5.05%	5.49%	6.58%	0.58%	-3.69%
Central and Eastern Africa	Zambia	1.03%	1.06%			7.96%	7.12%		
	Zimbabwe	-0.71%				-0.53%			
	Burundi	-0.13%	-0.56%			3.80%			
	Ethiopia	1.04%	0.20%	-2.13%	-1.64%	6.21%	4.65%	3.91%	5.10%
	Kenya	0.31%		-15.02%	-7.73%	6.18%		-10.80%	-8.78%
West Africa	Rwanda	-1.23%	-3.73%			-1.91%	-5.14%		
	Uganda	0.55%	-0.94%			1.72%	-2.71%		
	Benin	-3.35%	-2.43%			-0.22%	-2.30%		
	Burkina Faso	-0.46%	-1.99%			0.12%	-2.30%		
	Chad	-0.03%	-0.65%			1.67%			
	Côte d'Ivoire	-0.06%	0.45%			0.84%			
	Gambia			0.41%	4.55%				
	Ghana	3.37%				17.00%			
	Guinea-Bissau	0.31%				0.03%			
	Mali	0.49%	-0.90%			2.05%	0.14%		
	Mauritania		10.62%				14.62%		
Middle East, North Africa, Central Asia	Niger	-0.31%	-1.14%			-0.71%	-0.07%		
	Nigeria	1.70%	1.81%			7.98%	9.20%		
	Senegal	0.30%	0.32%			-1.45%	1.28%		
	Armenia	2.39%	3.30%			1.84%	1.43%		
	Azerbaijan	1.04%	2.55%			0.76%	0.14%		
	Egypt	1.95%	0.06%			10.34%	8.98%		
	Georgia	1.45%	3.31%			2.78%	2.00%		
	Iraq	1.36%	3.42%			1.88%	0.10%		
	Jordan	0.22%	1.72%			1.94%	1.92%		
	Palestine	0.02%	-2.21%			1.25%	-1.59%		
Asia	Tajikistan	0.16%	-0.12%			0.23%	0.09%		
	Yemen	0.31%	-0.70%	-13.46%	-11.76%	7.58%	3.18%	20.00%	50.00%
	Afghanistan	-0.26%	-0.93%		-7.43%	2.17%	3.35%		-10.96%
	Bangladesh	2.08%	2.44%			6.14%	6.44%		
	Cambodia	-0.21%	-0.34%			2.94%	3.90%		
	India	0.44%	-0.13%	-8.87%	-5.92%	4.96%	4.81%		
	Indonesia	2.73%				6.65%			
	Lao PDR	0.07%	-0.05%	-4.31%	-3.20%	2.75%	4.91%	-1.44%	-3.78%
	Myanmar				-3.01%				
	Nepal				-3.00%				
	Pakistan	-0.13%	-1.09%	-5.34%	-4.34%	4.69%	2.66%		
	Philippines	0.05%	0.49%			3.56%	6.34%		
	Sri Lanka	-1.64%			-7.50%	1.76%			







Note: The calculation of quarterly changes uses averages of indices or prices for the respective quarters.

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

**Q4-2014** (October to December) vs. **Q4-Baseline** (Average October to December)

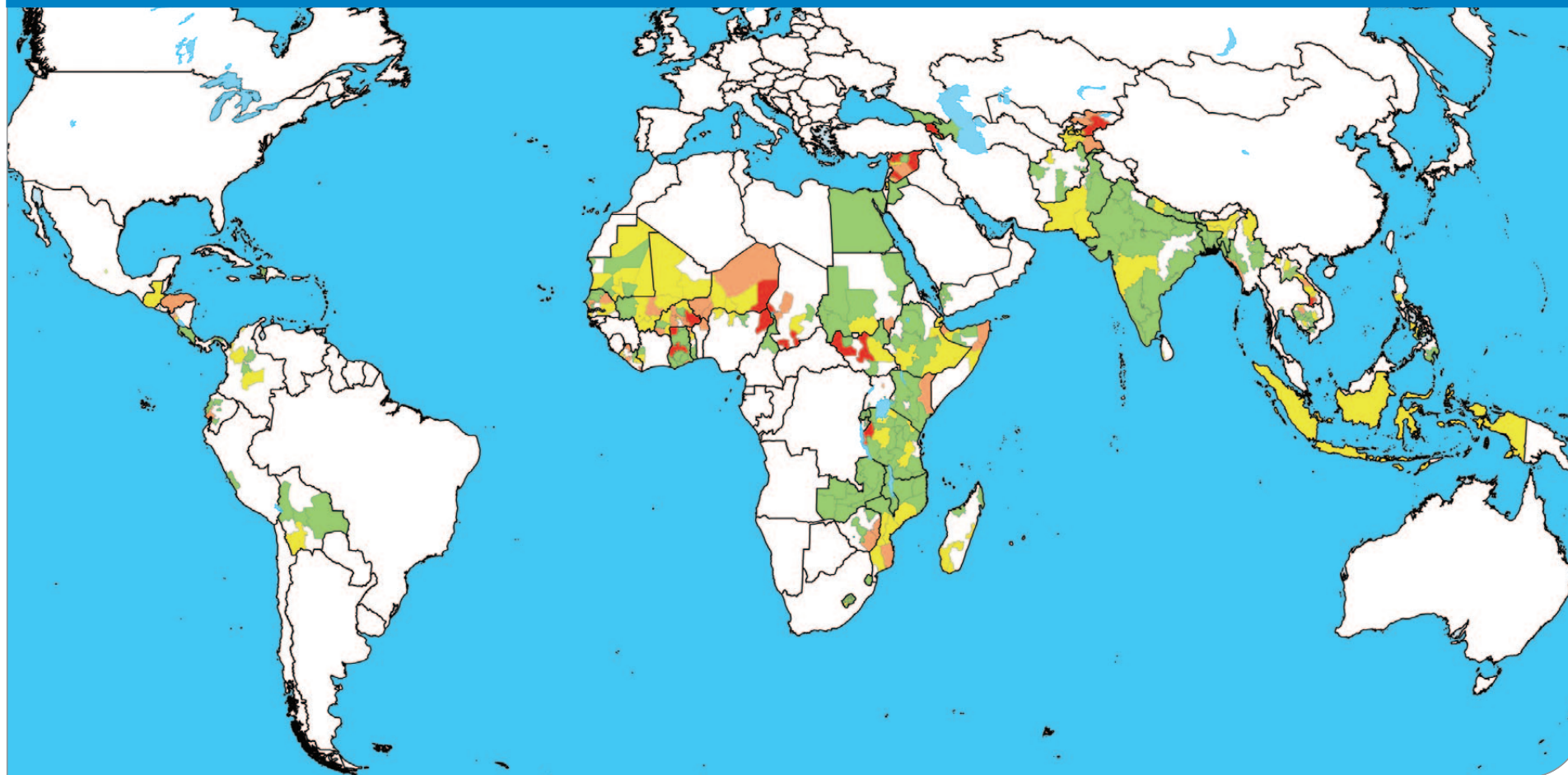


**Impact Codes**

 Low (< 0%)	 Moderate (0-5%)	 High (5-10%)	 Severe (> 10%)	 Monitored but without baseline	 Water bodies
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**Note:** This map is based on the calculations at subnational level of **column M** of the table on page 8-12.

## Q4-2014 (October to December) vs. Q3-2014 (July to September)



### Impact Codes

Low  
( $< 0\%$ )

Moderate  
( $0-5\%$ )

High  
( $5-10\%$ )

Severe  
( $> 10\%$ )

Monitored but  
without baseline

Water bodies

**Note:** This map is based on the calculations at subnational level of **column L** of the table on page 8-12.

Maps produced by: VAM - Food Security Analysis (OSZAF).

Source: WFP; Base Map: UNCS.

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



## Magnitude of quarterly price changes and their impacts on the cost of the food basket, by country and commodity

											Change		Price trend		Impact		
											< 0%	Decreasing	Low				
											>= 0% and < 5%	Stable	Moderate				
											>= 5% and < 10%	Slightly increasing	High				
											>= 10%	Increasing	Severe				
											↓		↓				
Region	Country	Main staple food	Caloric contribution	Change from last quarter	Seasonally adjusted quarterly change	Monthly change from last year	Quarterly change from last year	Quarterly change from baseline	Price trend	Quarterly cost share in food basket	Cumulative impact of changes on cost of food basket		# of years in baseline (the last 5 years [* see footnote])				
											from previous quarter (%)	from baseline (%)					
A	B	C	D	E	F	G	H	I	J	K	L	M	N				
Latin America and Caribbean	Bolivia	Wheat	19	-15	-17	-40	-38	-4	↓	40	-11	+9	5				
		Rice (Estaquilla)	14	-3	-5	-5	-4	+30	↓	49	-11	+9	5				
		Maize	13	-13	-15	-21	-20	-8	↓	11	-11	+9	5				
	Colombia	Maize (White)	13	-1	+2	N/A	N/A	+34	→	7	+2	+9	4				
		Sugar	13	-2	+5	+5	+4	-2	↗	7	+2	+9	2				
		Rice (White)	12	-3	+3	+10	+2	-8	→	8	+2	+9	2				
		Oil	8	+15	+3	+87	+43	+43	→	8	+2	+9	2				
		Wheat Flour	8	0	+3	+1	0	-16	→	4	+2	+9	5				
		Milk	7	+2	N/A	+19	+7	N/A	→	53	+2	+9	*				
		Bananas	5	-1	N/A	-3	+3	N/A	↓	8	+2	+9	*				
	Costa Rica	Plantains	5	-1	+3	+27	+19	+21	→	6	+2	+9	2				
		Rice (Ordinary Second Quality)	17	0	-4	0	0	-6	↓	100	-4	-6	5				
	Dominican Republic	Rice (Ordinary Second Quality)	17	0	0	-1	-3	-1	→	42	+3	+11	5				
		Meat (Chicken)	5	+5	+5	+8	+10	+21	↗	58	+3	+11	5				
	Ecuador	Rice (Long Grain)	19	-4	-4	-1	+3	+12	↓	64	-1	+8	5				
		Wheat Flour	13	+4	+3	-1	-1	0	→	36	-1	+8	4				
	El Salvador	Maize (White)	25	-1	+13	+26	+24	+14	↑	44	-3	+25	5				
		Beans (Red)	6	-13	-19	+65	+139	+55	↓	46	-3	+25	5				
		Sorghum	6	-3	-4	+5	+6	-13	↓	10	-3	+25	5				
		Tortilla (Maize)	36	+4	+4	+12	+13	+39	→	51	-3	+25	5				
	Guatemala	Sugar	14	+1	0	+7	+8	+16	→	9	+2	+29	5				
		Bread	11	+1	-1	+6	+5	+23	↓	33	+2	+29	5				
		Oil (Cooking)	8	0	0	+2	+1	+12	→	7	+2	+29	5				
	Haiti	Rice (Tchako)	23	+1	-4	-4	-2	+4	↓	57	-1	+3	5				
		Wheat Flour	12	-1	-4	-8	-8	+1	↓	20	-1	+3	5				
		Maize (Local)	9	+3	+7	0	0	+2	↗	11	-1	+3	5				
		Oil (Vegetable, Imported)	7	0	+1	0	0	+1	→	11	-1	+3	2				
	Honduras	Maize (White)	26	-18	+13	+18	+21	+6	↑	38	+7	+31	5				
		Beans (Red)	5	-3	-3	+67	+125	+89	↓	41	+7	+31	5				
		Rice (Milled 80-20)	5	-2	-5	0	0	+10	↓	21	+7	+31	5				
	Mexico	Maize (Tortillas)	32	0	0	0	0	+12	→	100	0	+12	5				
		Maize (White)	23	-12	+19	+19	+18	+32	↑	13	0	+12	5				
	Nicaragua	Rice (Ordinary Second Quality)	17	-3	-4	+10	+10	+25	↓	22	-1	+32	5				
		Sugar	15	+1	-1	+4	+4	+27	↓	13	-1	+32	5				
		Bread	9	+2	-2	+4	+4	+9	↓	30	-1	+32	5				
		Beans (Red)	7	-3	-16	+125	+169	+110	↓	22	-1	+32	5				
	Panama	Rice (Ordinary First Quality)	24	-4	-6	-32	-31	-24	↓	38	-4	-18	5				
		Bread	12	0	0	-24	-27	-16	→	52	-4	-18	5				
		Maize	7	0	-4	0	0	+7	↓	10	-4	-18	5				
	Peru	Rice (Local)	21	+1	+1	+4	+3	+5	→	25	-1	+3	5				
		Wheat Flour (Local)	14	0	0	+2	+2	+6	→	27	-1	+3	5				
		Potatoes	8	-4	-6	-18	-17	-4	↓	24	-1	+3	5				
		Sugar	8	+1	-2	+2	+2	-15	↓	7	-1	+3	5				
		Maize (Local)	7	-1	+1	0	0	+14	→	16	-1	+3	5				

(\*) Calculations based on nominal prices. For details, see 'Approach' on page 13.



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 baseline (% change)	Price trend	Quarterly cost share in food basket (%)	Cumulative impact of changes on cost of food basket		# of years in baseline (the last 5 years) [* see footnote]
											from previous quarter (%)	from baseline (%)	
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Southern Africa	Lesotho	Maize Meal	56	-2	-3	+1	+2	+14	↓	75	-3	+14	4
		Wheat Flour	14	0	-1	+5	+5	+13	↓	25			4
	Madagascar	Rice (Local)	49	+8	+1	-11	-12	-1	→	100	+1	-1	5
		Maize	53	-10	-17	-38	-37	+28	↓	68	-20	+34	5
	Malawi	Cassava Root	6	-20	-25	+17	+23	+50	↓	32			2
		Maize Grain (White)	20	+10	-3	-20	-23	-8	↓	24			5
	Mozambique	Wheat Flour	9	-2	-3	-3	-4	-1	↓	33	-4	-2	3
		Rice	8	+3	0	-4	-1	+3	→	29			5
		Oil (Vegetable, Local)	5	-4	-5	-3	-6	-6	↓	15			5
		Maize Meal	25	-2	-2	0	+2	+38	↓	36			5
	Swaziland	Wheat Flour	16	-1	+1	+11	+10	+22	→	33	-1	+27	3
		Sugar	11	0	+2	+3	+6	+21	→	17			3
		Rice	8	+1	0	+2	+2	+22	→	14			5
	Tanzania	Maize	26	-8	-19	-29	-27	-17	↓	33			5
		Rice	10	+15	+3	+16	+11	+2	→	42	-5	-4	5
		Beans	5	+8	-5	+7	+7	+7	↓	24			3
	Zambia	Maize Grain (White)	51	-8	-26	-7	-7	+12	↓	53	-12	+17	3
		Cassava Meal	13	+10	+8	+32	+19	+23	↗	47			2
	Zimbabwe	Maize Grain (White)	41	+5	-6	-31	-27	-11	↓	100	-6	-11	4
		Potatoes (Sweet)	17	-2	-17	+1	+1	-27	↓	39			5
Central and Eastern Africa	Burundi	Beans	16	+6	-10	-24	-22	-1	↓	26	-16	-12	5
		Cassava Flour	13	-8	-13	-9	+10	-2	↓	18			5
		Maize Grain	13	-9	-21	-10	-4	+10	↓	17			5
		Wheat Flour	34	+2	+4	+13	+11	+10	→	44			5
	Djibouti	Rice (Imported)	17	-1	0	+1	+1	-6	→	23	+1	0	5
		Oil (Cooking)	15	0	-1	0	0	-3	↓	19			2
		Sugar	11	-6	-3	-3	-3	-11	↓	14			2
	Ethiopia	Maize (Local)	21	-12	-5	-15	-10	+28	↓	36			5
		Sorghum	12	0	-3	-16	-7	+38	↓	29	0	+39	5
		Wheat Grain	12	+4	+8	+30	+21	+54	↗	35			5
		Maize (White)	35	-1	0	-6	-3	+13	→	27			5
	Kenya	Bread	9	+10	+9	0	+2	+25	↗	19	+7	+26	5
		Oil (Cooking)	8	+26	+19	-1	+7	+12	↑	9			5
		Milk	7	+8	+7	0	+6	+40	↗	45			5
		Bananas	17	+4	0	-4	-6	-39	→	27			5
	Rwanda	Potatoes (Irish)	12	-14	-13	-19	-11	+4	↓	23			5
		Beans	11	-8	-20	-32	-23	+3	↓	11			5
		Cassava	11	-5	-11	-17	-13	+6	↓	13	-6	-9	5
		Potatoes (Sweet)	11	-2	-10	-9	-2	+24	↓	16			5
		Sorghum	8	+12	+2	+43	+41	+31	→	7			5
		Maize	5	+4	-11	-20	-19	-2	↓	3			5
	Somalia	Sorghum (White)	29	+4	+2	-7	+3	+4	→	79	+4	0	2
		Rice (Imported)	9	-1	+4	-9	-10	-10	→	21			2
	South Sudan	Sorghum (White)	26	+18	+13	+12	+12	+39	↑	71	+17	+41	5
		Millet (White)	7	+28	+30	-4	+31	+49	↑	29			5
	Uganda	Cassava Flour	13	-8	-9	-23	-21	+1	↓	41			4
		Maize Grain	9	-16	-9	-42	-31	-22	↓	15			3
		Beans	5	-10	-4	-8	-14	-5	↓	22	-7	-4	3
		Millet Grain	5	-4	-3	-14	-9	+2	↓	21			3

(\*) Calculations based on nominal prices. For details, see 'Approach' on page 13.

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 baseline (% change)	Price trend	Quarterly cost share in food basket (%)	Cumulative impact of changes on cost of food basket		# of years in baseline (the last 5 years) (* see footnote)
											from previous quarter (%)	from baseline (%)	
A	B	C	D	E	F	G	H	I	J	K	L	M	N
West Africa	Benin	Maize (White)	19	-18	-3	-29	-31	-37	↓	17			5
		Gari	16	-20	-18	-35	-35	-23	↓	29			5
		Rice (Imported)	13	-2	-2	-6	-5	-4	↓	45	-8	-19	5
		Sorghum	5	-7	-10	-26	-21	-26	↓	10			5
	Burkina Faso	Sorghum	26	-2	+5	+9	+6	+5	↗	34			5
		Millet	22	-4	+3	+9	+5	+3	→	33			5
		Maize	16	-6	+5	-8	-6	-9	↗	16	+5	+2	5
		Rice (Imported)	6	+1	+1	+3	+2	+3	→	17			5
	Cameroon	Maize	15	-11	+4	0	-2	-2	→	34			3
		Cassava (Cossette)	12	+3	N/A	+22	+22	+27	→	20	-9	+2	3
		Rice (Local)	10	-9	-15	-6	-4	0	↓	32			3
		Sorghum (Red)	8	-20	-3	-5	-8	-9	↓	14			3
	Cape Verde	Rice (Long Grain, Imported)	19	-1	-2	-2	-4	-4	↓	64	0	-2	5
		Wheat	13	0	+1	0	-1	+3	→	36			5
	Chad	Sorghum	18	-4	+18	+5	-2	+12	↑	40			5
		Millet	15	-4	+6	+5	-7	+9	↗	45	+11	+12	5
	Côte d'Ivoire	Maize	5	-12	+3	+15	+1	+28	→	15			5
		Rice (Denikassia, Imported)	20	+4	+4	+2	+1	+2	→	47			5
		Cassava	12	+10	+5	+19	+17	0	↗	20			5
		Oil (Palm)	9	-3	-5	-11	-11	-7	↓	21	+1	0	3
	Ghana	Corn	7	+7	+8	0	0	+6	↓	13			3
		Cassava	21	-2	-1	-6	-5	+35	↓	26			5
		Maize	12	+5	+21	+81	+74	+90	↑	15	+2	+59	5
		Yam	11	-9	+9	+15	+10	+54	↗	38			5
	Guinea-Bissau	Rice (Local)	8	+4	+3	+53	+55	+92	→	21			5
		Rice (Imported)	35	0	+11	0	0	+40	↑	50			4
		Oil (Vegetable, Imported)	11	+2	+8	+5	+2	+14	↗	11			4
		Maize	8	+4	+4	+8	+4	+4	→	20	+10	+22	4
	Liberia	Millet	8	+2	+16	+4	+2	+17	↑	13			4
		Sugar	5	+10	+19	0	-8	-3	↑	6			4
		Rice (Imported)	32	+17	+15	+31	+31	+25	↑	62			2
		Cassava	21	-11	-21	+3	+10	+9	↓	18	+5	+21	3
	Mali	Oil (Palm)	15	+9	+2	+17	+17	+22	→	20			5
		Rice (Local)	21	+1	+3	+1	+2	-1	→	47			5
		Millet	20	-4	-1	-4	0	0	↓	28	+2	-1	5
		Sorghum	13	-2	+4	+3	+6	+1	→	16			5
	Mauritania	Maize	9	-3	+5	-2	0	-6	↗	10			5
		Wheat	30	+3	-1	+1	+2	+11	↓	34			5
		Sugar	12	-6	-9	-12	-8	-8	↓	18			5
		Oil (Vegetable)	11	-2	-2	+4	+3	+9	↓	14	-1	+8	5
	Niger	Rice (Imported)	11	+1	-3	+5	+1	+12	↓	19			5
		Sorghum (Taghalit)	7	+3	0	+14	+13	+20	→	15			5
		Millet	39	-13	+6	-14	-14	+3	↗	60			5
		Sorghum	11	-5	+8	-14	-10	+7	↗	17	+3	+3	5
	Northern Nigeria	Rice (Imported)	7	0	+1	-1	-1	+1	→	23			5
		Sorghum	13	-7	+10	-15	-14	-4	↑	23			5
		Millet	11	-11	+10	-12	-17	-2	↑	22	+8	+1	5
		Maize	8	-6	+13	-11	-13	-6	↑	14			5
	Senegal	Rice (Imported)	8	+9	+12	+6	+8	+9	↑	41			5
		Rice (Imported)	30	-2	-1	-2	-1	-5	↓	65			5
		Maize (Imported)	10	+1	+1	-1	-2	+3	→	18	0	0	5
		Millet	8	-4	+4	-6	-1	+17	→	16			5
	Togo	Maize (White)	24	-7	+3	-19	-24	-24	→	17			5
		Cassava	15	-10	-6	-19	-23	-5	↓	45	-2	-7	5
		Rice (Imported)	10	-1	+1	0	-1	+2	→	28			5
		Sorghum	8	-2	+2	-8	-15	-4	→	10			5

(\*) Calculations based on nominal prices. For details, see 'Approach' on page 13.

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 baseline (% change)	Price trend	Quarterly cost share in food basket (%)	Cumulative impact of changes on cost of food basket		# of years in baseline (the last 5 years) [* see footnote]
											from previous quarter (%)	from baseline (%)	
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Middle East, North Africa and central Asia	Armenia	Wheat Flour (First Grade)	40	+2	+1	+14	+10	+17	→	65	+14	+27	5
		Potatoes	5	+40	+48	+30	+53	+49	↑	35			5
	Azerbaijan	Wheat Flour	57	0	-4	+3	+5	+14	↓	68	-5	+18	5
		Potatoes	6	+4	-9	-7	+6	+27	↓	32			5
	Egypt	Wheat Flour	35	-2	-7	0	-21	-8	↓	64			4
		Rice	12	-2	-2	-4	-17	-8	↓	21	-5	-6	4
		Sugar	7	+3	+3	-7	+5	+4	→	15			4
	Georgia	Wheat Flour	41	0	-4	+2	+2	+4	↓	34	-8	+13	5
		Milk	10	+3	-9	+3	+3	+19	↓	66			5
	Jordan	Bread	38	-1	-1	0	0	0	↓	24			3
		Sugar	15	-2	0	-2	-3	-7	→	26	-1	+1	2
		Oil (Vegetable)	12	0	+4	+1	-1	+2	→	24			3
		Rice (Medium Grain)	8	-1	N/A	0	+6	+11	↓	26			3
	Kyrgyz Republic	Wheat	40	+6	+5	+83	+80	+61	↗	59	+11	+70	5
		Potatoes	8	+15	+26	+62	+42	+83	↑	41			5
	Palestine	Wheat Flour	40	+7	+6	-1	-5	-1	↗	46			5
		Sugar	10	+6	+5	+2	-7	-17	↗	14	+3	-3	3
		Rice (Small Grain, Imported)	7	-1	-2	+24	+22	-3	↓	15			5
		Oil (Olive)	5	+2	0	+8	+7	0	→	25			5
	Sudan	Sorghum	60	-13	-15	+11	+34	+107	↓	82	-15	+112	5
		Millet	9	-10	-11	+32	+58	+138	↓	18			5
	Syria	Wheat Flour	39	+9	N/A	-15	-18	N/A	↗	63	+11	+32	*
		Sugar	13	+14	+13	+8	+4	+50	↑	21			3
		Oil	11	+15	+12	-36	-38	+14	↑	16			3
	Tajikistan	Wheat Flour (Local)	54	+3	0	+9	+6	+15	→	69			5
		Sugar	7	0	+3	+2	0	-2	→	16	+1	+11	5
		Oil (Cotton)	6	+5	+6	+4	+4	+6	↗	10			5
		Maize	5	-1	+4	+3	+3	+18	→	5			5
	Yemen	Wheat Grain	38	-8	-13	+1	+3	-6	↓	50			5
		Sugar	12	-15	-11	-8	-8	-3	↓	24	-13	-9	2
		Oil (Vegetable)	9	-6	-7	-27	-26	-25	↓	13			2
		Rice (Imported)	6	-18	-11	-8	-11	-10	↓	13			2

(\*) Calculations based on nominal prices. For details, see 'Approach' on page 13.



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 baseline (% change)	Price trend	Quarterly cost share in food basket (%)	Cumulative impact of changes on cost of food basket		# of years in baseline (the last 5 years) [* see footnote]
											from previous quarter (%)	from baseline (%)	
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Asia	Afghanistan	Wheat	58	+2	-2	+8	+9	+26	↓	63	-4	+20	5
		Rice (Low Quality)	22	-3	-6	-9	-9	+10	↓	37			5
	Bangladesh	Rice (Coarse)	70	-1	-4	+1	+3	+17	↓	91	-5	+17	5
		Atta-Packet	6	0	-6	-1	+1	+13	↓	9			5
	Cambodia	Rice (Mixed)	65	-4	-9	-4	-3	-11	↓	100	-9	-11	5
	India	Rice	31	-3	-6	-2	0	+28	↓	54	-6	+23	5
		Wheat	22	+1	-4	+1	+3	+23	↓	32			5
		Sugar	7	-2	-7	0	0	+3	↓	14			5
	Indonesia	Rice	50	+4	+1	+10	+7	+26	→	79	+1	+21	5
		Oil (Cooking)	7	0	0	+8	+9	+13	→	5			5
		Sugar	6	0	-3	-5	-6	+2	↓	8			5
		Wheat	6	0	-1	+1	+3	+6	↓	7			5
	Lao PDR	Rice (Glutinous)	64	0	0	+8	+9	+9	→	100	0	+9	5
	Myanmar	Rice (Low Quality)	55	-2	-3	+1	+5	+17	↓	100	-3	+17	5
	Nepal	Rice	32	-1	-2	+3	+5	+19	↓	66	-4	+19	5
		Wheat	15	-2	-6	-1	+3	+18	↓	34			5
	Pakistan	Wheat Flour	37	+1	-1	-5	-2	+25	↓	46	0	+26	5
		Sugar	11	-2	N/A	-5	-3	N/A	↓	17			*
		Oil (Cooking)	9	-1	N/A	0	-1	N/A	↓	23			*
		Rice (Basmati Broken)	6	0	-3	-10	-11	+30	↓	14			5
	Philippines	Rice (Regular Milled)	48	-2	-1	+11	+11	+24	↓	100	-1	+24	5
	Sri Lanka	Rice (White)	41	+7	+2	+29	+31	+33	→	70	0	+27	5
		Wheat Flour	14	0	-3	0	0	+13	↓	30			5
	Thailand	Rice	41	0	0	-1	-2	-19	→	100	0	-19	5
	Viet Nam	Rice	59	-5	-15	-8	+3	-6	↓	100	-15	-6	5

(\*) Calculations based on nominal prices. For details, see 'Approach' on page 13.



# Approach

This bulletin examines price changes for staple food items and their impact on the cost of the basic food basket. For the most vulnerable population groups in developing countries, food often represents over 50% of total household expenditures, and staples contribute 40-80% of energy intake. Any change in staple food prices therefore has a big impact on overall food consumption, especially when the food basket is composed of very few items.

Monitoring the percentage changes of quarterly prices reveals whether recent changes are normal or abnormal when compared to a reference period (e.g. the previous quarter, the previous year or the baseline period).

Column D shows **what each food item contributes to total household energy intake**. The analysis is based on quarterly price<sup>1</sup> changes of the main food items (those that contribute at least 5% of caloric intake<sup>2</sup>):

- i) **"Change from last quarter"** (column E) shows how far quarterly nominal prices have changed from the previous quarter (percentage change).
- ii) **"Seasonally adjusted quarterly change"** (column F) shows how far quarterly prices have changed from the previous quarter, once prices have been adjusted for seasonality (percentage change). This indicator is calculated by dividing each monthly nominal price by its corresponding baseline average price.<sup>3</sup>
- iii) **"Monthly change from last year"** shows how the monthly nominal price has changed from the same month in the previous year (percentage change). The indicator reflects the data for the latest available month of the last quarter.
- iv) **"Quarterly change from last year"** (column H) is the percentage change of the quarterly nominal prices.
- v) **"Quarterly price change from baseline"** (column I) shows how far quarterly prices have changed from baseline average prices<sup>4</sup> (percentage change).

## How the impact on the cost of the food basket is assessed

The **'cumulative impact of the quarter'** (column L) shows the partial (known) change in the total cost of the food basket since the previous quarter. The **'cumulative impact from the baseline'** (column M) shows the change from the baseline. This approach seeks to derive the quantities of food consumed from the caloric contribution of each item in order to estimate the cost of the food basket and from there, the impact of price changes.

The impact calculation assumes that each food basket provides 2,100 kcal a day, and that the proportional caloric contribution is a proxy of the relative importance of the item in the food basket. It comprises the following calculations:

a) the total food basket energy is multiplied by the proportion of each item to give the absolute energy (in kcal) each item contributes to the total energy intake; b) each item's absolute energy is divided by its caloric density<sup>5</sup> to give the weight of that item in the food basket; and c) each item's weight is multiplied by its unit nominal/seasonally adjusted price to calculate the relative cost of each food basket item.

Costs are only calculated for energy contributors for which prices are available. To avoid bias, the other energy contributors that fill the gap to 2,100kcal are ignored. Thus, the total cost of the known part of the food basket is the sum of the itemized commodity costs (step c).

The **'quarterly cost share of food basket'** (column K) indicates the proportion each item represents in the total cost of the known food basket. The cumulative impact values are then calculated by comparing the seasonally adjusted cost<sup>6</sup> of the food basket with the cost in the previous quarter (column L) and against the baseline period (column M), as percentage changes. The likely impact is considered low when the percentage change is below 0, moderate when it is between 0 and 5%, high between 5 and 10%, and severe above 10%.

For further details on this approach, please visit <http://www.wfp.org/content/price-analysis-methods>

1. Prices are calculated as indices, using reference years. 'Last year' captures 12-month percentage changes, and 'last 5 years' captures percentage changes from long-term patterns.
2. Caloric contributions are based on FAO 2005-2007 estimates.
3. The baseline is an average of prices for the last five years of the same month. Note that this indicator requires a minimum two years' worth of data (see column N).
4. See note 3 above.
5. Caloric densities are based on NutVal 3.0 estimates.
6. For countries where seasonally adjusted prices cannot be derived, the nominal food basket cost is considered to measure the impact.

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## For more information, contact:

Arif Husain  
Chief Economist and Deputy Director,  
Policy and Programme Division - Analysis and Trends Service  
[arif.husain@wfp.org](mailto:arif.husain@wfp.org)

Tobias Flämig  
Market Analyst, Economic & Market Analysis Unit  
[tobias.flamig@wfp.org](mailto:tobias.flamig@wfp.org)

**World Food Programme**  
Via Cesare Giulio Viola, 68/70  
00148 Rome, Italy  
[www.wfp.org/food-security](http://www.wfp.org/food-security)  
<http://vam.wfp.org>



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