



# 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 71 countries in the third quarter of 2017 (July to September).<sup>1</sup> The maps on pages 6–7 provide analysis at sub-national level.

### Global Highlights

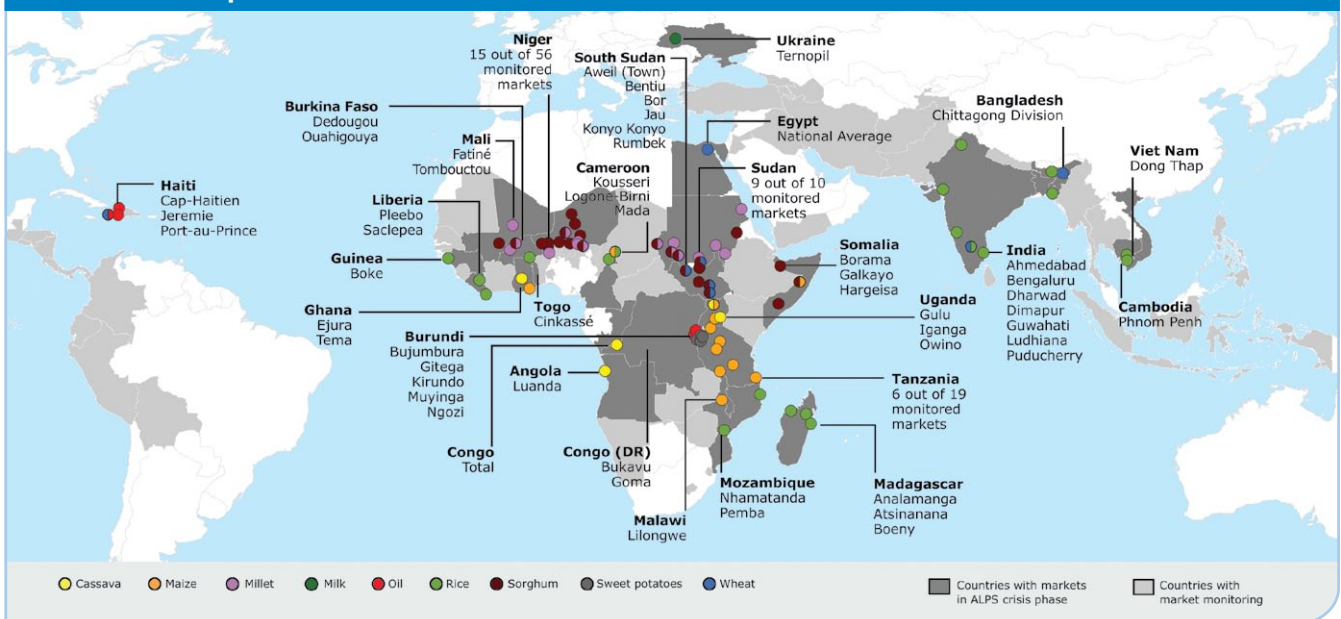
- **The upward trend of FAO's global food price index in 2017 continued in Q3, with the index 7 percent higher than in Q3-2016;** this is particularly the result of higher dairy prices. The FAO cereal price index rose by 8.2 percent over the same period.
- **The real price<sup>2</sup> of wheat rose by 4 percent from Q2-2017.** Although prices are significantly higher than in Q3-2016, world supplies are abundant and production forecasts for Russia and the EU are very favourable.
- **The real price of maize remains low; it fell 3 percent against the previous quarter and 2016** as this year's production is forecast to reach almost record levels.
- **During Q3-2017, the real price of rice fell by 3 percent compared with the previous quarter.** World rice stocks are expected to remain high as both consumption and supplies have increased.
- In a context of higher demand and slightly contracting global inventories, **the real price of crude oil has firmed and is now 11 percent higher than in Q3-2016. Even so, prices are still generally low.**

#### CHANGES OF REAL PRICES<sup>2</sup>

Quarterly Change	Maize	Wheat	Rice	Note: Comparison to
q3-2017 vs. q2-2017	-3%	4%	-3%	Second quarter in 2017
q3-2017 vs. q3-2016	-3%	20%	-4%	Same quarter in 2016
q3-2017 vs. q1-2008		-60%		Global wheat price peak in 2008
q3-2017 vs. q2-2008	-48%		-58%	Global maize and rice price peak in 2008

- **The cost of the basic food basket increased severely (>10%) in Q3-2017 in three countries: Burundi, Cameroon and Viet Nam.** High increases (5–10%) were seen in **Burkina Faso, Chad, Liberia, Mali, Sudan and Panama.** In the other monitored countries, the change was moderate or low (<5%).
- Price spikes, as monitored by **ALPS**, were detected in 27 countries, particularly in **Burundi, Haiti, Niger, Somalia, South Sudan, Sudan, Tanzania and Uganda** (see the map below).<sup>3</sup> These spikes indicate crisis levels for the two most important staples in each country, which could be cassava, maize, milk, millet, oil, rice, sorghum, sweet potatoes or wheat.

#### 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 World Bank prices on 23 October 2017.

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 Q3-2017, 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 the [Price Forecasts & Alerts website](#) 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 July to September 2017 was high in **Panama**; moderate in **Costa Rica** and the **Dominican Republic**; and low in the other countries.

• **Staple commodity prices:** Cereal and bean prices fell in most countries after a bumper harvest boosted stocks on local markets. In **Haiti**, a recovery in agricultural production brought average seasonally adjusted prices down from the previous quarter for rice (-7%) and maize meal (-2%). Nevertheless, heavy rains affected the Grand'Anse department in June, severely damaging crops and causing localized price increases for maize meal (+27%) from Q2-2017. In **Panama**, the price of first-quality rice rose by 8 percent from Q2-2017, reflecting an increase in reference paddy prices as well as import cuts brought in to incentivize

the recovery of domestic production. In **Peru**, a favourable harvest and higher imports stabilized the price of cereals and cereal products (+0% maize; +0% rice; -1% wheat flour). National potato production has improved after the 2016 drought decimated last year's crops: potato prices fell from Q2-2017 (-16%) and last year (-22%) in response to growing supplies.

• **Fuel prices:** Fuel prices rose in **Colombia** from the previous quarter (+1.6% gasoline; +2% diesel) and last year (+10% gasoline; +7.9% diesel). They were also up from last year in **Honduras** (+7.3% gasoline; +7.4% diesel).

• **Purchasing power:** In **Haiti**, cross-border food import restrictions and damaged productive infrastructure in hurricane-hit departments kept year-on-year (y/y) inflation high (+15% CPI and food CPI) despite a recent currency appreciation. In **Venezuela**, the bolivar accelerated its fall on parallel currency markets, losing 94 percent from last year amid political tensions during the elections.



## Southern Africa

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket in Q3-2017 was moderate in the **Democratic Republic of Congo** and **Swaziland**; and low in the other countries.

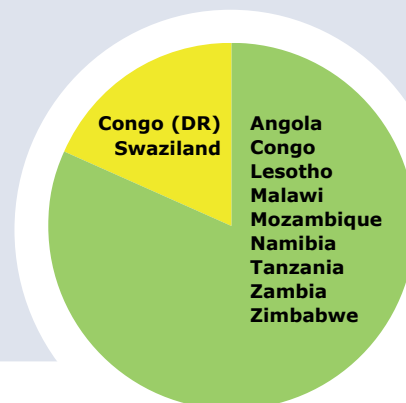
• **Staple commodity prices:** In Q3-2017, regional maize availability was at record levels as bumper harvests offset 2016 production shortfalls in most countries and the removal of intra-regional export bans expanded trade. The re-opening of Zambia's borders, improved production and stronger currencies brought down the seasonally adjusted price for maize in **Malawi** (-25%) and **Mozambique** (-26%) from Q2-2017. Price trends were mixed in the **Democratic Republic of Congo** compared with last quarter: in Katanga, prices fell for maize (-33%) and palm oil (-16%) thanks to increased imports from Zambia; however, civil unrest disrupted agricultural activities and pushed up food prices in Nord-Kivu (+32% maize; +28% palm oil) and Sud-Kivu (+15% maize; +15% palm oil). In **Tanzania**, dry spells and armyworm infestations during planting led to late and below-average maize production. Although increased intra-regional imports brought maize prices down from

Q2-2017 (-28%), they remained much higher than last year in drought-hit areas such as Iringa (+64%), Kigoma (+40%) and Mbeya (+41%); maize prices were at **ALPS crisis** level in Shinyanga. In **Congo**, the price of cassava rose from last quarter in Lekoumou (+23%) after widespread violence destroyed cultivations during the planting season; by contrast, cassava prices fell in other regions: Pool (-17%), Bouenza (-14%) and Kouilou (-2%).

• **Fuel prices:** Fuel prices rose from Q3-2016 in **Tanzania** (+6.3% gasoline; +5.3% diesel) and **Zimbabwe** (+4.4% gasoline; +9.9% diesel) in line with the international oil quotation. In **Mozambique**, the government slashed reference fuel prices to counteract the effects of the subsidy removal: as a result, diesel prices fell by 6 percent from Q2-2017 but remained 33 percent above last year's levels.

• **Purchasing power:** In the **Democratic Republic of Congo**, the national currency depreciation

drove record levels of y/y inflation (+71% CPI; +102% food CPI). Y/y headline inflation was also high in **Angola** (+22%). In **Mozambique**, q/q headline inflation eased slightly (-2.2%), partly driven by currency appreciation. However, it remained in double digits y/y (+14%) due to the prolonged economic slowdown and food price spikes in early 2017. In **Malawi**, the food CPI declined from Q2-2017 (-8.6%) as food prices fell and the kwacha stabilized thanks to improved foreign reserves.



## Central and Eastern Africa

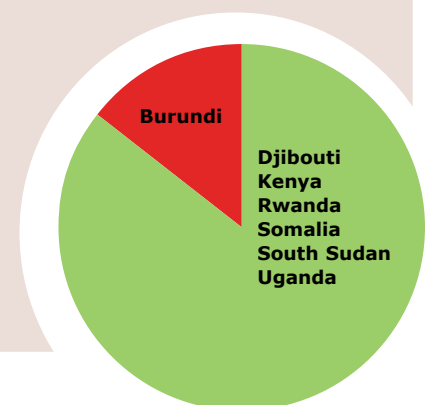
**Hotspots:** The cumulative impact of staple food price changes on the cost of the basic food basket in Q3-2017 was severe in **Burundi**; and low in the other countries.

• **Staple commodity prices:** In **Burundi**, import restrictions from neighbouring Tanzania, the depreciation of the national currency and insecurity continued to limit food and fuel supplies: prices were at record high levels compared with last year (+111% sweet potatoes; +55% cassava; +37% maize). The **ALPS** indicator flagged sweet potato and cassava prices at *crisis* level in Bujumbura, Kirundo, Muyinga and Ngozi markets in August. The start of the harvest season reduced pressure on cereal prices in **Somalia** (-10% sorghum; -12% maize) and **Uganda** (-17% maize; -8% millet) from Q2-2017; however, prices were markedly above last year's levels because of lower output and stocks from drought-affected lands. In Q3-2017, **South Sudan** saw mixed quarterly food price trends. Seasonally adjusted prices fell from Q2-2017 in Western Bahr-El-Ghazal (-30% sorghum; -22% millet; -49%

wheat flour) and Northern Bahr-El-Ghazal provinces (-49% sorghum; -54% millet). However, chronic fuel scarcity, hyperinflation and insecurity along trade routes continue to disrupt trade: sorghum prices were twice as high as last year across the country (+116%) and at **ALPS crisis** level in Konyo Konyo, Bor and Jau markets.

- **Fuel prices:** In **South Sudan**, official fuel prices rose sharply from Q2-2017 (+61% gasoline; +48% diesel) and were nearly 200 percent higher than last year. Fuel scarcity at gas stations increased demand on the parallel market, which experiences even wider price fluctuations than the official one.
- **Purchasing power:** In **Ethiopia**, the CPI rose significantly from last year (+10%) with the impact of increasing cereal prices on food inflation (+13%). In **Burundi**, y/y food inflation remains high (+21%).

During Q3-2017, the value of the domestic currency of **South Sudan** continued to fall against the US dollar compared to last year's levels, and it depreciated even further on parallel currency markets. Y/y headline inflation was 65 percent, as food import prices continue to push up food inflation (+94%) and fuel remains scarce.



## West Africa

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket in Q3-2017 was severe in **Cameroon**; high in **Burkina Faso, Chad, Liberia and Mali**; moderate in **Cape Verde, Côte d'Ivoire, the Gambia, Niger, Nigeria and Senegal**; and low in the other countries.

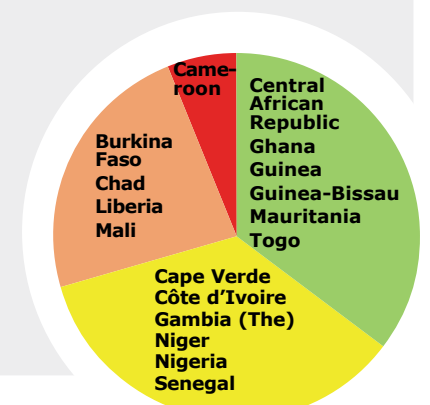
• **Staple commodity prices:** Several years of civil unrest in the Extrême Nord of **Cameroon** have displaced agricultural labourers and depleted productive assets. The consequent lower agricultural output caused atypical price surges from Q2-2017 for all staples (+21% maize; +25% rice; +12% sorghum). In **Chad**, seasonally adjusted cereal prices increased from Q2-2017 ahead of the September harvest (+5% sorghum; +3% millet; +11% maize); insecurity compounded maize price increases in the Lac region (+26%) by slowing down trade and accelerating stock depletion. In **Nigeria**, the economy remains under stress and local cereal prices were well above last year's levels (+28% sorghum; +26% millet; +17% maize) as internal population displacement and localized flooding in the south-west continue to disrupt trade. The steady depreciation of the naira was an aggravating factor, driving up the price of imported rice from Q2-2017

(+4%) and Q3-2016 (+8%). In **Mali**, cereal prices increased as expected ahead of the upcoming harvest. However, the **ALPS** indicator flagged exceptionally high increases in maize prices, with nearly all monitored markets at *crisis* or *alert* level. Q/q maize price increases were especially high in areas where flooding and stock withholding reduced available supplies earlier this year (+47% Gao; +49% Koulikoro; +59% Kayes). In **Liberia**, sharp currency depreciation in July affected the prices of imported rice (+5%) and palm oil (+2%). Cassava prices rose steeply from Q2-2017 (+23%) as household demand increased for this product as a substitute for more expensive imported rice during the lean season.

- **Fuel prices:** In **Nigeria**, gasoline prices continued their downward trend from Q2-2017 (-0.6%) as a result of the national strategy to boost available supplies. Diesel prices peaked in July but fell by 30 percent in August after the

government slashed reference retail price ranges.

- **Purchasing power:** In **Ghana**, favourable food production helped keep q/q headline inflation low (+1.4%) despite the currency depreciation. In **Nigeria**, the naira lost 10 percent of its value on official currency markets compared with last year. Growing import costs kept y/y food inflation at 20 percent and headline inflation above target (+16%) despite recent restrictive monetary policy measures.



## Middle East, North Africa and Central Asia

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket in Q3-2017 was high in **Sudan**; moderate in **Egypt, Palestine, Turkey and Ukraine**; and low in the remaining countries.

• **Staple commodity prices:** In **Sudan**, production areas affected by conflict saw the highest price rises for sorghum (+25% Kassala; +27% West Darfur) and millet (+28% North Darfur) as localized population displacement pushed up demand and accelerated stock depletion; the [ALPS](#) indicator flagged prices at *crisis* level in nearly all monitored markets for both commodities. Currency depreciation continued to affect imported food prices in **Egypt**: sugar was more expensive than last quarter (+4%) and last year (+89%) despite official price reductions; pasta was nearly 57 percent more expensive than in Q3-2016 because of higher imported wheat prices and cuts in food subsidies. In **Yemen**, the availability and flows of food supplies improved slightly during Q3-2017 and prices were stable (+0% wheat) or falling (-4% sugar; -16% rice) from the previous quarter. Nevertheless, demand

remains low as cuts to public sector salaries have slashed household incomes. In **Syria**, an improved security situation allowed supplies to reach markets, and prices fell in Aleppo from Q2-2017 (-14% sugar; -18% oil) and in Hassakeh (-36% sugar; -18% oil) from Q3-2016. Clashes in August halted trade flows in Raqqa but did not prevent prices from falling from Q2-2017 (-7% bread; -2% sugar; -9% oil). Food prices were highest in Deir Ezzor, where sugar and oil prices were about 50 percent higher than last year.

• **Fuel prices:** Improved availability and distribution of diesel lowered prices from Q2-2017 in **Syria** (-10%) and **Yemen** (-2.1%); even so, diesel remained over 25 percent more expensive than last year in both countries. Gasoline prices also rose from Q3-2016 in Yemen (+47%), **Ukraine** (+12%) and **Tajikistan** (+23%).

• **Purchasing power:** In Q3-2017, **Egypt's** national currency was half its value last year. Y/y inflation reached record levels (+32% CPI; +41% food CPI) under the pressure of soaring import costs. Y/y inflation was in double digits in **Sudan** (+32%) and **Azerbaijan** (+14%) as growing energy prices and weak national currencies increased service and import prices.



## Asia

**Hotspots:** The impact of staple food price changes on the cost of the basic food basket from July to September 2017 was severe in **Viet Nam**; high in **Bangladesh, India and Sri Lanka**; and low in the other countries.

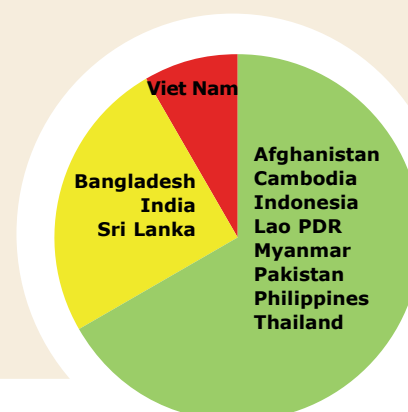
• **Staple commodity prices:** In **Viet Nam**, the combined effect of increased water salinity in paddy fields and occasional floods hampered the development of rice crops: rice prices rose atypically by 11 percent from Q2-2017 as below-average supplies came under pressure from large internal and external demand. Rice prices increased slightly from Q2-2017 in **Bangladesh** (+1%) and **Sri Lanka** (+3%) because of flood-reduced outputs from the July-August harvest season and lower imports. A recovery in paddy production stabilized rice prices in **India** compared with Q2-2017. Despite improvements in water supplies and

the use of fertilizers in drought-affected areas of **Pakistan**, the quarterly price for rice continued to rise in Balochistan (+29%) because of a significant drop in planted area.

• **Fuel prices:** Fuel prices were above last year's levels in **Afghanistan** (+19% diesel), **Sri Lanka** (+12% diesel), **Pakistan** (+10% gasoline; +9% diesel) and **Laos** (+6% gasoline; +9% diesel) reflecting international oil prices.

• **Purchasing power:** Q/q inflation was low and domestic currencies stable in most countries. The highest y/y headline inflation

was recorded in **Afghanistan** (+4.6%) and **Sri Lanka** (+6%). In **Myanmar**, falling natural gas export revenue was among the main drivers of the 13 percent appreciation of the US Dollar against the kyat from last year. The US Dollar also appreciated more than 8 percent in the **Philippines** over the same period.



## Consumer Price Index and Exchange Rates

Region	Country	Quarterly and Yearly Changes in Q3-2017 (July-September)					
		Quarter-on-Quarter			Year-on-Year		
		General CPI	Food CPI	Currency (USD/LCU)	General CPI	Food CPI	Currency (USD/LCU)
Latin America and Caribbean	Bolivia	1.01%	2.98%	0.07%	2.73%	2.92%	-0.29%
	Colombia	0.21%		1.98%	3.75%		1.03%
	Costa Rica	0.40%	1.30%	1.63%	1.24%	2.02%	3.78%
	Dominican Republic	0.45%	0.41%	0.02%	2.86%	2.24%	2.40%
	Ecuador	-0.55%	-1.37%		0.12%	-0.07%	
	El Salvador	0.03%			1.24%	1.30%*	
	Guatemala	1.81%		-0.70%	4.77%	10.40%*	-3.55%
	Haiti	3.18%	3.55%	-5.84%	14.83%	14.71%	-3.74%
	Honduras	0.79%	-1.34%	-0.15%	3.71%	0.57%	2.08%
	Nicaragua	0.56%	-0.45%	0.76%	3.56%	-0.17%	3.38%
	Panama	-0.03%		0.00%	0.61%	-1.20%*	-0.05%
Peru	0.55%		-0.62%	3.13%	3.67%*	-2.96%	
Southern Africa	Angola	4.08%		-0.03%	21.83%		0.01%
	Congo			-6.24%			-5.64%
	Congo (DR)			10.04%	70.75%*	101.59%*	62.33%
	Lesotho			-0.69%			-6.75%
	Madagascar			-3.89%			-0.49%
	Malawi	-2.52%	-8.58%	-0.16%	9.28%	3.04%	-0.15%
	Mozambique	-2.22%		-4.69%	13.72%		-14.45%
	Namibia	0.36%		-0.92%	5.46%		-6.92%
	Swaziland			-0.08%			-6.13%
	Tanzania	-0.49%	-2.13%	0.19%	5.15%	8.93%	2.18%
	Zambia	0.48%	-0.47%	-3.17%	6.52%	5.13%	-9.58%
Zimbabwe	-0.50%			0.33%			
Central and Eastern Africa	Burundi	-1.38%	-2.71%	1.20%	13.49%	20.99%	4.48%
	Djibouti			0.13%			0.77%
	Ethiopia	3.99%	4.79%	1.47%	10.20%	13.00%	5.27%
	Kenya	-1.30%		0.13%	7.52%		1.94%
	Rwanda	-0.08%	-3.04%	0.68%	7.47%	10.07%	3.98%
	Somalia			0.84%			2.28%
	South Sudan	11.82%	29.19%	5.81%	65.04%	94.33%	162.96%
Uganda	-0.32%	-2.47%	-0.26%	4.90%	10.46%	6.44%	
West Africa	Benin	0.88%	2.66%	-5.30%	2.43%	8.18%	-4.74%
	Burkina Faso	-0.01%		-5.30%	-0.05%		-4.74%
	Cameroon			-6.24%			-5.64%
	Cape Verde	1.12%	1.24%	-6.22%	2.12%	0.88%	-4.57%
	Central African Republic			-6.24%			-5.64%
	Chad			-6.24%			-5.64%
	Côte d'Ivoire			-6.34%			-5.78%
	Gambia	1.26%		0.29%	7.19%		4.99%
	Ghana	1.38%	-0.03%	2.79%	12.11%	7.56%	11.73%
	Mali	2.47%	4.32%	-6.34%	2.50%	2.72%	-5.78%
	Mauritania	-2.47%	-3.74%	0.53%	1.97%	3.01%	2.00%
	Niger	1.46%		-5.30%	1.78%		-4.74%
	Nigeria	3.39%	4.25%	8.19%	15.51%	19.69%	10.76%
	Senegal	2.56%	5.38%	-6.34%	1.49%	4.10%	-5.78%
Algeria	-0.39%		0.05%	4.37%		-0.76%	
Middle East, North Africa and Central Asia	Armenia	-3.41%	-7.57%	-1.01%	0.93%	2.93%	0.57%
	Azerbaijan	0.14%	-2.06%	-0.24%	14.21%	18.10%	6.11%
	Egypt	5.48%	4.05%	-1.93%	32.16%	41.26%	99.82%
	Georgia	-0.89%	2.10%	-0.39%	5.86%	6.59%	3.26%
	Iran	0.16%		1.28%	8.82%		8.84%
	Jordan	0.27%	-0.51%	-0.16%	2.54%	-2.32%	-0.22%
	Kyrgyzstan	-0.93%		1.27%	3.56%		1.12%
	Lebanon	0.26%	0.50%	-0.08%	3.73%	4.07%	-0.45%
	State of Palestine	-0.48%	-0.82%		-0.58%	-3.06%	
	Sudan	6.09%		-0.03%	31.86%		9.67%
	Tajikistan	-0.78%	0.88%	1.36%	-0.55%	10.86%	12.05%
	Turkey	0.68%		-2.29%	10.56%		17.95%
	Ukraine			-2.51%			1.60%
	Yemen			-0.02%			-0.07%
Asia	Afghanistan	-2.11%	-2.96%	0.85%	4.60%	6.70%	1.34%
	Bangladesh	1.08%	1.28%	-0.24%	4.24%	4.83%	3.22%
	Cambodia			1.08%			0.31%
	India	2.61%	3.28%	-0.49%	2.98%	0.82%	-4.15%
	Indonesia	0.80%	0.01%	0.26%	3.81%	1.35%	1.59%
	Lao PDR	0.30%	0.42%	0.74%	0.01%	-1.20%	2.30%
	Myanmar			0.13%			13.45%
	Nepal			-0.59%			-4.41%
	Pakistan	0.42%	0.88%	0.48%	3.39%	2.15%	0.48%
	Philippines	0.65%	0.73%	2.08%	3.12%	3.47%	8.05%
	Sri Lanka	0.70%	0.51%	0.52%	5.95%	7.31%	5.13%
	East Timor	-0.10%	-0.22%		0.78%	1.11%	
	Thailand	0.20%		-2.71%	0.45%		-4.21%
	Vietnam	0.48%		0.14%	3.60%		2.02%

Source: Trading Economics.

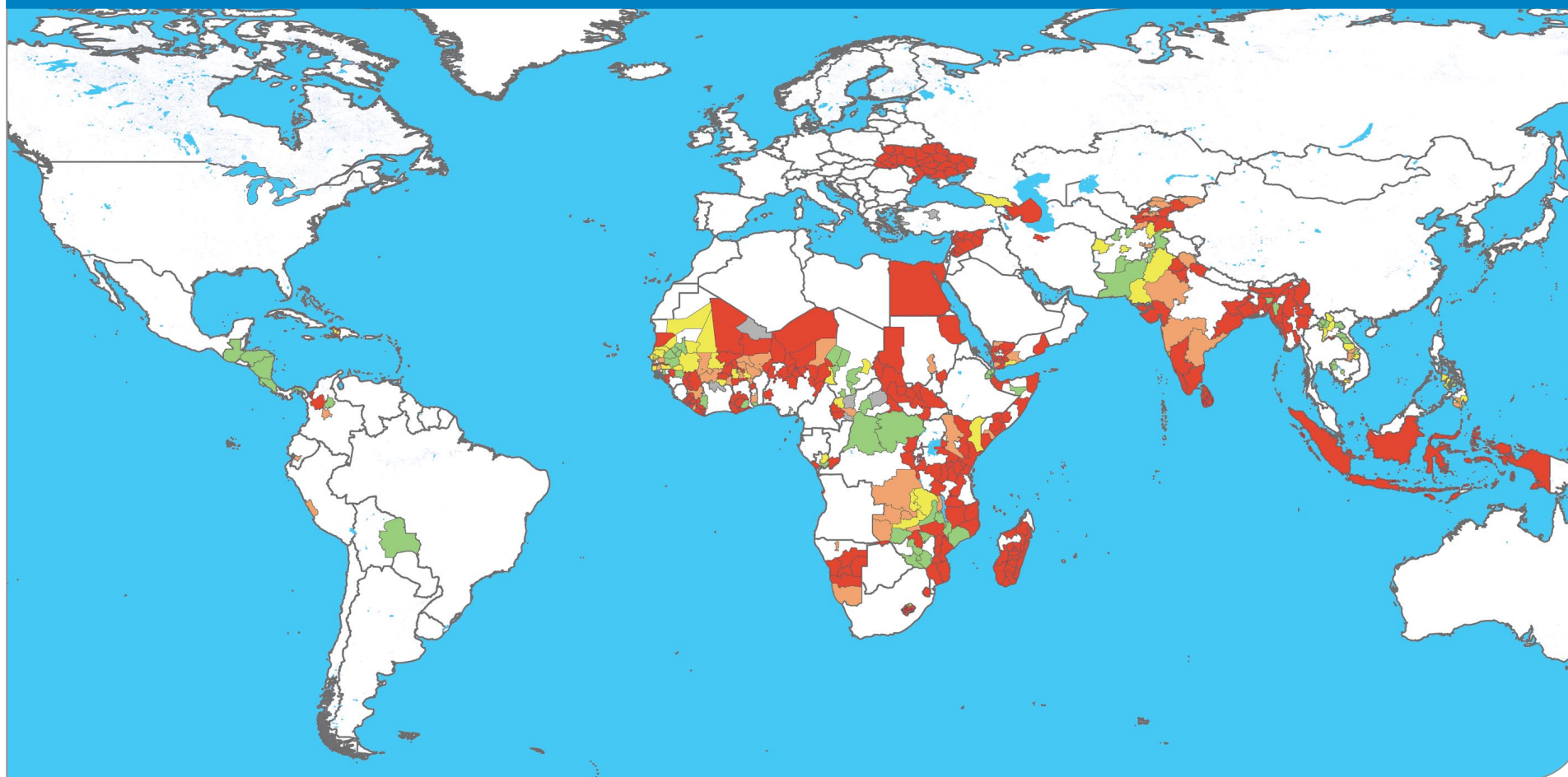
### Notes:

- The calculation of quarterly changes uses averages of indices.
- Exchange rates define the amount of domestic currency needed to exchange one US dollar.

\* 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

**Q3-2017** (July to September) vs. **Q3-Baseline** (Average July to September)



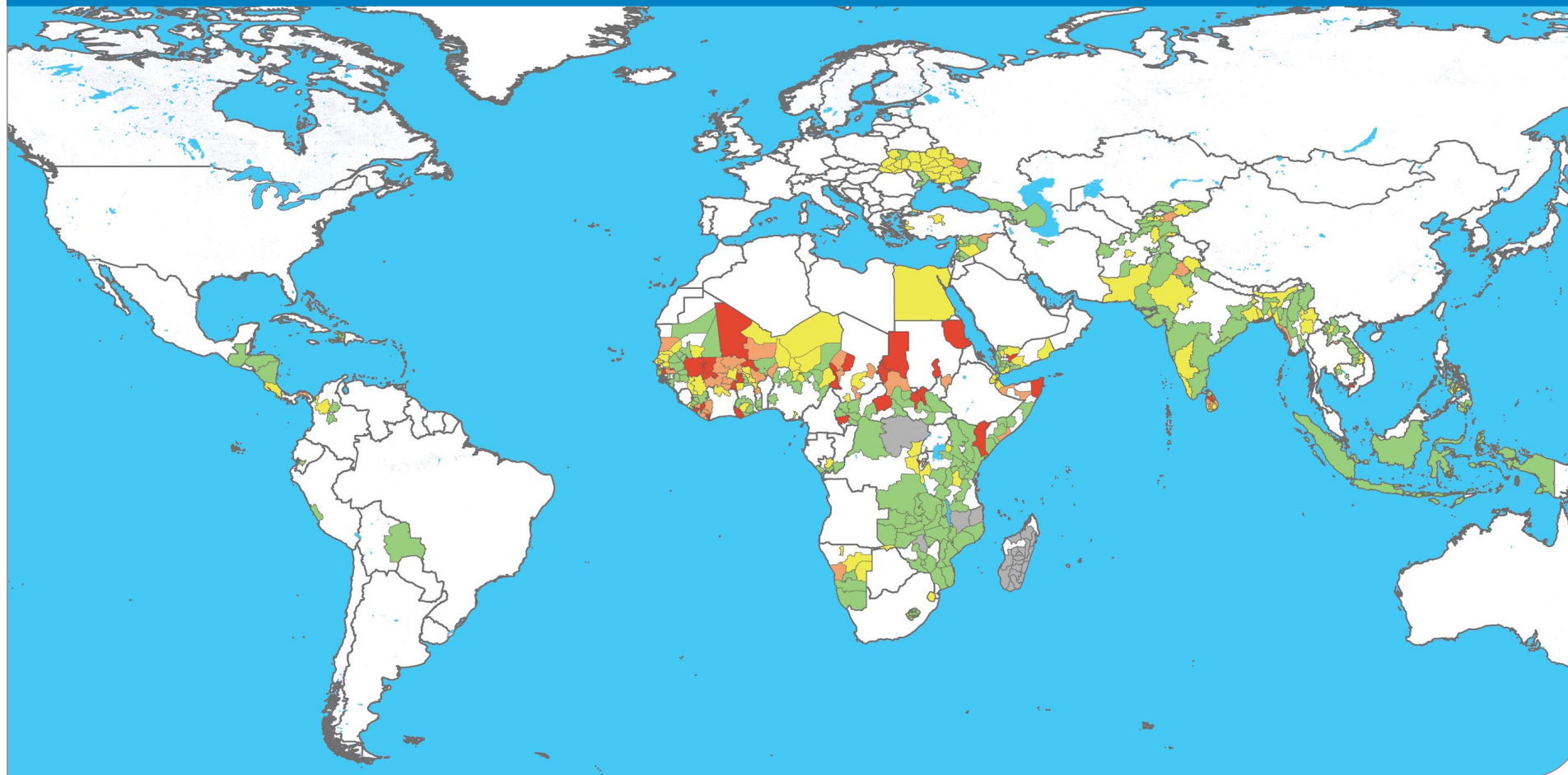
Map produced by: VAM - Food Security Analysis (OSZAF). Source: WFP; Base Map: GAUL

**Impact Codes**

Low (< 0%)	Moderate (0-5%)	High (5-10%)	Severe (> 10%)	Monitored but without baseline data	Water bodies
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**Note:** This map is based on the calculations at subnational level of column M of the table on pages 8-13. Baseline prices are from Q3 2012-2016.

## Q3-2017 (July to September) vs. Q2-2017 (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 data from the last quarter

Water bodies

**Note:** This map is based on the calculations at subnational level of column L of the table on page 8-13.

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

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)	Change	Price trend	Quarterly cost share in food basket (%)	Impact		# of years in baseline (the last 5 years) [* see footnote]
									< 0%	Decreasing		Low		
									>= 0% and < 5%	Stable		Moderate		
>= 5% and < 10%	Slightly increasing	High												
									>= 10%	Increasing		↓	↓	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Latin America and Caribbean	Bolivia	Rice (carolina 2da)	14	0	-7	+2	+2	-11	↓	100	-7	-11	5	
		Maize (white)	13	0	0	0	0	+14	→	26			4	
	Colombia	Sugar	13	-5	+3	-5	-3	+28	→	33	-2	+8	5	
		Rice (paddy)	12	-8	-5	-16	-17	-10	↓	19			5	
		Bananas	5	-6	-8	-5	-10	-4	↓	21			4	
	Costa Rica	Rice (first quality)	17	0	0	0	-1	-3	→	63	0	-4	5	
		Wheat (flour)	10	0	-1	-23	-10	-5	↓	37			5	
	Dominican Republic	Rice (first quality)	17	0	+1	-1	-1	+3	→	100	+1	+3	5	
	Ecuador	Rice (long grain)	19	0	-2	-5	-6	+4	↓	99	-2	+3	5	
		Wheat (flour)	13	-3	-14	-3	-4	-14	↓	1			3	
	Guatemala	Maize (white)	36	+3	-10	-19	-19	-22	↓	100	-10	-22	5	
	Haiti	Rice (local)	23	-6	-7	+6	+2	+3	↓	40			2	
		Wheat flour (imported)	12	0	-1	+7	+5	+24	↓	17			5	
		Sugar (white)	11	-1	-11	+11	+12	+12	↓	26	-7	+11	*	
		Maize meal (local)	9	-11	-2	-4	-2	+20	↓	9			5	
		Oil (vegetable, imported)	7	+1	+1	+8	+6	+17	→	9			5	
	Honduras	Maize (white)	26	+7	-6	-32	-31	-22	↓	59	-3	-17	5	
		Beans (red)	5	+8	-6	-10	+2	-8	↓	41			5	
	Nicaragua	Rice (milled 80-20)	17	-1	-1	-3	-3	-5	↓	29			4	
		Sugar	15	0	0	+2	+2	+1	→	21	-2	-7	5	
		Bread	9	-2	-2	-1	-2	-5	↓	35			4	
		Beans (red)	7	+2	-8	-7	-7	-24	↓	15			4	
	Panama	Rice (first quality)	24	0	+8	0	-3	-10	↔	39	+6	-9	5	
Bread		12	0	+5	0	0	-10	↔	52			5		
Maize		7	0	-1	0	0	0	↓	9			5		
Peru	Rice (local)	21	0	0	+3	+3	+6	→	24			5		
	Wheat flour (locally processed)	14	0	-1	+2	+3	+10	↓	25			5		
	Potatoes	8	-9	-16	-35	-22	-2	↓	25	-5	+8	5		
	Sugar	8	-5	-7	+9	+12	+24	↓	10			5		
	Maize (local)	7	+3	0	+19	+19	+16	→	16			5		

(\* ) Calculations based on nominal prices. For details, see 'Approach' on page 14.



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	Angola	Cassava (flour)	19	+4	+2	+20	+19	+40	→	26	-2	+74	5
		Maize (flour)	17	+2	-1	+5	+6	+50	↓	12			
		Sugar (white)	7	+4	-4	+18	+17	+123	↓	7			
		Milk (powder)	5	+3	-3	+28	+26	+99	↓	55			
	Congo	Cassava (fresh)	32	-11	-9	+13	+12	+18	↓	55	-7	+7	4
		Bread	18	-6	-4	-11	-6	-2	↓	33			
		Oil (palm)	11	-3	-13	+11	+15	-10	↓	6			
		Rice (mixed, low quality)	6	-2	-11	-14	-2	-13	↓	5			
	Congo (DR)	Cassava (chikwangue)	53	-2	-2	+4	+3	+14	↓	82	0	+13	5
		Maize	14	+5	+6	+91	+44	+31	↔	9			
		Oil (palm)	5	-7	-4	+17	+18	+15	↓	3			
		Wheat flour	5	-5	-4	+16	+10	-11	↓	7			
	Lesotho	Maize meal	56	-5	-4	-13	-11	+12	↓	56	-3	+13	5
		Bread (brown)	14	0	-2	+2	+2	+16	↓	44			
	Madagascar	Rice (local)	49	N/A	N/A	+21	+18	+31	N/A	100	N/A	+31	4
	Malawi	Maize	53	-17	-25	-50	-50	-7	↓	100	-25	-7	5
	Mozambique	Cassava flour	32	-12	0	-29	-25	0	→	39	-7	+13	3
		Maize (white)	20	-19	-26	-62	-58	-17	↓	10			
		Wheat flour (local)	9	-6	-9	-7	+1	+44	↓	20			
		Rice (imported)	8	-4	-8	-4	-3	+45	↓	18			
		Oil (vegetable, imported)	5	-8	-31	-20	-15	+17	↓	12			
	Namibia	Maize meal	25	0	+1	-5	-5	+20	→	40	-2	+24	5
		Rice	8	-2	-4	-2	+1	+12	↓	20			
		Sorghum	8	-2	-4	-3	-2	+43	↓	30			
Wheat (flour)		5	+4	+4	-4	-2	+16	→	10				
Swaziland	Maize (white)	25	0	+1	0	0	+34	→	21	0	+23	5	
	Wheat flour	16	+1	-1	+2	+1	+8	↓	34				
	Sugar (brown)	11	0	-3	+12	+8	+36	↓	26				
	Rice	8	+6	+7	+4	+4	+27	↔	19				
Tanzania	Maize	26	-29	-28	+16	+17	+30	↓	40	-11	+26	5	
	Rice	10	-2	+9	+26	+23	+25	↔	40				
	Beans	5	-4	-3	+14	+12	+22	↓	20				
Zambia	Maize (white)	51	-18	-16	-24	-24	+1	↓	100	-16	+1	5	
Zimbabwe	Maize	41	-23	-21	-33	-35	-21	↓	100	-21	-21	5	

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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	Burundi	Sweet potatoes	17	+25	+28	+86	+111	+120	↑	50	+13	+81	5
		Beans	16	-7	+4	+8	+9	+31	→	19			5
		Cassava flour	13	-5	+1	+56	+55	+74	→	16			5
		Maize (white)	13	+6	-6	+24	+37	+67	↓	15			5
	Djibouti	Pasta	34	-1	+1	-12	-12	-12	→	61	-1	-11	4
		Rice (imported)	17	-2	-1	+4	+1	-11	↓	22			4
		Sugar	11	-4	-6	0	+9	-4	↓	17			4
	Kenya	Maize (white)	35	-6	-9	+29	+27	+7	↓	28	-8	+4	5
		Bread	9	-4	-3	-4	-8	-4	↓	18			5
		Milk (cow, pasteurized)	7	-7	-10	0	-6	+5	↓	54			5
	Rwanda	Beans	11	-1	-6	-7	-2	+10	↓	71	-6	+20	5
		Maize	5	-4	-7	+20	+23	+50	↓	29			5
	Somalia	Sorghum (red)	29	-8	-10	+29	+42	+52	↓	55	-9	+33	5
		Maize (white)	18	-12	-12	+7	+16	+27	↓	27			5
		Rice (imported)	9	+1	+2	+5	+5	+3	→	18			5
	South Sudan	Sorghum (white)	26	+3	-31	+59	+116	+603	↓	41	-31	+520	5
		Wheat flour	15	+7	-26	+98	+124	+443	↓	45			4
		Millet (white)	7	+1	-32	+68	+89	+686	↓	14			4
	Uganda	Cassava flour	13	+1	+3	+41	+40	+59	→	44	-4	+47	5
		Maize (white)	9	-27	-17	+11	+23	+46	↓	17			5
Beans		5	-17	-4	+3	+5	+22	↓	20	5			
Millet		5	-7	-8	+31	+34	+51	↓	19	5			

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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	Burkina Faso	Sorghum	26	+8	+8	+19	+15	+7	↗	41	+6	+8	5
		Millet	22	+9	+7	+29	+24	+14	↗	39			5
		Maize	16	+3	+1	+3	0	0	→	20			5
	Cameroon	Maize	15	+27	+21	+32	+16	+2	↗	39	+21	+3	5
		Rice (local)	10	+21	+25	+5	+17	+3	↗	42			5
		Sorghum (white)	8	+23	+12	+30	+18	+5	↗	20			5
	Cape Verde	Rice (long grain, imported)	19	0	0	0	-1	-9	→	43	0	+2	4
		Wheat (flour, imported)	13	-1	-1	-10	-8	-11	↓	21			4
		Maize (white, local)	12	+4	-4	+3	+1	+30	↓	37			4
	Central African Republic	Cassava (cassette)	18	-3	-18	N/A	+15	-33	↓	69	-17	-28	3
		Maize	13	-8	-24	N/A	+16	-13	↓	31			3
	Chad	Sorghum (red)	18	+8	+5	+13	+8	-1	↗	45	+7	-5	5
		Millet	15	+10	+3	-1	-3	-12	→	40			5
		Maize (white)	5	+17	+11	+13	+12	+1	↗	15			5
	Côte d'Ivoire	Rice (denikassia, imported)	20	0	+1	0	0	+5	→	23	0	+17	5
		Yam (florido)	20	+10	+3	N/A	N/A	+30	→	51			2
		Cassava (fresh)	12	-18	-17	+11	+11	+30	↓	11			5
		Oil (palm)	9	+8	+7	-3	-3	-3	↗	10			5
		Maize	7	-6	-9	-31	-31	-9	↓	5			5
	Gambia (The)	Rice (long grain, imported)	21	-1	-2	+2	+4	+29	↓	29	+4	+26	4
		Millet	19	+14	+13	+80	+43	+47	↗	20			4
		Sugar	12	+1	+5	+17	+9	+16	↗	18			3
		Bread	8	0	+4	0	+6	+12	→	17			3
		Oil (palm)	7	+8	+21	+98	+32	+28	↗	11			3
	Ghana	Sorghum	5	+12	+3	+33	+27	+27	→	6	-7	+48	4
		Cassava	21	-20	-21	-24	-22	+48	↓	26			5
		Maize	12	+29	+13	-6	-6	+43	↗	12			5
		Yam	11	+2	-4	+20	+37	+103	↓	46			5
	Guinea	Rice (imported)	8	-23	-19	-10	-7	-15	↓	16	-4	+8	3
		Rice (imported)	37	-1	-2	+3	+4	+9	↓	71			5
		Cassava meal (gari)	12	-8	-15	+21	+21	+4	↓	20			3
		Oil (palm)	6	+7	+9	+8	+5	+3	↗	9			5
		Rice (imported)	35	0	-6	-8	-9	-23	↓	44			5
	Guinea-Bissau	Oil (vegetable, imported)	11	+1	-1	+7	+2	+1	↓	14	-10	-19	5
		Fonio	8	-14	-22	-20	-20	-8	↓	23			5
		Maize	8	-10	-10	+8	+7	-44	↓	11			5
		Sugar	5	-10	-11	0	-1	0	↓	8			4
	Liberia	Rice (imported)	32	+9	+5	+27	+28	+42	↗	66	+8	+30	4
		Cassava (fresh)	21	+12	+23	+32	+29	+4	↗	16			4
		Oil (palm)	15	+8	+2	+12	+14	+18	→	18			4
	Mali	Rice (imported)	21	+2	+5	+6	+5	+5	↗	44	+9	+10	5
		Millet	20	+7	+4	+32	+24	+10	→	26			5
		Sorghum	13	+9	+9	+22	+16	+6	↗	17			5
		Maize	9	+40	+41	+6	+37	+36	↗	13			5
	Mauritania	Wheat	30	+4	+6	+1	-1	-7	↗	30	-1	0	5
		Sugar	12	-6	-8	-6	-5	+5	↓	20			5
		Oil (vegetable)	11	+1	+3	-3	-2	-4	→	14			5
		Rice (imported)	11	-2	-4	+2	+3	+12	↓	22			4
Sorghum (taghalit)		7	+7	-2	+33	+13	-6	↓	13	5			
Niger	Millet	39	+7	0	+22	+27	+19	→	63	+1	+14	5	
	Sorghum	11	+9	0	+22	+25	+20	→	19			5	
	Rice (imported)	7	0	0	-1	-1	-3	→	18			5	
Nigeria	Sorghum (brown)	13	+3	-6	+23	+28	+111	↓	29	+1	+31	3	
	Millet	11	+2	+2	+16	+26	+10	→	23			5	
	Maize (white)	8	0	-7	+8	+17	+93	↓	15			3	
	Rice (imported)	8	+1	+4	+5	+8	-2	→	33			5	
	Rice (imported)	30	+1	+2	+5	+6	+3	→	68			5	
Senegal	Maize (imported)	10	+2	0	-8	-4	-5	→	17	+2	+3	5	
	Millet	8	+10	+5	+23	+20	+8	↗	15			5	
	Maize (white)	24	-4	+1	-11	-2	-6	→	18			5	
Togo	Cassava (gari)	15	-2	-9	-22	-17	+12	↓	51	-5	+5	5	
	Rice (imported)	10	-1	0	+6	+3	0	→	23			5	
	Sorghum	8	-7	-9	-4	-4	-7	↓	9			5	

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											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	Azerbaijan	Bread (high grade flour)	57	0	-1	+14	+16	+29	↓	76	-2	+24	5
		Potatoes	6	-22	-6	+16	+17	+10	↓	24			5
	Egypt	Pasta	35	0	+1	+57	+57	+72	→	58			5
		Rice	12	+9	+14	+34	+18	+68	↑	21	+4	+83	5
		Sugar	7	+5	+4	+68	+89	+144	→	21			5
	Georgia	Bread	41	0	-1	+1	+1	+4	↓	100	-1	+4	5
	Iran (Islamic Republic of)	Rice (local)	9	0	-12	+7	+10	+68	↓	75			5
		Sugar	9	-4	-13	-17	-12	+33	↓	25	-12	+58	5
	Kyrgyz Republic	Wheat flour (first grade)	40	-2	-7	-4	-5	-5	↓	24			5
		Milk (non-pasteurized)	12	0	+6	-1	-2	+5	↗	43	-3	+8	5
		Sugar	9	+5	+6	-8	-1	+8	↗	11			5
		Potatoes	8	-30	-10	+40	+37	+39	↓	22			5
	Palestine	Bread	40	+2	+3	-8	-7	-9	→	58			3
		Sugar	10	-3	-6	-5	-7	-2	↓	11	0	-8	3
		Rice (small grain, imported)	7	-3	-2	-8	-8	-6	↓	11			3
		Oil (olive)	5	-1	N/A	N/A	N/A	N/A	↓	20			*
	Sudan	Sorghum	60	+12	+6	+14	+6	+39	↗	82	+7	+43	5
		Millet	9	+18	+6	+51	+27	+61	↗	18			5
	Syria	Bread (bakery)	39	+2	+8	-3	-6	+80	↗	22			5
		Sugar	13	-8	-9	-3	-3	+121	↓	49	-11	+103	5
		Oil	11	-4	-12	-1	+4	+97	↓	29			5
	Tajikistan	Bread	54	-1	-5	-1	-3	+24	↓	90			5
		Sugar	7	+2	+1	+8	+12	+36	→	5			5
		Oil (cotton)	6	+4	+4	+6	+5	+24	→	3	-4	+25	5
		Maize	5	+2	+3	+23	+22	+19	→	1			5
	Turkey	Bread (common)	41	+1	N/A	N/A	N/A	N/A	→	65			*
Sugar		8	+2	N/A	N/A	N/A	N/A	→	9	+1	N/A	*	
Milk (pasteurized)		5	+1	N/A	N/A	N/A	N/A	→	26			*	
Ukraine	Bread (rye)	29	+3	0	+20	+19	+43	→	38			3	
	Oil (sunflower)	9	-1	-3	+1	+2	+27	↓	7	+2	+52	3	
	Potatoes	8	-15	+9	+39	+50	+64	↗	15			3	
	Milk	7	+3	0	+35	+34	+62	→	40			3	
Yemen	Wheat	38	-2	0	+9	+12	+17	→	46			4	
	Sugar	12	-4	-4	0	+1	+7	↓	22	-3	+17	5	
	Oil (vegetable)	9	0	+6	+25	+13	-6	↗	11			5	
		Rice (imported)	6	+4	-16	+15	+13	+54	↓	21			4

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											from previous quarter	from baseline (%)	
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Asia	Afghanistan	Bread	58	-1	-1	-1	-1	+1	↓	77	-1	+2	3
		Rice (low quality)	22	+1	-2	+7	+8	+8	↓	23	-1	+2	5
	Bangladesh	Rice (coarse)	70	+1	+1	+38	+38	+40	→	94	0	+36	5
		Wheat flour	6	-1	+2	-1	-2	-10	→	6	0	+36	5
	Cambodia	Rice (mix)	65	+1	-4	+7	+3	-2	↓	100	-4	-2	5
	India	Rice	31	+3	0	+9	+9	+13	→	52	0	+16	5
		Wheat	22	+2	-1	+6	+7	+18	↓	32	0	+16	5
		Sugar	7	+1	-1	+8	+7	+21	↓	16	0	+16	5
	Indonesia	Rice	50	0	-1	+1	0	+12	↓	80	-1	+10	5
		Oil (vegetable)	7	0	-1	+3	+4	+8	↓	5	-1	+10	5
		Sugar	6	-3	-6	-14	-15	0	↓	9	-1	+10	5
		Wheat	6	+2	+1	+1	0	+5	→	6	-1	+10	5
	Lao PDR	Rice (glutinous, first quality)	64	0	-4	0	-19	-1	↓	100	-4	-1	5
	Myanmar	Rice (low quality)	55	0	-6	+2	+11	+33	↓	100	-6	+33	5
	Pakistan	Wheat	37	-2	-2	-3	-2	-2	↓	18	-1	-1	3
		Sugar	11	-5	-11	-22	-20	-10	↓	8	-1	-1	4
		Milk	9	+1	0	+1	+2	+2	→	60	-1	-1	*
		Oil (cooking)	9	0	0	+3	+3	-7	→	9	-1	-1	4
		Rice (basmati, broken)	6	+9	+6	+18	+17	+6	↔	6	-1	-1	5
Philippines	Rice (regular milled)	48	-2	-4	-5	-2	+1	↓	100	-4	+1	5	
Sri Lanka	Rice (long grain)	41	0	+3	+15	+23	+31	→	74	+3	+20	2	
	Wheat flour	14	0	-1	0	-1	-2	↓	26	+3	+20	4	
Thailand	Rice (25% broken)	48	-8	-8	-6	-9	-14	↓	100	-8	-14	5	
Viet Nam	Rice (20% broken)	59	+12	+11	+15	+13	+6	↑	100	+11	+6	5	

(\*) Calculations based on nominal prices. For details, see 'Approach' on page 14.



## 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 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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