



The Market Monitor

Trends and impacts of staple food prices in vulnerable countries

This bulletin examines trends in staple food and fuel prices, the cost of the basic food basket and consumer price indices for 70 countries in the third quarter of 2016 (July to September).¹ The maps on pages 6–7 disaggregate the impact analysis to sub-national level.

Global Highlights

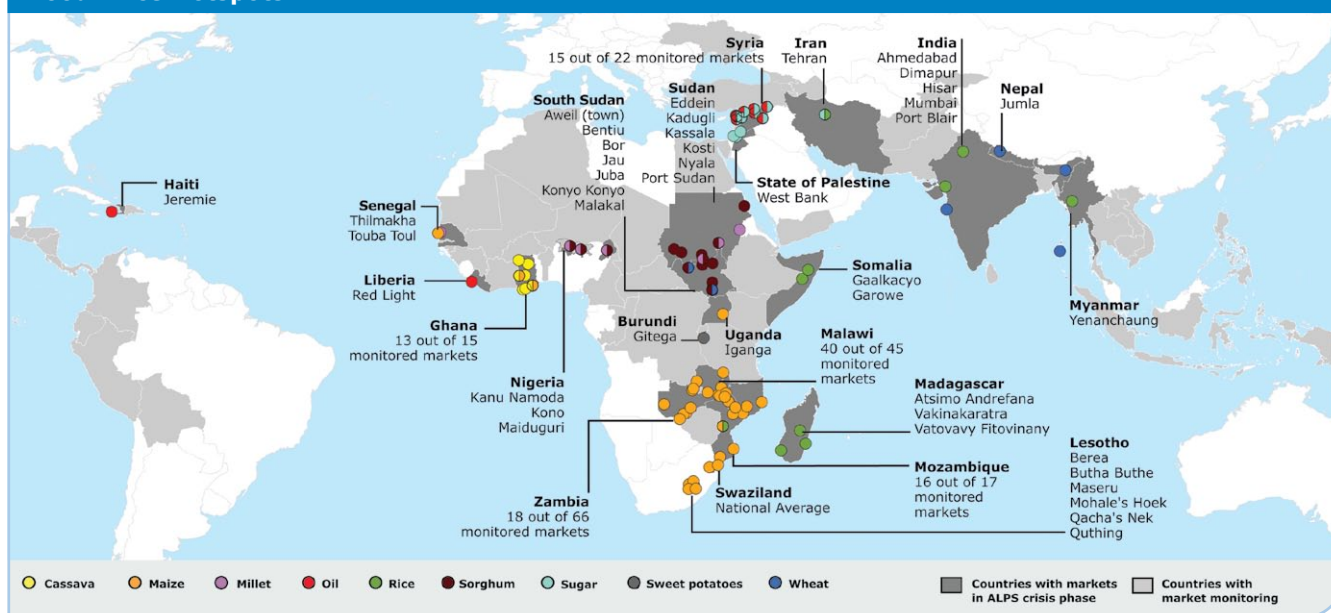
- During Q3-2016, **FAO's global cereal price index fell a further 9 percent year-on-year**. Ample global stocks and record production levels continue to suppress international prices. By contrast, the FAO global food price index continued to rise in Q3-2016 (5% y/y) due to significant price increases, largely for sugar as well as for dairy and oil products.
- The real price² of wheat dropped again, falling 19 percent below last year's level**. This is because world supply estimates remain at record levels thanks to excellent yields and production forecasts as well as record ending stocks.
- The real price of maize dropped 10 percent in Q3-2016 compared to the last quarter and the same period in 2015** and is now at levels last seen in 2006. Globally, the 2016/17 maize crop is forecast to be the highest on record with exporter stocks at a near 30-year high.
- During Q3-2016, **the real price of rice increased by 5 percent compared to Q2-2016**. After peaking this July, prices have been on a downward trend thanks to a global recovery in production, particularly in India.

CHANGES IN REAL PRICES²

| Quarterly Change | Maize | Wheat | Rice | Note: Comparison to |
|---------------------|-------|-------|------|------------------------------------------|
| q3-2016 vs. q2-2016 | -10% | -19% | 5% | Second quarter in 2016 |
| q3-2016 vs. q3-2015 | -10% | -29% | 12% | Same quarter in 2015 |
| q3-2016 vs. q1-2008 | | -68% | | Global wheat price peak in 2008 |
| q3-2016 vs. q2-2008 | -46% | | -60% | Global maize and rice price peak in 2008 |

- The real price of crude oil has remained stable during Q3-2016** and is 9 percent below the level of last year.
- The cost of the basic food basket increased severely (>10%) in Q3-2016 in eight countries: Bangladesh, Burundi, Iran, Madagascar, Mozambique, Niger, north Nigeria and South Sudan**. High increases (5–10%) were seen in **Democratic Republic of Congo, Kyrgyz Republic, Peru and Uganda**. In the other monitored countries, the change was *moderate* or *low* (<5%).
- Price spikes, as monitored by [ALPS](#), were detected in 23 countries, particularly in **Ghana, Lesotho, Malawi, Mozambique, Namibia, South Sudan, Sudan, Syria and Zambia** (see the map below).³ These spikes indicate *crisis* levels for the two most important staples in each country.

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 October 2016.

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 Q3-2016, and they did not return to normal levels by the end of the quarter. Note that for some markets/countries, prices are monitored but the price series may not necessarily qualify for ALPS calculation (see [ALPS website](#) for details).

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

Impact Codes (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 2016 was high in **Peru**; moderate in **Colombia**, **Costa Rica**, **Haiti** and **Panama**; and low in the other countries.

• Staple commodity prices:

Seasonally adjusted prices for white maize and rice fell in the region after a good summer harvest. Red beans prices also dropped in **Nicaragua** (-7%) and **Honduras** (-12%). In **Haiti**, seasonally adjusted prices for maize meal generally decreased from the previous quarter but remained above last year's level in drought-affected departments (+33% Artibonite; +20% Nord; +31% Nord Est). By contrast, quarterly maize meal prices were up 24 percent in Grand'Anse; further price increases are expected after Hurricane Matthew caused extensive damage in this department at the beginning of October. In **Peru**, seasonally adjusted potato prices stood higher than last quarter (+18%) and last year (+35%), reflecting the prolonged effect of the drought-induced supply shortages of previous months. Sugar prices stabilized during Q3-2016 in **Colombia** (+1%) after increasing for several quarters because of a deep

crisis in the national sugar industry; prices remained 29 percent above last year's level.

- **Fuel prices:** Quarter-on-quarter (q/q) fuel prices rose in **Honduras** (+5% diesel; +1.3% gasoline) and **Nicaragua** (+8.6% diesel; +2.6% gasoline) with the shrinking of regional crude oil production. Nevertheless, prices remained well below last year's level in most countries, including **Nicaragua** (-8.8% diesel; -4.8% gasoline), **Honduras** (-7.30% gasoline), **Guatemala** (-11.4% diesel; -13.2% gasoline) and **Colombia** (-5.3% diesel; -1.7% gasoline).

- **Purchasing power:** Quarterly changes in the headline and food consumer price indices (CPI) were low in most countries because harvests are improving as *El Niño* weakens. The food shortages of previous months are still influencing year-on-year (y/y) food inflation in **Bolivia** (+6.2%), **Colombia**

(+10.6%), **Guatemala** (+9%) and **Haiti** (+12.5%). In the latter, a 22 percent currency depreciation from Q3-2015 has put additional pressure on import prices and other components of y/y headline inflation (+14.3%). Prices are soaring in **Venezuela** as the country undergoes a deep economic crisis: y/y inflation was above 700 percent due to severe food shortages and the 59 percent y/y depreciation of the bolivar.



Southern Africa

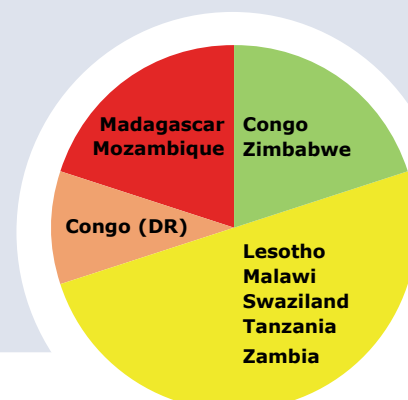
Hotspots: The impact of staple food price changes on the cost of the basic food basket in Q3-2016 was severe in **Madagascar** and **Mozambique**; high in **Democratic Republic of Congo**; moderate in **Lesotho**, **Malawi**, **Swaziland**, **Tanzania** and **Zambia**; and low in the other countries.

- **Staple commodity prices:** In **Zambia**, white maize prices generally stabilized (+2%) with the suspension of formal maize exports and the recent harvest; nevertheless, a 20 percent increase from Q2-2016 was seen in the Eastern province which is exposed to informal cross-border trade flows. Maize is scarce in **Malawi** and prices were 75 percent higher than last year because of low carry-over stocks. Maize supplies are also tight in **Mozambique** where maize prices were double last year's level due to a below-average harvest and commercial export bans from neighbouring countries: the highest quarterly increases were in Sofala (+21%) and Inhambane (+38%) as recent turmoil and road attacks have impeded the delivery of fresh supplies in local markets. The incessant depreciation of the metical continued to drive up the price of imported foods such as rice (+18%) and vegetable oil (+39%). The **ALPS** indicator flagged nearly all markets in **Zambia**, **Malawi** and **Mozambique** as in alert or crisis for maize as of September. Conflict increased pressure on food prices in **Democratic Republic of Congo**:

in Nord Kivu, quarterly prices rose for maize (+7%), palm oil (+13%) and wheat flour (+21%) as internally displaced people and new refugees from Burundi pushed up local demand. In **Zimbabwe**, increased imports and lower demand helped stabilize quarterly prices for maize, which fell by 7 percent from Q2-2016; vegetable oil prices increased slightly (+3%). In **Tanzania**, prices rose from Q2-2016 for maize (+7%) in the run-up to the lean season but continued to fall for other products (-1% rice; -1% beans).

- **Fuel prices:** In **Madagascar**, the government's gradual removal of fuel subsidies led q/q prices to increase (+14.9% diesel; +8.7% gasoline). **Tanzania's** energy regulatory authority revised fuel cap prices upward (+11.1% diesel; +4.7% gasoline) over Q3-2016 to cope with slight increases in freight costs. Y/y prices dropped in **Tanzania** (-10.6% diesel; -15.2% gasoline) and **Zimbabwe** (-11.9% diesel; -8.2% gasoline).
- **Purchasing power:** Y/y headline inflation was high in **Mozambique** (+25.1%) and **Malawi** (+26.8%):

in both countries, the economy and production show weak signs of recovery and the currency is depreciating (by 88.7% in **Mozambique**; by 38.9% in **Malawi**), pushing up import prices. During Q3-2016, q/q food inflation was low in **Lesotho** (-0.7%) and **Zambia** (+0.3%) as their domestic currencies appreciated. Nevertheless, food CPI remained above last year's levels in both countries: in **Lesotho** (+10.9%), following early 2016 crop failures; in **Zambia** (+24.2%) due to high export demand preceding the country's 2016 official export ban and the currency depreciation of the previous months.



Central and Eastern Africa

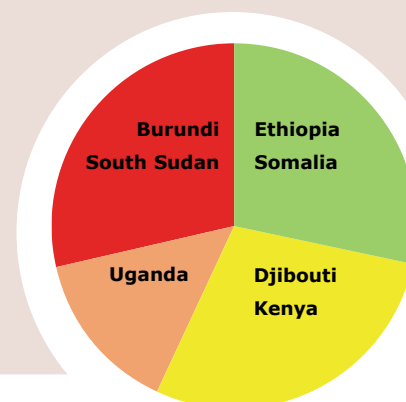
Hotspots: The cumulative impact of staple food price changes on the cost of the basic food basket in Q3-2016 was severe in **Burundi** and **South Sudan**; high in **Uganda**; moderate in **Djibouti** and **Kenya**; and low in the other countries.

• **Staple commodity prices:** In **Uganda**, seasonally adjusted prices increased for main crops (+14% maize; +7% beans; +4% millet) following a below-average harvest. In **Kenya**, maize prices edged up 10 percent from Q2-2016 ahead of the October harvest and because of the temporary interruption of exports from neighbouring Tanzania in July. In **Ethiopia**, maize prices fell from Q2-2016 in SNNPR (-6%), Oromia (-14%), Tigray (-3%) and Somali regions (-12%) with the favourable *belg* harvest in August – a sign that agriculture is gradually recovering from drought in these areas. Sorghum prices also fell 21 percent from the previous quarter. Low rains compromised bean crops in **Burundi**: prices were up from Q2-2016 in Cibitoke (+36%), Bubanza (+26%), Kirundo (+35%), Ngozi (+21%) and Ruyigi (+22%). Seasonally adjusted prices also increased for maize (+20%) and sweet potatoes (+21%) over the same period. Transport and import costs grew exponentially

in **South Sudan** as the domestic currency plummeted against the US dollar; new waves of insecurity and seasonal rains are additional constraints to south-to-north supply movements. Food prices skyrocketed from Q2-2016 as a result, with the highest increases in Western Bahr El Ghazal (+152% sorghum) where food availability is most constrained by the interruption of trade flows. All monitored markets were in *crisis* for sorghum according to [ALPS](#) in September.

• **Fuel prices:** Q/q prices rose in **Kenya** (+18.3% diesel; +11.6% gasoline) after the country's energy regulatory commission introduced a road maintenance levy in July. In **Ethiopia**, q/q fuel prices remained steady after governmental price cuts in February. Chronic fuel shortages have sent fuel prices skyrocketing in **South Sudan**: diesel was 195 percent and gasoline 218 percent more expensive than in Q2-2016.

• **Purchasing power:** Y/y headline inflation was 9 percent in **Rwanda**, nearly 8 percent in **Ethiopia**, 6 percent in **Burundi** and about 7 percent in **Kenya**, mostly due to food inflation. In **South Sudan**, the official exchange rate continued to fall, losing nearly 15 times its value against the US dollar from Q3-2015. A shortage of foreign currency, lack of fuel and the recent escalation of conflict have restricted trade and sent y/y consumer prices soaring (+782.1% CPI; +882.5% food CPI).



West Africa

Hotspots: The impact of staple food price changes on the cost of the basic food basket in Q3-2016 was severe in **Niger** and **north Nigeria**; moderate in **Benin**, **Cote d'Ivoire**, **Guinea**, **Liberia**, **Mali**, **Mauritania** and **Senegal**; and low in the other countries.

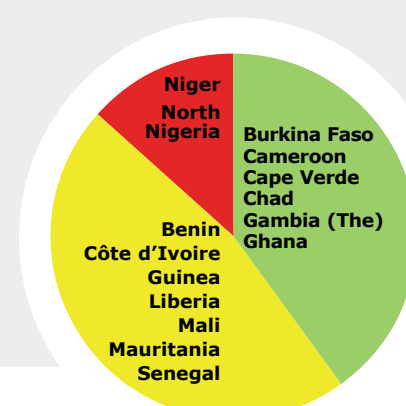
• **Staple commodity prices:** In Q3-2016, seasonally adjusted cereal prices decreased in **Benin** (-8% sorghum), **Burkina Faso** (-3% maize, millet and sorghum), **Chad** (-17% maize; -9% millet; -12% sorghum) and the **Gambia** (-2% millet; -8% sorghum) reflecting adequate supplies. Seasonal cereal price increases from Q2-2016 were seen in **Senegal's** eastern regions (in Thies: +38% millet and +20% maize; in Dakar: +10% millet; in Fatick: +4% millet and +16% maize), where July–September flooding delayed the start of the harvest season. Food prices in **Ghana** eased in Q3-2016 for local products (-4% cassava; -5% maize; -3% yam) but remained above last year's level (+124% cassava; +49% yam). The price of imported rice fell both from Q2-2016 (-30%) and from last year (-22%). Boko Haram attacks continued to disrupt farming and trade in **north Nigeria**: less land was planted as numerous families sought refuge from the violence in neighbouring Chad. Food prices consequently increased from Q2-2016 (+20%

sorghum; +27% millet; +31% maize) as food remains in short supply. The depreciation of the naira also contributed to the quarterly increase in the price of imported rice (+4%) as Nigeria is highly import-dependent. In **Niger**, irregular rains saw cereal prices rise in Tahoua (+9% millet; +11% sorghum) and Maradi (+21% millet; +21% sorghum); prices rose in Zinder due to higher demand from the influx of refugees (+16% millet; +13% sorghum) and in Diffa (+17% millet; +18% sorghum) because of persistent Boko Haram attacks.

• **Fuel prices:** In **north Nigeria**, pump prices were markedly higher than in Q2-2016 (+24.3% diesel; +28.3% gasoline) and last year (+23.4% diesel; +49.5% gasoline) as fuel was scarce and currency devaluation made imports insufficient and too costly to meet demand.

• **Purchasing power:** In **Ghana**, q/q food inflation was negative (-1.1%) as restrictive monetary policy is starting to take effect and the cedi depreciated at a slower pace than

in previous quarters. Nevertheless, prices were above last year (+16.8% CPI; +6.5% food CPI). Q/q food prices also followed a deflationary trend in **Benin** (-6.7%) and **Mauritania** (-3.3%). **Nigeria** abandoned the currency peg in June, leading the domestic naira to fall 47 percent against the US dollar in just three months: consumer prices accelerated from Q3-2015 (+18.6% CPI; +17.4% food CPI).



Middle East, North Africa and Central Asia

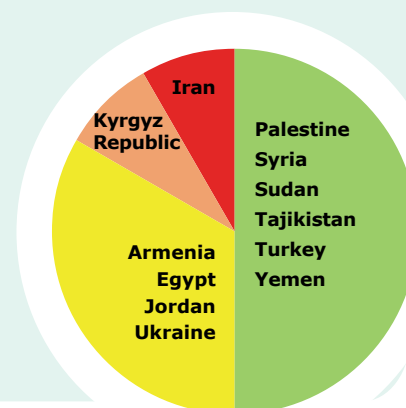
Hotspots: The impact of staple food price changes on the cost of the basic food basket in Q3-2016 was severe in **Iran**; high in **Kyrgyz Republic**; moderate in **Armenia, Egypt, Jordan and Ukraine**; and low in the remaining countries.

• **Staple commodity prices:** During Q3-2016, quarterly prices eased in **Turkey** (-2% bread; -4% sugar; -2% milk) but remained higher than last year (+15% bread; +8% sugar; +5% milk). In **Kyrgyz Republic**, seasonally adjusted prices increased markedly for potatoes from Q2-2016 (+48%), moderately for milk (+4%) and sugar (+4%), and declined for wheat flour (-8%). In **Sudan**, sorghum prices rose during the lean season, especially in Blue Nile (+19%) and South Kordofan (+24%). Food prices continued to soar from Q2-2016 in conflict-affected markets of Western Darfur (+6% sorghum; +65% millet). In **Syria**, seasonally adjusted prices increased from Q2-2016 for sugar and subsidized "bakery" bread in Aleppo (+76% bread; +36% sugar) and Edlib (+30% bread; +11% sugar), where airstrikes are disrupting market activities. Food assistance provided some relief and eased quarterly prices in the besieged areas of Deir Ezzor (-39% bread; -48% sugar; -44% oil) and Hassakeh (-12% oil). In **Yemen**, lower imports drove up prices for wheat flour (+3%) and sugar (+13%) from Q2-2016: there were major price increases in Sa'ada

(+10% wheat flour; +32% sugar), where airstrikes continued to prevent supplies from reaching local markets regularly. Improved availability reduced prices in Al Hudaydah (-16% wheat flour; -4% sugar; -15% oil; -38% sorghum) and Hajjah (-21% oil; -10% sorghum). However, economic access to food remains difficult because of irregular public-sector salary payments. Seasonally adjusted prices increased in **Iran** from Q2-2016 (+20% rice; +17% sugar) and Q3-2015 (+43% rice; +44% sugar): an effect of the depreciation of the rial during the first half of 2016.

• **Fuel prices:** In **Yemen**, quarterly prices declined after the price hikes of previous quarters (-24% diesel; -39.6% gasoline). Nevertheless, fuel remains scarce and informal cross-border trade is the main supply source. The oil industry in **Iraq** is undergoing a severe downturn after revenues fell with plunging gasoline prices (-10% from Q2-2016; -50.3% from Q3-2015) due to oversupply. **Algeria's** government budgeted substantial increases in the cost of fuel as a reaction to plummeting national oil revenues: y/y diesel prices increased by 46 percent and gasoline by 38 percent.

• **Purchasing power:** In **Sudan**, the dollar shortage caused by the depreciation of the pound on parallel currency markets drove up the price of imports; consumer prices rose (q/q +8.1%; y/y +19.6%). Q/q inflation was negative in **Armenia** (-3.2% CPI; -5.1% food CPI) following currency appreciation. Q/q inflation was also negative in **Azerbaijan** (-0.8% CPI; -2.1% food CPI); however, prices remained well above last year's level in the expectation that the government will devalue the manat for the third time since a floating exchange rate was introduced in December 2015.



Asia

Hotspots: The impact of staple food price changes on the cost of the basic food basket from July to September 2016 was severe in **Bangladesh**; moderate in **India and Nepal**; and low in the remaining countries.

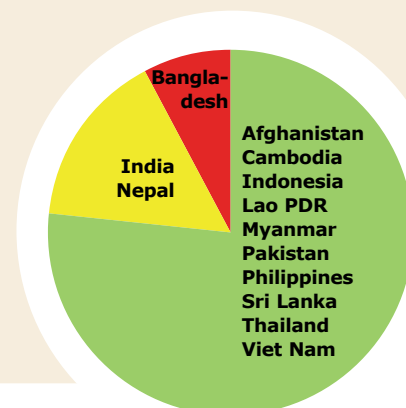
• **Staple commodity prices:** During Q3-2016, rice prices were stable or decreasing in most countries of the region. In **Myanmar**, rice prices followed a declining trend from the previous quarter except in the Chin region, where June flooding hampered harvesting and prices jumped by 28 percent from Q2-2016. Buthidaung, Magway, Maungdaw and Yenanchaung markets remain in alert according to the **ALPS**. In **Bangladesh**, several farmers have shifted from rice to more profitable crops because of chronic shortages of water to irrigate paddy fields: seasonally adjusted rice prices consequently increased by 25 percent from Q2-2016 because of below-average supply and because traders have withheld available crops ahead of the government's winter procurement. Quarterly wheat flour prices rose marginally

(+2%) thanks to growing imports and national reserves. Lower production and stock hoarding were behind the steep increase in sugar prices in **India** at the start of 2016: sugar prices stabilized in Q3-2016 following the government's introduction of a stock accumulation ceiling.

• **Fuel prices:** In **Laos**, fuel prices remained below last year's level (-12.5% diesel; -11.2% gasoline) despite a moderate increase in the quarterly quotation of diesel (+10.9%) and gasoline (+4.8%). Gasoline in **Myanmar** was nearly 30 percent cheaper than in Q3-2015 but increased from Q2-2016 (+10.1%), following the trend in international oil prices.

• **Purchasing power:** Q/q food and headline inflation was low and currencies were stable in most countries. An 8 percent exchange

rate depreciation drove y/y inflation in **Afghanistan** (+7.1% CPI; +8.6% food CPI) and **Sri Lanka** (+3.6% CPI; +4.5% food CPI). Y/y headline inflation was 7 percent in **Bangladesh** and nearly 10 percent in **Nepal**, mostly due to rising food prices.



| Consumer Price Index and Exchange Rates | | | | | | | |
|--------------------------------------------|--------------------|-------------------------------------------------------------|----------|--------------------|--------------|----------|--------------------|
| Region | Country | Quarterly and Yearly Changes in Q3-2016 (July to 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 | 0.35% | 0.10% | 0.23% | 3.86% | 6.21% | 1.11% |
| | Colombia | 0.78% | | -1.41% | 7.95% | 10.61%* | -1.07% |
| | Costa Rica | 0.84% | -0.15% | 2.13% | 0.18% | -1.56% | 3.33% |
| | Dominican Republic | 0.65% | 0.45% | 0.36% | 1.57% | 0.96% | 2.27% |
| | Ecuador | 0.10% | -0.35% | | 1.47% | 1.94% | |
| | El Salvador | -0.28% | | -0.07% | 0.66% | -1.72%* | -0.16% |
| | Guatemala | 1.20% | | -1.60% | 4.56% | 8.95%* | -1.77% |
| | Haiti | 3.57% | 3.09% | 2.43% | 14.32% | 12.50% | 22.36% |
| | Honduras | 1.01% | -0.65% | 1.03% | 2.76% | 0.36% | 4.50% |
| | Nicaragua | 0.11% | -1.18% | 1.17% | 3.47% | 0.70% | 6.40% |
| Southern Africa | Panama | 0.16% | | 0.07% | 0.71% | 1.20%* | 0.89% |
| | Peru | 0.58% | | 0.65% | 3.28% | 3.70%* | 5.21% |
| | Venezuela | | | -0.01% | 717.30% | | 58.62% |
| | Lesotho | 0.58% | -0.69% | -6.02% | 6.48% | 10.86% | 5.76% |
| | Madagascar | 1.07% | | -4.13% | 6.27% | | -5.41% |
| | Malawi | 0.52% | -4.86%* | 3.44% | 26.78% | 23.04%* | 38.93% |
| | Mozambique | 3.12% | | 26.65% | 25.13% | | 88.70% |
| | Namibia | 1.21% | | -6.15% | 7.09% | | 7.81% |
| | Swaziland | 0.79% | | -6.13% | 8.02% | | 5.46% |
| | Tanzania | 0.29% | -0.28% | -0.23% | 4.58% | 5.73% | 3.00% |
| Central and Eastern Africa | Zambia | 0.65% | 0.29% | -1.77% | 19.73% | 24.19% | 14.95% |
| | Zimbabwe | -0.31% | | | -1.71% | | |
| | Burundi | 2.39% | 1.65% | 4.69% | 6.21% | 5.61% | 5.56% |
| | Djibouti | 0.41%* | 0.95%* | -0.83% | 2.42%* | 5.45%* | -0.49% |
| | Ethiopia | 2.54% | 3.76% | 1.86% | 7.87% | 7.75% | 6.11% |
| | Kenya | 1.69% | | 0.28% | 6.60% | | -1.17% |
| West Africa | Rwanda | 3.53% | 2.36% | 1.18% | 9.26% | 9.23% | 11.43% |
| | South Sudan | 152.54% | 186.63% | 33.33% | 782.09% | 882.50% | 1482.92% |
| | Uganda | 0.90% | 0.38% | 0.81% | 5.45% | 9.36% | -4.05% |
| | Benin | -3.02% | -6.68% | 2.13% | -1.52% | -0.41% | 0.08% |
| | Burkina Faso | -0.29% | | 2.13% | -0.63% | | 0.08% |
| | Cape Verde | -0.23% | -0.15% | 1.10% | -1.84% | -0.88% | -1.04% |
| | Chad | 0.13% | | 2.12% | -1.86% | -4.63% | -0.02% |
| | Côte d'Ivoire | | | 1.88% | | | 0.21% |
| | Ghana | 1.78% | -1.11% | 2.38% | 16.84% | 6.48% | 2.79% |
| | Guinea | | | | | | |
| Middle East, North Africa and Central Asia | Mali | 1.13% | 2.87% | 3.02% | -3.19% | -5.57% | 1.84% |
| | Mauritania | 4.48% | -3.33% | 0.52% | 8.76% | 1.90% | 11.08% |
| | Niger | 1.59% | | 1.88% | 0.45% | | 0.21% |
| | Nigeria | 4.30% | 4.08% | 47.17% | 18.57% | 17.37% | 57.75% |
| | Senegal | 2.80% | 5.11% | 1.88% | 2.40% | 3.28% | 0.21% |
| | Armenia | -3.15% | -5.05% | -0.82% | -1.77% | -3.58% | -1.18% |
| | Azerbaijan | -0.84% | -2.12% | 5.89% | 11.36% | 14.75% | 55.53% |
| | Egypt | 4.00% | 4.33% | -0.05% | 16.20% | 18.62% | 13.57% |
| | Georgia | -0.20% | 3.88% | 5.17% | 1.16% | 0.67% | -0.74% |
| | Iran | 2.45% | | -0.92% | 9.14% | | 1.63% |
| Asia | Iraq | 0.58% | -1.04% | 2.36% | 7.41% | -4.41% | -0.48% |
| | Jordan | 1.34% | 1.84% | 0.04% | -0.88% | -3.83% | 0.02% |
| | Kyrgyz Republic | -0.64% | | -0.32% | 0.50% | | 6.69% |
| | Lebanon | 0.22% | 1.07% | 0.18% | -0.86% | -0.72% | 0.25% |
| | State of Palestine | 0.33% | 1.77% | | 0.21% | 0.18% | |
| | Sudan | 8.06% | | -0.32% | 19.62% | | 0.52% |
| | Tajikistan | 0.39% | 0.60% | -0.02% | 0.47% | 4.44% | 24.66% |
| | Turkey | 1.54% | | 2.37% | 8.06% | | 3.74% |
| | Afghanistan | 1.18% | 1.18% | -1.00% | 7.09% | 8.63% | 8.07% |
| | Bangladesh | 2.52% | 3.63% | -0.16% | 6.95% | 6.91% | 1.37% |
| Asia | Cambodia | 0.68%* | 1.80%* | -0.17% | 2.71%* | 5.10%* | -1.08% |
| | East Timor | -0.21% | -0.33% | | -1.66% | -2.47% | |
| | India | 1.84% | 1.42% | 0.12% | 4.95% | 5.42% | 2.68% |
| | Indonesia | 1.28% | 1.51% | -1.37% | 3.17% | 5.70% | -5.34% |
| | Laos | 1.23% | 1.80% | -0.45% | 1.89% | 4.15% | -0.77% |
| | Myanmar | | | 1.49% | | | -1.27% |
| | Nepal | 2.86% | 4.08% | 0.21% | 9.87% | 9.49% | 2.76% |
| | Pakistan | 1.57% | 2.56% | -0.03% | 3.89% | 2.92% | 1.66% |
| | Philippines | 0.65% | 1.08% | 1.15% | 2.17% | 3.27% | 3.29% |
| | Sri Lanka | 0.96% | 1.31% | -0.32% | 3.55% | 4.53% | 8.22% |

Source: Trading Economics, Fivencia.

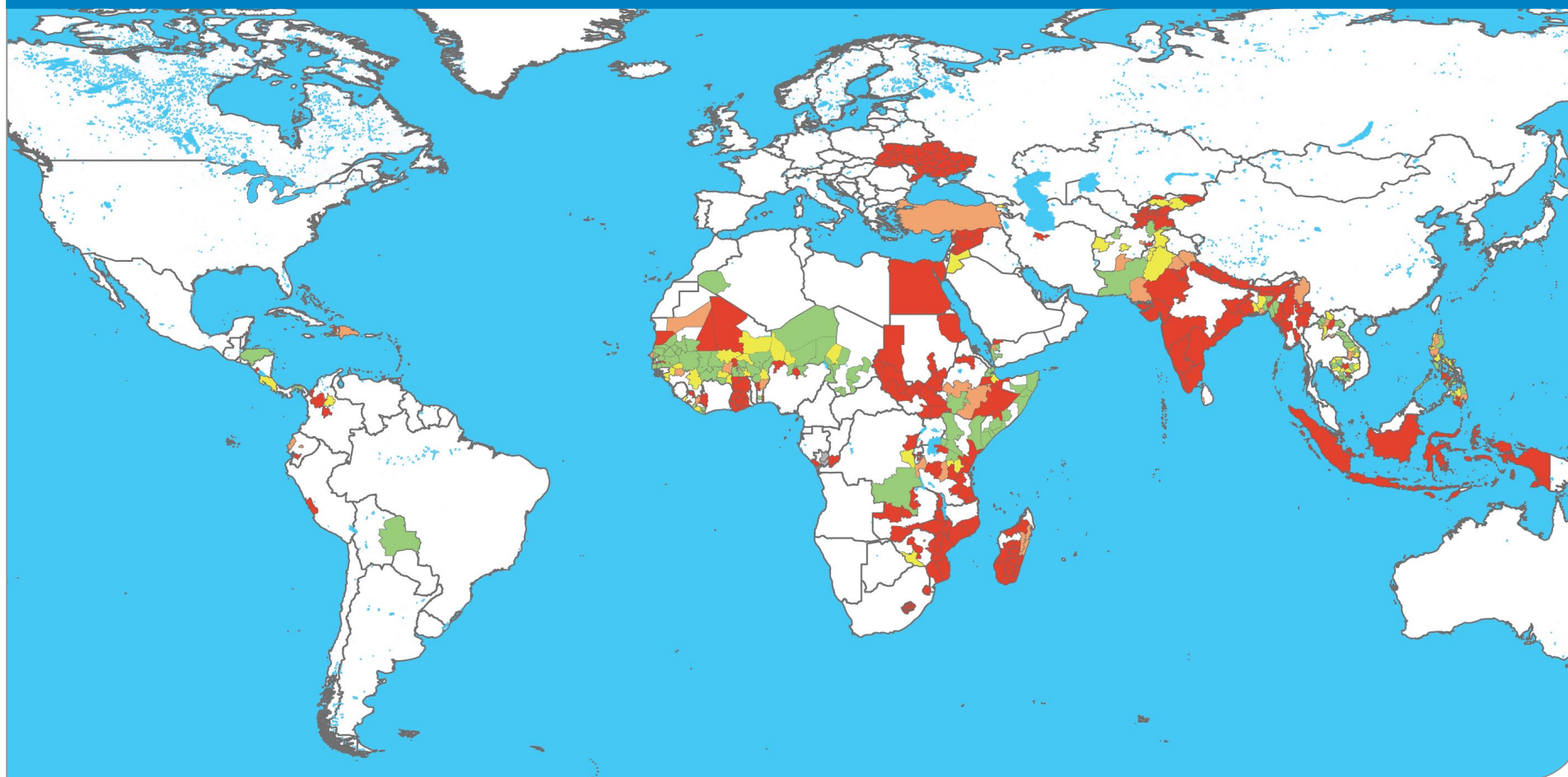
Notes:

- The calculation of quarterly changes uses averages of indices.
- Exchange rates define the amount of domestic currency needed to exchange one US dollar. An increasing exchange rate quantifies the depreciation of domestic currencies.

* 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

Q3-2016 (July to September) vs. **Q3-Baseline** (Average July to September)



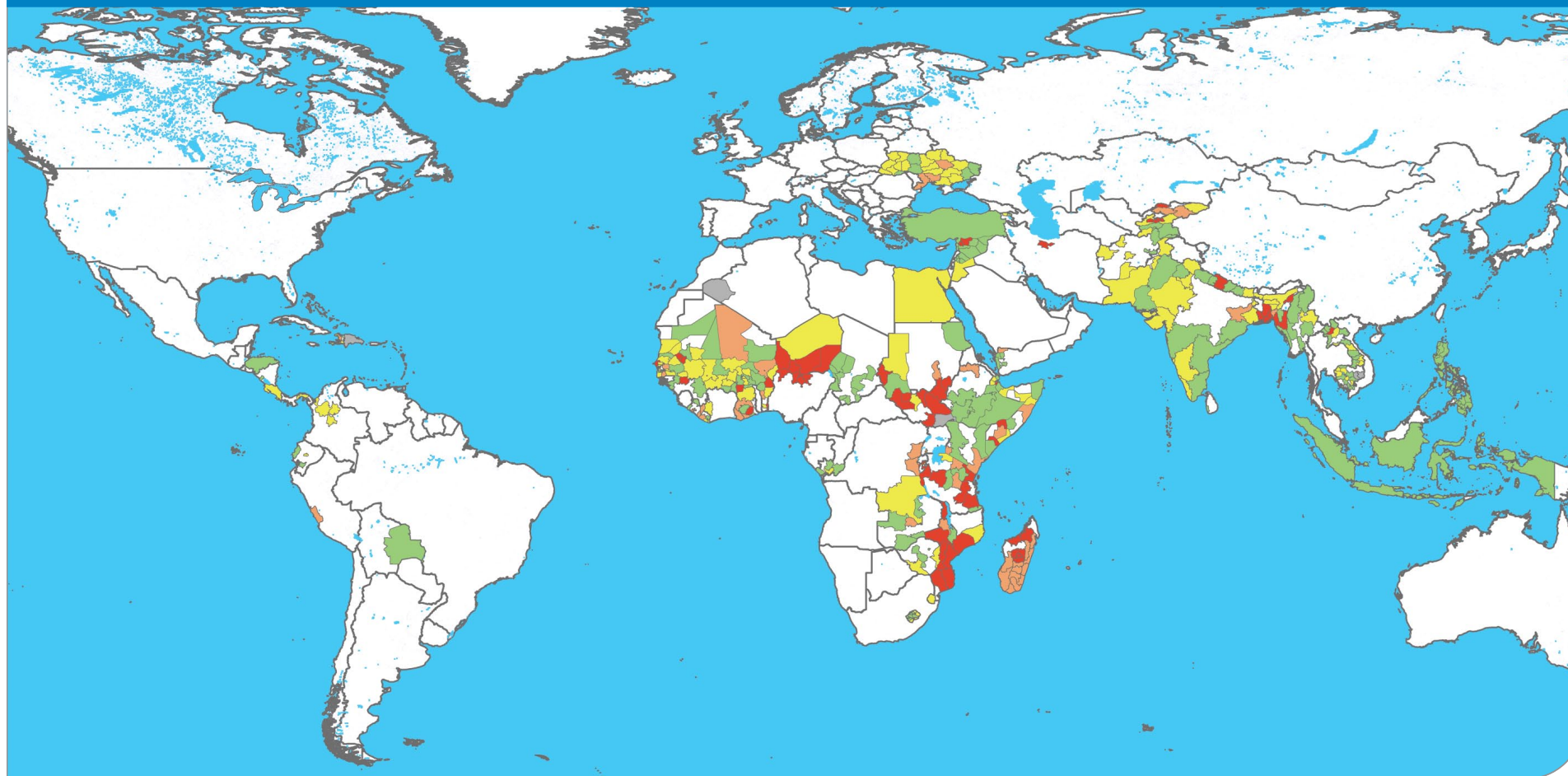
Map produced by: VAM - Food Security Analysis (OSZAF). Source: WFP; Base Map: GAUL

Impact Codes

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

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 2011-2015.

Q3-2016 (July to September) vs. Q2-2016 (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 | |
| | | | | | | | | | < 0% | Decreasing | | Low | # of years in baseline (the last 5 years) [* see footnote] |
| | | | | | | | | | >= 0% and < 5% | Stable | | Moderate | |
| A | B | C | D | E | F | G | H | I | J | K | Cumulative impact of changes on cost of food basket | | N |
| | | | | | | | | | | | from previous quarter | from baseline (%) | |
| Latin America and Caribbean | Bolivia | Rice (carolina 2da) | 14 | 0 | -5 | -3 | -3 | -12 | ↓ | 100 | -5 | -12 | 5 |
| | Colombia | Maize (white) | 13 | 0 | 0 | 0 | 0 | +28 | → | 22 | +1 | +17 | 4 |
| | | Sugar | 13 | -7 | +1 | +30 | +29 | +43 | → | 29 | | | 4 |
| | | Rice (paddy) | 12 | -7 | -5 | -2 | +1 | +10 | ↓ | 20 | | | 4 |
| | | Wheat flour | 8 | -8 | -6 | -25 | -28 | -15 | ↓ | 11 | | | 5 |
| | | Bananas | 5 | +15 | +17 | +2 | +15 | +9 | ↑ | 20 | | | 3 |
| | Costa Rica | Rice (first quality) | 17 | 0 | +1 | -1 | -1 | -4 | → | 60 | +2 | +2 | 5 |
| | | Wheat flour | 10 | +4 | +3 | +28 | +13 | +11 | → | 40 | | | 5 |
| | Dominican Republic | Rice (good quality) | 17 | N/A | N/A | -3 | -3 | -3 | N/A | 52 | N/A | +9 | * |
| | | Sugar | 16 | N/A | N/A | +25 | +25 | +25 | N/A | 48 | | | * |
| | Ecuador | Rice (long grain) | 19 | -1 | -4 | -3 | 0 | +14 | ↓ | 70 | -4 | +8 | 5 |
| | | Wheat flour | 13 | -8 | -7 | -7 | -7 | -6 | ↓ | 30 | | | 5 |
| | El Salvador | Sorghum (maicillo) | 6 | 0 | -11 | 0 | +1 | -5 | ↓ | 100 | -11 | -5 | 5 |
| | Guatemala | Maize (white) | 36 | +9 | -3 | +4 | +3 | -10 | ↓ | 100 | -3 | -10 | 5 |
| | Haiti | Rice (local) | 23 | +4 | N/A | +4 | +4 | +4 | → | 69 | | | * |
| | | Maize meal (local) | 9 | -7 | -1 | +4 | +7 | +31 | ↓ | 17 | +2 | +9 | 5 |
| | | Oil (vegetable, imported) | 7 | +2 | 0 | +7 | +8 | +12 | → | 14 | | | 4 |
| | Honduras | Maize (white) | 26 | +6 | -6 | -14 | -5 | -1 | ↓ | 55 | | | 5 |
| | | Beans (red) | 5 | -12 | -12 | -41 | -29 | -25 | ↓ | 24 | -6 | -8 | 5 |
| | | Rice (milled 80-20) | 5 | -1 | -2 | -6 | -6 | -3 | ↓ | 21 | | | 5 |
| | Nicaragua | Maize (white) | 23 | +22 | -1 | -19 | +7 | +30 | ↓ | 33 | -2 | +12 | 5 |
| | | Rice (first quality) | 17 | 0 | -1 | +2 | +2 | +14 | ↓ | 46 | | | 5 |
| | | Beans (red) | 7 | -1 | -7 | -30 | -24 | -11 | ↓ | 21 | | | 5 |
| | Panama | Rice (first quality) | 24 | -7 | -1 | -9 | +1 | -10 | ↓ | 40 | | | 5 |
| | | Bread | 12 | 0 | +6 | 0 | 0 | -12 | ↗ | 51 | +2 | -10 | 5 |
| | | Maize | 7 | 0 | -6 | 0 | 0 | -1 | ↓ | 9 | | | 5 |
| | Peru | Rice (local) | 21 | 0 | 0 | +1 | +1 | +3 | → | 22 | +5 | +15 | 5 |
| | | Wheat flour (locally processed) | 14 | +2 | +1 | +7 | +6 | +10 | → | 24 | | | 5 |
| | | Potatoes | 8 | +22 | +18 | +52 | +35 | +40 | ↑ | 32 | | | 5 |
| | | Sugar | 8 | +4 | +4 | +8 | +7 | +11 | → | 8 | | | 5 |
| | | Maize (local) | 7 | +1 | -3 | +2 | 0 | +1 | ↓ | 13 | | | 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 | Cassava (fresh) | 32 | -10 | -13 | +26 | +17 | +9 | ↓ | 52 | -11 | +5 | 4 |
| | | Bread | 18 | -7 | -7 | -1 | +9 | +9 | ↓ | 37 | | | * |
| | | Oil (palm) | 11 | -6 | -22 | -45 | -41 | -29 | ↓ | 6 | | | 2 |
| | | Rice (mixed, low quality) | 6 | +3 | -6 | -29 | -20 | -11 | ↓ | 5 | | | 4 |
| | Congo (DR) | Cassava (chikwangue) | 53 | +4 | +4 | +5 | +10 | +14 | → | 84 | +5 | +11 | 5 |
| | | Maize | 14 | +16 | +7 | +9 | +7 | +1 | ↗ | 6 | | | 5 |
| | | Oil (palm) | 5 | 0 | +6 | +22 | +10 | -2 | ↗ | 3 | | | 5 |
| | | Wheat flour | 5 | +11 | +13 | -6 | -8 | -7 | ↑ | 7 | | | 5 |
| | Lesotho | Maize meal | 56 | 0 | 0 | +13 | +15 | +33 | → | 12 | +1 | +23 | 5 |
| | | Bread (brown) | 14 | +2 | +1 | +10 | +10 | +22 | → | 88 | | | 5 |
| | Madagascar | Rice (local) | 49 | +15 | +22 | N/A | N/A | +19 | ↑ | 100 | +22 | +19 | 4 |
| | Malawi | Maize | 53 | +5 | 0 | +58 | +75 | +163 | → | 100 | 0 | +163 | 5 |
| | Mozambique | Cassava flour | 32 | -4 | +10 | +15 | +21 | +62 | ↑ | 41 | +18 | +81 | 2 |
| | | Maize (white) | 20 | +16 | +13 | +133 | +125 | +177 | ↑ | 19 | | | 5 |
| | | Wheat flour (local) | 9 | +12 | +14 | +55 | +46 | +60 | ↑ | 15 | | | 5 |
| | | Rice (imported) | 8 | +17 | +18 | +76 | +72 | +72 | ↑ | 14 | | | 5 |
| | | Oil (vegetable, imported) | 5 | +35 | +39 | +121 | +102 | +99 | ↑ | 11 | | | 3 |
| | Swaziland | Maize (white) | 25 | 0 | +4 | +49 | +49 | +59 | → | 21 | +2 | +32 | 5 |
| | | Wheat flour | 16 | +1 | -2 | -5 | +1 | +13 | ↓ | 35 | | | 5 |
| | | Sugar (brown) | 11 | +11 | +13 | +20 | +27 | +44 | ↑ | 25 | | | 5 |
| | | Rice | 8 | 0 | -5 | +27 | +27 | +33 | ↓ | 19 | | | 5 |
| | Tanzania | Maize | 26 | +5 | +7 | -1 | +5 | +20 | ↗ | 41 | +3 | +13 | 5 |
| | | Rice | 10 | -10 | -1 | -15 | -7 | +7 | ↓ | 38 | | | 5 |
| | | Beans | 5 | +1 | -1 | -4 | -4 | +14 | ↓ | 21 | | | 5 |
| | Zambia | Maize (white) | 51 | -5 | +2 | +37 | +32 | +56 | → | 100 | +2 | +56 | 5 |
| | Zimbabwe | Maize | 41 | -9 | -7 | +4 | +11 | +31 | ↓ | 83 | -5 | +24 | 5 |
| | | Oil (vegetable) | 5 | +2 | +3 | -2 | -3 | -4 | → | 17 | | | 2 |

(*) 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 | +12 | +21 | +41 | +33 | +5 | ↑ | 38 | +14 | +17 | 5 |
| | | Beans | 16 | 0 | +13 | +24 | +27 | +27 | ↑ | 27 | | | 5 |
| | | Cassava flour | 13 | -9 | -3 | +35 | +32 | +18 | ↓ | 17 | | | 5 |
| | | Maize (white) | 13 | +30 | +20 | +46 | +44 | +33 | ↑ | 18 | | | 5 |
| | Djibouti | Pasta | 34 | 0 | +3 | N/A | N/A | 0 | → | 65 | +2 | -6 | 3 |
| | | Rice (imported) | 17 | -1 | -2 | N/A | N/A | -16 | ↓ | 20 | | | 4 |
| | | Sugar | 11 | +7 | +2 | N/A | N/A | -15 | → | 14 | | | 3 |
| | Ethiopia | Maize (white) | 21 | +4 | -6 | +20 | +20 | +11 | ↓ | 27 | -1 | +17 | 5 |
| | | Pasta | 12 | +8 | +10 | +6 | +10 | +21 | ↑ | 54 | | | 2 |
| | | Sorghum | 12 | -15 | -21 | -4 | +1 | +13 | ↓ | 20 | | | 5 |
| | Kenya | Maize (white) | 35 | +14 | +10 | -4 | -3 | -20 | ↑ | 22 | +2 | +7 | 5 |
| | | Bread | 9 | +1 | +4 | -8 | -3 | +9 | → | 20 | | | 5 |
| | | Milk (cow, pasteurized) | 7 | +2 | -2 | -4 | -1 | +23 | ↓ | 58 | | | 5 |
| | Somalia | Sorghum (red) | 29 | -4 | -4 | -3 | +7 | -14 | ↓ | 38 | -3 | -11 | 5 |
| | | Maize (white) | 18 | +1 | +4 | +25 | +17 | -3 | → | 24 | | | 5 |
| | | Wheat flour | 10 | -11 | N/A | -37 | -13 | -13 | ↓ | 20 | | | * |
| | | Rice (imported) | 9 | +5 | +5 | +13 | +6 | -11 | ↗ | 18 | | | 5 |
| | South Sudan | Sorghum (feterita) | 26 | +76 | +60 | +466 | +534 | +991 | ↑ | 44 | +84 | +1013 | 5 |
| | | Wheat flour | 15 | +133 | +119 | +419 | +470 | +1055 | ↑ | 43 | | | 5 |
| | | Millet (white) | 7 | +77 | +90 | N/A | N/A | +957 | ↑ | 14 | | | 4 |
| | Uganda | Cassava flour | 13 | 0 | +3 | +15 | +1 | +24 | → | 40 | +6 | +23 | 5 |
| | | Maize (white) | 9 | 0 | +14 | +34 | +11 | +21 | ↑ | 18 | | | 5 |
| | | Beans | 5 | -9 | +7 | +5 | +10 | +24 | ↗ | 24 | | | 5 |
| | | Millet | 5 | +4 | +4 | +17 | +12 | +23 | → | 18 | | | 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 | Benin | Cassava (gari) | 16 | +13 | +10 | +39 | +44 | +15 | ↑ | 41 | +2 | +1 | 5 |
| | | Rice (imported) | 13 | -1 | -1 | -5 | -8 | -7 | ↓ | 50 | | | 5 |
| | | Sorghum (red) | 5 | -2 | -8 | 0 | -4 | -7 | ↓ | 9 | | | 5 |
| | Burkina Faso | Sorghum | 26 | -1 | -3 | -2 | -3 | -6 | ↓ | 13 | -1 | -2 | 5 |
| | | Millet | 22 | 0 | -3 | -3 | -3 | -6 | ↓ | 12 | | | 5 |
| | | Maize | 16 | +1 | -3 | +4 | +3 | 0 | ↓ | 8 | | | 5 |
| | | Rice (imported) | 6 | 0 | +1 | -1 | 0 | 0 | → | 67 | | | 5 |
| | | Maize | 15 | +2 | -5 | -4 | -4 | -13 | ↓ | 41 | | | 5 |
| | Cameroon | Rice (local) | 10 | +1 | +8 | +3 | +1 | -13 | ↗ | 43 | -1 | -13 | 5 |
| | | Sorghum (red) | 8 | -7 | -16 | -30 | -12 | -17 | ↓ | 16 | | | 5 |
| | | Rice (long grain, imported) | 19 | -1 | -3 | -2 | -3 | -12 | ↓ | 52 | | | 4 |
| | Cape Verde | Wheat (flour, imported) | 13 | +2 | 0 | +4 | +1 | -3 | → | 27 | -2 | -6 | 4 |
| | | Maize (yellow, imported) | 12 | 0 | -5 | +3 | +7 | +7 | ↓ | 21 | | | 4 |
| | | Sorghum | 18 | -7 | -12 | -27 | -24 | -18 | ↓ | 41 | | | 5 |
| | Chad | Millet | 15 | -3 | -9 | -16 | -15 | -12 | ↓ | 44 | -11 | -14 | 5 |
| | | Maize | 5 | -9 | -17 | -13 | -14 | -9 | ↓ | 15 | | | 5 |
| | | Rice (denikassia, imported) | 20 | 0 | +1 | -1 | -1 | +4 | → | 45 | | | 5 |
| | Côte d'Ivoire | Cassava (fresh) | 12 | 0 | -3 | +9 | +9 | +18 | ↓ | 20 | +1 | +10 | 5 |
| | | Oil (palm) | 9 | +1 | -1 | 0 | 0 | +2 | ↓ | 20 | | | 5 |
| | | Maize | 7 | +2 | +2 | +21 | +21 | +39 | → | 15 | | | 5 |
| | | Rice (basmati, broken) | 21 | -15 | -16 | N/A | N/A | +88 | ↓ | 62 | | | * |
| | Gambia (The) | Millet | 19 | +1 | -2 | N/A | N/A | +12 | ↓ | 9 | -13 | +48 | 4 |
| | | Sugar | 12 | -2 | 0 | N/A | N/A | +13 | → | 10 | | | 2 |
| | | Bread | 8 | -13 | -12 | N/A | N/A | -1 | ↓ | 9 | | | 2 |
| | | Oil (palm) | 7 | -1 | +1 | N/A | N/A | +10 | → | 6 | | | 2 |
| | | Sorghum | 5 | +3 | -8 | N/A | N/A | +20 | ↓ | 3 | | | 4 |
| | Ghana | Cassava | 21 | -3 | -4 | +117 | +124 | +167 | ↓ | 34 | -7 | +75 | 5 |
| | | Maize | 12 | +4 | -5 | -11 | -2 | +59 | ↓ | 10 | | | 5 |
| | | Yam | 11 | +5 | -3 | +17 | +49 | +106 | ↓ | 39 | | | 5 |
| | | Rice (imported) | 8 | -24 | -30 | -23 | -22 | -11 | ↓ | 17 | | | 2 |
| | Guinea | Rice (imported) | 37 | +5 | +6 | +17 | +19 | +6 | ↗ | 74 | +1 | +1 | 4 |
| | | Cassava meal (gari) | 12 | -7 | -12 | -17 | -20 | -17 | ↓ | 17 | | | 2 |
| | | Oil (palm) | 6 | -2 | +1 | -2 | -5 | -2 | → | 9 | | | 5 |
| | Liberia | Rice (imported) | 32 | +4 | +6 | N/A | +7 | +15 | ↗ | 65 | +1 | +8 | 5 |
| | | Cassava (fresh) | 21 | -8 | +2 | N/A | -16 | -16 | → | 15 | | | 5 |
| | | Oil (palm) | 15 | +7 | +5 | N/A | +5 | +8 | ↗ | 20 | | | 5 |
| | Mali | Rice (imported) | 21 | +1 | +3 | +1 | +1 | -2 | → | 48 | +2 | -4 | 5 |
| | | Millet | 20 | +1 | -1 | -4 | -5 | -9 | ↓ | 24 | | | 5 |
| | | Sorghum | 13 | +2 | +3 | -6 | -5 | -6 | → | 17 | | | 5 |
| | | Maize | 9 | +2 | +3 | +23 | +8 | 0 | → | 11 | | | 5 |
| | Mauritania | Wheat | 30 | -4 | -4 | -9 | -10 | -8 | ↓ | 30 | +2 | 0 | 5 |
| | | Sugar | 12 | +13 | +13 | +36 | +31 | +5 | ↑ | 20 | | | 5 |
| | | Oil (vegetable) | 11 | +2 | +3 | -1 | 0 | -4 | → | 14 | | | 5 |
| | | Rice (imported) | 11 | -1 | +1 | -6 | -5 | +17 | → | 24 | | | 5 |
| | | Sorghum (taghalit) | 7 | +16 | +8 | -21 | -18 | -14 | ↗ | 12 | | | 5 |
| | Niger | Millet | 39 | +17 | +14 | +23 | +18 | -1 | ↑ | 60 | +11 | -2 | 5 |
| | | Sorghum | 11 | +17 | +7 | +20 | +13 | -3 | ↗ | 18 | | | 5 |
| | | Rice (imported) | 7 | 0 | 0 | -1 | 0 | -3 | → | 22 | | | 5 |
| | North Nigeria | Sorghum | 13 | +27 | +20 | +43 | +26 | -4 | ↑ | 14 | +26 | +32 | 5 |
| | | Millet | 11 | +31 | +27 | +44 | +26 | -7 | ↑ | 12 | | | 5 |
| | | Maize | 8 | +30 | +31 | +175 | +142 | +109 | ↑ | 60 | | | 5 |
| | | Rice (imported) | 8 | +6 | +4 | -13 | -16 | -27 | → | 15 | | | 5 |
| | Senegal | Rice (imported) | 30 | +1 | +2 | 0 | -1 | -4 | → | 68 | +3 | -3 | 5 |
| | | Maize (imported) | 10 | +8 | +7 | +6 | +5 | +1 | ↗ | 19 | | | 5 |
| | | Millet | 8 | +8 | +3 | +2 | -5 | -9 | → | 13 | | | 5 |

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

| 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 |
| Middle East, North African and Central Asia | Algeria | Pasta | 46 | N/A | N/A | -18 | -15 | -15 | N/A | 82 | N/A | -12 | * |
| | | Sugar | 9 | N/A | N/A | -2 | 0 | 0 | N/A | 18 | N/A | | * |
| | Armenia | Bread (first grade flour) | 40 | -1 | -2 | -3 | -2 | +5 | ↓ | 46 | | | 4 |
| | | Milk | 8 | +2 | +6 | -3 | -5 | +4 | ↗ | 40 | +2 | +3 | 4 |
| | | Sugar | 8 | +1 | +3 | 0 | -3 | -8 | → | 6 | | | 4 |
| | | Potatoes | 5 | -25 | -6 | -14 | -5 | -3 | ↓ | 9 | | | 4 |
| | | Pasta | 35 | 0 | 0 | +34 | +30 | +13 | → | 56 | | | 5 |
| | Egypt | Rice | 12 | -2 | -4 | N/A | N/A | +52 | ↓ | 27 | +1 | +26 | 5 |
| | | Sugar | 7 | +15 | +15 | N/A | N/A | +39 | ↑ | 17 | | | 5 |
| | | Rice (local) | 9 | +30 | +20 | +48 | +43 | +75 | ↑ | 71 | +19 | +74 | 4 |
| | Iran (Islamic Republic of) | Sugar | 9 | +24 | +17 | +49 | +44 | +72 | ↑ | 29 | | | 4 |
| | | Bread (pita) | 38 | +1 | -1 | +1 | +1 | 0 | ↓ | 23 | | | 5 |
| | Jordan | Sugar | 15 | +7 | +6 | +6 | +6 | -3 | ↗ | 27 | +1 | +2 | 4 |
| | | Oil (vegetable) | 12 | 0 | -4 | +6 | +5 | +2 | ↓ | 24 | | | 5 |
| | | Rice (imported) | 8 | +3 | 0 | +2 | +2 | +9 | → | 26 | | | 5 |
| | | Wheat flour (first grade) | 40 | -2 | -8 | -15 | -14 | 0 | ↓ | 27 | | | 5 |
| | Kyrgyz Republic | Milk (non-pasteurized) | 12 | -3 | +4 | -1 | 0 | +15 | → | 46 | +7 | +7 | 5 |
| | | Sugar | 9 | +5 | +4 | +5 | +8 | +4 | → | 11 | | | 5 |
| | | Potatoes | 8 | +11 | +48 | +3 | +18 | +3 | ↑ | 16 | | | 5 |
| | | Wheat flour | 40 | -2 | 0 | -4 | -6 | -10 | → | 32 | | | 5 |
| | State of Palestine | Sugar | 10 | +5 | +9 | +5 | +5 | -7 | ↗ | 12 | -2 | +1 | 5 |
| | | Rice (long grain) | 7 | 0 | -3 | -1 | -1 | +9 | ↓ | 33 | | | 5 |
| | | Oil (olive) | 5 | 0 | -9 | +7 | +7 | +14 | ↓ | 23 | | | 5 |
| | | Sorghum | 60 | +6 | 0 | +26 | +38 | +59 | → | 85 | -1 | +58 | 4 |
| | Sudan | Millet | 9 | +9 | 0 | +12 | +25 | +51 | → | 15 | | | 5 |
| | | Bread (bakery) | 39 | -1 | -14 | +21 | +23 | +147 | ↓ | 23 | | | 4 |
| | Syria | Sugar | 13 | 0 | -18 | +20 | +61 | +283 | ↓ | 49 | -17 | +214 | 5 |
| | | Oil | 11 | +2 | -17 | +32 | +62 | +185 | ↓ | 27 | | | 5 |
| | | Bread | 54 | 0 | -2 | +1 | +5 | +41 | ↓ | 91 | | | 5 |
| | Tajikistan | Sugar | 7 | +3 | -3 | +21 | +21 | +22 | ↓ | 5 | -2 | +38 | 5 |
| | | Oil (cotton) | 6 | +3 | +2 | +11 | +14 | +19 | → | 3 | | | 5 |
| | | Maize | 5 | -6 | -10 | -5 | -12 | -7 | ↓ | 1 | | | 5 |
| | | Bread (common) | 41 | +4 | -2 | +15 | +15 | +10 | ↓ | 61 | -2 | +9 | 2 |
| | Turkey | Sugar | 8 | +3 | -4 | +7 | +8 | +7 | ↓ | 10 | | | 2 |
| | | Milk (pasteurized) | 5 | +1 | -2 | +5 | +5 | +7 | ↓ | 28 | | | 2 |
| | | Bread (rye) | 29 | +1 | -1 | +5 | +5 | +33 | ↓ | 40 | | | 2 |
| | Ukraine | Oil (sunflower) | 9 | +2 | 0 | +11 | +9 | +42 | → | 9 | +2 | +32 | 2 |
| | | Potatoes | 8 | -16 | +16 | -6 | -2 | +15 | ↑ | 13 | | | 2 |
| | | Milk | 7 | +2 | -1 | +20 | +19 | +35 | ↓ | 38 | | | 2 |
| | | Wheat flour | 38 | +5 | +3 | -12 | -3 | +11 | → | 50 | | | 5 |
| | Yemen | Sugar | 12 | +9 | +13 | +14 | +10 | +8 | ↑ | 22 | -6 | -1 | 4 |
| | | Oil (vegetable) | 9 | -25 | -24 | -36 | -23 | -25 | ↓ | 9 | | | 4 |
| | | Sorghum | 9 | -9 | -23 | -19 | -18 | -18 | ↓ | 19 | | | * |

(*) 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 | -2 | 0 | 0 | +2 | ↓ | 79 | -2 | +3 | 2 |
| | | Rice (low quality) | 22 | +3 | 0 | +7 | +7 | +6 | → | 21 | | | 5 |
| | Bangladesh | Rice (coarse) | 70 | +23 | +25 | +17 | +9 | +1 | ↑ | 93 | +23 | 0 | 2 |
| | | Wheat flour | 6 | -2 | +2 | -6 | -7 | -8 | → | 7 | | | 5 |
| | Cambodia | Rice (mixed, low quality) | 65 | +1 | -1 | +6 | +5 | +2 | ↓ | 100 | -1 | +2 | 3 |
| | India | Rice | 31 | +2 | -1 | +3 | 0 | +4 | ↓ | 50 | 0 | +12 | 5 |
| | | Wheat | 22 | +3 | +1 | +7 | +7 | +20 | → | 35 | | | 5 |
| | | Sugar | 7 | +3 | 0 | +43 | +46 | +21 | → | 15 | | | 5 |
| | Indonesia | Rice | 50 | +1 | -2 | +1 | +3 | +20 | ↓ | 79 | -1 | +19 | 5 |
| | | Oil (vegetable) | 7 | +2 | +2 | +5 | +3 | +6 | → | 5 | | | 5 |
| | | Sugar | 6 | +7 | +5 | +18 | +19 | +28 | ↗ | 10 | | | 5 |
| | | Wheat | 6 | +1 | 0 | +1 | +1 | +7 | → | 6 | | | 5 |
| | Lao PDR | Rice (glutinous, first quality) | 64 | +1 | -2 | N/A | +1 | -2 | ↓ | 100 | -2 | -2 | 3 |
| | Myanmar | Rice (low quality) | 55 | +4 | -2 | +15 | +4 | +30 | ↓ | 100 | -2 | +30 | 5 |
| | Nepal | Rice | 32 | +4 | 0 | 0 | +2 | +13 | → | 66 | 0 | +14 | 5 |
| | | Wheat | 15 | +1 | +1 | +2 | +3 | +17 | → | 34 | | | 5 |
| | Pakistan | Wheat | 37 | +1 | -1 | +3 | +3 | +7 | ↓ | 77 | -1 | +3 | 5 |
| | | Rice (basmati) | 6 | +2 | 0 | -8 | -9 | -7 | → | 23 | | | 5 |
| | Philippines | Rice (regular milled) | 48 | 0 | -2 | +3 | +2 | +8 | ↓ | 100 | -2 | +8 | 5 |
| | Sri Lanka | Rice (white) | 41 | +1 | +1 | +10 | +7 | +13 | → | 70 | -1 | +8 | 5 |
| | | Wheat flour | 14 | -3 | -4 | +3 | +4 | -3 | ↓ | 30 | | | 5 |
| | Thailand | Rice (25% broken) | 48 | -2 | -4 | +6 | +10 | -9 | ↓ | 100 | -4 | -9 | 5 |
| | Viet Nam | Rice (20% broken) | 59 | -6 | -10 | 0 | +3 | -13 | ↓ | 100 | -10 | -13 | 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 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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For more information, contact:

wfp.economicanalysis@wfp.org

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

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

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



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