European Commission

The European Commission's Knowledge Centre for Global Food and Nutrition Security

Contact: EC-KCFNS@ec.europa.eu

The impact of Russia's war against Ukraine on global food security – December 2022

This fifth knowledge review of Knowledge Centre for Global Food and Nutrition Security (KC-FNS) analyses, organises and synthetises the information from 68 papers published between 1st October and 30th November. The previous reviews and additional information can be consulted in the KC-FNS page dedicated to the impact of Russia's war against Ukraine on global food security.

This knowledge review does not reflect an official position of the JRC or any other services of the European Commission.

Key knowledge

- EU Solidarity Lanes and the Black Sea Grain Initiative allowed the export of 28 million tons of agricultural products from Ukraine by the end of November. Compared to 2021, the proportion of exports across geographic destination is similar.
- Global grain supplies are expected to tighten in 2022-23.
- Fertiliser prices are two and half times their 2019 level and affordability is at its lowest since 2008/09.
- The market for nitrogenous fertiliser is increasingly supply-constrained.
- No significant reduction in volumes of fertiliser exports from Russia was observed during the first 7 months of 2022.
- While farmers in developed regions are likely to maintain high levels of fertiliser use, in poorer countries, fertiliser use is expected to decline.
- The FAO Food Price Index averaged 135.9 points in October 2022, a decrease of 23.8 points (14.9%) from its peak in March this year.
- Wheat and maize prices remain 25% and 29% higher, respectively, than in January 2021.
- Price forecasts are subject to major risks: higher-than-expected input prices or energy supply disruptions, grain exports from the Black Sea.
- Food imports in low-income countries are forecast to shrink by 10% in volume, pointing to growing accessibility issues for these countries.
- The combination of elevated commodity prices, increasing production costs, and persistent currency depreciations translate into higher domestic food price inflation in many countries.
- With interest rates rising, developing countries will face higher debt service costs, further constraining fiscal space.
- Women are more food insecure than men in every region of the world. The gender gap in food security has grown 8-fold since 2018.
- In sub-Saharan Africa, the prevalence of undernourishment and the rate of child mortality are higher than in any other world region. In addition, more than 85% of the population cannot afford a healthy diet.
- The overlapping crises (inflation, debt crises, climate change) have caused reversals in poverty reduction and in human development.
- In low- and middle-income economies, just 20% of subsidy spending reaches the poorest people.
- More importance should be given to soil health: healthy soils supply 15 of the 18 essential plant nutrients.

Impact on global agricultural production and exports

Impact on Ukrainian production and exports

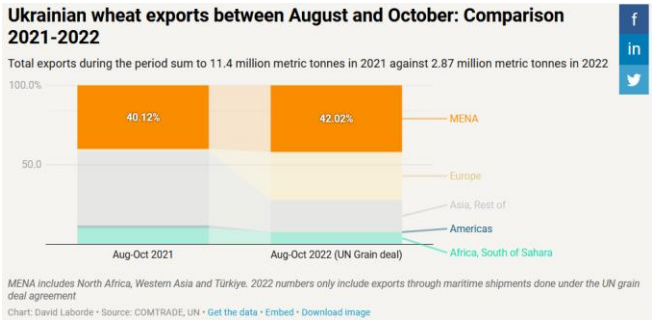
[FAO] estimates that one-third of the crops and agricultural land may not be harvested or cultivated in 2022. [FAO] has revised the Rapid Response Plan to provide additional cash and agricultural inputs to smallholder and medium-sized farming and address most pressing challenges: low returns from the sale of products, access to fertilisers and pesticides, access to fuel and electricity, and access to animal health products.

Regarding agricultural exports, the alternative transport routes established by the EU ("Solidarity Lanes") have enabled the export of more than 17 million tonnes of Ukrainian grain and food products (as of 26/11). An additional 1 billion Euro has been mobilised by the EU and financial institutions (EIB, EBRD, and World Bank) to boost their capacity [EC].

The Black Sea Grain agreement has been extended for a period of 120 days after some procrastination from Russia. Ukraine ships almost 75% of its agricultural exports through

the ports on the Black Sea. About half of those exports go out through the 3 ports covered by the deal [IFPRI]. Grain exports have more than doubled from pre-agreement levels, although they are still 50% below volumes from the same period in 2021 [World Bank].

The deal has facilitated the shipment of more than 11 million tons of corn, wheat, sunflower oil and related products to 38 countries (by the end of November) [OCHA]. Both European and MENA countries have received roughly the same proportions of maize exports as in 2021. Meanwhile, some of the poorest countries, in particular in sub-Saharan Africa (SSA), have received the same share as last year in wheat exports. In addition, about 150,000 tons of wheat has been exported through the World Food Programme to poor countries in the Horn of Africa and to Afghanistan [IFPRI].



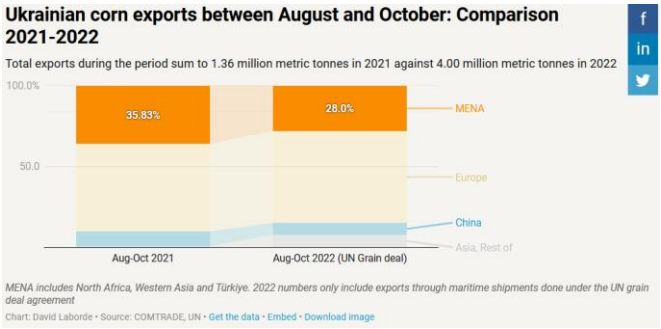
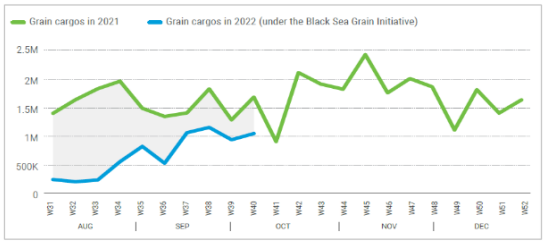


Figure 13: Weekly Volume of Grain Shipped from Ukrainian Ports, 2021 vs 2022, Millions of Tonn



Source: UNCTAD, October 20, 2022

[IFPRI] notes however that clearing times increased from an average of 9 days in September between departure from Ukrainian ports to the finalized inspection in Türkiye, to an average of 16 days in October, leading to an increased backlog of ships.

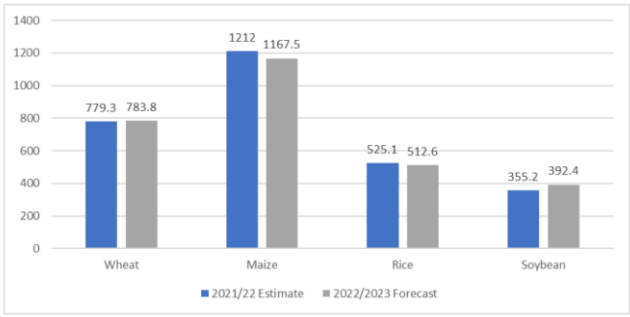
Several sources [UN, IFPRI, AMIS] stress that the resumption of Ukrainian exports has significantly eased pressure on markets. Future prices for wheat and maize increased 5% and 2%, respectively, after Russia's October 29 announcement, suggesting that world food prices will face further upward pressure if the deal is not renewed [World Bank]. [World Bank] notes that geopolitical risks differ from traditional shocks in how they affect international markets. Grain markets driven by geopolitical factors tend to overestimate rumors and headlines, which increases risk premiums and uncertainty.

Impact on production and exports from other countries

[IFPRI] analyses that together Brazil and Argentina have managed to compensate for the decline in exports from Ukraine, Canada, and the U.S. to the MENA countries, and that a similar shift took place in markets in SSA: the share of wheat exported from Mercosur countries to SSA jumped from 4% to 12% in the first six months of 2022 compared to the same period in 2021, and MENA's share doubled from 9% to 17%.

Global grain supplies are expected to tighten in 2022-23 with a further drop in global stock. While global wheat supplies are expected to increase marginally (significant harvest recoveries in Canada and the Russia Federation), supplies of maize and rice are projected to decline by 5% and 2%, respectively. The shortfall reflects lower production in the US and the EU (maize) as well as in China and India (rice). By contrast, supplies of edible oils are projected to increase by 4% this season, with most gains coming from palm, rapeseed, and soybean oils [World Bank, FAO, IFPRI, AMIS].

Figure 4: Global Commodity Production Estimates



Source: AMIS Market Monitor, November 3, 2022

As in previous episodes of high food prices, concern about shortages and inflation creates incentives for governments to implement export restrictions. The share of traded calories that are restricted due to ban or licensing or tax has reduced to 6.98% in October 2022, a slight decrease by 0.2 percentage points from September 2022 (17 countries maintain some kind of food export ban). These measures disrupt global trade flows, increase market tension, and raise prices. They have as well negative effects on producer incentives by reducing domestic producer prices [IFPRI].

Impact on the fertiliser market and fertiliser use

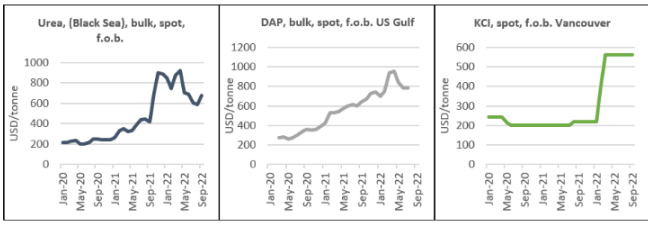
Impact on the fertiliser market

International fertiliser benchmark prices began gathering momentum in 2020 -in tandem with energy price- and then soared in mid-2021 in response to restrictions on fertiliser exports imposed by china, which is a major player in this market [IFPRI, AKADEMIYA2063].

The most notable increases have been registered for [WTO/FAO]:

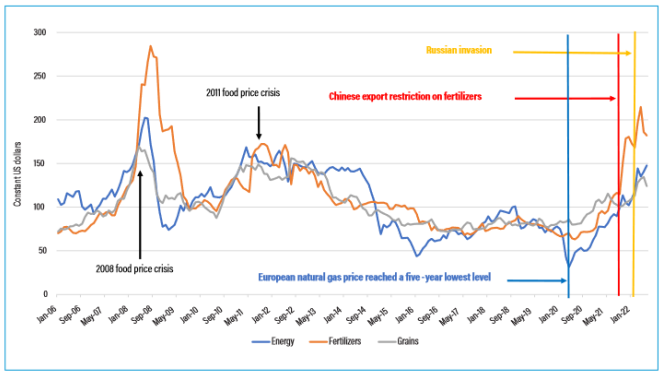
- Nitrogen (N) fertiliser, with nominal prices of N-urea having risen more than threefold since the beginning of 2020;
- Prices for diammonium phosphate (DAP), a key composite P-fertiliser, have also almost trebled;
- Potash (K-fertiliser), with spot price of Potassium Chloride (KCl) soaring by 150% in March 2022.

Figure 1: Spot price trends for key N, P and K fertilizers, Jan 2020 to Sep 2022



Source: Index Mundi.

Figure 1.4 Real prices for food, fertilizer, and energy, 2006–2022



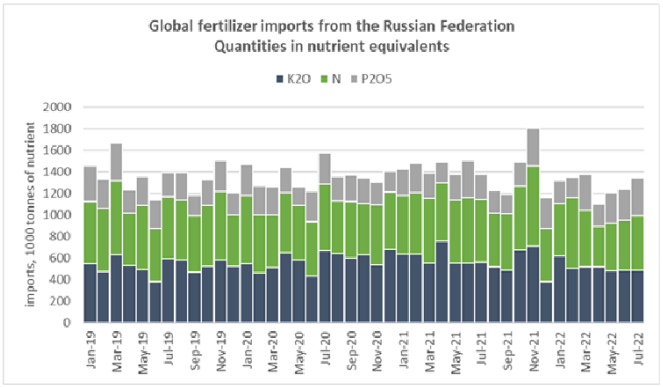
Source: Bouët, Laborde, and Traoré (2022).

Fertiliser prices are determined by the interplay of supply and demand. On the supply side, (i) high and volatile energy prices, (ii) disruptions in trade and high transportation costs, and (iii) export restrictions; while on the demand side, (iv) subsidies and (v) high crop prices [WTO/ FAO].

The market for nitrogenous fertiliser is increasingly supply-constrained, as numerous production plants faced with soaring prices for the key input of natural gas, have ceased or reduced output in view of lower margins. Current estimates by the International Fertiliser Association (IFA) suggest that 50-70% of European nitrogen fertiliser plants produce at curtailed capacity [WTO/ FAO]. From a status of exporter of nitrogen, Europe may become a net importer, adding pressure on the market [Maximo Torero – FAO].

The UN has been engaged for weeks in intensive closed-door negotiations aimed at enabling Russia to pipe large amounts of ammonia gas, a key ingredient in nitrate fertiliser, across a battle line through Ukrainian territory to the Black Sea [Devex, Reuters].

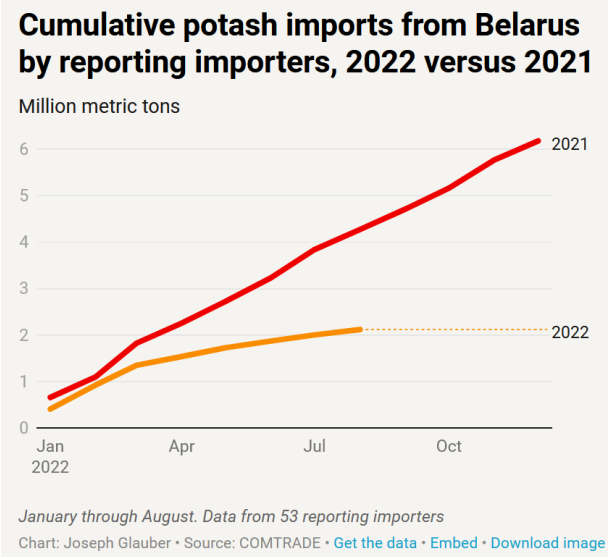
Looking at fertiliser exports from the Russian Federation, [WTO, FAO] observe no significant reduction in volumes during the first 7 months of 2022.



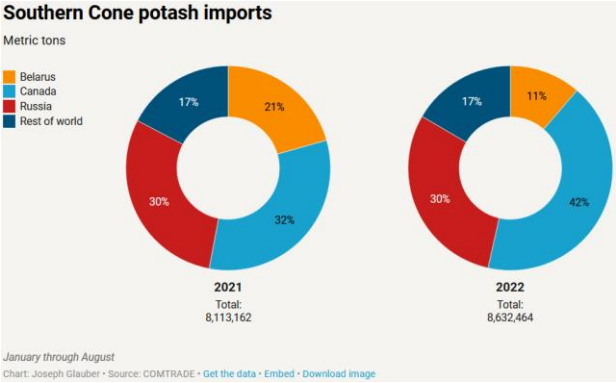
Note: Exports from the Russian Federation are the sum of the imports reported by all of its trading partners since no export data are available for the Russian Federation since January 2022.

Source: FAO calculations based on Trade Data Monitor (TDM) data.

However, [WTO/FAO, IFPRI] note that exports of potassic fertiliser from Belarus have shrunk considerably, only Brazil and China buying significant quantities from that country.



The [EC] has clarified that for potassium (potash), imports from Russia are limited to a quantitative maximum corresponding to the same level of imports in the period 2017-2021. This was introduced to avoid circumvention from Belarus as these products are subject to an import ban. [IFPRI] analyses that some affected importing countries have managed to find alternative sources (e.g. Southern Cone countries).



While fertiliser prices fell in the third quarter of 2022 – in line with energy price – they are still two and half times their 2019 level and their affordability is at its lowest since 2008/09 [World Bank, UNCTAD].

Regarding energy price, after surging by about 60% in 2022, they are projected to decline 11% in 2023 but will still remain 75% above their average over the past five years [World Bank].

Impact on fertilisers use

While 50% of the global food production today depends on production systems relying on the use of mineral fertilisers [EC], and the fertiliser affordability being at its lowest since 2008/09 [World Bank], the key issue remains to assess to what extent this could reduce cropped area, fertiliser application, and crop yields in 2022/2023.

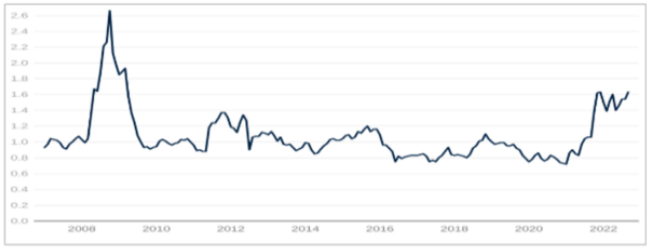
Past crises (2008/09) show that such reductions in fertiliser applications are not uncommon [FAO/ WTO], and the [UN] warns that fertiliser shortages this year could result in a production loss next year of 66 million tons of staple crops (maize, rice and wheat). [World Bank] provides the examples of Honduras where one in five farmers already indicated having reduced the planting area for maize, beans, sorghum, and rice.

[AKADEMIYA2063/IFPRI] explain that the increase in the price of fertiliser may be offset by the increase in the price of outputs (wheat, soybeans, corn, vegetable oils). Even if the increase in fertiliser prices is greater than the increase in crop prices, farmers' unitary margin can be preserved, thus maintaining their profitability and their incentive to produce. On average over the past two years, fertiliser prices have risen by 233% and grain prices by 65%. This indicates a ratio of 28% (65% divided by 233%). As the value of fertiliser costs in the price of cereals is generally less than 28%, the unit margin of cereal farmers should be preserved. The same report notes however, that in Africa the price of local cereals is relatively stable, reducing farmers' unitary margin.

While farmers in developed regions are likely to maintain high levels of fertiliser use, in poorer countries, fertiliser use could decline. This occurred in 2009, for instance, when the use of N-fertiliser in Africa declined by 13% relative to 2008 [WTO/FAO].

Local price of fertilisers are also impacted by the cost of fuel and logistics in the domestic fertiliser supply chain, from port to farm, which has doubled in some developing countries (e.g. Central American countries) [World Bank].

Figure 7: Fertilizer Affordability Index



Source: World Bank

Note: ratio of World Bank's fertiliser price index to food price index. A higher ratio represents lower fertiliser affordability, and vice versa. Last observation in September 2022.

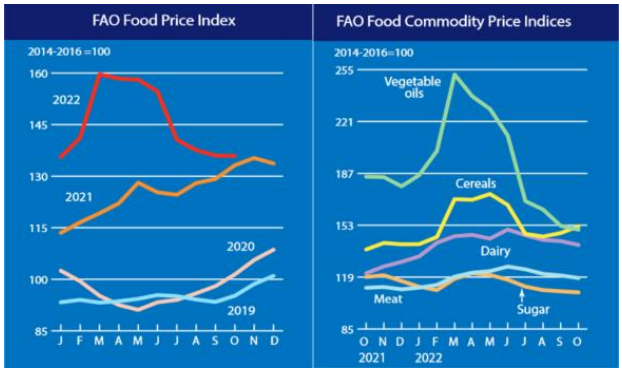
There are rising concerns that many African countries will not be able to access international fertiliser markets without external support. Africa only accounts for 3-4% of global fertiliser use, of which approximately 50% is dedicated to cash crops [WTO/FAO].

This sharp increase in fertiliser prices could also create future imbalances in the grain markets with farmers shifting to crops less intensive in fertilisers (e.g. soybeans in North America) to the detriment of crops more intensive in fertilisers (e.g. wheat, rice) [AKADEMIYA2063/IFPRI]. Further research is needed to better assess how such decrease in fertilisers affordability translates into total cost of production increase in different regions of the world and ultimately reduction of inputs and/or shift in production or farm practices [WTO/FAO].

Impacts on agricultural commodity prices and food price inflation

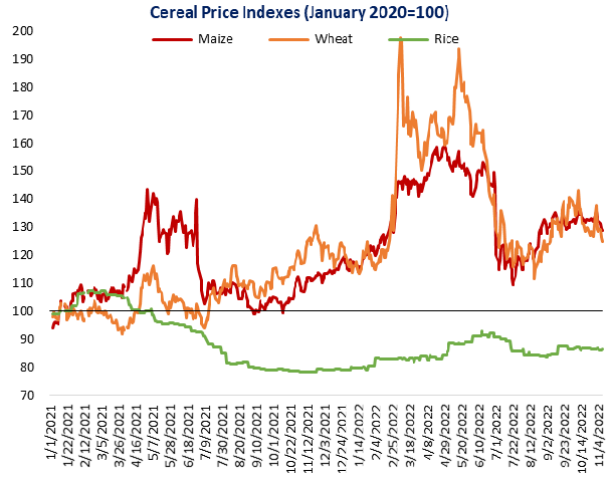
Impact on agricultural commodity prices

The FAO Food Price Index (FFPI) averaged 135.9 points in October 2022, virtually unchanged from September, with the price indices of all the covered commodity groups, except cereals, down month-on-month. With the latest updates, the FFPI has dropped 23.8 points (14.9%) from its peak in March this year, but remained 2.7 points (2.0%) above its value in the corresponding month last year.



Uncertainty regarding the Black Sea Grain Initiative and production concerns in some major exporting countries (e.g. wheat in the US) were the main drivers behind the month-on-month increases for both wheat and maize world prices. International rice prices also rose in October [FAO].

Wheat and maize prices remain 25% and 29% higher, respectively, than in January 2021. Rice prices were 10% higher year on year but 14% lower than in January 2021 [World Bank].



Food prices are expected to fall 5% in 2023 before stabilizing in 2024. The forecasts are subjected to numerous risks. A key risk is the likelihood of higher-than-expected input prices or energy supply disruptions. Also, increased climate variability, restrictive trade measures and biofuels policies could also push food prices higher. Lastly, a key risk to the forecast is an extension of the UN-backed agreement that allows grain exports from the Black Sea [World Bank].

Despite decreases in global food prices since their peak in April, in domestic currency terms, food prices remain elevated due to currency deprecations, and further tightening of monetary conditions, along with steeper appreciation of the U.S. dollar, could push domestic prices even higher [World Bank].

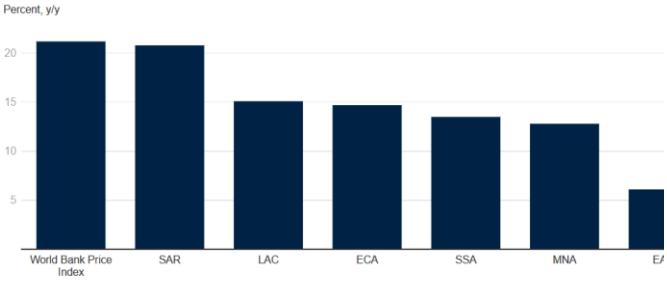
At USD 1.94 trillion, the global food import bill is forecast to reach another record in 2022 (a 10% increase over the record level of 2021). The aggregate food import bill for the group of low-income countries is expected to remain almost unchanged even though it is predicted to shrink by 10% in volume terms, pointing to a growing accessibility issue for these countries [FAO].

Impact on food price inflation

The combination of elevated commodity prices, increasing production costs, and persistent currency depreciations translates into higher domestic food price inflation in many countries. Between July and October 2022, 83.3% of low-income countries, 90.7% of lower-middle-income countries, have seen inflation levels above 5%, with many experiencing double-digit inflation. In real terms, food price inflation exceeded overall inflation in 90% of the 156 countries for which data are available [World Bank].

Food price inflation in South Asia averaged 20% in the first three quarters of 2022 (y/y); the average for most other regions was 14%. The exception was the East Asia and Pacific region where food price inflation averaged just 6%, in part due to stable rice prices, a key staple here [World Bank]. Food price inflation exceeds 15% in almost half of African reporting countries [ETTG].

Domestic food price inflation and world food prices



Note: EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, MNA = Middle East and North South Asia, SSA = Sub-Saharan Africa; Food inflation for each country is based on the latest month from January to September 2022 for wh component of the Consumer Price Index (CPI) and overall CPI data are available.

Source: World Bank.

Table 1: Food Price Inflation: Top 10 List

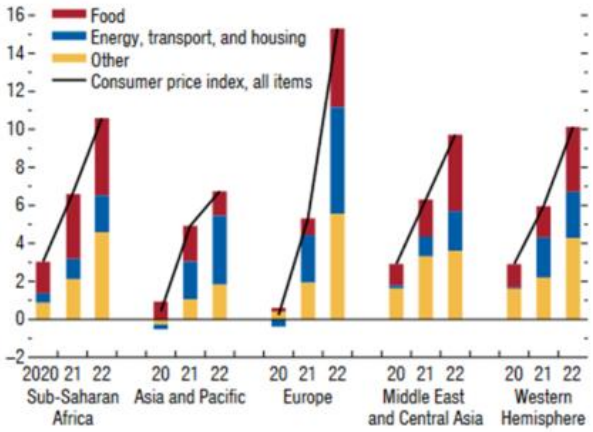
Country	Nominal food inflation (%YoY)	Country	Real Food (%Y
Zimbabwe	321	Zimbabwe	52
Lebanon	208	Lebanon	46
Venezuela	158	Iran	32
Türkiye	99	Sri Lanka	20
Argentina	87	Rwanda	17
Sri Lanka	86	Hungary	15
Iran	84	Colombia	15
Rwanda	41	Uganda	15
Suriname	40	Türkiye	13
Lao PDR	39	North Macedonia	13

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

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

Overall, international inflation has moved higher, propelled by further increases in consumer energy and food prices, as the war has led to a broadening of inflationary pressures. Countries with diets tilted toward foods with the largest price gains, especially wheat and maize; those more dependent on food imports; and those with diets including sizable quantities of foods with large pass-throughs from global to local prices have suffered most [IMF].

Figure 1.9. Inflation Driven by Food and Fuel
(Annualized percent)



Sources: IMF, Consumer Price Index database; and IMF staff calculations.
Note: Figure shows inflation contributions from broad categories. Contributions are computed first by country, annualized over available months in cases in which data are partial (for example, for 2022). The figure shows both the median contributions and aggregate inflation rate for each region.

[World Bank] analyses that food consumer price inflation increases about 0.3 percentage point in response to a 1 percentage point change in international food prices after about 10–12 months. The pass-through, which is limited by the cost share of food commodities in food consumer prices, is about 30% for the average country. However, the pass-through is larger for emerging market economies than for advanced economies, in part because food commodities have a higher cost share in the former group.

For emerging market and developing economies, inflation is expected to rise from 5.9% in 2021 to 9.9% in 2022, before declining to 8.1 % in 2023. However, the outlook for domestic food price inflation remains uncertain, as global food prices could surprise again on the upside, given the high uncertainty about the impact of the war in Ukraine and weather events and the delayed effect of high fertiliser prices [IMF].

Macroeconomic impact in developing countries

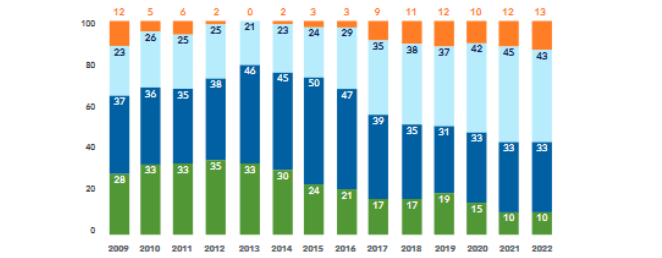
Public debt and broader fiscal risks have increased significantly since the onset of the COVID-19 pandemic and have been worsened by the war in Ukraine. For low-income countries, the increase in public debt was from 43.6% to 49.8% of GDP (IMF 2022). Central banks are now tightening monetary policy to fight inflation, and interest rates are rising. This has major fiscal implications for countries with elevated debt levels, which face increasing debt service costs [World Bank].

[IMF] notes that this may add pressure as well to borrowing costs for emerging market and developing economies. With a larger import bill, strained fiscal budgets, and limited fiscal space, any loss of access to short-term funding markets will have significant economic and social consequences. If sovereign spreads[1] increase further, or even just remain at current levels for a prolonged period, debt sustainability may be at risk for many vulnerable emerging market and developing economies. [UNDP] stresses that 19 developing economies are now paying more than 10 percentage points

[1] the difference between Bond yields issued on international markets by the country in question versus those offered by governments with AAA ratings

over US Treasury bonds to borrow money on capital markets, effectively shutting them out of the market. About 60% of low-income countries, and close to 30% of emerging market economies, are in or near debt-distress and running out of fiscal space [UNDP].

Figure 1.5
Rising Debt Risks in Low-Income Countries
(percent of DSSI countries with LIC DSAs)
The proportion of countries in debt distress, or at high risk of debt distress, has doubled to 60 percent from 2015 levels.



Source: LIC DSA database.
Note: As of March 31, 2022. DSSI – Debt service suspension initiative; LIC – Low-income countries; DSAs – Debt sustainability analyses.

For countries with energy and food subsidy schemes - developing economies spend roughly 3% of their GDP on average on subsidies-, these extreme price movements can result in significant increases in the cost of these subsidies [World Bank].

Recent [World Bank] growth projections for developing economies suggest the war will contribute to a cumulative GDP loss of about 3% in 2022 and 2023.

Small states and African economies are most likely to combine high fiscal vulnerability to at least one external economic shock with low fiscal space. Many countries display vulnerability to multiple external economic shocks, and they are likely to experience extraordinarily strong fiscal pressures and needs for external assistance in the current environment [World Bank].

TABLE 2 - Countries That Combine High Fiscal Vulnerability to External Economic Shocks with Limited Fiscal Space

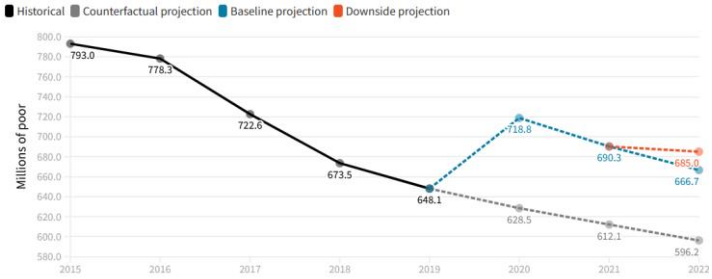
Region	Countries
AFR	Cape Verde, Eritrea, Malawi, Mozambique, Sao Tome and Principe, Seychelles, Zambia, Zimbabwe
EAP	Mongolia, Palau
ECA	Armenia, Belarus, Montenegro, Tajikistan
LAC	Antigua and Barbuda, Dominica, El Salvador, Grenada, Saint Lucia, Saint Vincent and the Grenadines, Suriname
MENA	Lebanon, Libya, Tunisia
SAR	Bhutan, Maldives, Sri Lanka

Impact on poverty, food security and nutrition

Impact on poverty

[UNDP] has estimated the potential effects of food and energy price inflation on household welfare with the devastating result that 71 million people could be pushed into poverty in 2022 with clear hotspots in the Caspian Basin, the Balkans, and Sub-Saharan Africa (particularly the Sahel).

After having calculated that the number of people living below the extreme poverty line, on less than $2.15 per day, rose by over 70 million in 2020 due to the COVID-19 pandemic, the [World Bank] also presents a downside scenario for 2022 with as many as 685 million people to be living in poverty. This is equivalent to 89 million more poor people than was expected before the pandemic.



Source: Mahler © Yonzan © Lakner (2022) , World Bank (2022), Poverty & Inequality Platform (PIP)
Note: Extreme poverty is measured as the number of people living on less than $2.15 per day. 2019 is the last year with official global poverty estimates. 'Counterfactual projection' utilizes Global Economic Prospects (GEP) growth forecasts from before the COVID-19 pandemic. Baseline and downside projections utilize distribution-sensitive projections for 2020 using estimates from Mahler, Yonzan, and Lakner (2022) and distribution-neutral projections for 2021 and 2022 using June 2022 GEP. Baseline scenario distributes the impacts of the COVID-19 pandemic, rising inflation, and the conflict in Ukraine equally to all households. Downside scenario includes the disproportionate impact of rising food prices on the bottom 40% compared to the top 60% over the baseline scenario. Official poverty estimates are available for all regions up to 2019, and for the Middle East & North Africa up to 2018. Regions are categorized using PIP definition.

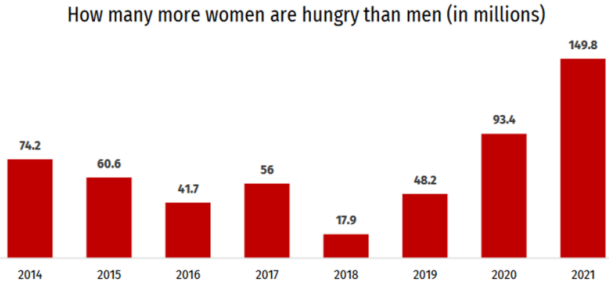
[UNDP] analyses as well that for the first time in 32 years, the Human Development Index (HDI) has declined globally for two years in a row. Human development has fallen back to 2016 levels, reversing much of the progress towards the SDGs since the 2030 Agenda was adopted in 2015. This reversal is nearly universal as over 90% of countries registered a decline in their HDI score in either 2020 or 2021, and more than 40% of countries registered declines in both years, signaling that the crisis is still deepening for many.

Impact on food security and nutrition

It is projected that the number of people subject to severe food insecurity will exceed 200 million in 2022, with populations most exposed to food crises typically living in countries facing extreme weather events and conflict, especially in Sub-Saharan Africa [World Bank]. Indeed, [FAO] predicts that a further 11 to 19 million people will experience chronic hunger by 2023**,** on top of the existing 193 million people facing food insecurity, and at least 47 countries are expected to fall short of the Zero Hunger target.

Fourteen out of 19 countries classified as early warning hunger hotspots by WFP and the FAO during the outlook period October 2022 to January 2023 are in Africa [ETTG]. At least, 123 million people in SSA will be in food crisis by the end of the year [IMF]. Record-breaking levels of acute food insecurity are being recorded in the eastern Horn of Africa, which has experienced a relentless series of droughts over the last two years [FEWS NET].

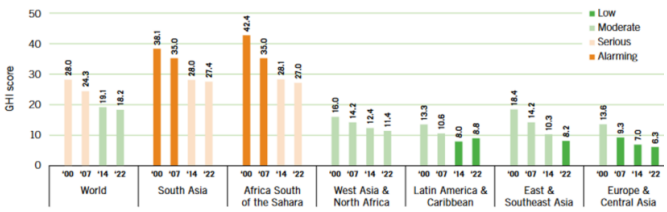
[CARE] finds that across 109 countries, as gender inequality goes up, food security goes down. Between 2018 and 2021, the number of hungry women versus hungry men grew 8.4 times, with a staggering 150 million more women than men hungry in 2021.



The 2022 Global Hunger Index, which combine 4 indicators - undernourishment, child wasting and stunting, child mortality- shows that hunger is serious in both South Asia and SSA. South Asia has the highest child stunting rate and by far the highest

child wasting rate of any world region. In SSA, the prevalence of undernourishment and the rate of child mortality are higher than in any other world region. There are, however, also signs of progress as since 2000, 32 countries have seen their GHI scores decline by 50% or more [Welthungerhilfe/Concern Worldwide].

FIGURE 1 **GLOBAL AND REGIONAL GHI SCORES, 2000, 2007, 2014, AND 2022**



According to the FAO, a healthy diet is one that meets daily energy needs as well as requirements within the food and dietary guidelines created by the country. The cost of a healthy diet is 60 percent higher than the cost of the nutrient adequate diet, and almost 5 times the cost of the energy sufficient diet in 2017 [FAO]. The (un)affordability is measured by comparing the cost of a healthy diet to income levels in the country. If the cost exceeds 52% of an average household's income, the diet is deemed unaffordable. In 52 countries, more than half of the population cannot afford a healthy diet. The majority of these are in Africa. In many countries across SSA, more than 90% of the population cannot afford a healthy diet [WEF].

	Cost of a healthy diet in 2020		People unable to afford a healthy diet in 2020		
	Cost (USD per person per day)	Change between 2019 and 2020 (percent)	Percent	Total number (millions)	Cha 201
WORLD	**3.54**	**3.3**	**42.0**	**3 074.2**	
AFRICA	**3.46**	**2.5**	**79.9**	**1 031.0**	
Northern Africa	3.57	-0.7	57.2	136.7	
Sub-Saharan Africa	3.44	2.9	85.0	894.3	
Eastern Africa	3.37	3.4	87.4	360.8	
Middle Africa	3.34	2.2	85.4	152.2	
Southern Africa	3.84	3.3	65.5	44.2	
Western Africa	3.45	2.7	85.7	337.1	
ASIA	**3.72**	**4.0**	**43.5**	**1 891.4**	
Central Asia	3.11	4.0	21.5	7.5	
Eastern Asia	4.72	6.0	11.0	174.4	
South-eastern Asia	4.02	4.2	53.9	347.2	
Southern Asia	3.81	4.0	70.0	1 331.5	
Western Asia	3.22	2.9	17.8	30.9	
LATIN AMERICA AND THE CARIBBEAN	**3.89**	**3.4**	**22.5**	**131.3**	
Caribbean	4.23	4.1	52.0	13.9	
Latin America	3.56	2.5	21.0	117.3	
Central America	3.47	2.1	27.8	43.1	
South America	3.61	2.7	18.4	74.2	
OCEANIA	**3.07**	**3.6**	**2.7**	**0.7**	
NORTHERN AMERICA AND EUROPE	**3.19**	**3.2**	**1.9**	**19.8**	
COUNTRY INCOME GROUP					
Low-income countries	3.20	2.7	88.3	454.2	
Lower-middle-income countries	3.70	2.9	69.4	2 230.7	
Upper-middle-income countries	3.76	2.9	15.2	374.0	
High-income countries	3.35	4.0	1.4	15.3	

More than 3 billion people were unable to afford a healthy diet in 2020. Image: UN.

On a more positive side, [World Bank] finds from 300 different poverty episodes that increases in international food prices are correlated with reductions in poverty over the next one to five years. The reductions are attributed to the agricultural supply response and, to a lesser extent, to the wage response to higher food prices. This finding points to the need to provide households with quick, time-bound, targeted support immediately after a price crisis. It also points to the need to remove constraints to agricultural investments that will enable realization of the positive impacts of high food prices on production [World Bank].

International response

The EU is mobilising up to 8 billion euros over the next 3 years for food assistance and to increase local food production [EC].

The [World Bank] is implementing a $30 billion food security response over a period of 15 months ending September 2023, including $12 billion of new projects, the to help vulnerable households cope with the shock, support farmers to increase production, improve nutrition outcomes, and build resilient food systems. IFC is also supplementing this with an additional $6 billion under a global platform for private sector interventions.

The US has provided more than $11 billion to respond to the global food crisis, including nearly $8.6 billion in humanitarian assistance [USAID].

Policy Recommendations

Among the most recently discussed policy recommendations:

Agricultural support measures

CGIAR called upon G20 members to rethink present agricultural support measures, which cost around $800 billion per year in fiscal resources but are not very effective in improving food system outcomes. CGIAR and World Bank research has showed that those resources could be deployed much more effectively to finance necessary investments in food systems R&D and provide incentives to farmers and consumers, by motivating them to produce and consume in more sustainable, healthy and resilient ways.

Social protection

In low- and middle-income economies, just 20% of subsidy spending reaches the poorest people. In contrast, spending on direct transfers -especially cash transfers- are usually better targeted and also much more effective in helping the poor. Nearly two-thirds of the funds that developing economies spend on cash transfers actually benefit the poorest people [World Bank].

Expanding the coverage of social protection schemes such as cash or in-kind transfers will allow more people to access diets sufficient in energy and nutrients [World Bank]. The [World Bank] Poverty and Shared Prosperity 2022 report suggests mobilizing revenue without affecting the poor by implementing property and carbon taxes and making personal and corporate income taxes more progressive.

Fertlisers

[WTO/FAO] recommend i) minimizing disruptions to global trade in fertilisers, ii) ensuring access to fertilisers for the most vulnerable countries, iii) increasing market and policy transparency, and iv) improving soil fertility and accelerating innovation for more efficient use of fertilisers.

According to [FAO], more importance should be given to soil health: of the 18 nutrients essential to plants, 15 are supplied by soils when they are healthy.

Debts

[IMF] recommends addressing growing government debt distress caused by lower growth and higher borrowing costs and this requires a meaningful improvement in debt resolution frameworks.

List of documents analyzed

[Agence Europe] At G20, EU shows its determination to support developing countries and accuses Russia of 'weaponising' food

[AMIS] Market Monitor – November 2022

[AKADEMIYA2063/IFPRI] Africa Agriculture Trade Monitor 2022

[CARE] Food Security and Gender Equality: A synergistic understudied symphony

[CGIAR] G20 Agriculture Ministers Underscore Importance of Food System Sustainability, Open and Fair Trade, and Digital Innovations as Long-Term Food Crisis Responses

[DEVEX] Fertilizer diplomacy: How ammonia could hobble Black Sea grain deal

[ETTG] The implications of global multi-crises for EU-Africa relations in the food security domain

[European Commission] Statement by President von der Leyen at the G20 Summit session on food and energy security

[European Commission] Factsheet EU-Ukraine Solidarity Lanes – Lifeline for Ukrainian economy, key for global food security

[European Commission] Questions and Answers: Ensuring the availability and affordability of fertilisers

[European Commission] Statement by President von der Leyen at the "Grain from Ukraine" Summit

[European Commission] Food security: EU contributes €100 million to IMF's Poverty Reduction and Growth Trust to support vulnerable African, Caribbean and Pacific countries

[European Union] EU Statement – UN General Assembly 5th Committee: Global Food Insecurity revised estimates

[European Union] The fight continues against the food insecurity that Russia's war is creating

[FAO] Food Outlook November 2022

[FAO] Food Price Monitoring and Analysis (FPMA) Bulletin #9: November 2022

[FAO] Alarming signs as the global food import bill set to rise to nearly US$2 trillion due to higher prices

[FAO] Benchmark for world food prices was broadly steady in October

[FAO] Ukraine: FAO reinforces its presence to optimize technical and humanitarian assistance

[FAO] Ukraine Rapid Response Plan, March - December 2022 - Supporting agricultural production to bolster food availability and access

[FAO] World Food Forum calls to keep trade in fertilizers open and increase their affordability and accessibility for farmers

[FAO] World cereal production, utilization, and stocks forecasts lowered from last month

[FEWS NET] UNPRECEDENTED SIXTH CONSECUTIVE SEASON OF DROUGHT FORECAST IN HORN OF AFRICA: HUNGER SURGES AS HUMANITARIAN EFFORTS REMAIN UNDERFUNDED

[IFPRI] Food and Fertilizer Export Restrictions Tracker

[IFPRI] Can agricultural exports from Southern Cone countries make up for global supply disruptions arising from the Russia-Ukraine war?

[IFPRI] How sanctions on Russia and Belarus are impacting exports of agricultural products and fertilizer

[IFPRI] Suspension of the Black Sea Grain Initiative: What has the deal achieved, and what happens now?

[IGAD] Communique during the IGAD Regional Ministerial Meeting on the Process of Strengthening, Adapting, and Accelerating National and Regional Efforts to Address Food Crises in East Africa

[IMF] WORLD ECONOMIC OUTLOOK - Countering the Cost-of-Living Crisis – October 2022

[OCHA] Russian Federation's Suspension of Participation in Black Sea Grain Initiative Risks Impacting Global Food Prices, Top Officials Tells Security Council

[OCHA] Black Sea Grain Initiative Vessel Movements

[Reuters] UN trying to get Russian ammonia to world through Ukraine

[Reuters] Analysis: India rice export curbs to end a decade of price stability

[SciDev.Net] Global starvation looms as food price rises intensify

[The Washington Post] Russia and Ukraine have renewed the U.N. grain deal. Is it working?

[TRADING ECONOMICS] Food Inflation - Africa

[UN] Statement attributable to the Spokesperson for the Secretary-General - on the shipment of fertilizer from Russian Federation producers

[UNCTAD] A trade hope: The role of the Black Sea Grain Initiative in bringing Ukrainian grain to the world

[UNCTAD] United Nations Security Council Briefing on the Black Sea Grain Initiative

[UNDP] United Nations Development Committee Statement

[UNDP] 50 percent of world's poorest need debt relief now to avert major systemic development crisis, warns UN Development Programme

[UNICEF] Child poverty across Eastern Europe and Central Asia soars by 19 per cent, as Ukraine war and rising inflation drive four million children into poverty

[USAID] The United States Announces Additional Funding to Deliver Ukrainian Grain to the World's Most Vulnerable

[WEF] Over half the global population can't afford a healthy diet

[WEF] World Food Day: What it is and why it's more important than ever

[Welthungerhilfe/ Concern Worldwide] 2022 Global hunger index: Food systems transformation and local governance

[WFP] First shipment of Russian fertilizer marks breakthrough in global supply crunch

[World Bank] New Dashboard to Track Food and Nutrition Security and Global Response

[World Bank] Food Security Update – November 10, 2022

[World Bank] Towards an informed, transparent, and accountable response for global food and nutrition security

[World Bank] Risks in global food markets

[World Bank] Commodity prices eased in October—Pink Sheet

[World Bank] Food prices eased but risks remain elevated

[World Bank] Food Security Update – October 27, 2022

[World Bank] Currency Depreciations Risk Intensifying Food, Energy Crisis in Developing Economies

[World Bank] Annual Meetings 2022: Development in Crisis

[World Bank] Global poverty in the 2020s is on a new, worse course

[World Bank] Food Security Update – October 13, 2022

[World Bank] From plant to fork: a rapid assessment of the fertilizer and food crisis in Central America

[World Bank] Averting fiscal crises in a deteriorating global economic environment

[World Bank] African Governments Urgently Need to Restore Macro-Economic Stability and Protect the Poor in a Context of Slow Growth, High Inflation

[World Bank] Correcting course to accelerate poverty reduction

[World Bank] Stepping up the fight against extreme poverty

[World Bank] Empower HER to address food and nutrition security in Africa

[World Bank] Fiscal Implications of the Deteriorating Global Economic Environment for EMDEs

[World Bank] Africa's Pulse, No. 26, October 2022: Food System Opportunities in a Turbulent Time

[World Bank] Poverty and Shared Prosperity 2022

[WTO/FAO] Global fertilizer markets and policies: a joint FAO/WTO mapping exercise