The background of the slide is a deep red color. On the left side, there is a vertical strip with a gradient from dark red at the top to light pink at the bottom. Overlaid on this strip are several white and light pink arrows of various sizes, all pointing upwards. Some arrows are solid, while others are semi-transparent. The main title is centered on the right side of the slide, set against a dark red background.

Food Systems Transformation: Ukraine

Olena Kovalova,
Dr.Sc in Economics,
Moderator of National Dialogue on Food System Transformation in Ukraine

Timeline



2013-
2014

Revolution
of Dignity

2014

russian invasion,
annexation of
Crimea

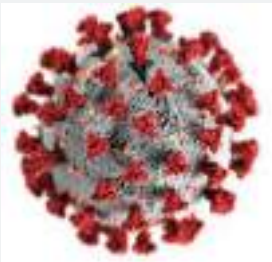
D
C
F
T
A



2017

Agricultural
State Support
reform (VAT),
state support
for agriculture
in the amount
of at least one
percent of
gross
agricultural
production

2020-



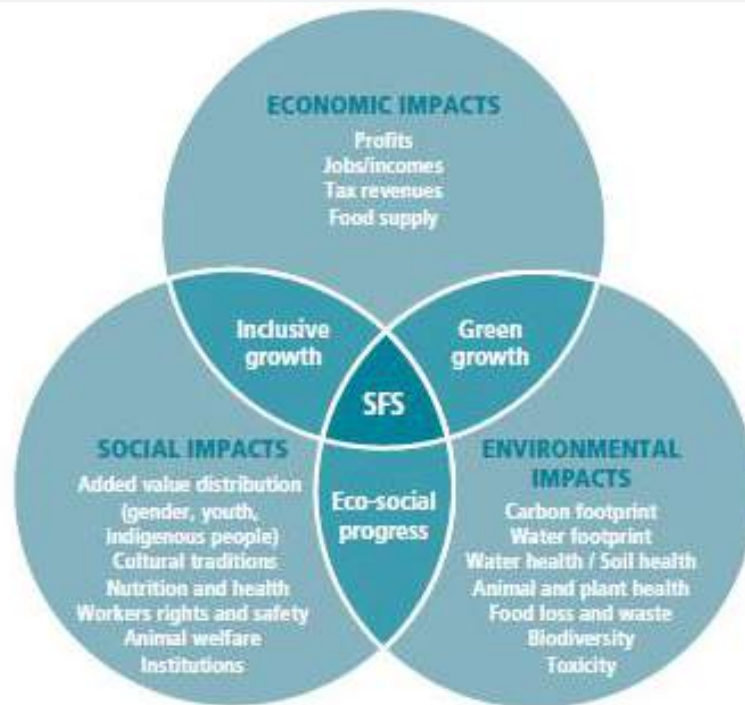
Agricultural
land reform

Updated
Nationally
Determined
Contribution of
Ukraine to the
Paris
Agreement
(NDC2)

2021

Food System Transformation: on the same page

*Food systems have fed a growing population, but the cost is unsustainable. **Current food systems often encroach on natural habitats, pollute the planet, exacerbate rural poverty and underlie ill health and disease.** Market and government failures impose high costs on society and the environment.**



Source: Adapted from FAO, 2014.

Food systems (FS) encompass the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded.

A **sustainable food system (SFS)** is a food system that delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised. This means that:

- It is profitable throughout (economic sustainability);
- It has broad-based benefits for society (social sustainability); and
- It has a positive or neutral impact on the natural environment (environmental sustainability**

Source:

- <https://www.worldbank.org/en/programs/food-systems-2030/food-systems-transformation>
- ** FAO

Food System Transformation: on the same page

UN Summit 2021

Action Tracks for the Food Systems Summit in support of the SDGs:

1. Ensuring Access to Safe and Nutritious Food for All (enabling all people to be well nourished and healthy);
2. Shifting to Sustainable Consumption Patterns (promoting and creating demand for healthy and sustainable diets, reducing waste);
3. Boosting Nature Positive Production at Sufficient Scale (acting on climate change, reducing emissions and increasing carbon capture, regenerating and protecting critical ecosystems and reducing food loss and energy usage, without undermining health or nutritious diets);
4. Advancing Equitable Livelihoods and Value Distribution (raising incomes, distributing risk, expanding inclusion, creating jobs); and
5. Building Resilience to Vulnerabilities, Shocks and Stresses (ensuring the continued functionality of healthy and sustainable food systems).

Ukraine's agriculture before the full-scale russian invasion

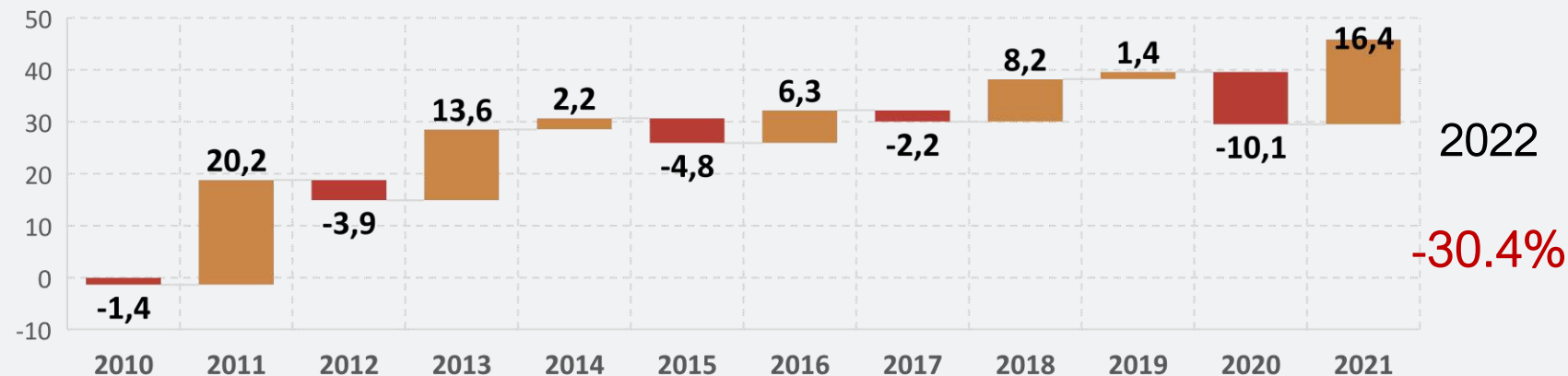
Population 41.1 M

Employment in Agriculture
17.3%, 2.6 M

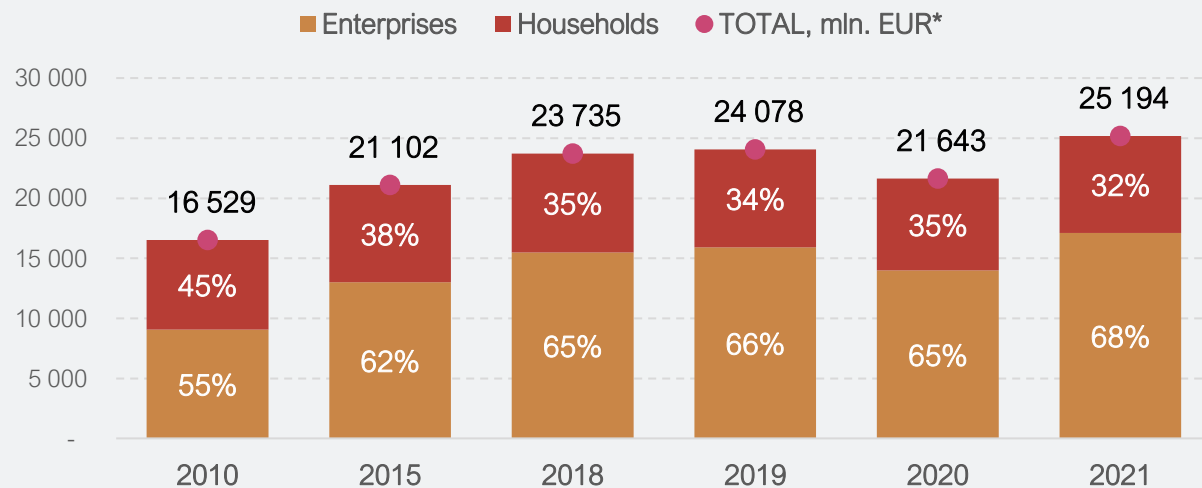
20.3% of GDP

1.8% share of government
support in farmers' revenues

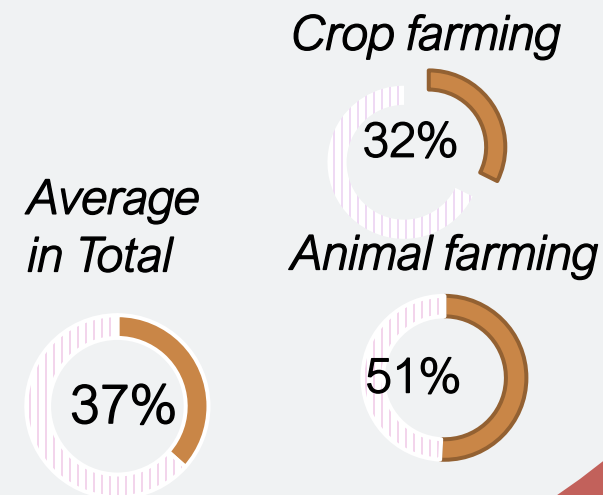
Cumulative, Agricultural Production Index (in 2016 prices, % to previous period)



Agricultural production in 2016 prices, M EUR*



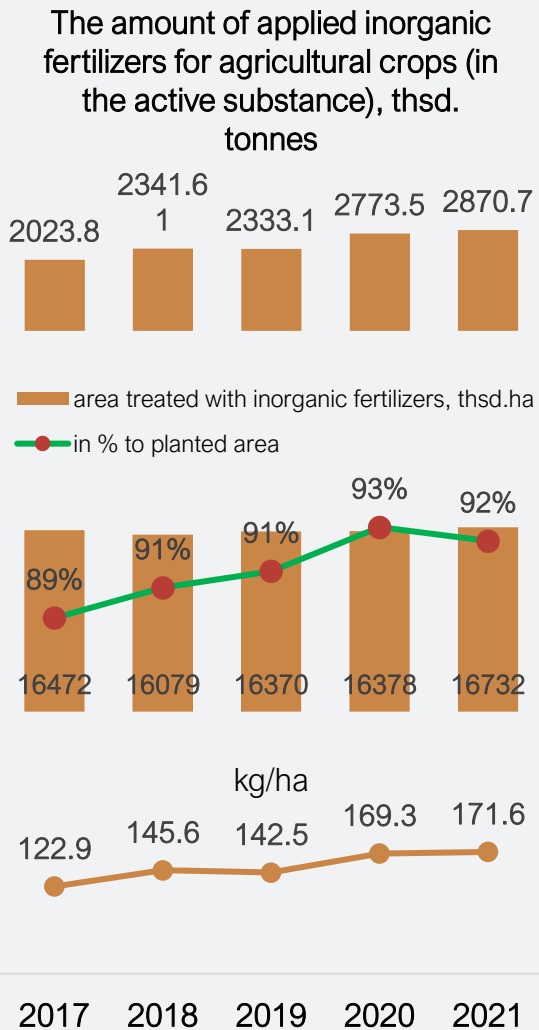
Share of Households



* at the average Central Bank ROE in 2016

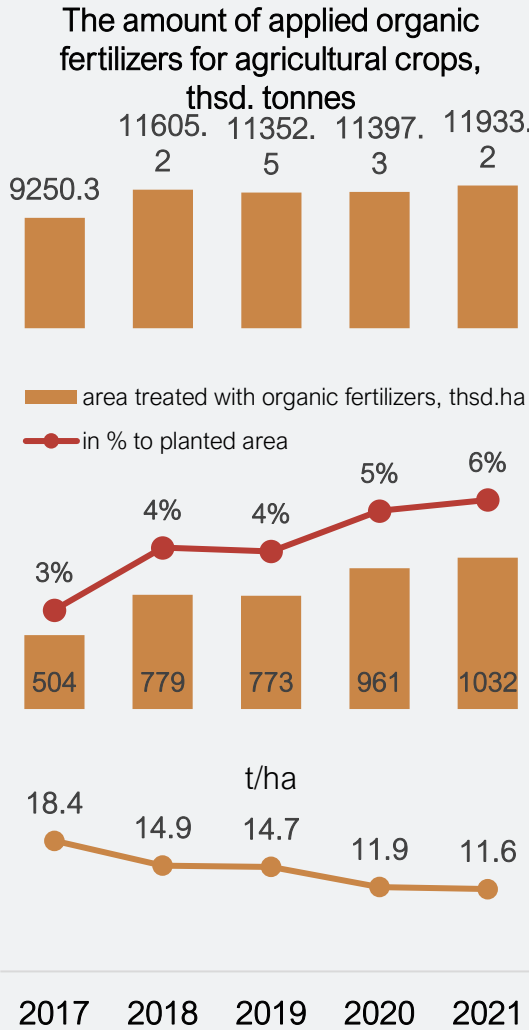
Fertilizers and Plant Protection

Fertilizers

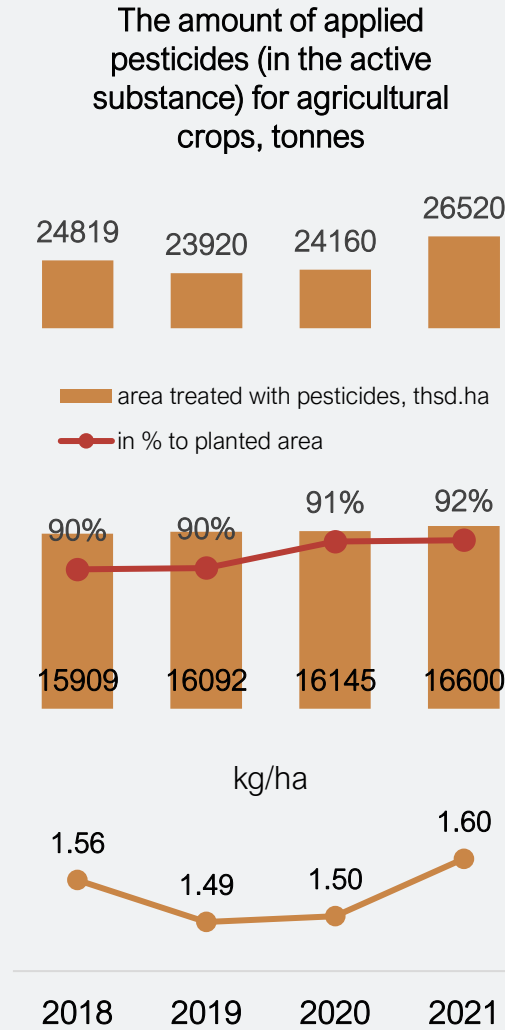


Up to 200

Organic fertilizers



Pesticides



Up to 10

EU From Farm to Fork Strategy:

- a reduction by 50% of the use and risk of chemical pesticides and the use of more hazardous pesticides by 50% by 2030.
- a reduction of nutrient losses by at least 50% while ensuring that there is no deterioration in soil fertility. This will reduce the use of fertilisers by at least 20% by 2030

Organic farming

- In 2022, **1 %** of the total agricultural land in Ukraine, i.e., 422.299 ha was used for certified organic production or under conversion
- **418** agricultural producers
- total number of organic farmers was **528**

last five years  **+21% areas**
+29% number of farmers

russian invasion  **-30% areas**
-15% farmers

- 2021 Ukraine exported about 260.000 t of organic products worth USD **220 million** to over 30 countries, **82%** to the EU market. Ukraine is among the TOP 5 suppliers of organic products to the EU and the first among non-tropical countries.
- the volume of Ukrainian organic products exported to the EU and Switzerland in 2022 of 225.814 t was **13%** higher than the previous year.

Antimicrobials

The procedure for the use of antimicrobial veterinary medicinal products in veterinary medicine and the procedure for submitting a report on the volumes of antimicrobial veterinary medicinal products used by them (2022)

EU From Farm to Fork Strategy:

- a reduction by 50% of the sales of antimicrobials for farmed animals and in aquaculture by 2030
- and reaching 25% of agricultural land under organic farming by 2030

Food System Transformation in Ukraine

Achieving the 2030 SDGs (2020), Ukraine



Source: <https://ukraine.un.org>

National priorities for the transformation of food systems by 2030 in the context of achieving the Sustainable Development Goals 2030 and a strategy for their implementation at the national level (2021):



Food System Transformation in Ukraine

HEALTHY NUTRITION

1. “Healthy and varied food in sufficient quantities for everyone in Ukraine”
 - Development of a national system of responsible consumption, reduction of food losses and waste; Introducing a culture of adherence to standards and best practices across the entire "from farm to fork" chain;
 - Ensuring the availability and accessibility of special food products for people with partial food intolerance;
 - Increasing the share of fortified foods in accordance with the "WHO Recommendations for increasing the content of vitamins and trace elements in food";
 - Improving the national nutrition system in schools;
 - Introduction of a traceability system at all levels of activity of food market operators "from farm to fork";
 - Creating programs to support and encourage processing of agricultural and fishery products.
2. “Changing the culture of food consumption and recovery after a pandemic”
 - Increasing market share of semi-finished and ready-to-eat products;
 - Ensuring post-pandemic recovery of the HoReCa segment;
 - Supporting initiatives aimed at improving the well-being of workers in various food-related sectors;
 - Development of gastrotourism and support production of craft and local products;
 - Promoting development of a national culture of wine consumption.

Food System Transformation in Ukraine

RESISTANCE TO MARKET INSTABILITY AND FOOD AVAILABILITY FOR ALL

1. “Ukraine – is one of the key guarantors of global food security”:
 - Implementation of export food policy and Promotion of Ukrainian agricultural and food products in foreign markets;
 - Adherence to the principles of transparency and predictability of behavior as a supplier in the foreign market
2. “Increasing the share of small and micro agricultural producers in food systems”:
 - Creation of a nationwide system of support for small food producers;
 - Establishment of a national system of advisory services;
 - Extensive training of small agricultural producers in the latest technologies, especially climate-neutral;
 - Encouraging participation of small farmers in organized product promotion chains
3. “Introduction of innovations in the agricultural sector. The increasing role of science and education”:
 - Implementation of national reporting standards for compliance with the principles of sustainable development;
 - Harmonizing approaches with the EU animal health and welfare standards;
 - Application of animal husbandry practices in compliance with the principles of sustainable development;
 - Strengthening the role of agricultural science and education in the transformation of food systems;
 - Improving vocational agricultural education and developing lifelong learning;
 - Development of agrometeorological systems;
 - Digital transformation of food production chains;
 - Improving systems for forecasting the development of the agricultural sector of the economy;
 - The growth of organic production is ensured and supported;
 - Accelerate the process of harmonization of legislation with the provisions of the EU Directives and Regulations.

Food System Transformation in Ukraine

ECO FRIENDLY PRODUCTION

1. "Adaptation of agriculture to climate change":
 - System of voluntary measurement, reporting and verification of greenhouse gas emissions; Carbon agriculture;
 - Ukraine's Second Nationally Determined Contribution to the Implementation of the Paris Agreement
2. "System of state policy, state support and financial and credit system takes into account the requirements of environmental and social management in enterprises":
 - GAEC indicators into state support policy;
 - Introduction (or stimulation) of the use of environmental criteria in public procurement of food products;
 - National system of green financing and insurance;
 - Harmonization of legislation with the approaches of the EU Strategy "From farm to fork";
 - Chemical pesticides circulation; Improving the fertilizer management system; Reducing the use of plastic in food chains.
3. "Sustainable Natural Resources Management":
 - Strengthening the monitoring of bio-resources and natural resources; Self-seeded forest management; Wood line management; Introduction of innovative irrigation technologies, machinery and pipelines; Closed cycle of water resources;
 - Increasing the share of environmentally friendly modes of transport, such as rail transport and inland waterways;
 - System for monitoring compliance with environmental standards in the production of agricultural products.
4. "Improving the energy efficiency of food systems":
 - Increasing the share of bioenergy in the national energy balance;
 - Introduction of "best available technologies" and "best available practices" in the field of energy efficiency in agriculture.

Food System Transformation in Ukraine

DECREE OF THE PRESIDENT OF UKRAINE No. 41/2022

On the national priorities for the transformation of food
systems in Ukraine
February 7, 2022

- 1) determination of national priorities for the transformation of food systems in Ukraine for the period up to 2030, including such areas as **healthy nutrition**, **environmentally friendly production**, **resistance to market instability**, and **availability of food products for all population groups**;
- 2) ensuring the **implementation of national priorities for the transformation of food systems in Ukraine** for the period up to 2030, in particular, during the development of draft forecast and programme documents, draft regulatory and legislative acts, primarily in the fields of agriculture, on issues of food security, safety and quality of food products



Milestones

24.02.2022

full-scale unprovoked invasion
by the russian federation



Wartime policy - food security, critical infrastructure, logistics, provision of electricity and inputs, demining, applying for exemption from conscription ...

23.06.2022

Ukraine is a candidate for
EU membership



Acceleration of the adaptation/implementation the EU
acquis

Ukraine's agriculture after the beginning of the full-scale russian invasion

Decrease in sown area by 25%

Lack of labor/inputs

Demining: 1.75 M ha, for vernal sowing operations
470 K ha

Disruption of Logistics and Associated Costs:

- \$25 per t for transporting grain to Ukrainian port, \$150 per ton to Polish port
- lack of insurance coverage
- waiting for an inspection in the Bosphorus for up to 60 days – demurrage
- 97% before 24/02/2022



Population 28-32 M*

4,8 M

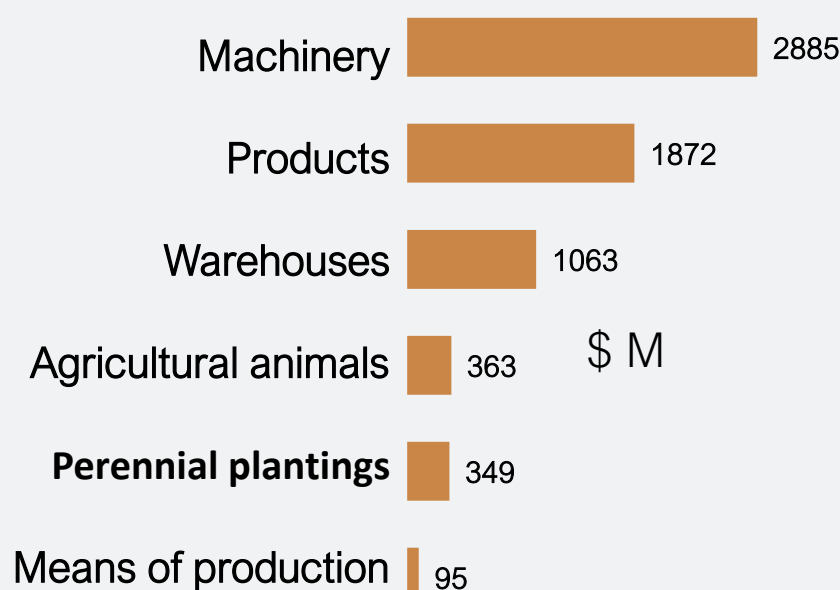
IDPs

4,9 M

EU temporary protection

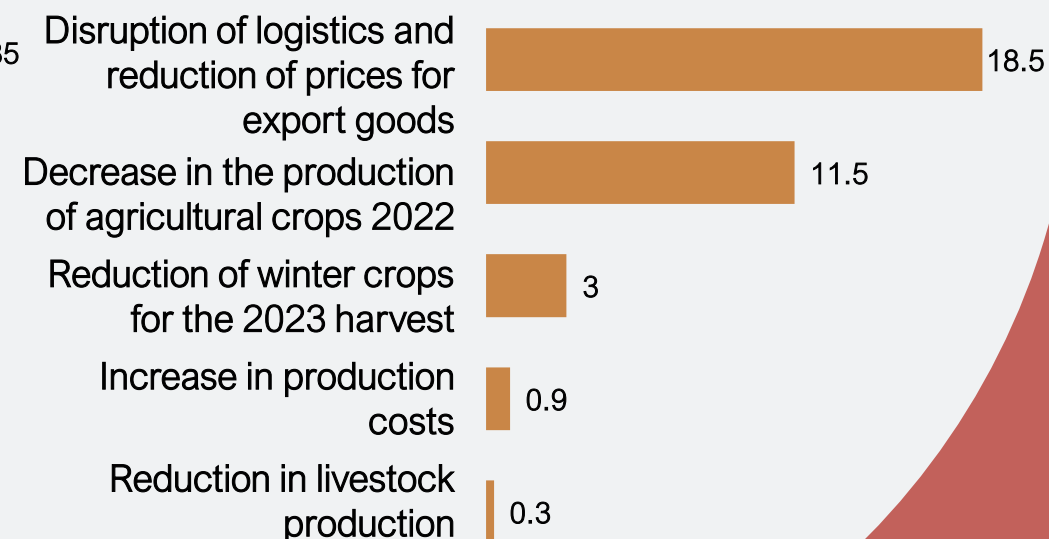
Direct losses**

\$6.6 B



Indirect losses

\$34.2 B



Source: * Institute of Demography; ** KSE



Footage Date: ~3/23/2023

Map of areas potentially contaminated by explosives

<https://mine.dsns.gov.ua/>

Source: NASA+University of Maryland,
E. C. Duncan, S. Skakun

Assessment of Direct Losses Incurred by Agricultural Producers (January 1, 2022)

Types of losses	Unit	Number of damaged assets*
Machinery	units	109951
Warehouses	capacity, K. tons	10748
Perennial crops	ha	18122
Destroyed or stolen agricultural products (ready for sale)	tons	4037542



Bachmut, 2022, 17 K head



Kharkiv, Agrosvit, 2 K cows, 2022



Gostomel, 30 horses, 2022



Chornobayivka, 4 M chickens

* Source: KSE

Losses of agricultural producers



Snegurivka, Mykolayiv, warehouse



Donetsk region, 2022, wheat field



Zaporizhzhia region, 2022



Kyiv region Bakery, Chanta



Production of key crops in Ukraine

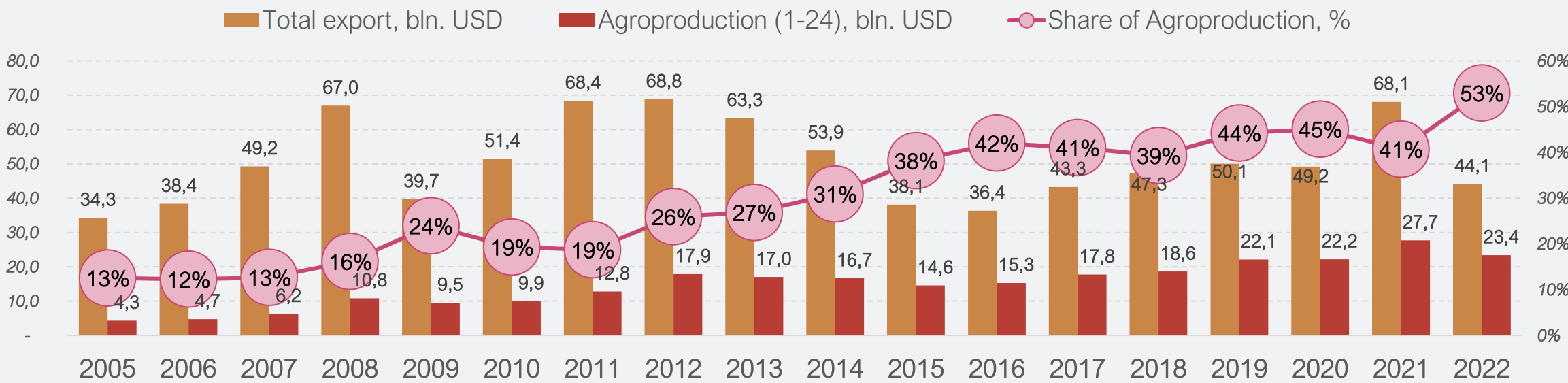
Crop	Planted Area, K ha			Harvest Area, K ha			Yield, t/ha			Production, K t			Change of production	
	2021	2022	2023*	2021	2022	2023*	2021	2022	2023*	2021	2022	2023*	22 vs 21	23 vs 21
Cereal and leguminous	15 995	14 006	10 069	15 948	11 382	9 817	5,39	4,58	4,65	86 010	52 605	45 614	-39%	-47%
<i>Wheat</i>	7 095	6 728	4 100	7 090	4 900	4 018	4,53	3,86	4,04	32 151	18 936	16 221	-41%	-50%
<i>Barley</i>	2 476	1 889	1 565	2 472	1 660	1 537	3,82	3,42	3,37	9 437	5 679			
<i>Corn</i>	5 522	4 600	3 770	5 482	4 220	3 638	7,68	6,32	6,29	42 110	26 670			
Main oilseeds	8 998	8 002	8 280	9 052	7 603	8 178	2,53	2,42	2,41	22 897	18 378			
<i>Sunflower</i>	6 622	4 970	5 400	6 665	4 871	5 340	2,46	2,26	2,30	16 392	10 998			
<i>Soybeans</i>	1 311	1 570	1 680	1 323	1 546	1 664	2,64	2,48	2,53	3 493	3 835			
<i>Rapeseeds</i>	1 006	1 462	1 200	1 005	1 186	1 174	2,93	2,99	2,76	2 939	3 545			

* Forecast

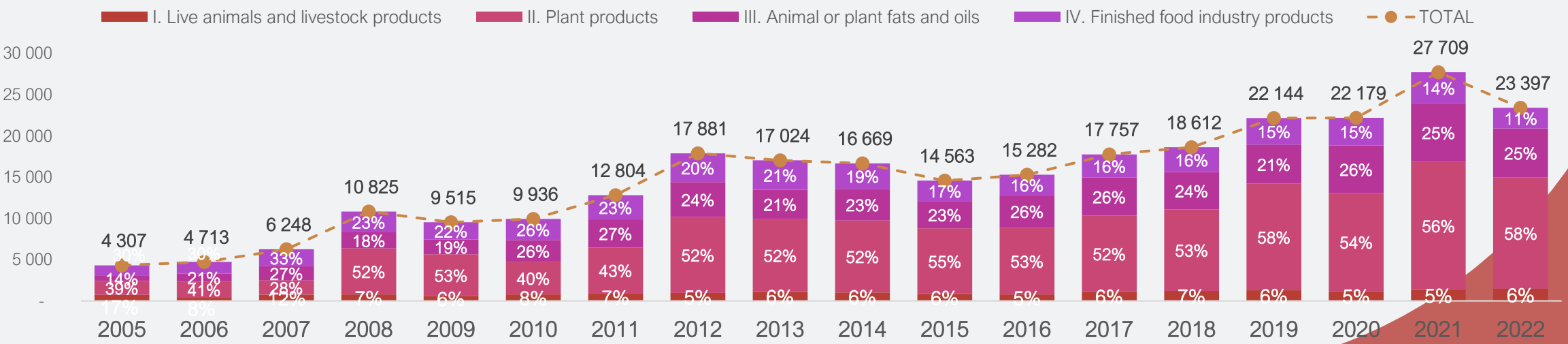
Source: APK-Inform Agency

Export Performance

Export from Ukraine



Structure of agricultural products export, M USD





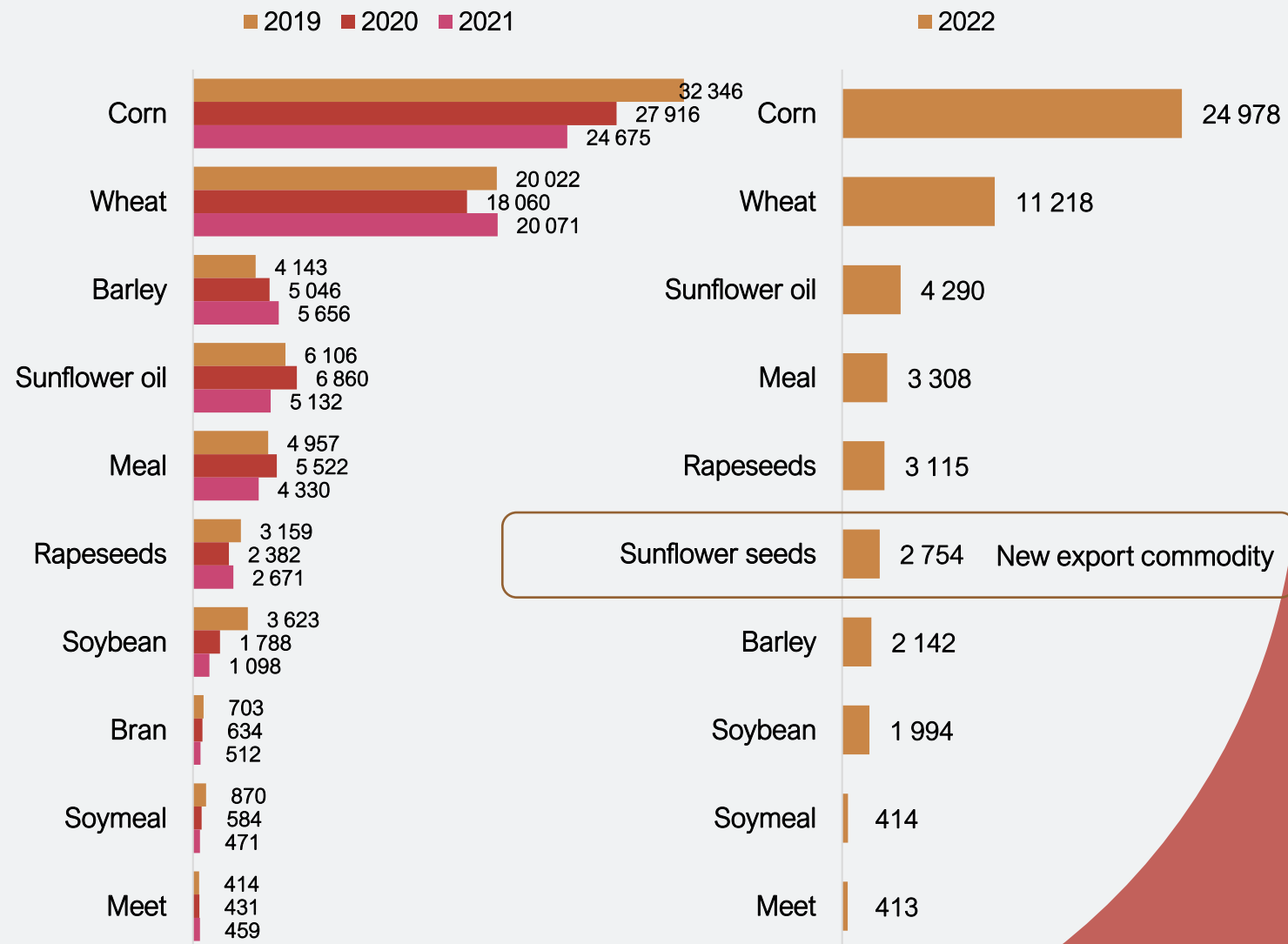
MAJOR IMPORTERS OF UKRAINIAN PRODUCTS 2021, MLN \$



MAJOR IMPORTERS OF UKRAINIAN PRODUCTS 2022, MLN \$



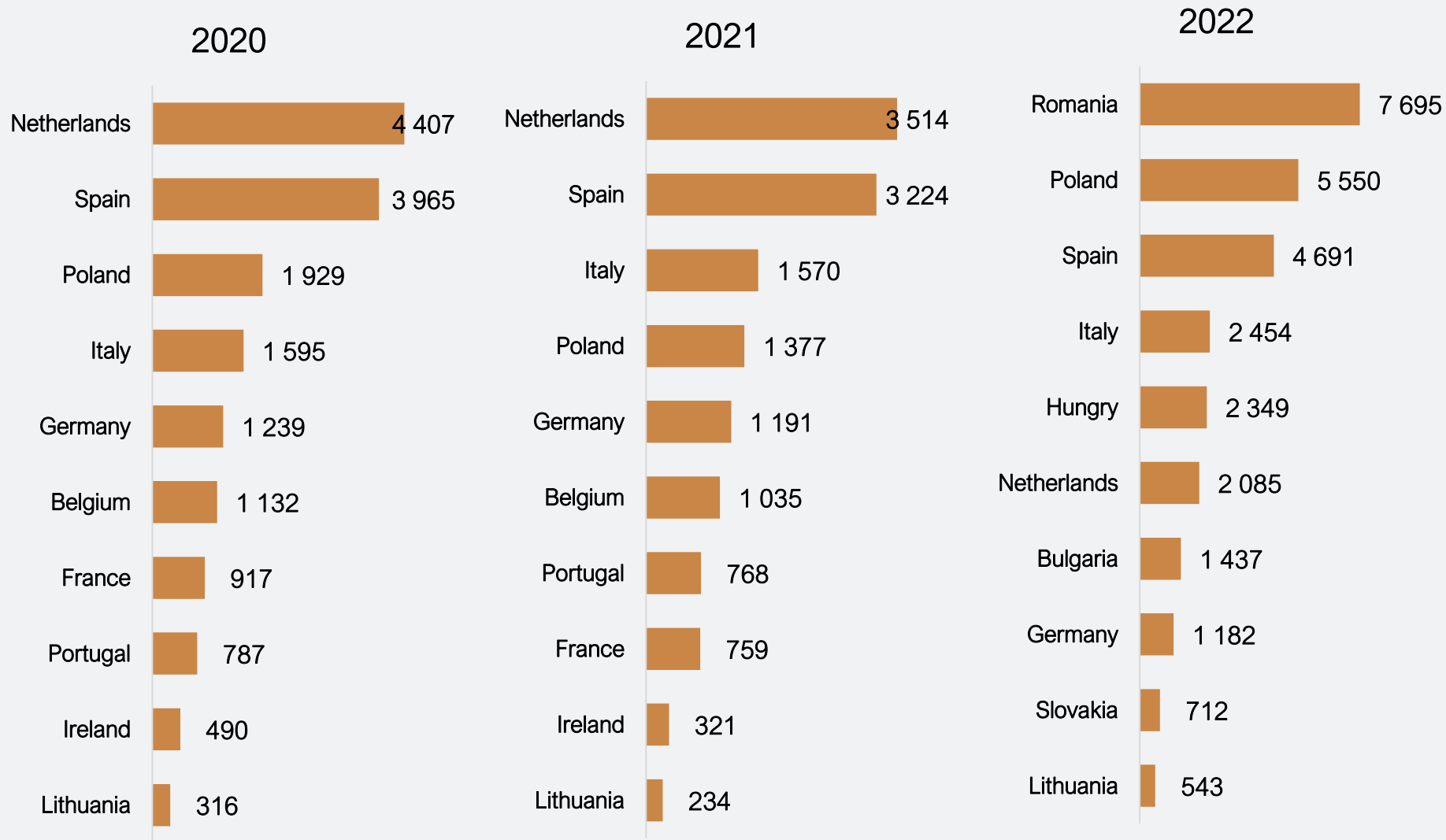
TOP-10 export commodities, K tonnes



Source: GrowUkraine2022

Exports to EU (TOP-10, 1-24, K t*)

426 (2022) enterprises approved for export to the EU (393 in 2021), +36
199 of these export food products (168 in 2021) +31



Ukrainian enterprises that have the right to export products for human consumption to the EU :

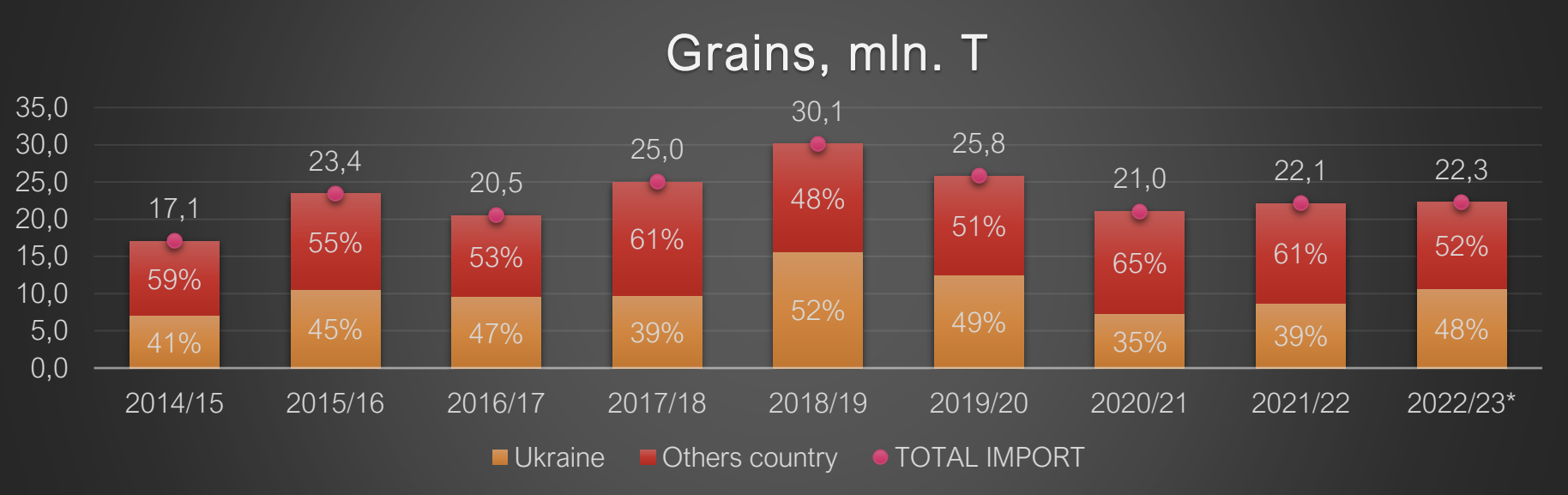
- milk and dairy products;
- poultry meat and poultry meat products;
- fish products;
- eggs and egg products;
- honey;
- food collagen;
- intestinal raw materials;
- snails.

In the process of opening: beef, pork, ready-made meat products, hatching eggs, live fish, shrimps, rapans, other molluscs, oilseeds and beets, planting material of the apple and plum species

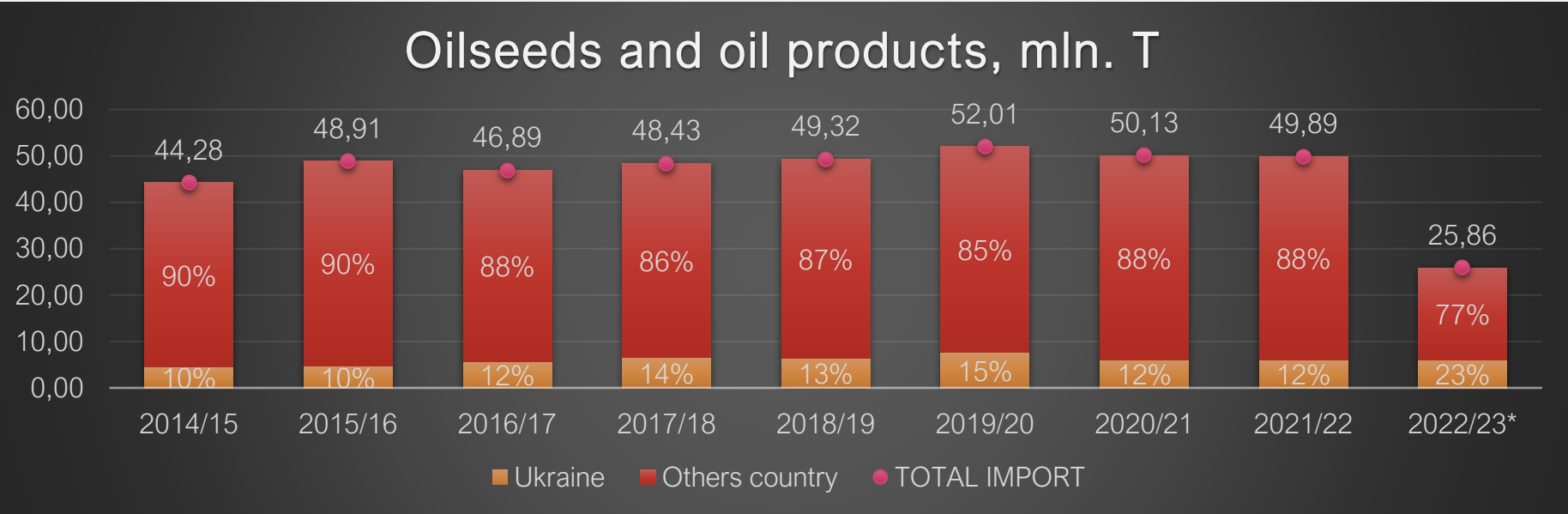
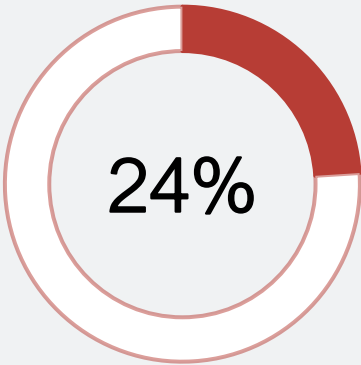
Request was sent to open the EU market for Ukrainian pork and pork products

**Source: European Commission*

Imports in EU



Average share of Ukraine



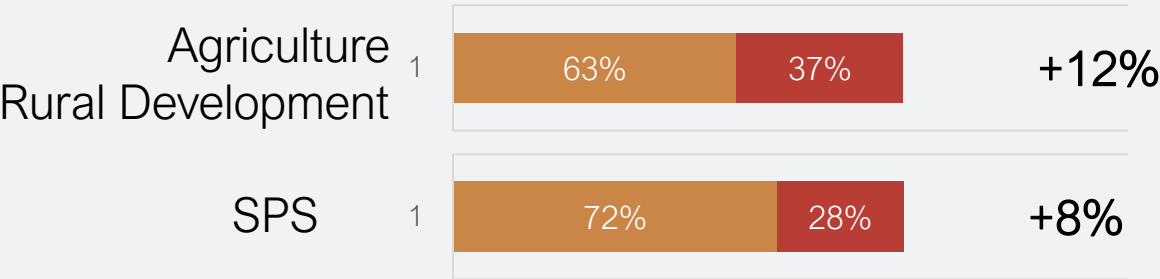
Source: EU Commission
*07.2022-01.2023

**EU is not a
target market
for Ukrainian
products.
Together we
are stronger**

USDA 2021	UKRAINE		EU		EU+UKRAINE	
Line	Export	Production	Export	Production	Export	Production
corn	4	6	5	4	3	3
sunflower oil	1	2	5	3	1	1
wheat	5	7	2	1	1	1
rapeseed	3	6	4	1	3	1
soyabeans	7	9	10	12	7	6
sunflower meal	1	3	3	2	1	1
barley	3	4	2	1	1	1
poultry meat	6	17	3	4	3	4
soyabean meal	11	23	8	5	6	5
soyabean oil	9	23	3	5	3	5
walnuts	4	5	6	4	4	3
rapeseed oil	7	15	5	1	3	1
bovine meat	19	19	7	4	6	3
white sugar	47	20	6	3	6	3
butter	9	12	2	2	2	2
powdered milk, cream	10	14	2	1	2	1
live bovine animals	9	15	2	5	1	5

Progress of European Integration

Plan of Measures for the implementation of the Agreement (DCFTA, 2016)



2259 tasks

2023

Self-screening of adaptation of Ukrainian legislation to EU acquis launched

The total number of acts 38,510
7,923 EU acts – in Agriculture and Rural Development, Fishery, Sanitary and Phytosanitary Measures (SPS) and others

Main changes

Veterinary Medicine, animal health, animal welfare	Organic Farming	GI, GI for alcoholic drinks	Protection of the rights of plant varieties, seed production, nurseries
Contacting materials, packaging	Informing the consumers	Pesticides and agrichemicals	Plant protection

ARD Strategy
CC Strategy
The best available methods and technologies
Producers' organisations
GMO
State (official) control

Next steps (2023):

- Agricultural and Rural Development Strategy
- Climate Policy
- The best available methods and technologies
- CMO and producers' organizations
- GMO
- State (official) control

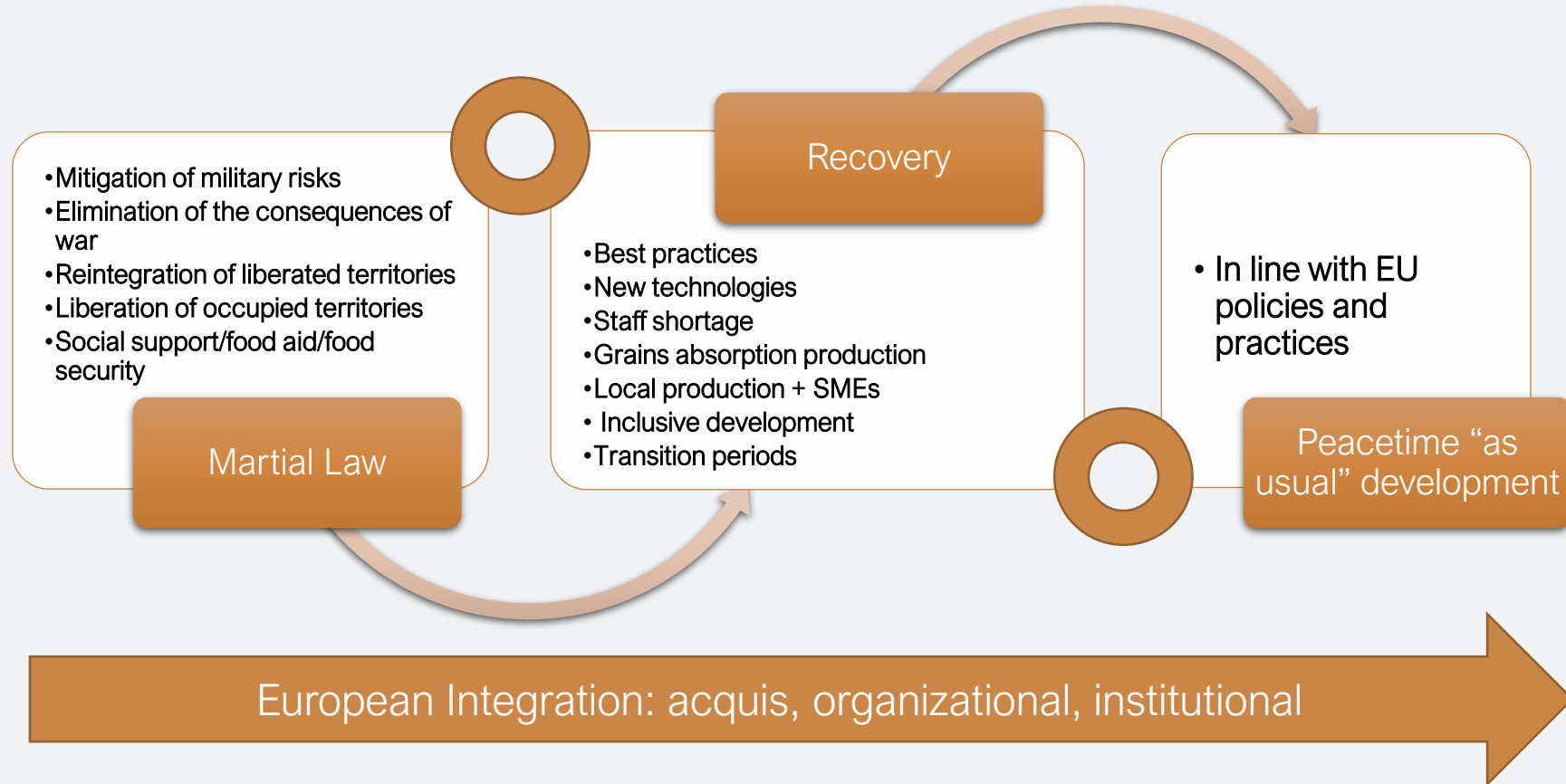
Digitalization + Deregulation



Nationally Determined Contribution of Ukraine to the Paris Agreement (NDC2) - reduce emissions by 65% in total

Challenges of UA European Integration

The Combination of Wartime Policies and Peacetime Principles for European Integration



Challenges:

- Institutional capacity
- New institutions
- Producers' awareness
- Change of Market Organization
- Adaptation for “greening”
- Adaptation for EU requirements and standards
- New technologies
- Investments and operational support
- SMMEs

Support

Stability and Predictability of
rules and policies

Cooperation

Communication:

- To foster better understanding between European and Ukrainian farmers and food processors, it's recommended to encourage mutual participation in NGOs and representative organizations to exchange information about business realities, market conditions, and standards systems.
- To anticipate expected changes, it's crucial to involve Ukrainian representatives from various levels (NGOs in the Agri-food sector, Ministries, Parliament) in discussions about political initiatives and EU legislative acts.
- Enhancement of Agri Dialogue


Business:

- along the value chain
- search and joint access to the markets of third countries
- development of logistics while controlling the transit – “win-win”
- transformation of grain and legumes in Ukraine

Wartime support

Government:

- The EU pre-accession assistance
- Institutional capacity and Technical support for European Integration processes
- Support agrifood producers at risk
- Transition to climate-oriented technologies and energy efficient technologies
- Support for public Communication, NGOs
- Investments and operational finance support



Happy to answer your
questions

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