Food and Agriculture Organization of the United Nations

Rome, 2022

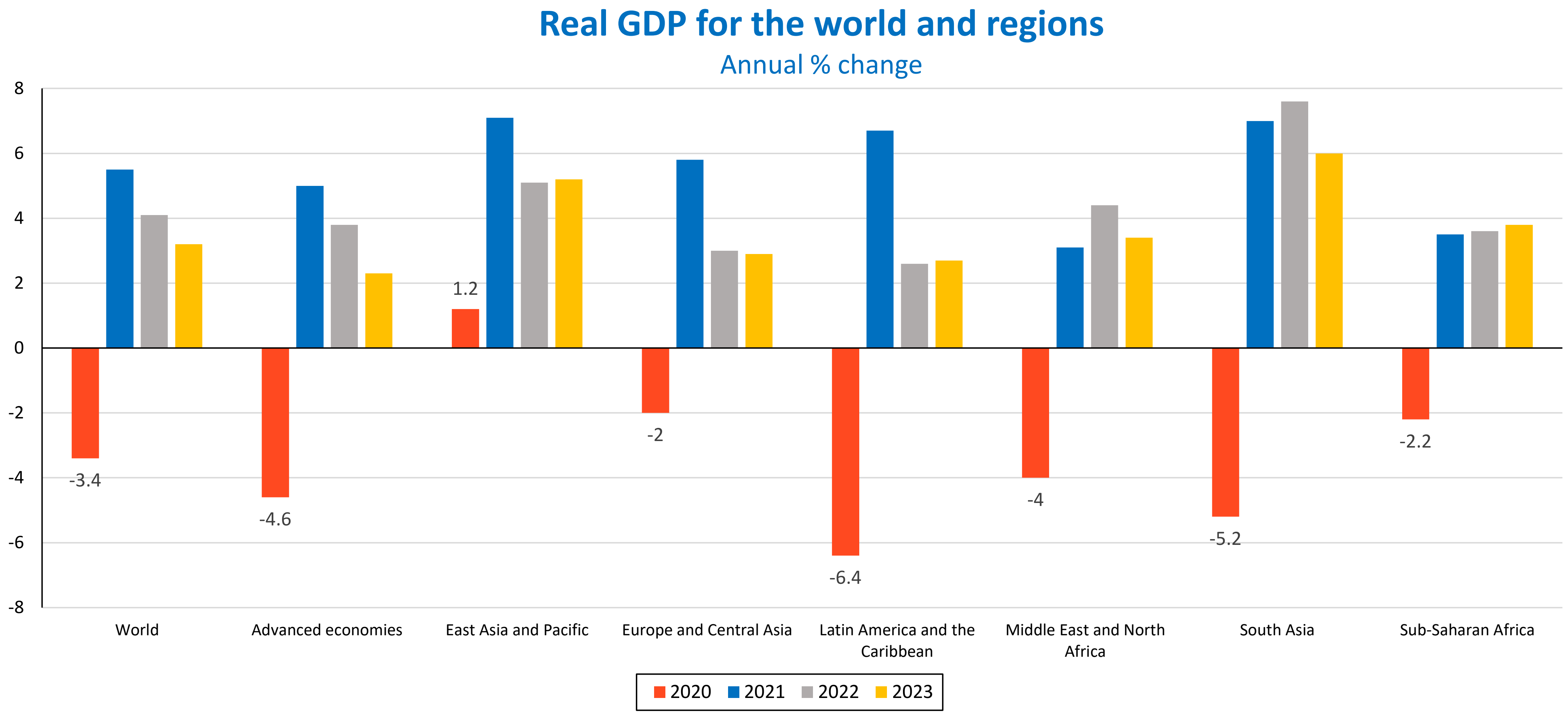
Technical Briefing to FAO Members on The impact of COVID-19 and the War in Ukraine on the Outlook for Food Security and Nutrition

Rome, Friday, 25 March 2022, 9:30 – 12:30

Overview

1. **Introduction**
2. **Where we stand**
    - Market structure and importance for world markets
    - Country dependencies
    - Prices
    - Trade
3. **The risks we face**
    - 10 major risk factors, global and local
4. **What we can do**
    - Action points
    - Policy recommendations

Uneven recovery from COVID-19

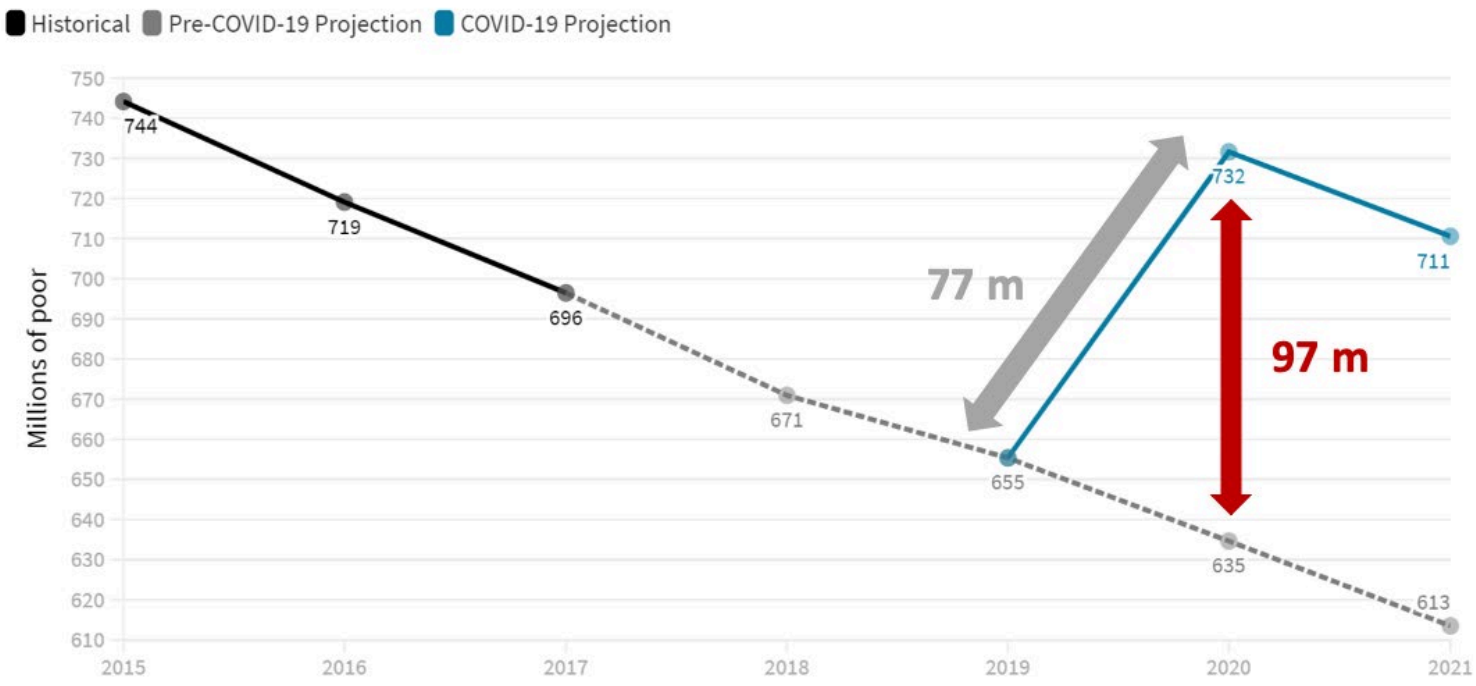


Note: Figures for 2021 are estimates, while figures for 2022 and 2023 refer to forecast

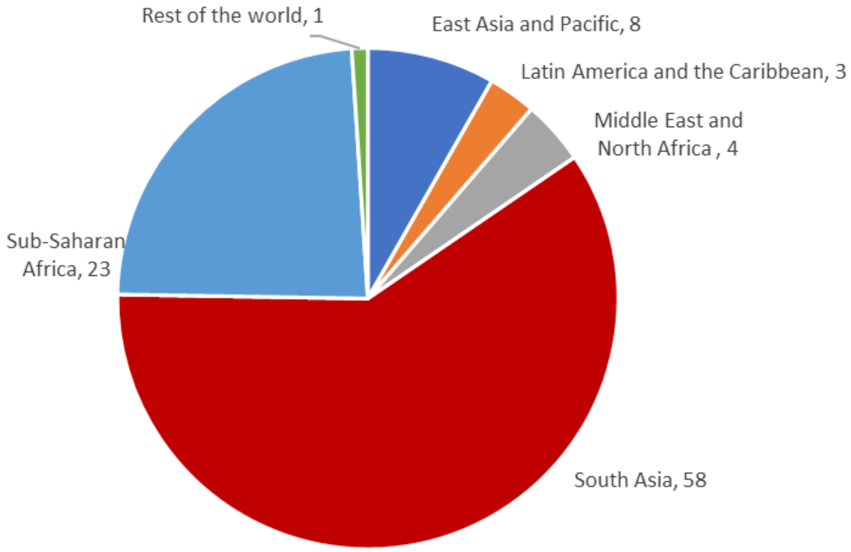
Source: World Bank. 2022. Global Economic Prospects, January 2022.

Extreme poverty rose for the first time in decades

Extreme poverty in the world, 2015-2021



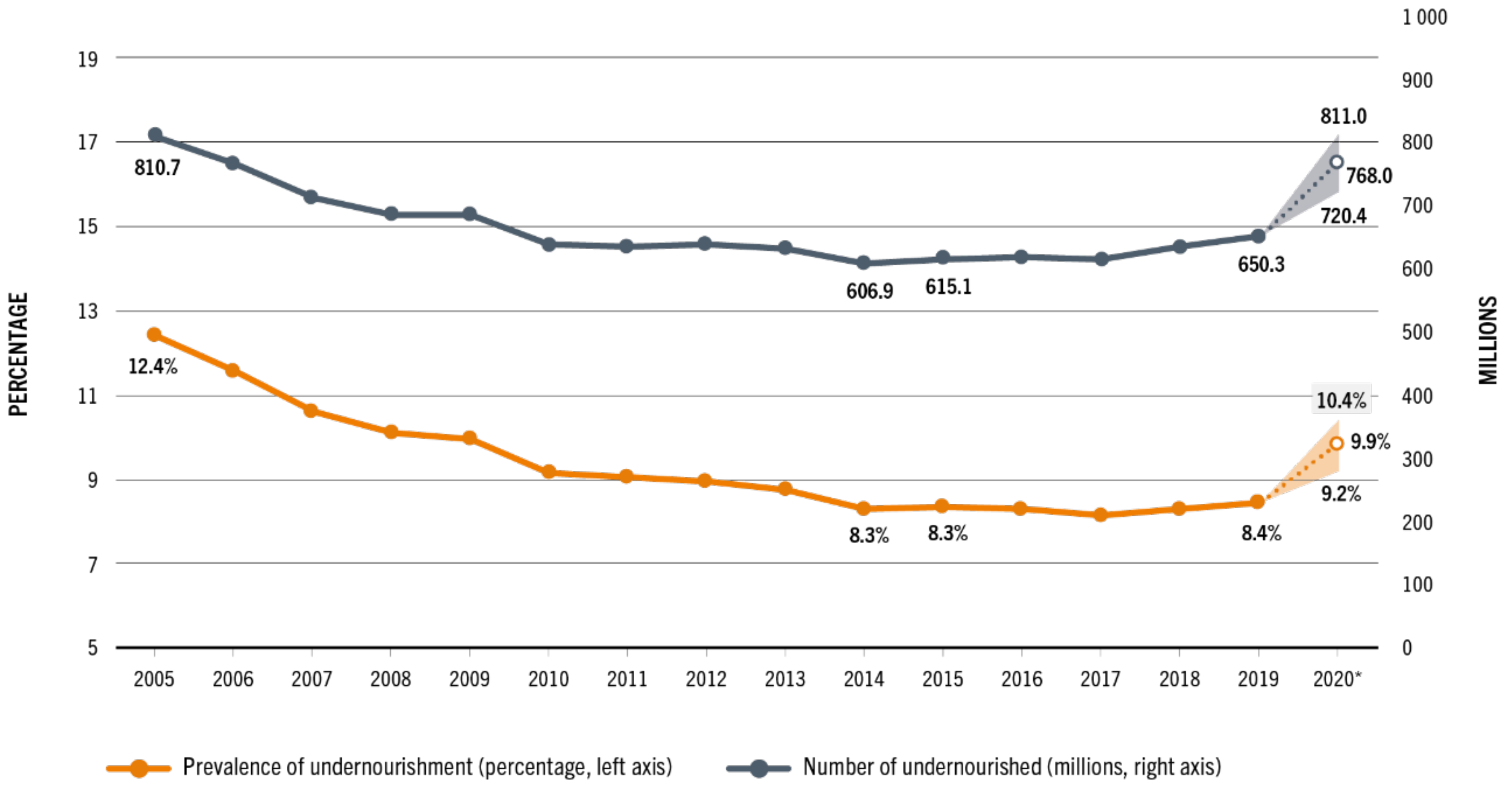
COVID-19-induced new poor by region, 2020



Note: Extreme poverty is measured as the number of people living on less than $1.90 per day. 2017 is the last year with official global poverty estimates.

Source: Gerszon, D. et al. June 2021.

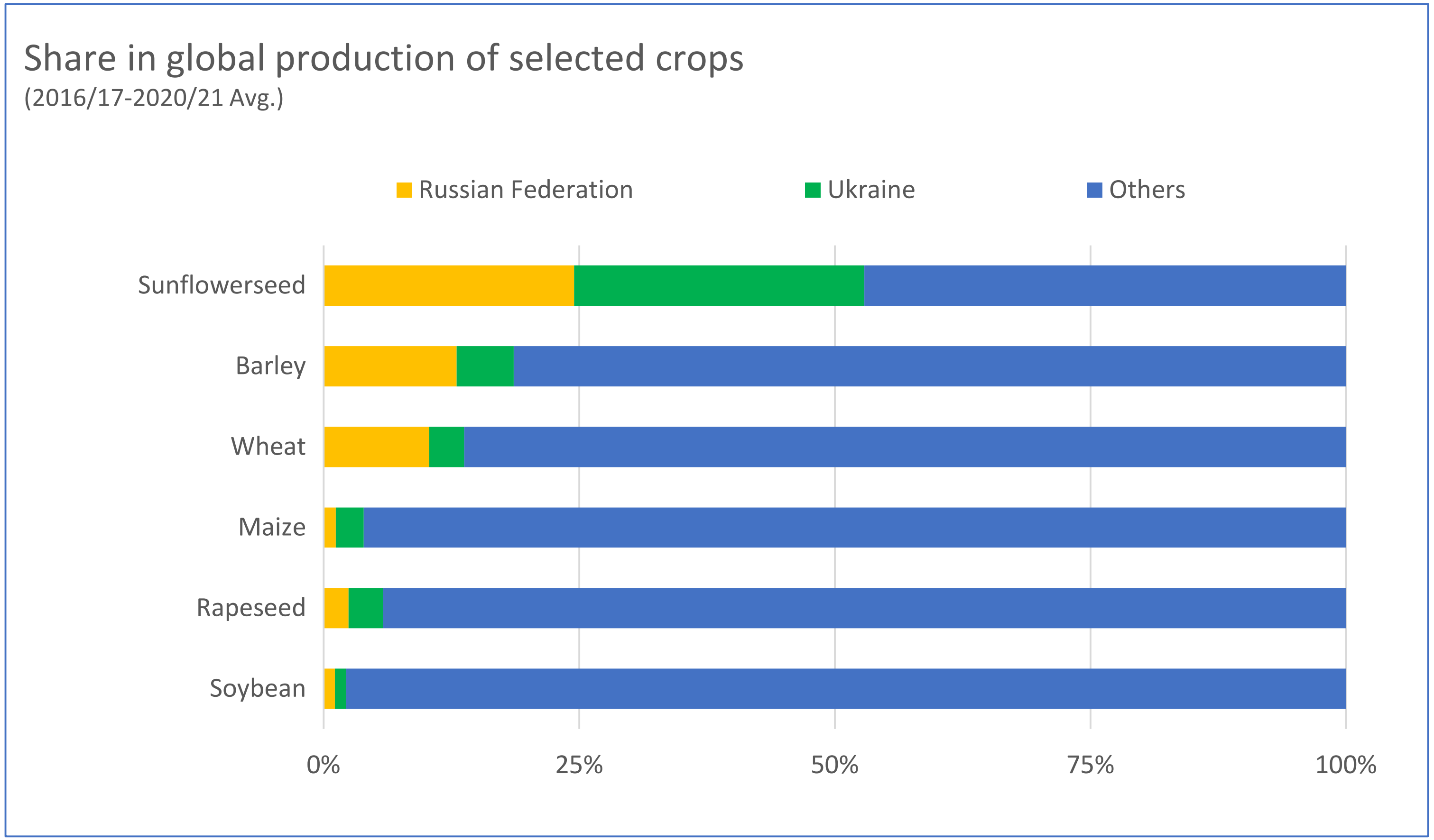
Global hunger shot up in 2020



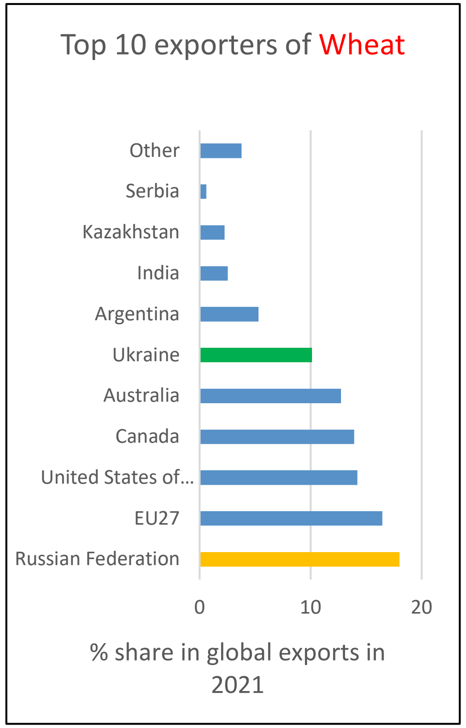
Source: FAO, IFAD, UNICEF, WFP and WHO. 2021. *The State of Food Security and Nutrition in the World 2021*.

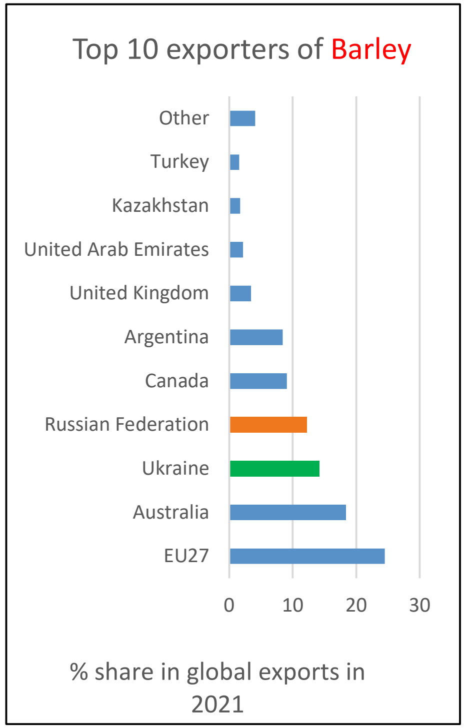
2. Where we stand:
Market structure and importance for world markets

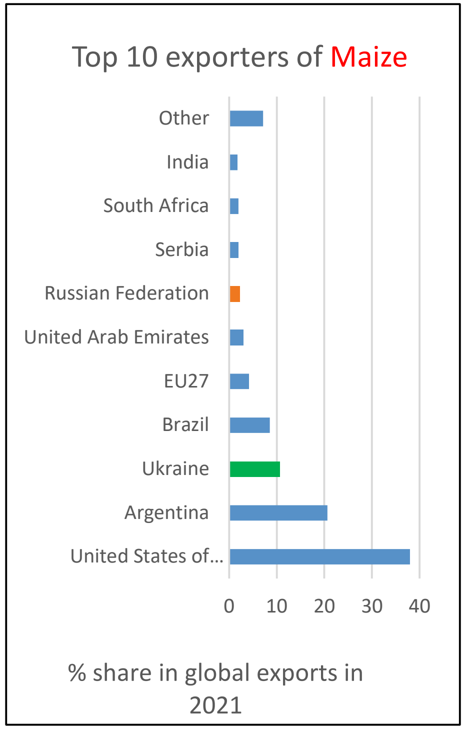
How important are UKR and RUS for global food production?

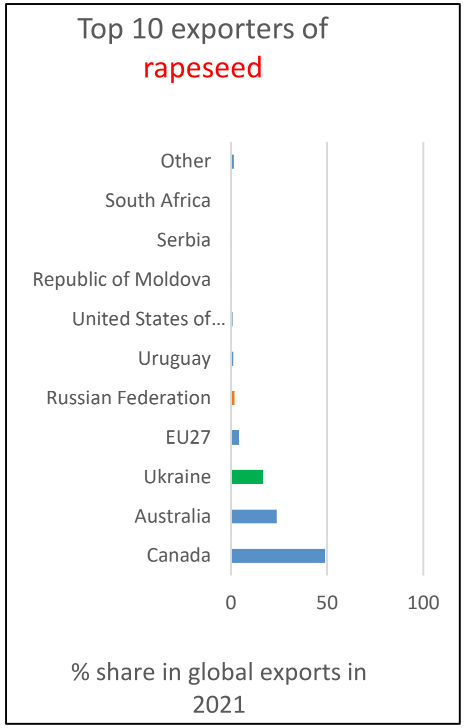


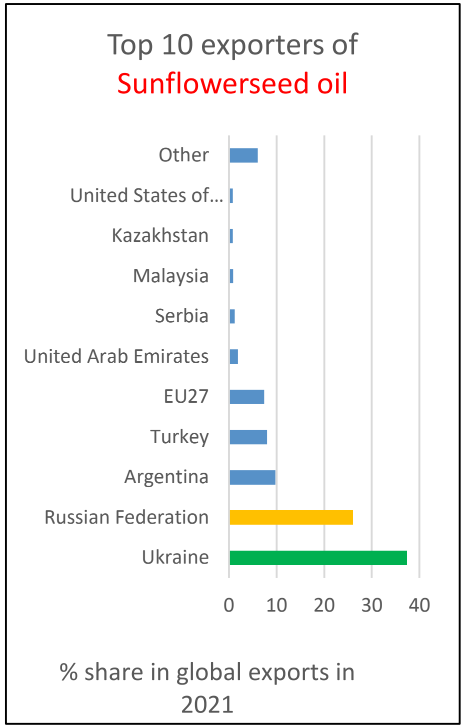
Ukraine and Russian Federation: important sources of global food supplies



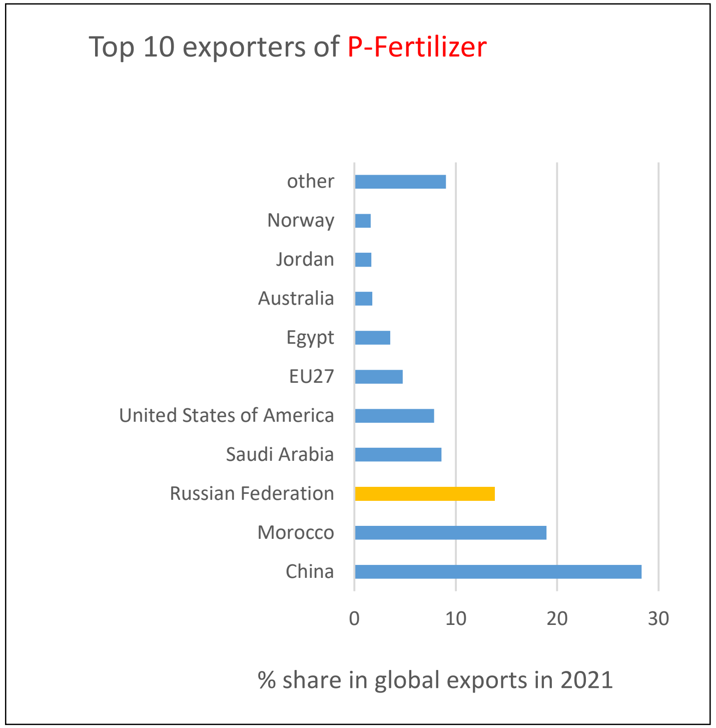




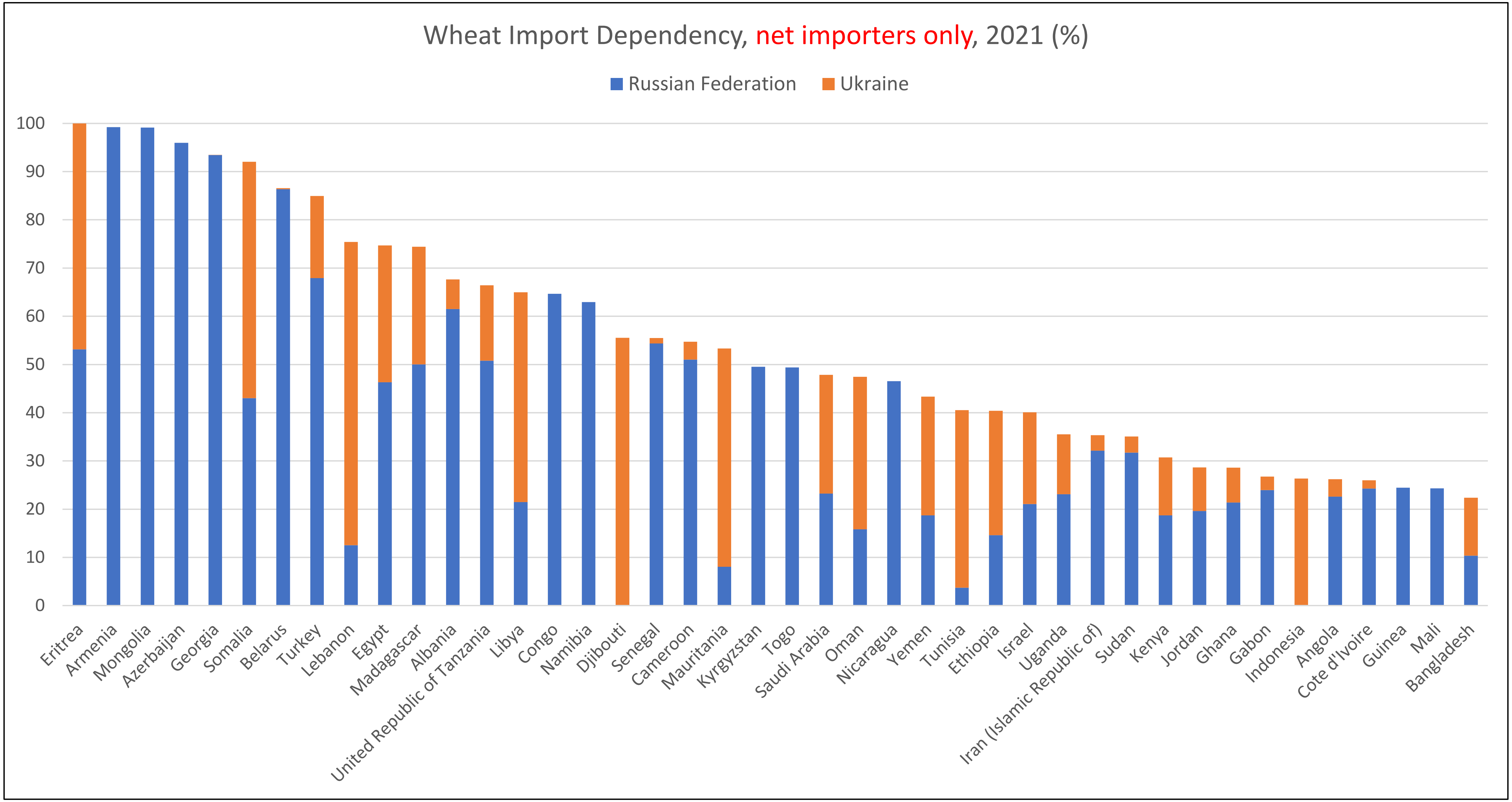




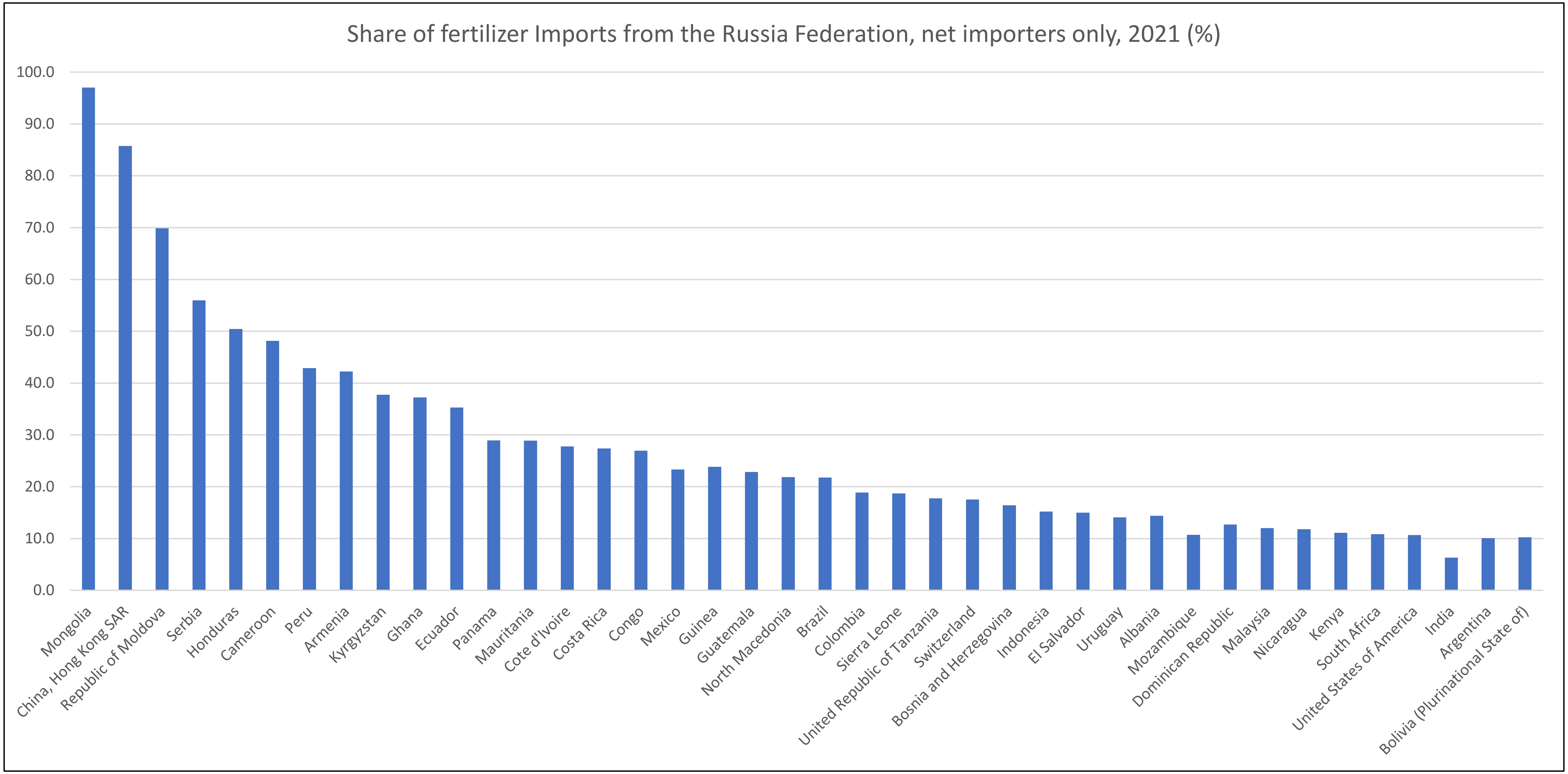
The Russian Federation: The most important source of global fertilizer supplies



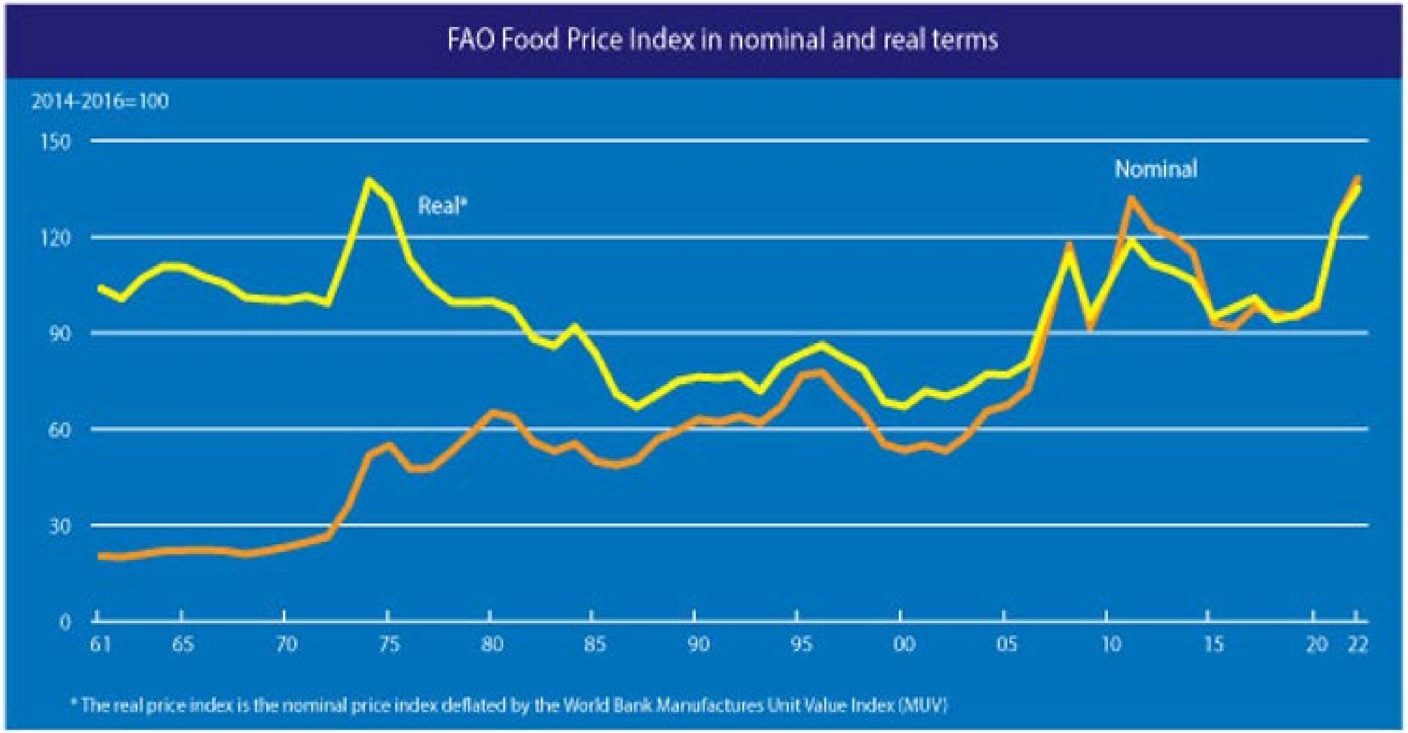
Some countries are heavily reliant on wheat imports from Ukraine and the Russian Federation



Some countries are heavily reliant on fertilizer imports from the Russian Federation

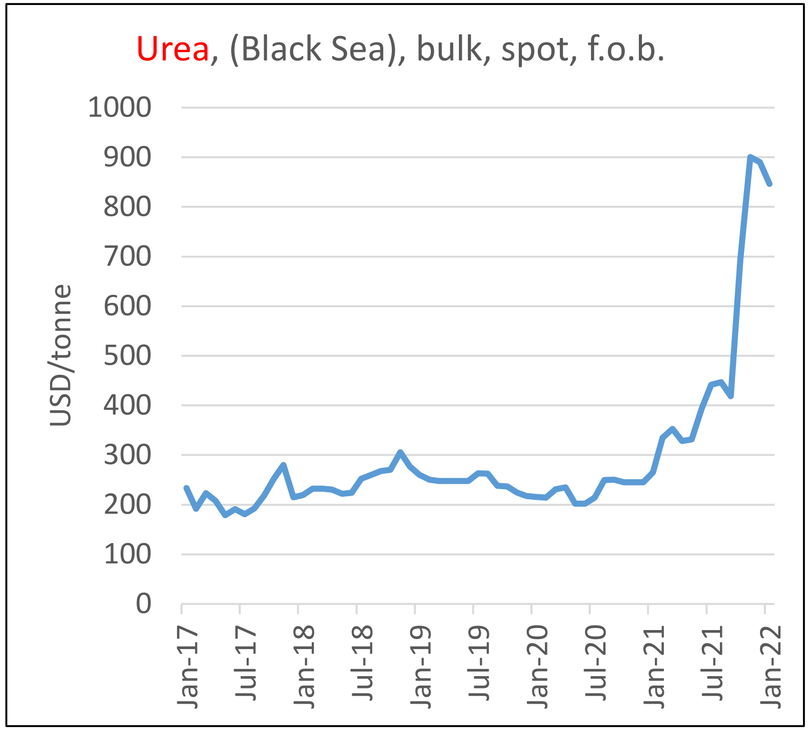


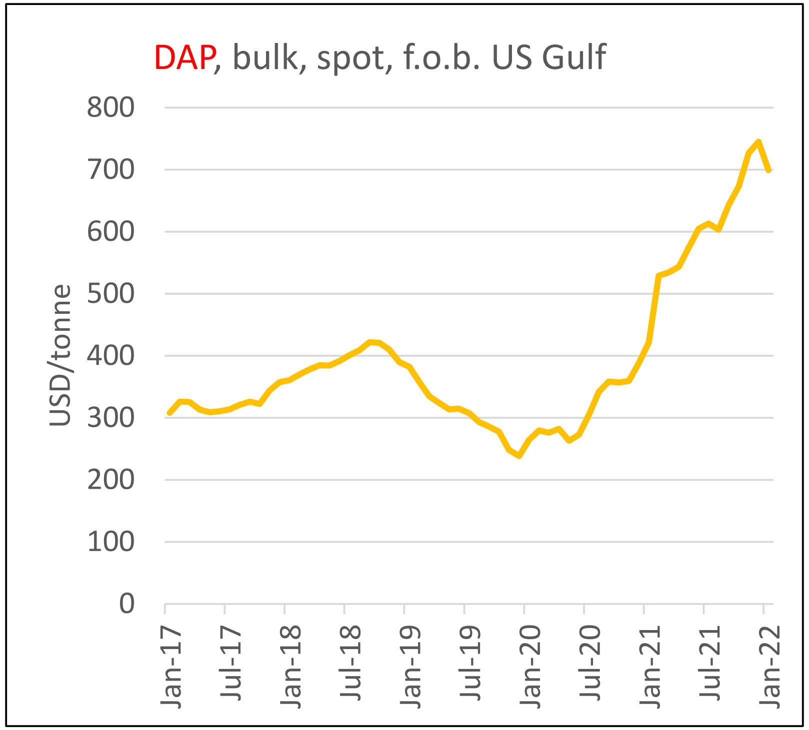
Recent trends in food prices:
The FAO FPI at a new all-time high in February

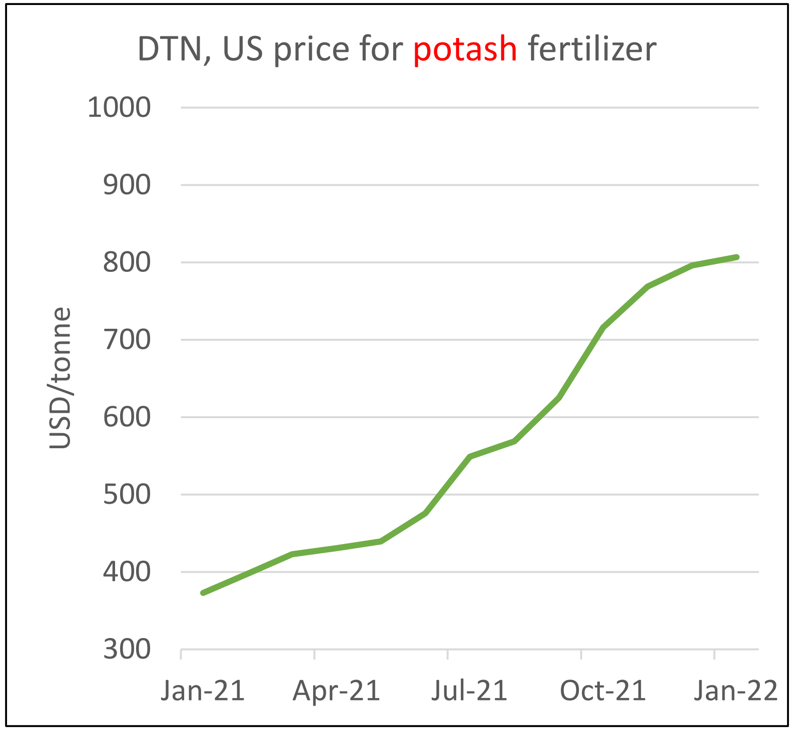


FAO FOOD PRICE INDICES	PEAK VALUES		FEB-22	CHANGE		
				m/m	y/y	Feb-22 over peak values
	Date	Points		Percent		
FAO Food Price Index	Feb-11	137.6	140.7	3.9	20.7	2.3
Cereals	Mar-08	163.3	144.8	3.0	14.8	-11.3
Vegetable Oils	Jun-08	178.2	201.7	8.5	36.8	13.2
Sugar	Jan-11	183.2	110.6	-1.9	10.4	-39.6
Meat	Aug-14	119.2	112.8	1.1	15.3	-5.4
Dairy	Dec-13	156.5	141.1	6.4	24.8	-9.8

Recent trends in fertilizer prices: Spot prices for N,P spiked prior to the conflict



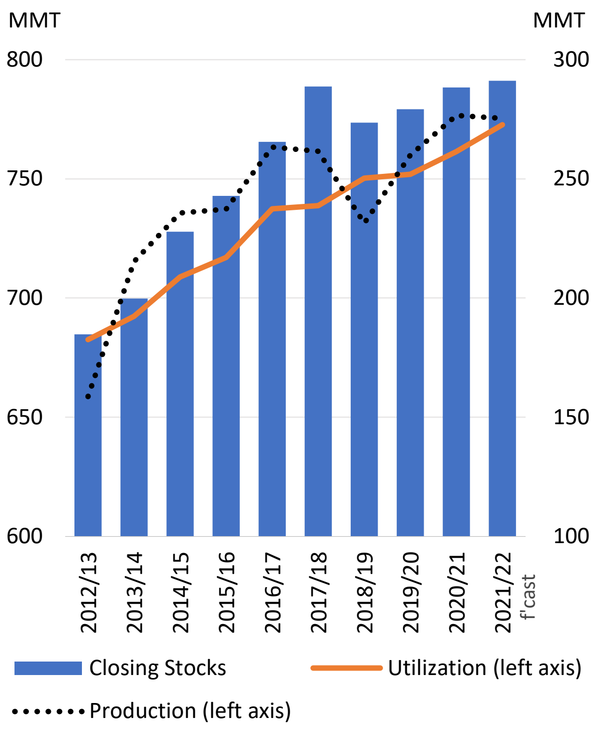




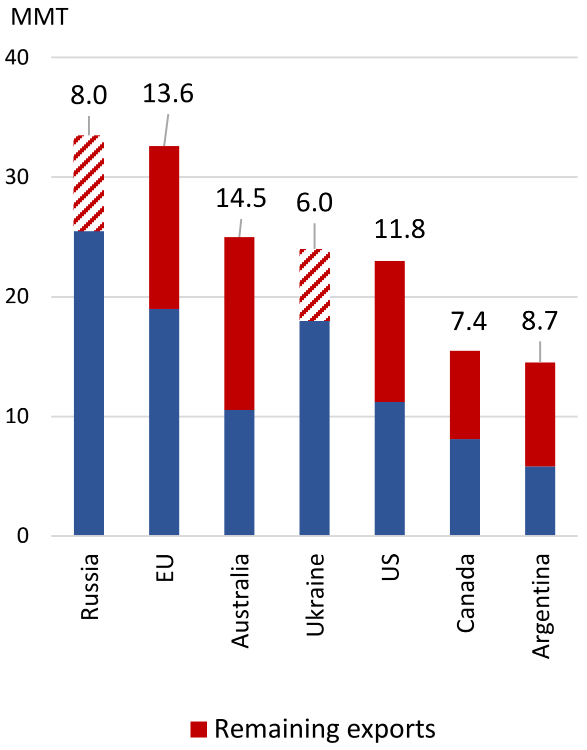
Source: Index Mundi; https://www.dtnpf.com/agriculture/web/ag/crops/article/2022/01/19/fertilizer-prices-continue-mostly

Outstanding wheat exports and available export quantities

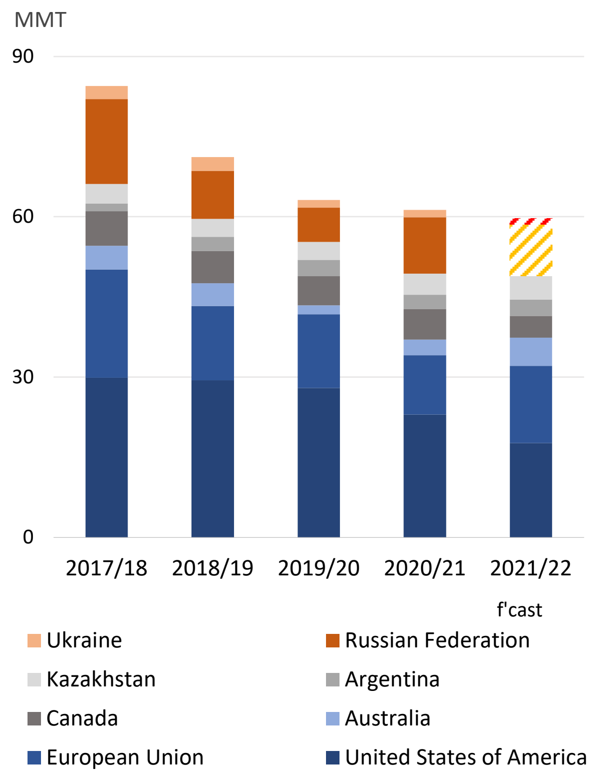
World wheat production, utilization and stocks



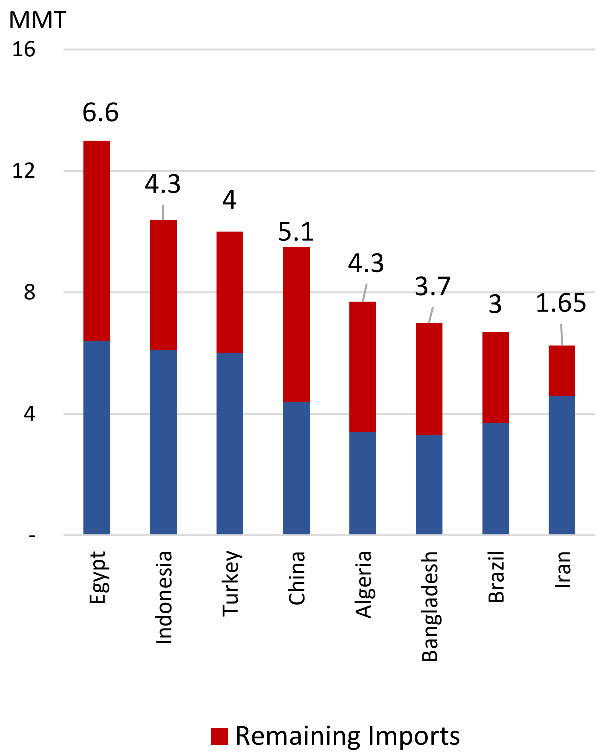
2021/22 Export forecasts of major exporters



Wheat stocks of major exporters

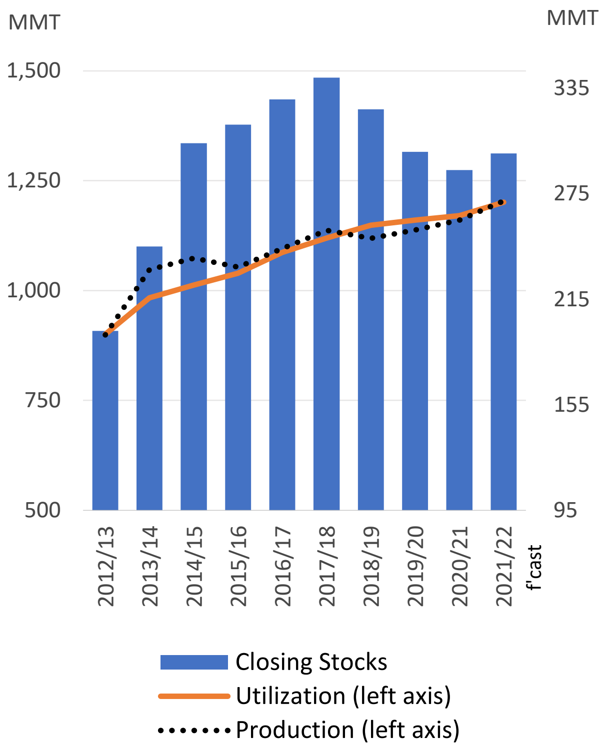


2021/22 Import forecasts of major importers

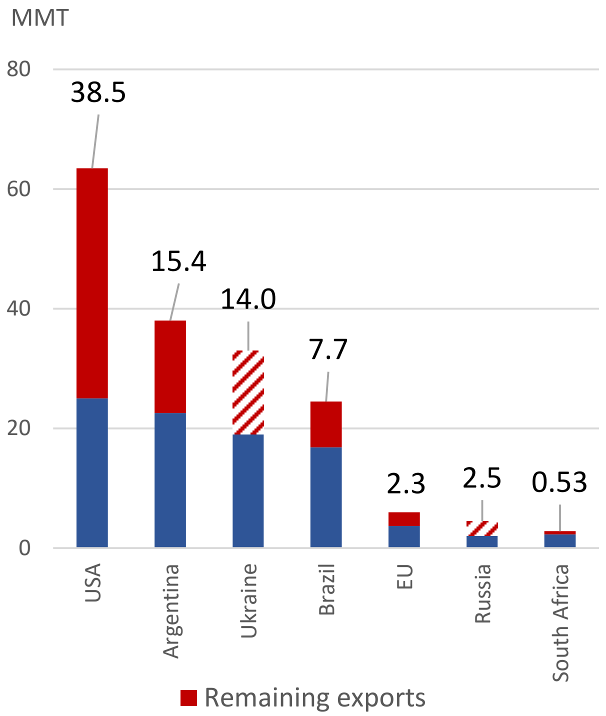


Outstanding maize available export quantities: no point to panic!

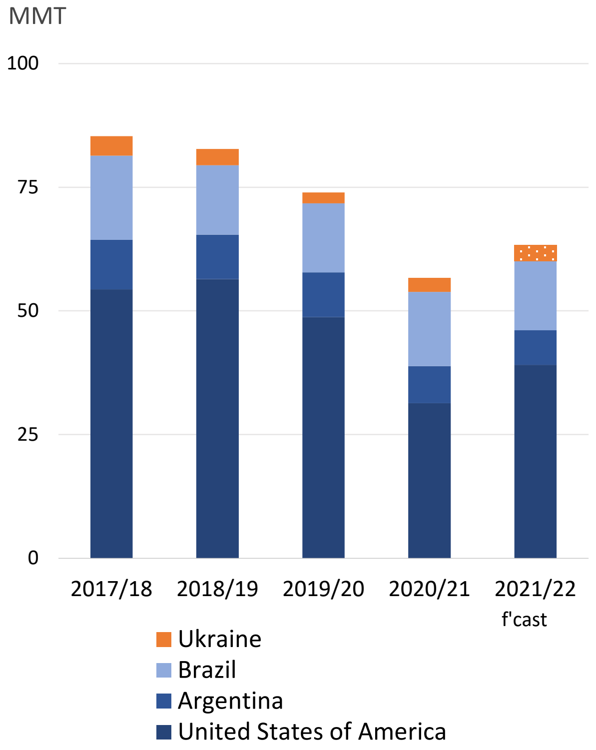
World maize production, utilization and stocks



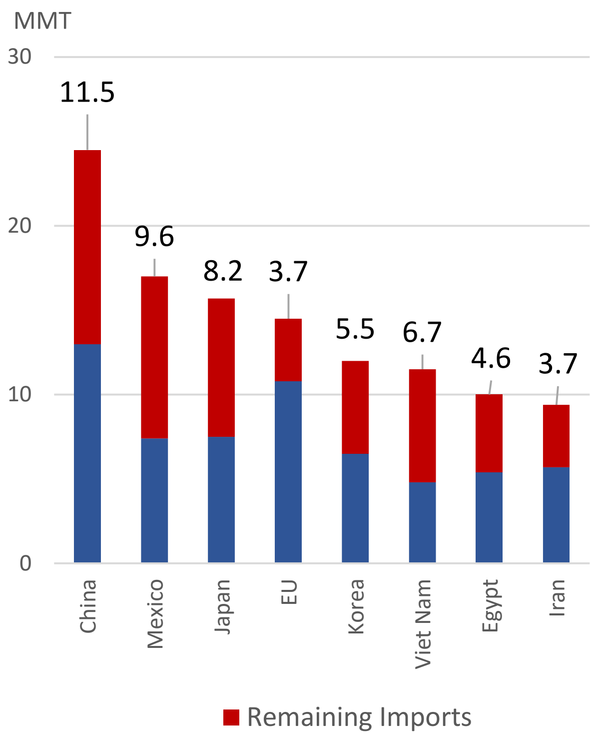
2021/22 Export forecasts of major exporters



Stocks held by the major maize exporters

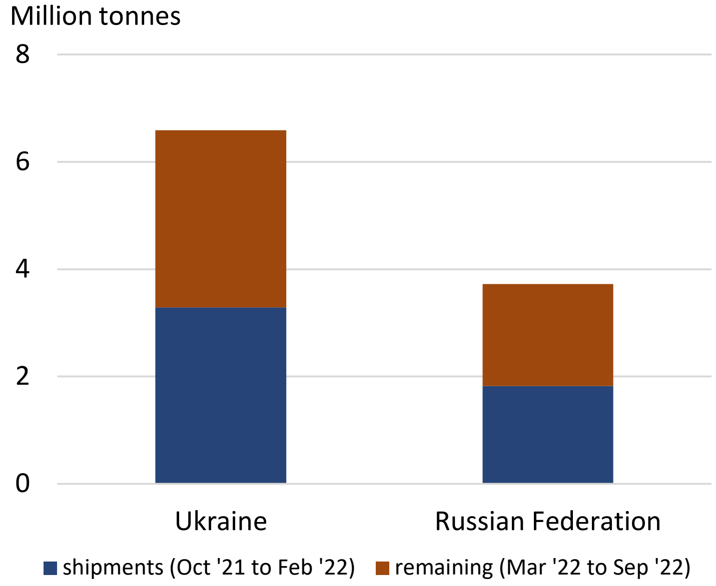


2021/22 Import forecasts of major importers

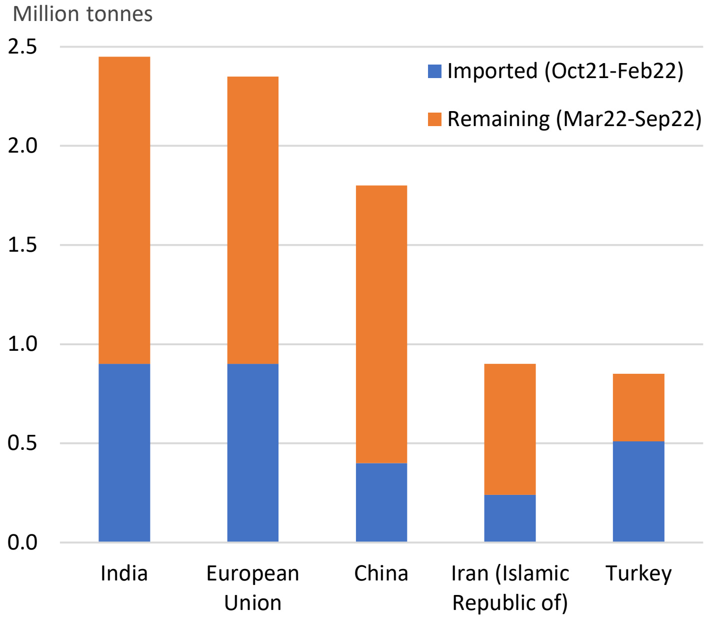


Outstanding sunflower oil export quantities

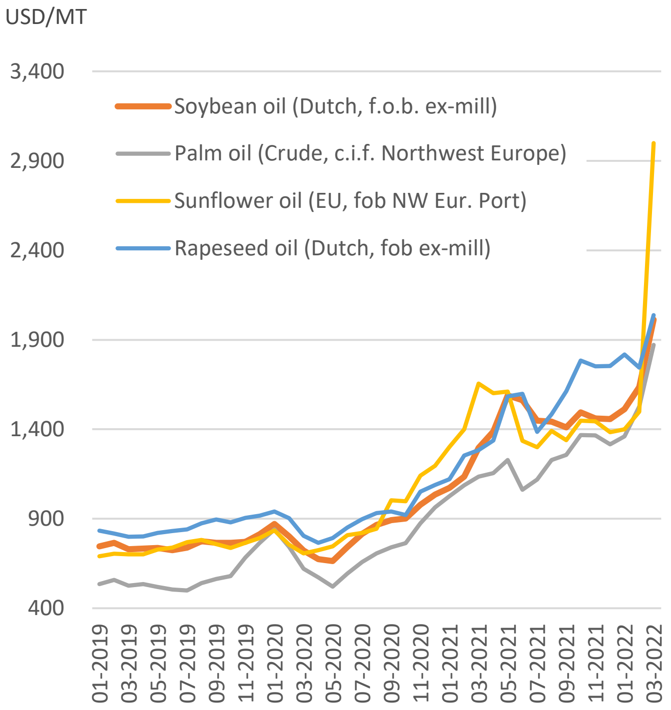
FAO forecasts of sunflower oil exports for 2021/22



FAO forecasts of sunflower oil imports for 2021/22



International vegetable oil prices



3. Delineating the key risks:
10 major risk factors, global and local

The basic risks for Ukraine and the global food economy

1. Food and Agriculture

- Input supplies (seeds, feeds, pesticides, fertilizer)
- Production: Yield/area risk
- Trade: exports
- Prices: Food inflation, WM prices
- Logistics and infrastructure, Ports, roads, storage
- Disease proliferation (ASF)

2. Macro

- Energy: Inputs and biofuels
- Debt, growth and exchange rates
- Nuclear contamination

3. Humanitarian

- Food
- Displacement and refugees

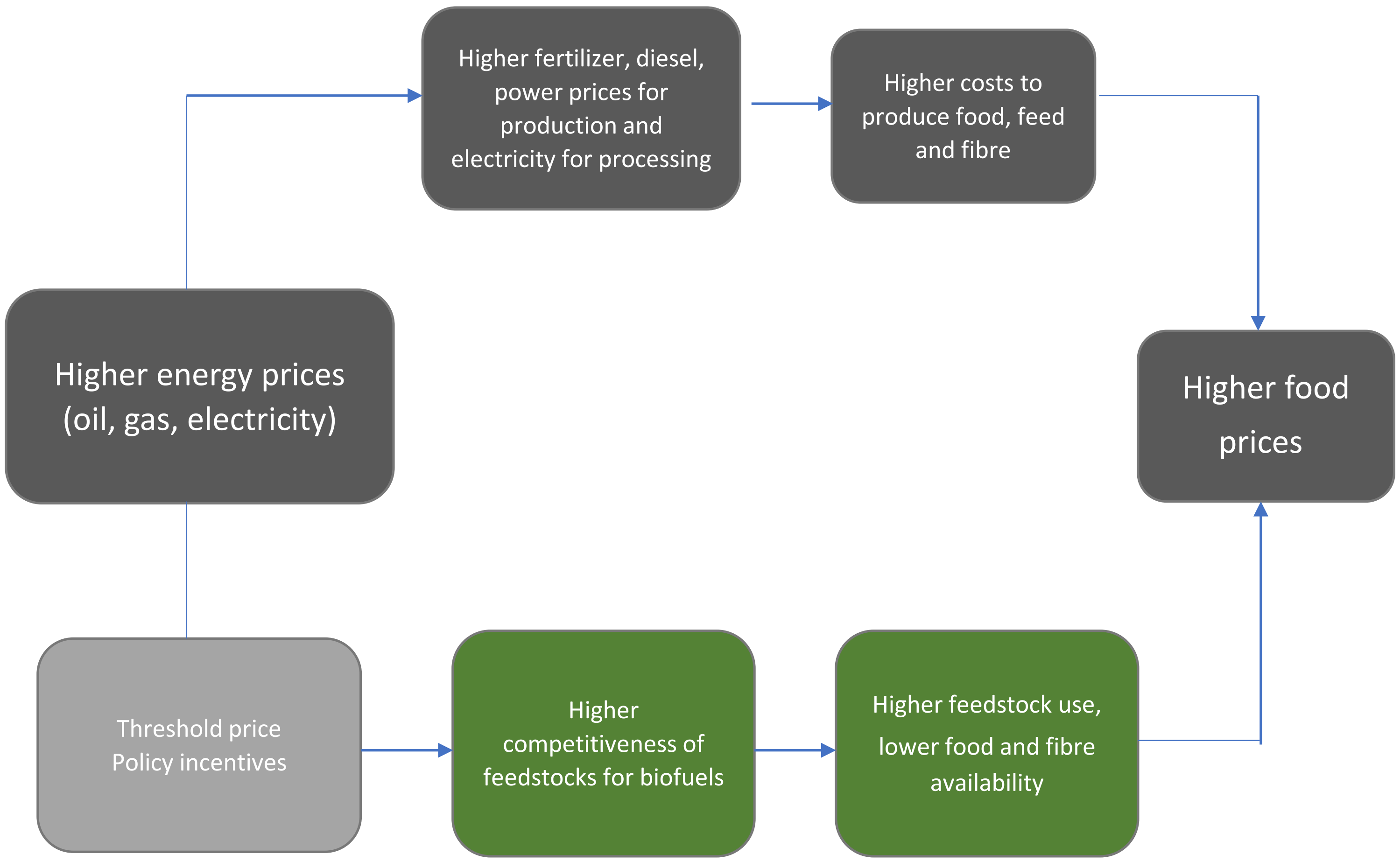
HUMANITARIAN RISKS

Humanitarian risks

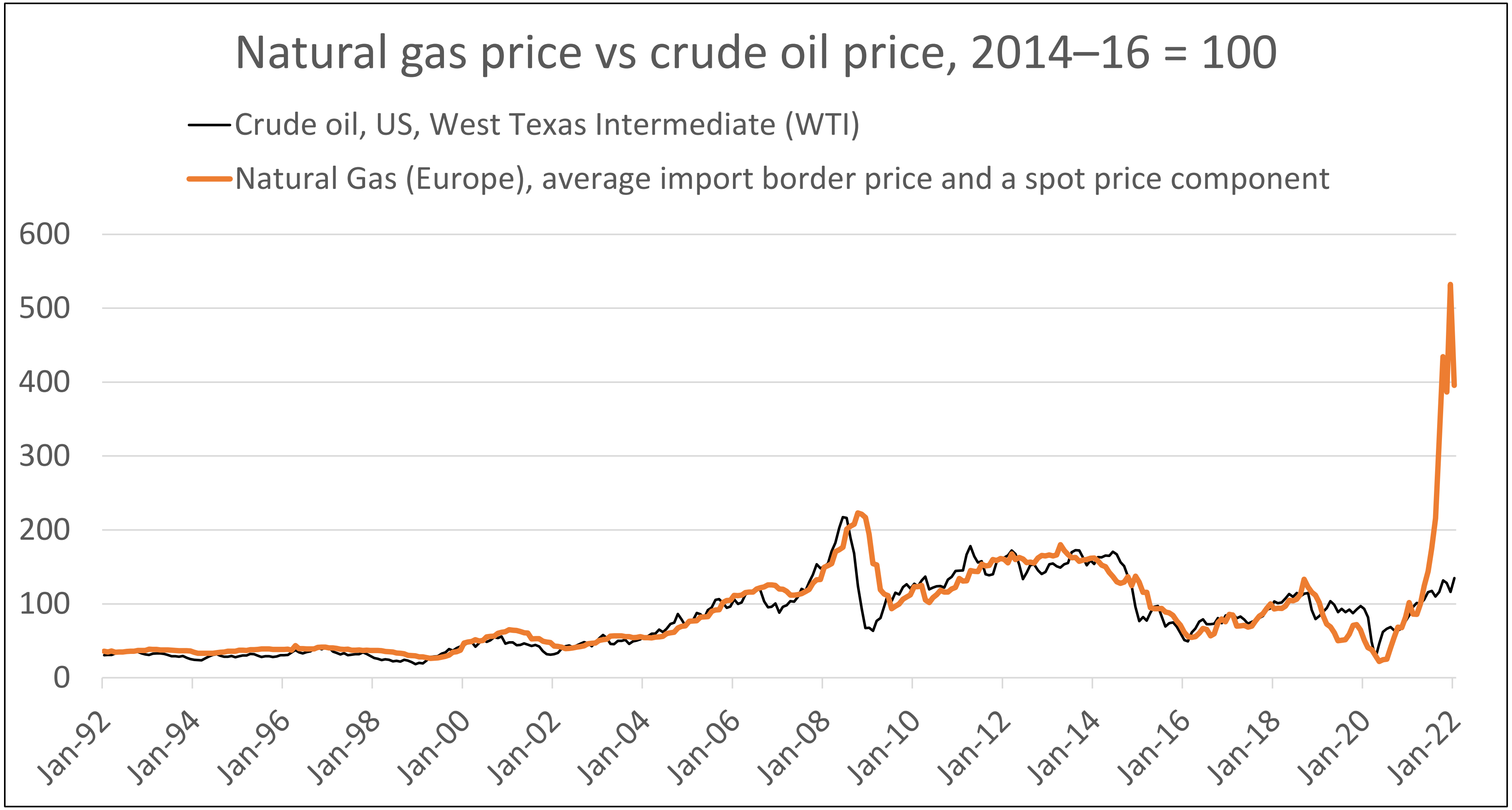
1. Up to 10 million IDPs and refugees expected, need to address humanitarian needs in Ukraine and host countries
2. Ukraine:
   - Elaborate social protection system in the Ukraine:
   - Unified Social Information System
   - Social protection covers 30 percent of the population and 77 percent of the poorest quintile.
   - Continue and increase cash payment and subsidies.
   - Continue and increase the monetary value of transfers provided through existing cash transfer programs.
3. Host countries:
   - Expand the reach of the national social protection system by registering additional population groups.
   - Ease access to social protection systems and jobs in new host countries
   - Enable host country social protection system to absorb spikes in refugee caseloads

Energy and fertilizer price risks

Energy and agriculture: the principal channels of transmission

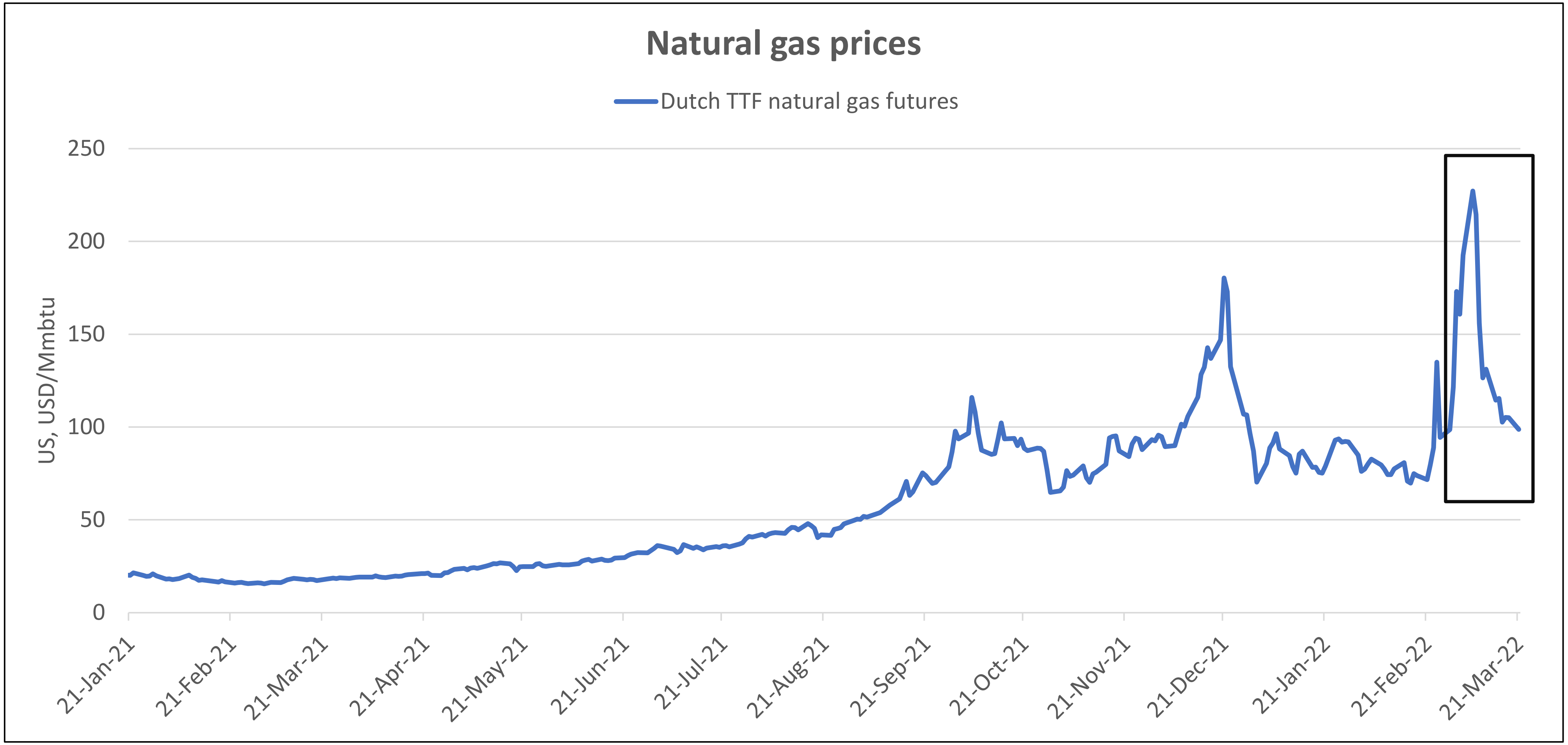


High and volatile energy prices



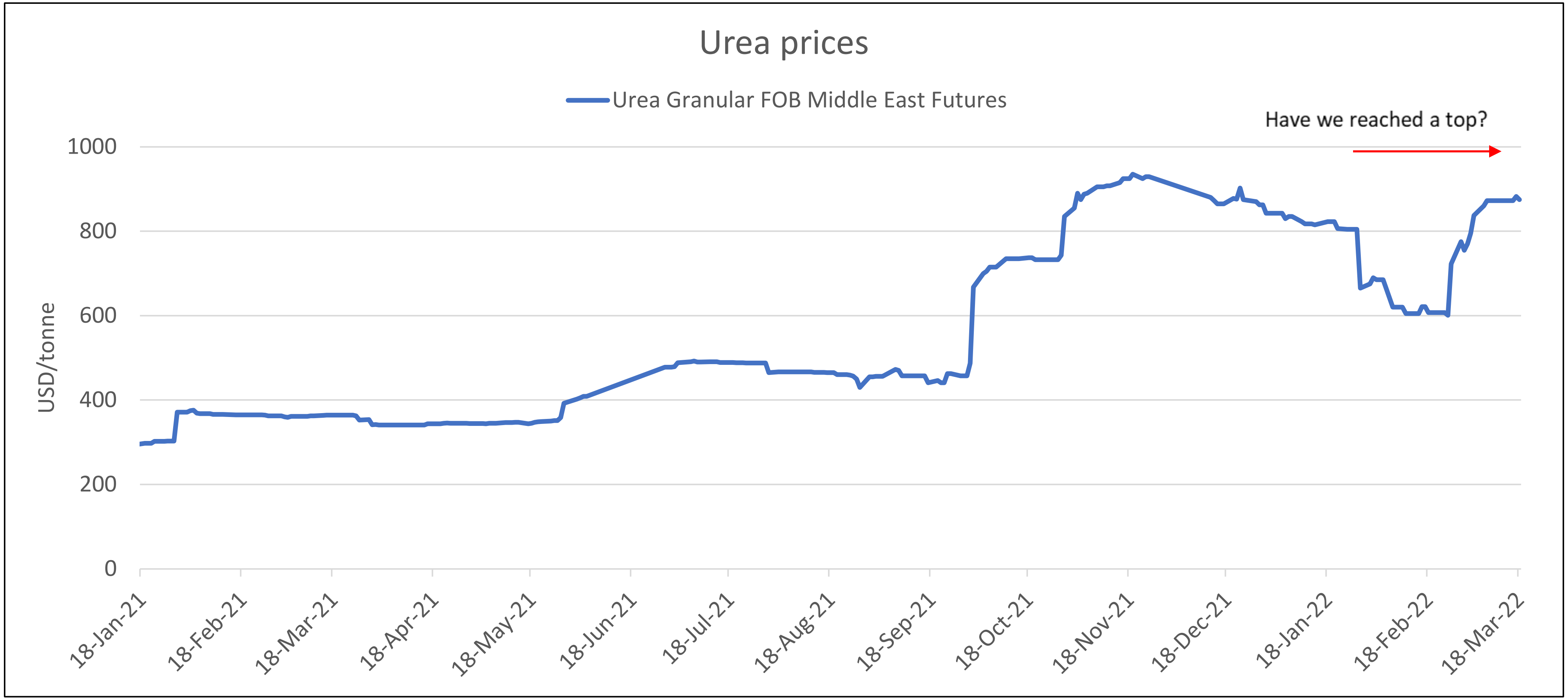
Source: Index Mundi

Prices for natural gas (EU) on the way to normalization?



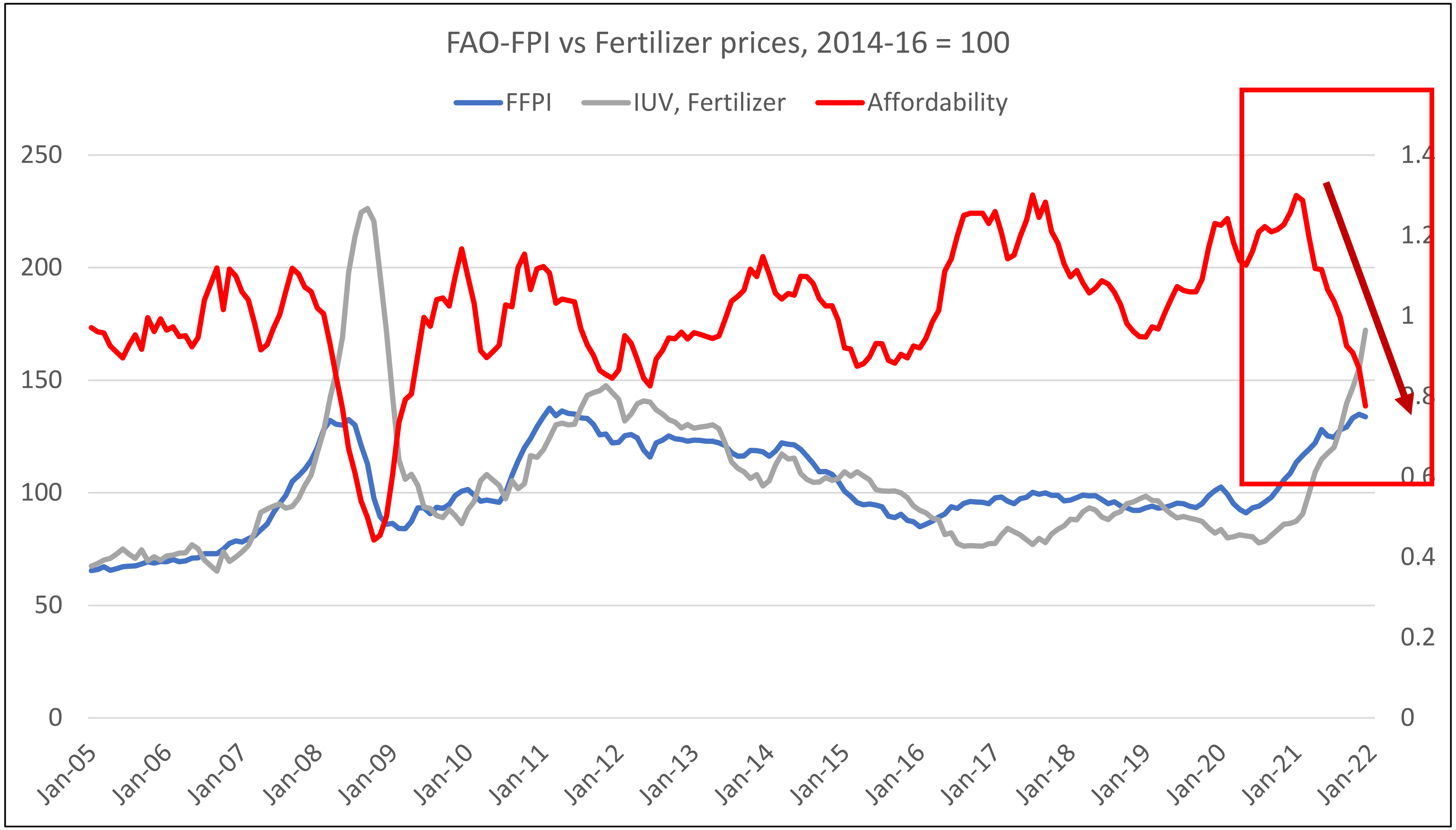
Source: Investing.com

Urea futures (FOB middle east)



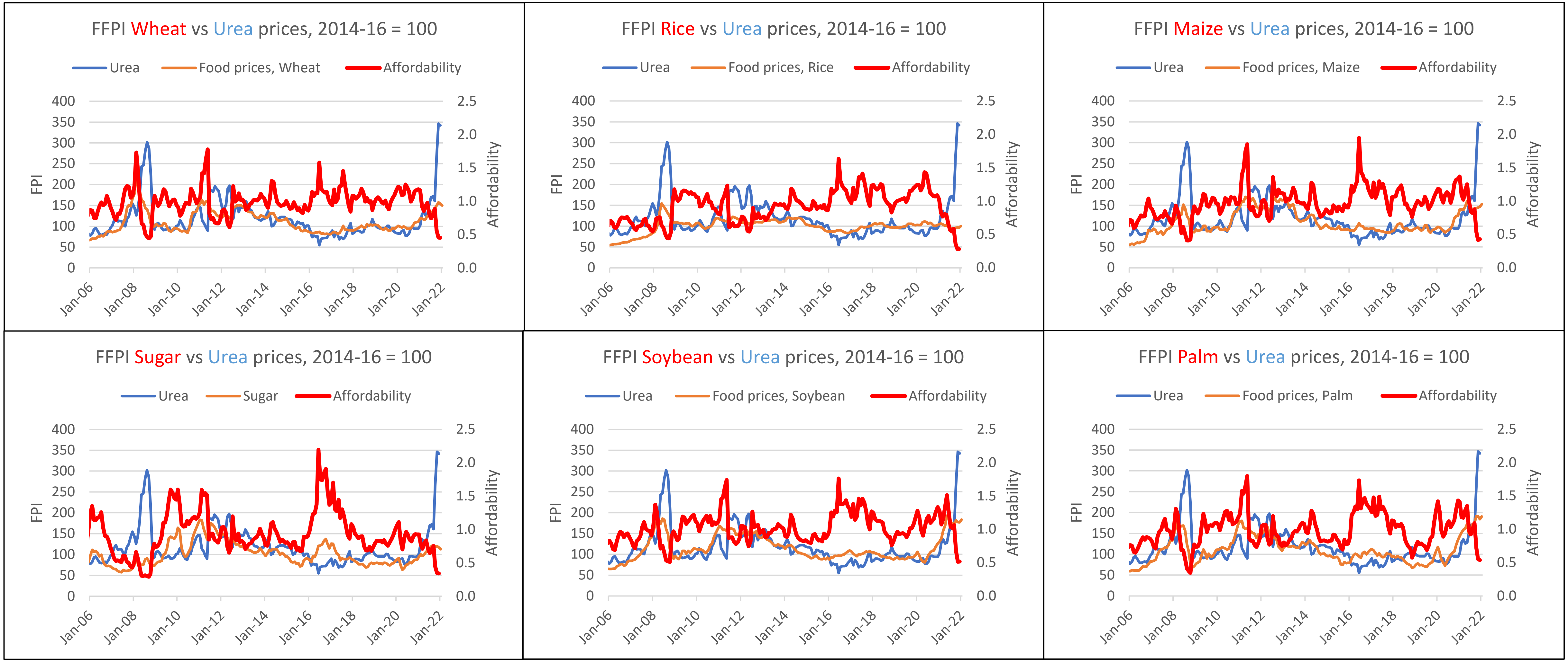
Source: Investing.com

Fertilizer affordability is precipitously falling



Source: FAO, TDM, author's calculations

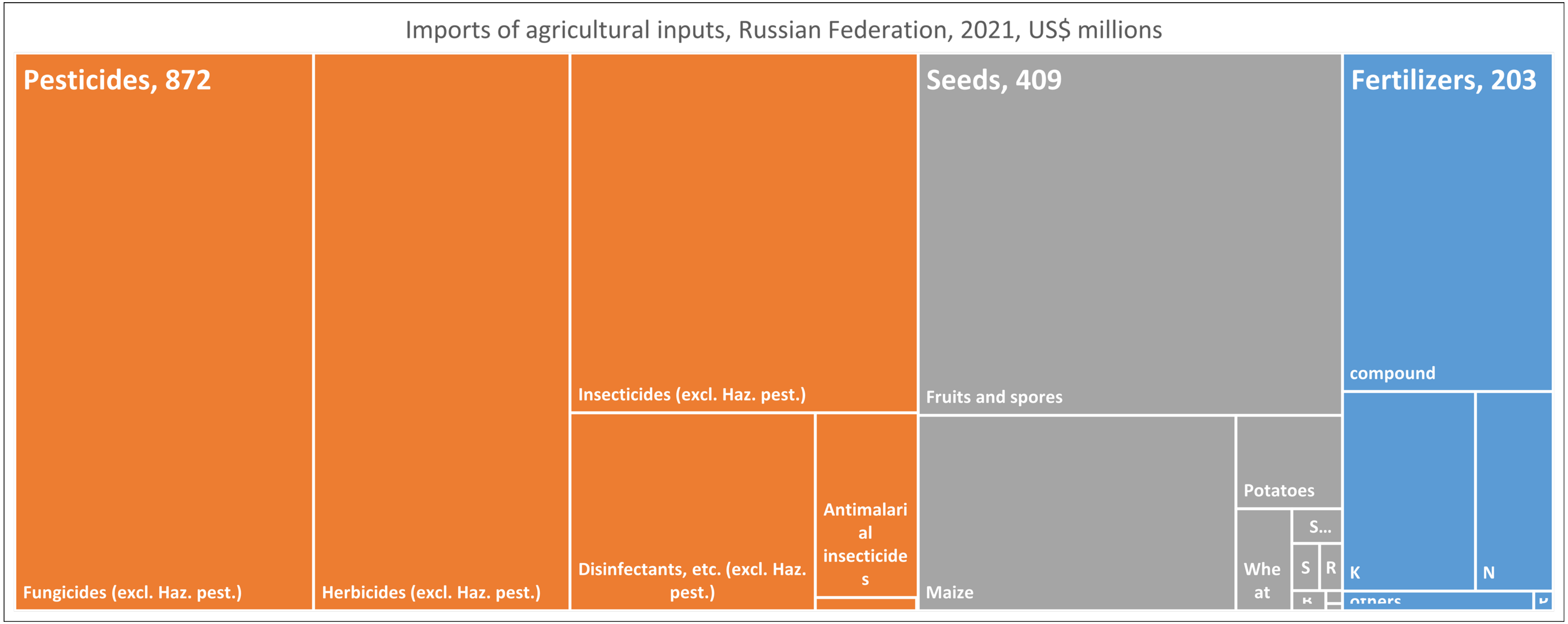
Urea affordability for various crops



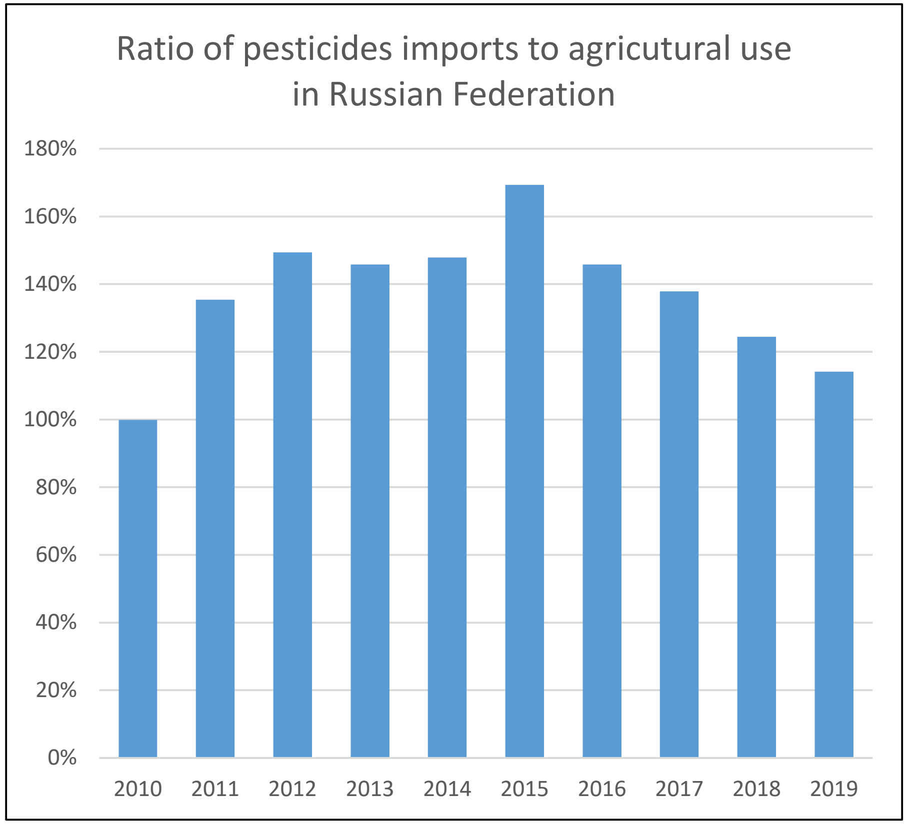
Source: FAO, TDM, author’s calculations

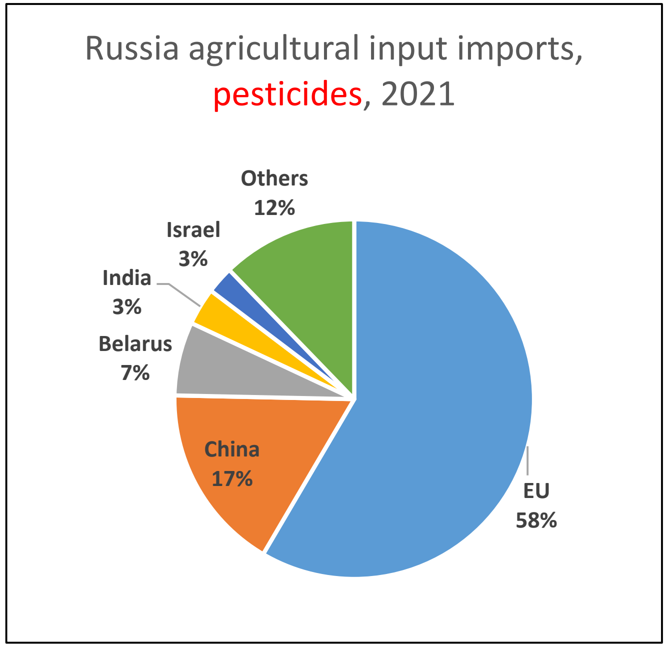
Seeds and pesticides

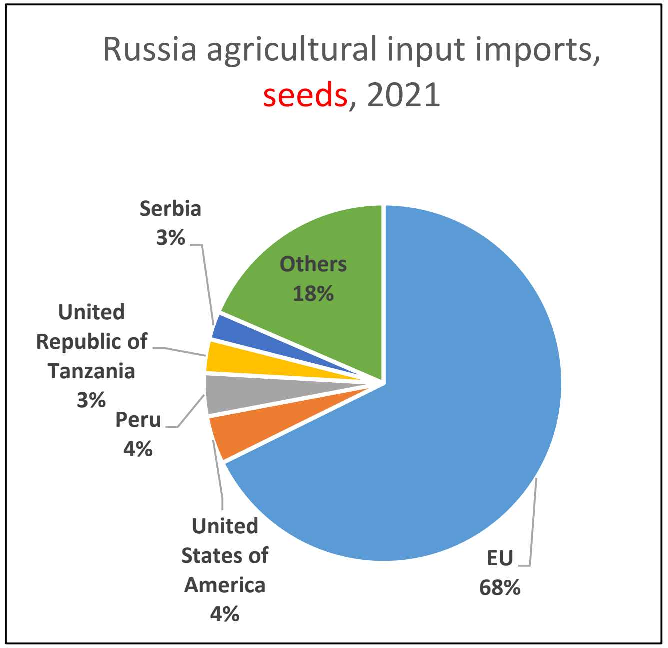
Inputs imported by the Russian Federation: Overview



The Russian Federation is heavily dependent on pesticides imports and most of its imports come from the EU-27

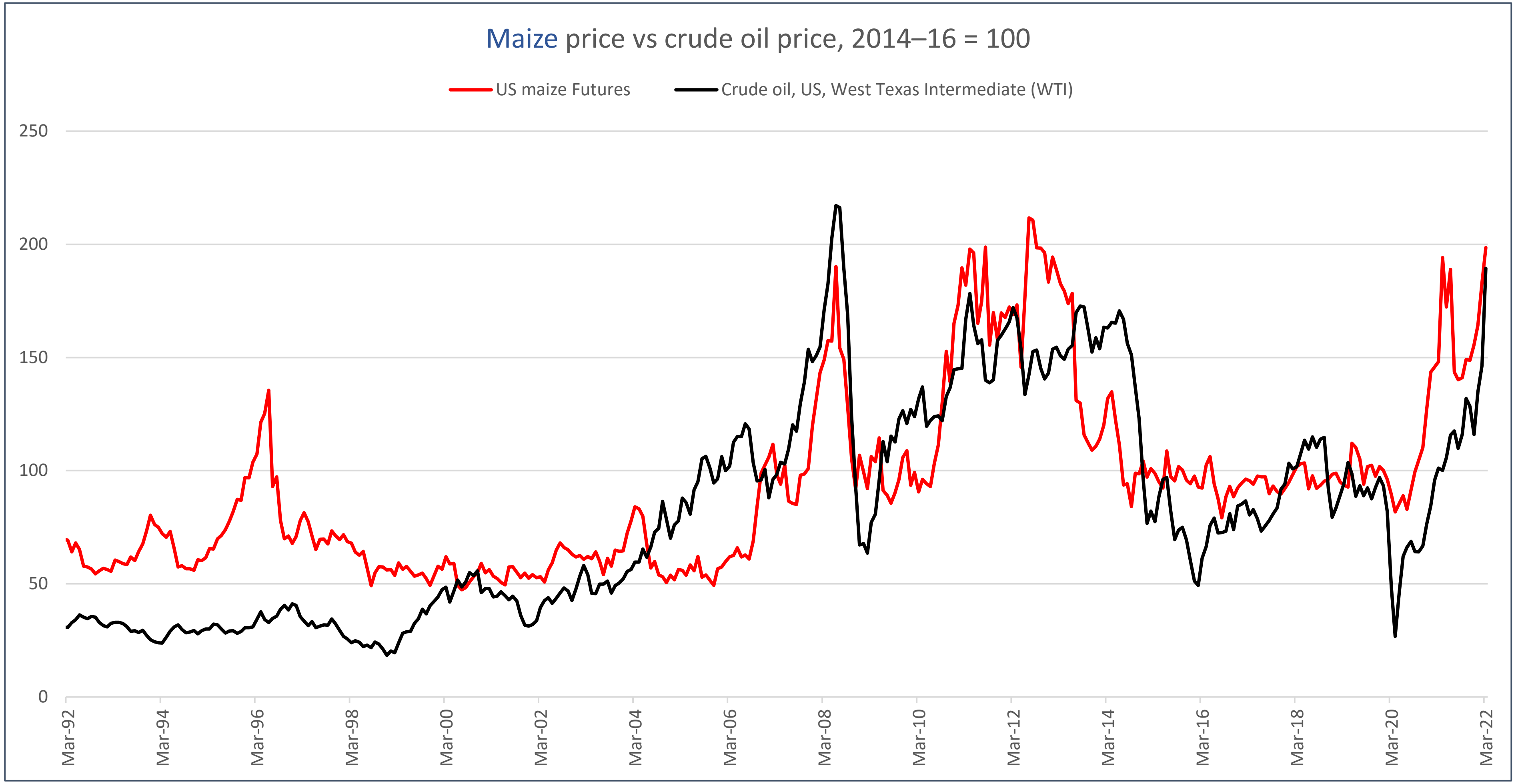






Food vs fuel risk

Food and fuel



Price risks

Gauging the possible effects of trade risks on world market prices

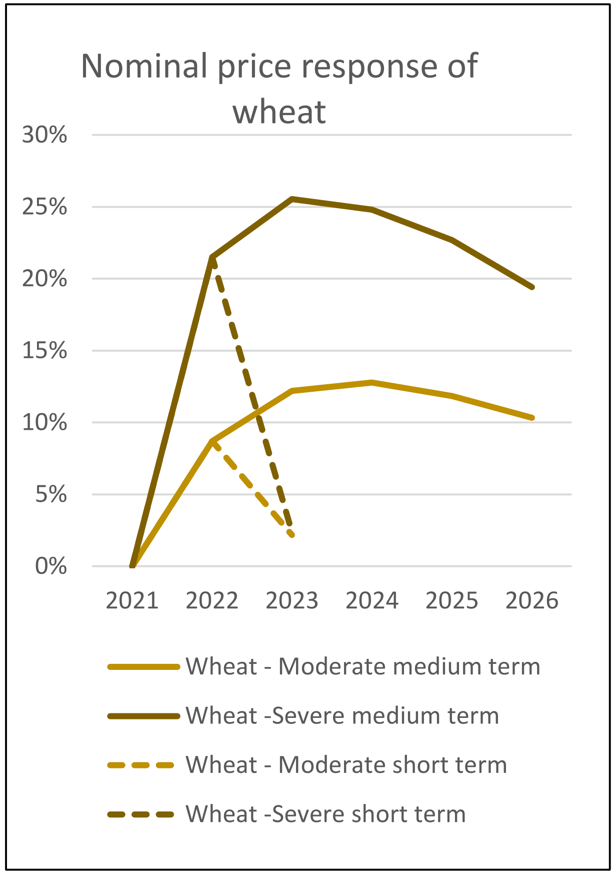
- Scenarios were simulated to account for a range of conceivable export developments:

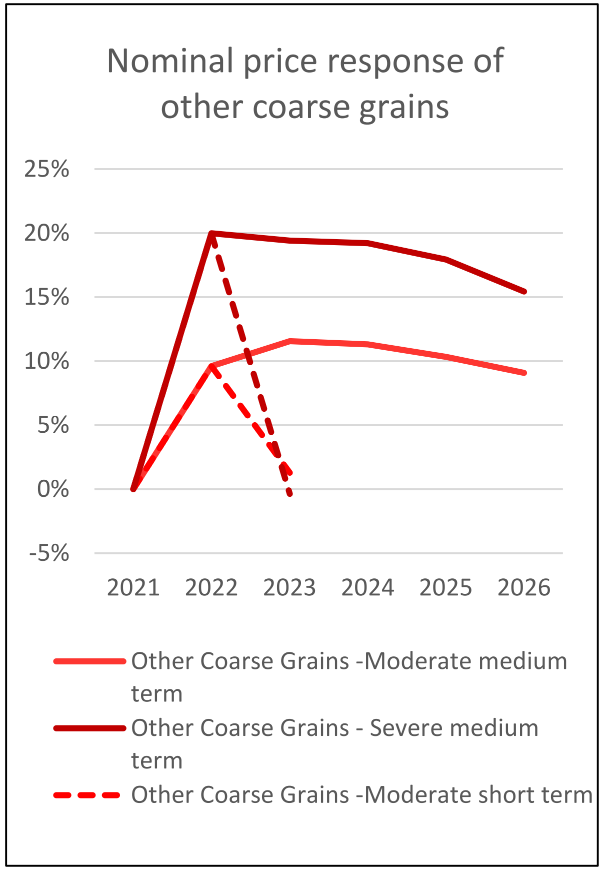
	Moderate shock	Severe shock
Wheat	-10 mmt	-25 mmt
Maize	-10 mmt	-25 mmt
Other coarse grains	-2.5 mmt	-5 mmt
Other oil seeds	-1.5 mmt	-3 mmt

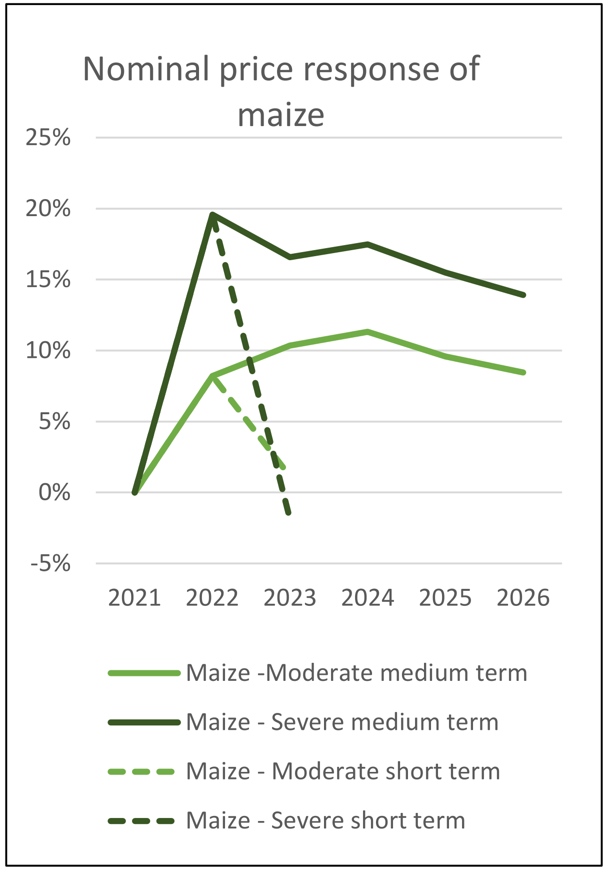
- Both shocks were simulated to assess their impact for only the 2022/23 marketing year and alternatively for five successive seasons.
- Reference crude oil prices would reach USD 100 per barrel in 2022/23up from an initial baseline value of USD 75 per barrel, and maintained in real terms for five seasons.

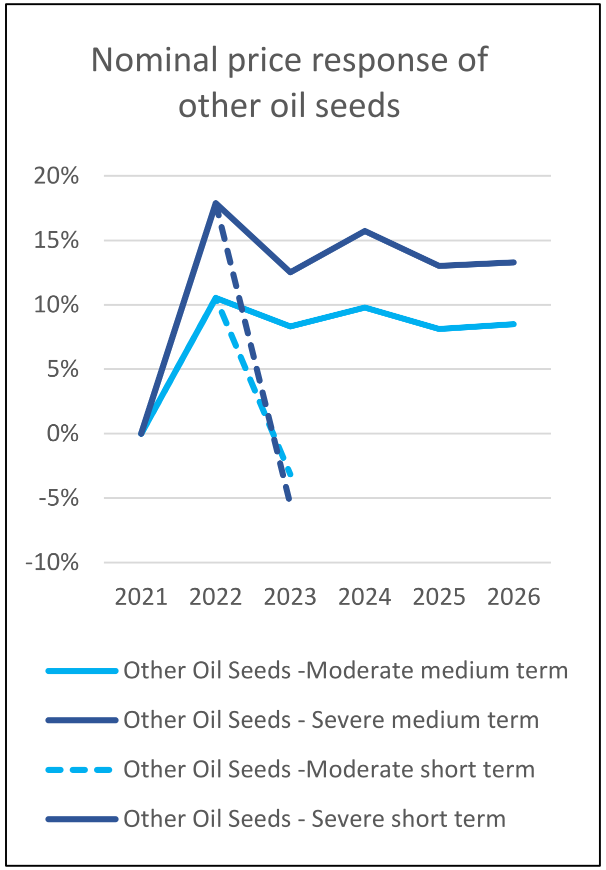
Other coarse grains are barley, rye, oats, sorghum, and millet. Other oilseeds encompass rapeseed, sunflower and groundnut.

WM price risks: short and medium term, moderate and severe supply disruptions







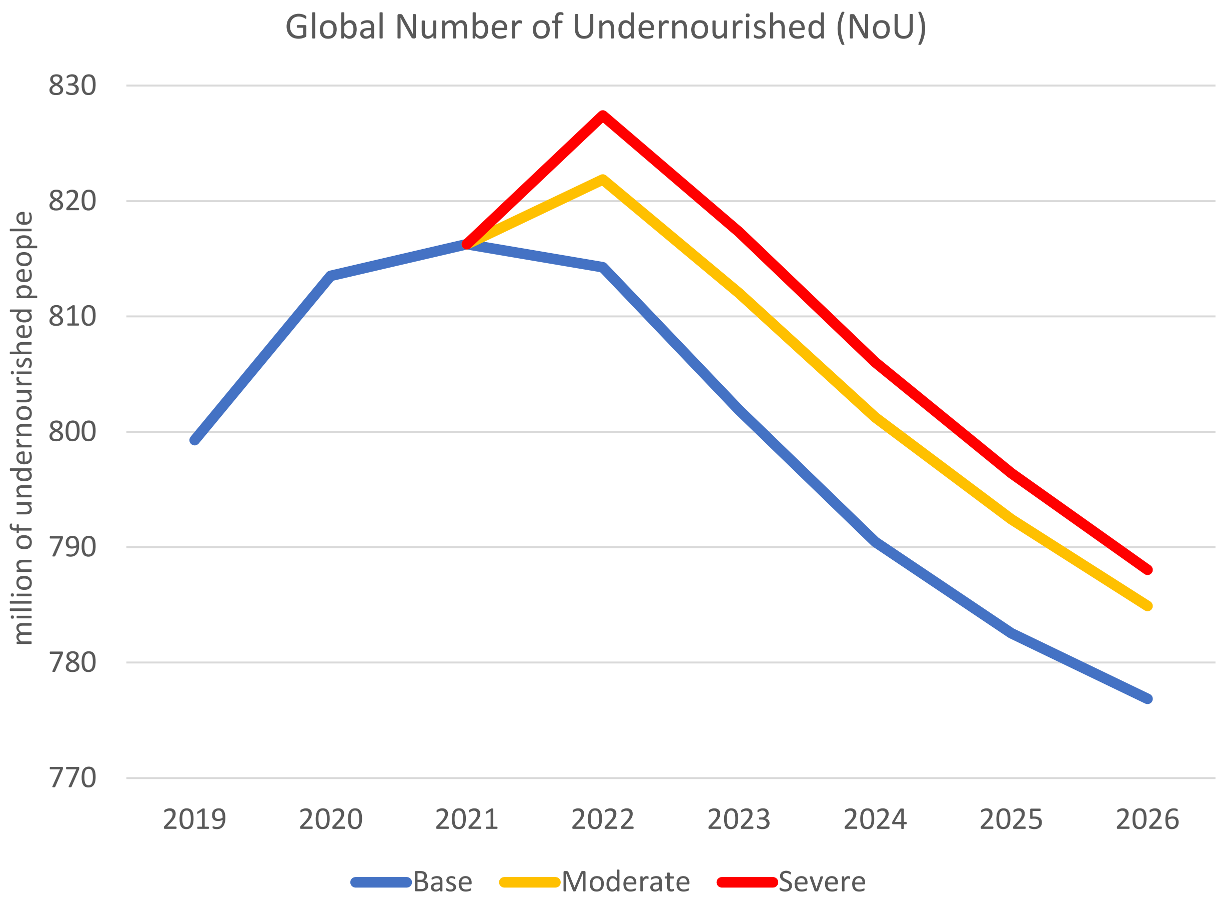


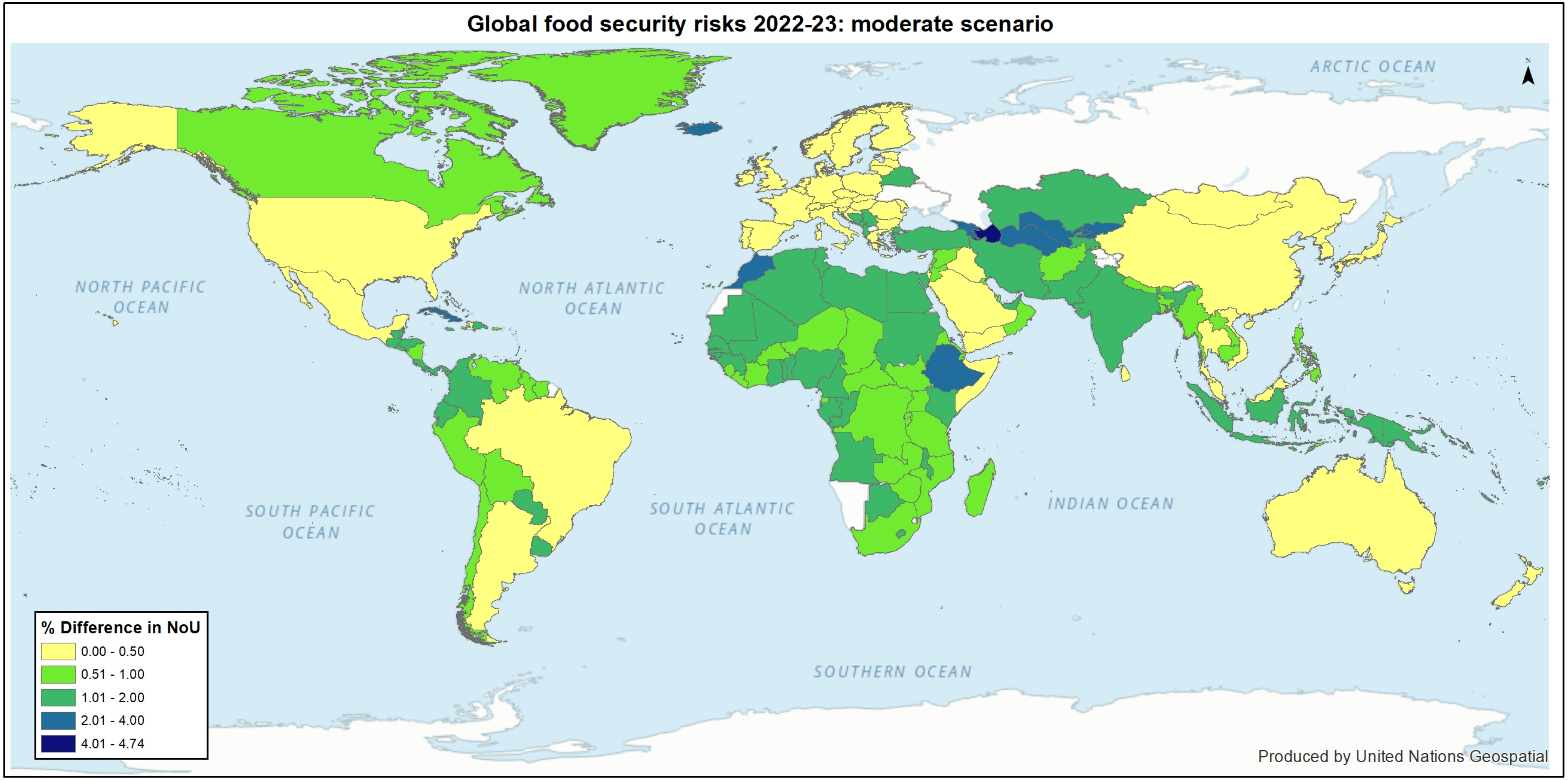
Source: FAO, Cosimo

Global food security risks

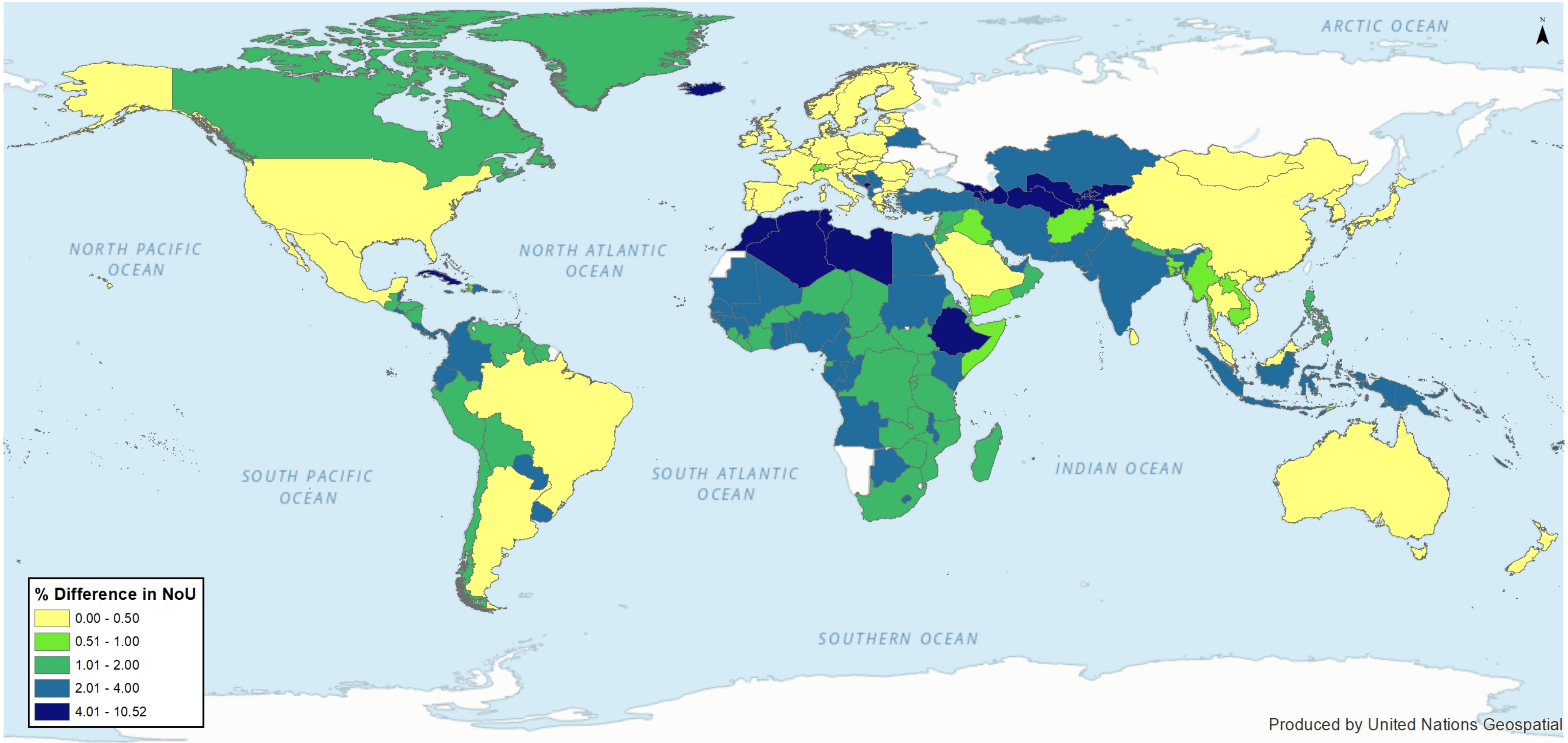
Gauging the possible effects on international food security

- Globally, under the moderate shock scenario, the number of undernourished people would increase by 7.6 million people, while this level would rise to 13.1 million people under the more severe shock setting in 2022/23.
- A prolonged high energy cost and export shortfall scenario, would keep the number of undernourished by 8.1 million people above baseline levels in a moderate shock and by 11.2 million in a severe scenario.
- Additional upward pressure on international food commodity prices impacts in particular low-income food-deficit countries (LIFDCs).




Global food security risks 2022-23: moderate scenario
ARCTIC OCEAN
NORTH PACIFIC OCEAN
NORTH ATLANTIC OCEAN
SOUTH PACIFIC OCEAN
SOUTH ATLANTIC OCEAN
INDIAN OCEAN
SOUTHERN OCEAN
% Difference in NoU
0.00 - 0.50
0.51 - 1.00
1.01 - 2.00
2.01 - 4.00
4.01 - 4.74
Produced by United Nations Geospatial

Global food security risks 2022-23: severe scenario



Macro risks

Macro-economic risks (OECD impact assessment)

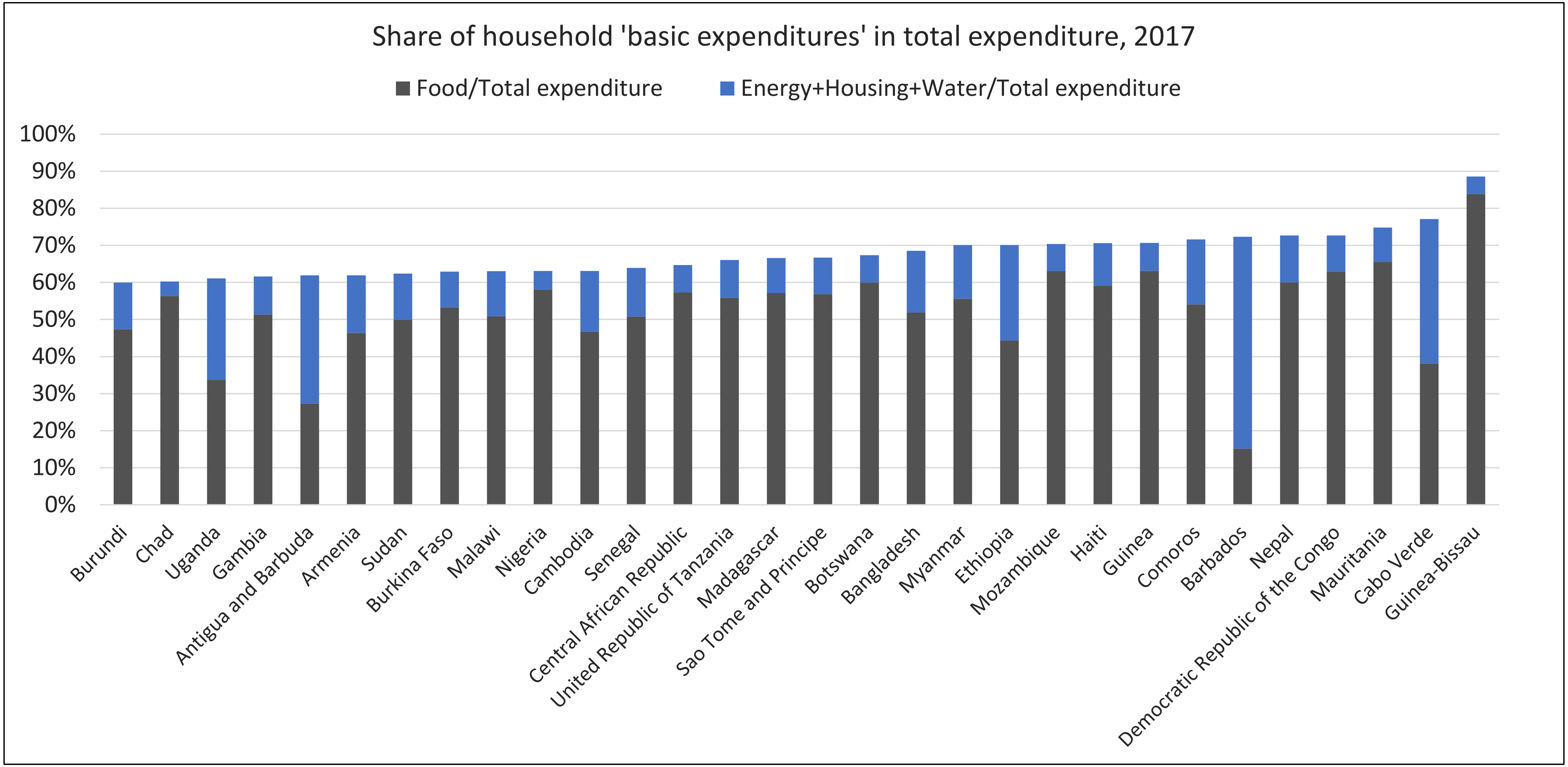
1. New negative supply shock on the world economy.

2. Importance of Ukraine and the Russian Federation for world economy:
- 2 percent of both global GDP and world trade
- But major suppliers of energy (the Russian Federation) and agricultural products (Ukraine and the Russian Federation).

3. Global impacts:
- Global growth to fall by over 1 percentage point
- Global inflation to rise by 2.5 percentage points in the first year
- European economies will be the hardest hit
- The impact on the rest of the world mostly stem from increased commodity prices and inflation.
- **Food and energy import bills already at record levels, to rise further.**

4. Russian Federation:
- Deep recession in the Russian Federation, with output declining by over 10 percent and inflation rising by close to 15 percentage points.

High food/energy prices are regressive on poor countries/households



DISEASE PROFILIFERATION

Impact of the UKR war on livestock value chains

Animal Health
- Reduced surveillance, diagnostics
- Delays in outbreak control and reporting
- Reduced access to veterinary services

Animal Production
- Reduced access to markets
- Reduced access to inputs and services

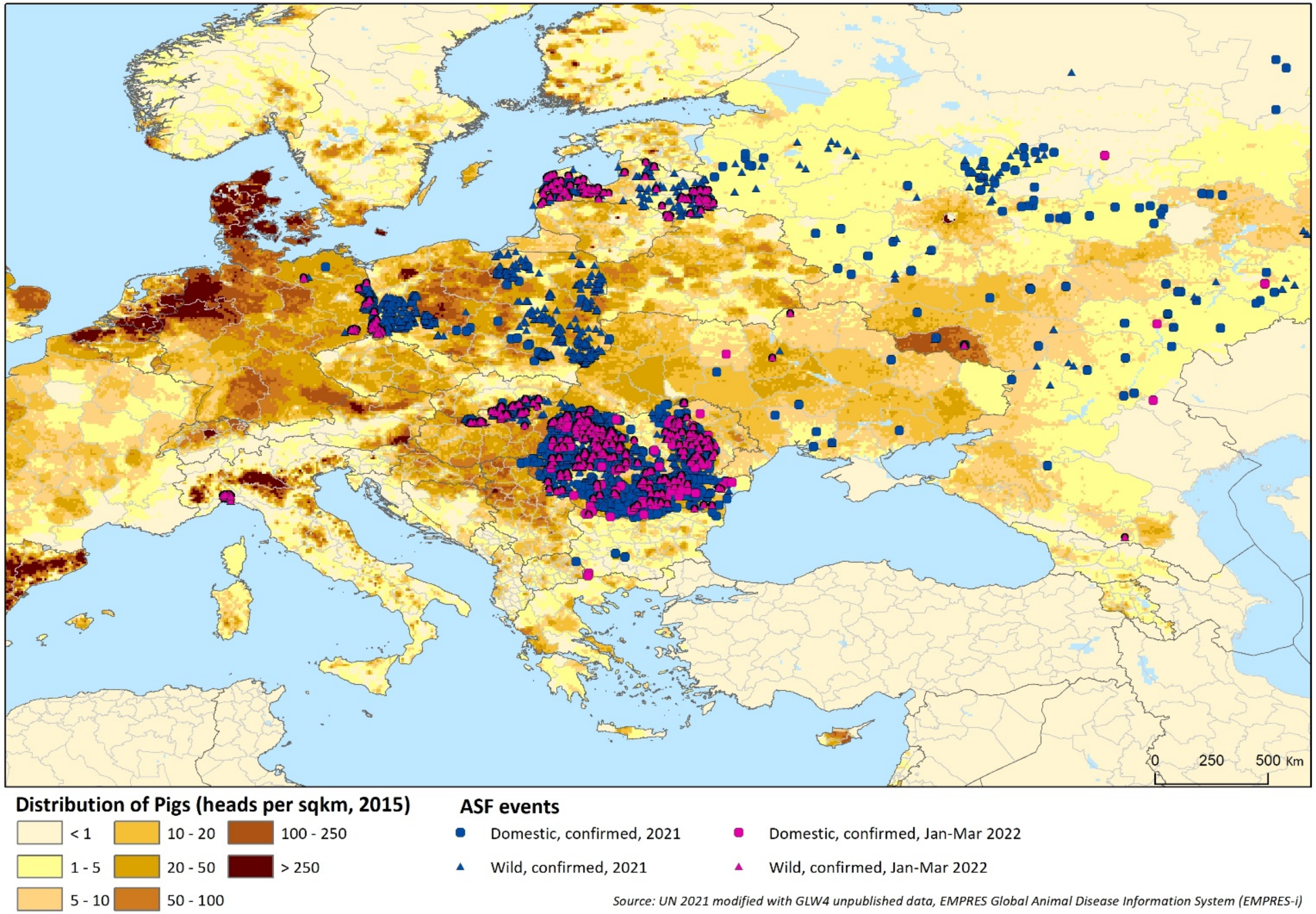
Processing
- Reduced processing capacity
- Compromised storage and conservation
- Constrained informal businesses

Transport
- Constrained national and international transport
- Business continuity

Sales and consumption
- Modified retailing and product demand
- Reduced consumer demand and purchasing power

Disrupted value chains

Could lead to alternative chains, practices and behaviors that exaggerate animal disease spread



Risk of disease spread is high due to:

- **reduced surveillance, diagnostics, vaccination, outbreak control measures, inspections**

- **large numbers of internally displaced people and refugees;**

- **large number of abandoned pet animals and livestock** might contribute to transmission

- Presence of large number of **Russian military forces - risk of introduction and spread of exotic transboundary animal diseases to Ukraine and Europe - foot and mouth disease** (FMD), lumpy skin disease (LSD) and other TADs.

Increased Risk of Zoonoses (Avian Influenza, rabies)

- Uncontrolled animal movement
  - Internal: Backyard and commercially farmed poultry left after displacement or death of their owners or lack of water/feed supply could lead to moving those animals to the wild.
  - Cross border: pet birds accompanying the refugees in the concentrated refugees' camps.
- Lack of access to medicines, vaccines, clean water, sanitation and drainage within Ukraine or at the refugees' camps will create opportunities for environmental contamination.
- Human encroachment and destruction of wildlife habitat due to the military operations.
- Migratory routes of migratory birds
- Partial destruction of animal and human health laboratories or lack of access control at the labs may allow contact of stray or wild animals and humans with several pathogens.

Increase the risk of disease incursion specially when border inspection is weakened.

Can lead to creating new interfaces facilitating spillover of known or unknown pathogens from animals to humans

Ecosystem degradation

Risk of Spillover from wildlife to livestock

4. What we can do: Actions points

FAO Humanitarian response in Ukraine

$ **50 million** needed (March-May)

To assist **240 000 people**

Focusing on the most vulnerable rural men and women (over 100 000 households), including IDPs, affected by the crisis

- Cash, agricultural inputs or cash+ agricultural inputs will be provided
- Immediate focus on spring vegetable planting
- Enough resources to-date to reach 10% of target

Four-pillars of FAO's response and recovery strategy in Ukraine

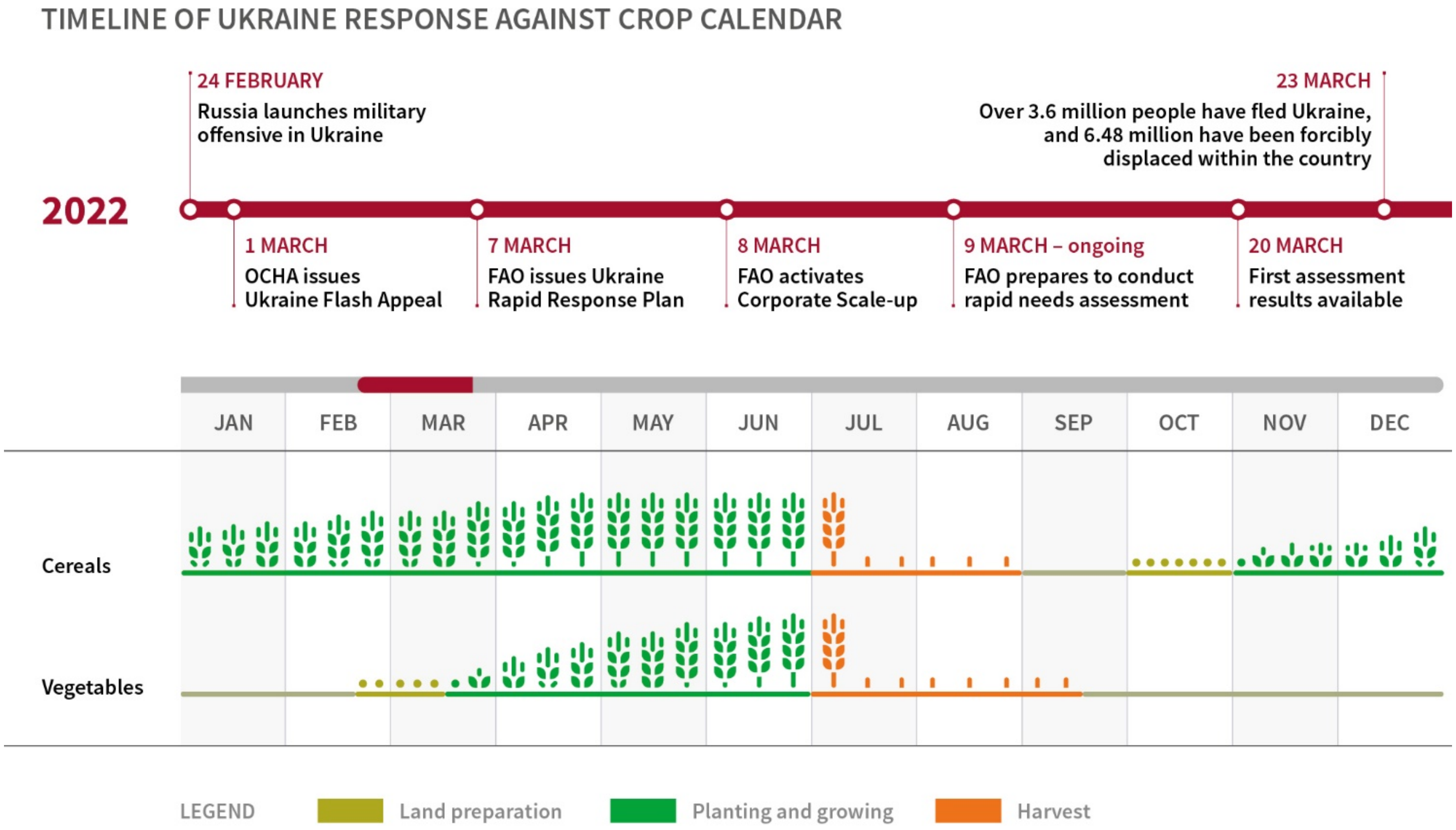
- Emergency support to smallholder farmers (Flash Appeal)
- Strengthened coordination
- Broader support to smallholders (livestock, recovery, etc.)
- Regular information flow on food security impacts in Ukraine

A nation-wide masterplan for the agricultural rehabilitation of Ukraine's agriculture will be also needed in the medium- to long-term

Timeline of Ukraine response against crop calendar

Ukraine agriculture sector:

- **Large farms and agro-holdings dominate** (however, significant smallholder farming sector with almost a million rural households)
- **Capital intensive** (fertilizer, pesticides, machinery)
- Need to be maintained and supplied with **fuel and inputs to ensure productivity**



Risks beyond Ukraine

YEMEN Acute food insecurity (2020)

Risk of Famine

Current acute food insecurity **(January-May 2022)**

17.4 million people

In Crisis or worse (IPC 3 and above)

Including **5.6 million** in Emergency (IPC Phase 4)

And **31 000** in Catastrophe (IPC Phase 5)

Drivers

- Conflict
- Economic shocks
- Reduced funding for HA
- Reduced access to basic services
- Natural hazards

Projected Acute Food Insecurity **(June-December 2022)**

19 million people

In Crisis or worse (IPC 3 and above)

Including **7.1 million** in Emergency (IPC Phase 4)

And **161 000** in Catastrophe (IPC Phase 5)

Source: IPC, 2022

Major concerns

- Latest IPC analysis shows a significant deterioration in acute food insecurity compared to 2021
- The Risk of Famine (RoF) is forecasted under the worst-case scenario in four districts of Hajjah

EAST AFRICA Acute food insecurity (2020)

32.9 million people

In 8 countries were in Crisis or worse (IPC 3 and above)

Including **6.8 million** in Emergency (IPC Phase 4)

Around **105 000 people**

In South Sudan were in Catastrophe (IPC Phase 5)

2021 preliminary numbers

Significant increase expected (forthcoming GRFC 2022)

Major concerns

- Impending drought in 2021-2022
- Widespread conflict and instability
- Significant levels of acute food insecurity in 2020, further increase expected in 2021
- High dependency on imports of wheat to meet food consumption needs
- Additional economic challenges in already fragile contexts

5. Policy recommendations

Policy recommendations

1. Keep trade open for food, fuel, and fertilizer
2. Review sanctions, pros and cons, costs and benefits
3. Avoid ad hoc policy reactions, export restrictions
4. Diversify food supplies, import sources
5. Prepare for disease outbreaks (ASF)
6. Prepare for nuclear risks
7. Prepare a food/fuel/fertilizer import facility for the poorest and most affected countries
8. Support vulnerable groups, provide humanitarian assistance
9. Strengthen market transparency and dialogue, provide timely information
10. Create a masterplan for food and agricultural rehabilitation in Ukraine

Thank you!