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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 69 countries in the fourth quarter of 2015 (October to December).¹ The maps on pages 6–7 disaggregate the impact analysis to sub-national level.

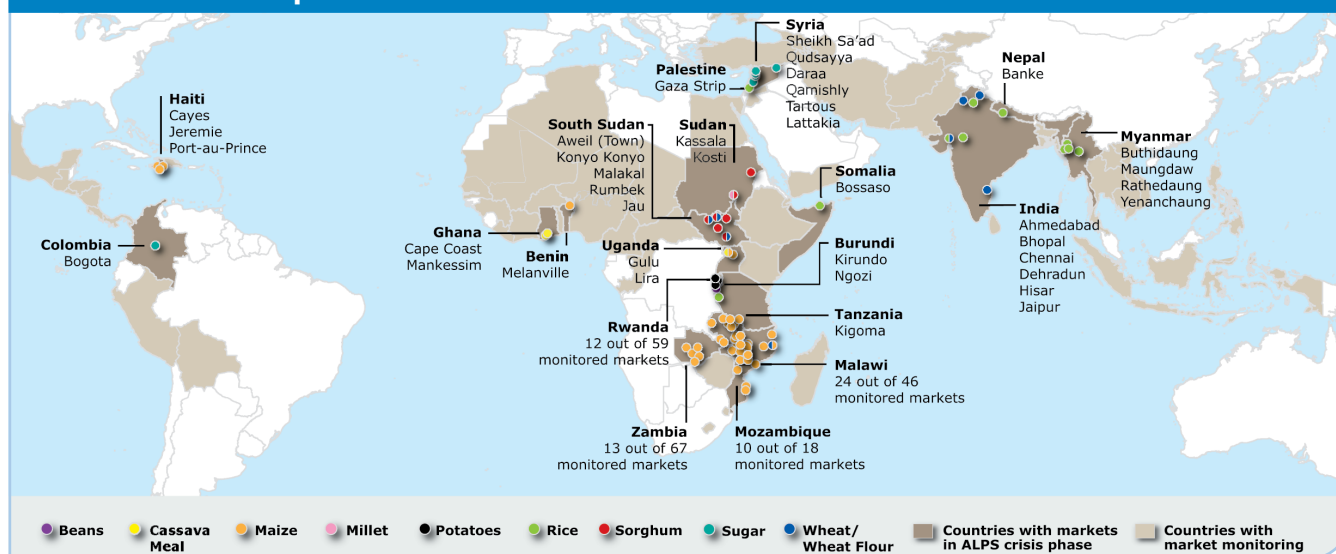
Global Highlights

- During Q4-2015, **FAO's global cereal price index fell by a further 15.2 percent year-on-year** because of abundant supplies and sluggish demand. The index returned to the level seen before the food price crisis of 2007-08.
- The real price² of wheat dropped by eight percent over the last quarter.** It fell by more than 25 percent compared with Q4-2014 mainly because of world record production and higher ending stocks.
- The real price of maize remained constant compared with Q3-2015.** Despite lower than expected production forecasts for 2015/16, global supplies were comfortable amid above-average closing stocks.
- During Q4-2015, the real price of rice decreased by two percent.** As in Q3, prices were 15 percent below 2014 levels. However, global rice supplies may tighten in 2015/16.
- In Q4-2015, the real price of crude oil dropped a further 12 percent compared with Q3-2015** and reached its lowest level in the past eleven years.
- The cost of the minimum food basket increased severely (>10%) during Q4-2015 in nine countries: Burundi, Malawi, Niger, Peru, Rwanda, South Sudan, Sudan, Syria and Turkey.** High increases (5–10%) were seen in **Benin, Cameroon, Ghana, Somalia, Sri Lanka, Uganda** and **Yemen**. In the other monitored countries, the change was *low* or *moderate* (<5%).
- Price spikes, as monitored by **ALPS** (Alert for Price Spikes), were evident in 19 countries, particularly in **Ghana, Haiti, India, Malawi, Mozambique, Myanmar, Rwanda, Somalia, Sudan** and **Syria** (see the map below).³ These spikes indicate *crisis* levels for the two most important staples in each country, including beans, cassava meal, maize, millet, potatoes, rice, sorghum and sugar.

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

Quarterly Change	Maize	Wheat	Rice	Note: Comparison to
q4-2015 vs. q3-2015	0%	-8%	-2%	Third quarter in 2015
q4-2015 vs. q4-2014	-4%	-27%	-15%	Same quarter in 2014
q4-2015 vs. q1-2008		-59%		Global wheat price peak in 2008
q4-2015 vs. q2-2008	-40%		-65%	Global maize and rice price peak in 2008

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 19 January 2016.

2. Nominal prices are adjusted by the [US Consumer Price Index](http://www.bls.gov).

3. A market is designated as a hotspot if prices for the country's two most important caloric contributors 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](http://www.alps.wfp.org) for details).

Price trends and impacts by region (Change from last quarter)

Impact Codes (q/q) 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 2015 was severe in **Peru**; moderate in **Colombia, Dominican Republic, Haiti, Nicaragua and Panama**; and low in the other countries.

• **Staple commodity prices:** In **Peru**, quarterly cereal prices stabilized with the reprise of cereal production (+0% maize and -1% rice; +1% wheat flour). By contrast seasonally adjusted prices of potatoes rose above expectations (+39%) as intense heat caused by *El Niño* compromised the planting season. In **Colombia**, prolonged dry weather associated with *El Niño* hampered crop production. Seasonally adjusted prices increased for rice (+13%) and plantains (+19%) since Q3-2015. Sugar prices soared in Antioquia (+47%) and Cundinamarca (+40%). Drought affected maize yields in **Honduras** and seasonal maize prices increased by nine percent during Q4-2015. In **Haiti**, quarterly prices for local maize were 16 percent up in

the Sud Est because of heavy crop losses. The **ALPS** indicator was at *crisis* level for maize in Jeremie and Port-au-Prince. Seasonally adjusted prices for red beans decreased atypically in **El Salvador** (-27%), **Honduras** (-24%) and **Nicaragua** (-22%) due to the early arrival of the Postrera harvest season.

• **Fuel prices:** During Q4-2015, fuel prices fell in line with the declining international oil prices. Quarter-on-quarter (q/q) prices for gasoline decreased in **Honduras** (-12.7%), and **Guatemala** (-13.8%). A marked drop also affected year-on-year (y/y) prices for diesel (-9.3% in **Colombia**, -24.8% in **Guatemala**) and gasoline (-8.43% in **Colombia**, -18.8% in **Guatemala** and -11.8% in **Honduras**).

• **Purchasing power:** In **Haiti**, the Consumer Price Index (CPI) rose by 3.1 percent because of increasing food prices (+3.0%) and the weakening local currency (gourde). Drought-reduced yields accelerated y/y food inflation in **Colombia** (+10.9%), the **Dominican Republic** (+8.2%), **Guatemala** (+9%) and **Haiti** (+13.8%).



Southern Africa

Hotspots: The impact of staple food price changes on the cost of the basic food basket from October to December 2015 was severe in **Malawi**; moderate in **Congo, Lesotho, Mozambique, Swaziland, Tanzania and Zambia**; and low in the other countries of the region.

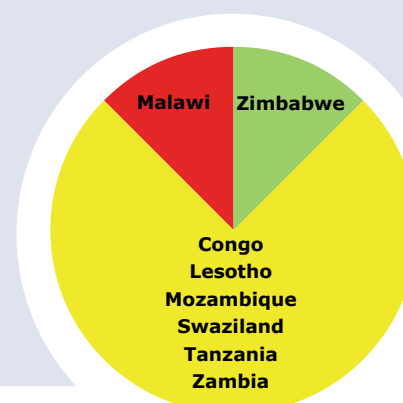
• **Staple commodity prices:** In **Tanzania**, the appreciation of the local currency and lower export demand offset the seasonal increase for commonly exported staples (-1% rice and -1% beans). Seasonally adjusted maize prices increased compared with Q3-2015 with the onset of the lean season in bimodal regions (+20% in Mara; +19% in Kagera; +16% in Dodoma) and southern producing areas (+25% Rukwa). Despite steep nominal price increases for maize in **Zambia** (+24%), they were fairly stable after seasonal adjustments (+3%). **Malawi** faces an acute deficit in maize supplies as *El Niño* related "dry spells" severely delayed planting in central and southern provinces: the national average of seasonally adjusted maize prices rose by 13 percent compared with Q3-2015 and almost doubled

since Q4-2014 (+86%). The **ALPS** indicator flags that nearly all monitored markets were either at *crisis* or *alert* level for maize in December. In **Mozambique**, the seasonally adjusted price for maize surged in coastal provinces (+34% in Sofala and +44% in Inhambane) and was at *alert* level in Tete, Massinga and Quelimane according to the **ALPS**. The depreciation of the Mozambican local currency (metical) continued to push up quarterly prices for imported commodities (+4% rice and +6% oil).

• **Fuel prices:** In **Tanzania**, q/q prices dropped for gasoline (-8.6%) and diesel (-6.3%) after the national energy regulator cut the price ceiling on fuels and the Tanzanian shilling stabilized on the international currency market.

• **Purchasing power:** In **Malawi**, q/q headline inflation accelerated

by 12.5 percent and food inflation was 20.4 percent due to tight supplies and a weaker kwacha. In **Zambia**, high food exports to neighbouring countries and growing production costs drove up the quarterly CPI by 11.3 percent and the food CPI by 13.8 percent. Y/y headline inflation was high in **Malawi** (24.7%) and **Zambia** (18.3%), mainly due to food price increases.



Central and Eastern Africa

Hotspots: The cumulative impact of staple food price changes on the cost of the basic food basket from October to December 2015 was severe in **Burundi, Rwanda and South Sudan**; high in **Uganda and Somalia**; and low in **Ethiopia and Kenya**.

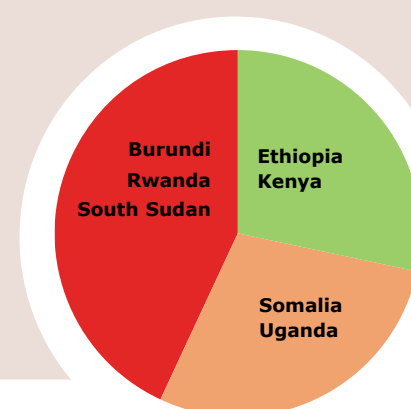
• **Staple commodity prices:** In **Burundi**, seasonal adjusted prices increased for cassava flour (+5%), sweet potatoes (+9%), beans (+24%) and maize (+26%) coinciding with the lean season. Insecurity weighed further on food prices in Kirundo (+46% maize and +39% beans), Muyinga (+37% maize and +28% sweet potatoes), and Ngozi (+25% maize, +50% beans and +55% sweet potatoes) as producers abandoned cultivated lands to flee post-electoral turmoil. In **Somalia**, sorghum prices increased seasonally (+4%) in Q4-2015 but remained well below last year's levels in all regions (-20%). In **Ethiopia**, sorghum prices decreased on average by 11 percent from Q3-2015, as the Meher harvest began; however, crop prices increased atypically for sorghum in Amhara (+28%) and in Dire Dawa (+32%) and for maize in SPNNR (+30%) because of poor rains during the planting season. In **Uganda**, seasonally adjusted prices increased for beans

(+22%), maize (+13%), and millet (+3%) despite the start of the harvest season - dryness in earlier 2015 had delayed land preparation and crop development. In **South Sudan** nominal prices were up by 11 percent for sorghum and 33 percent for wheat flour, while after seasonal adjustment they increased slightly (sorghum) or remained constant (millet). According to the [ALPS](#) indicator, prices for sorghum in Aweil, Jau and Konyo Konyo were at *crisis* level. Seasonally adjusted prices for maize decreased in **Kenya** (-3%) after a good harvest.

• **Fuel prices:** In **Kenya**, fuel prices fell from last year (-11.8% gasoline and -14.9% diesel). In **Ethiopia**, q/q gasoline prices rose by a further 8.9 percent in Q4-2015; nevertheless, the cost of fuel was lower than in Q4-2014 (-9.9% gasoline and -17.9% diesel). Q/q diesel prices skyrocketed in **South Sudan** (+89%) as fuel supplies remained scarce in the country and the South Sudanese pound

depreciated sharply after the introduction of a floating exchange rate policy in early December 2015.

• **Purchasing power:** Q/q headline inflation was moderate in **Rwanda** (2.9%) and **Uganda** (+3.8%) and driven by the change in food prices. In **South Sudan** y/y headline inflation skyrocketed (+84%) and q/q inflation rose sharply (+18.5% CPI and +20.2% food CPI) as insecurity, lower imports and fuel shortages continued to hit the South Sudanese economy.



West Africa

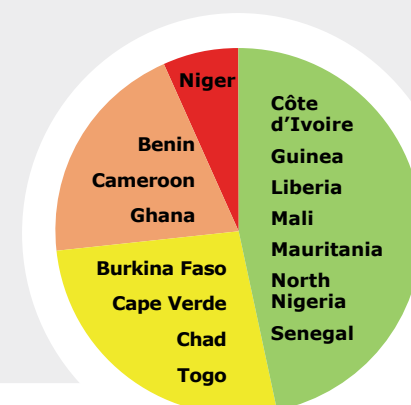
Hotspots: The impact of staple food price changes on the cost of the basic food basket from October to December 2015 was severe in **Niger**; high in **Benin, Cameroon and Ghana**; moderate in **Burkina Faso, Cape Verde, Chad and Togo**; and low in the other countries.

• **Staple commodity prices:** During Q4-2015, seasonally adjusted prices for millet and sorghum in **Niger** went up significantly by 19 and 7 percent respectively. Lower imports from neighbouring countries meant prices soared in southern regions Tillabéri (+37% millet and +32% sorghum) and Maradi (+19% millet and +6% sorghum). Additionally, insecurity drove up cereal prices in regions affected by Boko Haram, such as Agadez (+19% millet, +4% sorghum and +25% maize). Seasonally adjusted prices decreased in **Burkina Faso** (-1% sorghum and -1% millet), **Mali** (-4% millet and -3% sorghum) and **Côte d'Ivoire** (-7% cassava and -2% maize) thanks to adequate supplies. Despite civil unrest and displacement affecting food production in **North Nigeria**, above-average yields meant prices eased for local commodities (-11% sorghum and -17% millet) whereas maize prices increased by 11 percent in Kano as northern regions approached the main lean season. In **Cameroon**, prices changed sharply because erratic rainfall

compromised crop development before the second harvest season (+48% cassava, +22% sorghum and +5% rice). Seasonally adjusted prices increased dramatically by the border to Nigeria, such as in Nord Ouest (+51% cassava, +31% local rice, 12% sorghum and 7% maize), as insecurity disrupted agriculture. In **Chad**, late rains delayed planting and drove up seasonal cereal prices in Lake and southern regions: Hadjer Lamis (+13% sorghum, +10% millet and +19% maize) and Longone Oriental (+17% sorghum and +9% millet). Prices in **Ghana** still followed an upward trend as a consequence of the weaker local currency (cedi): most monitored markets were at *crisis* level for local rice and at *alert* level for maize according to the [ALPS](#). Markets continued to rebound in Ebola-affected countries and seasonally adjusted prices decreased in **Guinea** (-5% rice and -9% palm oil) as well as in **Liberia** (-5% rice, -6% cassava and -8% palm oil) thanks to growing production and imports.

• **Fuel prices:** No fuel prices available.

• **Purchasing power:** Inflationary pressure on food prices eased in **Burkina Faso** (-3.7%), **Chad** (-5.9%) and **Mali** (-5.2%), reflecting the improvement in food supplies. In **Ghana**, y/y headline inflation remained high (+17%) as a long-lasting result of below-average production and currency depreciation. Y/y headline inflation also edged up in **Guinea** (+7.4%) and **Nigeria** (+8.9%), partly driven by the rise in transportation costs.



Middle East, North Africa and Central Asia

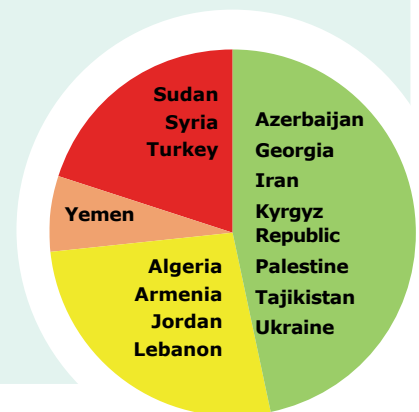
Hotspots: The impact of staple food price changes on the cost of the basic food basket from October to December 2015 was severe in **Sudan, Syria and Turkey**. It was high in **Yemen**; moderate in **Algeria, Armenia, Jordan and Lebanon**; and low in the remaining countries of the region.

• **Staple commodity prices:** In **Sudan**, prices rose seasonally for sorghum (+17%) and millet (+7%) as poor summer rains affected crop establishment for the current harvest season. Political instability weighed on prices in Southern Darfur (+47% sorghum and +19% millet) and in White Nile (+25% sorghum and +10% millet). The **ALPS** indicator was at *crisis* level for sorghum in Kosti and Kassala and at *alert* level for millet in Al Fashir and Port Sudan. In **Syria**, the ongoing conflict continued to disrupt trade and access to food: seasonally adjusted prices surged for sugar (+23%) and oil (+21%). The besieged governorate of Deir Ezzor recorded the highest quarterly price increase (+27% sugar and +62% oil); sugar and oil were respectively 17 and 10 times more expensive than last year. In **Turkey**, bread and sugar prices were 18 and 10 percent more expensive after seasonal adjustment. In **Ukraine** seasonally adjusted prices for

potatoes went up by 30 percent, but down by 10 percent for bread and oil. In **Yemen**, food availability improved in December 2015 keeping quarterly price increases in check for wheat flour (+7%), sugar (+5%) and vegetable oil (+12%) by comparison with previous surges. Yet, wheat flour increased significantly in Amran (+17%), Hajjah (+18%), Sa'ada (15%) and Al Hudaydah (+10%) in the fourth quarter.

• **Fuel prices:** Diesel prices stabilized in **Syria**, recording a moderate increase from to Q3-2015 (+4.6%). A chronic fuel shortage pushed prices up in **Yemen**: q/q prices rose by 19.5 percent for gasoline and by 13 percent for diesel; y/y price increases were at record levels (+269.6% gasoline; +248.4% diesel). In **Ukraine**, q/q prices decreased for gasoline (-4.2%) and diesel (-7.1%) but were still high compared with Q4-2014 (+17% gasoline and +4.3% diesel) due to the increase in the levy for fuels.

• **Purchasing power:** In **Egypt**, q/q headline inflation rose by 3.9 percent during Q4-2015 and by 10.7 percent compared with last year as the reduction in subsidies drove up food prices (+13.9%). In **Jordan**, the appreciation of the Jordanian dinar pulled down the annual headline inflation by 21.7 percent, due to the sharp drop in exports and cheaper imported products. In **Sudan**, y/y headline inflation eased at 12.9 percent from peak levels in 2014 due to the fall in international oil prices.



Asia

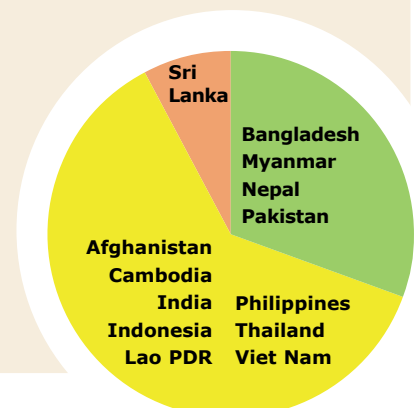
Hotspots: The impact of staple food price changes on the cost of the basic food basket from October to December 2015 was high in **Sri Lanka**; moderate in **Afghanistan, Cambodia, India, Indonesia, Lao PDR, Philippines, Thailand and Viet Nam**; and low in the remaining countries of the region.

• **Staple commodity prices:** Seasonally adjusted rice prices were stable or falling between Q3-2015 and Q4-2015, reflecting good availability of supplies in nearly all countries of the region. In **Myanmar**, the price for low quality rice decreased in Q4-2014 (-4%) thanks to a good harvest season; however, prices were at *alert* level in Magway, Maungdaw and Yenanchaung markets according to the **ALPS**. The seasonally adjusted price for sugar increased slightly in **Indonesia** (+1%); sugar prices were three percent up in **India** as sugar crops suffered severe damage from curbed monsoon rains; in **Sri Lanka**, quarterly sugar prices increased by six percent following the introduction of taxes on imported sugar in

September. Despite recent turmoil in southern regions of Nepal and the interruption of cross-border trade, seasonally adjusted prices decreased for wheat (-4%) and rice (-4%) during Q4-2015. Nevertheless, the **ALPS** indicator was at *crisis* level in Banke district for rice and at *alert* level for wheat in Kathmandu and Morang.

• **Fuel prices:** In **Pakistan**, fuel prices fell from Q3-2015 (-1.4% gasoline and -2.1% diesel) and from Q4-2014 (-17.7% diesel and -28% gasoline) as result of oversupplies. The plummeting of global oil prices explains the drop in q/q diesel prices in **Afghanistan** (-11%) and in **Myanmar** (-17%). Quarterly diesel prices remained unchanged in **Sri Lanka** due to state controls on the price for petroleum by-products.

• **Purchasing power:** Quarterly changes in the CPI and the food CPI were low to moderate in most countries. Y/y food inflation went up significantly in **Nepal** (+12%) as a prolonged period of general strikes reduced food supplies and disrupted cross-border trade in south-eastern regions.



Consumer Price Index

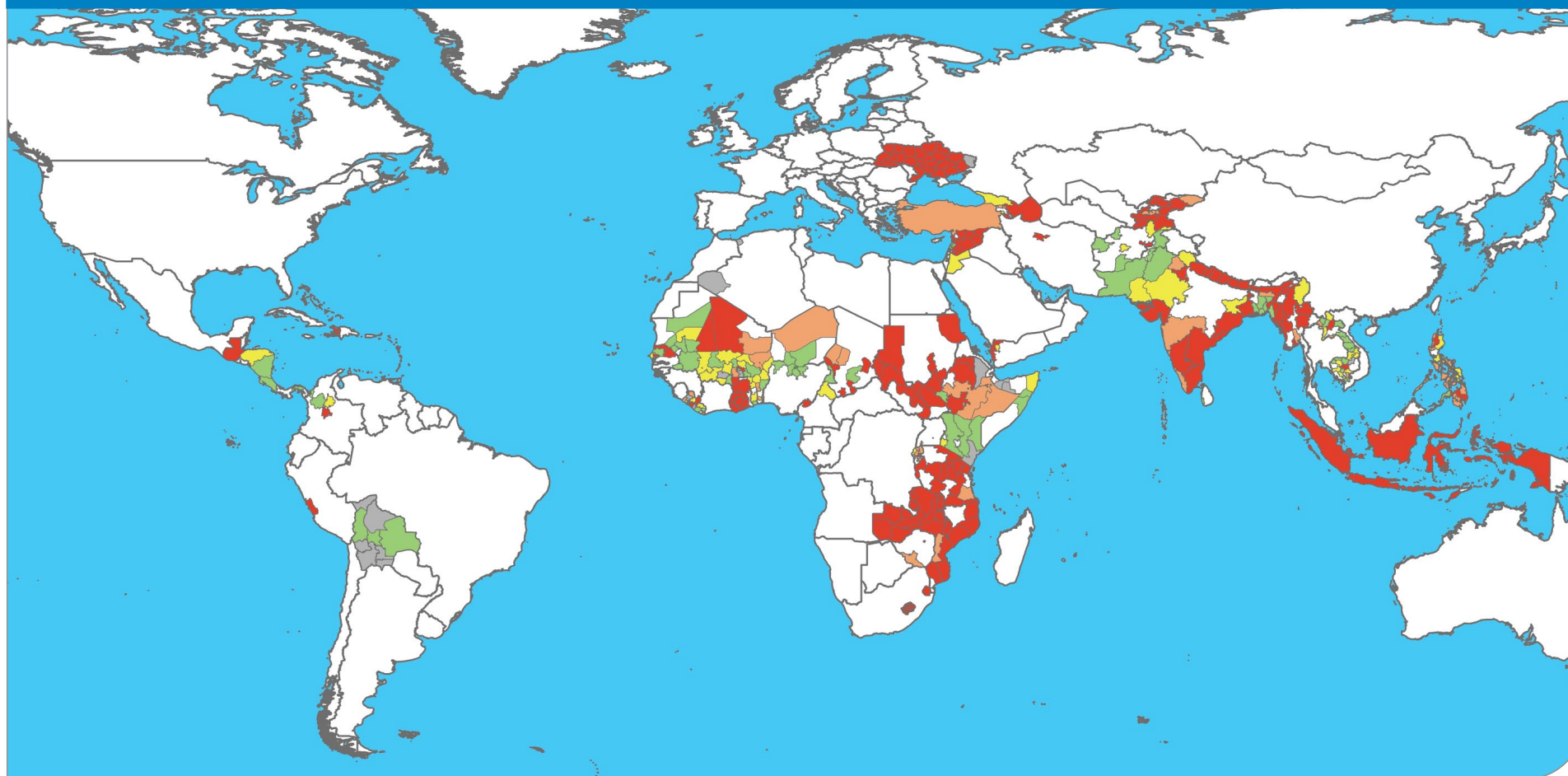
Region	Country	Quarterly and Yearly Changes in Q4-2015 (October-December)			
		Quarter-on-Quarter		Year-on-Year	
		General CPI	Food CPI	General CPI	Food CPI
Latin America and Caribbean	Bolivia	0.81%	1.21%	3.64%	4.09%
	Colombia	1.95%		6.36%	10.85%*
	Costa Rica	-0.43%	0.38%	-0.64%	0.03%
	Dominican Republic	1.04%	4.21%	1.64%	8.24%
	El Salvador	1.32%		-0.06%	-0.41%*
	Guatemala	0.96%		2.60%	9.00%*
	Haiti	3.06%	3.00%	12.17%	13.77%
	Honduras	-0.11%	-0.26%	2.33%	-0.26%
	Nicaragua	0.56%	2.44%	2.28%	2.03%
	Panama	-0.56%		-0.05%*	
Southern Africa	Peru	0.67%		4.08%	
	Lesotho	1.26%	-0.30%	4.62%	6.00%
	Madagascar	1.09%		7.03%	6.34%*
	Malawi	12.54%	20.37%	24.69%	28.83%
	Mozambique	5.25%		7.20%	
	Swaziland	0.56%		4.57%	3.90%*
	Tanzania	0.94%	1.41%	6.48%	10.82%
	Zambia	11.34%	13.80%	18.34%	21.30%
Central and Eastern Africa	Zimbabwe	-0.54%		-2.72%	-3.85%*
	Burundi	0.09%	-0.57%	51.24%	
	Ethiopia	-0.04%	1.38%	10.69%	16.19%
	Kenya	1.45%		7.35%	13.26%*
	Rwanda	2.90%	5.66%	6.58%	8.91%
	South Sudan	18.51%	20.22%	84.80%	107.63%
	Uganda	3.78%	6.75%	9.03%	15.06%
West Africa	Benin	0.98%	5.65%	1.61%	5.37%
	Burkina Faso	0.42%	-3.73%	2.01%	1.47%
	Cape Verde	0.10%	0.39%	-0.02%	1.43%
	Chad	-3.26%	-5.92%	0.42%	-2.26%
	Côte d'Ivoire			1.2%*	1.79%*
	Ghana	2.86%	-1.38%	16.99%	
	Guinea	1.51%		7.35%	
	Guinea-Bissau	0.21%		2.60%	
	Mali	-1.85%	-5.16%	1.42%	
	Mauritania	-5.16%	2.58%	-10.77%	-5.24%
	Niger	0.71%		2.13%	
Middle East, North Africa and Central Asia	Nigeria	1.37%		8.92%	
	Senegal	0.72%	2.11%	1.04%	9.84%
	Armenia	-1.68%	0.64%	-6.64%	-1.40%
	Azerbaijan	1.00%	2.50%	2.95%	4.94%
	Egypt	3.91%	4.40%	10.70%	13.91%
	Georgia	1.83%	-1.97%	5.63%	-2.89%
	Iran	1.29%		9.50%	6.40%*
	Iraq	0.23%	0.03%	1.33%	0.73%
	Jordan	-20.81%	0.20%	-21.65%	1.92%
	Kyrgyzstan	2.04%		3.99%	
	Lebanon	0.29%	1.80%	-3.52%	-1.30%
	Palestine	0.70%	1.79%	1.60%	4.86%
	Sudan	1.55%		12.92%	
	Tajikistan	-3.29%	-0.56%	-4.42%	-3.37%
	Turkey	2.82%		8.16%	10.87%*
Asia	Afghanistan	2.32%	1.88%	-1.27%	-2.26%
	Bangladesh	1.95%	2.17%	5.96%	5.70%
	Cambodia	0.22%		2.11%	
	India	1.34%	2.94%	5.18%	6.22%
	Indonesia	0.47%		4.73%	
	Lao PDR	0.00%		1.17%	
	Nepal	3.59%	4.81%	9.34%	11.98%
	Pakistan	0.75%	0.33%	2.51%	0.77%
	Philippines	0.44%	0.78%	0.99%	1.39%
	Sri Lanka	1.08%	2.18%	2.52%	4.03%

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

Q4-2015 (October to December) vs. **Q4-Baseline** (Average October to December)



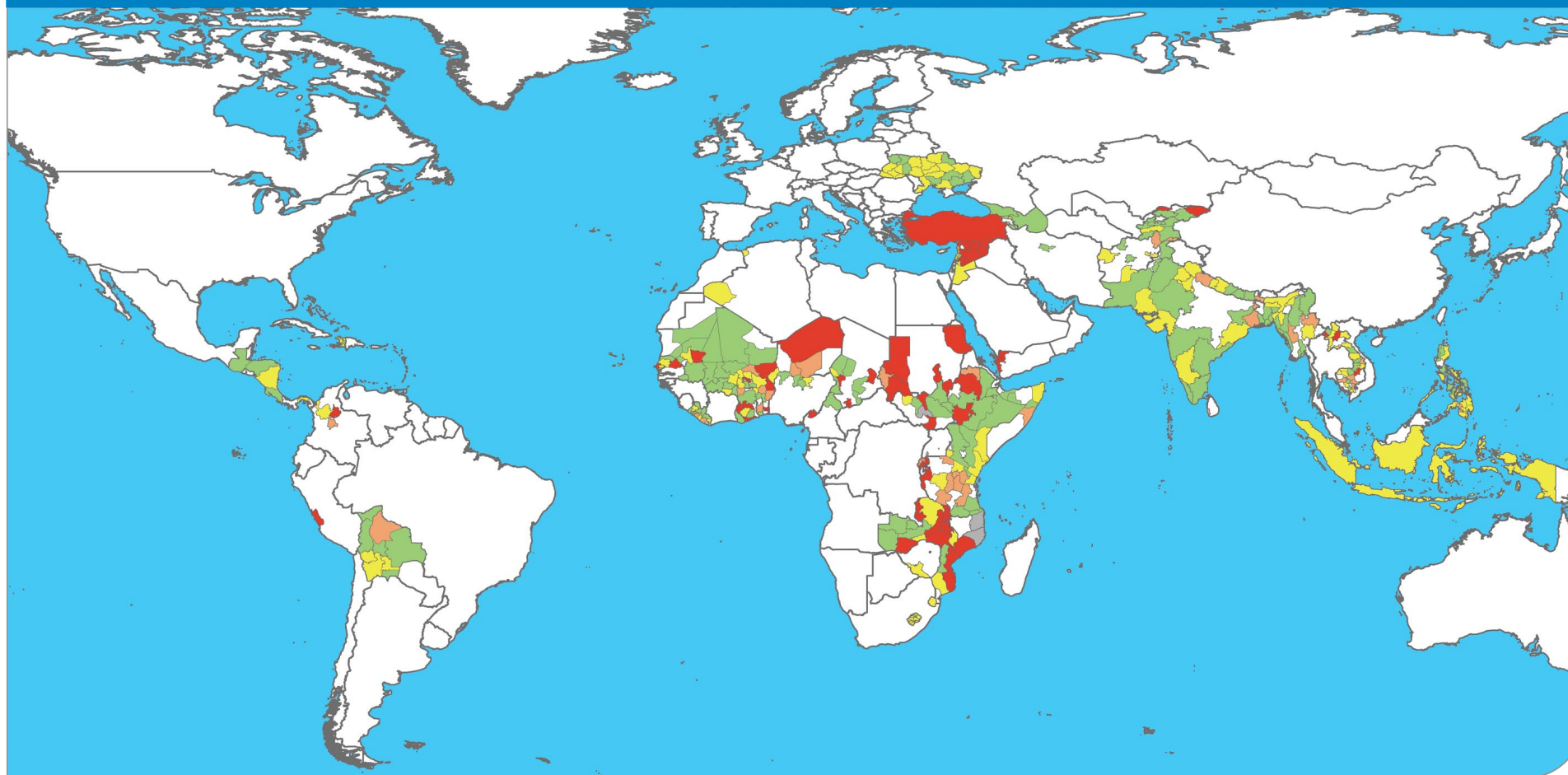
Map produced by: VAM - Food Security Analysis (OSZAF). Source: WFP; Base Map: GAUL.

Impact Codes

■ Low (< 0%)	■ Moderate (0-5%)	■ High (5-10%)	■ Severe (> 10%)	■ Monitored but without baseline	■ Water bodies
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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. Baseline prices are from Q4 2010-14.

Q4-2015 (October to December) vs. Q3-2015 (July to September)



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
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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		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]	
											(%)	(% change)		(% change)
A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Latin America and Caribbean	Bolivia	Rice (carolina 2da)	14	-2	+1	-14	-14	-7	→	49			5	
		Maize (hard yellow, cubano)	13	-15	-13	-26	-25	-32	↓	10	-3	-12	5	
		Sugar	13	-1	N/A	N/A	N/A	N/A	↓	41			*	
	Colombia	Maize (white)	13	0	+1	+27	+33	+53	→	7			4	
		Sugar	13	+22	+29	+68	+51	+49	↑	9			3	
		Rice (paddy)	12	+6	+13	+32	+29	+26	↑	7			3	
		Wheat flour	8	-7	-7	+32	+29	+11	↓	5	0	-38	5	
		Milk (pasteurized)	7	-4	-4	+25	+4	-54	↓	59			4	
		Bananas	5	-1	-1	-6	-10	-9	↓	6			2	
		Plantains	5	+15	+19	+30	+15	+30	↑	7			3	
	Costa Rica	Rice (first quality)	17	-1	-1	-5	-4	-3	↓	63	-1	-3	5	
		Wheat (flour)	10	-2	-4	-2	-4	-2	↓	37			5	
	Dominican Republic	Rice (first quality)	17	0	0	+1	+1	+3	→	45	+2	+10	5	
		Chicken (processed)	5	+4	+4	+5	+2	+17	→	55			5	
	El Salvador	Maize (white)	25	-8	+2	-4	-2	+7	→	48			5	
		Beans (red)	6	-20	-27	-37	-32	-10	↓	37	-7	+1	5	
		Sorghum (maicillo)	6	+18	+13	+50	+30	+14	↑	15			5	
	Guatemala	Tortilla (maize)	36	0	-2	+1	+5	+30	↓	55			5	
		Sugar	14	0	-1	0	0	+7	↓	10	-2	+22	5	
		Bread	11	+1	-2	-1	+1	+15	↓	34			5	
	Haiti	Wheat flour (imported)	12	+2	0	+18	+23	+21	→	47	+3	+23	5	
		Maize (local)	9	+4	+8	+36	+34	+40	↗	29			5	
		Oil (vegetable, imported)	7	+3	+3	+8	+9	+10	→	24			3	
	Honduras	Maize (white)	26	-18	+9	+23	+15	+22	↗	50			5	
		Beans (red)	5	-23	-24	-38	-44	-15	↓	27	-6	+4	5	
		Rice (milled 80-20)	5	-1	-4	-6	-5	+2	↓	23			5	
	Nicaragua	Rice (milled 80-20)	17	-2	-5	-6	-5	-5	↓	29			*	
		Sugar	15	-1	+7	-3	-3	-91	↗	19	0	-68	2	
		Bread	9	-6	-10	-10	-6	-6	↓	34			*	
	Panama	Beans (red)	7	-13	-22	-31	-38	-38	↓	17			*	
		Rice (first quality)	24	+7	+5	+18	+17	-8	↗	43			5	
		Bread	12	0	-1	0	0	-15	↓	48	0	-11	5	
	Peru	Maize	7	0	-3	0	0	+1	↓	9			5	
		Rice (local)	21	0	-1	+1	+1	+7	↓	23			5	
		Wheat flour (locally processed)	14	+1	+1	+2	+2	+6	→	23	+10	+16	5	
		Potatoes	8	+40	+39	+77	+55	+47	↑	33			5	
Southern Africa	Congo	Sugar	8	-1	-1	+19	+20	+3	↓	8			5	
		Maize (local)	7	-2	0	-4	-4	+5	→	13			5	
		Cassava (fresh)	32	+3	+2	N/A	N/A	-1	→	74			3	
	Lesotho	Oil (palm)	11	0	+5	N/A	N/A	+61	↗	15	+2	+8	*	
		Rice (mixed, low quality)	6	0	+2	N/A	N/A	+18	→	11			3	
	Malawi	Maize meal	56	+3	+3	+12	+11	+23	→	56	+1	+20	5	
		Bread (brown)	14	0	-2	0	0	+17	↓	44			5	
			Maize	53	+17	+13	+88	+86	+127	↑	100	+13	+127	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	-3	-12	+54	+56	+56	↓	47	+2	+33	*
		Maize (white)	20	+35	+16	+81	+64	+50	↑	16			5
		Wheat flour (local)	9	+4	+3	+7	+13	+13	→	16			4
		Rice (imported)	8	+8	+4	+15	+5	+4	→	13			5
		Oil (vegetable, imported)	5	+11	+6	+5	+6	+4	↗	9			3
	Swaziland	Maize (white)	25	+5	-2	+5	+5	+7	↓	18	0	+18	4
		Wheat flour	16	+1	0	-5	-2	+22	→	41			5
		Sugar (brown)	11	+2	+3	+5	+7	+22	→	23			4
		Rice	8	+2	-1	-6	-1	+15	↓	18			5
	Tanzania	Maize	26	+14	+5	+69	+62	+35	↗	38	+2	+30	5
		Rice	10	+11	-1	+24	+31	+28	↓	41			5
		Beans	5	+8	-1	+17	+18	+25	↓	21			4
	Zambia	Maize (white)	51	+24	+3	+30	+25	+32	→	100	+3	+32	3
	Zimbabwe	Maize	41	+8	-1	+42	+39	+26	↓	100	-1	+26	5
Central and Eastern Africa	Burundi	Sweet potatoes	17	+17	+9	-8	-9	-20	↗	35	+16	0	5
		Beans	16	+39	+24	+53	+27	+25	↑	32			5
		Cassava flour	13	+9	+5	-9	-10	-7	↗	15			5
		Maize	13	+35	+26	+18	+15	+21	↑	18			5
	Ethiopia	Maize (white)	21	0	+7	+10	-5	+9	↗	24	-14	+16	5
		Pasta	12	-15	-24	-8	+19	+19	↓	57			*
		Sorghum	12	-6	-11	-1	-6	+14	↓	19			5
	Kenya	Maize (white)	35	-4	-3	-21	-21	-17	↓	22	-4	+15	5
		Bread	9	0	-2	0	0	+16	↓	21			5
		Milk (cow, fresh)	7	-3	-5	+16	+10	+35	↓	57			5
	Rwanda	Bananas	17	+18	+12	+16	+12	-23	↑	27	+10	+7	5
		Potatoes (Irish)	12	+8	+17	+46	+41	+37	↑	26			5
		Beans (dry)	11	+11	+4	+21	+16	+18	→	11			5
		Cassava	11	+1	+1	+13	+6	+14	→	12			5
		Sweet potatoes	11	+13	+6	+18	+11	+27	↗	16			5
		Sorghum	8	0	-8	-10	-8	+14	↓	6			5
		Maize	5	+8	-2	+8	+3	+3	↓	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	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]
			(%)	(% change)	(% change)	(% change)	(% change)	(% change)		(%)	from previous quarter	from baseline (%)	
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Central and Eastern Africa	Somalia	Sorghum (red)	29	+10	+4	-23	-20	-20	→	82	+7	-21	*
		Rice (imported)	9	0	0	-29	-17	-23	→	18			3
	South Sudan	Sorghum (white)	26	+11	+6	+145	+105	+135	↗	36	+22	+168	5
		Wheat flour	15	+33	0	N/A	N/A	+194	→	49			3
		Millet (white)	7	N/A	N/A	+242	+142	+186	N/A	15			5
	Uganda	Cassava flour	13	-3	-2	+61	+33	+34	↓	40	+7	+31	5
		Maize (white)	9	+5	+13	+93	+54	+27	↑	18			4
		Beans	5	+13	+22	+40	+48	+42	↑	25			4
		Millet	5	+1	+3	+21	+14	+15	→	17			4
West Africa	Benin	Maize (white)	19	+5	+20	+78	+64	+38	↑	20	+5	-1	5
		Manioc (cassava)	16	-4	0	-11	-7	-15	→	40			5
		Rice (imported)	13	-1	0	0	0	+2	→	34			5
		Sorghum (red)	5	+6	+5	+15	+19	+6	↗	6			5
	Burkina Faso	Sorghum	26	-6	-1	-2	-3	-1	↓	41	0	0	5
		Millet	22	-7	-1	-2	-2	-2	↓	36			5
		Maize	16	-5	+4	+15	+13	+3	→	23			5
	Cameroon	Maize	15	-15	-1	+24	-12	-6	↓	25	+8	+4	4
		Cassava (cossette)	12	-7	+48	+10	+1	+16	↑	39			4
		Rice (local)	10	-10	+5	+70	-28	-8	↗	22			4
	Cape Verde	Sorghum (red)	8	-1	+22	+60	+28	+12	↑	14	+1	+11	4
		Rice (long grain, imported)	19	+2	+4	-2	-2	-6	→	43			5
		Wheat (flour, imported)	13	+1	+3	-1	-2	0	→	22			5
	Chad	Maize (white, local)	12	0	-3	+32	+37	+58	↓	35	+4	+18	5
		Sorghum	18	-6	+4	+5	+10	+22	→	44			5
		Millet	15	-6	+1	+1	+7	+16	→	43			5
	Côte d'Ivoire	Maize	5	-11	+2	-3	-3	+14	→	13	-4	+4	5
		Rice (denikassia, imported)	20	0	-2	+6	+5	+4	↓	47			5
		Cassava (fresh)	12	-1	-7	+2	0	-1	↓	19			5
		Oil (palm)	9	0	-1	+4	+2	-2	↓	21			4
	Ghana	Maize	7	0	-2	+13	+8	+26	↓	13	+6	+40	5
		Cassava	21	+3	+6	+21	+21	+40	↗	100			5
	Guinea	Rice (imported)	37	0	-5	0	0	+1	↓	86	-3	-1	3
		Oil (palm)	6	0	-9	0	0	-14	↓	14			3
	Liberia	Rice (imported)	32	-2	-5	-10	-13	+6	↓	61	-8	+1	5
		Cassava (fresh)	21	-1	-6	-19	-15	-8	↓	19			4
		Oil (palm)	15	+1	-8	-7	-12	-3	↓	20			5
	Mali	Rice (imported)	21	0	+1	0	+2	-1	→	49	-1	-2	5
		Millet	20	-6	-4	-3	-4	-5	↓	25			5
		Sorghum	13	-6	-3	0	0	-1	↓	17			5
		Maize	9	+2	+7	+3	+6	-1	↗	10			5
	Mauritania	Wheat	30	-4	-8	-7	-4	0	↓	34	-3	-1	5
		Sugar	12	0	+1	-10	-15	-23	→	16			5
		Oil (vegetable)	11	0	-1	-4	-4	0	↓	14			5
		Rice (imported)	11	+6	+3	+11	+12	+20	→	22			5
	Niger	Sorghum (taghalit)	7	-8	-10	-22	-10	+1	↓	14	+10	0	5
		Millet	39	-3	+19	N/A	-1	-2	↑	56			4
		Sorghum	11	0	+7	N/A	-1	+6	↗	19			4
		Rice (imported)	7	-1	0	N/A	+2	0	→	25			4
	North Nigeria	Sorghum	13	-13	-11	-37	-32	-23	↓	34	-6	-21	5
Millet		11	-16	-17	-30	-31	-31	↓	26	4			
Maize		8	+3	+11	-3	-2	-4	↑	24	5			
Senegal	Rice (imported)	8	-2	-3	-25	-25	-17	↓	16	-2	-1	5	
	Maize (imported)	10	+1	-2	-1	-1	-1	↓	100			5	
Togo	Maize (white)	24	-15	-7	+33	+43	+9	↓	21	+2	0	5	
	Manioc (cassava)	15	+6	+10	+8	+5	-4	↑	45			5	
	Rice (imported)	10	-3	-2	-3	-3	-3	↓	24			5	
	Sorghum	8	-5	0	+12	+14	+7	→	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 African and Central Asia	Algeria	Pasta	46	+2	N/A	N/A	N/A	N/A	→	84	+2	N/A	*
		Sugar	9	0	N/A	N/A	N/A	N/A	→	16			*
		Bread (first grade flour)	40	0	-2	0	+5	+8	↓	46			3
		Milk	8	-1	+2	-3	+11	+14	→	40	0	+9	3
	Armenia	Sugar	8	-4	-1	-15	+1	-7	↓	5			3
		Potatoes	5	-2	+1	-31	-23	+5	→	9			3
	Azerbaijan	Wheat (flour)	57	+1	-2	+9	+9	+16	↓	70	-5	+14	5
		Potatoes	6	+2	-6	0	-5	+11	↓	30			5
	Georgia	Bread	41	0	-2	+1	0	+3	↓	100	-2	+3	5
		Rice (local)	9	+4	-3	+8	+10	+27	↓	71	-3	+27	3
	Iran (Islamic Republic of)	Sugar	9	+4	-1	+14	+12	+26	↓	29			3
		Bread (pita)	38	0	0	0	0	0	→	23			4
	Jordan	Sugar	15	0	+1	-6	-6	-10	→	26	+2	0	3
		Oil (vegetable)	12	+7	+9	+7	+5	+6	↗	25			4
		Rice (imported)	8	0	-1	-1	-1	+7	↓	26			4
		Bread	40	0	-5	+2	+5	+23	↓	72			5
	Kyrgyz Republic	Sugar	9	+5	+9	+5	+4	+7	↗	12	-3	+12	5
		Potatoes	8	-3	-5	-46	-43	-18	↓	16			5
	Lebanon	Bread (pita)	30	0	+5	-5	-5	-7	↗	86	+1	-12	3
		Sugar	11	+1	-4	-24	-23	-31	↓	14			3
	Palestine	Wheat flour	40	-1	-4	-7	-6	-7	↓	42			5
		Sugar	10	0	-2	-2	-2	-15	↓	14	-1	-1	4
		Rice (small grain, imported)	7	-1	-2	+7	+10	+13	↓	17			5
		Oil (olive)	5	+4	+4	+7	+8	+9	→	28			5
	Sudan	Sorghum	60	+12	+17	+10	-3	+57	↑	85	+15	+57	5
		Millet	9	+4	+7	-6	-13	+53	↗	15			5
	Syria	Bread (bakery)	39	+12	+1	+129	+106	+200	→	25	+16	+241	3
		Sugar	13	+31	+23	+241	+231	+342	↑	49			4
		Oil	11	+28	+21	+140	+135	+162	↑	26			4
		Bread	54	+4	-3	+45	+41	+40	↓	92			5
	Tajikistan	Sugar	7	+1	+3	+12	+15	+8	→	4	-3	+38	5
		Oil (cotton)	6	+3	+2	+11	+13	+14	→	2			5
		Maize	5	-9	+1	+11	+9	+18	→	1			5
		Bread (common)	41	+4	+18	+10	+8	+8	↑	60			2
	Turkey	Sugar	8	+2	+10	+8	+8	+9	↑	11	+12	+7	2
		Milk (pasteurized)	5	0	-1	0	0	+4	↓	29			2
		Bread (rye)	29	+1	-10	+57	+55	+55	↓	41			*
		Oil (sunflower)	9	-2	-10	+61	+67	+67	↓	8			*
	Ukraine	Potatoes	8	+13	+30	+90	+86	+86	↑	15	-1	+50	*
		Milk	7	+7	+1	+34	+31	+31	→	36			*
	Yemen	Wheat flour	38	+5	+7	+15	+39	+32	↗	63			5
		Sugar	12	-3	+5	-3	+4	+4	↗	23	+8	+21	3
		Oil (vegetable)	9	+9	+12	+14	+29	+7	↑	15			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	Bread	58	+2	+2	+6	+6	+6	→	80	+1	+5	*
		Rice (low quality)	22	+1	-1	-3	-3	+3	↓	20			5
	Bangladesh	Rice (coarse)	70	-1	-4	-19	-19	-12	↓	91	-4	-11	5
		Wheat flour	6	-1	-7	-8	-8	-4	↓	9			5
	Cambodia	Rice (mixed, low quality)	65	+1	+4	-3	0	0	→	100	+4	0	2
	India	Rice	31	+1	-1	0	-2	+15	↓	54	0	+12	5
		Wheat	22	+2	-1	+3	+2	+18	↓	33			5
		Sugar	7	+5	+3	-9	-11	-9	→	13			5
	Indonesia	Rice	50	+3	0	+8	+11	+26	→	80	0	+22	5
		Oil (vegetable)	7	-3	-3	-5	-4	+4	↓	5			5
		Sugar	6	+1	+1	+13	+13	+12	→	9			5
		Wheat	6	0	-1	+2	+2	+7	↓	6			5
	Lao PDR	Rice (glutinous, first quality)	64	+1	+1	-4	-5	-1	→	100	+1	-1	5
	Myanmar	Rice (low quality)	55	-2	-4	+20	+18	+30	↓	100	-4	+30	5
	Nepal	Rice	32	-2	-4	-2	-1	+13	↓	65	-3	+14	5
		Wheat	15	-1	-4	+2	+2	+16	↓	35			5
	Pakistan	Wheat	37	+4	+1	N/A	-5	-6	→	45			*
		Sugar	11	-8	-10	+4	+6	+6	↓	20	-2	-5	2
		Oil (cooking)	9	-1	-1	-16	-15	-15	↓	22			2
		Rice (basmati, broken)	6	-3	-5	-14	-12	+5	↓	14			5
	Philippines	Rice (regular, milled)	48	-1	+1	-7	-7	+11	→	49	+1	+9	4
		Meat (pork)	7	0	0	0	0	+7	→	51			4
	Sri Lanka	Rice (long grain)	41	+6	N/A	N/A	N/A	N/A	↗	59	+5	-4	*
		Wheat flour	14	+1	-2	N/A	N/A	0	↓	23			3
		Sugar	11	+7	+6	N/A	N/A	-9	↗	18			*
	Thailand	Rice (25% broken)	48	+1	+1	-3	-2	-18	→	100	+1	-18	5
	Viet Nam	Rice (25% broken)	59	+9	+1	+4	-5	-12	→	100	+1	-12	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 price¹ changes of the main food items (those that contribute at least 5% of caloric intake²):

- 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 prices⁴ (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 density⁵ 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 cost⁶ 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.

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