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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 67 countries in the the fourth quarter of 2017 (October to December).[1] The maps on pages 6–7 provide analysis at sub-national level.

Global Highlights

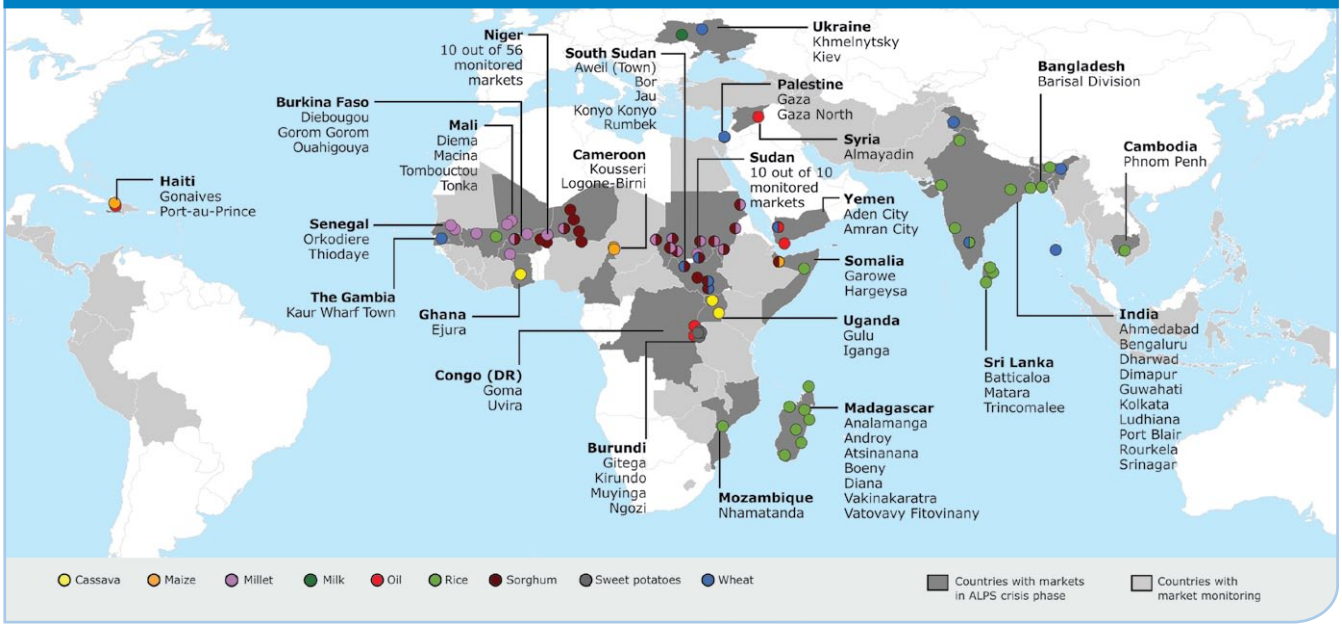
- **In Q4-2017, the global food price index of FAO dropped by 2 percent compared to Q3 and remained at approximately the same level as one year ago.** In contrast, the cereal price index rose by 7.6 percent in comparison to Q4-2016.
- **Although the real price[2] of wheat fell by 2 percent from Q3-2017, prices are still 19 percent higher than in 2016,** even though world ending stocks of wheat are at record levels.
- **In Q4, the real price of maize was low at US$119/mt** with only slight variation from Q3-2017 and the previous year.
- **The real price of rice remained relatively stable in Q4 albeit 6 percent higher than in Q4-2016.** World rice ending stocks have been at their highest levels since 2000/01, with China keeping 66 percent of stocks.[3]
- Following extended agreements by major oil-producing states to limit production, **the real price of crude oil increased by 19 percent compared to the previous quarter.**

CHANGES OF REAL PRICES[2]

Quarterly Change	Maize	Wheat	Rice	*Note: Comparison to*
q4-2017 vs. q3-2017	-1%	-2%	-1%	*Third quarter in 2017*
q4-2017 vs. q4-2016	-4%	19%	6%	*Same quarter in 2016*
q4-2017 vs. q1-2008		-61%		*Global wheat price peak in 2008*
q4-2017 vs. q2-2008	-49%		-58%	*Global maize and rice price peak in 2008*

- **The cost of the basic food basket increased severely (>10%) in Q4-2017 in four countries: Côte d'Ivoire, DR Congo, Madagascar** and **Sudan.** *High* increases (5–10%) were seen in **Burkina Faso, Chad, El Salvador, Mauritania, Sri Lanka, Turkey** and **Yemen.** In the other monitored countries, the change was *moderate* or *low* (<5%).
- Price spikes, as monitored by ALPS, were detected in 24 countries, particularly in **Burkina Faso, Burundi, Mali, Niger, South Sudan, Sri Lanka, Sudan** and **Ukraine** (see the map below).[4] 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 30 January 2018.
2. Nominal prices are adjusted by the US Consumer Price Index.
3. United States Department of Agriculture. World Agricultural Supply and Demand Estimates, January 2018.
4. A market is designated as a hotspot if prices for the country's two most important caloric contributors reached ALPS *crisis* level during Q4-2017, 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).

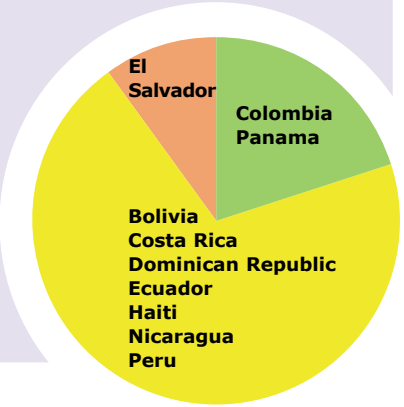
Price trends and impacts by region (Change from last quarter)

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 October to December 2017 was* high *in* ***El Salvador****;* moderate *in* ***Bolivia, Costa Rica, Dominican Republic, Ecuador, Haiti, Nicaragua*** *and* ***Peru****; and* low *in the other countries.*

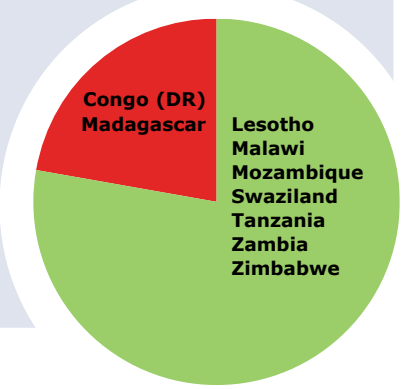
- **Staple commodity prices:** Uncertain production prospects due to poor rainfall saw the seasonally adjusted price for beans rise from Q3-2017 in **Nicaragua** (+5%) and **El Salvador** (+7%). Although the Salvadorian government raised import requirements in Q4 to prevent further price swings, maize became 8 percent more expensive than in Q3-2017 and sorghum prices were 14 percent above 2016 levels. Despite the start of the harvest in November, local cereal prices soared from Q3-2017 in the departments of **Haiti** hit by Hurricane Irma last September: Centre (+23% rice; +23% maize meal), Nord (+68% rice: +16% maize meal) and Nord-Ouest (+18% maize meal). By contrast, quarterly import prices were stable or declining after the national currency appreciated against the US dollar (-9% wheat flour; -11% sugar; +1% vegetable oil). The seasonally adjusted price for rice rose slightly as expected in **Bolivia** (+4%) and the **Dominican Republic** (+1%) ahead of the start of the harvest in January. In **Colombia**, the strategic expansion of rice and maize plantings ensured record supplies and falling prices from Q3-2017 for both crops (-3% maize; -3% rice) even after the end of the harvest season in late September. Sugar prices were also down, from both the previous quarter (-4%) and 2016 (-6%).
- **Fuel prices:** Fuel prices were up from Q4-2016 in **Colombia** (+9.3% gasoline; +7.7% diesel) and **Honduras** (+9.4% gasoline; +11.2% diesel) following the rising international quotations for oil.
- **Purchasing power:** In **Nicaragua**, quarter-on-quarter (q/q) food inflation was moderate (+4.4%) as crop prices rose during Q4 and the national currency depreciated. In **Haiti**, the domestic currency gained 4 percent from Q4-2016; nevertheless, year-on-year (y/y) inflation remained high (+14% CPI; +13% food CPI) as devastation from Hurricane Irma and higher fuel prices have slowed economic recovery. Y/Y food inflation was 12 percent in **Guatemala**.



Southern Africa

Hotspots: *The impact of staple food price changes on the cost of the basic food basket in Q4-2017 was* severe *in the* ***Democratic Republic of Congo*** *and* ***Madagascar****; and* low *in the other countries.*

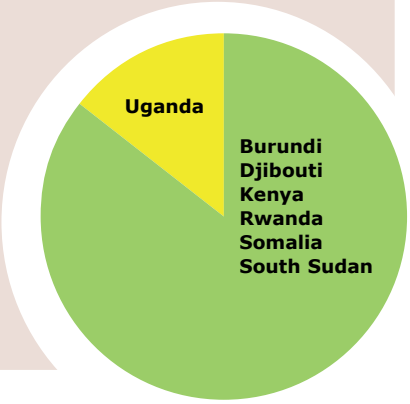
- **Staple commodity prices:** In the **Democratic Republic of the Congo**, maize prices in Nord-Kivu were 5 percent below Q3-2017 but still 62 percent above 2016 levels. The seasonally adjusted price for maize rose steeply from Q3-2017 in Sud-Kivu (+44%) as a result of the lean season and insecurity, which continues to disrupt farming activities: maize prices reached crisis level in Uvira according to ALPS. In **Madagascar**, water deficits in the south-west and the impact of Cyclone Enawo along the coasts damaged local rice production, reducing supplies for food consumption and seeds available for planting: as a result, local rice prices were 14 percent up from Q3-2017 and 33 percent higher than in 2016. Above-average maize production saw maize prices fall in **Zambia** (-9%) and **Tanzania** (-30%) compared to the previous quarter, even though the re-opening of national borders to trade has increased demand. The removal of maize export bans in these surplus-producing countries boosted cross-border supply flows to deficit areas of **Malawi**, where prices fell both from last quarter (-15%) and from 2016 (-57%). In **Mozambique**, prices fell for most local and imported staples (-23% cassava flour; -14% maize; -6% wheat flour; -7% rice) thanks to the recovery in national production, the expansion of regional trade and a stronger national currency.
- **Fuel prices:** Diesel prices skyrocketed in the **Democratic Republic of Congo** from Q3-2017 (+69%) and Q4-2016 (+83%). In **Mozambique**, diesel prices rose by 6 percent from Q3-2017 as a function of the government's plan to remove fuel subsidies during 2017 and to adjust reference fuel prices on a monthly basis in line with the international quotation for crude oil. Prices were moderately higher than in 2016 in **Tanzania** (+14% gasoline; 12% diesel).
- **Purchasing power:** In the **Democratic Republic of Congo**, the national currency depreciated by a further 33 percent from 2016, pushing the CPI up (+62% CPI; +83% food CPI) despite ongoing restrictive monetary policies. In **Mozambique**, the metical appreciated by 26 percent compared to Q4-2016, and y/y headline inflation fell below 10 percent (+7%) for the first time in over a year. In **Malawi**, q/q headline inflation was 9 percent, mostly driven by food inflation (+14%); y/y headline inflation was high in **Angola** (+25%).



Central and Eastern Africa

Hotspots: *The cumulative impact of staple food price changes on the cost of the basic food basket in Q4-2017 was* moderate *in* ***Uganda****; and* low *in the other countries.*

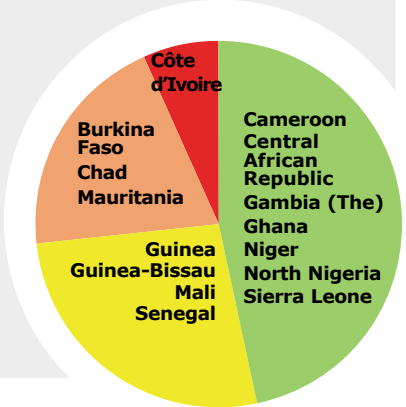
- **Staple commodity prices:** In Q4-2017, the seasonally adjusted price for beans fell from the previous quarter in **Uganda** (-3%) and **Rwanda** (-9%) thanks to the harvest. In **Kenya**, maize prices dropped 8 percent from Q3-2017 with the arrival of the "long rains" harvest despite unfavourable prospects, and increased imports made up for drought-induced production shortfalls. Water deficits in 2017 damaged livestock conditions, bringing milk production to a significant low: milk prices rose by 3 percent from Q3. In **Burundi**, national control measures against pest infestation had a beneficial effect on the 2017 crop production cycle; good production led to price declines for most staples (-15% sweet potatoes; -12% beans; -17% maize). Although the ongoing harvest restocked markets in several regions of **South Sudan**, localized armyworm infestations in Central Equatoria damaged crops and drove up the price for sorghum (+16%), which reached *crisis* levels in Konyo Konyo according to ALPS. Conflict continued to restrict agricultural activities in northern states, raising the quarterly price of wheat flour from Q3-2017 (+18% Warrap; +23% Unity). The *Karan* harvest in October and November eased pressure on average cereal prices in **Somalia** from Q3-2017 (-5% maize; -11% sorghum). However, poor rainfall during the *Gu* rainy season caused below-average production and kept prices higher than in 2016 in central and northern regions, particularly in Mudug (+29% sorghum; +19% maize) and Woqooyi Galbeed (+57% sorghum; +75% maize).
- **Fuel prices:** In **South Sudan**, gasoline prices rose by 45 percent compared to the previous quarter as fuel supplies dwindled across the country; prices were more than double (+114%) those of Q4-2016. **Kenya**'s energy regulatory commission revised fuel prices up from Q3-2017 (+6.5% gasoline; +7.4% diesel): a change attributable to higher landed costs for imported fuels.
- **Purchasing power:** During Q4-2017, y/y inflation was in double digits in **Ethiopia** (+13% CPI; +15% food CPI) and **Burundi** (+15% CPI; +21% food CPI), a reflection of weaker currencies and rising transport costs. In **South Sudan** the pound lost 50 percent against the US dollar from Q4-2016 and y/y inflation spiralled (+130% CPI; +82% food CPI) as foreign currency and fuel shortages impeded trade.



West Africa

Hotspots: *The impact of staple food price changes on the cost of the basic food basket in Q4-2017 was* severe *in* ***Côte d'Ivoire****;* high *in* ***Burkina Faso, Chad*** *and* ***Mauritania****;* moderate *in* ***Guinea, Guinea-Bissau, Mali*** *and* ***Senegal****; and* low *in the other countries.*

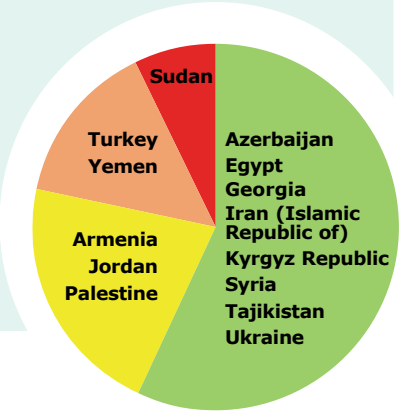
- **Staple commodity prices:** In **Côte d'Ivoire**, the seasonally adjusted price for yam was 23 percent higher than the previous quarter. The price for attiéké cassava also rose from Q3-2017 (+7%) as the growing season progressed; the harvest season is not expected to begin until February. In **Mali**, the start of the harvest season brought down quarterly maize prices (-21%). However, below-average millet and sorghum production combined with increasing demand from Niger accelerated stock depletion and drove up prices (+9% sorghum; +7% millet); the same occurred in **Burkina Faso** (+4% sorghum; +10% millet). The drought-induced failure of sorghum production accentuated seasonal price increases in **Mauritania** because in-country stocks depleted rapidly and the country became increasingly dependent on imports: sorghum was 33 percent more expensive than in Q3-2017 and at ALPS *crisis* level in Magta-lahjar, Kanossa and Tentane. Cereal harvesting ended in mid-October, temporarily lowering market prices in **Niger** for millet (-8%) and sorghum (-7%) from the previous quarter; nevertheless, strong cereal demand from national authorities for stock replenishment and market disruptions caused by Boko Haram attacks kept prices above 2016 levels (+14% millet; +19% sorghum). In north **Nigeria**, market activities are returning to normal as better security along main supply routes is facilitating cross-border trade and the macroeconomic system is recovering; as a result, seasonally adjusted food prices pointed downwards from Q3-2017 (-26% sorghum; -10% millet; -28% maize). Although the harvest provided relief to several markets in **Chad**, refugee influxes continued to drive up quarterly food prices at the border with the Central African Republic and Nigeria, particularly in Longone Oriental (+10% sorghum; +21% millet) and Kanem (+25% sorghum; +31% maize); y/y prices were also higher in Lac (+20% maize) and Hadjer lamis (+18% millet; +14% maize).
- **Fuel prices:** Quarterly retail prices for gasoline dropped slightly in **Nigeria** (-1.3%) as increasing oil production and improved national refining capacity have boosted the local availability of petroleum products. In **the Gambia**, diesel retail prices edged up 2 percent from Q3-2017 and up 3 percent from Q4-2016 as national authorities have linked pump price adjustments to international oil price trends.
- **Purchasing power:** In **the Gambia**, the dalasi depreciated by 5 percent from Q3-2017 and by 11 percent from 2016. **Nigeria**'s domestic currency inverted its recent trend by gaining 7 percent against the US dollar from Q3-2017; y/y headline inflation remained above the central bank's target of 6 to 9 percent (+16%), mostly driven by changes in the food CPI (+20%). In **Ghana**, y/y headline inflation was also in double digits (+12%), mostly because of non-food and energy components of the CPI.



Middle East, North Africa and Central Asia

Hotspots: *The impact of staple food price changes on the cost of the basic food basket in Q4-2017 was* severe *in* ***Sudan****;* high *in* ***Turkey*** *and* ***Yemen****;* moderate *in* ***Armenia, Jordan*** *and* ***Palestine****; and* low *in the remaining countries.*

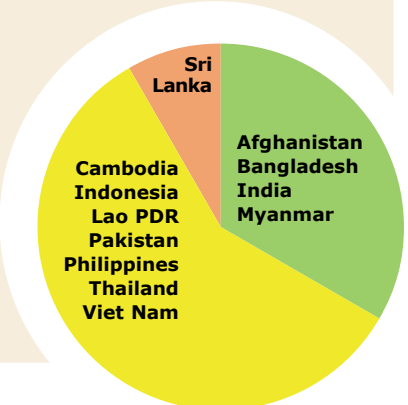
- **Staple commodity prices:** In **Sudan**, the arrival of the harvest season did not ease pressure on cereal prices, which continued to rise from Q3-2017 for sorghum (+19%) and millet (+23%). Prices peaked in conflict-affected areas, where insecurity is impeding access to land and recent flooding has disrupted crop production: sorghum and millet prices were at ALPS *crisis* level in all monitored markets. The rapid escalation of conflict in **Yemen** since November has curtailed food availability and pushed food prices up to alarming levels. Blockades of major sea and airports have hampered commercial and humanitarian imports while airstrikes have limited supply movements: this resulted in price rises from Q3-2017 in coastal governorates – such as Al Hudaydah (+21% oil; +37% rice; +22% sugar; +14% wheat) – and inland areas, such as Amran (+18% oil; +22% rice; +28% wheat). In **Egypt**, prices fell from Q3-2017 for several foods (-8% pasta; -4% rice; -13% sugar) as the economy showed signs of recovery and the current account deficit shrank for the first time since the introduction of a floating exchange rate in 2016; even so, prices remained above 2016 levels (+21% pasta; +36% rice; +11% sugar). Prices continued to fall in **Syria** for all monitored products from the previous quarter (-11% bread; -41% sugar; -22% oil). Deir-Ezzor governorate experienced the biggest quarterly decrease (-73% sugar; -46% oil) following the end of fighting in October and the removal of several checkpoints which constrained supply inflows.
- **Fuel prices:** In **Yemen**, the quotation for petroleum by-products skyrocketed from Q3-2017 (+30% gasoline; +39% diesel) and was nearly 70 percent higher than 2016, with the parallel market flourishing as the country faces severe supply shortages. Fuel prices also went up markedly from Q4-2016 in **Syria** (+33%), **Tajikistan** (+24% gasoline; +21% diesel) and **Ukraine** (+17% gasoline; +22% diesel).
- **Purchasing power:** In **Sudan**, y/y headline inflation was high (+25%) and the national currency was weaker than in 2016; the government's economic stabilization policy has included removing wheat subsidies, a move that has triggered protests across the country in anticipation of soaring food prices. The q/q increase in CPI slowed down in **Egypt** (+2.8% CPI; +0.7% food CPI) but remained high compared to Q4-2016 (+26% CPI; +32% food CPI) as the pound lost a further 18 percent against the dollar. Y/y headline inflation was also high in **Turkey** (+12%) and **Azerbaijan** (+13%), mostly driven by food inflation.



Asia

Hotspots: *The impact of staple food price changes on the cost of the basic food basket from October to December 2017 was* high *in* ***Sri Lanka****;* moderate *in* ***Cambodia, Indonesia, Lao PDR, Pakistan, Philippines, Thailand*** *and* ***Viet Nam****; and* low *in the other countries.*

- **Staple commodity prices:** In **Sri Lanka**, the price for long grain rice rose from the previous quarter (+6%) following the end of the harvest; it was exceptionally high compared to Q4-2016 (+30%) because water deficits in 2017 cut output in several regions. The harvest was underway and rice prices fell from Q3-2017 in **Myanmar** (-7%), **Afghanistan** (-3%) and **Bangladesh** (-21%); prices remained stable in **Thailand** (+2%) and **Viet Nam** (+1%) despite localized flooding that partially damaged crops. In **Pakistan**, the price for basmati rice increased by 4 percent from Q3-2017 across all regions and was far higher than in Q4-2016 in Balochistan (+50%), where flooding severely damaged crops earlier in the year. In **India**, cereal prices fell slightly from Q3-2017 for both rice (-1%) and wheat (-3%). Sugar production in Q4 was revised upwards against initially negative forecasts, and sugar prices declined slightly (-1%) from the previous quarter.
- **Fuel prices:** Fuel prices were above 2016 levels in **Afghanistan** (+6% diesel) and **Lao PDR** (+11% gasoline; +13% diesel) following international oil quotation trends.
- **Purchasing power:** Q/q inflation was low in most countries of the region. In **Sri Lanka**, drought-induced deficits in the supply of main crops since early 2017 drove up the food CPI by nearly 14 percent from the preceding year; headline CPI rose by 8 percent because of rising food prices. The CPI also rose from Q4-2016 in **Bangladesh** (+5.9% CPI; +7.3% food CPI).



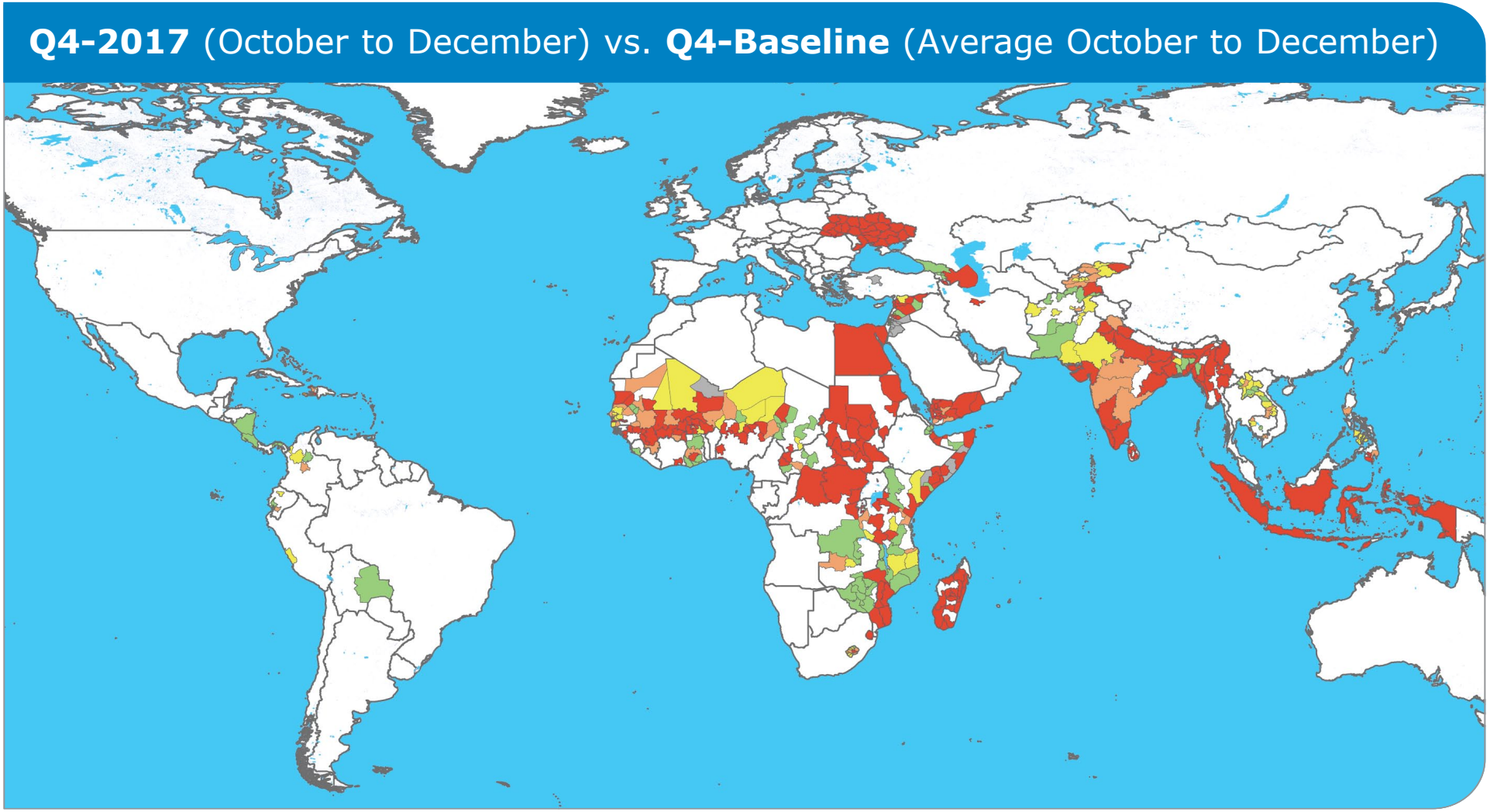
Consumer Price Index and Exchange Rates

Region	Country	Quarterly and Yearly Changes in Q4-2017 (October to December)					
		Quarter-on-Quarter			Year-on-Year		
		General CPI	Food CPI	Currency (LCU/USD)	General CPI	Food CPI	Currency (LCU/USD)
Latin America and Caribbean	Bolivia	0.74%	0.90%	0.45%	2.80%	2.93%	0.33%
	Colombia	0.34%		-0.18%	4.09%	1.92%*	1.11%
	Costa Rica	0.92%	0.96%	0.95%	2.46%	3.88%	-2.98%
	Dominican Republic	1.45%	1.60%	-0.95%	3.94%	4.84%	-2.90%
	Ecuador	-0.37%	-1.20%	-0.28%	-0.17%	-0.22%	6.54%
	El Salvador	0.37%		-1.49%	1.71%	2.49%	
	Guatemala	0.97%		-0.60%	4.86%	12.35%*	2.43%
	Haiti	2.48%	2.43%	-1.01%	13.53%	13.07%	4.27%
	Honduras	0.95%	2.10%	-0.49%	4.34%	3.49%	-2.10%
	Nicaragua	1.95%	4.37%	-2.50%	5.14%	4.01%	-4.55%
	Panama	0.05%		0.00%	0.47%		0.00%
	Peru	-0.48%		-0.10%	1.65%	0.31%*	4.60%
Southern Africa	Angola	7.33%		-0.01%	24.86%		0.04%
	Congo			-2.21%			6.60%
	Congo (DR)			-0.84%	62.0%*	83.40%	-33.36%
	Lesotho			-3.59%			2.29%
	Madagascar			-4.01%			2.64%
	Malawi	8.69%	14.17%	0.12%	7.68%	4.59%	-0.05%
	Mozambique	1.75%		0.97%	7.02%		25.81%
	Namibia	0.65%		-3.71%	5.20%		2.45%
	Swaziland			-3.69%			2.31%
	Tanzania	0.24%	-0.40%	-0.14%	4.50%	7.45%	-2.69%
	Zambia	1.76%	1.25%	-9.27%	6.27%	4.83%	-0.87%
	Zimbabwe	2.45%			2.89%		
Central and Eastern Africa	Burundi	2.73%	3.23%	-1.10%	15.48%	20.88%	-4.38%
	Djibouti	-0.50%	-3.46%	0.34%	-1.16%	-2.77%	0.15%
	Ethiopia	2.64%	3.04%	-13.05%	13.13%	14.80%	-16.71%
	Kenya	-0.79%		0.08%	4.98%		-1.53%
	Rwanda	-0.07%	0.00%	-1.43%	2.23%	0.49%	-3.22%
	Somalia			-1.38%			-4.17%
	South Sudan	19.82%	-0.68%	-3.41%	130.13%	81.61%	-47.65%
	Uganda	1.40%	4.49%	-0.83%	4.03%	7.68%	-2.85%
West Africa	Benin	-0.26%	0.74%	-0.47%	1.88%	3.17%	8.46%
	Burkina Faso	0.38%	-4.49%	-0.47%	1.41%	0.87%	8.46%
	Cameroon			-2.09%			6.60%
	Cape Verde	-0.46%	-0.98%	0.61%	0.48%	-0.89%	9.22%
	Central African Republic			-2.09%			6.60%
	Chad			-2.09%			6.60%
	Côte d'Ivoire			-0.36%	1.1%*	1.2%*	8.46%
	Gambia			-4.85%			-10.93%
	Ghana	1.81%	-0.46%	-1.46%	11.70%	8.03%	-8.79%
	Mali	-0.63%	-0.59%	-0.36%	1.98%	3.95%	8.46%
	Mauritania	0.26%	3.27%	1.82%	0.69%	2.10%	0.33%
	Niger	0.92%		-0.47%	4.35%		8.46%
	Nigeria	2.35%	2.62%	6.95%	15.72%	20.01%	-3.64%
	Senegal	0.00%	-2.61%	-0.36%	-0.03%	-0.22%	8.46%
Middle East, North Africa and Central Asia	Algeria	1.61%		-4.15%	5.85%		-3.65%
	Armenia	2.53%	4.86%	-0.88%	2.00%	4.72%	-0.79%
	Azerbaijan	4.45%	3.68%	0.38%	13.33%	17.03%	-0.51%
	Egypt	2.76%	0.66%	0.19%	26.12%	32.44%	-18.39%
	Georgia	2.27%	-1.32%	-6.92%	6.67%	7.40%	-4.16%
	Iran	1.51%		-5.55%	8.40%		-9.35%
	Jordan	1.06%	0.58%	-0.08%	3.33%	0.90%	0.01%
	Kyrgyzstan	1.36%		-0.28%	3.77%		-0.45%
	Lebanon	2.41%	1.08%	-0.09%	4.42%	3.76%	0.10%
	State of Palestine	0.43%	0.06%	1.24%	0.54%	-0.57%	9.06%
	Sudan	1.50%		-0.80%	25.19%		-4.85%
	Tajikistan	4.69%	-1.45%	-0.05%	6.82%	8.56%	-10.63%
	Turkey	3.95%		-8.06%	12.27%		-13.54%
	Ukraine	3.58%		-4.40%	13.96%	17.9%*	-4.05%
	Yemen			0.01%			0.04%
Asia	Afghanistan	0.55%	-0.22%	-0.33%	2.85%	4.25%	-3.48%
	Bangladesh	1.98%	2.75%	-1.68%	5.93%	7.28%	-4.49%
	Cambodia			1.08%			-0.21%
	India	1.51%	2.15%	-0.87%	4.55%	3.75%	4.16%
	Indonesia	0.44%		-1.43%	3.50%	1.26%*	-2.12%
	Laos	0.44%		-0.31%	0.33%		-1.84%
	Myanmar			-0.15%			-4.25%
	Nepal			-1.06%			3.92%
	Pakistan	1.45%	1.77%	-0.96%	4.11%	3.94%	-1.43%
	Philippines	1.14%	1.44%	0.08%	3.37%	3.43%	-3.40%
	Sri Lanka	2.24%	4.11%	-0.20%	7.50%	13.60%	-3.54%
	Timor-Leste	0.26%	0.29%		0.59%	0.53%	
	Thailand	0.60%		1.38%	0.88%		7.53%
	Vietnam	1.22%		0.07%	2.73%		-1.03%

Source: Trading Economics.

Notes:
- The calculation of quarterly changes uses averages of indices.
- A negative value in the exchange rate indicates the depreciation of the national currency.
* 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



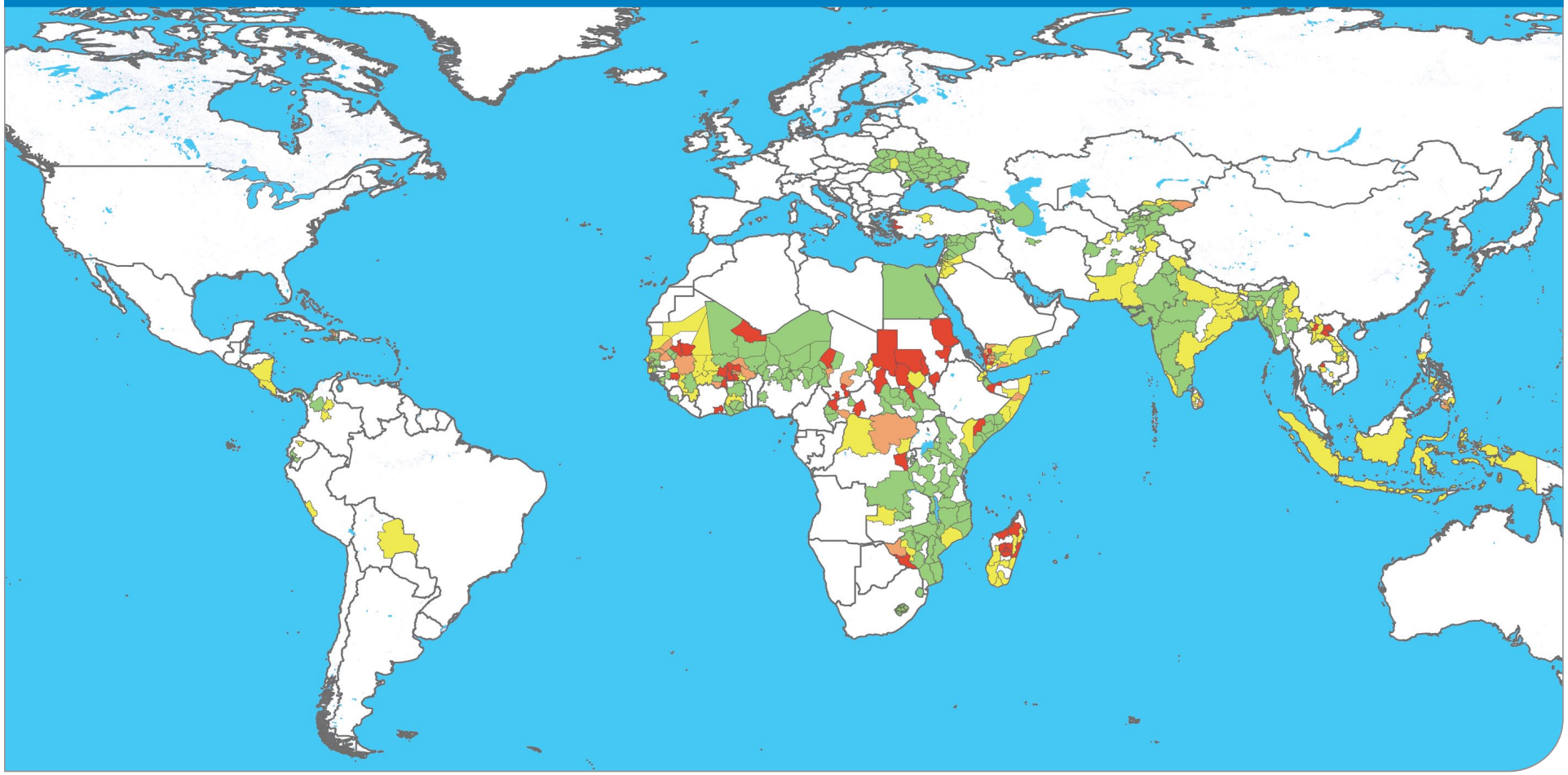
Map produced by: VAM - Food Security Analysis (OSZAF). *Source: WFP; Base Map: GAUL*

Impact Codes

- Low (< 0%)
- Moderate (0-5%)
- High (5-10%)
- Severe (> 10%)
- Monitored but without baseline data
- Water bodies

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 Q4 2012-2016.

Q4-2017 (October to December) vs. **Q3-2017** (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 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

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 (% 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	Rice (carolina 2da)	14	+1	+4	+5	+3	-8	→	100	+4	-8	5
	Colombia	Maize (white)	13	0	-3	0	0	+10	↓	26	-1	+6	4
		Sugar	13	-1	-4	-6	-6	+24	↓	33			5
		Rice (paddy)	12	-5	-3	-22	-18	-13	↓	19			5
		Bananas	5	-1	+4	+7	+3	-1	→	22			4
	Costa Rica	Rice (first quality)	17	0	0	0	0	-3	→	65	+2	-2	5
		Wheat (flour)	10	+4	+6	+7	+5	0	↗	35			5
	Dominican Republic	Rice (first quality)	17	+1	+1	+1	+1	+4	→	100	+1	+4	5
	Ecuador	Rice (long grain)	19	-3	-1	-5	-5	+2	↓	77	0	-1	5
		Wheat (flour)	13	+1	+3	-3	-3	-10	→	23			3
	El Salvador	Maize (white)	25	0	+8	-5	-7	-10	↗	44	+9	-6	5
		Beans (red)	6	0	+7	-2	0	-9	↗	39			5
		Sorghum (maicillo)	6	-1	-3	+12	+14	+18	↓	17			5
	Haiti	Rice (local)	23	+15	+12	+20	+20	+20	↑	43	+2	+13	2
		Wheat flour (imported)	12	-7	-9	-3	-2	+11	↓	15			5
		Sugar (white)	11	-1	-11	-2	+1	+1	↓	25			*
		Maize meal (local)	9	-2	-4	+4	0	+16	↓	9			5
		Oil (vegetable, imported)	7	+3	+1	+5	+5	+17	→	8			5
	Nicaragua	Rice (milled 80-20)	17	0	0	-2	-3	-5	→	29	+3	-5	4
		Sugar	15	0	0	+2	+2	+2	→	21			4
		Bread	9	+4	+4	+2	+2	-1	→	36			4
		Beans (red)	7	+2	+5	+3	0	-19	↗	15			4
	Panama	Rice (first quality)	24	0	-3	-2	-4	-13	↓	38	-2	-11	5
		Bread	12	0	-1	0	0	-12	↓	54			5
		Maize	7	0	0	0	0	0	→	9			5
	Peru	Bread (french type)	14	0	0	+1	+1	+2	→	100	0	+2	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	Congo (DR)	Cassava (cossette)	53	+22	+22	N/A	-3	0	↑	80	+19	+3	5
		Maize	14	+12	-2	+29	+35	+35	↓	10			5
		Oil (palm)	5	+12	+15	+4	+33	+32	↑	3			5
		Wheat flour	5	+21	+20	+17	+24	+6	↑	8			5
	Lesotho	Maize meal	56	-11	-10	-19	-18	-1	↓	52	-6	+5	5
		Bread (brown)	14	0	-1	+1	+1	+13	↓	48			5
	Madagascar	Rice (local)	49	+20	+14	+41	+33	+45	↑	100	+14	+45	5
	Malawi	Maize	53	-7	-15	-61	-57	-24	↓	100	-15	-24	5
	Mozambique	Cassava flour	32	-15	-23	-24	-37	-23	↓	36	-14	-2	3
		Maize (white)	20	+3	-14	-64	-62	-28	↓	11			5
		Wheat flour (local)	9	-1	-6	-12	-12	+34	↓	21			5
		Rice (imported)	8	-3	-7	-14	-13	+35	↓	19			5
		Oil (vegetable, imported)	5	-1	+19	-9	-9	+29	↑	13			3
	Swaziland	Maize (white)	25	0	0	0	0	+33	→	21	-1	+22	5
		Wheat flour	16	0	+1	+1	+2	+7	→	34			5
		Sugar (brown)	11	+1	+2	+9	+12	+38	→	26			5
		Rice	8	-4	-2	+6	+3	+21	↓	19			5
	Tanzania	Maize	26	-18	-30	-39	-29	-13	↓	32	-14	+8	5
		Rice	10	+7	-2	+25	+26	+24	↓	45			5
		Beans	5	+4	-5	+3	+4	+17	↓	22			5
	Zambia	Maize (white)	51	+3	-9	-38	-34	-8	↓	100	-9	-8	5
	Zimbabwe	Maize	41	+4	-1	-23	-26	-22	↓	100	-1	-22	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
Central and Eastern Africa	Burundi	Sweet potatoes	17	+1	-15	+15	+45	+94	↓	51	-15	+56	5
		Beans	16	+9	-12	-22	-6	+14	↓	20			5
		Cassava flour	13	-11	-16	-2	+18	+46	↓	14			5
		Maize (white)	13	+1	-17	-18	0	+38	↓	15			5
	Djibouti	Pasta	34	-5	-8	-19	-17	-19	↓	61	-5	-16	5
		Rice (imported)	17	0	0	-2	+1	-11	→	23			5
		Sugar	11	-7	-4	-12	-9	-7	↓	16			5
	Kenya	Maize (white)	35	-7	-8	+6	+11	-2	↓	27	-1	+3	5
		Bread	9	-1	-1	-2	-2	-5	↓	18			5
		Milk (cow, pasteurized)	7	-1	+3	-5	-2	+8	→	54			5
	Rwanda	Beans	11	+1	-9	-24	-22	0	↓	71	-7	+11	5
		Maize	5	+2	0	+5	+9	+50	→	29			5
	Somalia	Sorghum (red)	29	-7	-11	+9	+13	+34	↓	46	-6	+23	5
		Maize (white)	18	-10	-5	-5	0	+22	↓	21			5
		Wheat flour (imported)	10	-1	N/A	N/A	N/A	N/A	↓	18			*
		Rice (imported)	9	0	-2	-2	-1	+1	↓	15			5
	South Sudan	Sorghum (white)	26	-15	-24	+47	+45	+398	↓	44	-30	+328	5
		Wheat flour	15	-2	-33	+29	+71	+286	↓	56			3
	Uganda	Cassava (flour)	13	+2	0	+7	+5	+42	→	66	0	+36	5
		Beans	5	+1	-3	-5	-3	+25	↓	34			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
West Africa	Burkina Faso	Sorghum	26	-3	+4	+15	+15	+12	→	40	+7	+15	5
		Millet	22	+2	+10	+29	+30	+24	↑	40			5
		Maize	16	-4	+7	+11	+8	+6	↗	20			5
	Cameroon	Maize	15	-17	-3	+11	+16	0	↓	41	-14	-12	5
		Rice (local)	10	-24	-25	+7	+8	-21	↓	40			5
		Sorghum (white)	8	-20	-16	-21	-6	-10	↓	20			5
	Central African Republic	Cassava (cossette)	18	-19	-18	N/A	+2	-34	↓	73	-7	-32	4
		Maize	13	-23	-21	N/A	-1	-25	↓	27			4
	Chad	Sorghum (red)	18	-1	+5	+14	+18	+7	↗	45	+8	0	5
		Millet	15	-2	+2	0	+11	-5	→	41			5
		Maize (white)	5	-8	+3	+10	+20	0	→	14			5
	Côte d'Ivoire	Rice (imported)	20	-2	-1	0	-1	-1	↓	14	+12	+22	5
		Yam	20	0	+23	+9	-6	+38	↑	66			5
		Attiéké	12	0	+7	-16	-15	-1	↗	20			5
	Gambia (The)	Rice (long grain, imported)	21	+1	-3	+6	+7	+24	↓	30	-5	+20	4
		Millet	19	-7	-13	+10	+25	+22	↓	18			4
		Sugar	12	-3	-4	-2	-5	+6	↓	17			3
		Bread	8	+11	+8	+14	+13	+22	↗	19			3
		Oil (palm)	7	+1	-1	+10	+23	+24	↓	11			3
		Sorghum	5	-2	-1	+8	+11	+17	↓	6			4
	Ghana	Cassava	21	-18	-16	-56	-34	+20	↓	28	-13	+17	5
		Maize	12	-19	+6	+56	+38	+42	↗	12			5
		Yam	11	-21	-1	-28	-4	+32	↓	36			5
		Rice (imported)	8	-18	-21	-25	-18	-10	↓	23			3
	Guinea	Rice (imported)	37	+2	+7	+12	+12	+17	↗	62	+2	+17	3
		Cassava meal (gari)	12	+3	+7	+23	+24	+24	↗	19			*
		Oil (vegetable)	7	-2	N/A	N/A	N/A	N/A	↓	11			*
		Oil (palm)	6	+4	0	0	+2	+3	→	8			3
	Guinea-Bissau	Rice (imported)	35	+2	+3	-2	+1	-21	→	44	+4	-16	3
		Oil (vegetable, imported)	11	-2	-1	0	+1	0	↓	13			3
		Fonio	8	-3	-1	+4	-18	-8	↓	22			3
		Maize	8	+22	+24	+50	+23	-30	↑	13			3
		Sugar	5	+1	+2	-8	0	+2	→	8			3
	Mali	Rice (imported)	21	0	+1	+5	+5	+6	→	46	+1	+11	5
		Millet	20	+2	+7	+20	+25	+18	↗	27			5
		Sorghum	13	+1	+9	+18	+19	+16	↗	17			5
		Maize	9	-27	-21	+6	+5	+6	↓	9			5
	Mauritania	Wheat	30	+4	+5	+7	+6	-2	↗	30	+7	+7	5
		Sugar	12	-2	-2	-9	-10	+2	↓	19			5
		Oil (vegetable)	11	0	+2	-3	-2	-3	→	13			5
		Rice (imported)	11	+7	+7	+6	+8	+20	↗	23			5
		Sorghum (taghalit)	7	+27	+33	+57	+44	+25	↑	16			5
	Niger	Millet	39	-23	-8	+12	+14	+2	↓	58	-7	+3	5
		Sorghum	11	-14	-7	+17	+19	+12	↓	20			5
		Rice (imported)	7	+1	+2	+4	+4	-2	→	23			5
	North Nigeria	Sorghum (brown)	13	-16	-26	-14	-7	+60	↓	30	-12	+11	3
		Millet	11	-22	-10	-9	-6	-6	↓	20			5
		Maize (white)	8	-33	-28	-15	-18	+31	↓	12			3
		Rice (imported)	8	-6	-9	-8	-8	-7	↓	38			5
	Senegal	Rice (imported)	30	0	+1	+6	+4	+4	→	67	+1	+4	5
		Maize (imported)	10	0	-1	-7	-3	-4	↓	17			5
		Millet	8	+1	+2	+8	+18	+16	→	16			5
	Sierra Leone	Rice (imported)	40	-9	-4	-2	-3	+16	↓	75	-6	+19	4
		Cassava	9	-14	-28	+55	+48	+40	↓	12			3
		Oil (palm)	9	+10	-5	+6	+4	+18	↓	13			4

(*) 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
Middle East, North African and Central Asia	Armenia	Bread (first grade flour)	40	+6	+5	-5	-8	-7	↗	45	0	-4	5
		Milk	8	-6	-6	-12	-14	-2	↓	40			5
		Sugar	8	-1	+2	0	+4	+3	→	7			5
		Potatoes	5	+8	+19	+19	+18	+3	↑	9			5
	Azerbaijan	Bread (high grade flour)	57	0	-3	+8	+8	+25	↓	76	-5	+18	5
		Potatoes	6	+2	-4	+8	+3	-1	↓	24			5
	Egypt	Pasta	35	0	-8	+20	+21	+58	↓	58	-9	+66	5
		Rice	12	0	-4	+34	+36	+60	↓	21			5
		Sugar	7	-3	-13	+6	+11	+103	↓	21			5
	Georgia	Bread	41	-41	-42	-83	-41	-39	↓	100	-42	-39	5
	Iran (Islamic Republic of)	Rice (local)	9	0	-8	-2	-2	+55	↓	76	-8	+46	5
		Sugar	9	-5	-8	-13	-15	+23	↓	24			5
	Jordan	Bread (pita)	38	0	N/A	N/A	N/A	N/A	→	22	0	N/A	*
		Sugar	15	0	N/A	N/A	N/A	N/A	→	27			*
		Oil (vegetable)	12	0	N/A	N/A	N/A	N/A	→	25			*
		Rice (imported)	8	0	N/A	N/A	N/A	N/A	→	26			*
	Kyrgyz Republic	Wheat flour (first grade)	40	+2	0	0	-2	-6	→	24	-3	+5	5
		Milk (non-pasteurized)	12	+14	0	-2	-2	+5	→	47			5
		Sugar	9	-15	-15	-12	-11	-8	↓	9			5
		Potatoes	8	-1	-4	+28	+41	+33	↓	21			5
	Palestine	Bread	40	+1	+2	-5	-5	-7	→	58	0	-7	3
		Sugar	10	-1	0	-6	-7	-3	→	11			3
		Rice (small grain, imported)	7	-5	-5	-7	-10	-11	↓	11			3
		Oil (olive)	5	-1	N/A	N/A	N/A	N/A	↓	20			*
	Sudan	Sorghum	60	+17	+19	+51	+30	+65	↑	82	+19	+70	5
		Millet	9	+19	+23	+81	+62	+98	↑	18			5
	Syria	Bread (bakery)	39	-4	-11	-33	-13	+61	↓	27	-29	+38	5
		Sugar	13	-28	-41	-54	-48	+19	↓	41			5
		Oil	11	-11	-22	-27	-19	+50	↓	32			5
	Tajikistan	Bread	54	-2	-6	-4	-4	+17	↓	91	-6	+18	5
		Sugar	7	-6	-6	+2	+4	+28	↓	5			5
		Oil (cotton)	6	-2	-2	+6	+5	+21	↓	3			5
		Maize	5	-5	0	+12	+17	+19	→	1			5
	Turkey	Bread (common)	41	+5	N/A	N/A	N/A	N/A	↗	64	+6	N/A	*
		Sugar	8	+3	N/A	N/A	N/A	N/A	→	9			*
		Milk (pasteurized)	5	+11	N/A	N/A	N/A	N/A	↑	27			*
	Ukraine	Bread (rye)	29	+4	+1	+22	+21	+43	→	39	-4	+45	3
		Oil (sunflower)	9	+1	0	+2	+2	+26	→	7			3
		Potatoes	8	-21	-17	+17	+19	+29	↓	12			3
		Milk	7	+6	-1	+28	+26	+57	↓	42			3
	Yemen	Wheat	38	+3	+4	+18	+10	+22	→	45	+9	+28	4
		Sugar	12	+3	+8	+5	+3	+16	↗	22			5
		Oil (vegetable)	9	+6	+7	+35	+30	0	↗	11			5
		Rice (imported)	6	+14	+23	+42	+30	+89	↑	23			4

(*) 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
Asia	Afghanistan	Bread	58	0	-1	-1	-1	0	↓	78	-1	+1	3
		Rice (low quality)	22	-1	-3	+7	+6	+4	↓	22			5
	Bangladesh	Rice (coarse)	70	-17	-21	+19	-15	-4	↓	91	-20	-4	5
		Wheat flour	6	+3	+2	0	+2	-7	→	9			5
	Cambodia	Rice (mix)	65	+2	+3	+8	+14	+3	→	100	+3	+3	5
	India	Rice	31	+1	-1	+6	+7	+12	↓	52	-2	+14	5
		Wheat	22	+1	-3	0	+2	+15	↓	32			5
		Sugar	7	0	-1	+5	+7	+20	↓	16			5
	Indonesia	Rice	50	+2	+1	+4	+2	+13	→	80	+1	+11	5
		Oil (vegetable)	7	0	0	+2	+3	+8	→	5			5
		Sugar	6	-2	-1	-13	-14	-1	↓	9			5
		Wheat	6	+2	+2	+4	+3	+7	→	6			5
	Lao PDR	Rice (glutinous, first quality)	64	+1	+2	-6	-9	0	→	100	+2	0	5
	Myanmar	Rice (low quality)	55	-5	-7	-4	-3	+25	↓	100	-7	+25	5
	Pakistan	Wheat	37	+4	-1	0	-1	-3	↓	18	+1	0	3
		Sugar	11	-2	0	-14	-20	-9	→	7			4
		Milk	9	0	+1	+1	+1	+2	→	59			3
		Oil (cooking)	9	0	+2	+2	+2	-5	→	9			4
		Rice (basmati, broken)	6	+2	+4	+21	+21	+10	→	6			5
	Philippines	Rice (regular milled)	48	-1	+1	-1	+3	+5	→	100	+1	+5	5
	Sri Lanka	Rice (long grain)	41	+12	+6	+22	+30	+39	↗	77	+5	+27	2
		Wheat flour	14	+1	0	0	-1	-2	→	23			3
	Thailand	Rice (25% broken)	48	-3	+2	-5	-3	-12	→	100	+2	-12	5
	Viet Nam	Rice (20% broken)	59	+4	+1	+19	+19	+7	→	100	+1	+7	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[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.

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