WFP World Food Programme wfp.org

Issue 29 | October 2015

Fighting Hunger Worldwide

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 70 countries in the third quarter of 2015 (July to September).[1] The maps on pages 6–7 disaggregate the impact analysis to sub-national level.

Global Highlights

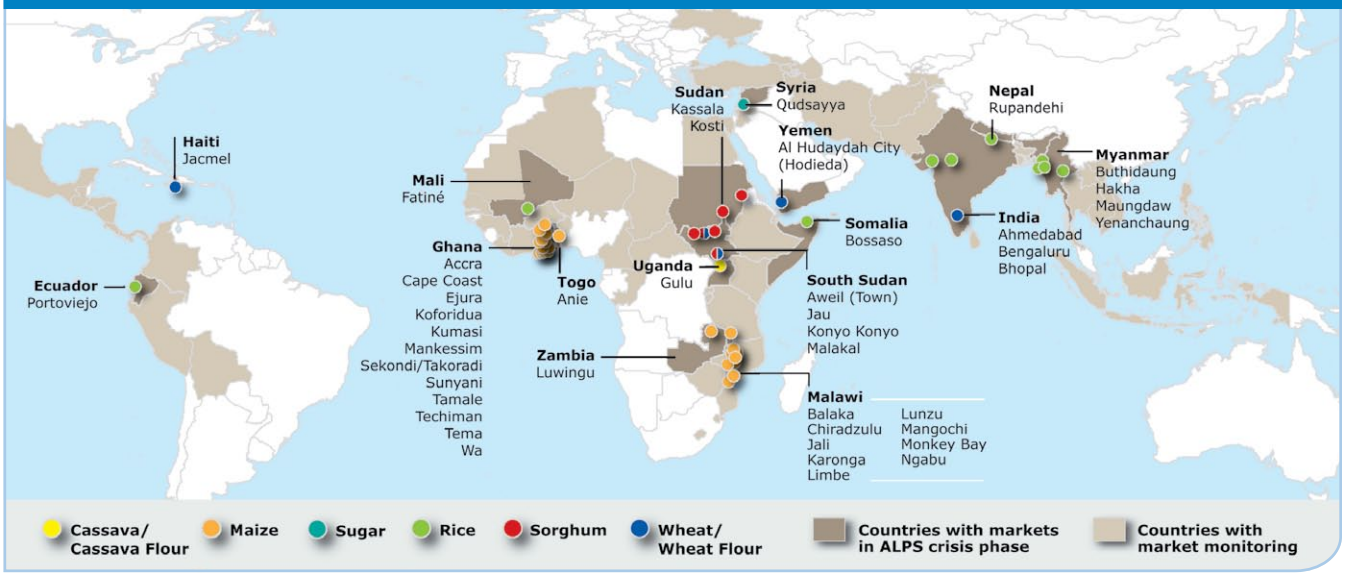
- **FAO's global cereal price index still continued to fall in Q3-2015, down 12.7 percent year-on-year and is now at 2010 levels.**
- **The real price[2] of wheat dropped a further 14 percent over the last quarter.** Prices are 30 percent lower than in Q3-2014, thanks to record production in 2015, abundant global supply and strong export competition.

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

Quarterly Change	Maize	Wheat	Rice	*Note: Comparison to*
q3-2015 vs. q2-2015	-2%	-14%	-1%	*Second quarter in 2015*
q3-2015 vs. q3-2014	-3%	-30%	-15%	*Same quarter in 2014*
q3-2015 vs. q1-2008		-59%		*Global wheat price peak in 2008*
q3-2015 vs. q2-2008	-40%		-64%	*Global maize and rice price peak in 2008*

- **The real price of maize has dropped 2 percent since Q2-2015** and is 3 percent lower than in Q3-2014. However, global production 2015/16 is projected to be lower than this year.
- **The real price of rice has fallen by 1 percent since Q2-2015** and is 15 percent lower than Q3 last year. Despite reduced production amid increased global utilisation, weakened import demand has kept rice prices in check.
- In Q3-2015, **the real price of crude oil dropped by 19 percent compared with Q2-2015** and reached a level last seen in 2004.
- **The cost of the minimum food basket increased severely (>10%) during Q3-2015 in four countries: Ghana, Myanmar, Syria and Tanzania.** *High* increases (5–10%) were seen in **Benin, Ethiopia, Haiti, Kenya** and **Mali**. In the other monitored countries, the change was *low* or *moderate* (<5%).
- Price spikes, as monitored by ALPS (Alert for Price Spikes), are evident in 16 countries, particularly in **Ghana, India, Malawi, Myanmar, South Sudan, Sudan** and **Yemen** (see the map below).[3] These spikes indicate *crisis* levels for the two most important staples in the country, whether they are either cassava, maize, rice, wheat, sorghum or sugar.

Food Price Hotspots



1. Data were collected and collated by WFP country offices and are available at: http://foodprices.vam.wfp.org. Additional data sources are FAO Food Price Index, FAO/GIEWS Food Price Data and Analysis Tool, and IMF Primary Commodity Prices as on 22 October 2015.
2. Nominal prices are adjusted by the US Consumer Price Index.
3. A market is designated as a hotspot if prices for the country's two most important caloric contributors reached ALPS crisis level during Q3, 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)

Latin America and Caribbean

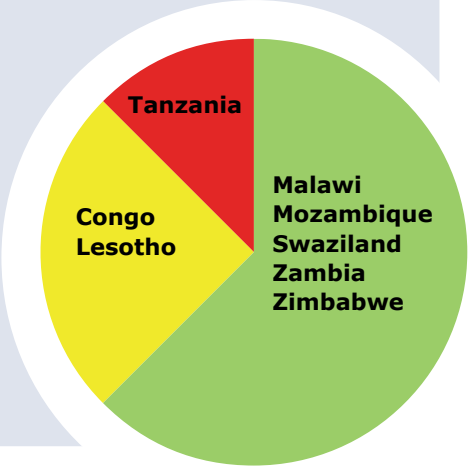
Hotspots: *The impact of staple food price changes on the cost of the basic food basket from July to September 2015 compared with the previous quarter was* high *in* **Haiti***;* moderate *in* **Colombia, Ecuador, El Salvador, Mexico, Nicaragua** *and* **Panama***; and* low *in the other countries.*

- **Staple commodity prices:** During Q3-2015, the continued impact of the dry spells associated with *El Niño* led to consistent crop losses in most Latin American countries. In **El Salvador**, nominal prices increased for maize (+10%) and red beans (+12%), despite the start of the *primera* harvest season. Nominal maize prices also increased in **Nicaragua** (+5%), where drought induced delays in planting and reduced yields of the main harvest. Price trends were mixed in **Honduras**: seasonally adjusted prices for maize were stable in Q3-2015 in response to the Government's price control policies but remained 16 percent higher than in Q3-2014; red beans prices fell (-9%) following a good harvest. In **Guatemala**, maize imports contributed to stabilizing seasonal prices for commonly consumed by-products, such as tortillas (-2%). In **Haiti**, seasonally adjusted prices surged for local maize (+19%) and wheat flour (+20%) and increased moderately for other imported commodities (rice +3%; vegetable oil +4%). The ALPS indicator was at *crisis* levels for maize in Jeremie and Port-au-Prince.
- **Fuel prices:** In **Colombia**, quarterly prices for fuel were stable (-1.4% gasoline; +0.5% diesel) while they decreased moderately compared with Q3-2014 (-8.4% gasoline; -8.0% diesel). In **Nicaragua**, gasoline was 19 percent and diesel was 22 percent cheaper than last year, in line with the decline in international fuel prices.
- **Purchasing power:** In **Haiti**, the quarterly headline inflation was moderate (+5.2%) and the year-on-year (y/y) inflation was high (+9.6%), mainly driven by food inflation. Lower agricultural output and currency depreciation drove food prices up in **Colombia** (+7.3%) and the **Dominican Republic** (+6.7%). Y/y food inflation was also high in **Guatemala** (+8.6%) but had little impact on y/y headline inflation (+2.1%) due to the beneficial effect of a stronger *queztal* on import prices.

Southern Africa

Hotspots: *The impact of staple food price changes on the cost of the basic food basket from July to September 2015 was* severe *in* ***Tanzania****;* moderate *in* ***Congo*** *and* ***Lesotho****; and* low *in the other countries of the region.*

- **Staple commodity prices:** The below-average harvest season led to a shortage of maize supplies in southern Africa. In **Tanzania**, regular rainfall patterns favoured stability of maize prices in the northern regions around Lake Victoria (-4% Kagera; 0% Mara); however, lower stocks and growing export demand from neighbouring countries drove maize prices up by 7 to 40 percent in the other regions. In **Malawi**, the increase in imports contributed to keeping nominal maize prices under control (+3%) before the beginning of the lean season; nevertheless, maize prices remain 54 percent higher compared with last year and at *alert* level in most monitored markets according to the ALPS. Seasonally adjusted prices for rice increased moderately in **Tanzania** (+7%) and **Congo** (+12%) in anticipation of the lean season. In **Mozambique**, the depreciation of the local currency caused a general upward pressure on the seasonally adjusted prices for the main staples, including local wheat flour (+8%), maize (+6%), vegetable oil (+3%), and imported rice (+1%).
- **Fuel prices:** In **Tanzania**, currency depreciation and the introduction of a fuel levy in July pushed up fuel prices from Q2-2015 (+18.9% gasoline; +14.6% diesel); prices remained lower than last year (-1.7% gasoline; -6.6% diesel).
- **Purchasing power:** Quarterly changes in the Consumer Price Index (CPI) and the food CPI were low or negative in most countries. Y/y headline inflation accelerated in **Madagascar** (+7.4%), **Tanzania** (+6.2%) and **Zambia** (+7.4%); it was moderate in **Lesotho** (+3.1%). In **Malawi**, severe food shortages, the rise of transport costs, and the steep depreciation of the *kwacha* triggered soaring y/y headline (+23.2%) and y/y food inflation (+21.9%).

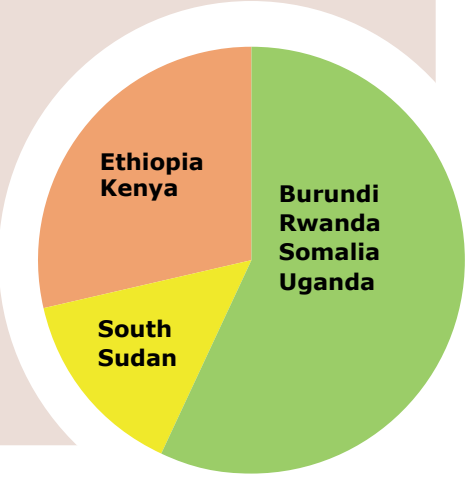


Impact Codes (q/q) Low (< 0%) Moderate (0-5%) High (5-10%) Severe (> 10%)

Central and Eastern Africa

Hotspots: *The impact of staple food price changes on the cost of the basic food basket from July to September 2015 was* high *in* ***Ethiopia*** *and* ***Kenya****;* moderate *in* ***South Sudan****; and* low *in the other countries.*

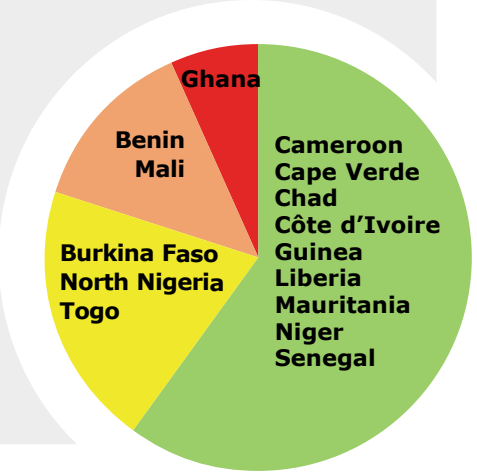
- **Staple commodity prices:** Seasonally adjusted prices for main staples were generally stable or declining in the region, reflecting adequate supplies. In **Uganda**, prices followed their expected seasonal trends and declined for beans (-9%), millet (-1%), cassava (-3%), and maize flour (-2%) in accordance with the harvest season. Seasonally adjusted prices also declined in **Burundi** for beans (-2%) and sweet potatoes (-14%) as harvested crops reached local markets in the eastern and southern regions; nevertheless, prices increased in Muyinga (+20% maize and +35% beans), Gitega (+21% maize), and Bujumbura Mairie (+17% maize), after producers abandoned cultivated lands to flee political instability. In **South Sudan**, nominal prices continued to increase from the previous quarter (sorghum +14%; wheat flour +7%) and reached record levels compared with Q3-2014 (+112% sorghum and +225% wheat flour). The escalation of the conflict, currency depreciation, as well as US dollar and fuel shortages continued to disrupt markets and generated major seasonal price increases in Western Bahr El Ghazal (+30% sorghum and +18% wheat flour) in Warrap (+52% wheat flour) and in Central Equatoria (+47% sorghum). In **Kenya**, disputes between companies and small producers over domestic cows' milk prices led to increased volatility; prices went up by 14 percent from Q2-2015. In the SNNP region of **Ethiopia**, prices for fava beans escalated from Q2-2015 (+29%), especially reflecting the severe impact of inadequate belg rains.
- **Fuel prices:** Y/y fuel prices decreased in **Kenya** (-15.7% gasoline; -19.9% diesel). In **Ethiopia**, despite diesel prices being 6 percent up in Q3-2015, the cost of fuel was markedly lower than in Q3-2014 (-16.0% gasoline; - 13.2% diesel). Though fuel prices in **South Sudan** seem to have stabilised over the past two months, they were significantly higher than at the beginning of the year and varied considerably between markets.
- **Purchasing power:** In **Ethiopia**, y/y headline inflation was high at 12 percent, mainly due to food price increases (+13.9%). The harshness and duration of the conflict in **South Sudan** compromises price stability: y/y headline (+56.5%) and food inflation (+69.2%) rose dramatically from Q3-2014 as widespread insecurity, the shut-down of fuel production and the depreciation of the South Sudanese pound led the country close to economic collapse.



West Africa

Hotspots: *The impact of staple food price changes on the cost of the basic food basket from July to September 2015 was* severe *in* ***Ghana****;* high *in* ***Benin*** *and* ***Mali****;* moderate *in* ***Burkina Faso, North Nigeria*** *and* ***Togo****; it was* low *in the other countries.*

- **Staple commodity prices:** During Q3-2015, seasonally adjusted prices for maize increased moderately in western Africa, except in **Chad** (-6%) and **Côte d'Ivoire** (-5%). In **Togo**, seasonally adjusted maize prices continued to increase (+24%) from Q2-2015 in anticipation of a poor harvest season. In **Chad**, seasonal prices decreased for sorghum (-9%), reflecting good availability and increased for millet (+9%). A late start to the growing season and lower stocks - particularly in the western regions - pushed up cereal prices: Bar-El-Ghazal (+20% millet and +19% maize); Guera (+21% millet); and Kanem (+12% millet). Despite the recently attempted coup inducing political instability in **Burkina Faso**, a good harvest limited price changes for maize (+5%), millet (+2%) and sorghum (+1%). Similarly, favourable agricultural prospects in **Niger** offset insecurity in border regions and drove cereal prices down thanks to adequate supplies (-4% millet, -5% sorghum and -1% rice). Prices continued to soar in **Ghana** (+18% cassava; +13% maize and +10% rice) due to the depreciation of the *cedi*; the ALPS indicator for maize was at *crisis* level in most monitored markets in September. Economic reprise, growing production and imports eased pressure on prices in **Guinea** (-1% rice and -8% palm oil) and **Liberia** (-8% imported rice and -20% cassava).
- **Fuel prices:** No fuel prices available.
- **Purchasing power:** **Mali** faced a significant increase in the food CPI, which reached 8.9 percent during Q3-2015. In **Ghana**, the quarterly food CPI dropped by 1.3 percent and dragged q/q headline inflation down to 3.3 percent; y/y headline inflation remained high (+17.5%), mainly driven by the cost of non-food items. In **Nigeria**, y/y food inflation (+10.1%) drove up headline inflation (+9.3%) after delayed rains and insecurity reduced the productive potential of the main harvest season.



Middle East, North Africa and Central Asia

Hotspots: *The impact of staple food price changes on the cost of the basic food basket from Q2-2015 to Q3-2015 was* severe *in* ***Syria****. It was* moderate *in* ***Algeria, Azerbaijan, Egypt, Lebanon, Palestine*** *and* ***Turkey****; and* low *in the remaining countries of the region.*

- **Staple commodity prices:** In Q3-2015, prices were stable or falling in **Armenia, Egypt, Georgia, Jordan**, and **Lebanon**. In **Sudan**, seasonally adjusted prices declined for sorghum (-2%) and millet (-9%); however, the country suffered from localized price increases due to political instability and below-average rains: the ALPS indicator was at *crisis* levels for sorghum prices in Kosti and Kassala; it was at *alert* level for millet in the conflict-affected area of El Fashir. In **Syria**, the ongoing conflict continues to restrain supply and disrupt trade; nominal prices increased for wheat flour (+5%), sugar (+21%), and oil (+9%). The besieged governorate of Deir Ezzor recorded the most significant price changes from the previous quarter (+43% sugar and +26% oil); sugar and oil were respectively more than eleven and five times, as it is +1147% and +541% respectively more expensive than last year. In **Yemen**, a temporary reduction in air strikes allowed for improvements in food availability in early Q3-2015; seasonally adjusted prices decreased for wheat flour (-14%) and sugar (-17%). However, fuel shortages and insecurity continued to push up prices for imported commodities (+10% vegetable oil). Fresh waves of conflict are affecting the country and new price upsurges are expected in the coming months. In September, the ALPS indicator signalled *crisis* price levels for wheat flour in Al Hudaydah and *alert* levels in Arman City, Haradh Town and Sa'ada City.
- **Fuel prices:** In **Syria**, the price for diesel was still double that of Q3-2014 (+103.1%) following the destruction of refineries in besieged areas. Fuels prices declined in **Yemen** during Q3-2015 (-2.7% gasoline; -15.4% diesel). However, prices remain higher than last year (+85.6% gasoline; +79.4% diesel) as a chronic fuel shortage affected conflict-hit regions.
- **Purchasing power:** q/q food inflation decreased in **Armenia** (-5.8%), **Azerbaijan** (-3.2%), **Lebanon** (-1.0%) and **Tajikistan** (-1.8%). Y/y headline inflation dropped from Q2-2015 in **Sudan** (12.8%) and also in **Iran** (12.7%).

Asia

Hotspots: *The impact of staple food price changes on the cost of the basic food basket July to September 2015 was* severe *in* ***Myanmar****;* moderate *in* ***Thailand*** *and* low *in the remaining countries of the region.*

- **Staple commodity prices:** Seasonally adjusted rice prices were stable or falling between Q2-2015 and Q3-2015, reflecting good availability and record stock levels in most countries. In **Myanmar**, prices for low quality rice went up by 23 percent because of the expectation of production shortfalls after the July flood event and the depreciation of the national currency; the ALPS indicator was at *crisis* levels for rice in Buthidaung, Hakha and Maungdaw. Seasonally adjusted prices for wheat fell in **Afghanistan** (-5%) and **India** (-3%) while they remained stable in **Nepal** (+1%) and **Indonesia** (+1%); prices for wheat flour also decreased in **Bangladesh** (-2%), **Pakistan** (-3%), and **Sri Lanka** (-3%). In **Pakistan**, the seasonally adjusted price of sugar continued increasing (+5%) as a result of the doubling of import tariffs in July.
- **Fuel prices:** During Q3-2015, quarterly prices fell in **Afghanistan** for diesel (-6.7%) and in **Pakistan** for gasoline (-3.3%) and diesel (-2.7%), because of the downward trend of international fuel prices. Q/q fuel prices remained stable in **Lao PDR** from the previous quarter and were 17 percent cheaper than last year.
- **Purchasing power:** Quarterly changes in the CPI and the food CPI were low or slightly negative in most countries. Y/y food inflation was moderate in **Bangladesh** (+6.0%) and **Indonesia** (+8.3%). In **Afghanistan**, the y/y food CPI continued to decline (-6.2%) driving down y/y headline inflation (-3.5%).

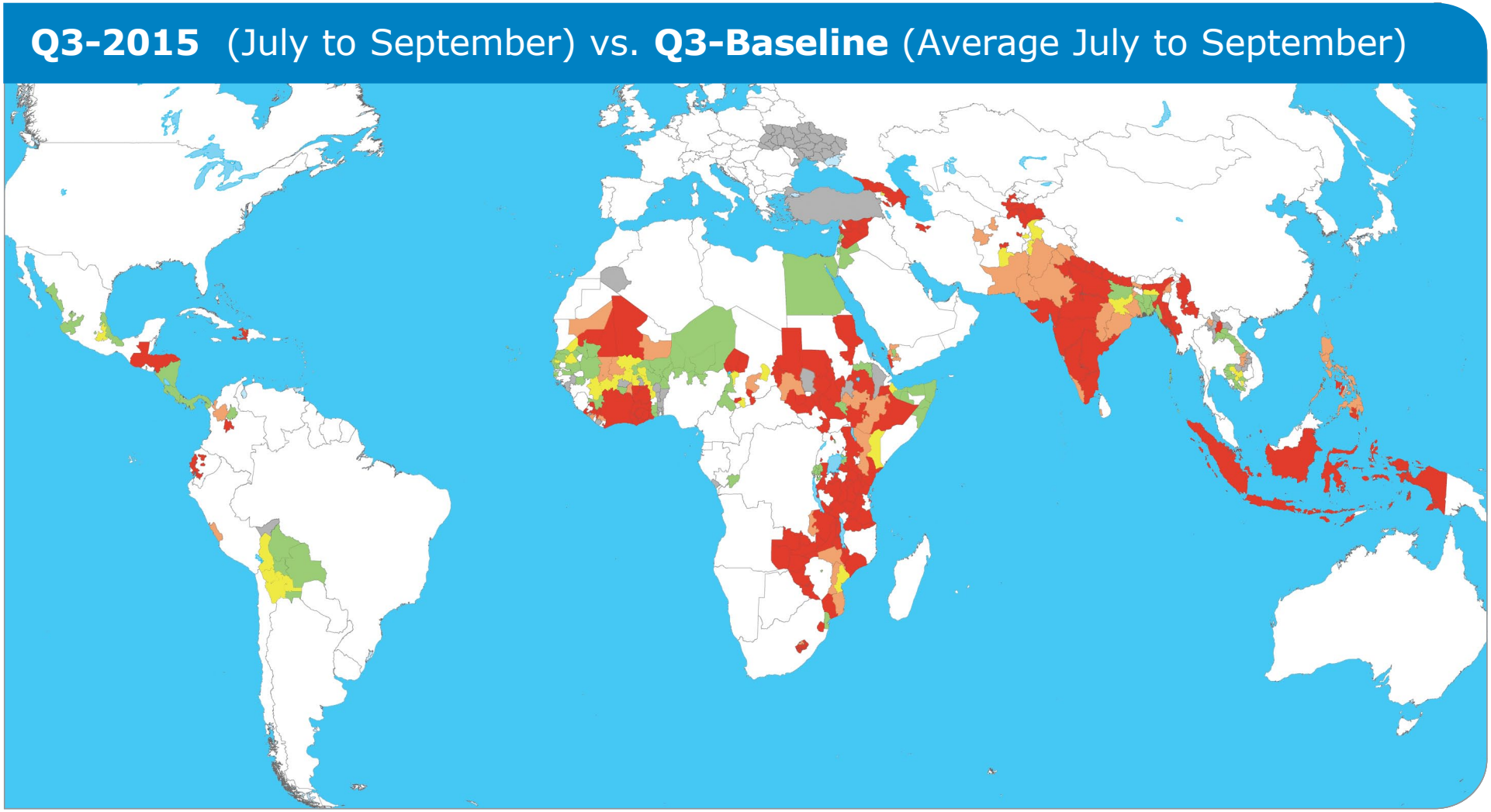
Consumer Price Index

Region	Country	Quarterly and Yearly Changes in Q3-2015 (July-September)			
		Quarter-on-Quarter		Year-on-Year	
		General CPI	Food CPI	General CPI	Food CPI
Latin America and Caribbean	Bolivia	1.25%	2.51%	3.44%	3.12%
	Colombia	0.90%		4.88%	7.30%*
	Costa Rica	-0.39%		-0.64%	
	Dominican Republic	0.88%	3.59%	0.44%	6.72%
	El Salvador	-0.41%		-1.92%	-1.06%*
	Guatemala	1.02%		2.05%	8.57%*
	Haiti	5.18%	6.30%	9.64%	11.35%
	Honduras	0.82%	-0.02%	3.01%	1.08%
	Nicaragua	-0.08%	-1.32%	2.87%	2.16%
	Panama	-0.11%		-0.40%*	
	Peru	1.13%		3.83%	4.51%*
Southern Africa	Lesotho	1.94%	2.74%	3.14%	5.84%
	Madagascar	1.12%		7.42%	
	Malawi	-0.91%	-8.13%	23.16%	21.90%
	Mozambique	-0.34%		2.17%	
	Tanzania	0.59%	0.35%	6.18%	10.15%
	Zambia	2.19%	1.72%	7.39%	7.86%
	Zimbabwe	-0.44%		-2.90%	
Central and Eastern Africa	Burundi	0.26%	-0.69%	5.41%	6.56%
	Ethiopia	3.78%	5.34%	11.93%	13.91%
	Kenya	0.77%		6.14%	
	Rwanda	1.11%	0.05%	2.32%	3.48%
	South Sudan	17.22%	23.70%	56.49%	69.22%
	Uganda	1.13%	-1.14%	5.90%	7.41%
West Africa	Benin	-0.49%	1.06%	0.72%	
	Burkina Faso	2.40%		1.32%	4.87%
	Cape Verde	0.44%	1.34%	0.38%	2.45%
	Chad	2.44%		5.21%	
	Côte d'Ivoire			1.2%*	1.79%*
	Ghana	3.28%	-1.29%	17.53%	7.80%*
	Guinea	1.94%		7.25%	
	Guinea-Bissau	2.83%		1.51%	0.00%*
	Mali	4.23%	8.94%	2.98%	
	Mauritania	-4.10%	-6.65%	-2.41%	-5.28%
	Niger	3.15%		0.89%	-0.30%*
	Nigeria	2.26%	2.47%	9.33%	10.12%
	Senegal	2.96%	5.41%	0.18%	6.13%
Middle East, North Africa and Central Asia	Armenia	-4.10%	-5.84%	-1.80%	1.57%
	Azerbaijan	-1.10%	-3.15%	3.74%	5.34%
	Egypt	1.90%	2.04%	8.49%	9.18%
	Georgia	1.06%	4.58%	5.14%	2.22%
	Iran	1.05%		12.65%	
	Iraq	1.40%	3.49%	2.46%	3.81%
	Jordan	0.19%	0.19%	-1.02%	3.81%
	Lebanon	-1.28%	-1.04%	-4.36%	-1.96%
	Palestine	0.03%	0.72%	0.86%	1.44%
	Sudan	3.41%		12.81%	
	Tajikistan	-0.58%	-1.75%	-1.28%	-3.28%
	Turkey	0.50%		7.30%	10.73%*
Asia	Afghanistan	-0.51%	-1.52%	-3.53%	-6.17%
	Bangladesh	2.61%	3.01%	6.26%	6.01%
	India	2.32%	2.54%	4.24%	2.58%
	Indonesia	1.70%		6.82%	8.26%*
	Lao PDR	0.66%		1.23%	
	Pakistan	1.16%	1.15%	1.61%	-0.65%
	Philippines	0.19%	0.62%	0.58%	1.13%
	Sri Lanka	1.13%	1.15%	-0.25%	2.24%

Note: The calculation of quarterly changes uses averages of indices.

** Where indices were not available, y/y changes are not based on quarterly average but on the inflation rate of the last month available.*

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



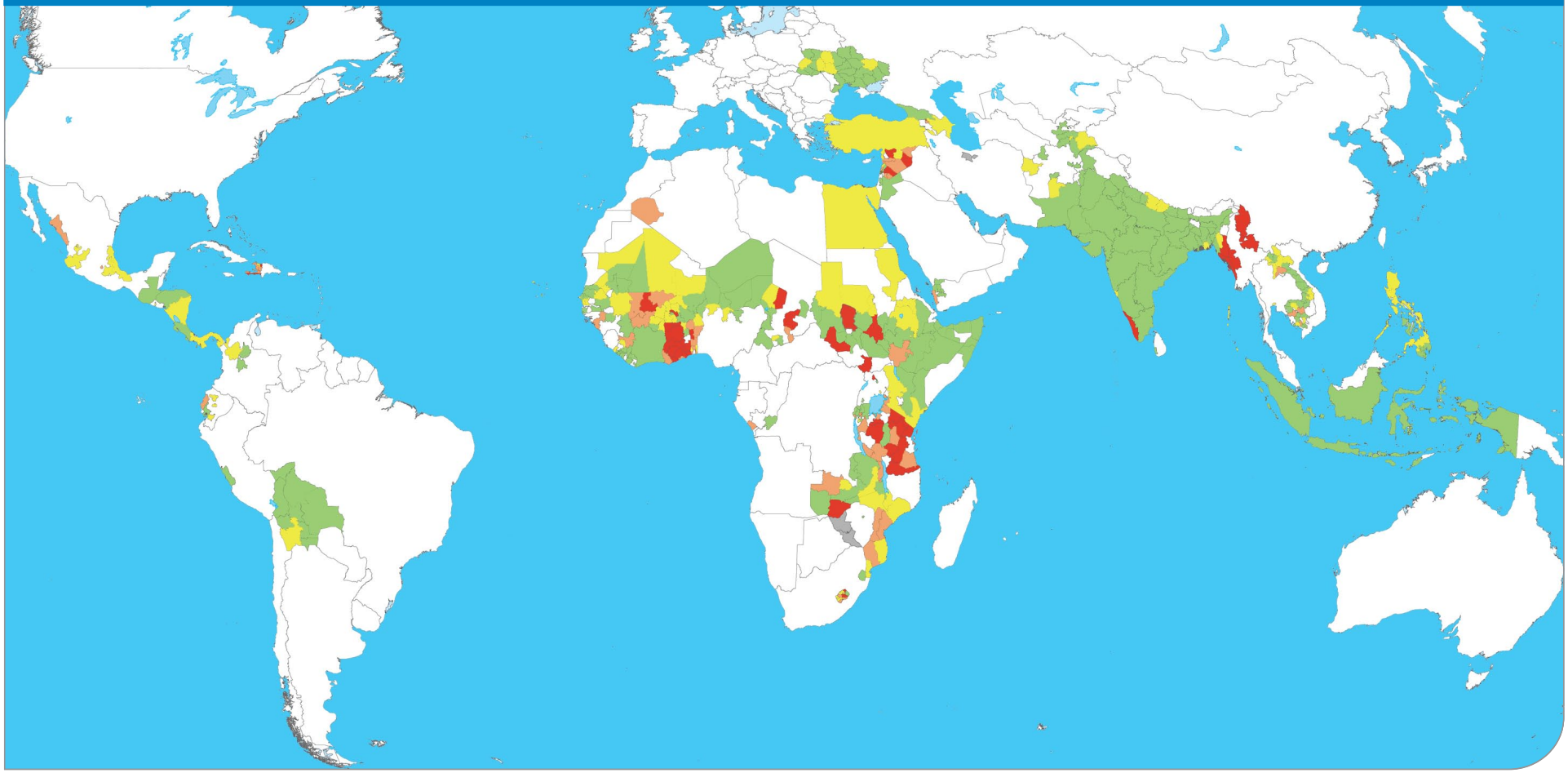
Map produced by: VAM - Food Security Analysis (OSZAF). *Source: WFP; Base Map: GAUL.*

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 M of the table on page 8-12. Baseline prices are from Q3 2010-14.

Q3-2015 (July to September) vs. **Q2-2015** (April to June)



Map produced by: VAM - Food Security Analysis (OSZAF). *Source: WFP; Base Map: GAUL.*

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.

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

Change	Price trend
< 0%	Decreasing
>= 0% and < 5%	Stable
>= 5% and < 10%	Slightly increasing
>= 10%	Increasing

Impact
Low
Moderate
High
Severe

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
Latin America and Caribbean	Bolivia	Wheat (flour)	19	-6	-11	-22	-22	-4	↓	37	-5	-3	5
		Rice (estaquilla)	14	-4	-5	-11	-10	+4	↓	34			5
		Maize (hard yellow, cubano)	13	-13	-12	-28	-27	-27	↓	6			5
		Sugar	13	-1	N/A	N/A	N/A	N/A	↓	24			*
	Colombia	Maize (white)	13	0	-1	+6	+6	+29	↓	7	+1	+8	4
		Sugar	13	+2	+14	+25	+21	+15	↑	7			3
		Rice (white)	12	-2	-2	+29	+28	+20	↓	9			3
		Wheat flour	8	-6	-6	+33	+38	+37	↓	5			5
		Milk (pasteurized)	7	0	0	+4	+4	+4	→	60			2
		Bananas	5	-2	+1	-11	-10	-8	→	6			2
		Plantains	5	+1	+2	0	+1	+10	→	6			3
	Costa Rica	Rice (milled 80-20)	17	-3	-3	-3	-3	-19	↓	100	-3	-19	5
	Ecuador	Rice (long grain)	19	+4	+1	+13	+11	+23	→	68	+2	+15	5
		Wheat (flour)	13	+1	+3	+3	+6	+2	→	32			4
	El Salvador	Maize (white)	25	+10	+4	+4	+5	+4	→	47	+4	+8	5
		Beans (red)	6	+12	+3	-35	-26	+16	→	42			5
		Sorghum (maicillo)	6	+17	+6	0	+7	-2	↗	12			5
	Guatemala	Tortilla (maize)	36	+2	-2	+10	+10	+32	↓	56	-1	+24	5
		Sugar	14	0	0	+1	+1	+8	→	10			5
		Bread	11	0	-1	+2	+2	+17	↓	34			5
	Haiti	Rice (tchako)	23	+4	+3	0	+2	+7	→	53	+8	+12	5
		Wheat flour (imported)	12	+17	+20	+21	+20	+21	↑	22			5
		Maize (local)	9	+8	+19	+37	+34	+30	↑	13			5
		Oil (vegetable, imported)	7	+5	+4	+7	+6	+7	→	11			3
	Honduras	Maize (white)	26	+12	0	+16	+16	+12	→	51	-3	+11	5
		Beans (red)	5	-5	-9	-30	-30	+12	↓	30			5
		Rice (milled 80-20)	5	0	0	-6	-6	+6	→	19			5
	Mexico	Maize (white)	32	+3	+4	+1	-4	-5	→	100	+4	-5	5
	Nicaragua	Maize	23	+5	N/A	+12	+3	N/A	↗	25	0	+5	*
		Sugar	15	0	+1	-1	0	+5	→	26			4
		Bread	9	-2	N/A	+3	+5	N/A	↓	49			*
	Panama	Rice (milled 80-20)	24	0	-2	N/A	+1	-15	↓	85	0	-13	5
		Maize (yellow)	7	0	-7	N/A	+3	0	↓	15			5
	Peru	Rice (local)	21	0	0	+2	+2	+8	→	25	-5	+6	5
		Wheat flour (locally processed)	14	+1	0	+2	+1	+5	→	25			5
		Potatoes	8	-10	-17	+16	+9	+6	↓	26			5
		Sugar	8	+10	+14	+22	+22	+4	↑	9			5
		Maize (local)	7	-2	-6	-4	-2	+5	↓	15			5
Southern Africa	Congo	Cassava (fresh)	32	+2	N/A	N/A	N/A	-9	→	60	+3	-11	3
		Wheat flour	18	-13	-16	N/A	N/A	-25	↓	18			3
		Oil (palm)	11	+29	N/A	N/A	N/A	N/A	↑	13			*
		Rice (mixed, low quality)	6	+22	+12	N/A	N/A	+18	↑	9			3
	Lesotho	Maize meal	56	+5	+5	+6	+4	+18	↗	76	+4	+17	5
		Wheat flour	14	0	0	+1	+2	+13	→	24			5
	Malawi	Maize	53	+3	-6	+69	+54	+98	↓	100	-6	+98	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	Mozambique	Cassava flour	32	-8	N/A	N/A	N/A	+46	↓	51	-2	+25	2
		Maize (white)	20	+8	+6	+40	+39	+25	↗	13			5
		Wheat flour (local)	9	+4	+8	+9	+7	+9	↗	16			4
		Rice (imported)	8	+2	+1	+3	+3	+3	→	13			5
		Oil (vegetable, local)	5	+3	+3	-1	-2	-7	→	7			5
	Swaziland	Maize meal	25	+2	-9	+5	-1	+21	↓	35	-3	+20	5
		Wheat flour	16	+5	+1	+10	+1	+23	→	32			5
		Sugar (brown)	11	+3	+4	+8	+4	+19	→	18			4
		Rice	8	+2	-6	+4	+1	+16	↓	14			5
	Tanzania	Maize	26	+14	+22	+42	+31	+28	↑	37	+10	+28	5
		Rice	10	-4	+7	+37	+35	+29	↗	41			5
		Beans	5	-1	-3	+17	+18	+26	↓	22			4
	Zambia	Maize (white)	51	-9	-3	+6	-7	+28	↓	100	-3	+28	5
	Zimbabwe	Maize	41	-4	+2	+19	+1	+10	→	72	-5	+10	5
		Wheat	10	-8	N/A	-23	-23	N/A	↓	28			*
Central and Eastern Africa	Burundi	Sweet potatoes	17	-16	-14	-32	-24	-17	↓	38	-5	-8	5
		Beans	16	-9	-2	-5	-4	+2	↓	29			5
		Cassava flour	13	-7	-3	-28	-23	-7	↓	17			5
		Maize	13	+19	+11	-17	-22	-2	↑	16			5
	Ethiopia	Maize (white)	21	0	-8	-10	-16	+1	↓	20	+5	+20	5
		Teff	13	+2	N/A	N/A	N/A	N/A	→	28			*
		Sorghum	12	+2	+1	0	-13	+21	→	17			5
		Wheat	12	+6	+1	+17	+17	+41	→	24			5
		Beans (fava, dry)	5	+29	N/A	N/A	N/A	N/A	↑	12			*
	Kenya	Maize (white)	35	+3	-1	-4	-4	+1	↓	26	+7	+24	5
		Bread	9	0	0	+6	+10	+19	→	19			5
		Milk (cow, fresh)	7	+15	+14	+9	+19	+41	↑	55			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
Central and Eastern Africa	Rwanda	Bananas	17	-10	-11	+1	-2	-34	↓	24	-4	-6	5
		Potatoes (irish)	12	+9	+3	+8	+2	+5	→	26			5
		Beans (dry)	11	-3	-5	-6	-7	+8	↓	11			5
		Cassava	11	-4	+3	0	-3	+10	→	13			5
		Sweet potatoes	11	+4	+5	-6	-6	+16	↗	15			5
		Sorghum	8	-13	-2	+5	+4	+25	↓	7			5
		Maize flour	5	+1	-1	-6	-6	+3	↓	5			5
	Somalia	Sorghum (red)	29	-3	N/A	-19	-18	N/A	↓	77	-3	-20	*
		Rice (imported)	9	-3	N/A	-14	-11	-20	↓	23			3
	South Sudan	Sorghum (white)	26	+14	+8	+87	+112	+146	↗	48	+3	+179	5
		Wheat flour	15	+7	0	+241	+225	+218	→	52			4
	Uganda	Cassava flour	13	-6	-3	+8	+17	+30	↓	37	-4	+18	5
		Maize flour	9	-5	-2	0	+2	+10	↓	27			5
		Beans	5	-21	-9	+18	+15	+14	↓	20			4
		Millet	5	-1	-1	+9	+6	+15	↓	15			4
West Africa	Benin	Maize (white)	19	+15	+13	+2	+23	-13	↑	23	+6	-16	5
		Cassava meal (gari)	16	0	-9	-40	-34	-37	↓	22			5
		Rice (imported)	13	+4	+3	0	+1	-2	→	45			5
		Sorghum	5	+7	+8	-13	-8	-20	↗	9			5
	Burkina Faso	Sorghum	26	+2	+1	-1	+4	0	→	41	+2	0	5
		Millet	22	+4	+2	+1	+4	-1	→	37			5
		Maize	16	+9	+5	+12	+13	-1	↗	22			5
	Cameroon	Maize	15	+8	+2	-2	-2	-5	→	27	-8	-5	4
		Cassava (cossette)	12	-7	-37	+15	+16	-7	↓	36			4
		Rice (local)	10	+12	+15	-19	-10	0	↑	24			4
		Sorghum (red)	8	+13	+9	+7	-3	-7	↗	13			4
	Cape Verde	Rice (long grain, imported)	19	0	-1	N/A	-5	-9	↓	66	-1	-7	5
		Wheat (flour, imported)	13	0	-1	N/A	-2	-2	↓	34			5
	Chad	Sorghum	18	-2	-9	+11	+12	+14	↓	43	-2	+13	5
		Millet	15	+14	+9	+12	+12	+13	↗	43			5
		Maize	5	-1	-6	-2	-4	+14	↓	14			5
	Côte d'Ivoire	Rice (denikassia, imported)	20	+3	+1	+6	+6	+3	→	47	-1	+10	5
		Cassava (fresh)	12	+2	+4	+2	0	+17	→	19			5
		Oil (palm)	9	-1	-7	+4	+13	+11	↓	21			4
		Maize	7	+2	-5	+20	+20	+28	↓	13			5
	Ghana	Cassava	21	+15	+18	+18	+14	+39	↑	24	+12	+70	5
		Maize	12	+15	+13	+38	+47	+112	↑	15			5
		Yam	11	+6	+9	+16	+27	+65	↗	40			5
		Rice (local)	8	+24	+10	+21	+29	+104	↑	21			5
	Guinea	Rice (local)	37	+8	-1	-8	-14	-12	↓	89	-1	-10	5
		Oil (palm)	6	-3	-8	-8	-2	+11	↓	11			5
	Liberia	Rice (imported)	32	0	-8	-2	+1	+14	↓	62	-6	+10	5
		Cassava (fresh)	21	-21	-20	-22	-22	0	↓	19			4
		Oil (palm)	15	+13	+6	-5	-8	+8	↗	19			5
	Mali	Rice (local)	21	+7	+8	+9	+14	+12	↗	51	+6	+5	5
		Millet	20	+4	+3	-3	-2	-2	→	24			5
		Sorghum	13	+5	+5	+5	+4	+1	↗	16			5
		Maize	9	+5	+3	+9	+9	-1	→	10			5
	Mauritania	Wheat	30	-1	0	-3	-5	+13	→	34	-2	+4	5
		Sugar	12	-1	-2	-14	-15	-23	↓	16			5
		Oil (vegetable)	11	-2	0	-7	-6	0	→	14			5
		Rice (imported)	11	-2	-1	+2	+3	+18	↓	21			4
		Sorghum (taghalit)	7	-2	-14	+3	+2	+9	↓	15			5
	Niger	Millet	39	-2	-4	-15	-18	-19	↓	57	-4	-15	5
		Sorghum	11	+2	-5	-11	-14	-16	↓	18			5
		Rice (imported)	7	-1	-1	-2	-2	-2	↓	25			5
	North Nigeria	Sorghum	13	+1	-1	-13	-18	-27	↓	24	0	-20	5
		Millet	11	0	+1	-15	-21	-28	→	20			5
		Maize	8	+7	+7	+13	-2	-16	↗	17			5
		Rice (imported)	8	-4	-3	-7	-9	-12	↓	38			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
West Africa	Niger	Millet	39	-2	-4	-15	-18	-19	↓	57	-4	-15	5
		Sorghum	11	+2	-5	-11	-14	-16	↓	18			5
		Rice (imported)	7	-1	-1	-2	-2	-2	↓	25			5
	North Nigeria	Sorghum	13	+1	-1	-13	-18	-27	↓	24	0	-20	5
		Millet	11	0	+1	-15	-21	-28	→	20			5
		Maize	8	+7	+7	+13	-2	-16	↗	17			5
		Rice (imported)	8	-4	-3	-7	-9	-12	↓	38			5
	Senegal	Rice (imported)	30	-1	-1	-1	0	-3	↓	68	-1	-2	5
		Maize (imported)	10	+3	+2	0	+1	0	→	18			5
		Millet	8	0	-5	-10	-8	0	↓	14			5
	Togo	Maize (white)	24	+17	+24	+73	+53	+19	↑	24	+4	-2	5
		Manioc (cassava)	15	+1	-2	-5	-13	-14	↓	40			5
		Rice (imported)	10	+2	+2	-2	-1	-1	→	25			5
		Sorghum	8	+3	-1	+25	+19	+7	↓	10			5
Middle East, North African and Central Asia	Algeria	Pasta	46	-4	N/A	N/A	N/A	N/A	↓	43	0	N/A	*
		Sugar	9	0	N/A	N/A	N/A	N/A	→	8			*
		Milk (camel)	5	+3	N/A	N/A	N/A	N/A	→	49			*
	Armenia	Wheat flour	40	-32	-32	-14	-15	-12	↓	24	-15	+6	4
		Milk	8	-9	-7	+20	+21	+17	↓	56			3
		Sugar	8	-5	-4	-1	+1	-7	↓	8			3
		Potatoes	5	-29	-14	+59	+33	+12	↓	13			3
	Azerbaijan	Wheat (flour)	57	+1	0	+8	+8	+18	→	68	+1	+23	5
		Potatoes	6	-15	+5	+11	+8	+37	↗	32			5
	Egypt	Wheat flour	35	+2	+3	-5	-4	-4	→	63	0	-5	5
		Rice	12	-5	-7	-9	-3	-7	↓	21			5
		Sugar	7	-2	+1	-12	-4	-3	→	15			5
	Georgia	Wheat (flour)	41	0	0	+6	+5	+9	→	33	-2	+18	5
		Milk (raw)	10	0	-3	-4	0	+23	↓	67			5
	Iran	Rice (local)	9	N/A	N/A	+10	+10	+32	N/A	71	N/A	+31	3
		Sugar	9	N/A	N/A	+8	+8	+27	N/A	29			3
	Jordan	Bread (pita)	38	0	-2	-3	-1	0	↓	23	-3	-2	4
		Sugar	15	-1	-2	-8	-7	-11	↓	26			3
		Oil (vegetable)	12	0	-5	-2	-1	-3	↓	24			4
		Rice (imported)	8	0	-5	-2	-2	+9	↓	27			4
	Lebanon	Wheat flour	30	+4	N/A	N/A	N/A	N/A	→	80	+2	-30	*
		Sugar	11	-4	-1	-18	-24	-30	↓	20			3
	Palestine	Wheat flour	40	-1	+1	-7	+1	-3	→	42	0	0	5
		Sugar	10	-2	+3	+5	+4	-13	→	14			4
		Rice (small grain, imported)	7	+5	+7	+15	+10	+15	↗	17			5
		Oil (olive)	5	+1	-7	+7	+6	+5	↓	27			5
	Sudan	Sorghum	60	+3	-2	-20	-25	+34	↓	84	-3	+36	5
		Millet	9	+4	-9	-24	-24	+44	↓	16			5
	Syria	Wheat flour	39	+5	N/A	+50	+51	+30	↗	54	+10	+58	2
		Sugar	13	+21	+12	+152	+138	+163	↑	29			3
		Oil	11	+9	-15	+99	+93	+62	↓	17			3
	Tajikistan	Wheat flour (first grade)	54	0	-2	+15	+17	+29	↓	71	-1	+22	5
		Sugar	7	+8	+4	+13	+14	+5	→	15			5
		Oil (cotton)	6	+3	+3	+15	+15	+11	→	9			5
		Maize	5	+2	-4	+10	+18	+17	↓	5			5
	Turkey	Wheat flour	41	0	N/A	+1	+2	N/A	→	29	0	N/A	*
		Sugar	8	+6	N/A	0	-1	N/A	↗	8			*
		Milk (powder, infant formula)	5	0	N/A	N/A	N/A	N/A	→	63			*
	Ukraine	Wheat flour (first grade)	29	-10	N/A	N/A	N/A	N/A	↓	26	-1	N/A	*
		Oil (sunflower)	9	-2	N/A	N/A	N/A	N/A	↓	11			*
		Potatoes	8	+1	N/A	N/A	N/A	N/A	→	18			*
		Milk	7	+3	N/A	N/A	N/A	N/A	→	45			*
	Yemen	Wheat flour	38	-12	-14	+42	+25	+23	↓	62	-11	+12	5
		Sugar	12	-14	-17	-9	-8	-1	↓	24			3
		Oil (vegetable)	9	+6	+10	+31	+11	-4	↑	14			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
Asia	Afghanistan	Wheat	58	-2	-5	-6	-7	+11	↓	62	-3	+8	5
		Rice (low quality)	22	+3	0	-7	-7	+4	→	38			5
	Bangladesh	Rice (coarse)	70	-4	-5	-20	-19	-9	↓	91	-4	-8	5
		Wheat flour	6	-2	-2	-7	-7	+3	↓	9			5
	Cambodia	Rice (mixed, low quality)	65	+1	-2	-3	-1	-3	↓	100	-2	-3	2
	India	Rice	31	-1	-4	-5	-5	+16	↓	54	-4	+12	5
		Wheat	22	0	-3	+1	+1	+17	↓	33			5
		Sugar	7	-5	-7	-16	-18	-12	↓	13			5
	Indonesia	Rice	50	+3	-1	+13	+12	+26	↓	80	-1	+22	5
		Oil (vegetable)	7	-1	-1	-3	-2	+7	↓	5			5
		Sugar	6	+4	+2	+11	+11	+12	→	9			5
		Wheat	6	+1	+1	+2	+2	+7	→	6			5
	Lao PDR	Rice (glutinous, second quality)	64	0	-8	-2	-4	0	↓	100	-8	0	5
	Myanmar	Rice (low quality)	55	+24	+23	+14	+18	+45	↑	100	+23	+45	5
	Nepal	Rice	32	+3	-1	+5	+3	+17	↓	66	-1	+18	5
		Wheat	15	+2	+1	+4	+3	+20	→	34			5
	Pakistan	Wheat flour	37	-1	-3	-7	-7	+11	↓	44	-3	+5	5
		Sugar	11	+8	+5	+5	+11	+16	↗	21			2
		Oil (cooking)	9	-3	-5	-16	-15	-15	↓	21			2
		Rice (basmati, broken)	6	-1	-4	-9	-9	+10	↓	14			5
	Philippines	Rice (regular milled)	48	0	-3	-6	-8	+8	↓	52	-1	+7	5
		Pork meat with bones	7	+1	+1	-1	-1	+6	→	48			5
	Sri Lanka	Rice (white)	41	-6	-7	-19	-10	+13	↓	69	-6	+7	5
		Wheat (flour)	14	0	-3	-12	-12	-3	↓	31			5
	Thailand	Rice (25% broken)	48	+3	0	-6	-3	-18	→	100	0	-18	5
	Viet Nam	Rice (25% broken)	59	-2	-8	-18	-16	-13	↓	100	-8	-13	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[1] changes of the main food items (those that contribute at least 5% of caloric intake[2]):

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.[3]

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[4] (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[5] 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[6] 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 4.0 estimates.
6. For countries where seasonally adjusted prices cannot be derived, the nominal food basket cost is considered to measure the impact.

For more information, contact:

wfp.economicanalysis@wfp.org

Arif Husain
Chief Economist and Deputy Director,
Policy and Programme Division - Analysis and Trends Service
arif.husain@wfp.org

Tobias Flämig
Market Analyst, Economic & Market Analysis Unit
tobias.flaemig@wfp.org

World Food Programme
Via Cesare Giulio Viola, 68/70
00148 Rome, Italy
www.wfp.org/food-security
http://vam.wfp.org

WFP wfp.org

vam food security analysis