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Food Security UPDATE

Update January 12, 2023

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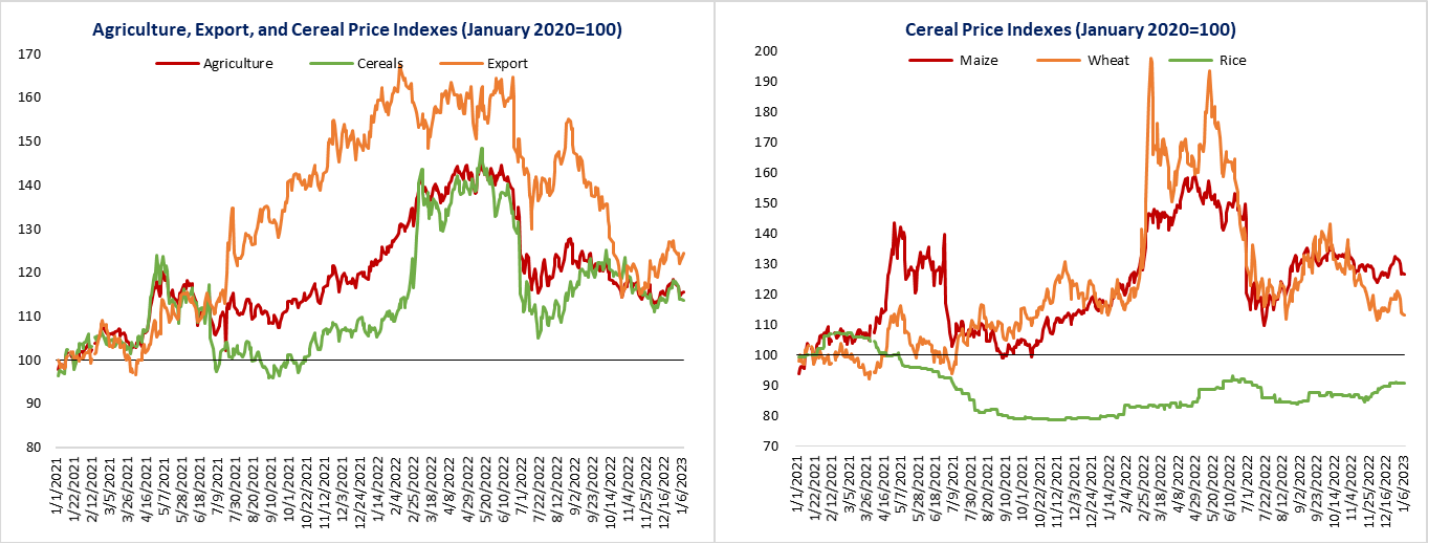
AT A GLANCE

- Since the last update on December 13, 2022, agricultural, cereal, and export prices have remained relatively stable.
- Domestic food price inflation continues to remain high in almost all countries.
- The global economy is projected to grow by 1.7 percent in 2023 and 2.7 percent in 2024.
- Global food prices are expected to remain high.
- Countries that experience food crises absorb the largest volume of humanitarian financing.
- High fertilizer prices have become a significant obstacle to food production in many low-income countries.
- Food inflation during pregnancy and in the first years of a child's life is associated with greater risk of child wasting in the short run and stunting in the long run.

GLOBAL MARKET OUTLOOK (AS OF JANUARY 9, 2023)

Trends in Global Agricultural Commodity Prices

Figure 1: Agricultural and Cereal Price Trends (Nominal Indexes)



Source: World Bank commodity price data.

Note: Daily prices from January 1, 2021, to January 9, 2023. The export index includes cocoa, coffee, and cotton; the cereal index includes rice, wheat, and maize.

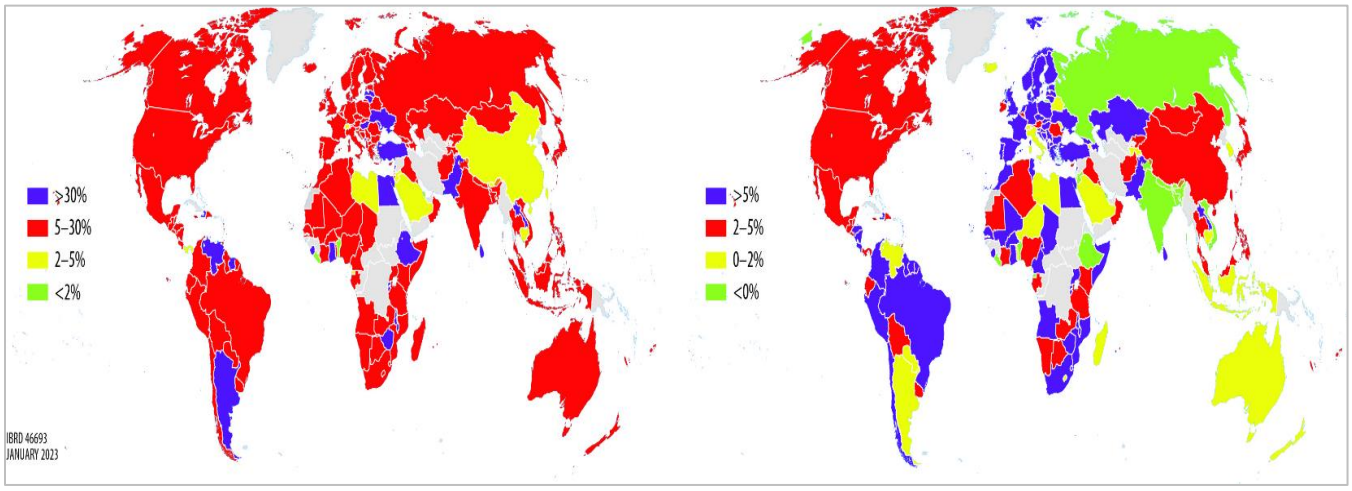
Since the last update on December 13, 2022, agricultural, cereal, and export prices have remained relatively stable. The agricultural index closed at the same level, the export index 1 percent higher, and the cereal index 1 percent lower. Maize and wheat prices closed 1 percent and 2 percent lower, respectively, and rice prices 1 percent higher. Maize and rice prices are 8 percent and 13 percent higher, respectively, than in January 2022, and wheat prices 2 percent lower. Maize and wheat prices are 27 percent and 13 percent higher, respectively, than in January 2021, and rice prices 10 percent lower.

Food Price Inflation Dashboard

Domestic food price inflation (measured as year-on-year change in the food component of a country's Consumer Price Index (CPI)) remains high (see the dashboard in Annex A). Information from the latest month between September and December 2022 for which food price inflation data are available shows high inflation in almost all low- and middle-income countries; 94.1 percent of low-income countries, 92.9 percent of lower-middle-income countries, and 89.0 percent of upper-middle-income countries have seen inflation levels above 5 percent, with many experiencing double-digit inflation. The share of high-income countries with high inflation is also high, with about 87.3 percent experiencing high food price inflation. The countries affected most are in Africa, North America, Latin America, South Asia, Europe, and Central Asia (Figure 2). In real terms, food price inflation exceeded overall inflation (measured as year-on-year change in the overall CPI) in 91 percent of the 160 countries for which food CPI and overall CPI indexes are both available (Figure 3). This week's 10 countries with the highest food price inflation, in nominal and real terms, are listed in Table 1 (using the latest month for which data are available between September and December 2022).

Figure 2: Food Inflation Heat Map

Figure 3: Real Food Inflation Heat Map



Source: International Monetary Fund, Haver Analytics, and Trading Economics.

Note: Food inflation for each country is based on the latest month from September to December 2022 for which the food component of the Consumer Price Index (CPI) and overall CPI data are available. Real food inflation is defined as food inflation minus overall inflation.

Table 1: Food Price Inflation: Top 10 List

Country	Nominal food inflation (%YoY)	Country	Real Food Inflation (%YoY)
Zimbabwe	376	Zimbabwe	121
Lebanon	171	Lebanon	29
Venezuela	158	Rwanda	28
Argentina	94	Hungary	21
Türkiye	77	Uganda	19
Sri Lanka	64	Egypt	17
Rwanda	59	Colombia	15
Ghana	55	Montenegro	14
Suriname	55	Lithuania	13
Haiti	53	Burundi	13

Source: International Monetary Fund, Haver Analytics, and Trading Economics.

Note: Food inflation for each country is based on the latest month from September to December 2022 for which the food component of the Consumer Price Index (CPI) and overall CPI data are available. Real food inflation is defined as food inflation minus overall inflation[1].

EMERGING ISSUES

World Bank Global Economic Prospects Report Suggests Slowing Global Growth

In the most recent Global Economic Prospects report, released January 2023, the World Bank indicated that the global economy is projected to grow by 1.7 percent in 2023 and 2.7 percent in 2024. High inflation, high interest rates, reduced investment, and disruptions caused by the Russian invasion of Ukraine have been the main reasons for slowing global growth. The growth expectations outlined in the report are 1.3 percentage points below previous forecasts. Further shocks such as higher inflation, monetary policy tightening, and rising geopolitical tensions could push the global economy into a recession. rising geopolitical tensions could push the global economy into a recession.

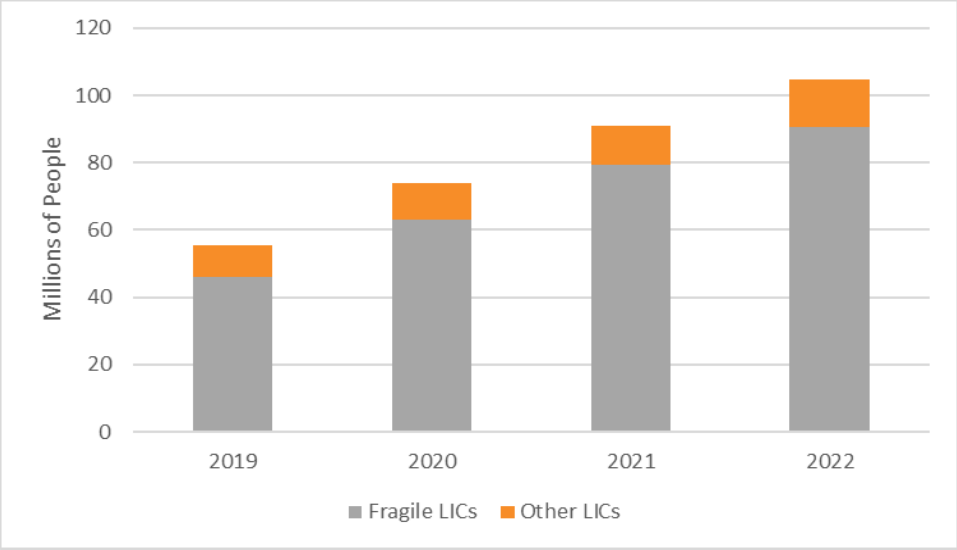
Global inflation remains high worldwide, leading central banks to tighten monetary policy. CPI inflation is expected to remain high at 5.2 percent in 2023 before falling to 3.2 percent in 2024. Although inflation is likely to decrease gradually over 2023, underlying inflationary pressures could become more persistent. High inflation reflects a combination of supply and demand factors, including price increases for food. In poorer countries, inflation has risen rapidly, partially caused by the greater share of food in consumer spending than in wealthier countries.

[1] Details of the domestic food inflation tracker methodology are found at the end of Annex A.

Most commodity prices have eased, largely driven by the slowdown in global growth and concerns about the possibility of a global recession, but commodity prices remain high according to historical standards, prolonging challenges associated with food security. Agricultural prices are forecast to decline by 5 percent in 2023, reflecting better prospects for global production alongside lower input costs, particularly for fertilizers. Despite these projections, prices are expected to remain above pre-pandemic levels. In addition, the report highlights the possibility that fertilizer prices will continue to rise in response to higher natural gas prices caused by the closure of several European fertilizer manufacturers.

In emerging markets and developing economies, food insecurity remains a serious concern, driven by trade restrictions, weather-related events, and conflict, including the Russian invasion of Ukraine. For low-income countries (LICs), growth is projected to grow 5.1 percent in 2023. Despite this forecast, high inflation, tight monetary policy, and debt distress are expected to restrain domestic consumption and investment in LICs. The cost-of-living crisis has pushed many more people into food insecurity, especially in LICs, where fragility was high before Russia's invasion of Ukraine (Figure 4). LICs' food supplies are likely to remain stressed because of limited grain imports, reduced fertilizer use, and persistent severe drought conditions in many countries. Intensification of conflict in some LICs will continue to disrupt farming activities and limit market access. High global fuel and fertilizer prices, which have become more costly because of weakened currencies, will keep local food prices high, which will reduce food affordability and real incomes, which may further increase food insecurity. In addition, it is likely that the adverse effects of the third consecutive year of La Niña in 2022 will prolong severe drought conditions in the Horn of Africa, increasing food insecurity and famine in the region.

Figure 4: Food Insecurity in Low-Income Countries (LICs)



Source: Global Economic Prospects.
Note: Bars show the number of people in food crisis as classified according to Integrated Food Security Phase Classification Phase 3, that is, in acute food insecurity crisis or worse. Data for 2022 are estimates as of September 2022.

In response to the potential impacts of slowing global growth, the report suggests that the international community must intensify support to those affected by food insecurity, particularly in LICs. Governments can support the most vulnerable by not imposing export restrictions and by targeting support measures to low-income groups. The report also suggests that credible medium-term frameworks that focus on reducing wasteful spending, such as inefficient agricultural subsidies, must guide fiscal consolidation needs.

Global Food Prices Expected to Remain High

A December 2022 report released by the International Monetary Fund (IMF) has indicated that global food prices are expected to remain high because of war, energy costs, and weather events, despite interest rate hikes having slightly eased price pressures. Record prices have increased food insecurity, raised social tensions, and strained the budgets of countries that rely on food imports. To better understand the scale of these challenges for policy makers, the authors of the report quantified four important drivers of cereal prices—shocks to fertilizer and oil production, cereal production, and U.S. interest rates—in an analysis initially published in the October 2022 World Economic Outlook.

The study focuses on cereals (wheat, corn, rice, and a few smaller crops) that are common in diets and hard to substitute. The researchers conducted an econometric analysis using monthly data from the World Bank, Haver Analytics, and IMF CPI and Primary Commodity Price System databases covering from the first quarter of 1991 to the first quarter of 2021. The authors use statistical modeling to obtain estimates of the spillover effects from fertilizer prices to cereal prices and the effects of U.S. monetary policy shocks and cereal harvest shocks. These models included control variables for global gross domestic product growth and the U.S. dollar real effective exchange rate. Their findings, which help explain recent food price fluctuations, show that a 1 percent drop in global harvests raises food commodity prices by 8.5 percent; a 1 percentage point increase in the Federal Reserve's main interest rate reduces food commodity prices by 13 percent after one quarter; a 1 percent increase in fertilizer prices, which have climbed recently with the surge in natural gas prices, boosts food commodity prices by 0.45 percent; and a 1 percent increase in oil prices increases food commodity prices by 0.2 percent

A combination of supply-side factors (including food trade restrictions and continuing La Nina weather conditions high energy prices (driving food production costs and diverting some crop output from food to biofuels), the war in Ukraine, and low interest rates kept global food prices rising between April 2020 and May 2022. IMF estimates suggest that supply constraints could outweigh weakening demand for food commodities, keeping prices high in the next few quarters. Although rising interest rates tend to apply downward pressure on food prices by discouraging inventory holdings and reducing speculative activity in commodity future markets, rate hikes could also decrease personal incomes by slowing economic activity broadly.

International food prices are estimated to have added 5 and 6 percentage points to consumer food inflation in 2021 and 2022, respectively, and are forecasted to add an estimated 2 percentage points in 2023. The report suggests that it could take up to a year for this change in international prices to pass through to domestic retail food prices, meaning that many people will have to wait for relief from lower commodity prices.

In response to rising food insecurity, many countries will look to expand their social protection spending. External debt relief and grants from international organizations would allow cash-strapped governments to finance schemes to protect vulnerable populations. Other measures, such as eliminating trade barriers on food and fertilizers and reducing mandates to blend biofuels into national fuel mixes, would similarly help countries defend against price surges.

Global Network Against Food Crises Highlights Trends in Financing for Food Crises

As a companion piece to the Global Report on Food Crises, the Global Network Against Food Crises (GNAFC) has released the 2022 Financing Flows and Food Crises Report to provide an evidence-based snapshot of humanitarian development financing trends in the context of food crises. The report covers the food, agricultural, and nutrition sectors, explaining financial trends to inform decision making and promote policy dialogues on funding to reduce food crises over time.

The report highlights the position of food crises in the landscape of global external assistance, noting that countries that experience food crises receive the most humanitarian financing. Specifically, for global humanitarian assistance across all sectors, food crisis countries received 77 percent, with 43 percent of these resources designated for the food sector. When considering humanitarian assistance designated for the food sector, food crisis countries absorbed 88 percent of global allocation on average. In 2021, humanitarian assistance to food sectors in the 53 countries covered in the 2022 Global Report on Food Crises increased by 20 percent, reaching USD9.8 billion. Despite this increase, humanitarian assistance per person in crisis or worse conditions (Integrated Food Security Phase Classification (IPC) Phase 3 or above) has decreased by 40 percent, from USD85 per person in 2018 to USD51 in 2021.

When all sectors are considered, development allocations (defined as financial aid that promotes and targets the economic development and welfare of developing countries) to food crisis countries are much larger than humanitarian assistance. Food crisis countries received 33 percent of all development assistance worldwide, with 11 percent of these resources allocated for assistance to the food sector. When considering development assistance to food sectors only, food crisis countries absorbed 46 percent of global allocation. In 2020 (the latest year for which data are available), development assistance to food sectors in food crisis countries decreased by nearly 10 percent, to USD6.2 billion.

When considering allocations to countries based on drivers of food crises, countries where conflict and insecurity are the main drivers absorb the largest share of humanitarian and development assistance. In 2021, 83 percent of humanitarian assistance to food sectors went to these countries, an increase of more than 35 percent since 2020. Development assistance to these countries is also a large source of financing, with these countries receiving 42 percent of all development allocations in 2020. Financing for food crises in situations when economic shocks and weather extremes are key drivers have decreased, with allocations to these countries decreasing by 44 and 25 percent, respectively, between 2020 and 2021.

To address the structural causes of food crises, a holistic approach is required that emphasizes the equal importance of food, agricultural and livelihood, and nutritional assistance to support vulnerable populations. Despite this, there

are significant differences in financial allocations to these food sectors. Cash and in-kind food assistance is the most-funded food sector, with an average of 84 percent of humanitarian assistance to food sectors from 2016 to 2021. Meanwhile, nutrition assistance received 13 percent of allocations, and agricultural and livelihood assistance received 4 percent. In 2020, development assistance to agriculture accounted for more than half of development funding to food sectors in food crisis countries, and social protection programs and long-term household food security, rural development, and basic nutrition accounted for approximately 10 percent each.

Transforming Fertilizer Markets in Response to the Global Food Crisis

A recent World Bank blog underscored that high fertilizer prices have become a significant obstacle to food production in many LICs, destabilizing the 2023 and 2024 crop cycle; 205 million people are in acute food insecurity in 45 countries worldwide. Many of these countries lack sufficient raw materials—nitrogen, potash, phosphate, natural gas—and production facilities to ensure that farmers can affordably access fertilizers. The challenge is clearest in Sub-Saharan Africa, where disruptions to fertilizer exports from Belarus and Russia and restrictions of other exporting countries have hit poor households hardest. Fertilizer prices have tripled since early 2020 and remain volatile, preventing smallholder farmers from accessing a stable supply. Meanwhile, farmers in more-advanced economies can afford to plant more and purchase fertilizer because they benefit from subsidies that often cover natural gas for fertilizer and diesel fuel for equipment.

African leaders have emphasized that families in LICs will not be able to compete with farmers in more-industrialized economies if current trends persist, a problem that has been raised in the G7, G20, and G24 meetings; the World Bank and IMF annual meetings; and the U.N. climate and biodiversity meetings in Egypt and Canada. High natural gas and coal, commodity crop, and fertilizer prices, along with high consumption of available agricultural supplies by countries with higher incomes and subsidies, are among the factors contributing to this divide. As higher-income countries dominate more of the world's crop production and agricultural fossil fuel use, poorer households—especially in rural Africa—could be facing a prolonged food and jobs crisis.

The world's ability to rebalance energy and fertilizer supply chains will be critical to reducing the length and severity of the food crisis for rural populations vulnerable to climate change, displacement, and economic shocks. The first step is to make sure that LICs are included in natural gas and fertilizer production and distribution. Increasing and diversifying production would allow Europe to reduce its dependency on Russia over time, but it is vital that advanced economies avoid stockpiling current supply in the near term to guard against the risk of shortages. Natural gas markets are being drained for future winter heating instead of current fertilizer manufacturing, which harms smaller fertilizer producers.

The blog states that countries can reduce overapplication of fertilizer by shifting subsidies for consumption and using new technologies to optimize application rates. In Sub-Saharan Africa, fertilizer application rates are too low, with an average of 22 kilograms per hectare, compared with the world average of 146 kilograms per hectare. For higher-income farmers for whom fertilizer is a less-costly input than labor or machinery, fertilizer overuse is less scrutinized, leading to excessive fertilizer application rates. Repurposing fertilizer subsidies for measures that reduce overuse, decrease emissions, and increase availability by enabling the private sector (e.g., e-voucher

subsidies to help small farmers purchase fertilizer from retailers at a subsidized rate) could increase access for countries consuming fertilizer well below the world average. Similarly, investments in green fertilizer production and precision agricultural practices can lower emissions while boosting the efficiency of fertilizer application and absorption.

Africa can contribute to this transformation by reducing its own logistical and trade barriers. About 90 percent of fertilizers used in Sub-Saharan Africa are imported, even though the continent produces two times as much fertilizer as it consumes. Such inefficiencies reflect opportunities for improvements in shipping and port costs, distribution chains, and information availability. Better trade infrastructure and facilitation measures such as harmonized rules, complemented by increased local production, can play an important role in reducing logistical costs and thus easing fertilizer prices.

Several international programs are helping farmers cope with higher prices. Private fertilizer donations and shipments via the Black Sea Grain Initiative have somewhat addressed supply challenges. The International Finance Corporation has committed USD6 billion through its Global Food Security Platform to provide credit to address liquidity constraints in the private fertilizer supply chain; the World Bank USD30 billion global food crisis response, which focuses on developing countries, will include efforts to encourage food and fertilizer production; and the IMF's Food Shock Window is an emergency financing channel available to countries with urgent balance-of-payment needs related to food and fertilizer.

New Study Investigates Effects of Inflation on Child Nutrition

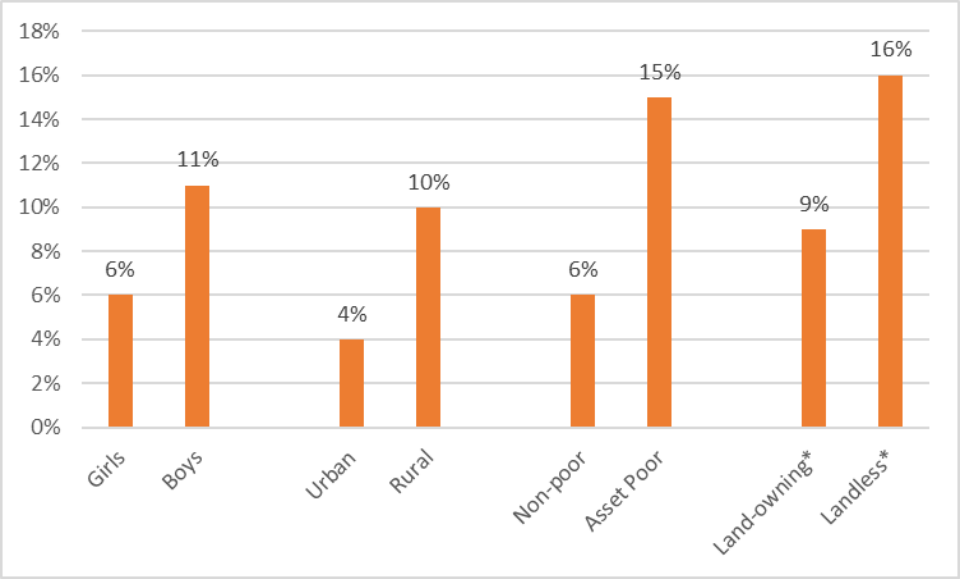
Food price volatility has increased over the past two decades, and food crises associated with price spikes have become more frequent in the 21st century. To better understand the nutritional impacts of such crises on poor and food-insecure populations, a new analysis from the International Food Policy Research Institute (IFPRI) of 1.27 million children in 44 low- and middle-income countries explores the potential impacts of food inflation on wasting and stunting in 1.27 million preschool-aged children.

To test whether increases in the real price of food are a short-term risk factor for child wasting and a longer-term risk factor for child stunting, a novel database was used that linked 130 Demographic Health Surveys in 44 low- and middle-income countries from 2000 to 2021 with national-level monthly data on real food price changes. Researchers assessed whether child age at the time of food price shocks affects the magnitude of impacts on wasting or stunting. Rural versus urban location, gender, poverty, and farm ownership status, demographic and socioeconomic indicators in the Demographic Health Surveys, were also analyzed to test for variation of results. The study determined that food inflation during pregnancy and in the first years of a child's life is associated with higher risk of child wasting in the short run and stunting in the long run. Specifically, on average for all children younger than 5, a 5 percent increase in the real price of food increases the risk of wasting by 9 percent and severe wasting by 14 percent. In separate tests, it was found that on average, infants younger than 6 months are at high risk of wasting, which suggests a maternal nutrition pathway during pregnancy.

In terms of specific socioeconomic or demographic groups who are most vulnerable to inflation shocks, the study found that food inflation predicts larger wasting risks for boys, rural children, and children from asset-poor and

landless households (Figure 5). Lack of an option to grow food in the face of rising food prices in markets may account for the vulnerability of landless households. In addition, statistical research models in the study predicted additive effects for these factors, indicating that the combination of sociodemographic factors may increase the chance of wasting. For example, for children from landless rural households that are also asset poor, a 5 percent increase in the real price of food results in a 29 percent increase in the risk of wasting for boys and a 23 percent increase for girls.

Figure 5: Increase in Wasting from 5 Percent Increase in Real Price of Food



Source: International Food Policy Research Institute.
Note: Coefficients derived from linear probability regression models that interact food inflation with gender, location, poverty status, and land ownership (*in rural areas only).

Nutritional deprivation during the first 1,000 days of a child's life, when the biological foundations for optimal nutrition, health, and development are established, can have long-term consequences for healthy growth. The study found that food price increases during pregnancy and the first year of a child's life were associated with greater risk of stunting at age 3 to 5, with even stronger effects for severe stunting.

This study demonstrates that the impacts of food inflation strike early—in the first 1,000 days of life—and during pregnancy and infancy and disproportionately affect the rural poor and landless. As such, there is an urgent need to improve women's nutrition and health before and during pregnancy to guarantee prenatal health and nutrition support for mothers and children. The study suggests that programs such as maternal and child food cash transfers could provide protection throughout the first 1,000 days, especially if targeted to vulnerable groups and combined with nutrition- and health-focused social behavior change communications. The study also suggests that food policies should be designed to achieve greater stability in food prices and increase affordability of nutritious foods. To accomplish this, agricultural policies could be repurposed to make healthy diets more affordable.

REGIONAL UPDATES

East and Southern Africa

Up to 67 million people in eastern and southern Africa continue to experience acute food insecurity, including famine, and it is predicted that this will increase in the coming months for most countries. (See www.fews.net for detailed reports.) Somalia faces Famine conditions (IPC Phase 5), and 7.5 million people are likely to be affected, with approximately 90 percent of the country facing extreme drought. Large parts of South Sudan also meet Famine conditions (see below). Up to 15 million people in Ethiopia and 10 million in the Democratic Republic of the Congo are facing acute food insecurity (IPC Phase 3+). There is also a high risk of acute food insecurity in other countries, including up to 7.5 million people each in Kenya, South Sudan, and Sudan (with a risk of famine in the latter two); 2.5 million each in Madagascar, Malawi, Mozambique, Uganda, and Zimbabwe; 1 million in Burundi; and 0.5 million each in Lesotho and Rwanda.

In South Sudan, 6.6 million people remain acutely food insecure, and there is a credible risk of Famine (IPC Phase 5) (FEWS NET). Of extreme concern are Akobo, Canal/Pigi, and Fangakof Jonglei states and the Greater Pibor Administrative Area, where households are likely to be in IPC Phase 5 (FEWS NET). More than half of the people in Jonglei, Lakes, Northern Bahr el Ghazal, Unity, Upper Nile, and Warrap are assessed to be in Crisis (IPC Phase 3) condition or worse. Consecutive years of flooding, macroeconomic crises characterized by rising food and nonfood prices, and protracted conflicts that hamper well-being have caused the high levels of food insecurity. Four straight years of flooding are affecting more than 1 million people and have caused crop and livestock production losses. Flooding disrupts trade flows, markets, and humanitarian food and nutrition assistance to vulnerable people in need. Crisis (IPC Phase 3) and Emergency (IPC Phase 4) outcomes are expected to remain widespread even during the harvest and post-harvest (February-March) periods. At the same time, humanitarians plan to deliver food assistance to 1.3 million people per month (16 percent of the total population in need). The worst-affected households, in Catastrophe (IPC Phase 5), are in Akobo, Canal/Pigi, Fangak, and Pibor, which lack productive assets. Because of the shocks mentioned above, as well as prolonged dry spells in north-central and southern South Sudan and limited household access to inputs, harvests in Greater Upper Nile and Greater Bahr el Ghazal are expected to be lower than last year and the 5-year average (FEWS NET).

East Asia and the Pacific

Food and nutrition security in Myanmar have deteriorated in 2022, with 4 percent of households facing moderate to severe hunger in July and August 2022, according to an IFPRI survey. The proportion of households with a low food consumption score increased from 9.4 percent in December 2021 to January 2022 to 17.2 percent in July to August 2022. Over the same period, the proportion of adults with inadequate dietary diversity rose from 20.6 percent to 27.6 percent, with rates higher for women, especially in rural areas. More than one-third of all children aged 6 to 23 months and 15.8 percent of all children aged 24 to 59 months have inadequate dietary quality, with no significant change in 2022. Wage workers, migrant households, and displaced communities were found to be

particularly vulnerable. By early December 2022, more than 1.4 million people had been displaced across Myanmar, with more than 1.1 million displaced after the 2021 military takeover.

The results of the Remote Household Food Security Survey by the government of the Lao People's Democratic Republic (PDR) and World Food Program (WFP) suggest that 14 percent of households in Lao PDR are food insecure. There is regional disparity, with the prevalence of household food insecurity ranging from 3 to 28 percent, depending on district. On average, rural areas have a higher rate of food insecurity (17 percent) than urban areas (7 percent), where food insecurity has declined, particularly in Vientiane Capital. Households experiencing a significant income reduction (>50 percent) are more than twice as likely to be food insecure (22 percent) as those whose income has remained constant or increased (10 percent). More than half of the population relies on coping strategies such as spending savings, reducing health care costs, and increasing borrowing to meet basic needs.

Europe and Central Asia

The European Commission launched a dashboard on food security in the European Union at the 2022 EU Agricultural Outlook Conference. The dashboard will present a wide range of indicators affecting food supply and food security in the European Union, such as weather and drought events, freight and energy costs, animal diseases, and possible trade restrictions. A monitoring section will show data on self-sufficiency rates of the most significant agricultural commodities and shares of the European Union's and EU countries' imports for these commodities and fertilizers. The monthly rates of food inflation in the European Union will also be displayed.

Despite experiencing a 25 percent increase in food prices, Kazakhstan ranked 32nd of 113 countries in the Global Food Security Index (GFSI) 2022 report from the Economist Impact. The country has risen from the 41st position that it occupied last year. Similarly, the ranking of Uzbekistan improved from 78 in 2021 to 73 in 2022, and Tajikistan improved from 83 to 75. The report finds that the global food environment is deteriorating overall, making it susceptible to shocks. The positive trends of 2012 to 2015 have reversed because of global structural problems. High food prices, lack of freedom of trade, and limited funding for food safety nets have caused affordability to plummet. The report also noted growing inequality in the global food system because the top performers are high-income countries. The difference between the top performers and the bottom of the rankings has widened since 2019.

Latin America and the Caribbean

Food Inflation remains a significant concern in the region, with Argentina, Chile, and Colombia reporting real food inflation higher than 20 percent as of November 2022 as measured according to year-on-year change (High Frequency Monitoring Update November 2022). The Food and Agriculture Organization (FAO) reported domestic price warnings for white maize in Mexico (overall food inflation in Mexico was also high at 12 percent in November 2022), specifically in Puebla State, where a 10 percent reduction in area sown in the prior season has also driven price increases. In Colombia, the annual inflation rate for food and nonalcoholic beverages remained high (27 percent) in November 2022, and FAO issued a price warning for white flour, which has been at an all-time high (FPMA update).

As reported in the previous update, continued insecurity in Haiti has severely limited income-generation activities, driving households in Cite Soleil to consumption deficits while poorer households in Artibonite, Grand'Anse, Nippes, Nord, Sud, and Sud-est, which climate shocks have also affected, are coping by selling productive assets and seed stock. The steep decline of the Haitian gourde against the dollar is challenging with regard to food prices because of Haiti's heavy dependence on food imports (reliefweb).

In Central America, demand for agricultural labor and increases in economic activity have raised household incomes, although it is likely that persistently high food prices are likely to at least partially offset these increases. Farmers in the region saw some damage due to tropical storm Julia, and in Guatemala, cold fronts may affect vegetable and fruit harvests (reliefweb).

In Peru, the current political uncertainty will increase food insecurity by affecting supply routes and income-generating activities. This is on top of a severe drought affecting especially the southern and central parts of the country. In addition, fertilizer prices remain high, with urea and DAP prices 50 percent higher in November 2022 than in November 2021. All these factors will increase already high food inflation (12 percent as of November 2022, year-on-year change).

Middle East and North Africa

Data gathered in November showed that the upward trend in inflation was confirmed in several Middle Eastern and North African countries. The National Institute of Statistics of Tunisia announced overall inflation of 9.8 percent in November 2022 and food inflation of 15.1 percent—a 1.3-percentage-point increase consisting of a 7.5 percent increase in egg prices, a 6.1 percent increase in vegetable prices, and a 3.0 percent increase in edible oil prices. Egypt recorded overall inflation of 19.2 percent and food inflation of 30.9 percent in November 2022, which is the highest since November 2017. Large currency devaluations in March and October 2022 boosted inflation in food prices. After the first currency devaluation in March, the Central Bank of Egypt restricted imports by requiring letters of credit to conserve foreign credits, slowing the importation process. Despite this restriction being canceled on December 29, 2022, inflation is expected to continue because of another devaluation of the Egyptian pound in early January.

The WFP's and FAO's recent publication on hunger hotspots said that Yemen is one of the "highest hunger hotspots," with 7.3 percent of the population under IPC Phase 4+ (Emergency) conditions. Syria is also classified as a "very highly concerned" country, a sizable amount of whose population is projected to be in IPC/CH Phase 4+. In addition to active armed conflict in the country, Syria is experiencing a severe drought this winter, which will affect next year's harvest. Water scarcity is also worsening the cholera outbreak, leading to more than 60,000 cases during August through December 2022.

South Asia

In Afghanistan, lack of access to basic services and food insecurity are resulting in increased cross-border population movements. The situation requires continued focus on preparedness and response activities in neighboring countries, especially Iran and Pakistan. Country risk assessment indicates that prices have continued to rise, and

the seasonal decline in casual labor has started to reduce purchasing power for many. Although a drastic decrease in purchasing power has not occurred, the risk remains high and is expected to materialize over the winter in areas subject to high snowfall, where road closures will cause a further increase in domestic prices. The recent ban on women working in nongovernmental organizations has led to several international organizations suspending operations. If this ban remains in place, effective emergency response will be extremely challenging. In the livestock subsector, lumpy skin disease in cattle, which emerged in May 2022, has spread to approximately 30 provinces. As of December 2022, 125,000 cattle had been vaccinated against the disease, with the FAO planning to vaccinate 3,975,000 more by July. Untreated, this disease can decrease milk yields, reducing farmers' incomes.

The high incidence of climatological shocks, depletion of foreign currency reserves, and depreciation of local currencies keep food inflation high and make healthy food less affordable in South Asia. In December 2022, year-on-year consumer price inflation for food prices was 7.9 percent in Bangladesh, 7.4 percent in Nepal, 35.5 percent in Pakistan, and 64.4 percent in Sri Lanka. Last summer, floods caused by higher-than-normal monsoon rains in some parts of South Asia and less-than-normal rainfall in other parts have widely disrupted food production. In Pakistan, floods killed more than 11 million head of livestock and destroyed more than 9.4 million acres of cropland between June and August 2022 in the most food-insecure provinces of Balochistan and Sindh. According to the WFP, 6 million people (30 percent of the population analyzed) experienced acute food insecurity (IPC Phase 3+), and this was projected to increase to 8.5 million between September and December 2022. In Sri Lanka, the WFP Household Food Security Survey found that 37 percent of households were food insecure in November 2022, and fertilizer and rainfall shortages are expected to further decrease food production. In Nepal, despite shortages of fertilizer and rainfall, paddy rice production is expected to be above last year's but still approximately half a million tonsless than needed to cover domestic demand. In India, despite larger areas allocated to winter crops this year, output of summer and winter crops is expected to be lower than last year. To support vulnerable households, the Union Cabinet approved an extension of the free grain distribution scheme for 813 million vulnerable people until the end of 2023 under the Pradhan Mantri Garib Kalyan Ann Yojana program.

West and Central Africa

Despite above-average yields in the 2022/23 agricultural season, West and Central Africa continues to face high levels of food insecurity because of the confluence of persistent security and macroeconomic crises. Currently, 28.9 million people depend on emergency food assistance. Unless appropriate countermeasures are taken, 41.9 million people could be food insecure between June and August 2023(RPCA 2022). With cereal production at 6 percent above the 5-year average and root and tuber production at 9 percent above the 5-year average, the 2022/23 agropastoral season was satisfactory, although access to food for the most vulnerable populations continues to deteriorate. Food prices are 36 percent above the 5-year average. Inflation averages 18 percent in an unfavorable environment shaped by the war in Ukraine and devaluation of some local currencies. Conflict and instability continue to drive food insecurity, especially for internally displaced persons, of whom there are currently more than 6.1 million. In addition to the immediate food and humanitarian consequences, the violence is depriving people of their productive assets, risking the resilience of thousands of agropastoral communities (RPCA 2022).

TRADE POLICY RESPONSES

Trade policies are a major source of risk for global food price stability. This section tracks recent trade policy announcements as potential sources of such risk. For regular tracking of trade measures, see the Macroeconomics, Trade, and Investment Global Practice COVID-19 Trade Policy Database for Food and Medical Products, the World Trade Organization COVID-19 Agriculture Measures Database, and the IFPRI COVID-19 Food Trade Policy Trade Tracker.

Trade policy actions on food and fertilizer have surged since the beginning of the war in Ukraine, and countries actively used trade policy to respond to domestic needs when faced with potential food shortages at the beginning of the COVID-19 pandemic. Active export restrictions on major food commodities are listed in Table 2 and restrictions on other foods in Table 3. As of December 2022, nineteen countries have implemented 23 food export bans, and eight have implemented 12 export-limiting measures.

Table 2: Food Trade Policy Tracker (Major Food Commodities)

Jurisdiction	Measure	Products	Announcement	Expected end date
Afghanistan	Export ban	Wheat	5/20/2022	12/31/2022
Algeria	Export ban	Sugar, pasta, oil, semolina, all wheat derivatives	3/13/2022	12/31/2022
Argentina	Export taxes	Soybean oil, soybean meal	3/19/2022	12/31/2022
Bangladesh	Export ban	Rice	6/29/2022	12/31/2022
Burkina Faso	Export ban	Millet, maize, sorghum flours	2/28/2022	12/31/2022
Belarus	Export licensing	Wheat, rye, barley, oats, corn, buckwheat, millet, triticale, rapeseed, sunflower seeds, beet pulp, cake, rapeseed meal	4/13/2022	12/31/2022
Cameroon	Export ban	Cereals, vegetable oil	12/27/2021	12/31/2022
Georgia	Export ban	Wheat, barley	7/4/2022	7/01/2023
India	Export ban	Wheat	5/13/2022	12/31/2022
India	Export licensing	Wheat flour and related products	7/6/2022	12/31/2022
India	Export ban	Broken rice	9/8/2022	12/31/2022
India	Export taxes	Rice in the husk (paddy or rough), husked (brown) rice, semi-milled or wholly milled rice (other than parboiled rice and basmati rice)	9/9/2022	12/31/2022
Iran	Export ban	Potatoes, eggplants, tomatoes, onions	4/27/2022	12/31/2022
Kosovo	Export ban	Wheat, corn, flour, vegetable oil, salt, sugar	4/15/2022	12/31/2022
Kuwait	Export ban	Grains, vegetable oil, chicken meat	3/20/2022	12/31/2022
Lebanon	Export ban	Processed fruits and vegetables, milled grain products, sugar, bread	3/18/2022	12/31/2022
Pakistan	Export ban	Sugar	4/15/2022	12/31/2022
Russia	Export ban	Rapeseed	3/31/2022	2/1/2023
Russia	Export taxes	Soya beans	4/14/2022	8/31/2024
Russia	Export taxes	Sunflower oil, sunflower meal	4/15/2022	12/31/2022
Russia	Export taxes	Wheat, barley, corn	4/8/2022	12/31/2022
Serbia	Export ban	Corn flour, sunflower oil	3/10/2022	12/31/2022

Tunisia	Export ban	Fruits and vegetables	4/12/2022	12/31/2022
Türkiye	Export licensing	Poultry meat, eggs, vegetables, fruits	1/27/2022	12/31/2022
Türkiye	Export ban	Cooking oils	3/9/2022	12/31/2022
Türkiye	Export ban	Beef meat, sheep meat, goat meat	3/19/2022	12/31/2022

Table 3: Food Trade Policy Tracker (Other Commodities)

Jurisdiction	Measure	Products	Announcement	Expected end date
Argentina	Export ban	Beef meat	1/1/2022	12/31/2023
Azerbaijan	Export licensing	Flour-grinding industry goods, starch, wheat gluten, oilseeds and other seeds, medicinal and industrial crops, feed	3/19/2022	12/31/2022
China	Export ban	Phosphate rock	9/28/2021	12/31/2022
China	Export licensing	Fertilizers	9/24/2021	12/31/2022
Lebanon	Export ban	Meat products, fish, potatoes, fruits and vegetables, oil, animal fat, ice cream, cacao, mineral water, milk	3/11/2022	No end date
Türkiye	Export ban	Beans, lentils, olive oil	2/27/2022	12/31/2022
Ukraine	Export ban	Nitrogenous fertilizers	3/12/2022	12/31/2022
Vietnam	Export taxes	Mineral fertilizers	5/6/2022	12/31/2022
Russia	Export licensing	Nitrogenous fertilizers	11/3/2021	12/31/2022

Source: International Food Policy Research Institute COVID-19 Food Trade Policy Tracker and Macroeconomics, Trade, and Investment Global Practice COVID-19 Trade Policy Database for Food and Medical Products

ANNEX A: FOOD INFLATION JANUARY 2022–DECEMBER 2022 (PERCENT CHANGE, YEAR ON YEAR)

Country/Economy	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Low Income												
Afghanistan							24.9	23.2	17.6	12.3		
Burkina Faso	14.2	17.8	24.3	25.6	25.2	28.9	30.8	29.8	26.4	23.7	19.6	
Burundi	14.4	16.2	15.0	19.3	22.9	21.0	24.4	24.2	26.3	29.5	39.8	
Chad	6.0	6.1	7.2	8.2	10.8	12.9	13.0	14.4	12.3	16.6	21.6	
Ethiopia	40.1	41.8	43.5	42.9	43.9	38.1	35.6	33.3	31.0	30.7	34.2	
Gambia	9.8			15.5	14.2	13.7	13.9	14.9	15.7	17.1		
Guinea	13.5	14.1	14.7	12.6		12.9	12.8					
Liberia				-2.4		-1.1	-1.0	-3.9	-5.1			
Madagascar	7.3	7.6				8.6	9.9	10.3	10.9	11.7		
Malawi	14.2			19.5			32.5	33.4	33.7	34.5		
Mali	11.1	10.5	11.5	12.3	14.1	12.8	16.7	20.1	16.3	16.3	14.4	
Mozambique	10.9	8.9	8.0	10.5	13.9	16.3	17.7	17.8	17.9	19.6	20.2	
Niger	11.2	10.3	11.3	9.6	9.6	8.1	5.9	5.2	4.9	4.0	5.2	
Rwanda	-2.8	0.3	2.5	13.2	23.8	26.1	32.7	34.5	41.2	56.9	64.4	59.2
Sierra Leone	15.7	17.1	23.0	23.0		28.5	30.6	31.6	35.2	40.1		
Somalia	11.6	12.7	12.0	11.9	14.7	16.9	17.5	16.7	16.1	15.0	12.7	
South Sudan				0.1		2.3	1.7	-5.3				
Sudan												
Togo	16.8	17.9	19.1	13.6	13.7	10.2	7.7	7.2	8.6	6.1	9.1	
Uganda	5.3	4.5	1.9	5.3	13.6	14.5	16.5	18.8	21.6	25.6	27.8	29.4
Lower Middle Income												
Algeria	11.9	13.1	13.6	15.7	13.4	17.3	14.5	14.5	11.3	10.5	11.6	
Angola	25.2	25.7	26.1	25.9	25.8	25.2	24.6	23.9	22.9	21.8	20.3	
Bangladesh	5.7	6.2	6.3	6.2	8.3	8.4	8.2	9.9	9.1	8.5	8.1	7.9
Belize	2.5	3.7	5.9	7.1	7.3	7.5	8.0	8.2	9.4	9.6		
Benin	15.6	4.6	1.9	-1.0	-1.7	-9.0	-5.3	-3.9	-7.2	-0.8	1.2	

Bhutan	5.3	4.1	4.0	3.7	3.5	5.1	5.8	5.2	4.3	2.9	2.2	
Bolivia	0.2	0.4	-0.3	-0.5	0.9	2.2	2.3	0.8	2.2	5.7	6.4	6.6
Cabo Verde	10.0	11.6	16.5	15.8	15.2	16.2	16.7	17.6	17.9	17.8	17.2	
Cambodia	3.6	5.9	5.7	6.2	5.5	6.5	5.0	4.3	4.6	4.3		
Cameroon			10.0	12.0	12.4	12.1	15.9	14.4	15.7			
Cote d`Ivoire	11.9	8.8	8.4	7.4	5.2	9.8	9.0	10.9	10.8	9.6	8.5	
Djibouti			6.8			25.7	10.9	12.5				
East Timor	6.4	6.8	7.0	7.3	8.0	8.6	8.5	8.3	8.2	7.6	7.2	
Egypt	12.4	17.7	19.8	26.0	24.8	22.4	22.4	23.1	21.7	23.9	30.0	37.9
El Salvador	8.9	9.5	9.8	10.9	13.3	14.4	14.1	14.5	13.6	12.8	12.1	12.2
Eswatini			3.4		5.4	6.7		10.8	12.1	12.5		
Ghana	13.8	17.5	22.5	26.6	30.1	30.7	32.3	34.4	38.8	43.7	55.3	
Haiti	25.5	25.9	26.6	27.7	29.1	30.7	32.7		44.3	53.1		
Honduras	7.5	8.1	8.8	10.6	13.0	15.6	17.6	18.0	17.2	18.0	18.1	16.2
India	5.6	6.0	7.5	8.1	7.8	7.6	6.7	7.6	8.4	7.0	5.1	
Indonesia	3.5	2.5	3.4	5.3	5.8	9.1	10.3	8.3	8.4	7.0	5.8	5.7
Iran, Islamic Republic of	42.7	40.7	41.2	44.3	50.9	85.5	90.2	84.0				
Kenya	8.5	8.4	9.7	11.1	12.2	13.4	15.2	15.3	15.5	15.8	15.5	13.9
Kyrgyzstan	12.5	12.1	15.8	18.0	17.1	14.8	16.0	18.9	18.7	17.2	17.2	
Lao People`s Democratic Republic	4.2	5.5	6.1	5.7	8.1	16.9	21.6	30.2	35.5	38.8	42.7	45.9
Lesotho	7.5	7.6	7.4	7.2	7.4	8.4	10.2	10.2	10.2	10.0	9.9	
Mauritania	9.4	9.6	11.4	13.4		16.0	17.4	11.8	12.6	13.7	14.7	
Mongolia	21.2	17.9	18.0	16.8	18.0	19.5	21.6	18.7	17.0	16.4	16.8	15.4
Morocco	4.3	5.5	9.1	9.1	8.4	10.6	12.0	14.1	14.7	13.8	14.4	
Myanmar		12.8	15.4	15.4	15.7	16.0	17.1	18.4				
Nepal	4.9	6.0	7.5	7.4	7.1	7.4	6.9	7.1	8.2	8.1	7.4	
Nicaragua	10.3	11.0	13.7	16.2	16.9	15.5	18.3	18.9	17.1	18.6	16.6	
Nigeria	17.0	17.0	17.2	18.4	19.5	20.6	22.0	23.1	23.3	23.7	24.1	
Pakistan	12.9	14.7	15.3	17.0	17.3	25.9	28.8	29.5	31.7	36.2	31.2	35.5

Palestine, State of	6.7	7.4	9.6	9.7	8.1	6.7	4.6	3.6	4.9	6.8	6.3	
Papua New Guinea			6.2			5.1						
Philippines	1.6	1.1	2.8	4.0	5.2	6.4	7.1	6.5	7.7	9.8	10.3	10.6
Samoa												
Senegal	9.2	10.6	10.1	11.3	12.1	14.1	17.1	17.1	18.1	19.6	21.4	
Sri Lanka	24.3	24.4	29.5	45.1	58.0	75.8	82.5	84.6	85.8	80.9	69.8	64.4
Tajikistan	6.8		7.1	8.1		9.6	9.7	8.0	7.9	6.1		
Tanzania, United Republic of	6.4	6.1	6.5	6.6	5.5	5.9	6.5	7.8	8.3	9.1	9.5	
Tunisia	7.7	8.9	9.1	8.9	8.4	9.9	11.4	12.3	13.3	13.2	15.7	15.1
Ukraine	14.1	14.4	19.6	23.1	24.1	28.3	29.5	31.3	32.1	36.1	35.2	
Vietnam	3.1	1.6	1.8	2.1	2.4	2.9	2.9	3.9	4.9	5.9	6.9	7.9
Zambia	16.9	16.0	15.3	14.1	12.3	11.9	12.0	11.4	12.1	12.7	12.1	11.9
Zimbabwe	63.3	69.3	75.1	104.0	155.0	255.0	309.0	353.0	340.0	321.0	376.0	
Upper Middle Income												
Albania	6.7	6.9	9.2	10.4	11.8	13.2	13.9	14.9	14.6	15.2	15.4	14.8
Argentina	50.5	55.8	59.8	62.1	64.2	66.4	70.6	80.0	86.6	91.6	94.2	
Armenia	12.3	11.4	12.8	14.5	14.7	17.3	13.5	12.5	13.7	12.5	11.1	10.0
Azerbaijan	17.1	17.0	16.7	18.3	20.1	20.5	20.3	20.8	21.7	21.0	20.2	
Belarus	12.0	11.3	15.5	19.0	19.3	19.6	19.6	18.9	18.3	15.9	14.4	
Bosnia and Herzegovina	11.8	13.3	14.8	15.0	23.5	24.2	25.6	26.6	27.2	27.3	26.0	
Botswana	7.1	6.8	6.8	6.2	8.3	9.7	11.9	13.3	14.8	15.8	16.3	
Brazil	8.0	9.1	11.6	13.5	13.5	13.9	14.7	13.4	11.7	11.2	11.8	11.6
Bulgaria	11.2	13.5	16.9	20.7	22.1	23.2	23.6	23.6	24.9	25.7	26.1	
China	-3.9	-4.0	-1.6	1.7	2.2	2.7	6.2	5.9	8.8	7.1	3.7	
Colombia	20.0	23.3	26.3	27.0	22.0	24.1	25.1	26.0	27.0	27.3	27.3	28.0
Costa Rica	3.3	7.3	8.8	11.1	13.0	15.1	20.7	22.3	20.3	20.6	19.9	19.1
Dominica												

Dominican Republic	9.4	10.2	11.8	12.9	13.1	13.2	12.5	10.4	10.3	9.9	10.0	
Ecuador	2.7	2.7	2.1	2.5	4.1	7.7	6.7	6.5	7.9	8.0	8.2	8.4
Equatorial Guinea	3.2	4.7	5.8		6.7	7.8	5.8	7.0	6.3	5.2	4.5	
Fiji	5.1	3.1	8.0	7.2	3.6	3.3	4.7	6.9	6.0	9.1	9.6	7.1
Gabon	2.3	2.8	3.5	3.9	3.9	5.8	6.7	8.1	8.8	8.0		
Georgia	16.2	17.3	17.8	21.4	22.0	21.8	16.4	15.8	17.7	15.7	16.8	16.4
Grenada												
Guatemala	3.2	3.3	4.9	5.6	7.2	10.7	12.7	13.3	13.1	13.6	12.1	11.8
Guyana				13.8	11.5	7.3	9	10.6	11.2	12.3		
Iraq	8.5	7.8	7.5	9.0	9.0	7.1	6.7	2.9	5.7	6.7	6.5	
Jamaica	0.5	0.8	4.1	6.3	13.9	13.7	12.7	12.6	10.5	10.1	14.2	
Jordan	3.4	2.4	4.2	4.3	5.8	4.1	3.9	3.0	3.2	3.5	3.1	
Kazakhstan	9.9	10.1	15.7	17.9	19.0	19.2	19.9	21.0	22.2	23.3	24.4	25.6
Kosovo, Republic of	8.8	9.7	14.2	16.4	18.6	19.2	22.0	21.1	21.2	22.5	19.6	
Lebanon	486.9	401.5	390.4	374.4	363.8	332.3	240.2	198.1	208.1	203.2	171.2	
Libya			5.5	5.1	4.9	4.5			3.9	3.6	3.8	
Malaysia	3.6	3.8	4.2	4.2	5.3	6.3	7.0	7.3	6.9	7.3	7.4	
Maldives	2.0	1.8	2.9	3.7	4.7	5.2	6.0	6.2	5.5	5.9	5.7	
Mauritius	10.3	16.4	19.1	17.8	11.9	6.5	13.6	16.0	18.5	17.8	17.0	
Mexico	12.0	12.6	13.0	12.8	12.5	13.6	14.2	14.2	14.6	14.5	12.4	12.7
Moldova, Republic of	21.1	23.4	27.0	30.2	32.5	34.3	36.4	38.4	37.1	36.2	33.1	
Montenegro	11.3	13.1	18.3	19.8	21.3	23.1	25.4	26.1	27.7	30.3	31.0	
Namibia	5.6	5.5	4.7	5.8	6.8	7.2	8.4	8.8	9.5	9.2	9.5	
North Macedonia, Republic of	9.2	9.6	11.4	15.1	17.4	21.5	24.3	25.9	29.8	32.5	30.8	28.0
Panama	2.1	2.3	2.8	3.0	3.6	4.2	4.8	5.1	4.4	4.6	4.7	
Paraguay	14.1	15.7	17.5	19.8	18.4	18.6	16.7	16.1	12.9	10.9	11.1	9.2
Peru	7.9	7.9	11.1	11.8	13.7	11.9	11.6	11.4	11.7	11.3	12.0	15.2
Romania	7.2	8.8	11.2	13.5	14.2	14.7	16.1	18.2	19.1	20.6	21.5	

Russian Federation	11.1	11.5	18.0	20.5	20.1	18.0	16.8	15.8	14.2	12.1	11.1	
Saint Lucia												
Saint Vincent and the Grenadines												
Serbia	13.4	15.2	16.1	16.1	16.3	19.3	29.4	20.9	20.8	23.9	23.5	
South Africa	5.7	6.5	6.7	6.2	8.1	9.2	10.4	11.8	12.3	12.3	12.9	
Suriname	67.7		68.3	60.9	55.1	38.3	32.6	36.7	40.0	51.3	54.9	
Thailand	2.4	4.5	4.6	4.8	6.2	6.4	8.0	9.4	9.8	9.6	8.4	8.9
Türkiye	55.6	64.2	71.6	90.8	93.1	94.3	94.5	89.3	92.4	98.7	102.0	76.8
Venezuela	389.0	270.0	229.0	192.9	154.6	146.1	131.4	108.8	157.9	157.7		
High Income												
Antigua and Barbuda												
Aruba	4.9	6.1	7.2	8.3	9.7	11.1	11.0	12.1	12.1	11.5		
Australia			4.3			5.9			9.0			
Austria	5.0	4.2	5.5	8.2	8.8	11.5	12.1	13.0	13.5	14.5	15.2	
Bahamas												
Bahrain	9.5	12.2	10.6	9.7	11.6	7.3	8.5	10.4	10.7	9.9	12.7	
Barbados			17.0			18.6	17.4	11.2	7.6			
Belgium	2.4	4.0	4.8	5.1	6.3	8.4	9.2	9.7	10.4	12.3	14.5	14.5
Bermuda		5	5	5.4	6.4	8	9	9.5	10.6			
Brunei Darussalam	2.5	2.6	3.8	4.7	6.0	6.4	7.4	7.6	7.3	6.7		
Canada	5.8	6.7	7.7	8.8	8.8	8.8	9.2	9.8	10.3	10.1	10.3	
Cayman Islands			4.9			7.9						
Chile	6.0	8.4	13.1	15.9	18.1	19.2	20.7	22.8	23.0	22.7	24.7	25.2
Croatia	9.4	10.0	11.1	13.4	15.9	17.4	19.0	19.8	19.6	20.4	19.6	
Cyprus	3.5	7.9	9.7	11.2	8.5	7.8	7.4	1.6	7.4	13.2	15.5	12.2
Czech Republic	5.4	6.9	7.8	11.1	15.5	18.7	20.0	20.2	21.8	26.2	27.1	
Denmark	4.0	5.5	6.3	7.7	10.6	13.6	15.6	16.7	15.9	16.5	16.0	14.9

Estonia	9.4	12.4	13.8	14.6	17.0	19.2	19.7	21.4	24.4	28.0	28.2	29.8
Faroe Islands			2.6		2.6	6.2			9.9			
Finland	3.2	4.5	5.1	6.0	9.0	10.9	12.3	12.5	14.5	15.7	16.0	
France	1.7	2.3	3.4	4.3	4.6	6.4	7.4	8.5	10.9	13.2	13.3	12.1
Germany	4.9	5.0	6.2	8.6	11.1	12.7	14.8	16.6	18.7	20.3	21.0	20.7
Greece	5.2	7.1	8.1	11.3	12.4	12.9	13.4	13.5	13.7	15.1	15.3	
Hong Kong	2.9	3.5	4.6	4.0	4.0	4.0	4.1	3.8	3.7	3.4	3.5	
Hungary	10.1	11.3	13.0	15.6	18.6	22.1	27.0	30.9	35.2	40.0	43.8	
Iceland	3.5	4.4	4.8	5.0	6.2	7.3	8.1	8.6	8.4	9.7	10.4	10.2
Ireland	2.2	3.0	3.0	3.5	4.5	6.8	8.1	9.2	10.2	10.8	11.7	
Israel	4.1	5.0	4.8	4.7	5.5	4.0	4.6	4.5	3.3	4.4	5.2	
Italy	3.6	4.8	5.9	6.7	7.6	9.2	10.2	10.7	11.8	13.8	13.7	13.3
Japan	2.0	2.8	2.4	3.2	3.1	3.7	4.3	4.5	5.1	6.4	7.5	
Korea, Republic of	5.5	3.7	3.2	4.3	5.9	6.4	8.1	8.1	7.9	7.6	4.7	5.2
Kuwait	7.3	7.3	7.6	9.8	8.7	8.6	8.2	7.3	6.9	7.0	7.1	
Latvia	8.8	11.8	15.0	17.8	18.7	22.5	24.5	26.1	27.8	29.9	30.0	
Lithuania	11.8	14.7	17.3	22.0	25.5	28.9	30.4	31.0	31.2	34.5	36.1	35.0
Luxembourg	2.8	3.4	3.9	5.4	5.5	6.8	7.5	8.0	8.8	10.5	10.4	10.9
Macao	1.3	1.8	1.7	1.5	1.7	1.9	2.2	1.9	1.8	1.8	1.6	
Malta	7.0	8.0	8.1	9.2	9.9	10.0	11.5	11.1	11.8	13.7	12.5	
Netherlands	4.4	5.1	6.2	8.5	9.1	11.2	12.3	13.1	12.8	14.0	15.7	16.8
New Caledonia				3.7	4.6	5.7	5.6	7.5	9.8	10.6	8.7	
New Zealand	5.9	6.8	7.6	6.4	6.8	6.8	7.4	8.3	8.3	10.1	10.7	
Norway	-1.6	0.8	0.5	2.1	3.1	5.6	10.2	10.1	11.9	12.9	12.6	11.5
Oman	5.1	5.0	4.9	5.5	5.0	6.1	6.1	4.9	5.1	4.6	5.0	
Poland	9.4	7.6	9.8	13.4	14.2	14.9	15.9	18.1	20.0	22.9	23.0	
Portugal	3.7	4.6	7.4	10.7	12.8	13.4	14.3	15.8	16.9	19.2	20.6	
Qatar	7.2	6.9	4.5	4.1	6.7	4.9	4.8	6.4	4.6	1.3	0.3	
Saint Kitts and Nevis												
Saudi Arabia	2.1	2.4	3.3	4.6	4.6	4.8	4.2	4.3	4.7	4.6	3.7	

Seychelles	2.3	1.0	0.2	-0.8	1.3	2.2	1.8	0.9	1.7	2.5	2.6	2.5
Singapore	2.6	2.3	3.3	4.1	4.5	5.4	6.1	6.4	6.9	7.1	7.3	
Slovakia	8.2	9.5	11.7	13.9	16.0	17.9	19.1	21.0	23.3	26.0	27.8	
Slovenia	4.7	6.3	6.9	9.4	11.1	12.8	13.5	14.1	14.7	17.7	19.4	18.9
Spain	4.8	5.6	6.8	10.4	11.2	13.3	13.9	14.1	14.7	15.8	15.7	
Sweden	2.0	4.0	5.4	6.4	8.5	10.9	13.6	14.2	16.3	17.6	18.6	
Switzerland	-1.5	-1.1	-0.4	-0.3	0.9	1.8	1.9	2.3	2.9	4.2	4.4	4.0
Taiwan	3.7	5.3	5.9	6.9	7.4	7.3	7.2	4.9	5.3	5.2	4.1	4.9
Trinidad and Tobago	6.5	7.9	7.9	8.7	8.1	7.8	10.3	11.7	11.6	12.0		
United Arab Emirates						9.0						
United Kingdom	4.4	5.0	5.9	6.7	8.6	9.9	12.9	13.5	14.9	16.7	16.7	
United States	6.7	7.6	8.8	9.4	10.2	10.4	10.9	11.4	11.2	11.0	10.6	
Uruguay	7.0	10.3	13.3	12.2	10.8	11.5	12.2	12.1	14.0	11.5	11.3	11.8

Source: IMF, Haven, and Trading Economics data. Food inflation is calculated from the food and non-alcoholic beverages component of the Consumer Price Index (CPI) for each country.

Color code	Indicator
	Price increase less than 2 percent
	Price increase between 2 and 5 percent
	Price increase between 5 and 30 percent
	Price increase 30 percent or higher

Methodology of the Domestic Food Price Inflation Tracker

Note: The domestic **food price inflation tracker** shows monthly food inflation (year-on-year) from January 2022 for countries where data is available - blank (white) cells indicate missing data. The core data source for food inflation is IMF and it is supplemented by trading economics. A traffic light approach was adopted to show the severity of food inflation and the color-coding was determined based on historical food price inflation targets, and expert consultation from World Bank AGF Unit. Values in purple indicate inflation increase greater than 30 percent, those in red indicate a YOY increase of 5-30 percent, yellow indicates a YOY increase of 2-5 percent and green indicates a YOY change of less than 2 percent.

The heat map shows the latest available nominal and real monthly food inflation (year-on-year) data for countries where data is available. The core data source for food inflation and overall inflation is IMF and it is supplemented with trading economics. Real food inflation is calculated as the difference between food inflation and the overall inflation. A traffic light approach was adopted to show the severity of nominal food inflation and the color-coding was determined based on historical food price inflation targets, and expert consultation from World Bank AGF Unit. Blank (gray) countries indicate countries with no data in the last four months. For nominal food price inflation, values in purple indicate inflation increase greater than 30 percent, those in red indicate a YOY increase of 5-30 percent, yellow indicates a YOY increase of 2-5 percent and green indicates a YOY change of less than 2 percent. For the real food inflation, values in purple indicate inflation increase greater than 5 percent, those in red indicate a YOY increase of 2-5 percent, yellow indicates a YOY increase of 0-2 percent and green indicates a YOY change of less than 0 percent.

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