



Ukraine conflict: implications for food/feed safety-security/animal health/biodiversity



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Outline

- Impact of on-going Ukraine conflict on global food security (feed, energy, agricultural products)
- Emerging risk impacting the food supply chain (security/safety) in the EU and globally
- Emerging risk of animal health, environment protection, biodiversity
- What measures to assess and mitigate these risks?
 - EU action (The EFCSM, EFSA StaDG-ER, EREN)
 - Global action (FAO, WFP, Working Group of the UN Global Crisis Response Group)

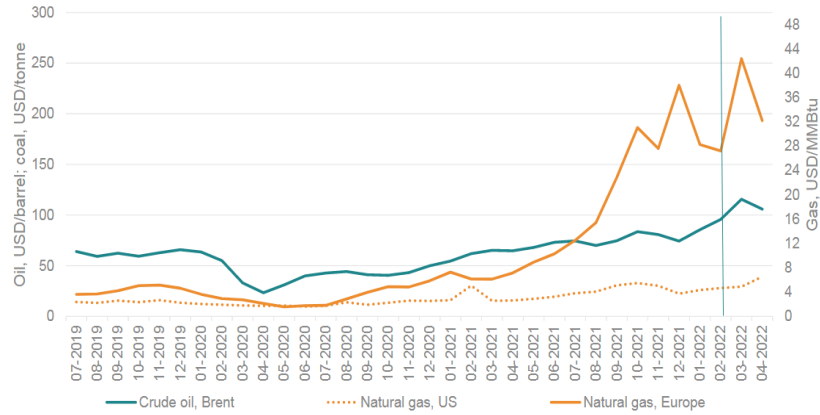
Conflict in Ukraine: impact on global food security

- Ukrainian crisis while disrupting already global tight food, energy, and financial market, has quickly affected the entire global agri-food sector as a whole.
- 2022 GDP growth lower than expected due to the war, and price **20,8% higher** than 2021
- Co-factors: Covid-19, climate change, poor countries, **previous rising food prices**
- UN: is the largest cost-of-living crisis of the 20H centuray to date



State of play: input price increase

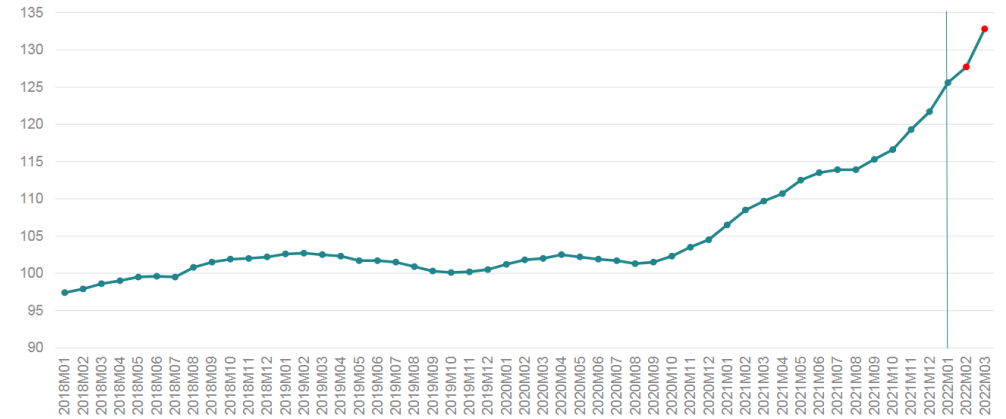
Energy prices



Source: World Bank

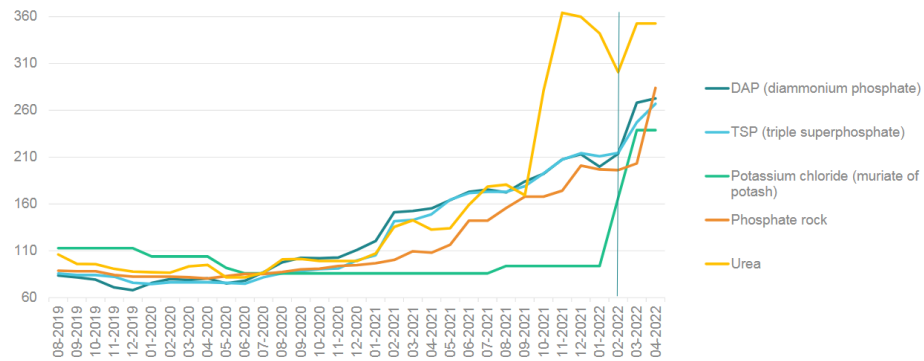
Feed

Output price index – Manufacture of prepared animal feeds



Fertiliser

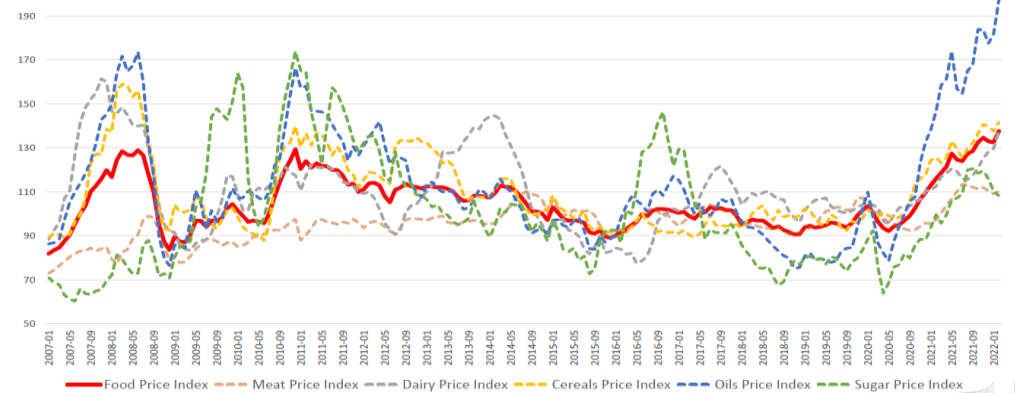
Fertiliser prices (index 2018-2019 = 100)



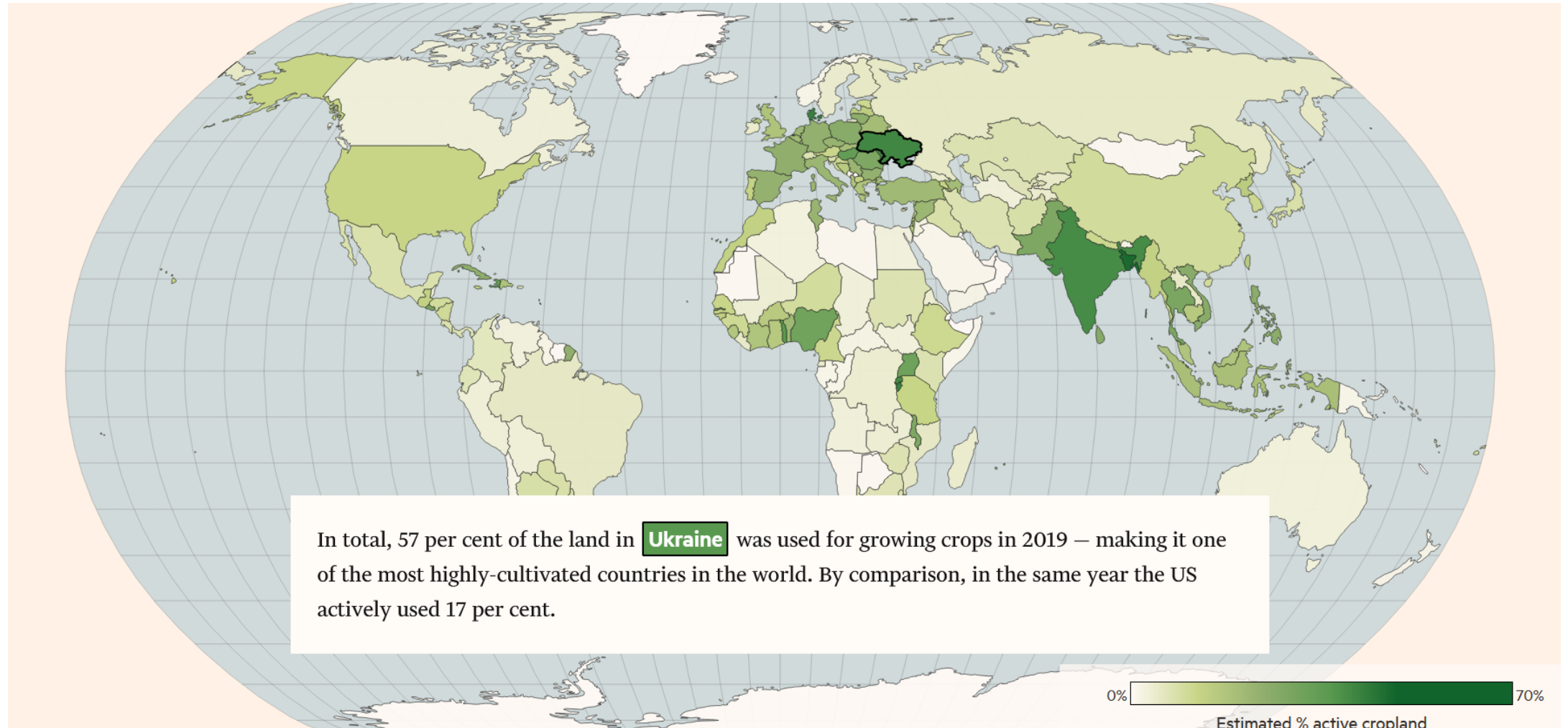
Source: World Bank

Agricultural prices at high level

FAO food price index and subsectors

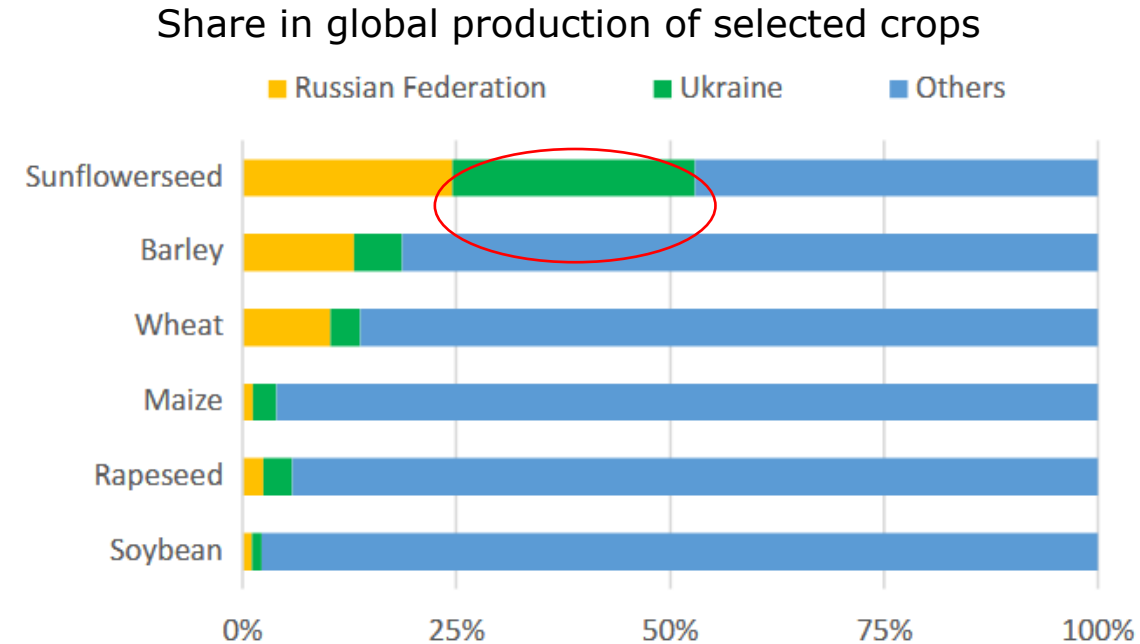


Conflict in Ukraine: impact on global food security



Conflict in Ukraine: why such huge impact on global food security?

- UKR became a leading global supplier of agricultural products and plays an important role in ensuring a sustainable food system and global food security
- Ukraine and the RF provide around 30% of the world's wheat and barley, 1/5 of its maize, and over half of its **sunflower oil**.
- RF is the largest fertilizer exporter in the world (with neighbouring Belarus around a fifth of the world's fertilizers) and world's top natural gas exporter.



Source: FAO XCBS system



State of play: food security impact

- halting of the Ukraine's agricultural exports, including livestock feed and fertilizer
- silos in Odesa are full of food that cannot be exported, while the world is at risk of a food shortage crisis
- prices have soared for wheat, vegetable oil, corn, grains, threatening food shortages and hunger crises.
- some countries (Egypt, Turkey, Bangladesh, Libia) are heavily reliant on wheat imports (60% or more) from Ukraine and the RF



Increased risk caused by the UKR war

- Food safety
- Food security
- Environment
- Biodiversity
- Animal welfare/Animal health

Increasing risk in food security/safety

- destruction of ports and infrastructure and compromised fertile plains, farmers struggled to find fuel, fertilizer and seeds
- in importing countries (EU): risk of unregulated diversification of import, which could lead to emerging chemical and/or microbiological risk (maximum residue Levels-LMR?)
- import from MERCOSUR: non equivalent standard?



Increased risk on environmental and biodiversity

- Ukraine is home to a variety of aquatic and terrestrial ecosystems.
- biodiversity loss due to direct destruction of habitats and vegetation for some of the 45,000 animal species present
- from refineries, chemical plants, and metallurgical facilities and fires release of large quantities of smoke and various toxic chemical compounds (eg. PAHs, carbon monoxide) which can lead to marked consequences on human health and animal.

Open Letter on the Environmental Dimensions of the Russian Invasion of Ukraine (with signatures; 3MAR2022)
Source: Environmental Peacebuilding Association, 2022
Countries: Ukraine
Added: 03/03/2022



Increased risk on environmental and biodiversity

- the intense conflicts have in fact led to the deaths of several animals of the zoo, at the same time threatening those who remained alive due to the lack of food supplies.
- **marine biodiversity**: naval operations undertaken by armies can in fact cause not a few sufferings for aquatic animals.
- in the EU ramping up food production by expanding lands under cultivation, increasing water and agrochemical use...could set back F2F goals on protecting biodiversity, regenerating soils and reducing carbon emissions?



Photograph of the Mariupol Zoo courtesy of Gabriele Micalizzi

Increased in risk of spread of animal diseases

- supply chains for feeds, veterinary medications and product transportation have been massively impacted
- limited number of cases where culling of animals was accelerated due to risks of unavailability of feed
- uncertainties on animal **disease control**



Increased risk of spread of animal diseases

- **drivers** of transmission and spread of the animal contagious diseases and zoonosis
 - disruption of animal health services and surveillance
 - porous borders, uncontrolled movement of animals and person
 - about 7.7 million internally displaced persons and, according to the UN, more than 5.7 million refugees have left Ukraine (<https://news.un.org/en/story/2022/05/1117632>)
 - **risk of spread** of transboundary animal diseases, zoonoses and wildlife related diseases **in neighbouring countries**



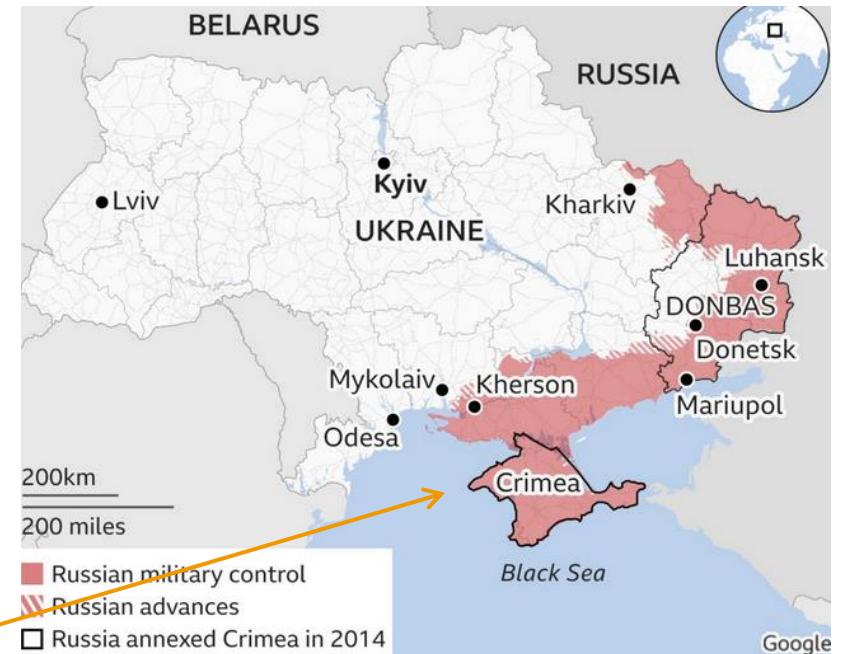
Increased risk of spread of animal diseases

- The war has resulted in one of the largest human displacement crises in the world today (UN refugee Agency)
- **uncontrolled** movement of person and their animals



Increased risk of spread of animal diseases

- abandoned livestock, cats and dogs in the areas affected by military activities leading to increased contact with other feral and domestic animals, and with humans
- increase interface human-wildlife-domestic animals and likelihood of spillover of pathogens
- increased uncontrolled slaughter and meat trade
- breaches in biosecurity of commercial poultry and livestock farms especially in the southern regions (lack of water, electricity..).



Increased risk of African Swine Fever

- pork is a vital source of protein to the Ukrainian people representing 34% of meat consumption
- pig farmers mostly lack inputs (feed ingredients, veterinary products, vaccines and antibiotics)
- destruction of many pig houses and transport to processors is difficult
- hundreds of supermarkets are closed or destroyed so the **supply chains are broken**



Increased risk of African Swine Fever

- Ukraine war could heighten risk for **African Swine Fever (ASF)**
- potential spread of infection via:
 - personal movement of ASF contaminated pork products
 - large number of abandoned domestic animals (pigs)
 - movement of wild boars crossing Ukraine's borders into the EU and Belarus.
- consequences for the EU pig farming
- disruption of the pig meat chain

OIE-WAHIS



Food and Agriculture Organization
of the United Nations

The Conflict in Ukraine and Animal Health

Increased risk of Avian Influenza, Rabies

- **Highly pathogenic avian influenza**

- February-April is the high-risk seasons for its introduction from wild birds (natural reservoirs)
- disruption of surveillance in wild birds and poultry interface areas
- the disease spillover may quickly spread in the country.



- **Rabies**

- Rabies Bulletin Europe: out of 40,000 cases reported in Europe from 2012 to date, over 14,000 are in Ukraine
- in 2018, 1704 cases of rabies were detected with 58% of domestic animals and 42% in wild
- 2021: 500 cases.



How to tackle the animal health risk?

- **FAO Recommendations**

- **UKR**

- multi-disciplinary panel of national and international experts to work on risk evaluation and monitoring of the situation jointly with the government of UKR
 - system of collecting information related to animal production and health in UKR (e.g. risk based surveillance for specific diseases, enhance disease reporting and detection)

- **Neighbouring countries**

- assess the risk of introduction and spread of diseases
 - vaccination of all dogs and cats against rabies entering EU
 - activate early warning system applying the One Health approach



How to address the EU food safety/security risk?

- The EU crisis management measures
- Commission established the European Food Security Crisis Preparedness and Response Mechanism (EFSCM) Expert Group



EFSCM activities 2022-2024

- a study on mapping risks and vulnerabilities of the food supply chain
- foresight, risk assessment and monitoring
- coordination, cooperation and communication (sharing information, best practices, national contingency plans, etc..)

European Food Security Crisis Preparedness and Response Mechanism (EFSCM)' s 3 Sub-Groups

- on the review of ways to diversification of sourcing in the food supply chain
 - diversifying domestic production (sustainably)
 - diversifying through trade
 - diversifying consumption
- on the development of **guidelines for crisis communication** on food supply and food security
- on the development of a **dashboard** for the **monitoring of food supply and food security** (e.g. objective: strengthen preparedness, support response and monitor food security).



How to address the global risk

■ FAO Global Policy recommendations (April 2022)

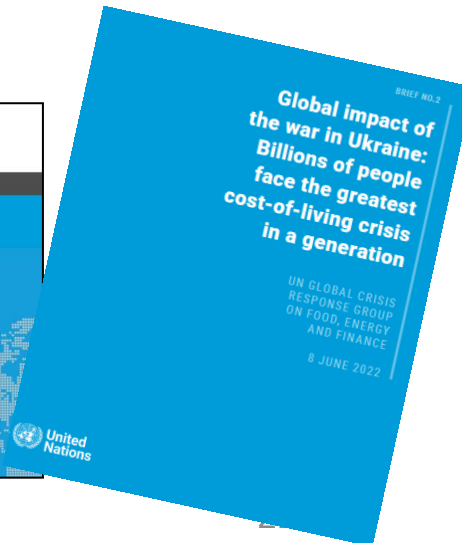
- keep trade in food and fertilizers open
- find new and more diverse food supplies
- contain the spread of African Swine Fever (ASF) and other animal diseases (biosecurity)
- strengthen market transparency and dialogue.

■ UN Global Crisis Response Group's briefs

- 3 dimensional crisis: prices of food, energy, and fertilizer.
- cost-of-living crisis



169th session of FAO's Council



Take home message (1)

- EU food security is not at stake at the moment
- the impact of the Ukraine conflict can therefore hardly be considered a food security crisis - more an **animal feed crisis**.
- ongoing discussion on the opportunity to postpone the sustainability targets of the Green Deal and to (temporarily) watering down some of the ambitions of the F2F strategy
- **Clear COM message**: F2F must remain the key stone to food security, the F2F strategy is not an obstacle, rather is a key to create a crisis-proof and resilient food system.
- **keep monitoring the UKR animal health situation**

Take home message (2)

- From the Commission:
 - avoiding trade restrictions and ensuring stability in the global food market.
 - CAP strategic plans offers an opportunity to all MS to adapt their strategic plans to create resilient and sustainable agri-food systems
 - Sustainable food system framework initiative planned to be adopted in 2023 not delayed