

HSS #6



Hamburg Sustainability Session 6 - Hamburg meets Kyiv - FOOD SECURITY

Date: 18/November/2022

Time: 11:00 Hamburg (CET) & 12:00 Kyiv (UCT+2)

How is the invasion of the Ukraine impacting food security locally and globally?

Agenda

11:00 SDG2 and the effects of War in Europe

Dr. Kalterina Shulla

Researcher at Research + Transfer Centre
„Sustainability & Climate Change Management“
(FTZ-NK) HAW Hamburg

11:20 How to achieve food security in times of war

Viktor Filatov

Expert in Farming
Founder of the FDseeds brand, Ukraine

12:00 Food Security in Conflict Context in Ukraine

Dr. Maria Fedoruk

Environmental economy researcher and activist, Coordinator
of “Nature Conservation and Conflict in Ukraine. (FTZ-NK)
HAW Hamburg

12:30 Q&A session

Food Crisis from the perspective of the Sustainable Development Goals

DiTTs Project

DAAD – German Academic Exchange Service

- Teaching materials for the SDGs
- Online free resources for teacher and students, everyone interested in SDGs
- Toolbox Hosted by HAW Hamburg
www.dl4sd.org

“Digital Introduction to the Sustainable Development Goals in higher education teaching”
Regional aspects in implementing the SDGs from Brazil and South Africa and Europe”

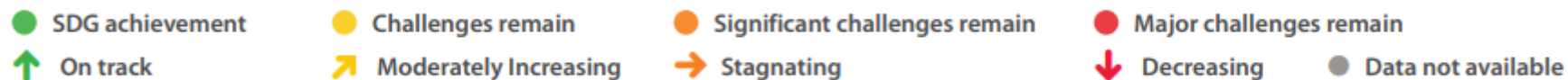
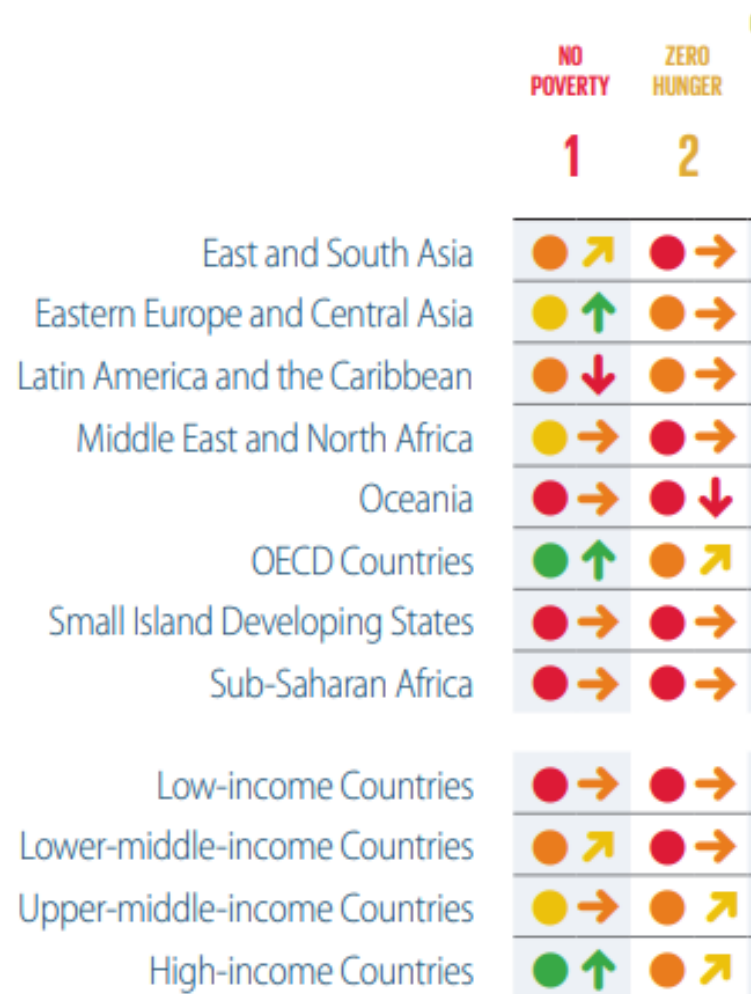


The world aims to achieve Zero Hunger-
embracing this in SDG2- of the 2030 Agenda for
Sustainable Development



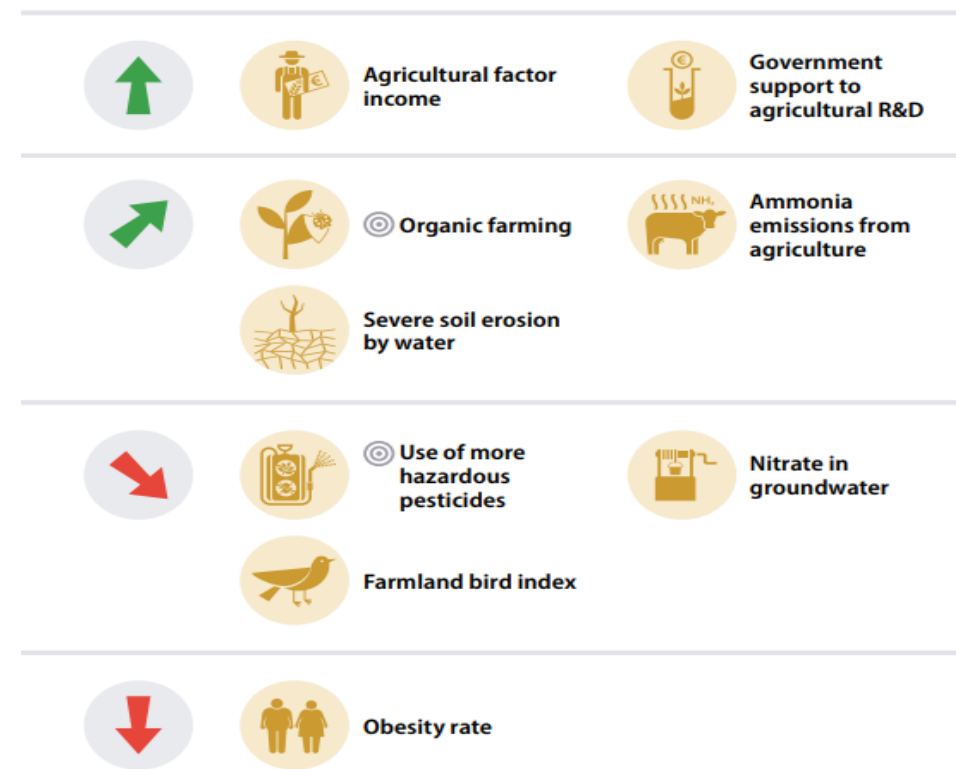
SDG 2 seeks to end hunger and malnutrition and ensure access to safe, nutritious and sufficient food. Realising this goal largely depends on promoting sustainable food production systems, as well as increased investment in rural infrastructure and agricultural research and development.

SDG2- 8 Targets and 13 Indicators



SDG2 in the European Union

Assessment of short-term trends



Main consequences of War in Ukraine for Europe

- **Food systems and supply chains (SDG1, SDG2)**
Pressure on global food systems and more people suffering hunger and food insecurity
- **Energy security (SDG7)**
Energy crises in many European countries, and raise of energy prices
- **Migration and humanitarian crises (SDG16)**
Reduced international food aid to meet rising food demands in times of crisis
- **Environment**
Aggravating ecosystems, air quality, deforestation etc.

Bread price increase 18%
across Europe

Gas 115% and electricity 237%

4,725,612 people moved to
Europe –(UNCHR)

War in Ukraine is hampering the achievement of the SDG2

- SDG 2 aims to end hunger
- SDG2 integrates and links the dimensions of food security, nutrition, and sustainable/resilient agriculture
- SDG 2 emphasizes the importance of the **role of small producers in the various agricultural sectors** and can be regarded as a key for safeguarding agro-ecosystems
- Increasing number of people suffering hunger- up to 10% of global population
- Threatening food security and nutrition – high prices and inflation, agricultural input costs, logistical bottlenecks and market uncertainties, and speculation
- Damaging small and medium sizes producers in the agricultural sector

Viktor Filatov

- Farmer on 4200 hectares of land
Founder of the FDseeds brand,
which specializes in the cultivation of
cover crop content and the
production of cover crop mixtures.
Using climate-oriented solutions in
his farm.

[https://www.facebook.com/FDSeeds?
mibextid=LQQJ4d](https://www.facebook.com/FDSeeds?mibextid=LQQJ4d)







Food Security in war context in Ukraine

Dr. Mariia Fedoruk,
Hamburg University of Applied Sciences
Germany



Ukraine provided
before the 2022

46%

World's
sunflower
oil exports

9%

World's
wheat
exports

17%

World's
barley
exports

12%

World's
corn
exports

Source: US Department of Agriculture

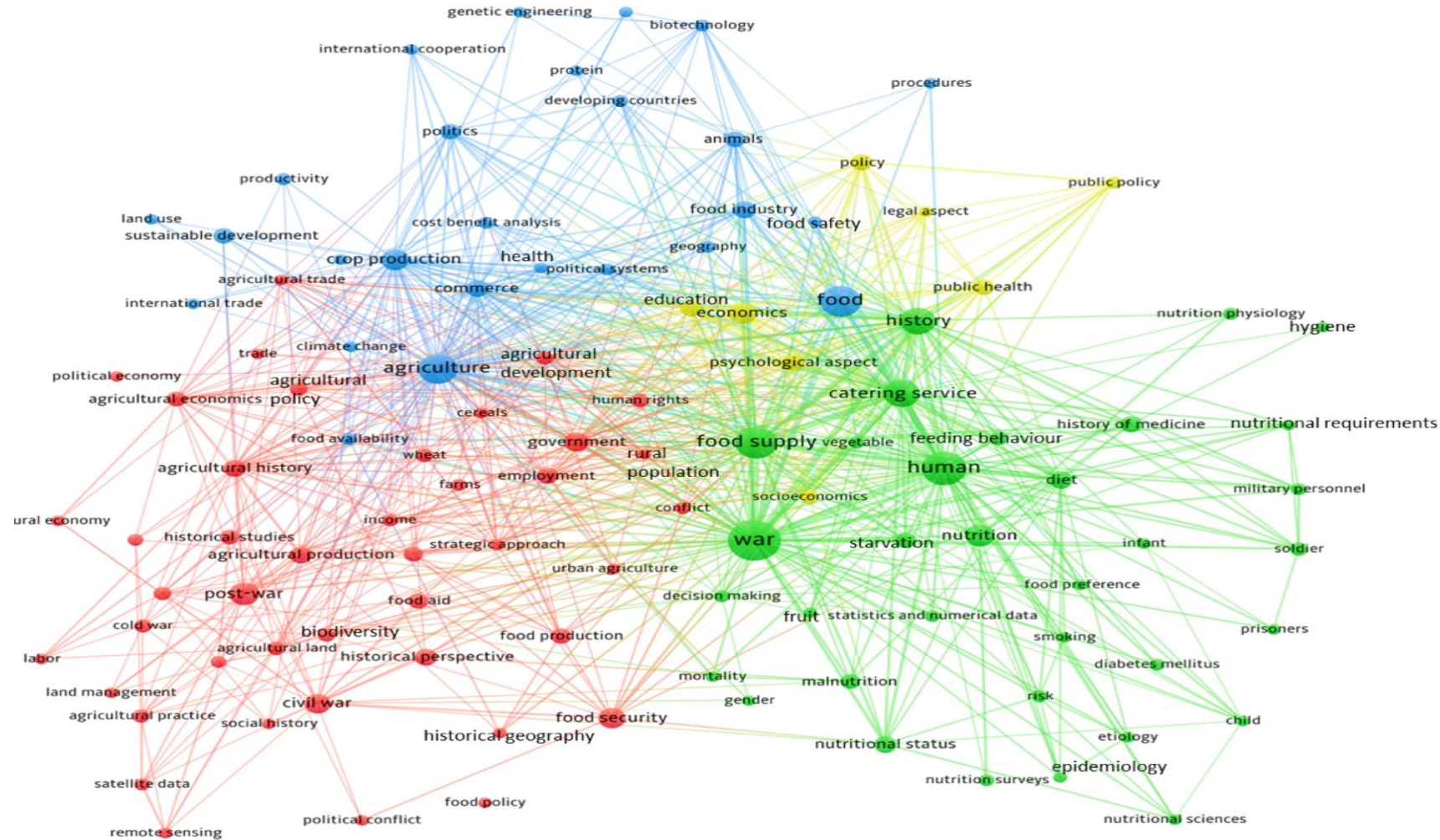


Top 15 importers of Ukrainian wheat





Country	Quantity (million tons)
Egypt	3.08
Indonesia	2.72
Bangladesh	1.51
Pakistan	1.24
Turkey	1.00
Tunisia	0.98
Morocco	0.95
Yemen	0.71
Lebanon	0.67
Philippines	0.63
Thailand	0.56
Libya	0.55
Malaysia	0.40
Spain	0.37
Republic of Korea	0.32

Source: Report of the World food
program "Food security
implications of the Ukraine"

Results obtained by bibliometric analysis (VOSviewer)



Clusters

-  C1: Food security and government
-  C2: Human history, nutrition and war
-  C3: Agriculture, food safety and health
-  C4: Economics and public policies



The main causes of food insecurity in terms of war:

- destruction
- danger
- reduction in crop production (lands containing unexploded ordnance, infrastructure's destruction, farmers fear for their lives or engaged in war)
- environment deterioration
- displacement
- control on food (food insecurity as a weapon)
- international food trade barriers (as a result: food distribution inequality, violation of basic human right, and maintenance of social disorder)
- economic recession
- political instability
- energy prices (influence on energy related inputs (fertiliser, pesticides))

Military drivers of environmental degradation

- Bombs, explosives detonation, missiles
- Undetonated bombs left in the soil
- Fires caused by explosions, missile attacks
- Military vehicles (cars, tanks, personnel carriers, combat support vehicles, etc.)
- Artillery, ammunition
- Chemical warfare agent
- Air navigation, drones, military aviation
- Military waste
- Atomic warfare, radioactive particles
- Construction of trenches and bunkers

Source: Results obtained by bibliometric analysis (VOSviewer), Ukraine-Nature project

Groups



Soil



Air



Water



Biodiversity

Self-sufficiency in food production is not suggested as an immediate response to the post-war food shortage problem due to environment deterioration that can lead to a health problems.

The conflict may cause a change in the agricultural behavior of the population which may disrupt the ecological system and threaten wildlife without making an actual increase in crop production or food security.

Along with the effects of war, Global climate change may also contribute further to food insecurity

Despite, there is enough food on the global level, higher food prices could become a problem and put food availability under some pressure for a part of the population that has a low income, spends a large part of their food on cereals and are highly dependent on imports of Ukrainian and Russian cereals (e.g. Egypt, Turkey, Lebanon, Tunisia, Yemen, Syria, Afghanistan, Nigeria)

This war is also affecting the ability of international agencies to provide food aid to countries that are suffer from famine or other armed conflicts

Transitions to (more) closed food economies are not advisable, as this would remove players from international markets, could lead to food shortages in many countries and might take focus away from environmental and health-related issues.

Solutions:

- respecting food as basic human right
- merging local capacities
- sustainable global cropping system
- more equitable seed distribution to rehabilitate agriculture disorder
- overseas agricultural investment
- food import from multi origins
- food independence by replacing available foods with scant foods
- taking initiatives aimed to offer people the most healthy diet possible during food shortage
- reduction of food waste
- establish by the international community a strategic food reserve
- during a war situation, satellites could be used to alleviate food insecurity in the target country, facilitating food aid by distributing it where it's most necessary



https://www.youtube.com/channel/UCo7vyKSW7hGIgBUXWs_wiQQ/videos



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Questions & Answers!



Thank you!



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