

National Strategy to Increase Foreign Direct Investment in Ukraine

Section 2.5: High-Value Agriculture

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Section 2.5

High-Value Agriculture





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Executive Summary



Introduction

No selection of high-potential industries in Ukraine is complete without the one traditional and central to Ukrainian self-consciousness - agriculture. According to a popular theory, even the Ukrainian flag represents ripe wheat under a blue sky. Ukrainians like to recall that at the beginning of the XX century, the country was called “Breadbasket of Europe.” In recent past, agriculture was one of the few industries that enjoyed almost **uninterrupted growth**, mainly by returning to the cultivation of arable lands abandoned after the collapse of the Soviet Union and by gradual modernization of production processes by the large agricultural holdings.

Agriculture has long been the key income source for Ukraine, keeping it afloat even through the worst of the crises of the past three decades – and still remains of utmost importance, with the sector reaching 9% of Ukrainian GDP in 2019. Unique soil, ‘chernozem,’ coupled with favorable weather conditions and geo-positioning, allowed Ukraine to establish high ground as a top world exporter of several key commodities: corn, barley, rapeseed, sunflower oil, and more. Rapidly growing global demand for food has helped immensely.

Yet, Ukrainian agriculture has been largely limited to low-value production, owing to a great extent to the fact that the agricultural land market has not been liberalized – another remnant of the Soviet past. Absence of ownership rights to land by producers limited any incentives to invest long-term into higher-value products.

While the concentration on the low value-added niche is bad strategically, as it cements its inferior role in the international value creation chains, even **this role is under threat** as there are indicators that in the middle-to-long-term the demand for commodity crops as an input for animal feed will decrease dramatically as a

result of plant-based alternatives to meat and milk is gaining global popularity.

At that, Ukraine has a lot to offer in the high-value segment, subject to systemic cross-border investments. Global food consumption is transforming, with significant demand for a more complex and diverse food mix and healthy lifestyle driven by rising disposable income. That demand is informed, however, by the mega-trends present in all other factors – sustainability (and biodiversity concerns in case of agriculture), digitalization and optimization, and security of supply chains.

Ukraine is well-placed to make use of all these: through gradually changing the existing crop mix to higher-value crops (and not just edible crops – plant-based fuel potential is massive and might be fully tapped through vast expanses of arable land available), concentrating on unique niches like honey and aquaculture, digitizing the regulatory infrastructure (phytosanitary regulations, monitoring and export processing) and using the high-tech affinity of the Ukrainian workforce to create and implement unique farming solutions. Inevitable liberalization of the land market will drive the process and provide the incoming investors with proper investment framework and operational incentives to enter the market long-term.

The spectrum of niches ripe for mid-term FDI enhancement is significant – we concentrated on the ones with the least systemic large corporate involvement and highest marginality. Ultimately, investment in those sub-sectors will provide necessary positive signaling for cross-border investors into Ukrainian agriculture as a whole – and being largely dependent on the local workforce. This will drive Ukrainian economy forward as few other industries can.

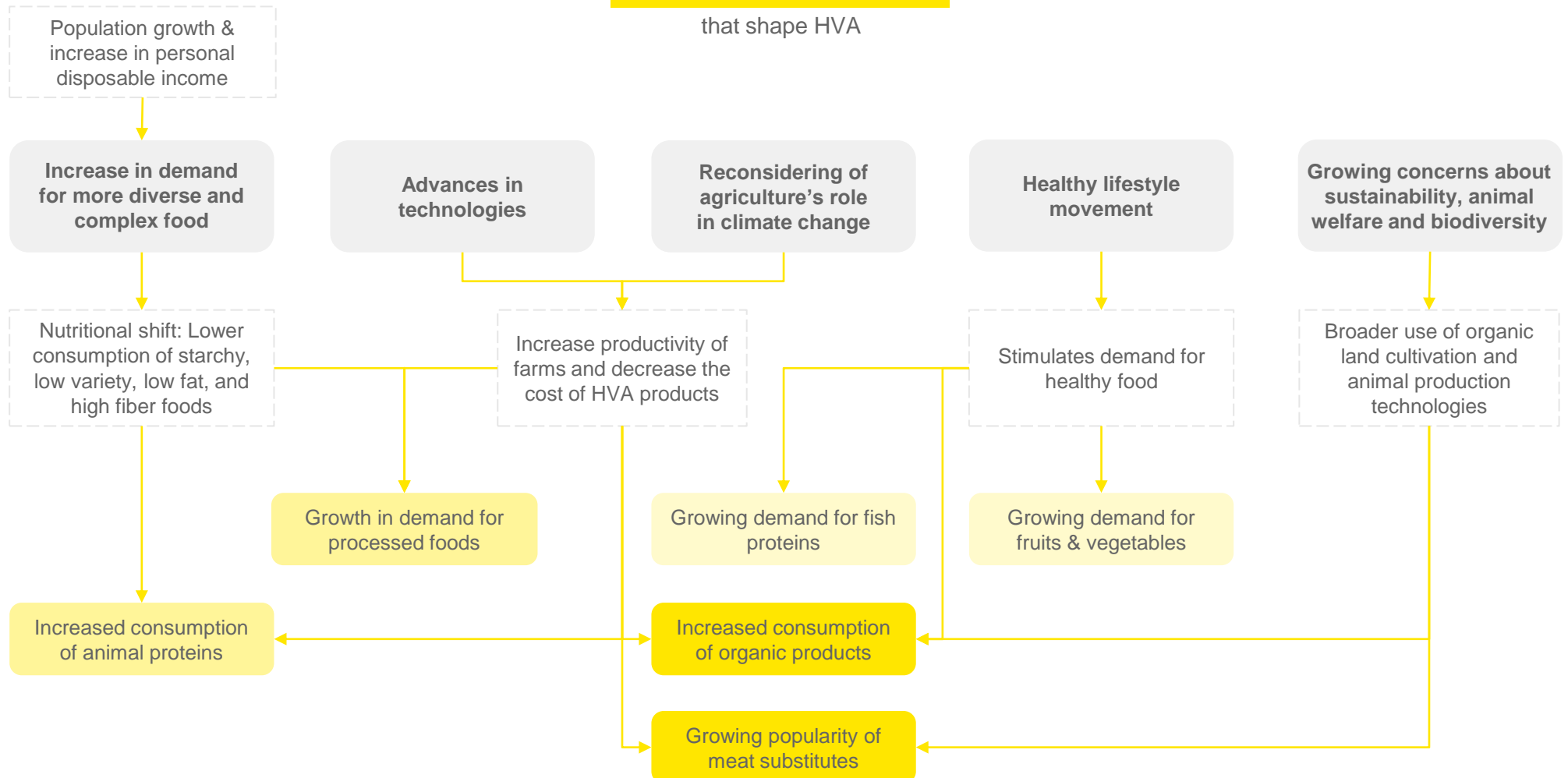


Global trends in high-value agriculture

Based on our analysis, we identified the following

Global trends

that shape HVA





Key gaps and enablers for FDI attraction

Based on our analysis, we identified the following

KEY GAPS

- ▶ The model of agricultural land market to be launched in July 2021 discourages FDIs in HVA (e.g., perennial plantings) by limiting ownership of agricultural land to Ukrainian citizens, State and local communities
- ▶ **The remaining misalignment of Ukrainian phytosanitary, veterinarian, and food safety standards with the EU.** The full alignment of the standards with the EU requirements will not only underline the quality and safety of Ukrainian HVA products for export markets but also guarantee the best quality products for Ukrainians.
- ▶ **The remaining tariff and non-tariff barriers** for export of Ukrainian HVA products to the EU and other countries. Further trade liberalization could bring FDI.

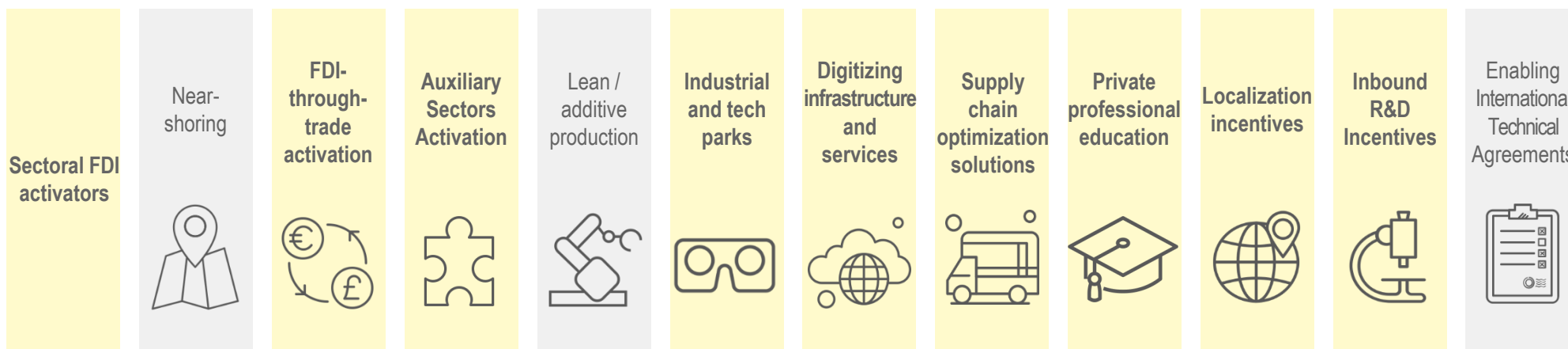
limiting the potential attractiveness of the HVA subsector for investors



Nevertheless, gaps and barriers could be effectively mitigated, underpinned by the following

KEY ENABLERS

- ▶ **Bad condition of the irrigation systems at Southern Ukraine.** Given the plentiful water resources, the upgrade of the systems could turn the region from an area of extreme agriculture into a farming center for thermophilic water-loving HVA crops.
- ▶ **Underdevelopment of related infrastructure for HVA** (e.g., freezers, laboratories, slaughterhouses), possibly as a result of the lack of investment incentives and relative underdevelopment of agricultural cooperatives. The infrastructure is an important enabler for the wide range of HVA activities.
- ▶ **Absence of affordable weather/agricultural insurance for HVA.** The desired scheme should assure the survival of the HVA farms in case of extreme weather events.



Sectors with high FDI potential: factors of attractiveness and issues

I



Aquaculture

- ▶ Ukrainian aquaculture production has duties- and quota-free access to the EU's market
- ▶ Ukraine has numerous water bodies that can be used for the purpose
- ▶ It is forecasted that the global demand for fish will continue to grow
- ▶ Aquaculture is the most efficient form for transforming plant proteins to animal proteins at scale as (i) fish does not need to spend energy to heat it, (ii) aquaculture farms could be designed to have multiple layers, thus minimizing the loss of feed, (iii) fish is fully utilized, thus no waste;
- ▶ Absence of adequate legal framework to defend the rights of aquaculture farmers in case of pollution of the water body that contains the farm (remedy: to increase low administrative fines for pollution of water)
- ▶ Absence of the visible list of water bodies for rent (remedy: to transfer of the lease of water objects procedure to electronic tenders)

III



Organic products

- ▶ (1) at rich markets of EU and USA, demand for organic food increases faster than for conventional food
- ▶ (2) usually, organic farming is more value-added activity than conventional agriculture
- ▶ (3) Ukraine has aligned its organic products legislation with the EU
- ▶ (4) cost to rent arable land for organic farming is low in Ukraine
- ▶ Ukraine is not included in the list of countries recognized by the EU as having equivalent national organic regulations

II



Beekeeping

- ▶ (1) international demand for honey constantly growing
- ▶ (2) it provides valuable inputs for the Ukrainian food industry
- ▶ (3) it is a crucial enabler for the most plant growing industries of HVA, as bees pollinate plants
- ▶ (4) if certain conditions are met, honey could be labelled as organic
- ▶ Absence of adequate framework for informing beekeepers about the use of chemicals harmful to bees by neighbor farmers
- ▶ Lack of efficient mechanism to reimburse the damage on bees caused by the agrochemicals
- ▶ Excessive use by farmers of certain insecticides that are harmful to bees (remedy: limit the use of that substances in line with EU regulations)

IV



Baby food

- ▶ it is posed to grow along with the increase of the world population
- ▶ Ukraine is working on gradual aligning its regulation of the industry to the EU legislation, which would demonstrate high growth potential of this sector
- ▶ Baby food industry could accustom Ukrainian food producers to the highest standards of food safety
- ▶ The legal framework for the industry is outdated and needs to be updated to be in line with current health safety and nutrition requirements, inter alia, by aligning definitions and standards with the respective EU regulations.

2.5.1. Introduction





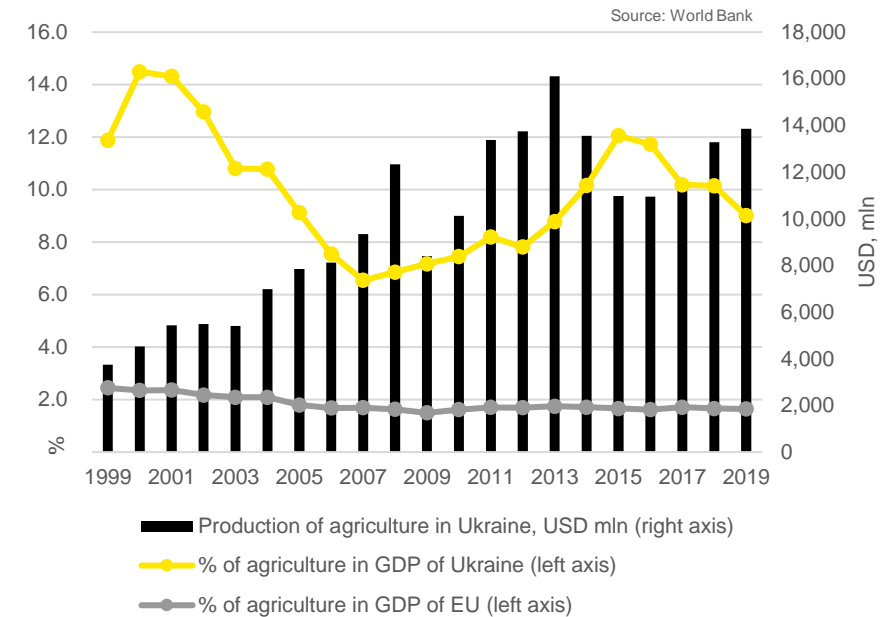
2.5.1. Introduction

Agriculture occupies essential place in Ukrainian economy both in terms of the output share and employment. In recent years there was an upward trend in the industry output

Role of agriculture in the Ukrainian economy

- ▶ Agriculture is the third most important sector of the Ukrainian economy, with a GDP share of **9%** in 2019
- ▶ Roughly **42** million of the total 60 million hectares of the country is classified as agricultural land
- ▶ As of 2018, Ukraine generated agricultural products sufficient to feed **2.6** times its own population
- ▶ As of 2019, Ukraine possesses leading positions in supplying certain critical agricultural products to the global market (sunflower, wheat, barley, corn, etc.)
- ▶ A chronic lack of modern harvesting equipment remains one of Ukraine's main obstacles to increasing grain output and quality

Share of agriculture in GDP in Ukraine and EU, %, 1999-2019



69%

Of all Ukrainian territory is covered with arable land

18%

of the total number of employed population is employed in agriculture

542 m

Accumulated stock of FDI in agriculture sector of Ukraine at the end of 2019

2,844 m

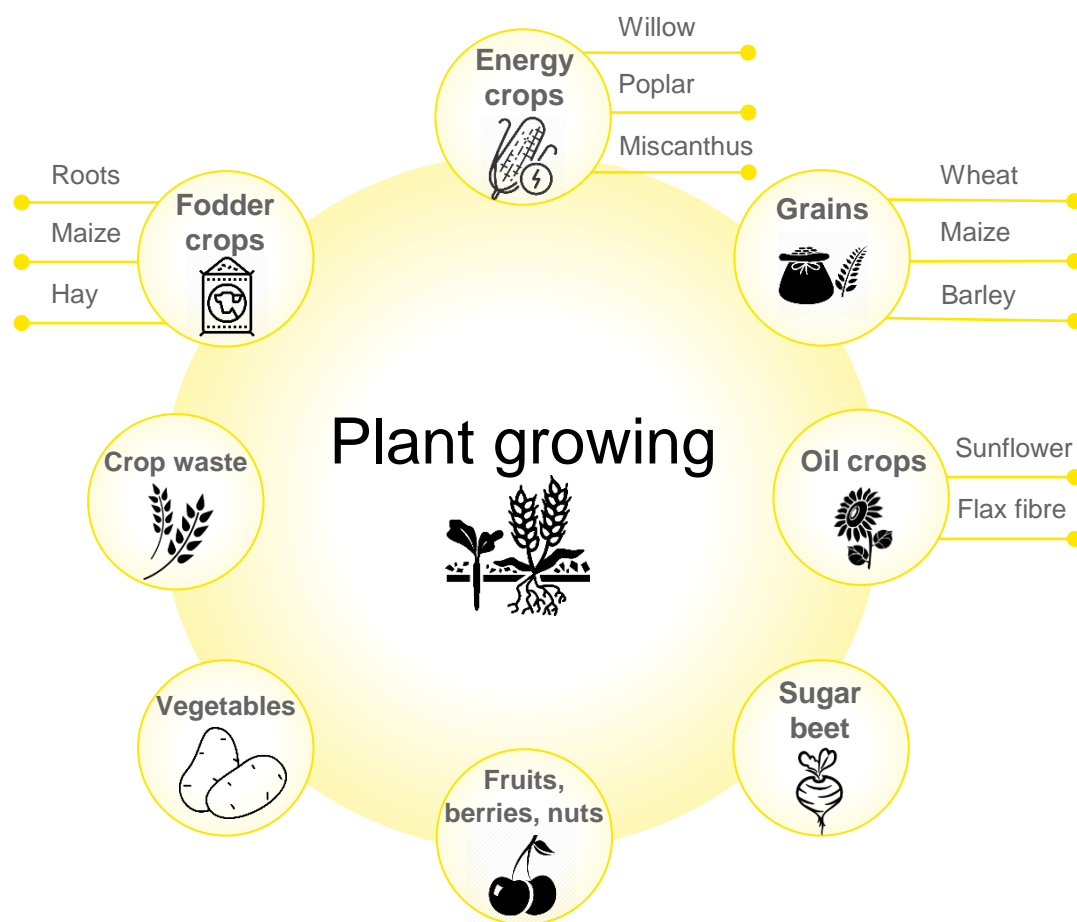
Accumulated stock of FDI in food sector of Ukraine at the end of 2019



2.5.1. Introduction

Plant growing is one of the major sub-sectors of the high-value agriculture

Subsectoral decomposition of Infrastructure sector



Key figures by subsectors



Grains

- ▶ Grain and leguminous crops constituted 54.7% of all planted crops in 2019.
- ▶ Zaporizhzhia, Kharkiv, and Odesa regions are Top-3 regions by wheat production (23.6% of all production)



Oil crops

- ▶ 21.7 % of the sown area under agricultural crops is taken by sunflower.
- ▶ Production of sunflower increased almost 5 times since 2000.



Sugar beet

- ▶ Production of sugar in Ukraine decreased by 22.7% from 2000 to 2019
- ▶ Vinnytsya, Khmelnytskyi, and Ternopil regions are Top-3 regions by sugar production (44.3% of all production)



Fruits, berries, nuts, and vegetables

- ▶ Production increased by 56.3% from 2000 to 2019
- ▶ Export of fruits and nuts increased by 68% in 2019 as compared to 2015.



Crop waste

- ▶ 3,726 thousands tons of oil equivalent of biofuel were produced out of crop waste in 2018 in Ukraine



Fodder crops

- ▶ Gross harvest of fodder crops constituted 21.5 mln tons in 2019



Energy crops

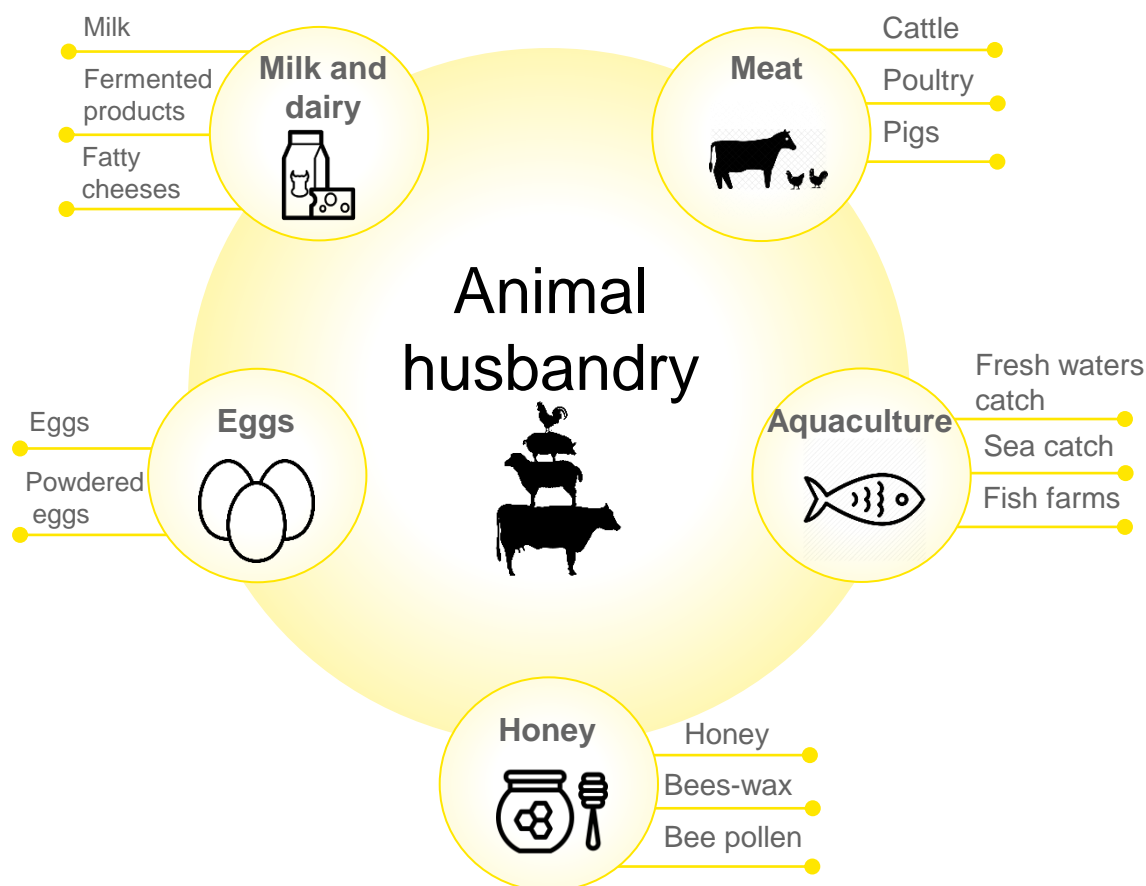
- ▶ About 4,000 ha are planted with energy crops in Ukraine



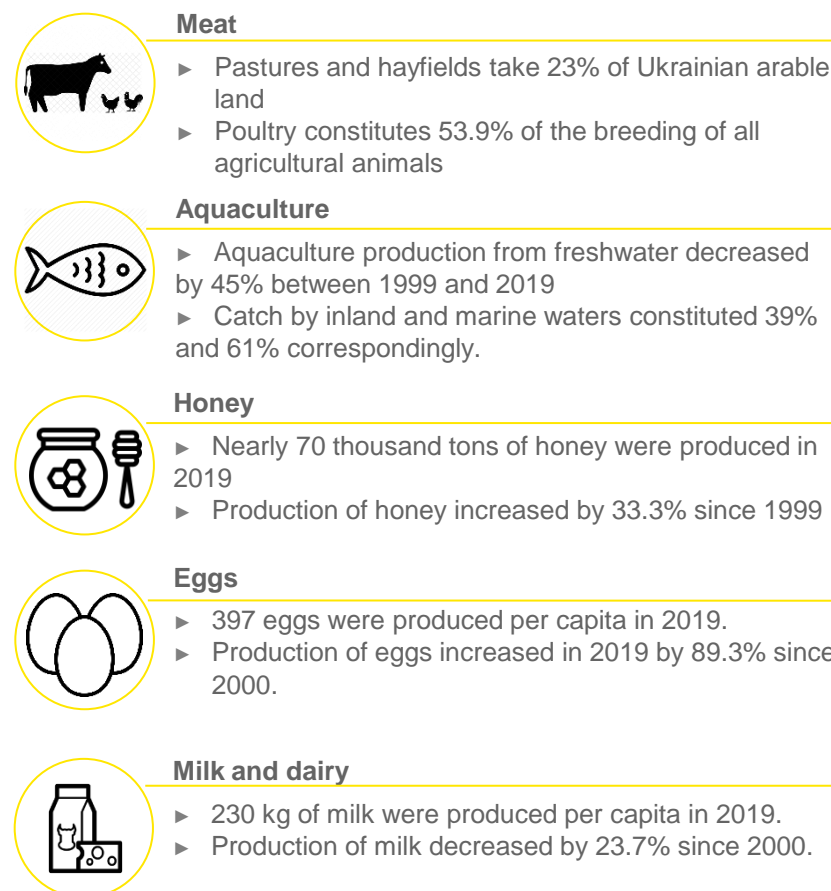
2.5.1. Introduction

Animal husbandry is one of the major sub-sectors of the high-value agriculture

Subsectoral decomposition of Infrastructure sector



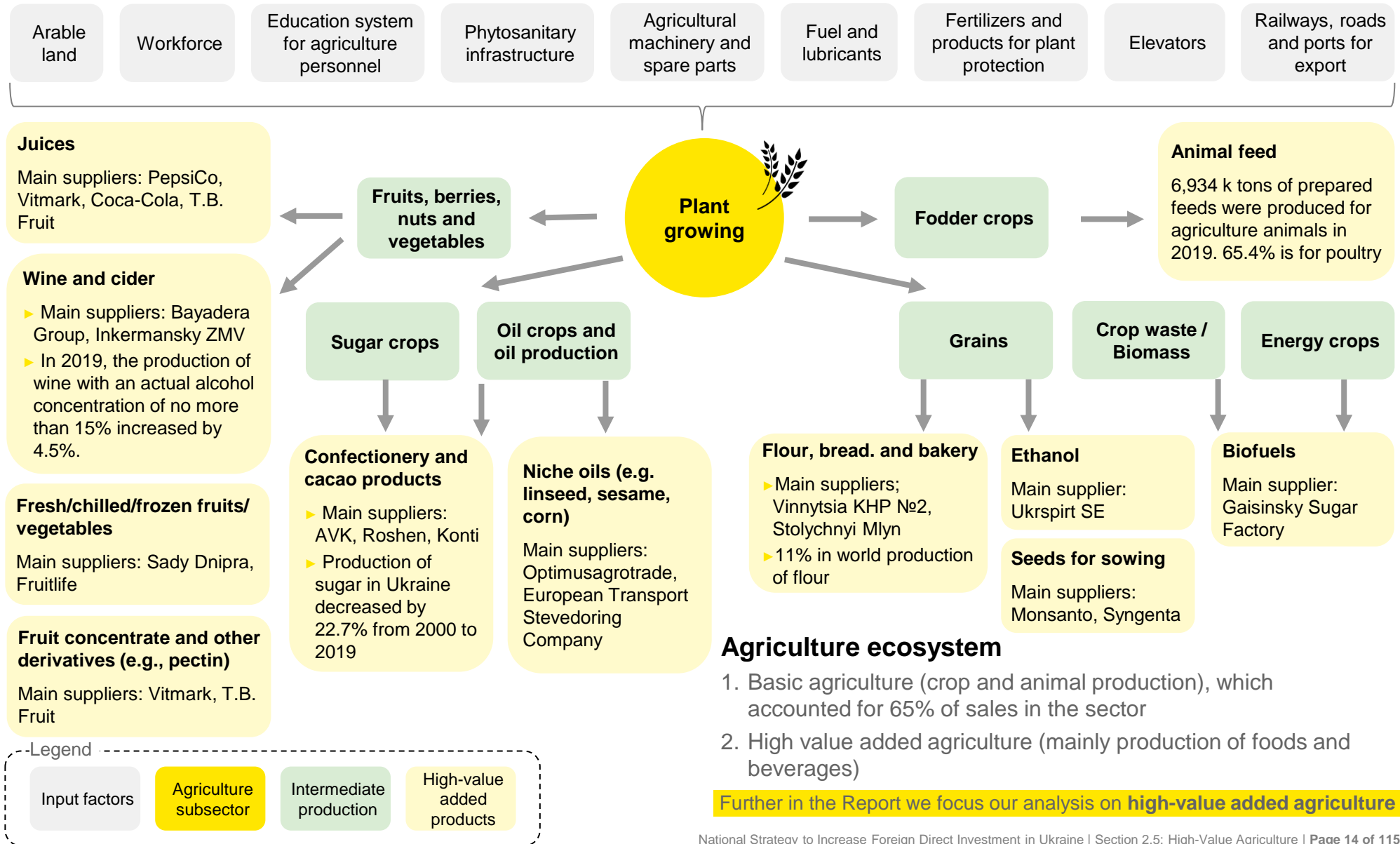
Key figures by subsectors





2.5.1. Introduction

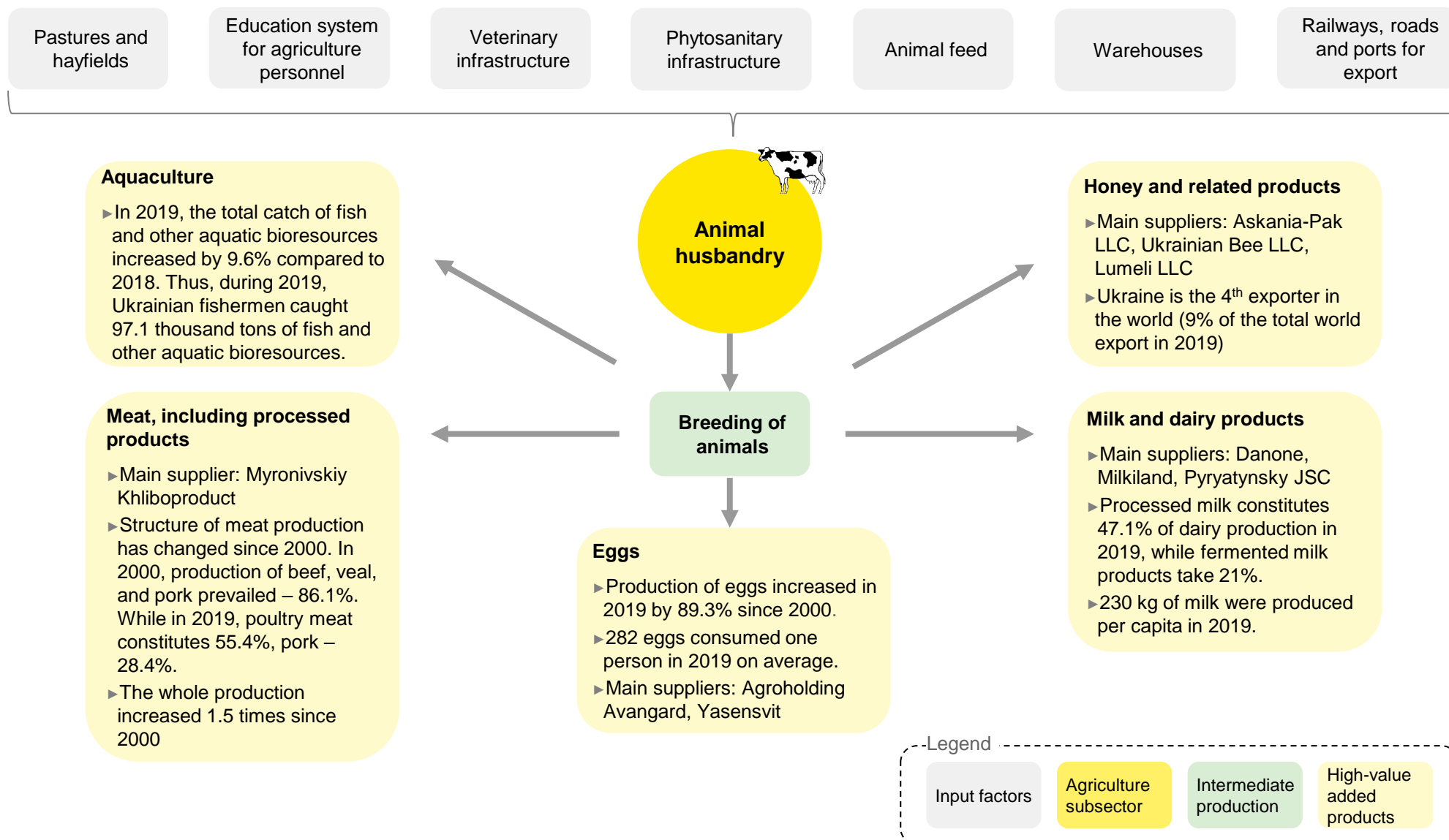
Plant growing sub-sector includes numerous HVA industries that produce high quality, highly-competitive goods





2.5.1. Introduction

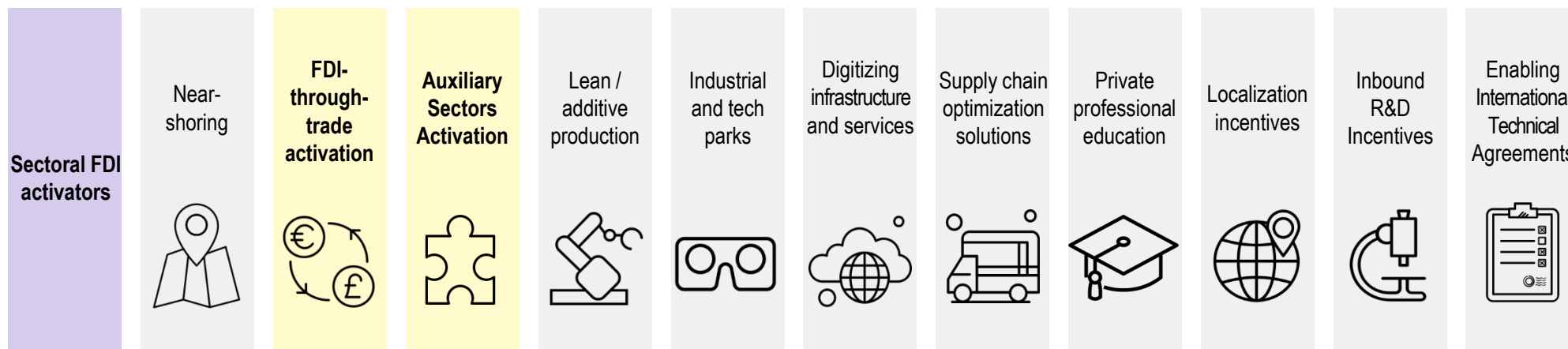
Some of industries of the animal husbandry sub-sector are very successful at the international market





2.5.1. Introduction

As a result, by applying predefined measures within the HVA sector it is possible to achieve FDI activation for other sectors in the long-term (2\3)



Elimination of barriers for trade in HVA products with the EU

Elimination of tariff and non-tariff barriers for the trade of HVA products with EU, including by approximation of the national veterinarian, phytosanitary, and food safety regulations to the EU requirements.



Further liberalization of the market for agricultural land

Ownership of the land, which is one of the key inputs for the HVA activities, is considered the crucial condition for investments in the land improvements that are required for HVA activities.



Concluding of free-trade agreements for HVA trade

Concluding a free-trade agreement with Turkey, Israel, and other nations. Fuller access to the growing Chinese and African HVA markets.



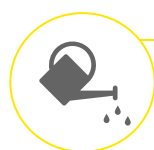
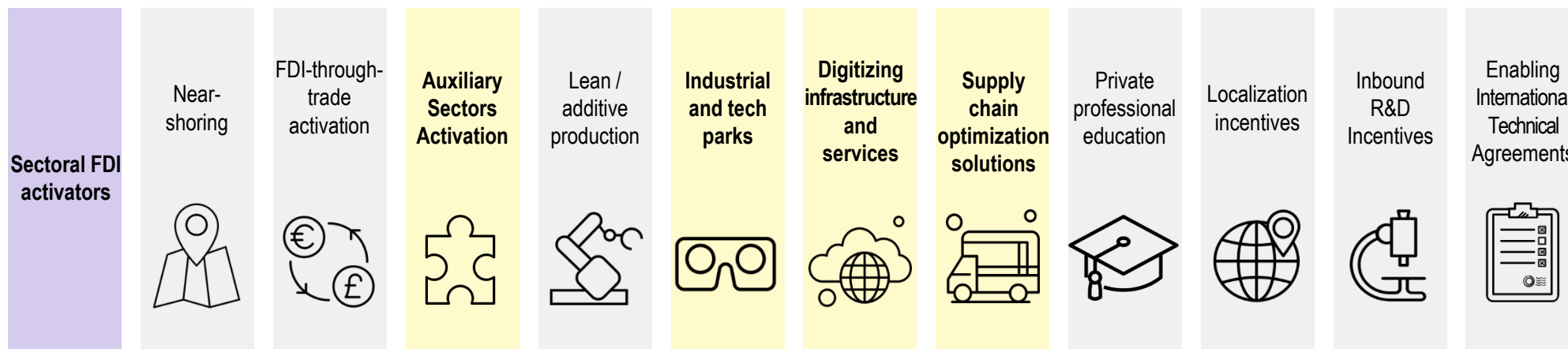
Further development of weather/ agro insurance for HVA

Weather conditions are one of the most critical exogenous factors for a lot of HVA sub-sectors. Eliminating the risks induced by weather would boost the HVA sector, including FDI in HVA

Mechanisms to achieve described FDI activators: 1) liberalization of trade; 2) development of supporting infrastructure and industries; 3) support for development and maintenance of the intellectual potential.

2.5.1. Introduction

As a result, by applying predefined measures within the HVA sector it is possible to achieve FDI activation for other sectors in the long-term (2\3)



Reanimation of irrigation systems on Ukrainian south

As the water is necessary for a lot of HVA activities, restoration and further development of the existing irrigation systems will be a significant impetus for developing the HVA in the region.



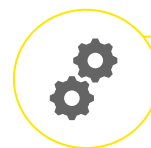
Creation of specialized HVA industrial parks

HVA industrial parks could attract FDI in the production of the hi-tech FDI products by providing shared (thus cheaper) infrastructure (freezers, laboratories), land for construction, and tax incentives.



Support of smart farming and other IT solutions for HVA

Support via tax incentives, grants, or subsidized financing local vendors of the smart farming solutions. Subsidizing the implementation of the local smart farming solutions by farmers.



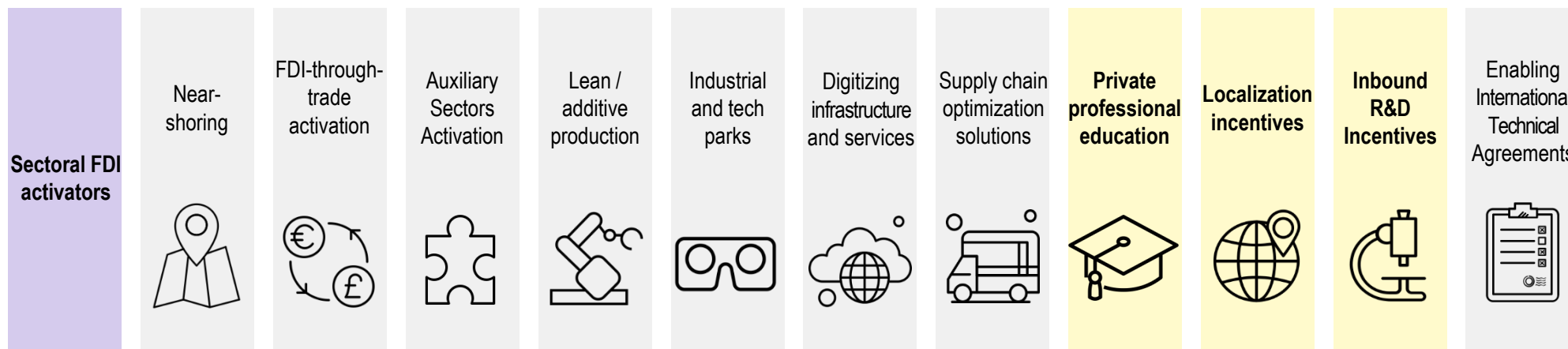
Stimulating creation of critical infrastructure for FDI

Tax incentives, grants, or other support for farmers cooperatives or private investors that develop freezers, laboratories, slaughterhouses, and other necessary HVA infrastructure.

Mechanisms to achieve described FDI activators: 1) liberalization of trade; 2) development of supporting infrastructure and industries; 3) support for development and maintenance of the intellectual potential.

2.5.1. Introduction

As a result, by applying predefined measures within the HVA sector it is possible to achieve FDI activation for other sectors in the long-term (3\3)



Creation of high-quality private HVA schools and colleges

The availability of the local staff that could apply the modern technologies and machinery used in HVA is a great advantage for potential foreign investors in the HVA sector.

Informational support for localization of the HVA imports

Creation and maintaining of the database of the categories of HVA products, including niche products, that are imported but could be produced locally given the Ukrainian climate.

Finalization of the reform of the IP infrastructure

Launch of the specialized IP court and other lacking elements of the IP infrastructure will underpin re-location to Ukraine of the IP-heavy HVA businesses.

Facilitation of R&D and innovations within the industry

Considering the advanced nature of the subsector, additional investments in capacity and other assets will accelerate value-added innovations and R&D through the whole business chain.

Mechanisms to achieve described FDI activators: 1) liberalization of trade; 2) development of supporting infrastructure and industries; 3) support for development and maintenance of the intellectual potential



2.5.1. Introduction

While Ukraine has attracted number of high-profile foreign investments in HVA, given the country's size and potential the volumes of attracted FDIs are clearly insufficient

Unlocked FDI by brands, 2015-2019



Unlocked FDI in HVA, 2015-2020

\$1.8b

Source: "Ukraineinvest"

Declared FDI, 2015-2020

\$160m

Source: "Ukraineinvest"

Agri-logistics*	Seed oil production*	Farming*	Seed production*	Other*
\$ 670 m	\$ 350 m	\$ 325 m	\$ 280 m	\$ 260 m

"This investment demonstrates Bayer's strong commitment to Ukraine. With more than 25 years of successful history in Ukraine, we have always been a key player in developing the country's agricultural sector. Bayer will continue working with farmers in Ukraine and is also planning to export its high-quality corn seed to EU states".

Dr. Dirk Backhaus

Member of the Executive Leadership Team
and Head of Product Supply for the Crop
Science division of Bayer

Source: "Ukraineinvest"

"We in Cargill believe that Ukrainian agriculture has tremendous growth potential. We want our company to be part of this growth. Cargill has been active in Ukraine for more than 20 years and we remain dedicated to this market. We have a long-term view and are continuously looking into new investment opportunities".

Martin Schuldt

CEO of Cargill Ukraine

Source: "Ukraineinvest"

40+
New production
facilities

2.5K
Jobs created since
2015

Source: "Ukraineinvest"
Note: Unlocked FDI

2.5.1. Introduction

In recent years Ukraine managed to re-direct its HVA export flows after the rapid loss of the Russian market that was traditional destination for Ukrainian HVA export

Total export vs HVA products

\$21.7

bln

Total value of agriculture, food and beverages export in 2019

5.7% increase as compared to 2018

- ▶ Relatively low share of HVA export in the total agricultural and provision export represents the fact that the majority of buyers of Ukrainian agricultural output chose to turn it into the HVA products outside of Ukraine
- ▶ Potential increase of the local agricultural output that processed to become HVA products inside the state borders represent the key opportunity for the local HVA sector

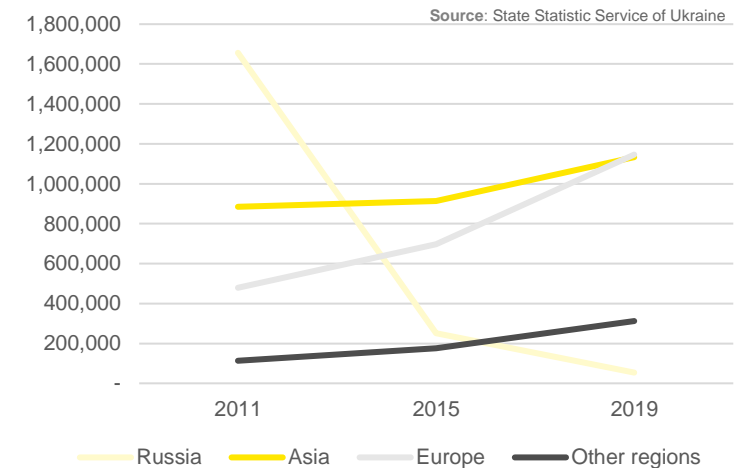
\$2.7

bln

Export of the HVA products which consists of

meat, fish, milk, eggs, grain, confectionery, etc.

Export of HVA products in retrospective view by destinations, USD ths



Dynamics of Ukrainian HVA export by regions

- ▶ During 2011-2019 geography of Ukrainian HVA export changed dramatically, as presented on the chart to the right. High share of Russia in the export was caused mainly by **historical ties** of Ukrainian producers with the Russian market and relatively low requirements for quality of imported goods. The rapid decrease of HVA export to Russia during the 2011-2019 period was mainly caused by the political decisions of the Russian leadership. Thus it could be promptly restored in future
- ▶ After Russia has closed its border, Ukrainian HVA producers were forced to **re-orient to Europe (mainly EU) and Asia**. The key enabler for the increase of export of Ukrainian HVA to the EU was signing the **EU-Ukraine association agreement** in 2014. While the agreement does not provide for unlimited access to the EU market for Ukrainian HVA products, in order to compete in mature EU market, Ukrainian HVA producers have to adhere to **high standards** of quality and safety of the products, which in the future could help Ukrainian HVA products to win markets outside the EU
- ▶ The increase of export of Ukrainian HVA products to Asian markets was mainly caused by the **increase of the population** of Asia during 2011-2019 as well as a gradual increase in the incomes in the region
- ▶ Gradual increase of the export to other regions represent the result of constant efforts of Ukrainian producers to enter the new markets coupled with the **increased competitiveness of Ukrainian HVA products** (partially due to adherence of the high EU standards for the products)



2.5.1. Introduction

Europe and the Middle East are the major destinations for export of Ukrainian HVA products

Export of Ukrainian HVA products by regions in 2019



- ▶ Meat and fish, including the processed products, are the main export category for Ukrainian HVA, representing **26%** of all HVA export from Ukraine in 2019. Top destinations for the products in the category are regions that are geographically close to Ukraine, namely Middle East, EU, and other (mostly neighbor) European countries. The export mostly comprised of chicken meat.



- ▶ Milk, dairy, eggs, honey, and other animal husbandry products are the second largest HVA export category, which accounts for **17%** of the total Ukrainian HVA export. The main regions for the category export are the same as for meat products.



- ▶ Note that Ukrainian HVA export is underrepresented in certain regions, namely in North, Central and South America, North, and South Asia, Australia, and Oceania. While there are certain obstacles to the increase of Ukrainian HVA export to these regions, namely its remoteness from Ukraine, modern storage and transportation technologies make it possible and economically viable to transport Ukrainian HVA products there. Thus these regions represent significant opportunities for Ukrainian HVA producers to increase the export of their products.



- ▶ The other opportunity lies in the increase of the share of HVA products in the total agriculture and provision export. Shares of HVA in the total agriculture and provision export to the Middle East and EU are only **18% and 10%**, respectively. Thus 82%-90% of the export represent commodities, which are processed to HVA products locally. Given the visible presence of Ukrainian HVA producers on the markets of the regions, it could be relatively easy for them to expand their market shares, provided that import restrictions or limitations do not restrict such expansion.

Export of HVA products in 2019 by regions

Source: State Statistic Service of Ukraine

USD mln	Middle East	EU	Other European countries	Central Asia	Africa	East Asia	North America	Other countries	North Asia	Australia and Oceania	Central America	South Asia	South America	Total
Meat, fish, incl. processed products	283	196	73	43	66	48	-	-	-	-	-	3	-	712
Milk and dairy, eggs; honey	139	118	35	28	39	59	9	-	-	2	15	10	-	454
Finished grain products	52	74	77	37	9	10	4	1	3	-	1	-	-	269
Sugar and sugar confectionery	69	60	45	44	13	9	2	1	4	6	-	-	-	254
Beverages (incl. alcohol) and vinegar	40	36	47	8	6	6	7	57	2	-	-	-	-	211
Cocoa and cocoa products	38	47	40	26	1	9	7	5	30	-	-	-	-	205
Flour and cereal products	59	24	17	-	48	29	-	-	-	12	1	1	11	202
Vegetable processed products	15	88	33	4	1	3	46	1	-	-	-	2	-	192
Other products (incl. coffee and tea)	42	83	54	5	10	9	2	2	15	1	-	1	-	226
Total HVA products	740	726	421	195	193	182	77	68	55	22	17	17	13	2,725
Total agriculture export	4,183	7,228	918	245	3,259	2,886	165	68	64	592	26	2,038	32	21,703
<i>Share of HVA products in agriculture</i>	<i>17.7</i>	<i>10.0</i>	<i>45.8</i>	<i>79.5</i>	<i>5.9</i>	<i>6.3</i>	<i>46.7</i>	<i>99.9</i>	<i>85.5</i>	<i>3.8</i>	<i>68.4</i>	<i>0.9</i>	<i>40.0</i>	<i>12.6</i>

2.5.2. HVA sectors with high FDI potential





2.5.2. HVA sectors with high FDI potential

Free trade agreement with no custom duties and no quotas is the key to the EU second largest aquaculture market and the largest importer of fishery in the world

Ukraine has a great potential at EU markets

11.3

mln tons
of fishery and
aquaculture products
consumed EU in
2019

EUR
54.3
bln

total EU
expenditures on
the aquaculture
products in
2017

6.34

EU
aquaculture
import in
2019

EUR
27.2
bln

* The EU Fish Market 2020 Report by the European Market Observatory for Fisheries and Aquaculture Products

Unrealized fresh water aquaculture potential

- ▶ Ukraine has the largest acreage of freshwater resources suitable for fishery and aquaculture activities in Europe at **over 1 mln ha in more than 49,000 freshwater bodies**
- ▶ At the same time, **less than 100 ths ha were under aquaculture production in 2018**. Other 144.8 ths ha were used by special commercial fishery farms and aquaculture activities, according to the State Agency of Fisheries of Ukraine
- ▶ Even considering the fact that around 60% of aquaculture production is not counted by official statistics, **freshwater bodies potential is utilized by less than 40%**



Aquaculture

There is a number of factors making Ukraine's aquaculture production a very attractive segment for investments. Free Trade Agreement (FTA) between the EU and Ukraine has no tariff or quota restrictions on trade in aquaculture products. At the same time, the demand for fish and fish products is expected to grow in the world, while the wild fish industrial catch is beyond a sustainable level. Ukraine, in turn, underutilizes its aquaculture development potential. Finally, aquaculture is the most efficient form of transforming plant proteins and other nutrients from feed into animal proteins at scale as compared to other animal production segments

Production in 2018, '000 tons:

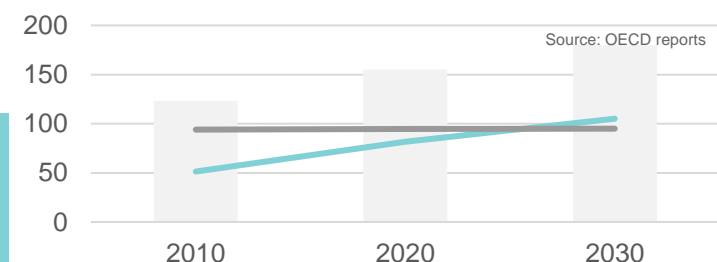
Ukraine	20
World	82,095

Potential for development in Ukraine **Strong**

Major producers in 2018, '000 tons:

China	47,559
India	7,066
Indonesia	5,427
Vietnam	4,134

Global demand driver, ths tones



Consumption Aquaculture Capture

Aquaculture consumption will grow by **28%**, while fish catch already surpassed the sustainable level long ago and remains relatively stable **over the last 20 years**

Efficiency of transformation plant proteins into animal ones

All parts of fish can be used for consumption either by humans or as animal feed leaving no wastes

Cold blooded animals, like fish, do not need to spend energy to heat their bodies. This feature significantly increases the efficiency of feeding. The need for feed, defined as kilograms of feed per additional 1 kg of animal body weight, varies among different kinds of fish. It is higher for herbivorous fishes (4 for carp) than for predatory fishes (0.95 - 1.1 for salmon). However, it is **much lower than in other animal production segments** (more than 8 for meat cattle)

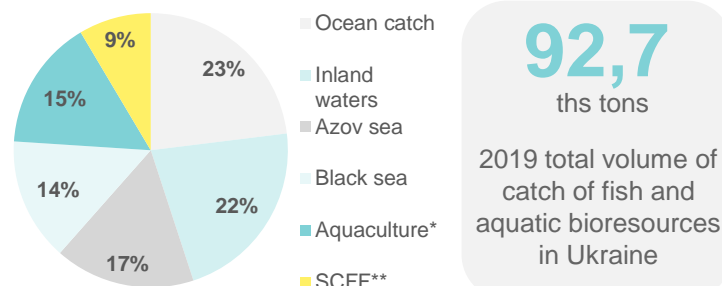
Existing advanced technologies allow building multilayer aquaculture farms with placing at the lower layers of aquaculture species feeding on feed residues, wastes, and bodies of species from upper layers. This decreases feeding losses and prevents significant changes in the biochemical composition of water (important for a steady growth of many aquaculture species)



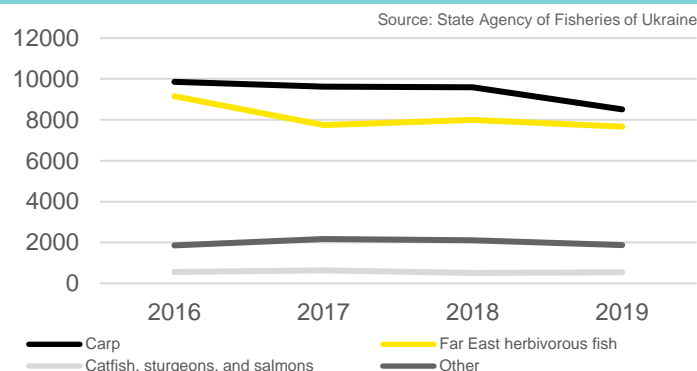
2.5.2. HVA sectors with high FDI potential

Ukraine has relatively developed and resilient freshwater aquaculture industry. Marine aquaculture is at infancy stage

Fish capture in 2019, ths tons



Pond aquaculture production in 2019, tons



Leaders of freshwater aquaculture production

1 st	PJSC Bilshivtsi-Ryba	4 th	PJSC Sumyrybgosp
2 nd	SE Irklyivskiy Ryborozpodilnyk	5 th	FE Galyske Dzherelo
3 rd	PJSC Petrykivskiy Rybgosp and Zakarpattia Rybokombinat LLC		

Source: The League of the Best Ranking



Aquaculture

Historically, Ukraine's fishery and aquaculture production was one of the most developed among the former USSR republics. However, after the collapse of the USSR, total fishery and aquaculture production decreased by 60% during the first year in Ukraine. Since then, the industry became import oriented, and per capita consumption of fish and seafood significantly decreased

Fishery and aquaculture key trends:

- ▶ There were over 4000 legal entities in the field of aquaculture in Ukraine in 2018
- ▶ Ukraine specializes in freshwater aquaculture, while marine aquaculture just started to develop in recent years
- ▶ Pond aquaculture prevails, fish pens and, especially, recirculating systems are rarely used
- ▶ In 2019, the total catch of fish and other aquatic biological resources by enterprises of the fishing industry of Ukraine increased by 9.6% compared to 2018

Foreign trade in fish and other fishery products in 2019, tons

Source: State Fiscal Service of Ukraine

Type of goods	Export		Import	
	USD mln	Ths tons	USD mln	Ths tons
Fish, live	422	328	267	7
Fish, dried, salted, smoked	4,234	496	10,313	6,965
Prepared or canned and crustaceans mollusks	5,029	1,395	29,187	7,959
Crustaceans and mollusks	4,358	1,211	51,588	10,937
Fish, fresh or chilled	398	158	140,531	22,537
Prepared or canned fish, caviar	7,506	3,849	71,747	28,045
Fish fillets, and other	23,148	3,707	65,195	32,294
Fish, frozen	1,078	398	376,626	285,285
Total	46,173	11,542	745,454	394,029

Macro factors:

- ▶ In general, the **annexation of the Crimean peninsula** by the Russian Federation affected the fish capture and the pace of marine aquaculture development. It also resulted in the reorientation of fishing places, which led to a decrease of its catches in the Black Sea basin and to an increase in catches in inland waters
- ▶ It should be taken into account that the problem of poaching and so-called UUI fishing (uncontrolled, unaccountable, illegal) persists in Ukraine, and therefore part of the production remains in the shadows. According to various estimates, this can be **from 45,000 to 90,000 tons**
- ▶ The domestic market of Ukraine consumes about 14 kg of fish per capita



2.5.2. HVA sectors with high FDI potential

Legal framework of aquaculture industry in Ukraine

From the legal perspective, aquaculture means an agricultural economic activity for artificial the breeding and cultivation of any living aquatic organisms (fish, shellfish, algae, etc.). Legal aspects of aquaculture in Ukraine are primarily governed by the [Law of Ukraine "On Aquaculture"](#) and the [Water Code of Ukraine](#).

The aquaculture may be produced on the basis of rivers, lakes, certain areas of seas and rivers, as well as using technological objects (pools, floating equipment). Article 6 of the [Water Code of Ukraine](#) says that water objects may not be privatized and are subject to lease only. Lessee is determined through the land auctions.

To engage in the aquaculture business, the producers should generally:

- ▶ Conduct environmental impact assessment (e.g., if they intend to produce more than 10 tones of production; the need for this procedure is generally determined on a case by case basis)
- ▶ Obtain a title to use the water object
- ▶ Obtain a permit on special water use (Article 48 of [Water Code of Ukraine](#))
- ▶ Obtain scientific and biological substantiation of cultivation of no-native species of aquatic organisms and notify the [State Agency of Fisheries of Ukraine](#)
- ▶ Register the aquaculture [facilities](#) at the territorial department of Food Security Service
- ▶ Pay rent tax for the special water use for aquaculture (Article 255 of the [Tax Code of Ukraine](#))

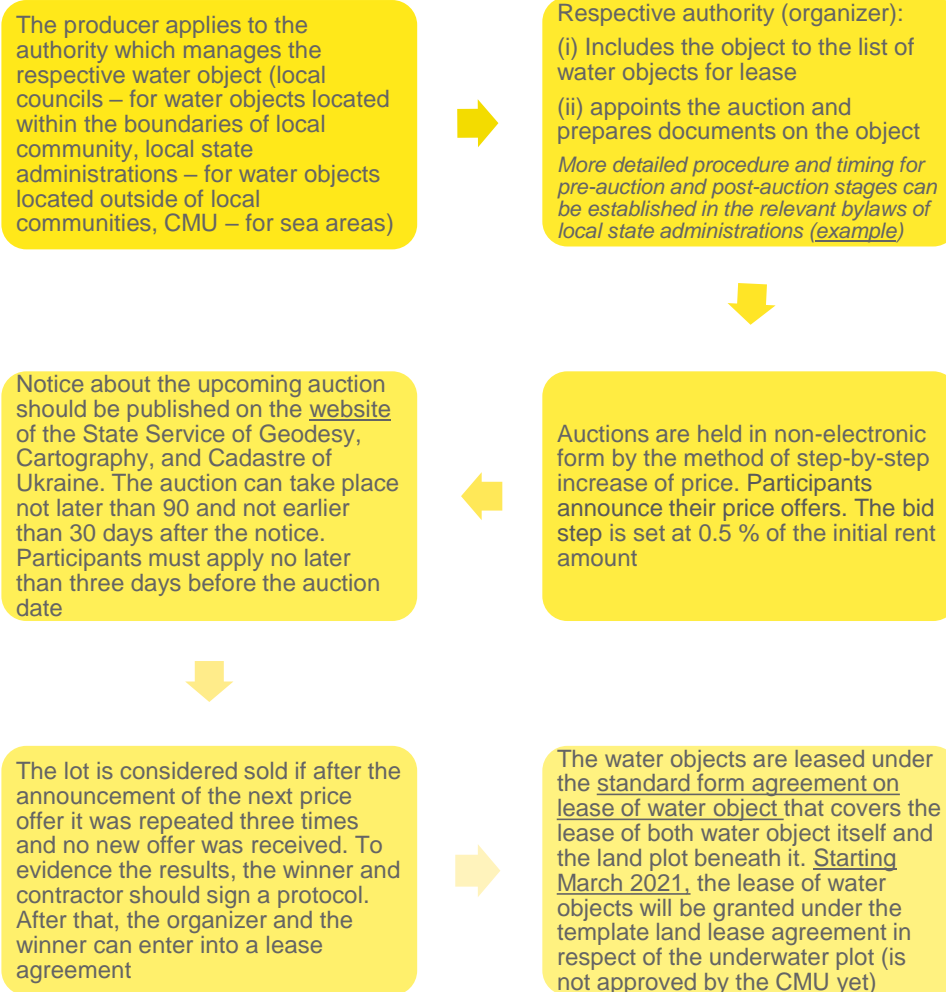
Permit for special use of water resources

The permit for special use of water resources is granted by the [State Agency of Water Resources of Ukraine](#) under the [Procedure for Granting Permits for Special Water Use approved by the CMU's Resolution No. 321 dated 13 March 2002](#). This regulation does not clearly define the supportive documents to be submitted with the application for a permit.

To obtain the permit, the producer submits the application and supportive documents (e.g., copies of documents confirming the title to use the water object)

to the regional department of the State Agency of Water Resources of Ukraine. Starting from 2019, the permit can be obtained electronically. The permit should be granted within 30 days after the application.

Transfer of the water object to the aquaculture producer's use





2.5.2. HVA sectors with high FDI potential

Global honey market (both export and domestic) is expected to grow by half by 2025. Global export market for honey was around USD 2 bln in 2019.

Global demand growth

There are several global trends driving the demand for honey upwards:

- ▶ **Healthy lifestyle movement.** This is the major driver. Aiming at healthier diets, people switch from sugar and artificial sweeteners to honey
- ▶ **Wide usage of honey** in the food industry
- ▶ The increased role of **honey in medicine.** Governments and international organizations (WHO) have recently started to promote honey as a beneficial mediational ingredient

Organic honey certification conditions

Similar to demand for organic products in general, demand for organic honey grows faster than that for conventional honey. Also, organic honey sales generate much higher revenues. At the same time, **the main requirements for organic certification** do not bear much of additional cost for beekeepers:

- ▶ Locating apiary at the chemicals free territory of 3 km in radius
- ▶ Chemicals free plants for bee feeding
- ▶ Artificial feed for bees has to have organic certificate
- ▶ Bees have to be treated with medications containing organic substances
- ▶ Honey has to be harvested without bee smoking
- ▶ Beehives have to be made of natural materials



Beekeeping

Beekeeping has a high investment potential in Ukraine. The industry is of high importance not only for domestic but also for the global market. Global demand is continuously expanding on the back of several nutritional trends. Honey is consumed not only as a final product but serves as an input for the production of various foods, making it an important resource of the food processing industry. Also, beekeeping is crucial for the country's agriculture, as bees pollinate plants. Fulfilling certain conditions will allow producing of organic honey and generating additional revenues.

Consumption in 2019, '000 tons:

Ukraine	20
World	1,832

Potential for development in Ukraine **Strong**

Major producers in 2019, '000 tons:

China	444
Turkey	109
Canada	80
Argentina	79

Pollination of plants

USD
280
mln

invested into pollination of almond plantations allows harvesting around 1 mln tons of almonds worth over **USD 5 bln**

USD
28.4
bln

is the worth of harvest products as the result of pollination in Turkey. Pollination of melon increased yield by **60%**

Uzbek farmers, with the help of bee pollination, managed to increase yields of apricots by **6** times, plums – by **11** times, cherry – by **22.5** times, and sweet cherry – by **26.4** times

Source: <https://agrotimes.ua/article/i-bdzhola-nam-u-pomich/>

Ukrainian farmers lose lots of opportunities that bee pollination provides because of lack of financing for additional logistics, while beekeepers usually have no equipment for transportation of bee families at a great distance.

Usage in food industry of Ukraine

Traditionally, honey was widely used in the homemade food of Ukrainians. However, with the development of the craft food production sector in recent years, honey started to gain more and more popularity in small - and large-scale industrial food production. In Ukraine, honey is popular in production of:

- ▶ Porridges and breakfast cereals
- ▶ Confectionary
- ▶ Bakery
- ▶ Alcoholic and non-alcoholic beverages

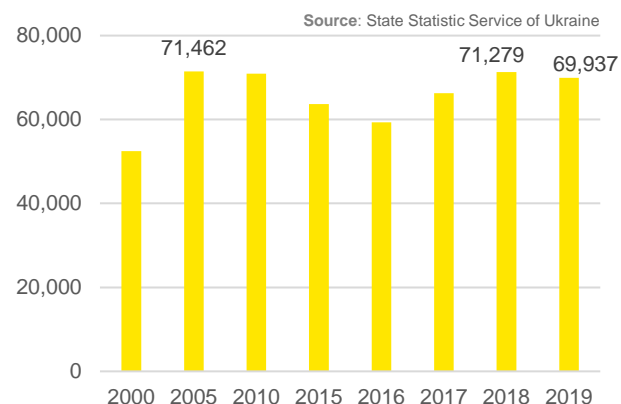
Furthermore, apart from honey, other beekeeping products (bee wax, propolis, pollen, etc.) are widely used in the food industry and medicine



2.5.2. HVA sectors with high FDI potential

Ukraine is among the largest honey exporters in the world, accounting for approximately up to 5.7% of the world honey export in 2019

Production of honey in Ukraine, tons



Major honey exporters in 2018

- 1st** Askania-Pak LLC, 15.2%
- 2nd** Ukrainian Bee LLC, 10.7%
- 3rd** Lumeli LLC, 6.6%
- 4th** Bartnik LLC, 5.3%
- 5th** Jessa LLC, 5.2%

*Note: information is provided for 2018, as there is no available data for 2019 or 2020



Domestic market

- The domestic market of Ukraine consumes about **1 - 1.1 kg** of honey per capita



Beekeeping

Beekeeping has a huge export potential and can become an industry that promotes SME development in rural areas. In 2019, Ukraine ranked first in Europe, and the fourth in the world in terms of honey production, exporting around 55,600 tons of honey. Ukraine produces several types of honey - sunflower, buckwheat, rape, linden, and white acacia.

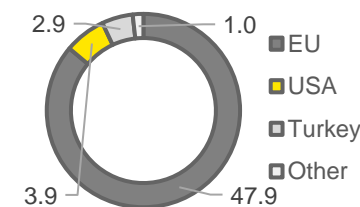
New trends in beekeeping

- **Consolidation of production.** The production scale of honey extraction can be achieved with the number of bee colonies of at least 500. Smaller firms have lower profitability and often cannot overcome competition in the market, since their product turns out to be more expensive in terms of cost
- **Improvement of the construction of hives.** Recent inventions of automated plastic honeycomb have reduced collection work to a minimum. So, one of the latest prototypes does not require removing them from the hive at all. The mechanism collects the product directly from the hives ready for use, which **saves time and money**

Export of honey, tons



Export in 2019, '000 tons



Source: State Statistic Service of Ukraine

The duty free quota for exports to the EU in 2019 was 8,100 tons. Export to EU in excess of the duty free volumes totaled 39,800 tons (83% of the honey exports to EU in 2019) and was subject to 17.3% customs duty.

Performance indicators of major exporters

Askania-Pak LLC:

- Productive capacity – 3,000 t per month
- Storage volume of finished products – 4,000 t
- 150 professional apiaries

Ukrainian Bee LLC:

- Productive capacity – 3,600 t per month
- Storage volume of finished products – 1,000 t
- 300 bee-families

2.5.2. HVA sectors with high FDI potential

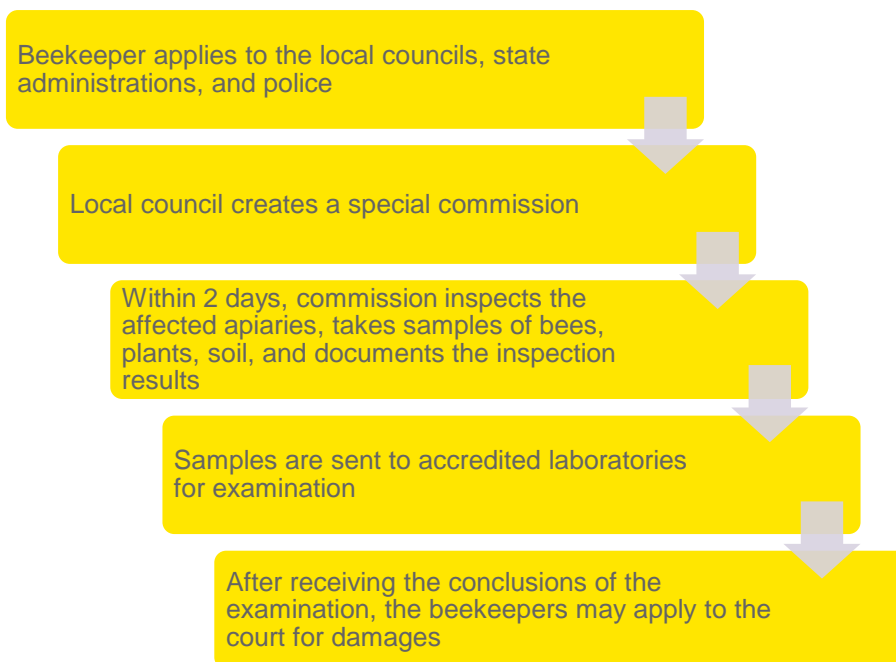
Legal framework of beekeeping in Ukraine (1/2)

Honey is one of the most popular products to [export](#) in the EU and USA. Beekeeping is governed by the [Law of Ukraine "On Beekeeping"](#) dated 2000. In 2019 the Mineconomy approved [the Requirements for Honey](#), setting norms on composition and classification of different types of honey and labeling requirements. These requirements are aimed at securing the protection of consumer rights

Protection of bees is one of the underregulated issues

- ▶ Ukrainian community of beekeepers [points out](#) the problem of protection of bees as one of the key issues in the industry. This concerns, particularly, protection against pesticides, phytoncides, and insecticides
- ▶ Farmers should notify beekeepers no later than 3 days prior to the planned spraying of agrochemicals in 10 km zone around the targeted fields. The notice should include the date, names of agrochemicals to be used, level, and term of their toxic effects. However, the legislation does not further provide a clear procedure in this regard and fails to set adequate liability for non-compliance with these notification requirements
- ▶ In addition to that, the law does not set any restrictions for using agrochemicals that are harmful to bees. The beekeepers [proposed](#) to prohibit the use of certain agrochemicals and approximate respective Ukrainian regulations with [Regulation \(EC\) No 1107/2009](#) and [Regulation No \(EU\) 540/2011](#) regarding the requirements for approval of agrochemicals, conducting researches on their impact on bees and the list of approved active substances
- ▶ There are two legislative initiatives that partially address the aforementioned issues: draft laws No. [4510](#) and [4511](#) dated 17 December 2020 (submitted to the Parliament). They govern the procedure for notifying beekeepers, require to use agrochemicals only during the night time and set higher administrative fines for violation of the notification rules (up to USD 600)
- ▶ The Mineconomy [is currently developing the Draft Order "On Certain Issues in the Field of Beekeeping"](#) that:
 - ▶ Introduces new damages reimbursement procedure establishing a clear methodology for calculation of damages and improving the status of commission on the poisoning of bees
 - ▶ Introduces new procedure for obtaining a veterinary passport of the apiary, with defined terms and electronic form of application

- ▶ The current [Instruction for the Prevention of Poisoning of Bees with Pesticides](#) dated 14 June 1989 provides for the mechanism of compensation of damages incurred due to poisoning of bees by agrochemicals. This regulation needs to be amended to improve the existing procedure of documenting damages. The current procedure is the following:



Legal framework for the provision of pollination services is underdeveloped

According to the [USDA](#) report, pollination fee services make the biggest share in the revenue of beekeepers globally. At the same time, the Ukrainian [pollination services market is not developed](#). The provision of pollination services to farmers is allowed under the law and may be conducted on a fee basis under the contract. The law, however, does not set out the essential contract conditions and the mechanism to protect bees from poisoning in this area. Legislative changes aimed at clarifying the provision of pollination services and development of the pollination services market may contribute to the investment attractiveness of beekeeping and planting

2.5.2. HVA sectors with high FDI potential

Legal framework of beekeeping in Ukraine (2/2)

Regulatory procedures

Apiaries are subject to registration. The registration is confirmed by the veterinary and sanitary passport of the apiary. According to the [Procedure for Registration of Apiaries approved by Order of the Ministry of Agricultural Policy No. 184/82 dated 20 September 2000](#), registration is carried out under the request of the apiary's owner of the apiary submitted to the [State Service of Ukraine on Food Safety and Consumer Protection](#) (Food Safety Service). The registration fee is set at approx. USD 1.80. The service inspects the apiary and issues a passport within 30 days. An application may be submitted in paper form only

- ▶ Beekeepers should also register apiaries as production capacity according to Article 10 of the [Law of Ukraine "On Basic Principles and Requirements for Food Safety and Quality"](#) and the relevant [Procedure](#). Registration is free of charge and should be conducted by the Food Safety Service within 15 business days from application

State aid

- ▶ Both individual beekeepers and entities are entitled to receive budget subsidies pursuant to the [Procedure for Using Funds Provided in the State Budget for State Support of Animal Husbandry Development and Processing of Agricultural Products, approved by Resolution of the CMU No. 107 dated 7 February 2018](#). The aid is granted for subjects that own from 10 to 300 bee colonies in the amount of UAH 200 (approx. USD 7.15) per bee colony, with a cap of UAH 60,000 (approx. USD 2,145). According to the Deputy Minister of Economic Development, Trade and Agriculture, the total amount of aid granted in 2020 was UAH 239,440,200 (approx. USD 8,570,000). The aid was provided to 23,430 applicants
- ▶ Beekeepers willing to get state aid should obtain veterinary and sanitary passports for all their apiaries and register them as facilities according to the procedures indicated above. In addition to documents confirming fulfillment of these requirements, the applicant must also provide statistical reports on the production of bee products and documents confirming the opening of the bank account. Local councils gather such information and transfer it to the Mineconomy. Mineconomy further distributes grants within the limits of available budget funds

- ▶ The Procedure also gives the right to partial reimbursement of costs for purchased queen bees in the amount of UAH 100 (approx. USD 3.60) per queen bee and for bee colonies in the amount of UAH 500 (approx. USD 17.90) per colony

Requirements for organic beekeeping

Beekeepers may also acquire Ukrainian certification of an organic product for their bee products under special requirements. Such requirements are set out in the [Law of Ukraine "On Basic Principles and Requirements for Organic Production, Handling and Labeling of Organic Products"](#) and the [Procedure \(Detailed Rules\) for Organic Production and Circulation of Organic Products](#). To obtain an organic certificate, beekeepers should:

- ▶ Have [native bee species](#): Carpathian bee (*Apis mellifera carpatica*) found in the western part of the country, Ukrainian steppe bee (*Apis mellifera acervorum* Scor.) living in the east and south, and Polissia bee (*Apis mellifera mellifera*) in the north
- ▶ Replace non-organic wax with organic one during the transition period
- ▶ Place apiary in a manner that excludes any agrochemicalized plants in the 3 km area as much as possible, prioritize preemptive treatment methods
- ▶ Comply with a number of other regulatory requirements: use only natural materials for apiaries, not use chemically synthesized repellents when pumping honey, use only allowed organic veterinary medicines to combat bee diseases, refrain from feeding bees, not cut off bee queen's wings, etc.

Export to the EU

- ▶ Ukrainian honey exporters can count on benefits for exports to the EU as long as the Association Agreement in [Annex I-A](#) establishes a zero-tariff quota for five (with a further increase to six) thousand tons of Ukrainian honey exported to the EU. In 2017 this volume was additionally increased by 2,500 tons under [Regulation \(EU\) 2017/1566](#) (It should apply for three years from 1 October 2017). Quotas are used based on the "first come, first served" principle. All extra volumes of exported honey are subject to a 17,3% customs rate



2.5.2. HVA sectors with high FDI potential

As a result of robust international demand, organic agriculture sector has significant investment potential

External demand driver

Up to
150%
higher price is for
organic goods as
compared to
conventional ones

Demand for organic products continues to expand in the world. However, it grows faster in countries with higher personal disposable income due to higher prices. The data of Organic Trade Association shows that organic food **sales expanded by 4.6% in 2019** in the USA, while organic non-food sales grew by 9.2%. Both segments significantly outpaced the conventional counterparts as total food sales expanded by 2% and total non-food sales posted a 3% growth. In the EU, organic products retail sales posted double-digit growth for the last four years, while the highest growth rate for the total retail sales did not exceed 3.4% over the period. Similar trends were observed in other developed markets such as Japan, Canada, and Australia.

37% The largest organic
product markets in
the world by their
share
USA

47% EU

The regulations require that the EU organic logo can only be used on products that have fulfilled strict conditions on how they must be produced, processed, transported, and stored. Therefore, the EU organic logo is one of the most respected signs of organic products among consumers

In 2018, Ukraine adopted the Law on Basic Principles and Requirements to Organic Production, Distribution, and labeling of Organic Goods. The Law was developed in close cooperation with the EU institutions. It fully aligns the national organic production legislation to that in the EU



Organic products

Organic production is one of the most attractive for investment sectors. It's growth in the country is mainly driven by external demand (USA and EU). Ukraine has all the opportunities to satisfy growing demand for organic products. First, organic production is more value-added, generating higher revenues. Second, Ukrainian legislation on organic production is now aligned with that in the EU – the most advanced organic production legislation in the world. Finally, the cost of the arable land rent for organic production is very low in Ukraine

Consumption in 2018, EUR mln

Ukraine	18
World	96,683
Potential for development	Strong
Major countries and blocs by land area under organic agriculture in 2018, mln ha	
Australia	35.69
EU	27.28
China	4.11
India	3.43

Higher-value added

Organic production technologies require more human and financial resources as compared to conventional production. This means higher value-added of the final product and allows charging a higher price.

In terms of organic agriculture, here are the major factors of additional value-added:

- ▶ Transfer period for land certification of three years (goods produced are not certified organic and are sold without organic premium)
- ▶ Investments into special equipment for more gentle land cultivation
- ▶ Additional tillage to grow weeds without the use of herbicides and pesticides
- ▶ Cleaning of equipment each time it was involved in conventional agricultural production
- ▶ Higher transportation costs because of obligatory separation from conventional goods
- ▶ Small scale production of organic feed for animals (loss of returns of the scale)

Low land rent cost

The mentioned earlier transfer period for organic land and strict requirements of preserving land fertility in developed countries lead to significantly higher land rent rates for organic production as compared to conventional ones. Some experts' estimates show that the difference is around **25% in the USA. In the EU, the difference is even higher** because of generally higher land prices.

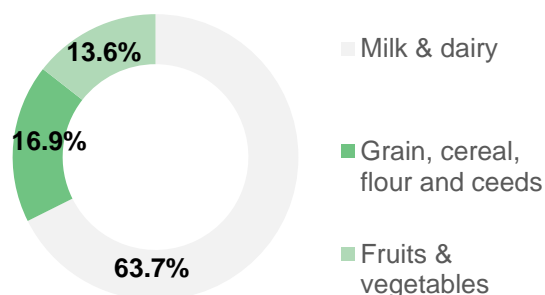
Because of the absence of the land market, agricultural lands can only be leased and at rates significantly below the market level. Land rent rates in Ukraine depend on normative monetary valuation of land plots and do not differ much in organic and conventional agriculture. The average land rent rate was at **EUR 50 in Ukraine in 2018** as compared to EUR 57 in Latvia (the lowest in the EU)



2.5.2. HVA sectors with high FDI potential

The organic agriculture sector is fast-growing. Local producers are aware of its advantages and are seeking ways to increase export

The structure of consumption of organic products in 2019



Major producers:

- 1st** Lybid-K (TM Svit Bio) – eggs, milk, vegies
- 2nd** Galex-agro (TM Organic milk and Organic Meat) and Etnoproduct – milk
- 3rd** Zolotyi Parmen, Liluck – juices
- 4th** **Arnika**, Skvyra Plant of Bread Products (TM Skvyrianka), Organic Original (TM Ecorod) – grains, cereals, and flour
- 5th** Kasper (TM Organico) – cold-pressed vegetable oil
- 6th** LiQberry – berry pastes

The number of organic products producers increased from:

294

In 2016



500

In 2018

They operated on 233,500 ha of lands compliant with EU organic standards.

Organic products (2/3)

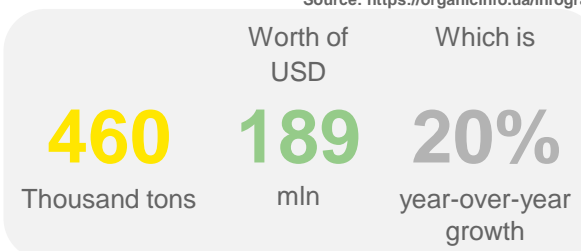
Following the global trends, organic production is actively developing in Ukraine. Although domestic consumption is increasing (by 9.7% year-over-year in 2019), the industry is oriented mainly on external markets. In 2019 exports of Ukrainian organic products exceeded domestic consumption by **~8 times** in terms of value. Such a big difference caused by the fact that Ukrainian exports are mainly intermediate goods for further processing: grains, oil crops and legumes, wild berries and mushrooms, and medicinal plants and herbs.

Arnika company is an example of a successful switch from conventional agriculture to organic production. The company signed its first contract on organics in 2015. Key steps:

- ▶ **Certification.** It certified all its cultivated lands of over 15,770 ha under the most trusted Bio Suisse international standard.
- ▶ **Infrastructure:** construction of special storage facilities (with a capacity of around 114,000 tons), 5 organic grain cleaning and drying facilities, so on.
- ▶ In June, the company opened its **sales office** in the US. As of now, Arnika is the **second largest organic holding in Europe**.

Organic exports in 2019

Source: <https://organicinfo.ua/infographics/>



Around 80 organic products were exported to 35 countries through 236 importing entities in 2019

Importer	Share / Volume
Europe: 85% of all Ukrainian organic products	
North America: 12%	
The Netherlands:	141 ths tons / USD 37 mln
Switzerland:	59.5 ths tons / USD 14 mln
The US:	50.0 ths tons / USD 34 mln

- ▶ Kherson, Zhytomyr, and Odesa regions are the largest organic producers in terms of land under organic agricultural production
- ▶ 19 regions of Ukraine provide support to organic producers within the regional programs of agro-industrial complex development, 11 of which also provide financial support from the regional budgets
- ▶ On the side of consumers, organic products became more affordable in 2019. Despite its growth in terms of volume, total consumption dropped 2.5% year-over-year in terms of value.





2.5.2. HVA sectors with high FDI potential

There are certain segments of the local organic agriculture sector that are more attractive than others

Attractive segments and enablers



Grains, cereals and flour



Fruits and vegetables



Juices



Other (including wild berries and medical plants and herbs for abroad)

Key enabler: refrigerating facilities

The refrigerating facilities market is actively developing in Ukraine:

- ▶ The country's large refrigerating plants are old and are mostly located close to the Western border. At the same time, actual production has a much broader geography. Thus, most large producers invested in the construction of the own refrigerating plants
- ▶ Such construction is costly. Therefore, smaller producers have three options: (i) locate their production close to the existing refrigerating facilities; (ii) associate into cooperatives and jointly construct refrigerating facilities; (iii) utilize unlicensed small refrigerating facilities
- ▶ Unlicensed small refrigerating facilities constitute a significant "shadow" share of the market as of now. An additional difficulty for organic producers is the fact that organic production protocols prohibit any contacts between conventional and organic products during processing, which imposes additional production costs.

**EUR
120 ths**

Is the cost of the construction of a refrigerating shop with a capacity of 2,500 tons of raspberry per day



The State Regulation

Organic products (3/3)

In order to become an organic producer, a company or an individual have to go through costly and time consuming registration procedure. Including:

- ▶ A total cost of around **UAH 60-70 ths**
- ▶ From **10 weeks to >3 years** of waiting time to obtain the status of an organic producer
- ▶ Confirmation of the organic producer status - on average **once** a year
- ▶ Duration of the registration process and the frequency of organic producer status confirmation depend on the type of agriculture

Production type	Approximate duration
Poultry	10 weeks
Goats, pigs, and milk cows	½ a year
Meat cattle and horse breeding farms	1 year
Pastures and fields for cultivation of annual plants	24 months
Fields for cultivation of perennials	36 months
Wild strawberry cultivation	>36 months

Specific legislation

The state regulation procedures of organic production are stipulated in the special legislation. This includes:

- ▶ the Law of Ukraine On the Main Principles of and Requirements to Organic Production
- ▶ Turnover and Labeling of Organic Products
- ▶ A set of by-laws



2.5.2. HVA sectors with high FDI potential

Legal framework of organic agriculture (1/2)

- ▶ Organic production and its certification are governed by the [Law of Ukraine "On Basic Principles and Requirements for Organic Production, Circulation and Labeling of Organic Products"](#) No. 2496-VIII dated 10 July 2018, which was developed based on EU Regulations [No. 834/2007](#) and [No. 889/2008](#)
- ▶ Organic production is a certified activity on agricultural production at all stages of the technological process, including harvesting, processing and packaging, which are carried out in compliance with the requirements for organic production, circulation and labeling
- ▶ Information about the organic producers, organic seeds, planting materials' producers and certification bodies should be included in the respective [registers](#) operated by Mineconomy under the CMU's regulation [No. 87 dated 12 February 2020](#). However, the registers are not [yet](#) publicly available
- ▶ Organic producers are allowed to use the non-organic substances included in the [List of Substances \(Ingredients, Components\) That Are Allowed to Be Used in the Process of Organic Production, and That Are Allowed to be Used in Maximum Permissible Quantities](#) (approved by Order of the Mineconomy No.1073 dated 9 June 2020)

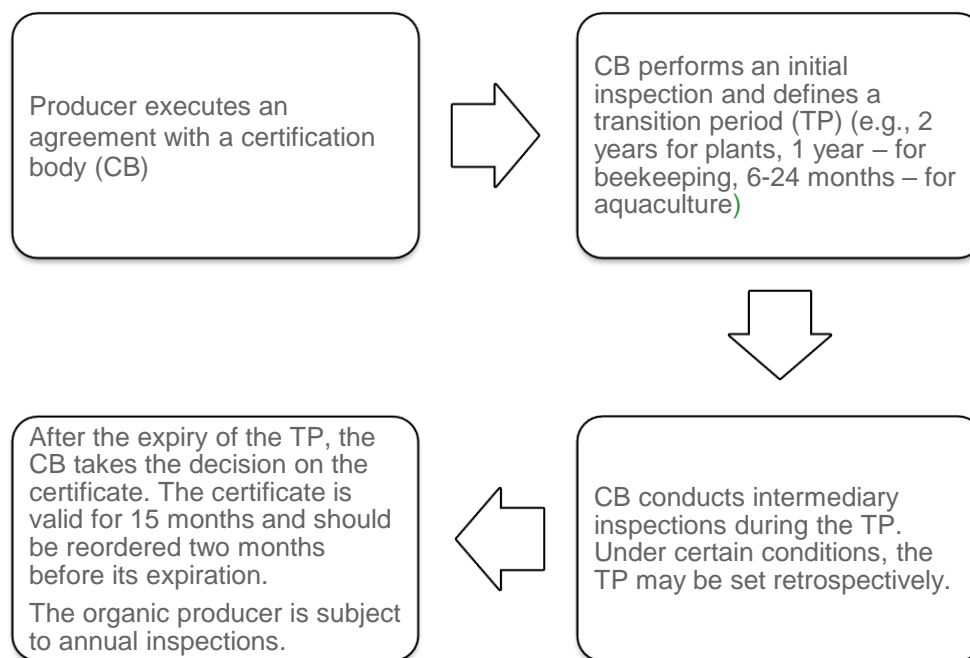
National certification and labeling

- ▶ Organic certification is carried out by the certification bodies (CB): private entities authorized by Mineconomy under the procedure approved by the CMU's [Regulation No. 1032 dated 21 October 2020](#)
- ▶ It is prohibited to mark non-compliant products with the state logo or use in their respect any designations containing the words "organic," "biodynamic," "biological," "ecological," "organic" and/or any monosyllabic words. Such use qualifies as consumer fraud and triggers confiscation of illegally marked goods
- ▶ Ukraine recognizes the organic certificates issued by foreign certification bodies included in the special List of Foreign Certification Bodies for goods to be imported or exported
- ▶ Organic products certified in accordance with Ukrainian regulations are subject

to [labeling](#) with a [special logo](#)



Organic certification procedure includes the following steps:



2.5.2. HVA sectors with high FDI potential

Legal framework of organic agriculture (2/2)

Lack of recognition of Ukrainian organic certification for export to EU

- ▶ Main trade partners for organic imports in the EU include China (13%), Ukraine (10%), Dominican Republic (10%) and Ecuador (9%)
- ▶ Ukrainian organic export to the EU is subject to EU certification. Exporters must prove the status of “compliant product” under the provisions of Article 32 of the Regulation (EC) No. 834/2007. This means that they must comply with the EU requirements with respect to organic production, undergo the certification process of a certification (control) body recognized by the EU, and be ready to provide the necessary documentary evidence at any time
- ▶ To be subjected to the EU organic certification, the Ukrainian exporter must apply to an accredited certification body from the official list of the European Commission. According to the list, EU authorized 18 certification bodies to conduct organic certification in Ukraine. The certification body conducts an audit and issues an electronic certificate of inspection (e-COI) administered through the electronic system TRACES and confirming that the organic goods intended for import in EU comply with its requirements
- ▶ European Commission’s guidelines for Ukraine stipulate that importers must inform a control body about any consignment to be imported in the EU and provide documentation on entry points (COI, custom declaration, transport documents and documents on traceability as well as valid certification of each operator involved in all stages). This also requires additional analysis of samples at the entry points in the EU
- ▶ Although the Ukrainian organic certification system is presented as based on the EU legislation principles, Ukraine is not included in the list of recognized countries provided in Annex III of Regulation No. 1235/2008. This means that Ukrainian exporters of organic products should get EU organic certification to be presented in the EU market. Additional certification leads to double expenses since the organic producers have to go through the two regulatory procedures in case they want to sell their products on the domestic market and export them to the EU
- ▶ Ukrainian organic export can be accepted at the EU market based on the national organic certification standard if the EU recognizes Ukraine as a third country in accordance with Article 7 of Regulation (EC) of 8 December 2008 No 1235/2008 laying down detailed rules for the implementation of Regulation (EC) No 834/2007. The list of recognized countries is set out in Annex III to the

said Regulation. In this case, the control bodies specified in Annex III will be entitled to issue a COI. According to Article 8 of the aforementioned Regulation, a third country can apply to the European Commission and request its inclusion to the list of third countries by providing a technical dossier as evidence that its organic standards and system of certification comply with the EU ones

- ▶ To ease doing organic business in Ukraine and further export to EU, it is advisable to ensure consistency of the Ukrainian organic standards with the EU ones and address the European Commission with the request for inclusion of Ukraine into the list of recognized countries



Export to the USA

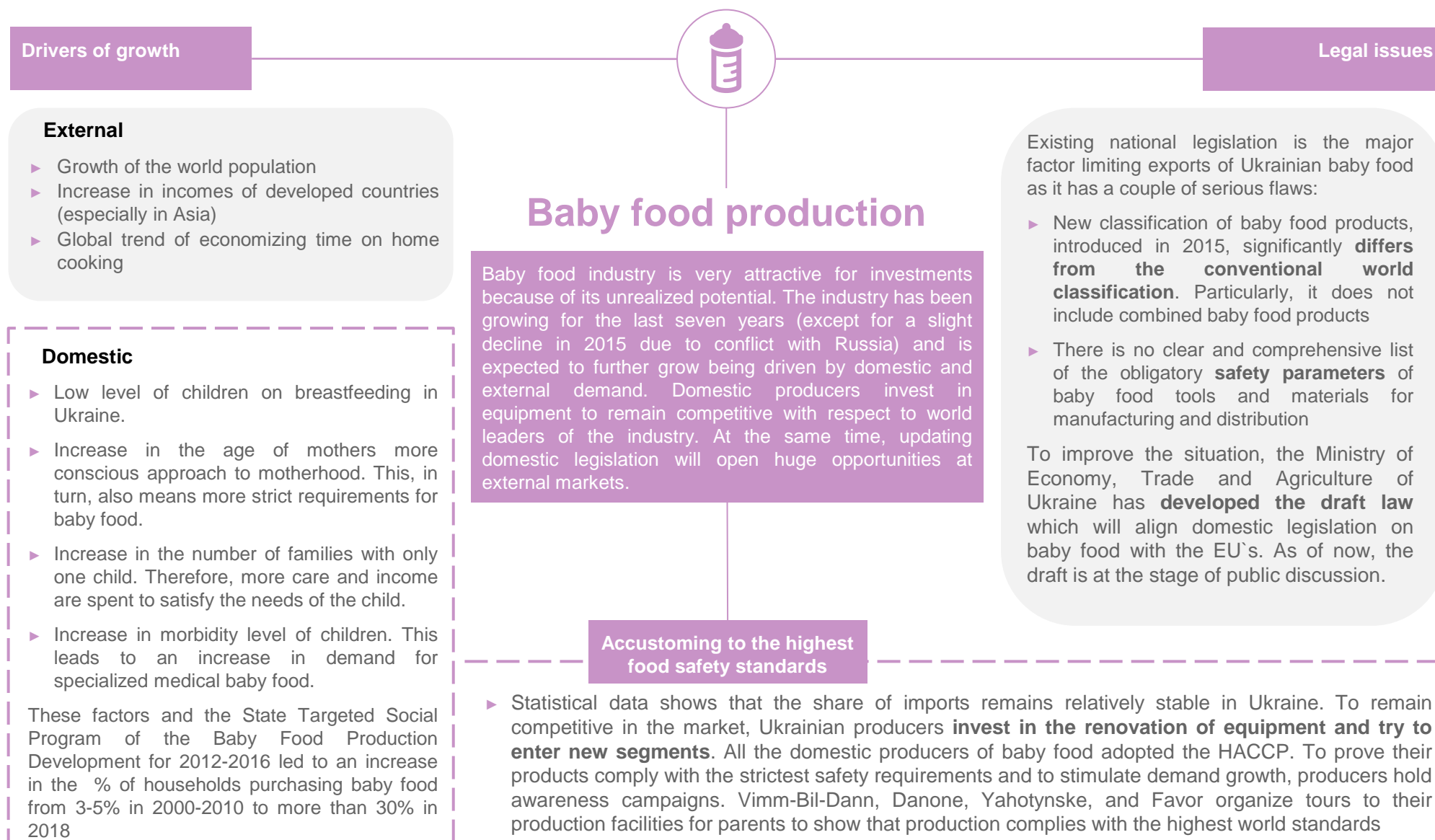
- ▶ Ukrainian organic food operators are also not allowed to directly import their organic goods into the US on the basis of their national certification
- ▶ The main obstacle in this respect is the difference between the relevant regulatory requirements in the two countries. As an illustration, the transition period for the land on which the products are grown differs – three years in the USA and not less than two years in Ukraine
- ▶ According to the Guidelines of the Federal Department of Agriculture, the certification of organic products originating from the non-recognized third countries is conducted through a certification agent. The agent will verify that the producer’s practices comply with the US requirements and conduct the on-site audits. If the submitted documents and the inspection reports show compliance with the US organic regulations, a certification agent issues an organic certificate
- ▶ Taking into account the increased demand for organic products in the US market, it is advisable to consider the possible approximation of organic standards on top-exported products with the US ones and execute the respective organic trade agreement





2.5.2. HVA sectors with high FDI potential

Significant potential of the Ukrainian baby food industry for international expansion is restrained by the outdated national legislation





2.5.2. HVA sectors with high FDI potential

On national level Ukraine has well-developed baby food industry. International expansion should be the next step for the producers

Main categories and producers



Milk powders and porridges with added milk powder and fruits (the largest segment by value)



Liquid and paste-like milk-based products



Fruit and vegetable juices and puree



Kid's water



Special purpose tea for kids

- ▶ Nutritek (brands: Malysh, Maliutka, and Malyshka)
- ▶ Dnipropetrovsk Food Company Waiz Ltd (TM Nyam-Nyam)
- ▶ Association of Baby Food (TM Karapuz)
- ▶ Vimm-Bil-Dann Ukraine (TM Agusha)
- ▶ Milk Alliance (TM Yahotynske for kids)
- ▶ Prydniprovskiy Plant (TM Zlahoda)
- ▶ Danone Dnipro (TM Tioma)
- ▶ Favor Ltd. (TM AMO)
- ▶ Vitmark-Ukraine (TM Chudo-Chado),
- ▶ Association of Baby Food at Pivdennyi Plant of Canned Products (TM Karapuz)
- ▶ Econia EFI LLC (TM Maliatko)
- ▶ HIPP Ushgorod LLC (TM Bebi Vita)
- ▶ Nutritek (Russia) at Khorol Dairy Canning Plant for Baby Food (brand Malysh)
- ▶ PRJSC Myrhorod Mineral Water Plant (TM Akva Niania)
- ▶ HIPP Ushgorod LLC (TM Bebi Vita)



Industry overview

Baby food production

Ukraine has a powerful baby food industry that covers around 80% of the local demand. The remaining 20% of the local demand is covered by import, mainly from the EU, Belarus, New Zealand. Exports account for around 2% of domestic production. Some retail chains sell baby food under their private labels. However, volume of such sales is small (around 1% of the total market value).

>40%

increase

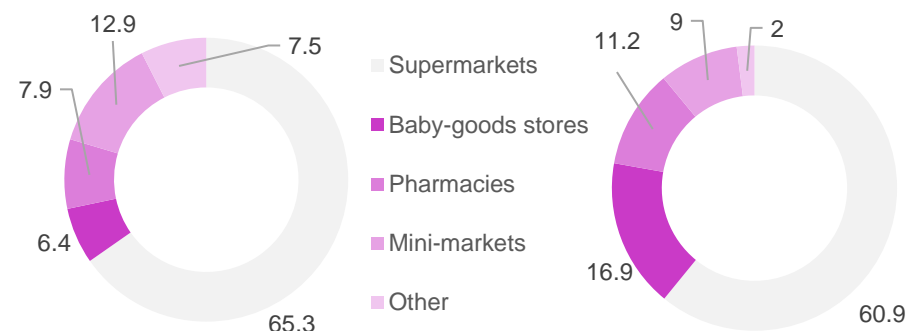
Of Total volume of produced baby food to 33.8 k tons from 2013 to 2018

Baby food segments weakly covered by domestic production:

- ▶ Special medical purpose milk powders
- ▶ Canned meat and fish
- ▶ Biscuits
- ▶ Pasta
- ▶ Sauces

Baby food distribution channels

Source: Nielsen (2017)



The relatively new for Ukraine segment of healthy sweets is actively developing in the country. However, producers **do not position their products as baby food** because it is often a psychological barrier for other customer groups. The most known producers are Eco-Snack LLC (TM Bob Snail) and Sergio LLC (TM Sergio)

2.5.2. HVA sectors with high FDI potential

Legal framework of the baby food industry

- ▶ The Law of Ukraine "On Baby Food" defines the "baby food" as food determined by the Ministry of Health of Ukraine for special dietary consumption and specially processed or designed to meet the nutrition needs of infants and young children (formulae, supplementary food, drinks and water). The Law establishes general provisions on prohibited ingredients, requirements for packaging and labeling, and the procedure for market access for baby food
 - ▶ **Prohibited components for baby food:** raw materials that do not meet the sanitary requirements, artificial flavorings, dyes, sweeteners, preservation agents, stabilizers, flavor enhancers and food additives not registered by the Ministry of Health of Ukraine; palm, sesame and cotton oils, margarine and hydrated soy protein; mechanically separated meat and by-products (except for heart, liver and tongue) and meat of pond and bottom-dwelling fish
 - ▶ **Special zones for dedicated raw materials:** most (the exact proportion is not set) of the raw materials for infant food production should be produced in the special zones located far from industrial facilities. The use of hormones and GMOs is prohibited, and the use of natural agrochemicals is limited in such zones. Producers should apply to the special commission of state regional administration for the conclusion on compliance of their production facilities with zone's requirements. According to the procedure approved by the CMU's Regulation No. 1195 dated 3 October 2007, the status of a special zone may be granted to the producer for five years under the respective order of the chairman of local administration. Information about this zone should be included in the respective state register
 - ▶ **Specific requirements for baby food are further detailed in regulations and standards, particularly:**
 - ▶ Hygienic Requirements for Baby Food, Safety Parameters and Certain Indicators of Their Quality approved by Order of the Ministry of Health of Ukraine No. 696 dated 6 August 2013 aims to bring Ukrainian legislation in line with EU Directives 2006/141, 2006/125, 2009/39
 - ▶ State Hygienic Rules and Regulations "Regulations for Maximum Levels of Certain Contaminants in Food" approved by Order of the Ministry of Health of Ukraine No. 368 dated 13 May 2013 set the maximum permissible levels of harmful substances (nitrates, mycotoxins, lead, tin, quicksilver, cadmium, polycyclic aromatic hydrocarbons, melamine)
 - ▶ Microbiological Criteria for Establishing Food Safety Indicators approved by Order of the Ministry of Health of Ukraine No. 548 dated 19 July 2012
 - ▶ introduce ISO 21528-1 and EN/ISO 7932 international standards on microbiological examination of infant's dairy products
 - ▶ Medico-biological Requirements and Sanitary Norms on Quality of Food Raw Materials and Food Products (adopted in 1989), in spite of being outdated, are still valid in respect of norms on copper, arsenic, zinc, hormones
 - ▶ Different state standards, including State standard of Ukraine 8590:2015 "Dry dairy products for baby food. Dry milk formulas adapted for children aged four months to one year. Technical conditions" adopted in 2017, State standard of Ukraine 4084-2001. "Canned fruit puree for baby food" (33939) adopted in 2001 and State standard of Ukraine 4541: 2006. "Dairy products for infants, cream sterilized for children" (34063) adopted in 2006. These documents are generally based on the old-use standards developed in the Soviet Union and are not tailored to the modern types of agrochemicals and food processing methods and practices of the EU
- #### Approximation with EU requirements
- ▶ The requirements of Ukrainian law regarding baby food (level of standards, terminology) are not consistent with EU legislation
 - ▶ For instance, the Hygienic Requirements for Baby Food, Safety Parameters and Certain Indicators of Their Quality were developed to implement Directive 2006/141, but the EU subsequently adopted the new stricter Commission Delegated Regulation (EU) 2016/127 applicable from 22 February 2020 setting out the requirements not yet regulated in Ukraine – e.g., the norms on molybdenum (in milk-based products) and zinc (in soy-based products)
 - ▶ Mineconomy is developing the Draft Law aimed at an approximation of baby food legislation with EU acquis, in particular:
 - ▶ Introduction of harmonized terminology and product classification
 - ▶ Setting the requirements or labeling, advertising, and provision of the necessary information
 - ▶ Introduction of the procedure for notifying a competent authority about the intention to put into circulation or import into the customs territory of Ukraine baby food products
 - ▶ As the Association Agreement does not provide for special obligations to approximate legislation in the area of baby food, Ukraine should begin such a process unilaterally. Compliance with European standards may become a sign of quality for Ukrainian baby food on the global market

2.5.3. HVA sectors with medium FDI potential



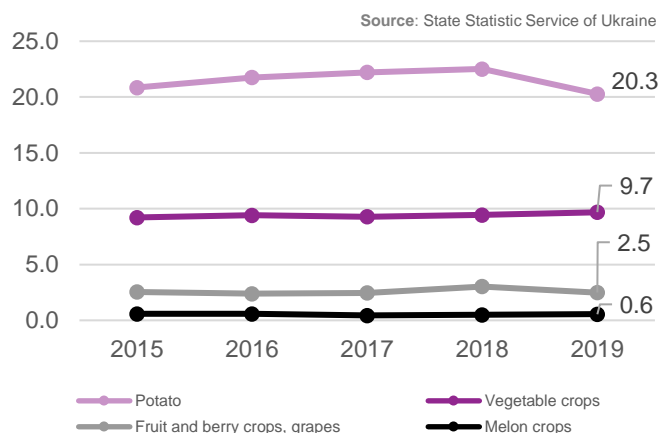


2.5.3. HVA sectors with medium FDI potential

Vegetables & fruits industry generates around 60% of the total revenues of the fresh foods market. Ukraine is in Top-3 of horticultural producers in Eastern Europe



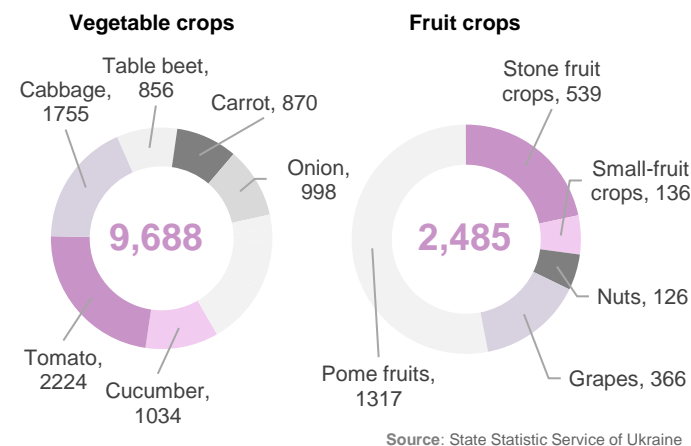
Horticultural production, mln tones



Horticulturals

Households and small scale producers cover more than 90% of horticultural production in Ukraine. Vegetable production posted rather slow growth in 2015-19 because of stable consumption and gradual increase in growth of exports. Consumption of fruits is more sensitive to income fluctuations. Lowering of personal disposable incomes of population led to declines in per capita consumption.

2019 Structure of crops production, thsd tons



Foreign trade in vegetable crops, thsd tons



- Export is on the upward trend. The decline in 2019 was the result of hryvnia appreciation and EU restrictions)
- Exports totaled USD 168.4 mln in 2019, which is a 27.4% over-year decline
- Ukraine exports mostly dried (75.7% in terms of value) and fresh (18.6%) vegetables
- The largest share in imports to Ukraine belongs to fresh vegetables (85.9% in terms of value). Dried fruit imports amount to 8.4% and frozen fruit imports – to 5.2%

Industry trends

- Development is limited by lack of technologies, refrigeration and storage facilities, compliance with the standards, absence of quality and safety certificates
- Open-air markets are the major distribution channel. Supermarket networks expand their horticultural product lines but mainly with imported chilled, packaged goods

Foreign trade in Fruit crops, thsd tons



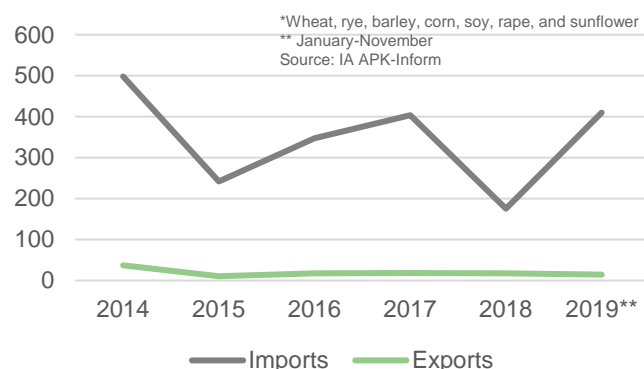
- Ukraine is a net importer of fruits. Imports were almost three times larger than exports in terms of volume and 2.4 times larger in terms of value in 2019
- Imports continued to grow in terms of value (by 4.8% over-year) to USD 552 mln in 2019
- Exports are unchanged - USD 229.7 mln in 2019
- Ukraine exports mainly fresh (64.8% in terms of value) and frozen (34%) fruits
- Imports of fruit crops consist almost exclusively of fresh fruits (97.4% in terms of value)



2.5.3. HVA sectors with medium FDI potential

Ukraine is a net importer of seeds for sowing. Exports of seeds are negligible. However it should change as the EU has just opened its seeds market for Ukrainian seeds

Foreign trade in seeds for sowing*, USD mln



Major seeds producers

- 1st** MAS Seeds (former Maïsadour Semences) – 1 mln seed units (s.u.)
- 2nd** Seed Corp (Remington Seeds and MAIS) – 900,000 s.u.
- 3rd** Stasi Nasinnia (DuPont Pioneer) – 800,000 s.u.
- 4th** Bayer – 750,000 s.u.
- 5th** Cherlys (Euralis Semens) – 650,000 s.u.



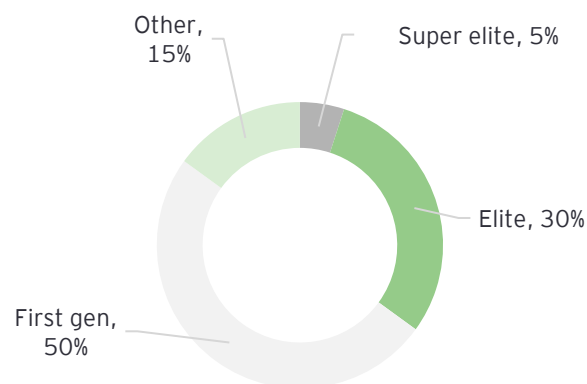
In 2018, corn seed producers increased output by 53% over-year to 74.4 thousand tons. The high production growth pace continued in 2019. Thus, it is expected that Ukraine will reach the self-sufficiency level in corn seed production in 2-3 years.

Seeds for sowing

Generally, agricultural producers cover their needs in grain and legume seeds for sowing from their harvest. Therefore, although the estimated need for seeds is at around 1.8 million tones, domestic trade in seeds for sowing totals around 200-250 thousand tones. Climate change causes an increase in demand for high performance corn hybrids. Therefore, the need for corn seed only is around 110-140 thousand tones per year.

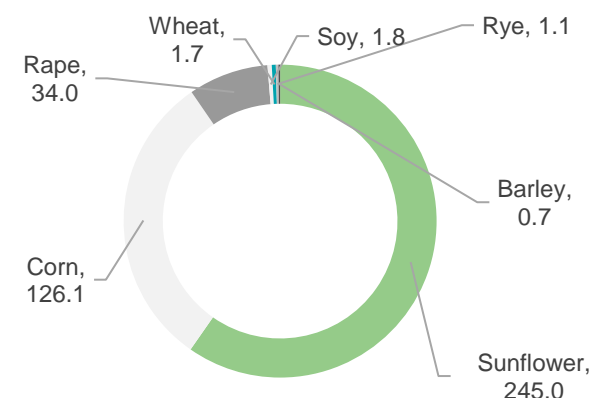
Currently, the Ukrainian production of seeds is dominated by international companies.

Key problem: significant share of seeds of older generations



Source: <https://agravery.com/uk/posts/show/globalnij-ta-ukrainskij-rinok-nasinna-obsagi-ta-trendi>

The structure of imports of seeds for sowing in 2019*, USD mln



*January-November
Source: IA APK-Inform

Major importers:

- ▶ US (21% of the total imports in value)
- ▶ France (16%)
- ▶ Turkey (12%)
- ▶ Hungary (11%)
- ▶ and Austria (8%)

In 2019, imports almost tripled in terms of volume and jumped by 71.8% over-year in terms of value

Investment potential

Based on the results of the 2015 audit of the seeds production business in Ukraine, the European Parliament confirmed the equivalence in the certification of Ukrainian seeds on October 20, 2020. This opens the EU market for Ukrainian seeds and may boost production and exports in the nearest future



2.5.3. HVA sectors with medium FDI potential

Legal framework for seeds and planting stock in Ukraine (1/2)

Seed production is governed by the [Law of Ukraine "On Seeds and Planting Stock"](#) and [Law of Ukraine "On Protection of Rights to Plant Varieties"](#)

There are two main requirements for the production of seeds:

- ▶ Producer should be registered in the [Register of Seeds and Planting Stock Producing Entities](#)
- ▶ Plant variety should be included in the [Register of Plant Varieties of Ukraine](#) or to the [OECD's List of Plant Varieties](#) (in respect of cereals, corn, sorghum, sugar and fodder beet, oilseeds, crucifers and yarn crops)

Registration as seed producing entity

To get access to seed production, an entity should be listed in the [Register of Seeds and Planting Stock Producing Entities](#). In order to be included in the Register, an entity must submit an application to Mineconomy. The application should be supplemented with documents confirming the right to use the plant variety, the availability of necessary material and technical base, qualified personnel, and information about the plant variety and volume of seeds to be grown. The application may be submitted electronically

Certification of seeds. Seeds may only enter the market after certification. Each shipment of seeds should be supplemented with two different certificates confirming varietal and sowing qualities. Seeds may pass the certification only if they belong to a variety listed in the Register of Plant Varieties of Ukraine and their varietal and sowing qualities meet the Ukrainian requirements. Two certification procedures are governed by the [Procedure for Certification, Issuance and Revocation of Certificates for Seeds and/or Planting Stock](#). It was improved in [2020](#) to bring the seed certification procedure in line with international requirements, particularly with respect to the improvement of soil control. You can find the detailed procedure below. The term of validity of certificates of varietal qualities is not limited. The term of validity of certificates of sowing qualities depends on the particular plant variety and does not exceed one year.

Certification of varietal qualities of seeds

The procedure consists of the following [stages](#):

- i) Producer applies to the Mineconomy, its territorial divisions or the [SE "State Center for Certification and Expertise"](#). The application should be supplemented with documents confirming the right to use a plant variety, copies of certificates issued for seeds or planting stock of the previous generation and a plan of the fields. Key steps:
- ii) Consideration of the application and decision-making (up to 10 business days)
- iii) Execution of agreement on the provision of certification services (up to 30 business days)
- iv) Carrying out field trial and issuing the act of field assessment
- v) Prepayment of certificate costs
- vi) Issuance of the certificate within 10 days after prepayment of costs and entering the relevant data in the [Register of Seed Certificates](#)

Certification of sowing qualities of seeds

Is conducted after certification of varietal qualities in respect of each separate shipment of seeds. The procedure consists of the following [stages](#):

- i) The producer should submit to the Mineconomy, its territorial divisions, the [SE "State Center for Certification and Expertise"](#) or private conformity assessment body an application form, copies of issued certificates of varietal qualities and samples selected from the particular shipment by the certification auditor
- ii) Execution of agreement on the provision of certification services
- iii) Analysis of samples
- iv) Decision-making and drawing up a protocol of the trial
- v) Issuance of the certificate (within 5 days after the protocol of trial), entering the relevant data in the [Register of Seed Certificates](#)

OECD' certification of seeds

Producer may obtain internationally recognized OECD certificates (for cereals, corn, sorghum, sugar and fodder beet, oilseeds, crucifers and yarn crops) confirming varietal qualities of seed.

To obtain these certificates, the producer should apply to the [SE "State Center for Certification and Expertise"](#) and submit an application form supplemented by copies of ISTA certificates and certificates of varietal qualities of seeds. Seeds are subject to mandatory onsite and lab controls. A more detailed procedure can be found via the [link](#).

International Seed Testing Association's (ISTA) certification of seeds

The producer may obtain internationally recognized ISTA certificates confirming sowing qualities of seeds.

To obtain these certificates, producer should apply to the [SE "State Center for Certification and Expertise"](#), submit an application form and certificates of varietal qualities of seeds, and execute a certification agreement. Samples of crops are further taken from fields and transferred for analysis. ISTA certificate is issued based on the results of such analysis. A more detailed procedure can be found via the [link](#)

2.5.3. HVA sectors with medium FDI potential

Legal framework for seeds and planting stock in Ukraine (2/2)

Improvement of the legal framework on seeds and planting stock

The Parliament considers the [Draft Law "On Amendments to the Law of Ukraine on Seeds and Planting Stock" No. 4593 dated 1 January 2021](#), which determines categories of planting material and simplifies its certification procedure, as well as improves rules for import/export rules for seeds and planting stock. The Parliamentary Committee on EU Integration found the Draft Law is in line with EU law ([Directive 66/402/EC](#) and [Directive 2002/55/EC](#))

Import of seeds

- ▶ The [Law of Ukraine "On Seeds and Planting Stock"](#) allows to import seeds of plant varieties specifically included in the [national register](#) or recognized [OECD's](#) schemes. Import requires a phytosanitary certificate issued by the competent authorities of exporting country
- ▶ If the variety is not included in the national list but is indicated in the recognized [OECD's](#) schemes, import as well as further export requires additional approval from the Food Safety Service in accordance with the established [Procedure](#) approved by the CMU's Resolution No. 762 dated 26 October 2016. Seeds of such plant varieties may be grown in Ukraine, but only for abroad usage
- ▶ It is allowed to import seeds of plant varieties not included into any of the lists, but only for selection, research and exposure, and subject to special approval of the Food Safety Service
- ▶ Import of seeds also requires quality certificates of countries of origin
- ▶ Ukraine recognizes OECD's and [International Seed Testing Association's](#) (ISTA) international certificates and other countries' certificates recognized under international agreements. Seeds supplemented by those certificates are not required to have a phytosanitary certificate and certificate of the country of origin

Export of seeds to the EU

- ▶ The [Decision \(EU\) 2020/1544 of the European Parliament and the Council](#) dated 21 October 2020 stipulated that any field trials as part of cereal certification procedure conducted by the Mineconomy are equivalent to the inspection conducted by EU body and that sampling, testing, and official post-controls of cereal seeds are carried out appropriately and satisfy the conditions set out by respective EU legislation

- ▶ This decision opened opportunities for the export of Ukrainian seeds to the EU

Legal protection of rights to plant varieties

- ▶ Since seed producers can carry out their activities subject to observance of intellectual property rights to plant varieties (Article 13 of the [Law on Seeds and Planting Stock](#)), this sphere is closely related hereto. The producer may use plant variety registered in Ukraine by himself, execute a licensing agreement, or receive a license from the holder of exclusive intellectual property rights to plant variety or right of propagation, or get propagation right (in respect of well-known plant varieties) by himself
- ▶ Plant varieties are considered special intellectual property objects that are protected from unauthorized use, including production or reproduction, preparation for reproduction, offering for sale, sale or other commercial alienation, export, import and storing for the aforementioned purposes (Article 32 of the [Law on Protection of Rights to Plant Varieties](#)) for the term of 30 years (35 for trees, grapes and shrubs). Intellectual property rights to plant variety are protected under the patent
- ▶ The law distinguishes between intellectual property rights to a variety and the right of propagation. The validity of intellectual property rights to a plant variety is maintained subject to payment of a fee for its maintenance. The intellectual property right for the distribution of plant variety is evidenced by a certificate of state registration of plant variety. Any person may, upon application, obtain the right of distribution in respect of a well-known plant variety
- ▶ New plant varieties are registered by the Mineconomy upon the application of plant breeders. An applicant may claim 12 months priority for applications previously submitted to foreign authorities. The registration procedure involves both formal and qualification examinations and examination of the name of the plant variety. Information about exclusive intellectual property rights to plant varieties is included in the [Register of Patents](#). Rights of propagation are registered in the Register of Plant Varieties. Varieties not included in such register are prohibited from propagation in Ukraine
- ▶ The Parliament considers [Draft Law No. 3680](#) aiming to simplify, clarify and digitalize the procedure for registration of plant variety and harmonize it with the EU's framework

2.5.3. HVA sectors with medium FDI potential

Ethanol production is declining, but it is expected to rebound following the privatization of the sector

1996

79 state ethanol plants with a production capacity of over 65 million dal per year

Those plants were founded during the USSR times, and their production capacity was excessive for Ukraine. Thus, both production capacities and their load continuously declined

1998

The largest producer in the bioethanol segment of the country

The state company Ukrspyrtr started to utilize bioethanol production technologies. It modernized 10 of its plants and became the largest producer in the bioethanol segment of the country (unlike conventional ethanol, there was no state monopoly on bioethanol production) with a production capacity of 194.4 thousand tons per year

2010-2014

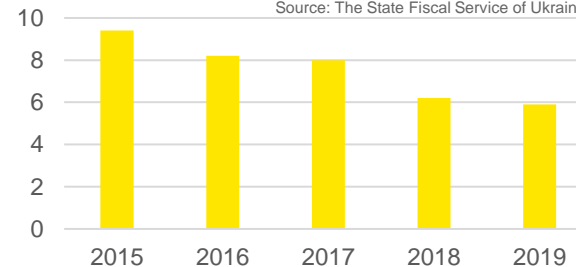
Legal changes in 2010 and 2014 almost completely shut the production of liquid biofuels down in the country

2015

Since 2015, there is almost no import of ethanol to Ukraine. At the same time, exports were increasing despite declining domestic production

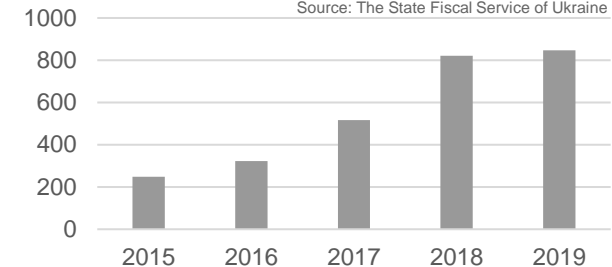
Production of ethanol, mln dal

Source: The State Fiscal Service of Ukraine



Export of ethanol, ths dal

Source: The State Fiscal Service of Ukraine



2019

Ethanol output dropped from around 52 mln dal in 1996 to 5.9 mln dal in 2019

There were two major reasons for that:

- ▶ Decrease in demand for Ukrainian ethanol at both CIS and EU markets. CIS countries had built up their own production capacities, while Europe switched to cheaper ethanol
- ▶ Growth of illegal ethanol production in Ukraine. Monopoly pricing, periodic increases in excise tax on ethanol, and inefficient state control, high level of corruption led to a situation when the share of illegal ethanol production reached almost half of the market.

In monetary terms, exports of ethanol amounted to USD 4.0 million, which was a 7% year-over-year increase. Main importers: Poland (69.4% of the total), Great Britain (14.7%), and Hungary (9.5%).

On December 14, 2019, Ukraine adopted the law lifting state monopoly on ethanol production and allowing privatization of the state ethanol producing plants. Privatization auctions for **12** plants have already been held. The law allows placing into the operation of new private ethanol production facilities starting on July 1, 2021.

To protect domestic production, the law prescribes that ethanol importing activities are allowed only to state companies authorized by the government till January 1, 2024.



2.5.3. HVA sectors with medium FDI potential

The confectionary and cacao industry has recovered to its pre-2014 levels

Niches that have the largest investment potential:

► Craft sweets



Lvivskyi Shokolad is a good example of craft product expansion all over the country

► Healthy sweets



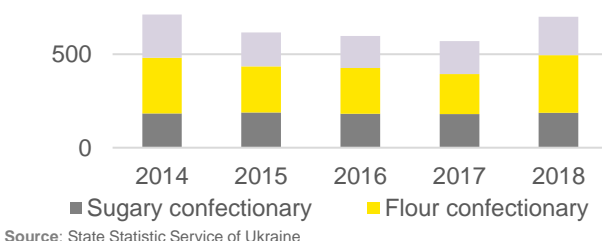
Gluten free, with little or no sugar, carob- and fruit-based confectionery products become more and more popular. The success stories in this segment are Frutallita, Steviasun, Bob Snail, and August

► Small bakeries

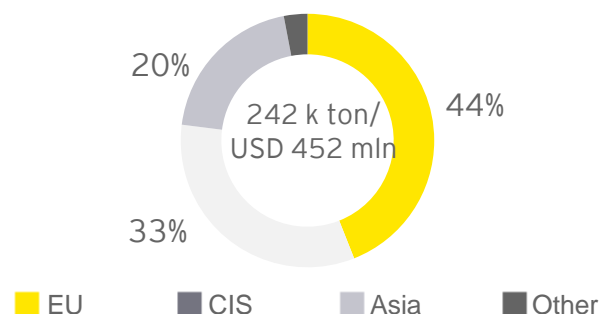


Growing popularity of coffee and tea houses and cafes create a high demand for frozen prebaked and other semi-finished confectionery products

Production of confectionary products, ths tones



Confectionary export, 2019



Main importers are Poland, Kazakhstan, Belarus, Germany, and Romania.

Ukraine imports confectionary products mainly from the EU and CIS countries. One of the largest exporters of confectionaries to Ukraine is Turkey

2014

Confectionary industry of Ukraine was already on a downward trend when it was hit by the political consequences of the conflict with Russia. Loss of Russian, partially Belarusian and Kazakh markets caused further decline

2018

Production bounced back in 2018 mostly because of a significant increase in production of flour confectionary

2019

However, this segment shrank again in 2019 due to a further decline in flour output, while two other segments posted small increases. Thus, total output was close to that in 2018

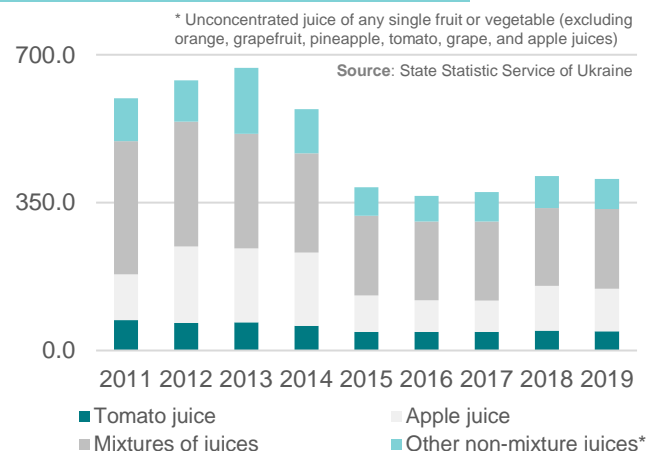
Three largest domestic producers (Roshen, AVK, and Konti) are in the Top-100 world confectionary producers¹



2.5.3. HVA sectors with medium FDI potential

Overall, consumption of juices decreases in volume but increases in value due to price growth and consumption shifting to premium juices segment

Production of selected juices in Ukraine in retrospective view, mln l



Major juice producers and their trade marks:

- 1st** PepsiCo (TM Sandora, TM Sadochok)
- 2nd** Vitmark (TM Jaffa, TM Nash Sik, TM Pryamo sik, TM Sokovyta)
- 3rd** Coca-Cola (TM Rich, TM Dobryi)
- 4th** T.B. Fruit (TM Galicia)
- 5th** Erlan (TM Biola)

State regulation specifics



The government considers new juice production standards and requirements within the national legislation approximation to the EU standards



Juice production

- ▶ Production of fruit juices is well-developed thanks to a broad resource base
- ▶ It is highly competitive in Ukraine
- ▶ There is a group of 10 large producers, a group of strong medium-size regional players, and also there are some small producers with their own niche products
- ▶ Exports to the EU are limited by export quota, which is usually covered in the first months of the year

Per capita consumption



14 L
2008

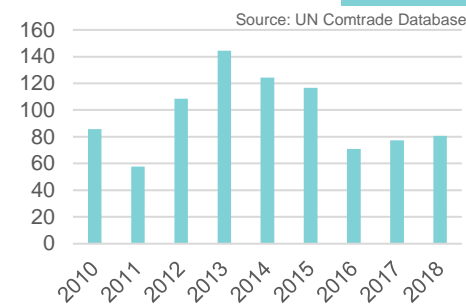


10 L
2018

There is a tendency of further decline in consumption:

- ▶ Initially a drop in consumption was the result of lower purchasing power of consumers
- ▶ But now there is a trend of diet shifting towards more healthy and more expensive juice options

Export of fruit juices, mln kg



123

thsd tons

Total 2019 export

In 2019, exports totaled USD **110.2 million**, which is a 35% growth. The major products are apple (91,2%) and tomato juices (4,4%). Ukraine was the 4th biggest exporter of apple juice with 6,2% of the global share

Import

Major importers:

- ▶ USA (40.8%),
- ▶ Austria (13.1%)
- ▶ Canada (12.7%)

At the same time, import is decreasing. It is safe to say that domestic producers drive external competitors out of Ukrainian juice market

Investment opportunities



The segment of NFC (not from concentrate) juices is actively developing in the country.

Some producers of fruits and vegetables extract **juice substandard fruits and vegetables** at the production site. The resulting product is of high demand at both domestic market (restaurants and premium segment food markets) and abroad



2.5.3. HVA sectors with medium FDI potential

Ukraine is one of the world leaders in the production of apple juice concentrate

Juice concentrates

In the subsegment of concentrated juices, Ukraine is specialized mainly in production of apple concentrate. The country was the world's **4th** largest exporter of the product.

Ukraine is in **Top-5** of the world apple juice concentrate players. Apple juice concentrate production increased over the last couple of years, being driven by external demand.

80%

in terms of volume

Apple juice concentrate exports as a share of total juice exports

85%

in terms of value

Recent trends

- ▶ Ukrainian apple juice concentrate is generally of better quality than analogs from other countries thanks to the balanced composition of nutrients and high pectin content.
- ▶ Ukraine expands its apple juice concentrate exports geography from year to year.
- ▶ One of the largest apple juice concentrate producers, T.B. Fruit is planning to increase its production capacity by 62.5% to 130,000 tons per year to enter markets of Japan and some other Asian countries, which are traditionally covered with supplies from China.



Juice production

Apart from the production of juices, Ukraine is actively developing other fruit and berry processing segments.

The country has strong positions in the production of fruit fillers.

Its jams, marmalades, jellies, and other similar products industry is back on track after the drop in 2014.

Recently, the country managed to enter such new segments as the production of pectin and sublimated products.

Sublimates

Production of sublimated products is relatively new for Ukraine.

PE Fediakin (TM CryoVit) is a pioneer in the field in the country. The company entered this segment in 2018 after almost 15 years in machine building. It produces sublimated fruits, veggies and meals as well as sublimation equipment for both domestic and external markets.

The other two large players are Liedovo and Gold Frost. The former specializes in the production of medical sublimates, while the latter – on fruit sublimates for export purposes.

Other fruits and berries processing products

Fruit fillers

Agrana Fruit Ukraine, subsidiary of Agrana Group – one of the world leaders in fruit processing, covers 85% of the Ukrainian market of fruit fillers. The company exports around 30% of its output.

Pectin

Ukraine entered the pectin production in 2019. The only producer of pectin in the country is B.T. Fruit. The company has a pectin plant with a total capacity of 3 thsd tons / per year

Jams, marmalades, jellies, and other similar products

Production of jams, marmalades, jellies, and other similar products followed the trend observed in confectionary production in recent years.

The output and exports dropped in 2014 after the loss of major markets due to conflict with Russia. Imports dropped mainly because of the decline in incomes of the population.

Recovery in the sector started in 2016. However, 2019 production was still below the level observed in 2013. Exports recover faster, as they surpassed the 2013 level in terms of both volume and value in 2019. Imports were at around 60% of the 2013 level in terms of volume in 2019.

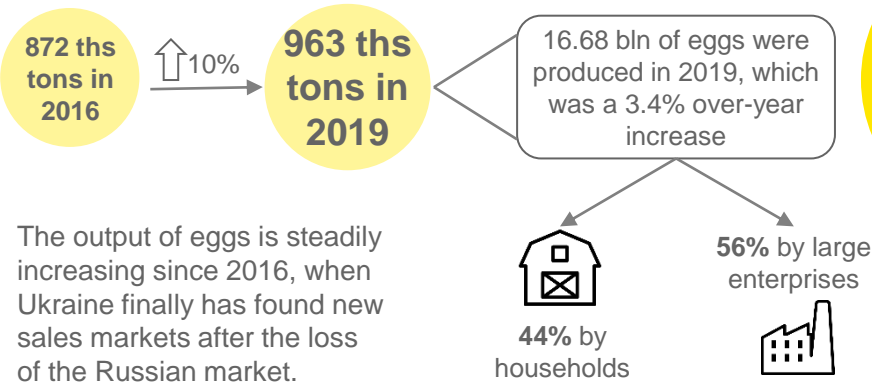
The largest trade partners of Ukraine in terms of both imports and exports are the EU, Russia, China, Belarus, and the US.



2.5.3. HVA sectors with medium FDI potential

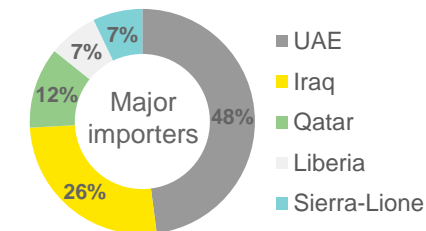
Ukraine is among the world's top egg producers. Potential for growth in the industry lies in the further development of the egg products segment

Output of eggs, thousand tons



Foreign trade in eggs

In terms of value, egg exports totaled USD 112 mln in 2019, which was a 19% over-year growth



Foreign trade in eggs, ths tons



Households

- ▶ Households' output is more uniformly distributed around the country.
- ▶ Just 10% of eggs produced by households end up at the market, while the rest is consumed as food (around 87%) or as feed and for incubation (around 2%).

Large enterprises

- ▶ 1/2 of chicken livestock that produces eggs for agricultural enterprises is located in Kyiv, Khmelnytsk, and Kherson regions, where operate leaders of the industry

Investment opportunities

- ▶ Increase in demand for eggs as the simplest source of animal protein in major markets for Ukrainian egg exports, such as Asia and the Middle East (due to population growth and diet shifting to higher protein intake on the back of income growth).
- ▶ Further development of the egg products segment will allow not only to mitigate seasonal fluctuations at the domestic market but also to expand exports to Europe.

Key highlights

- ▶ Ukraine is among the largest world producers of eggs.
- ▶ Production capacity significantly exceeds domestic demand.
- ▶ Import of eggs is significantly lower than exports, especially in terms of volume.
- ▶ Eggs are mainly imported by poultry farms for incubation purposes to replenish livestock with highly productive poultry breeds.

The segment of egg products remains underdeveloped in Ukraine. The output of egg products increased by more than 8 times over the last five years, being driven mainly by export demand. However, domestic demand for these products also started to grow recently. In addition, high egg production by households, especially during the summer, causes significant seasonal fluctuations of egg prices at the local market. Development of the egg products segment will allow to stabilize the market and further expand export opportunities for the industry.

2.5.4. HVA sectors with low FDI potential





2.5.4. HVA sectors with low FDI potential

Under current circumstances, there are no big investment opportunities in the biofuels sector. Amending the legal framework development is critical for further development

Solid biofuels



Solid biofuels production is underdeveloped in Ukraine mainly because of absence of stimulus on the side of the state and lack of financing

Produced from:

- ▶ wastes of planting
- ▶ special energy plants
- ▶ wood and/or wastes of wood processing

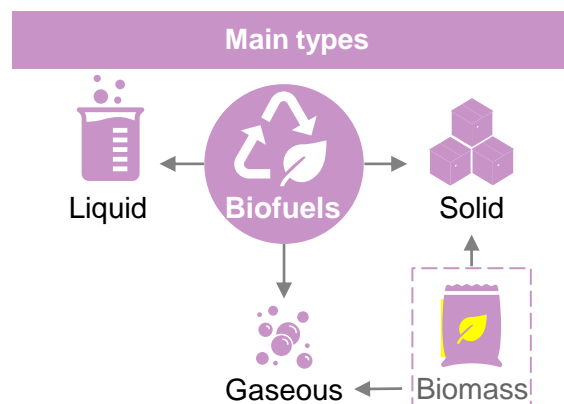
In relation to agriculture in Ukraine, they can be produced from straw (in pellets or baled), special energy plants (energy willow or poplar) or from wastes (plant or animal).

Pellets production

Geography: production of pellets is localized close to the resource base. Large projects of straw pellet production failed in Ukraine. Kirovograd plant of pellets went bankrupt, while production capacities of Vin-Peleta LLC (Vinnytsia) are loaded by 25% only mainly due to lack of straw supplies.

Further steps: strengthening of responsibility for improper treatment of wastes could induce agricultural producers to collect planting wastes and either to supply them to existing biogas facilities or invest in such facilities on their own. Most of the existing pellet production projects are municipal-level initiatives financed with the help of national and international donors.

Biofuels



Biogas has significant growth potential

90% of large cities have already installed biogas stations at their solid wastes landfills, while the rest of cities and villages has almost no such stations due to a lack of financing

49 biogas generating stations in the country, 21 - in agriculture and 28 - solid waste landfills, with a total capacity of 86 MW of power. (For comparison, Germany had over 7,000 stations)

Green tariff for biogas stations is lower than that for solar stations, with the investment payback period for biogas stations around **6** years

Liquid biofuels



Production of liquid biofuels is almost absent in Ukraine because of existing legal framework. As of now there are no legal requirements concerning biocomponent content in fuels

Produced form:

- ▶ Bioethanol – Ukraine's production capacity of 284 ths tons/ per month is heavily underutilized. Production from switchgrass, giant miscanthus and other energy crops is not practiced in Ukraine.
- ▶ Biodiesel – all the projects in the field were closed after the introduction of a new excise tax in 2010

This is a lost opportunity for Ukrainian soybean and rapeseed producers who exports their products instead of extracting oil on-site and selling it as biodiesel component, which would double their revenues.

Investment opportunities

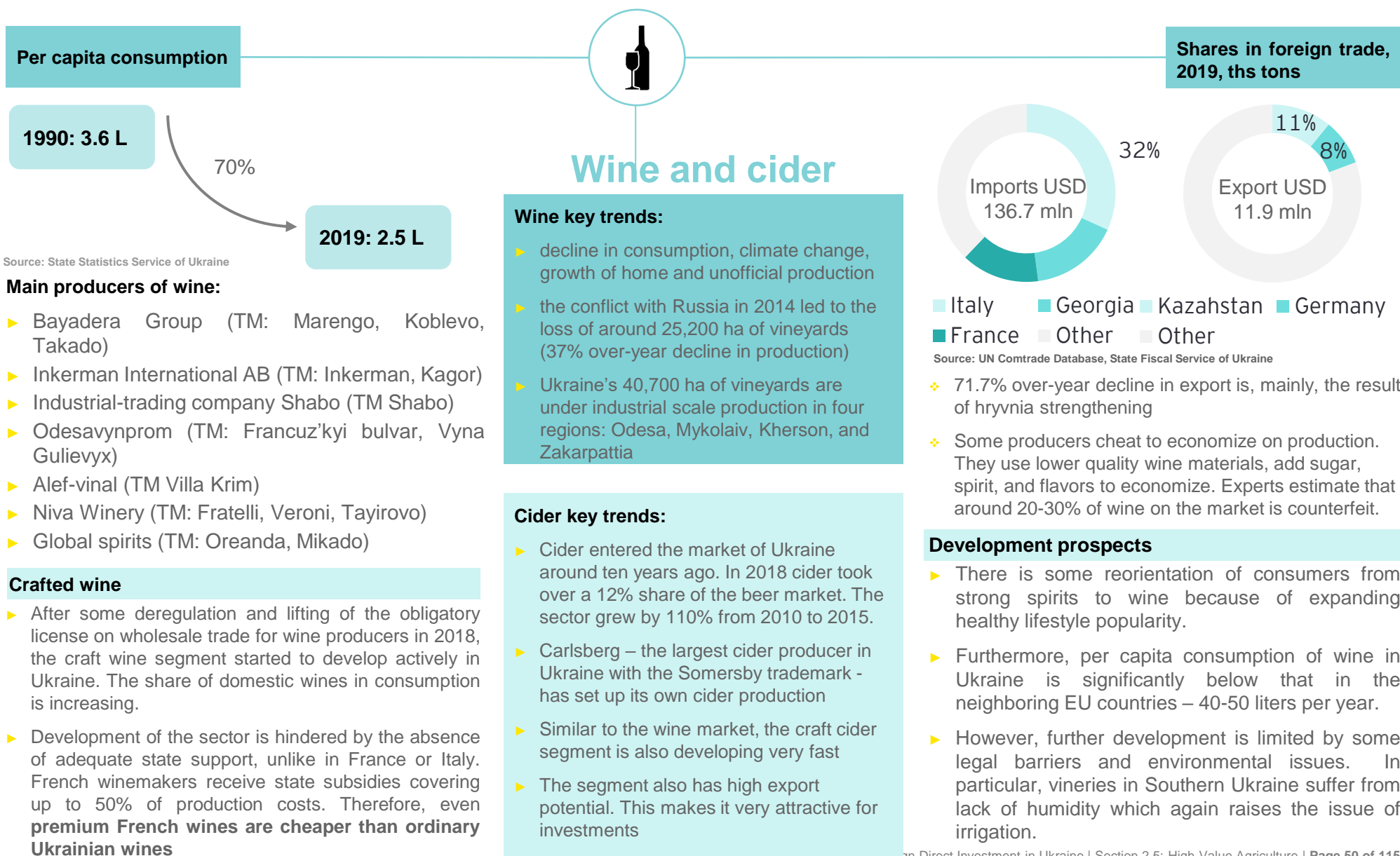
Under current legal framework there are no big investment opportunities in the sector:

- ▶ Absence of legal norms forcing agricultural producers to utilize plant wastes hinder development of the solid biofuel segment
- ▶ Current green tariff is not high enough to stimulate active development of the biogas segment
- ▶ Production of liquid biofuels is unprofitable because of high excise taxes
- ▶ There is almost no demand for liquid biofuels because, unlike in other countries, there are no legal requirements on biocomponent content in fuels in Ukraine



2.5.4. HVA sectors with low FDI potential

Wine production is on a downward trend. Since 2011, Ukraine is in the Top-10 largest producers of cider in the world

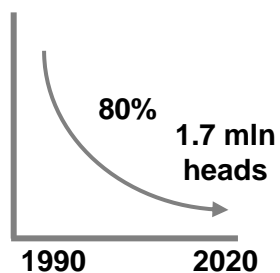




2.5.4. HVA sectors with low FDI potential

Growth of prices and the decline in purchasing power contribute to the decline in per capita consumption of milk and milk products

Milk cattle livestock



Source: State Statistics Service of Ukraine

2% the share of imports in total consumption

42% of produced milk end up at processing plants



Milk production

Milk and dairy production suffers from a continuous decrease in livestock due to:

- Uncertainty with the land market in the country
- Underpayment of state support and existing plans to cut support programs
- Production decreased at a slower pace by usage of modern milking technologies

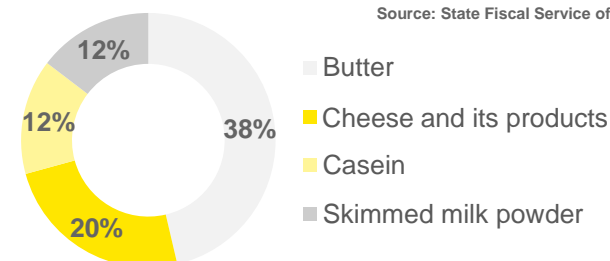
- Climate, availability of feed, and long traditions of milk production ensure wide opportunities for investments into the sector. **Small and medium farms** have a high potential for investments, taking into account the increase in demand for organic products.

- The existing joint investment project of the UNDP and government of Sweden with the Ukrainian government on the development of family farms of up to 50 cows in Western Ukraine proved its sustainability over the last three years. **More than USD 1 million** were used as co-investment into 55 newly created farms. The success of the Project may be replicated in other regions of the country.

- **Large farms are less attractive** for investments. The payback period of large investment projects in cattle breeding is estimated by experts at 8-10 years. This makes such projects **too risky**.

Shares in foreign trade, 2019, ths tons

Source: State Fiscal Service of Ukraine



2019 largest exporters: Vinnytsia milk plant Roshen, Milkyland Intermarket, Yagotynskyi maslozavod, Komo-Export, and Lactalis-Ukraine.

Major milk and dairy producers

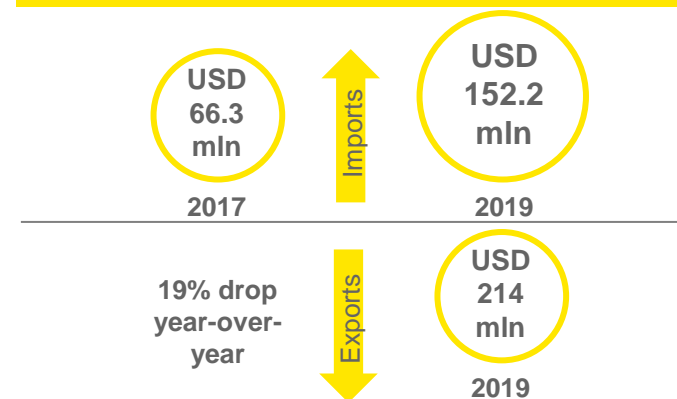
- 1st** Danone – 13.2%
- 2nd** Molochnyi Aliance – 11.2%
- 3rd** Lactalis – 10%
- 4th** Smak Zdorovogo Zhyttia – 9.8%
- 5th** Wimm-Bill-Don – 8.8%

Prices

Milk prices in Ukraine are higher than in Europe due to:

- subsidies to European producers from their governments;
- generally lower level of technologies in the industry in Ukraine

Milk and dairy import and export



- There is an upward trend in milk and dairy imports to the country, especially from Poland and Belarus
- At the same time, there is a strong trend of a decrease in exports in both volume and value due to a continuous decline in milk production.
- The largest importers: Morocco (10%), Kazakhstan (8.9%), and Moldova (5.7%)



2.5.4. HVA sectors with low FDI potential

Consumption of flour, bread and pasta in Ukraine is decreasing

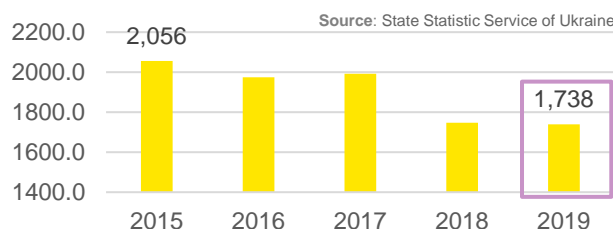
Flour output decrease by **27.6%** since 2011



- ▶ Partially due to the result of a decrease in domestic consumption of flour-based products during the period.
- ▶ Most of the large milling facilities were built in the 1980s, and their owners did not invest in modernization for years.
- ▶ **EUR 26 mln** was invested into the industry, but this is too little to have a significant effect

However, the decline in flour output was slower than in bread and pasta thanks to high external demand for Ukrainian flour

Production of major flour, bread & pasta, k ton



Major flour producers in 2019, by share of the market

- 1 Vinnytsia bakery No.2 - 11%
- 2 Stolychnyi Mlyn - 7%
- 3 Dnipromlyn - 6%
- 4 Roma LLC - 5%
- 5 Khmelnytskyi Mlyn - 4%

Production of bread constituted **51.4%** of the total production of the sector in 2019 – **893 ths tons**



Although, production of fresh bread halved in 2019 as compared to 2011. Reasons for that are:

- ▶ the decrease of the population due to the occupation of the part of the territory
- ▶ labor migration
- ▶ change of the nutrition habits
- ▶ small producers' leaving the legal framework of the market (share of illegal bread production is estimated at around 70% of the market and it is sometimes not included in the state statistics).

Market trends

The low end of the market ('social bread' = unprofitable bread) is covered mainly by industrialized companies that enjoy the economy of scale.

The high end of the market is represented by small bakeries and supermarket chains that bake bread on site.

Major fresh bread producers in 2019, by share of the market

- 1 Vinnytsia bakery No.2 - 11%
- 2 Stolychnyi Mlyn - 7%
- 3 Dnipromlyn - 6%
- 4 Roma LLC - 5%
- 5 Khmelnytskyi Mlyn - 4%

Production of pasta is on a downward trend for more than **10** years



- ▶ Negative developments at both domestic and external markets
- ▶ Growing popularity of the healthy lifestyle leads to the reorientation of domestic consumers from pasta to cereals and vegetables
- ▶ In addition, gradual recovering of the purchasing power of consumers causes their shift from domestic to imported pasta of the medium-price and premium segments because of a much higher quality of imported goods.

Pasta* output

2016 – 95.9 ths tons

23%

2019 – 73.8 ths tons

* Excluding pasta containing eggs
Source: State Statistic Service of Ukraine

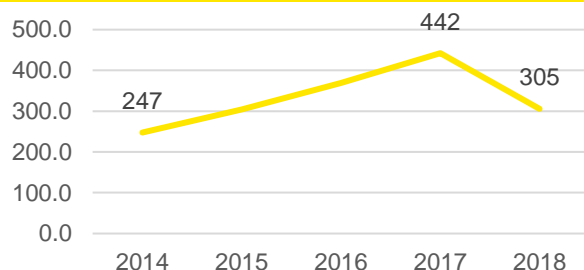
Major pasta producers in 2019, by share of the market

- 1 Kyiv pasta plant (TM MKF) - 24%
- 2 Kharkiv past plant (TM Khutorok) - 13%
- 3 Makfa (TM Makfa and TM Smak) - 10%
- 4 Khmelnytskyi and Chernigiv pasta plants (TM Taia) - 9%
- 5 Chumak - 8%

2.5.4. HVA sectors with low FDI potential

Pasta products associated with healthy life style are the most attractive for investments in the segment

Exports of flour, ths tons



Source: UN Comtrade Database

- ▶ Growth of exports is **restricted** by the quality of the final product, logistics issues, and short product life. In particular, Ukraine lost several of its traditional markets to Russia and Turkey in 2018.
- ▶ Imports totaled USD 2.3 mln in 2018, while exports were equal to USD 71.2 mln.



Investment opportunities

- ▶ Current consumption trends show that Ukrainians are becoming more and more interested in specialized flour and **flour mixtures** (fortified, baking, pasta flour, etc.)
- ▶ Investments into this segment will allow domestic producers to successfully compete with foreign producers at both domestic and foreign markets.

Bread

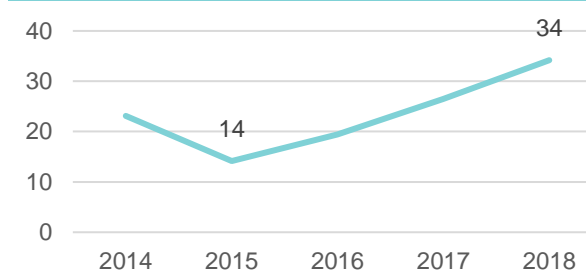
- ▶ Both imports and exports of bread are **insignificant**. Imports account just to around 0.2% of domestic production
- ▶ **Short shelf life** of fresh bread is the main reason for that, as it significantly limits transportation and storage options



Investment opportunities

- ▶ Both bread producers and experts of the market expect the **trend of a healthy lifestyle** to continue in the nearest future. This makes the production of healthy bread very attractive for investments
- ▶ Another promising investment option is the production of **frozen and prebaked bread**. These products have longer a shelf life and are not that demanding to transportation options as compared to fresh bread
- ▶ The desire of the population to utilize time more rationally, especially in big cities, led to the fast development of the street food segment. In most of the **retail trade chains**, this segment is occupied by imported products

Imports of pasta*, ths tons



* Excluding pasta containing eggs
Source: UN Comtrade Database

Imports of pasta are significantly higher than exports and are on an upwards trend since 2015.

Ukraine imports pasta from:

- ▶ Italy (41%)
- ▶ Turkey (25.5%)
- ▶ Poland (22.6%)
- ▶ China (2.8%).

Exports of pasta totaled USD 1.4 million in 2018 as compared to USD 26.1 million of imports.



Investment opportunities

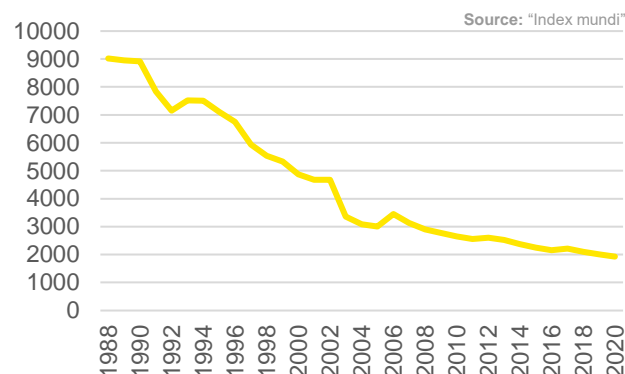
Similar to flour and bread segments, the production of **pasta products** associated with a healthy lifestyle are the most attractive for investments in the segment.



2.5.4. HVA sectors with low FDI potential

Deteriorated economics of beef production and re-orientation of the production to free market rails led to the continuous decline of the cattle herd

Cattle herd, by year, ths heads



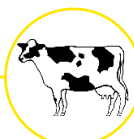
Main meat cattle producers

- 1st** Buffalo LLC – 7,500 heads
- 2nd** Ratnivskiyi agrariy LLC – 7,500 heads
- 3rd** Agrikor-holding LLC (LTD) – 6,500 heads
- 4th** Ukralandfarming – around 6,000 heads

Investment opportunities



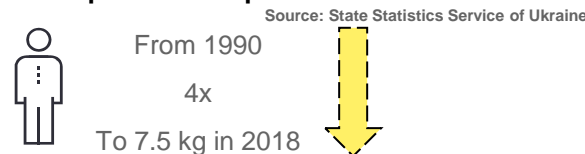
Beef production have good growth prospects in the segment of processing under specific rules and requirements. In particular, Asian and Arab countries are ready to buy large amounts of halal products



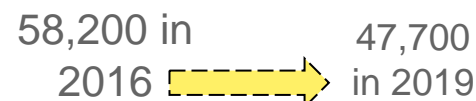
Beef production

Most beef production facilities are located in Western Ukraine because of favorable weather conditions, availability of feed, and large pasture territories. Ternopil oblast is the leader of the production (22.6% of total fresh and 30.1% of total frozen beef).

Per capita consumption



Number of meat cattle



Reason - change in taste preferences of Ukrainians who transferred from beef and pork to chicken meat due to decreasing purchasing power.

Beef production suffered more as beef is the most expensive kind of meat out of the three.



Beef freezing is not spread among Ukrainian producers – fresh meat account for about 80% of total beef production

Foreign trade data, 2019

Exports

38.7 ths t
\$119.2 m

Source: State Statistics Service of Ukraine

Imports

1.1 ths t
\$3.2 m

Exports of fresh or chilled beef in 2018

15,700 tons or USD 45.4 mln

Major importers:

- ▶ Belarus (88.5%)
- ▶ Turkey (11.1%)

The largest exporters:

- ▶ JSC Agro-produkt (31% of the total)
- ▶ Gazagroprom LLC (10.3%)
- ▶ Tornado-zahid (8.9%)

Exports of frozen beef in 2018

25,900 tons or USD 79.4 mln

Major importers:

- ▶ Azerbaijan (26.4%)
- ▶ Kazakhstan (25.5%)
- ▶ Belarus (18.4%)

The largest exporters:

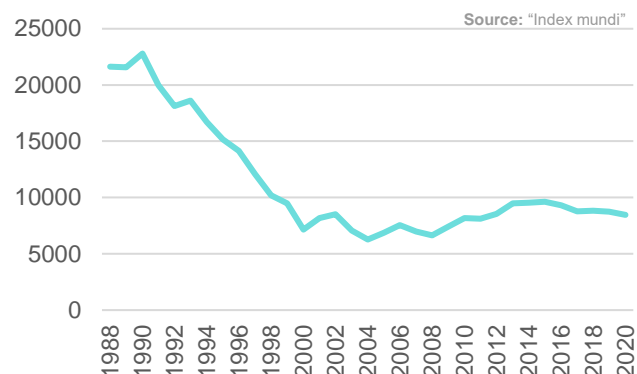
- ▶ Rachynmiasprom (9.1%)
- ▶ JSC Agro-produkt and Prylutskyi miasokombinat-Agropererobka (6.6% each)



2.5.4. HVA sectors with low FDI potential

Pork production is at the downward trend, mainly due to competition from imports and sporadic outbreaks of African swine fever

Swine herd by year, ths heads

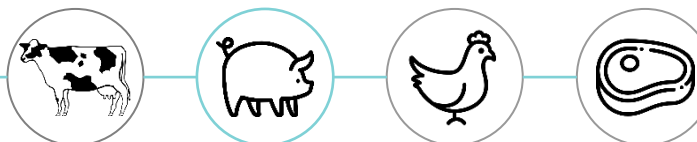


Main meat cattle producers

- 1st** JSC APK-INVEST – 286,300 heads
- 2nd** JE Nyva Pereyaslavshchyny LLC – 221,800 heads
- 3rd** Goodvalley Ukraine – 187,900 heads
- 4th** NVP Globynskyi Slynokompleks – 154,300 heads



Further modernization of production facilities, especially in beef and pork production segments, is another investment opportunity. Pork production, particularly, suffers most from outdated production technologies and equipment. Its output is several times lower than in developed countries with very similar livestock (Germany, Poland).



Pork production

Ukrainian pork production is oriented on the domestic market as its export opportunities are limited due to African swine fever (ASF) outbreaks (Ukraine has no status of a country with a controlled spread of animal illnesses). Domestic demand for pork remained relatively stable over the last five years. Pork production is spread all over the country, but the largest production volumes are in the central regions of Ukraine.

The livestock of pigs, as of mid-2020

Source: State Statistics Service of Ukraine



In 2018 and at the beginning of 2019, the major trend in pork production was the enlargement of main players, as most leaders enhanced their breeding stock and production capacities.



Frozen pork accounted for just 6.9% of total pork production, despite a 35% year-over-year increase in 2019

Foreign trade data, 2019

Exports

2.2 ths t
\$5.3 m

Imports

23.2 ths t
\$44.2 m

Source: Ukrainian State Statistics service

There was an upwards trend in pork imports since 2015, which was the result of high domestic pork prices and a continuous decline in domestic output. However, the share of imported pork at the domestic market does not exceed 5%.

Imports of pork in 2019

USD 44.2 mln

Ukraine imports pork mostly from Europe (Germany, Poland, and Denmark)

Exports of fresh and frozen pork in 2019

2,260 tons or USD 5.27 mln

Major importers:

- ▶ Hong Kong
- ▶ Georgia
- ▶ Vietnam

The largest exporters:

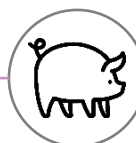
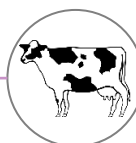
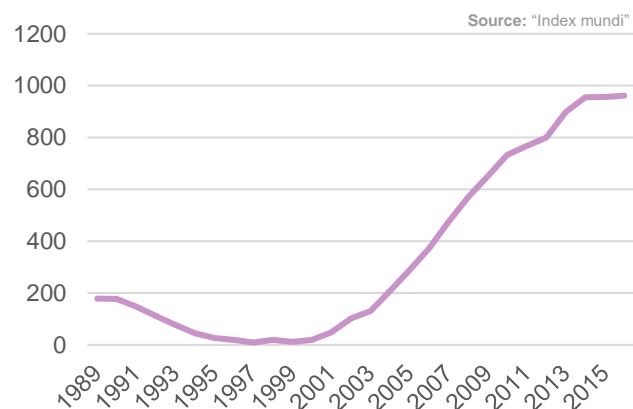
- ▶ JSC APK-INVEST (65.8%)
- ▶ YEVIRO-KOMERS LLC (29.7%)



2.5.4. HVA sectors with low FDI potential

Poultry production growth is caused mainly by the shift of the local demand from more expensive pork and beef and by the availability of highly efficient vertically integrated businesses in the sector

Poultry production by year, ths tons



Foreign trade data, 2019

Poultry production

In 2018-2019, Ukraine was the 6th largest world producer of chicken meat.

Poultry industry posted continuous livestock growth over the last five years. Note that most poultry livestock is concentrated in the industrial sector and not in households.

Poultry production has no specific localization in Ukraine.

Exports

414.5 ths t
\$578 m

Imports

131.2 ths t
\$52.5 m

Source: State Statistics Service of Ukraine

Around **30%** of poultry output is exported

Main poultry producers

- 1st** JSC Myronivskyi khliboproduct (38% of the market)
- 2nd** Kompleks Agromars LLC (12%)
- 3rd** Agro-Oven LLC (6%)

Investment opportunities



As chicken meat production is dominated by large production companies, it is better to invest in other kinds of poultry. Taking into account observed trends of a shift in the diet of Ukrainians towards more healthy food, especially among people with medium and higher incomes, turkey, ostrich, and quail meat have good investment potential

54.3% - share of poultry in total per capita consumption of meat (~48-49 kg per year)

55.4% - share of poultry in total meat production

90% - share of chicken in total poultry livestock

97.5% - share of chicken in total poultry meat. There are farms that specialize at more "niche" birds – ducks, goose, quail, but their output is insignificant



Share of frozen meat is around **20%** in poultry output

Imports of poultry in 2019

USD 52.5 mln

Ukraine imported poultry mainly from Poland (around 61.4% of total poultry imports)

Exports of poultry in 2019

USD 578.6 mln

Major importers:

- Netherlands (15.8%)
- Saudi Arabia (13.5%)
- Slovakia (8.5%)
- Belarus (6.9%)
- Azerbaijan (5.9%)

The largest exporters:

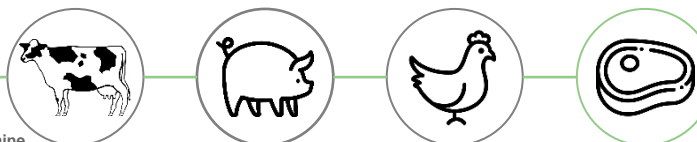
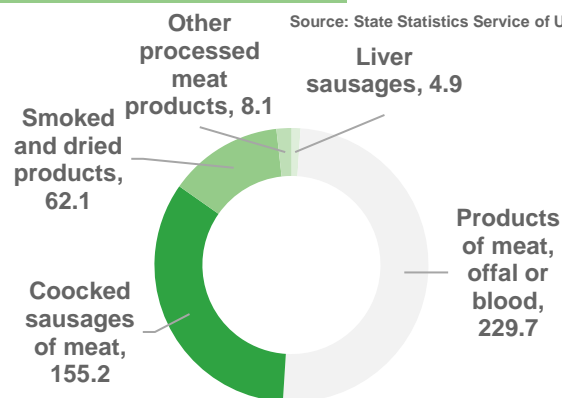
- Myronivskyi khliboproduct
- Ptakhokompleks Dniprovskyi
- Pan Kurchak
- Agro-Oven



2.5.4. HVA sectors with low FDI potential

Export potential of the processed meat sector is not yet realized

Structure of processed meat output in 2019, ths tons



Foreign trade, 2019



Processed meat

Production of ready to use processed meat products is oriented on the domestic market and is highly competitive.

Output of the sector was at the upwards trend in 2015-2018, recovering from the loss of the Russian market. However, it observed a 4.4% over-year drop in 2019

Processed meat producers

- ▶ Most of ~ 300 industrial producers are concentrated in Eastern Ukraine
- ▶ Large producers are also in Kyiv, Mykolayiv, Rivne, and Lviv oblasts
- ▶ Dnipropetrovsk oblast has the largest production capacity among regions
- ▶ Globynskyi meat plant, Favoryt plus, APK-Invest, Alan, Yatran cover almost 50% of the market.
- ▶ Regional producers cover almost 20% of the market.
- ▶ The rest of the market is covered by more than 1,000 small producers.

Investment opportunities

Promotion of local analogues to imported premium processed meat with protected designation of origin have high investment potential. Ukrainian shovdar, matsyk, and kavruk are analogues of globally known dry-cured meat products like Jamon or Parma ham. Investment in production of such products will allow reorienting local consumers from imported goods and expand exports.

Trends of the market



Fast growth in imports (188.7% over-year in terms of volume)



30% of the market operates without proper control of origin and quality control, especially in Western Ukraine

The low-price tier of the sector is flooded with processed meat products containing very little meat, if any at all

Imports of processed meat products in 2018

692 tons or USD 4.5 mln

From:

- ▶ Spain (54 tons, USD 118,000),
- ▶ Italy (23 tons, USD 57,000),
- ▶ France (2 tons, USD 26,000)

In 2019, imports almost tripled in terms of volume and jumped by 71.8% over-year in terms of value.

Exports of processed meat products in 2018

USD 1.3 mln

Major importers:

- ▶ Georgia (205 tons)
- ▶ Azerbaijan (109 tons)
- ▶ Moldova (54 tons)

The largest exporters:

- ▶ Domenik LLC (43.7%)
- ▶ Alan LLC (22.5%)
- ▶ Kovbasnyi svit (20.5%)

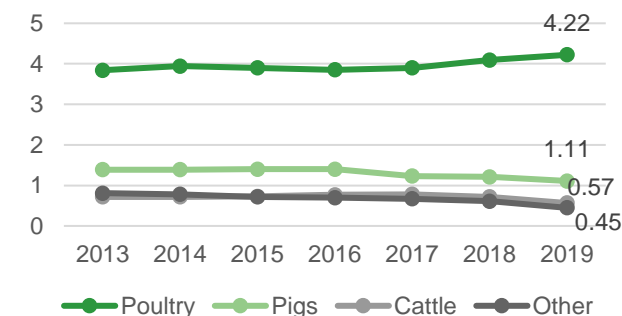
In 2019, exports increased by 10.3% over-year in terms of volume but decreased by 3.0% in terms of value.



2.5.4. HVA sectors with low FDI potential

Animal feed production in Ukraine is oriented at the domestic market. Its production is in decline along with the herds of cattle and swine

Animal feed production through feed types, mln tons



Source: State Statistic Service of Ukraine

- ▶ Foreign trade in animal feed is underdeveloped in Ukraine. Both, Import and export are roughly around 1% of total animal feed consumption in terms of volume
- ▶ The main suppliers are: Poland, Hungary, and Germany
- ▶ Export potential is limited due to the challenging logistics of rough and succulent animal feed
- ▶ Main importers of Ukrainian animal feed are: Georgia, Moldova, Russia, and Belarus

Animal feed



Since all animal production segments, except for poultry, observe a decrease in livestock, production of the correspondent types of animal feed decreases in tandem

Total animal feed production in 2019

6.45 mln t

- ▶ Following the global development tendencies, the production of animal feed in Ukraine is dominated by concentrated feed, as it has a longer shelf life and is much easier in transportation and storage compared to rough and succulent feed

120 producers

with a potential capacity of

12-18 mln t per year

Major producers by share of the market

- 1st** Myronivskyi khliboprodukt – 30.4%
- 2nd** Ukrainske Zerno – 7.1%
- 3rd** Ukrlandfarming – 5.2%
- 4th** Ovostar Union – 4.6%
- 5th** APK Invest – 2.5%

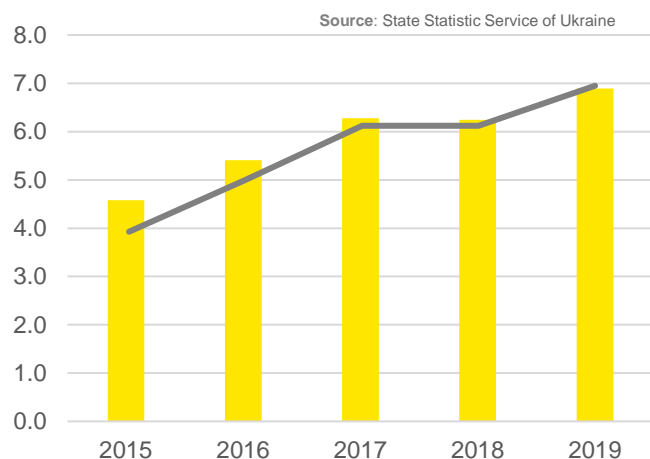
- ▶ Feed production plants are located close to animal production because they demand special treatment in transportation and storage
- ▶ Therefore, the largest feed production capacities are in Cherkasy (around 16% of the market), Kyiv (14%), Dnipropetrovsk (10%), and Donetsk (9%) oblasts



2.5.4. HVA sectors with low FDI potential

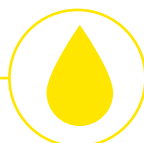
Sunflower oil is the main growth driver for the sector, but soybean and rapeseed oils have great potential

Oil production (column) and export (line), mln tons



Major sunflower oil producers by share of the market in 2019/2020 MY

- 1st** Kernel – 23.1% of unrefined oil market and 18.3% of refined oil market
- 2nd** Bunge – 10.7% and 15.5%
- 3rd** MHP – 6.3% of unrefined oil market
- 4th** Optymus Agro Trade LLC – 5.6% of unrefined oil market
- 5th** Delta Vilmar Ukraine LLC – 3.1% and 2.4%



Plant oils

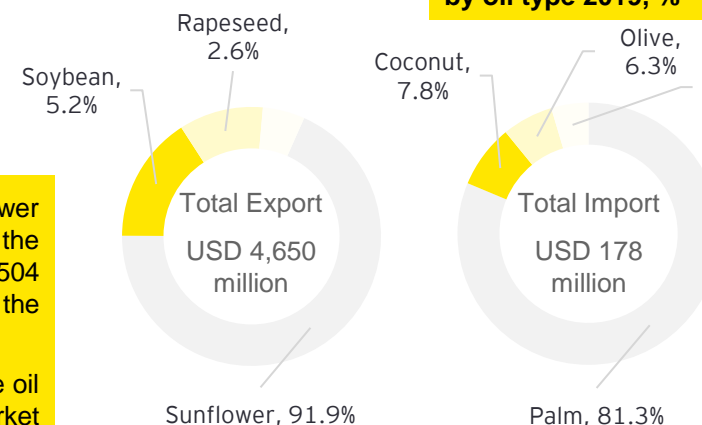
Ukraine is the largest producer of sunflower seed and exporter of sunflower oil in the world. Domestic consumption of 504 thousand tones of plant oils is just 7.6% of the country's plant oil exports.

Sunflower oil covers more than 60% of the oil market of Ukraine. Almost 30% of the market is covered by oils made of tropic plants. Other oils (olive, soybean, rapeseed, flaxseed, and mustard) have a share of around 10%.

Investment opportunities:

- ▶ **Soybean oil exports.** 70% of soybean cultivated in Ukraine is genetically modified, although the law prohibits GMOs cultivation. Thus, the EU markets are closed for Ukrainian soybean oil.
- ▶ **Rapeseed oil export.** Ukrainian producers are exporting rapeseed (mainly to Germany) instead of crushing it for oil and obtaining twice as many revenues
- ▶ **Tropical plant oils.** Several companies (Delta Wilmar) have facilities for tropic plant oil processing. Thus, the share of tropic plant oils is increasing in both import and export.

Share in foreign trade, by oil type 2019, %



Exports of plant oils exceed imports by almost 30 times in terms of both volume and value

Source: State Statistic Service of Ukraine

Oils export in 2019

- Export, by destination:
- ▶ India (33.2%)
 - ▶ China (13.9%)
 - ▶ Netherlands (10.6%)
 - ▶ Spain (7.3%)
 - ▶ Iraq (6.2%)
 - ▶ Italy (6.2%)
- The largest exporters:
- ▶ JSC Agro-produkt (31% of the total)
 - ▶ Gazagroprom LLC (10.3%)
 - ▶ Tornado-zahid (8.9%)

Observed trends:

Consumers in large cities prefer refined sunflower oil, while people in villages and small towns – unrefined ones. Also, due to higher incomes, urban consumers consume more imported plant oils as compared to the rural consumer.

2.5.5. Auxiliary sectors and supporting information



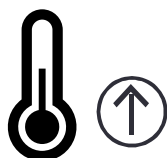


2.5.5. Auxiliary sectors and supporting information

Climate change and extensive agriculture cause degradation of lands in Ukraine that is especially acute in Southern Ukraine, which suffers from insufficient soil moisture.

Climate change trends in Ukraine

- The whole territory of Ukraine is covered by the **global warming trend**.



**By 1.2 °C
since 1991**

Source: Ministry of Ecology and Natural Resources of Ukraine

The pace of temperature increase is higher in Ukraine as compared to the world average. Experts forecast a further increase in temperature by 2-4 °C in Ukraine by the end of the century.

- Ukraine suffers from insufficient land moisture due to growing imbalances in atmospheric precipitation. The annual precipitation norm was 578 mm in Ukraine in 1960-1990, which is already below the level needed for sustainable agriculture (700 mm).



**By 1.5-2 % in
2014-18**

Source: Ministry of Ecology and Natural Resources of Ukraine

The amount of precipitation increased in winter and significantly decreased in summer. A further decline in atmospheric participation will lead to the expansion of lands prone to desertification.

- Higher temperature decreases the efficiency of precipitation, leading to a more arid climate in the territory of Ukraine. This causes a higher frequency of droughts and their spread from South and South-East to West and North of the country.

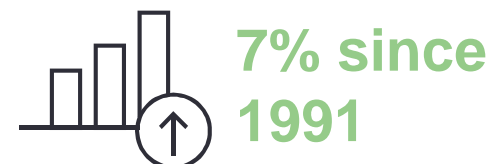


Irrigation

Climate changes bring negative consequences to both quantity and quality of agricultural lands in Ukraine. To mitigate those consequences, the country needs to invest into renovation and expansion of existing irrigation systems.

Consequences of climate change for land

- The size of arid lands is continuously increasing.



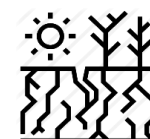
Source: Ministry of Ecology and Natural Resources of Ukraine

In total, arid zones cover almost one-third of the Ukrainian territory, including

**11.6 mln ha of
arable lands**

Source: Ministry of Ecology and Natural Resources of Ukraine

- Droughts are often accompanied by dust storms, which significantly aggravate wind erosion. Over 6 mln ha of agricultural lands are systematically affected by wind erosion.



Dust storms expand the area under wind erosion to

20 mln ha

In extreme cases, the wind erosion area expanded to 125 mln ha (2007).

Ukraine annually loses 300-600 mln tons of soil due to erosion (both water and wind). Expert estimates show that yields of agricultural crops are 20-60% lower at eroded soils leading to loss of over 9-12 mln of grain units, which is equivalent to over USD 10 bln.



2.5.5. Auxiliary sectors and supporting information

Reanimation and further development of drainage system in the South of Ukraine is the critical enabler for the development of HVA in the region

General overview



Irrigation

Extensive **irrigation systems** were built in Ukraine to stimulate agricultural production in arid areas. The systems consist of 1,160 water reservoirs of 55 cubic km in volume, **over 1,000 km of channels, and over 2,000 km of pipelines** in Dnipropetrovsk, Mykolaiv, Odesa, and Kherson regions as well as in Crimea.

The natural wear of the irrigation infrastructure is estimated to exceed 80%. Currently, the highest level of irrigation systems usage was observed in the **Kherson region – around 70% of capacity**.

The state has finally recognized the problem. The Irrigation and Drainage Strategy by 2030 was developed in close cooperation with the experts of the World Bank, UNDP, and Ukrainian Academy of Agrarian Science and adopted in 2019.

3,250
USD/ Per ha

is required for the installation of modern irrigation systems and can be paid off in 3-5 years. In total, approximately USD 3 bln is needed to refurbish the existing irrigation systems and additionally cover with irrigation 1.2 mln ha.

There are some IFI-supported efforts to facilitate the modernization of the irrigation system, namely:

- In November 2019, the EBRD announced the beginning of the modernization of 40 thousand ha in the Kherson region. The need for investment is estimated at EUR 84 mln
- The group of experts from the World Bank, FAO, prepared the **2030 Strategy of Irrigation and Drainage in Ukraine** which was adopted by the Government on August 14, 2019

Actual yields of agricultural crops (total and those with irrigation (WI)) in 2019, center per ha

	Total	WI	Gain in %
Grains and legumes	49.1	67.3	37.1
Sunflower	25.6	30.2	18.0
Soybean	22.9	34.1	48.9
Potato	154.8	256.9	66.0
Field vegetables	205.9	530.3	157.6
Fruits and berries	108.1	134.9	24.8

	Actual usage (2018)	Actual capacity (2017)	Estimated need (2018)
Total:		5.5 mln ha	23.8 mln ha
Irrigation:	0.5 mln ha	2.2 mln ha	19 mln ha
Water regulation:	0.25 mln ha	3.3 mln ha	4.8 mln ha

The Strategy:

- 1 Update of the existing legislation and creation of water usage associations (nonprofit organizations providing irrigation and drainage services) – 2019-2020.
- 2 Clearly define powers of central and local authorities in policy formation and realization in the field of irrigation, expand the authorities of basin councils, start upgrading of water complex, and introduce transparent and socially acceptable tariff system – 2021-2024.
- 3 Institutional reform of water management and melioration of lands, ensure the sustainable operation and efficient co-operation of the National Water Council, Fund, basin councils, basin departments of water management, and water user associations, implement targeted investment and infrastructure projects – 2024-2030.



2.5.5. Auxiliary sectors and supporting information

Climate change causes a change in the crop mix. While challenging, it could enable switching to higher value agriculture

Currently, Ukraine undergoes climate change that has a complex impact on Ukrainian agriculture:



On the positive side, it leads to the prolongation of the active vegetation period of plants and some increase in yields.

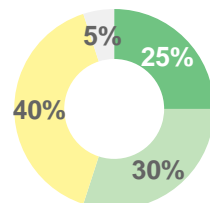


From the negative perspective, it causes a decline in precipitations during the vegetation period and a more arid climate in general.

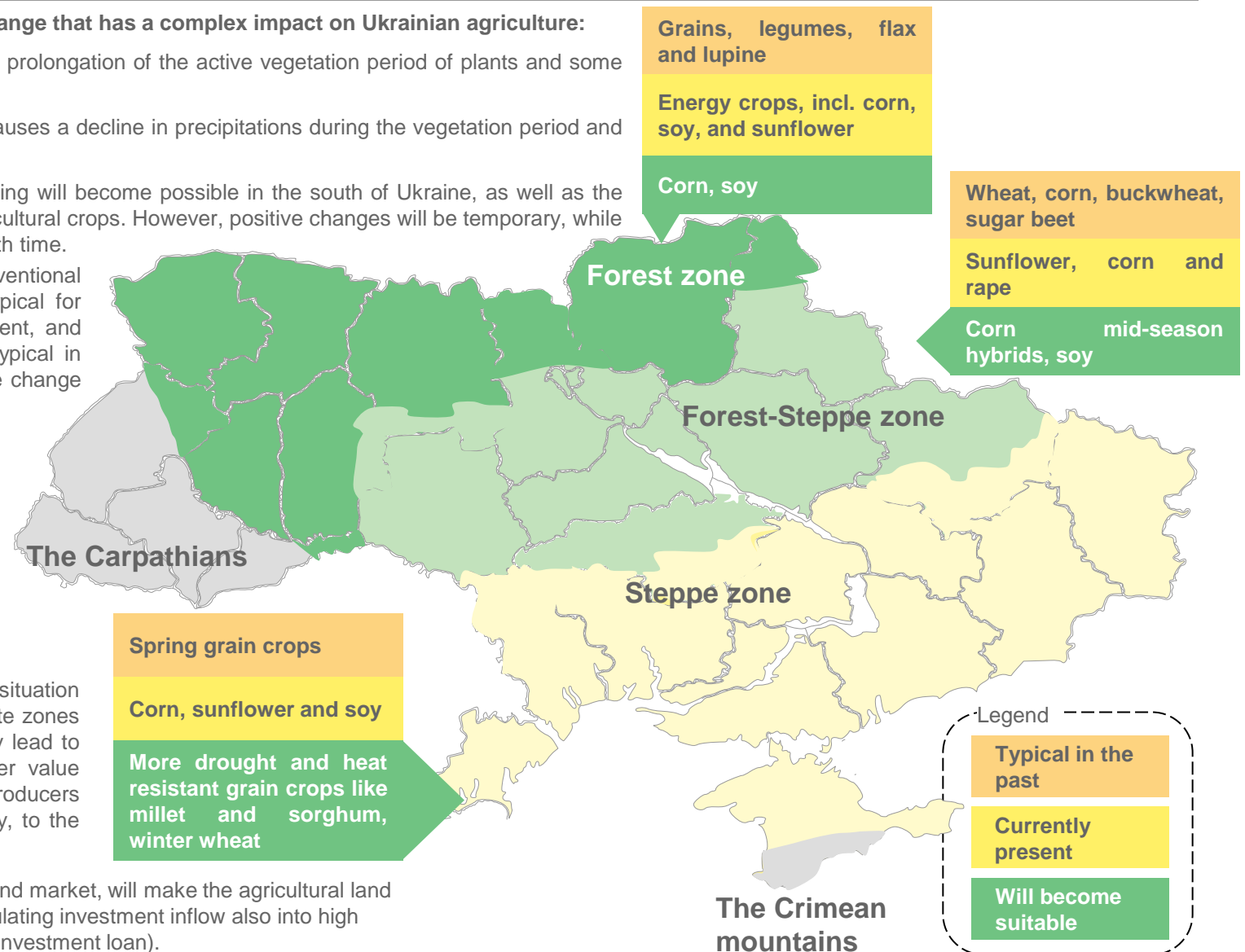
- ▶ Thanks to positive effects, double cropping will become possible in the south of Ukraine, as well as the cultivation of all kinds of heat-loving agricultural crops. However, positive changes will be temporary, while the negative ones will only strengthen with time.
- ▶ The map to the right represents conventional climate zoning with the major crops typical for each climate zone in the past, at present, and those which are expected to become typical in the zones in the future if current climate change trends will continue.

Ukraine's flat territory coverage by climatic zones

- Forest zone
- Forest-Steppe zone
- Steppe zone
- Mountains zone



- ▶ Climate changes already led to the situation when corn can be cultivated in all climate zones of Ukraine. Further climate change may lead to the spreading of new crops with higher value added. This will increase revenues of producers per 1 hectare of land and, consequently, to the growth of the agricultural land price.
- ▶ This, accompanied by a fully operating land market, will make the agricultural land a target for large scale investments stimulating investment inflow also into high value agriculture (i.e., as a mortgage for investment loan).





2.5.5. Auxiliary sectors and supporting information

Ukraine has well-developed food retail industry which combines formal stores with open-air markets. It is enough for distribution of any products

General overview

Food Retail

Ukrainian food retail market is dominated by **local players**.

- ▶ Large local players of food retail **grow vertically** (acquiring suppliers, undercutting intermediaries, developing goods delivery, etc.), **horizontally** (increasing the network of outlets (either organically or by acquiring of the smaller rivals), and by expansion to the **smaller towns**.
- ▶ There are small store chains specialized solely in **organic and healthy food**
- ▶ The share of organized retail trade (hypermarkets, convenience stores, etc.) is close to **50%** of the food trade

UAH
336
bln

Is a retail food market in 2019 in terms of value - it grew by 16.2% year-over-year. In terms of physical volumes, food retail increased by 5.8% year-over-year. The turnover of food retail is on an upward trend since 2016

Major retailers

- 1st** ATB (ATB, ATB express) – 1098 stores as of March 2020
- 2nd** Fozzy Group (Fozzy C&C, Silpo, Fora, Thrash!, Le Silpo, Favore) – 566 stores
- 3rd** VolWest Retail (Nash Krai, Nash Krai express, SPAR) – 266



Food retail infrastructure is well developed because several large local and international players compete on the market, bringing to the local market the know-hows and innovations from abroad (e.g., omnichannel sales, personalized offerings, self-service checkouts).

- ▶ Additional flexibility to the system of retail food trade brought by open-air food markets that cover ≈50% of total food sales, especially in villages. Operates by hundreds of local sellers
- ▶ Similarly to European countries, supermarkets are the most popular distribution channel for food in cities

Retail space (Sq. m per 1000 inhabitants)

166 vs **900/700**

≈50% was occupied by food retail, in 2017, Ukraine Norway/Estonia

There are 6 main categories of retail food channels in Ukraine:



Small grocery stores

Retail outlets <120 m². Usually, a limited product line of convenience goods and perishable foods



Kiosks

Small roofed stalls of <30 m². Located at bus stops, etc., in cities. Usually, sell one product grouping: tobacco, frozen food, etc.



Convenience stores

Self-service stores <399 m²; Often located in bedroom communities, close to transport hubs



Open-air markets

Often sold goods without refrigeration or defrosted. Sale, mostly locally produced, fresh products



Hyper- and supermarkets

Large self-service stores; Usually located in the outskirts of the major cities, near highways



E-commerce

Online sales and delivery. This channel is at the early stage of development as of now, despite fast growth in large cities in 2020

2.5.5. Auxiliary sectors and supporting information

Legal framework of the agri-food markets in Ukraine

Agri-food markets

- ▶ Agri-food markets are business entities that create appropriate conditions for sale (wholesale) of agricultural products, including food in specially equipped and designated places (Article 1 of the [Law of Ukraine "On Basic Principles and Requirements for Food Safety and Quality"](#))
- ▶ Most Ukrainian agri-food markets are functioning as municipal enterprises. Directors of such enterprises are appointed by the local councils
- ▶ According to the [Law of Ukraine "On Local Self-Government in Ukraine,"](#) the local councils determine the rules of operation of markets. These rules should be based on the [Rules of Trade in Markets](#) approved by the Mineconomy in 2002
- ▶ The rules set out common sanitary requirements for planning and organization of the territory, access to water, sanitary rules for storage and selling of goods, hygiene rules for market employees and salesmen, specific regulation on butcheries, control over the freshness of goods of animal origin that have not been sold during a previous day. The market administration is responsible for fulfilling these requirements
- ▶ Each market should have its own veterinary laboratory. The laboratories provide a sanitary examination of products of animal origin to salesmen on a paid basis
- ▶ The law allows for selling the products at the food markets only after laboratory examination or after the provision of documentary evidence confirming products' traceability. These products are:
 - ▶ Whole carcasses or parts of carcasses of ungulates and poultry, rabbits and small wild animals.
 - ▶ Fish
 - ▶ Honey
 - ▶ Eggs
 - ▶ Raw milk and home-made cheese
 - ▶ Vegetables

- ▶ Detailed sanitary requirements for operation of the food markets are set out in the [Veterinary and Sanitary Rules for Markets approved by Order of the Chief State Inspector of Veterinary Medicine of Ukraine No. 23 dated 4 June 1996](#). These rules establish the mandatory cleaning, disinfestation and deratization, requirements for salesmen's tare, instruments and clothing; require dairy sellers to undergo regular medical examinations and have medical history books; allow the sale of honey only after examination in the market's laboratory; restricts any trade conducted with goods on the ground, etc. Persons not compliant with these requirements are not allowed to trade at food markets







2.5.5. Auxiliary sectors and supporting information

Ukraine has a number of local teams that develop HVA-oriented startups

Innovations landscape

Innovations in the Ukrainian agriculture sector are mainly driven by large industrialized agricultural holdings (MHP, Kernel, Astarta, IMC, Ukrlandfarming) and food producing companies (Loostdorf, Enzym) as well as startups providing innovative services and solutions to agrarian companies (see some examples to the right).

Key areas for innovations are:

-  ▶ Precise farming solutions for soil and crops monitoring using a system of remote sensors (e.g., soil moisture sensors), satellite images, multispectral cameras and meteorological sensors
-  ▶ GPS trackers for machinery
-  ▶ Automated land bank management systems
-  ▶ Drones and respective AI-based algorithms (e.g., geospatial analysis) to analyze the images in near-real-time and apply fertilizers or plant protecting substances
-  ▶ Laboratory diagnostics and agronomic research solutions
-  ▶ Energy-efficiency and petrol-usage management solutions
-  ▶ Automated irrigation systems

Startups operating in Ukraine and innovative solutions

BIOsens

Mobile laboratory with immediate onsite mycotoxins testing without specially trained personnel for:

- Food safety control
- Agronomic research
- Express diagnostics

itLynx

- Automated irrigation system: automated water supply, monitoring of soil temperature and moisture.
- GPS tracking
- Petrol consumption monitoring

SmartLand

Online farm management system:

- Estimation of soil fertility and density
- Control of agricultural machinery movement
- Fuel consumption and parts replacement planning

SmartFarming

- Land bank management system
- Petrol control
- Satellite images analysis
- Meteorological monitoring
- Precise farming
- Soil and seeding analysis

FieldBI

Automated land bank management and related services

Soft.Farm

Integrated IT solution for crop and animal husbandry.

- Logs of zootechnic activities
- Livestock accounting
- Feed rations management
- Precise farming
- Land bank management
- Agroscouting and seeding control
- GPS monitoring of equipment, analysis of satellite images and meteorological observations

AgriLab

Optimization of agribusiness efficiency, including:

- Precise farming
- Complex field expertise and resources usage efficiency
- Agrochemical soil analysis
- Field measurement
- Crops monitoring

Kray Technologies

Automatic drones for applying plant protection products and fertilizers to industrial crops.

Agrieye

Remote sensing and soil analysis for small and medium-sized farms using drones and multispectral cameras.



2.5.5. Auxiliary sectors and supporting information

Large Ukrainian agro-industrial holdings and food producers are implementing innovations at scale

Other innovations and R&D initiatives include:

- ▶ Raw milk processing technologies (ultra-high temperature (UHT) treatment and steam processing)
- ▶ Alternative (vegetable) milk production
- ▶ Biogas production based on chicken manure
- ▶ Startups accelerators
- ▶ Internal meteorological stations
- ▶ Farm management trainings and development of specialized “school for agronomists”
- ▶ Baking innovation center

Large Ukrainian agriculture holdings implementing innovations

Kernel

The company has its own R&D center and uses the following technologies

- Precise farming
- Real-time satellite monitoring
- GPS tracking
- Petrol control
- Meteorological diagnostics
- Drones

Ukrlandfarming

- Internal meteorological station
- Drone fleet
- Soil analysis laboratory
- Internally developed telemetric system collecting and analysing data from all machinery
- Satellite monitoring technology
- System for controlling the entire process of grain harvesting and its transportation from field to elevators

MHP

Recent innovation initiatives include:

- Construction of stations for the production of biogas using chicken manure and other organic wastes
- Establishment of MHP Accelerator for finding and developing agriculture start-ups

Industrial Milk Company

- Introduction of Farm Management training
- GPS trackers on transportation vehicles
- Satellite maps analysis
- Automated land bank management
- Auto-piloting
- Development of “School for agronomists” to prepare agriculture professionals

Some examples of Ukrainian food and beverage producers which implement innovations

Lustdorf

- Production of vegetable milk
- Ultra-high temperature (UHT) treatment and steam processing of raw milk

Vitmark

- Production of vegetable milk using cereals, nuts and fruits

Enzym

The company established a Baking Innovation Center (Khlibny Dim) to provide comprehensive services to various bakery businesses, including:

- Development of new recipes for bakery and confectionery products
- Educational and experience sharing events

The company's R&D department tests and performs studies on ready yeast to increase its efficiency and performance.



2.5.5. Auxiliary sectors and supporting information

Case studies of innovations implemented by agricultural companies in Ukraine

Innovations implemented by key players on the Ukrainian HVA market

- ▶ Large agricultural holdings such as MHP, Kernel and Ukrlandfarming are key innovation drivers and trendsetters in the HVA sector of Ukraine.
- ▶ Most innovations are developed and implemented in close cooperation of in-house IT departments with agritech vendors as well as through the launching of agricultural start-up accelerators.
- ▶ All three holdings use the services of **SmartFarming** start-up for digitalizing their business. SmartFarming's services include landbank audit and management, monitoring and automatization of agricultural production, implementation of precision farming technologies, increasing the efficiency of business processes.

1. In cooperation with ELEKS (IT company), **Kernel** integrated all-digital solutions into the single innovation ecosystem called #DigitalAgriBusiness, which is claimed to be “the world's first comprehensive intellectual system to manage agricultural production.”

Currently adopted **digital monitoring and control solutions** include:

- ▶ Precision agriculture (in cooperation with SmartLanding). All fields are covered by Real-Time Kinematic (RTK) signals.
 - ▶ Fields monitoring. All fields are monitored with the aid of drones, UAVs, and satellite imagery. The data collected is analysed using Pix4D, ENVI, ArcGis and other software
 - ▶ GPS-navigation
 - ▶ Distant oil control of the vehicles
 - ▶ Online weather monitoring using sensors and meteorological stations.
-
- ▶ The in-house **R&D center** develops solutions in the field of AI and Big Data. One of the key projects is focused on logistics optimization based on technologies of simulation modelling and artificial intelligence.
 - ▶ Kernel cooperates with several Ukrainian **AgriTech projects** such as Kray Technology, AeroDrone, Pixel, Matrix UAV, as well as foreign projects, including Gamaya and Geoprospectors.
 - ▶ The company also funds CraftScanner, a startup developing a module to automatically adjust the depth of soil cultivation.

2. **MHP** implemented innovations that are unique for Ukrainian agriculture. Key projects include:

- ▶ **GreenNRG**. In 2013 MHP launched its first biogas station working on chicken manure and other organic wastes with a capacity of 5 MWt per hour (equivalent to the electricity supply for 15,000 flats and heating of 1,500 flats), which was the first station in Europe with such a level of technology and capacity.
- ▶ In 2017 MHP announced the construction of a biogas complex in the Vinnytsia Region (central part of Ukraine) with a capacity of 2 MWt, which will become the largest biogas complex in the world. In 2019 the first stage was launched with a capacity of 12MWt or 40% of MHP's electricity needs (investments comprised \$27mln).
- ▶ **Agricultural start-up accelerator** was launched in partnership with Radar Tech in 2017.
- ▶ **Geoinformation System** is one of MHP's internal projects focused on collecting, processing and visualizing all land bank management data. Drones are used for monitoring and watering the soil.
- ▶ MHP also cooperates with AgriLab in implementing comprehensive solutions to increase the efficiency of agribusiness.

3. **Ukrlandfarming** combined its internally developed applications and interfaces with vendor systems to create a tightly integrated ITC environment. Its state-of-the-art technologies include:

- ▶ **Precision farming solutions** to optimize fertilizer and crop protection products application.
- ▶ **Telemetric data collection and analysis system** (developed in-house) to collect and analyse data from machinery (TETRA). The system has the following features: the control over the entire grain harvesting and transportation process (from field to elevator), daily reporting of executed farming jobs, fuel consumption control.
- ▶ **Satellite monitoring technology NDVI and drones** for monitoring vegetation and crop development which ensure dynamic response to situations or incidents in the fields.
- ▶ The company also cooperates with **Bitrek** (Ukrainian telemetry equipment producer) and **FarmaQa** (US-based company) and engages in Ukrainian projects focused on soil density measurement.

2.5.5. Auxiliary sectors and supporting information

International R&D centres operating in Ukraine in HVA predominantly represent multinational seed companies

Existing R&D facilities of international HVA players

Please see below examples of international HVA industry players who run R&D centres in Ukraine:



- ▶ Syngenta is one of the leading producers of plant protection products and seeds.
- ▶ In 2017 Syngenta invested about \$1 mln into Research and Selection station in Dnipro Region (Central Ukraine).
- ▶ The company's Research and Selection station and Seedcare Institute form a center for innovative developments.
- ▶ The total area comprises 1 100 sq.m, including laboratories and administrative buildings.
- ▶ The center mainly focuses on a selection of sunflower and corn seeds. It is expected to become a key station in Eastern Europe, serving for markets of Russia, Serbia, Romania, Bulgaria, France and Spain.
- ▶ Syngenta's similar R&D centers are located in France, Argentina and India.



- ▶ KWS is among the top-5 seed producers worldwide, with a subsidiary in Ukraine.
- ▶ In Ukraine, it invests above 12% of total turnover into research annually.
- ▶ The selection station is used for testing new seed hybrids for different Ukrainian climate regions and soil types, including sugar beets, corn, sunflower, rapeseed and sorgo.
- ▶ Currently, there are 14 employees working at the station, including 3 scientists with PhD.



- ▶ Deutsche Saatveredelung AG (DSV) is one of the leading plant breeding companies in Germany. The Ukrainian subsidiary was established in 2010.
- ▶ In 2018 DSV launched the research and selection station in the central part of Ukraine (Cherkasy Regio) with an area of 1,500 sq.m.
- ▶ Total amount of investments into the station's construction comprised €550k.
- ▶ The station mainly focuses on research, development and selection of winter rapeseeds and wheat seeds that are resistant to drought, frost and diseases. It employs 9 highly qualified professionals.
- ▶ Each year the research and development station tests dozens of thousands of new hybrids.

2.5.5. Auxiliary sectors and supporting information

HACCP-based system in Ukraine

- ▶ **Hazard Analysis and Critical Control Points System (HACCP)** is a tool to assess hazards and establish control systems that focus on prevention rather than relying on end-product testing. HACCP can be applied throughout the food chain, from primary production to final consumption. Its implementation should be guided by scientific evidence of risks to human health
- ▶ The government should approximate legislation with the **EU Regulation No. 853/2004 of 29 April 2004 on the hygiene of foodstuff** that obliges food business operators to establish and operate food safety programs and procedures based on the HACCP principles. These rules are established in the **Law of Ukraine "On the Basic Principles and Requirements for Food Safety and Quality"** (Article 21) and the **Law of Ukraine "On Safety and Hygiene of Feed,"** which **require to develop and adopt HACCP-based food safety management systems** for operators involved in all stages of food supply chain and dealing with food processing (primary agricultural producers, food processors, retail and catering operators) as well as for animal feed operators. At the same time, the laws do not mandate to obtain HACCP certification. Businesses may obtain HACCP certification on the voluntary basis
- ▶ HACCP principles are defined in the **Law of Ukraine "On the Basic Principles and Requirements for Food Safety and Quality"** and included in the international Standard **ISO 22000 "Food safety management."**
- ▶ **HACCP is based on seven principles:**
 1. Conduct a hazard analysis (identify hazards and assess the risks associated with them at each step in the commodity system, describe possible control measures)
 2. Determine the critical control points (critical control point is a step at which control can be applied and is essential to prevent or eliminate, or reduce a food safety hazard)
 3. Establish critical limits for control measures
 4. Establish a monitoring system
 5. Establish a procedure for corrective action when monitoring at critical control points indicates a deviation from an established critical limit
 6. Establish procedures for verification to confirm the effectiveness of the HACCP plan
 7. Establish documentation concerning all procedures and records appropriate to these principles and their application
- ▶ Detailed guidelines for implementation of each principle are provided in the **Requirements for Development, Implementation and Application of Standing Procedures Based on the Principles of Food Safety Management System (HACCP)**, which provide for the following steps:
 - ▶ Establishment of a HACCP team consisting of its employees that will determine the sphere of application, critical control points, the key processes and risks related to them
 - ▶ Development of prerequisite program (e.g., proper planning of industrial, ancillary and domestic premises to avoid cross-contamination)
 - ▶ Storage and transportation, control over technological processes, food labeling and consumer awareness, introduction of the standard operation procedure of each HACCP principle for specific goods and plan for implementation of HACCP-based system
 - ▶ Verification and validation of the plan by the HACCP group

State control and liability

- ▶ Safety Service controls compliance with the aforementioned requirements. In case of violations, the Safety Service can impose fines under the **Law of Ukraine "On State Control of Compliance with Legislation on Food, Feed, Animal By-products, Animal Health and Well-being."** Absence of approved HACCP-based procedures triggers the imposition of a fine amounting to 30 minimal monthly wages



2.5.5. Auxiliary sectors and supporting information

Certain regulatory aspects of animal husbandry (1/2)

To carry out business in animal husbandry the producer should generally:

- ▶ Conduct environmental impact assessment (e.g., prior to construction of large farm facilities; the need for this procedure should be, however, determined on a case by case basis)
- ▶ Register farm as a facility and obtain permit for its operation
- ▶ Register farm's animals
- ▶ Ensure veterinary examination of meat and obtain international veterinary certificates for export of products of animal origin
- ▶ Properly manage utilization of animal by-products and derived products not intended for human consumption

Requirement to conduct environmental impact assessment

Environmental impact assessment is mandatory prior to engaging in construction of facilities to produce poultry (> 40,000 animals), cattle (>1,000 animals), rabbits and other fur animals (>2,000 animals) farms; intensive aquaculture; utilization of animal by-products and derived products not intended for human consumption (Article 3 of the [Law of Ukraine "On Environmental Impact Assessment"](#)). The procedure takes up to six months and consists of the following key steps:

- ▶ Submitting a notification to the local regional state administration or directly to the Ministry of Environmental Protection and Natural Resources of Ukraine
- ▶ Public discussion of notification of planned activity
- ▶ Drafting the report on environmental impact assessment
- ▶ Public discussion of the report, and
- ▶ Conclusion on the environmental impact assessment

Documents can be submitted and obtained through special electronic system and available in the [Unified Register of Environment Impact Assessment](#).

Registration formalities and permit procedures in respect of facilities

- ▶ The operators of facilities used for industrial animal breeding should register themselves at the relevant territorial branch of the Food Safety Service (Article 34 of the [Law of Ukraine "On Veterinary Medicine"](#)) under the [Procedure approved by Order of the Ministry of Agrarian Policy of Ukraine No. 39 dated 10 February 2016](#). Information about facilities (species of animals kept at the relevant facilities, the number of animals of each species, the name of the operator) will be included to the [dedicated register](#). Registration is free of any charges and should be conducted within 15 business days. There is an option

of electronic application

- ▶ Use of the unregistered capacity is subject to fine amounting from 23 to 30 minimal wages (approx. USD 4,860-6,340)
- ▶ Producers of food products and raw materials of animal origin should also acquire **exploitation permit for their facilities** (Article 20 of the [Law of Ukraine "On the Basic Principles and Requirements for Food Safety and Quality"](#)). Such permit is granted after the audit of the Food Safety Service under the Procedure for Issuing Exploitation Permit approved by the CMU's Resolution No. [930](#) dated 11 November 2015. The procedure should not exceed 30 days

Registration of animals

- ▶ Ukrainian legislation establishes producer's obligation to identify and register its cattle, horses, pigs, sheep and goats pursuant to the [Law of Ukraine "On the Identification and Registration of Animals"](#) (Article 5)
- ▶ Registration is required to displace the animals and carry out their slaughter or disposal. Every animal of aforementioned species should be identified shortly after it was born (except for pigs and horses)
- ▶ Prior to registration of the first animal, the producer should register its farm in the Animal Register. For this purpose, the producer should apply to agent of the [State Enterprise "Agency for Animal Identification and Registration"](#) (Agency) and submit a registration card previously certified by the seal of state veterinary doctor
- ▶ The procedures for identification and registration of animals slightly differ depending on particular species: [cattle](#), [sheep and goats](#), [pigs](#) or [horses](#)
- ▶ Generally, producer applies to the Agency to order the identification of animals. The Agency provides the producer with labels with identification numbers and producer marks animals' ears
- ▶ In order to register its animals, the producer should apply to the local veterinary institution of the Food Safety Service and submit the completed registration card for approval by the veterinary specialist. The card should be approved within three days
- ▶ The producers should notify the Food Safety Service about changes in animal status and replacement within five business days
- ▶ Identification of animals aims to ensure traceability and safety of products **derived from them**

2.5.5. Auxiliary sectors and supporting information

Certain regulatory aspects of animal husbandry (2/2)

- ▶ Then, the producer should submit an approved registration card to the Agency, which should register the animal in the Animal Register within 10 days after obtaining respective documents from the producer
- ▶ After the registration, the Agency should issue a veterinary passport for the registered animal within five days
- ▶ The legislation provides for the paper form of registration and identification procedures. It is expected that these procedures will be digitalized shortly - the Agency recently presented the electronic cabinet of users of the Animal Register

Veterinary certificates

- ▶ To export raw materials and products of animal origin, the operator should obtain the international veterinary certificate (Article 32 of the Law of Ukraine "On Veterinary Medicine"). This certificate is obtained under the Procedure for Issuing Veterinary Documents approved by CMU's Resolution No. 857 dated 21 November 2013
- ▶ To obtain the certificate, the operator should apply to regional departments of the Food Safety Service and state institutions of veterinary medicine (authorized bodies). The operator should submit previously obtained conclusions of veterinary and sanitary examinations conducted by the state veterinary labs and previous veterinary documents for goods (in case the cargo was divided into parts)
- ▶ The authorized body should issue the certificate taking into account the results of the direct inspection of goods and conclusions of veterinary and sanitary examinations within one month after receiving the necessary documents

Antemortem inspection of animals and post-slaughter veterinary and sanitary examination

Any slaughter of animals on an industrial scale should be carried out only in slaughterhouses that have received the exploitation permits in accordance with the Law of Ukraine "On the Basic Principles and Requirements for Food Safety and Quality" (Article 34). The health status of animals to be slaughtered should be evidenced by veterinary documents (Article 34 of the Law of Ukraine "On the Basic Principles and Requirements for Food Safety and Quality") and examined

by a veterinary specialist. Sales and use of meat and other slaughter products of animals (poultry) that have not passed a veterinary and sanitary examination, and those received from animals that have not been subjected to antemortem inspection in the prescribed manner, is prohibited. Such procedures are conducted at slaughterhouses and in accordance with the detailed provisions set out in the Rules of Pre-slaughter Veterinary Inspection of Animals and Veterinary and Sanitary Examination of Meat and Meat Products No. 28 dated 7 June 2002

Management of animal by-products and derived products not intended for human consumption

Relationships concerning the processing and disposal of animal by-products and derived products not intended for human consumption in Ukraine are regulated by the Law of Ukraine "On Animal By-Products not Intended for Human Consumption." The Law stipulates that carcasses or parts thereof of slaughtered, dead animals and other parts of their bodies are divided into three main categories depending on the level of danger (Articles 11-14). Remains of healthy animals are only allowed to be recycled into organic fertilizers, biogas, feed or compost, etc. (Article 16), dangerous remains of ill animals should be only removed (Article 14), less dangerous remains may be removed or recycled with certain limitations (Article 13). The Law sets a fine for removal of animal by-products in violation of this Law in the amount of 23 to 30 minimum wages (approx. USD 4,850-6,325 based on the minimal wage set as of 1 January 2021)

Harmonization with EU regulations

- ▶ Legislation on animal husbandry is subject to further harmonization with the EU According to the CMU's Action Plan, the CMU should approximate regulations regarding animal husbandry with the respective EU legislation listed in Annex XXXVIII to Chapter 17 of the Association Agreement by the end of 2020 and 2021
- ▶ According to the CMU's report, 52% of respective Ukrainian regulations (harmonization of sanitary and phytosanitary control procedures, food safety requirements, the unification of standards, reforms of control authorities) were updated in 2019



2.5.5. Auxiliary sectors and supporting information

Labor market (1/2)

Labor supply and demand

There are 3 mln of people employed in the agricultural sector as of 2019 (18% out of a total number of the employed population – the 2nd industry by a number of employed people). The number of the population employed in agriculture has been growing during the last 5 years, yet the percentage out of the total number of the employed population remained almost unchanged¹.

Despite the growth in the number of employed employees, 38% of employers from the agricultural sector observe difficulties with retention and attraction due to outbound migration², in particular, among manual workers. One of the key reasons for migration abroad is a gap in salary levels as compared with the neighboring countries. Given that this situation cannot be resolved in the short term, the employers have to utilize other approaches, such as non-monetary incentives (e.g., improvement of working conditions, additional benefits – transportation, housing, etc.).

Moreover, 45% of agricultural companies mention difficulties with employee attraction, which they experience mainly in relation to professional and manual staff. In particular, employers find it rather challenging to attract agronomists, tractor operators and other non-diversified specialists³.

Source: 1. State Statistics Service of Ukraine; 2. EY Express-Survey, Q1 2019; 3. EY Compensation and Benefits Surveys

Sector attractiveness for employment purposes

Although the agricultural sector is popular among professional candidates in terms of employment (the 5th out of 18 in the sector attractiveness rating), it is significantly less appealing to students (the 16th of 18)¹.

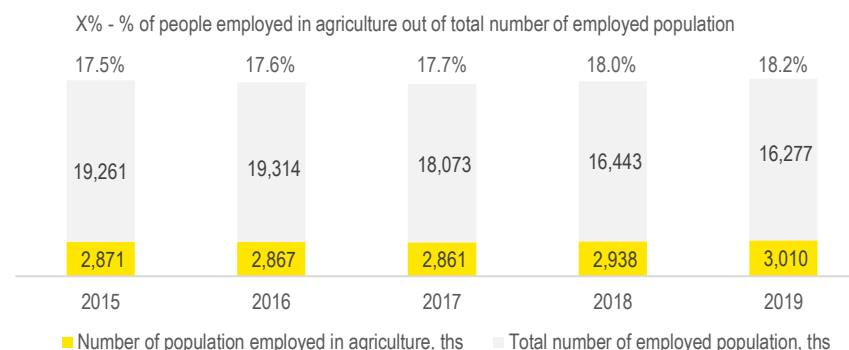
In general, graduates are not much willing to work in agriculture. The average age of workers in the agricultural sector is somewhat higher than in the general market (42 years vs. 40 years). The situation is even more difficult for foremen (42 years in the agricultural sector vs. 39 years on the general market)².

Further actions to improve sector attractiveness among youth may be required to ensure a sufficient labor supply for one of the fast-growing industries.

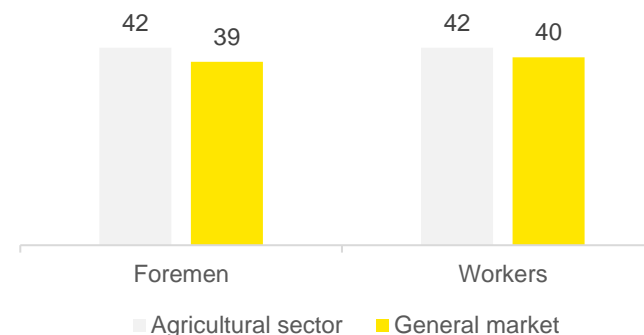
Source: 1. EY Best Employer Survey, 2019; 2. EY Compensation and Benefits Surveys – 2020 (preliminary)

Number of employed population, ths

Source: State Statistics Service of Ukraine



Average age of employees, years old



Source: EY Compensation and Benefits Surveys – 2020 (preliminary)



2.5.5. Auxiliary sectors and supporting information

Labor market (2/2)

Vocational and higher education

As of 2020, only 5% of all students of higher education institutions are enrolled in agricultural fields of study, and only 4% of all students at vocational institutions.

In 2020 the share of people enrolled in higher education in the agricultural field of study out of the total number of students was nearly the same as the share of graduates (4.7% vs 4.9%), which means that the popularity of this specialization remained unchanged. However, only 1.4% of applications during the university admission process were directed to agricultural fields of study. This means that significantly fewer students are choosing agricultural fields of study as their first choice for enrollment

Learning and development of personnel

Most of the largest industry employers mention the skill gap as a significant challenge. In particular, they state that young specialists lack knowledge of innovative agricultural techniques as well as practical skills and understanding of the modern industry. To handle this issue, the companies have to invest in the learning and development of their employees and also cooperate with universities to adjust learning curricula and provide practical training opportunities for students. In particular, there is a number of projects on implementing dual education in cooperation with the public universities, which are aimed at educating specialists with the practical skillset that corresponds to the market needs (e.g., the Master's Program AgroKebety). However, the whole educational system needs to be reviewed to enable the actualization of the existing education programs and development of practical skills in cooperation with the industry

Also, there is a number of training programs available on the market and aimed at improving the quality of personnel. These mainly focus on crop production and protection, as well as technologies in agriculture.

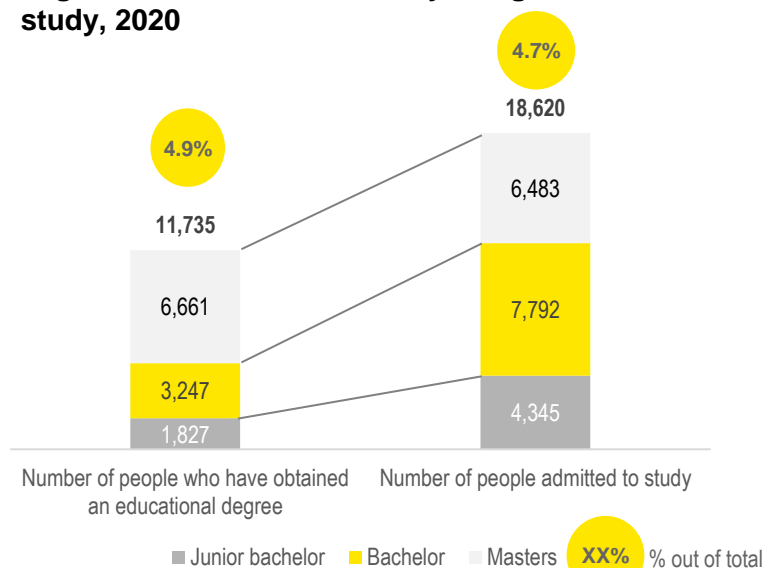
Remuneration

Monthly fixed remuneration in the agricultural sector varies significantly between management and field companies.

Salaries of management companies are significantly higher than on the general market (especially for the middle management). At the same time, remuneration levels for field companies are lower than those on the general market for each job level.

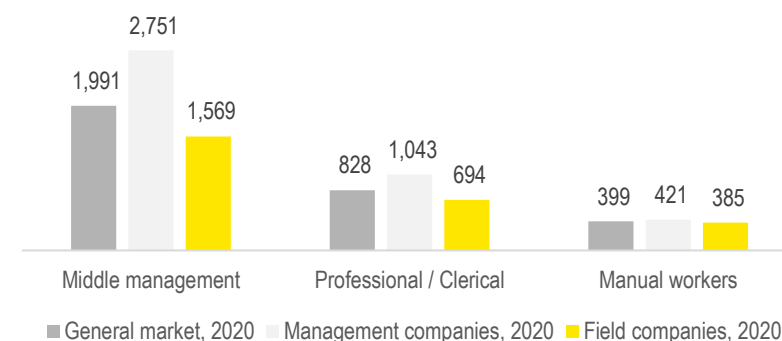
However, there is a significant number of staff engaged on a piece-work pay. Different approaches to determine the calculation of pay among other companies cause difficulties in market benchmarking, hence – cost management

Number of people, who obtained an educational degree and admitted to study in agricultural fields of study, 2020



Source: Ukrainian State Statistics service

Monthly remuneration level by category of employee, USD gross



Source: EY Compensation and Benefits Surveys



2.5.5. Auxiliary sectors and supporting information

Ukraine has relatively underdeveloped framework for state support of HVA sector

The following slides are presented operational benchmarking of the Ukrainian HVA environment against peer countries. For the peer role for the HVA sector we selected, Moldova, Kazakhstan, Georgia, Romania and Poland. These countries are located not only close to Ukraine but also in continental climate zone (with slight differences). Thus, climate conditions are alike. Therefore crop mix of named countries is comparable: all of the listed peer countries breed wheat, corn and barley. Moreover, the percentage of total GDP generated by the Agriculture sector is less than 10.

Forms of state support specific for HVA	Moldova	Kazakhstan	Georgia
	Subsidies of up to 50% of the value of constructed post-harvest and processing infrastructure. A subsidy fund supports lending to farmers, insurance in agriculture, investments in agricultural technology and equipment and technological innovations	Special subsidies and credit programs for poultry and seed farms, creation or extension of goat dairy farms and fish-breeding farms.	Co-financing of processing and storage projects in agriculture. Promotion of national agriculture products by the state. Agri-insurance - supports the development of the insurance market for agriculture.
	Romania	Poland	Ukraine
	Non-refundable financial support for 40% of investments in processing/marketing of agricultural products.	Subsidies for the new projects in the food industry that cover up to 7,5% of project costs; Subsidies for employment in the food industry of up to 3,900 EUR per hired worker.	State support for the development of livestock and the processing of agricultural products.

Source: public sources



2.5.5. Auxiliary sectors and supporting information

Ukraine does have state support programs for HVA, but their scale is much lower than at peer countries (1/2)

Key forms of state support for agriculture	Moldova	Kazakhstan	Georgia
	State subsidies for the whole spectrum of agricultural activities. Decreased 8% VAT rate for agriculture (standard VAT rate is 20%), financial support for the transition to organic farming. The employers from the agricultural sector pay a decreased social security contribution of 16% (23% for the rest of employers)	Subsidies for up to 30% of the value of investments in fixed assets. The in-kind subsidies could comprise land plots, machinery and equipment, measuring and regulating devices. Also, there are loans available at discounted rate for a prolonged period. A reduced CIT rate of 6% applies to the qualified agricultural income. Subsidies for R&D in agriculture are considered	Subsidies in the form of cash grants and compensation for certain equipment and services (e.g., plowing services) Discounted price for fuel (within certain limits). Loans at a discounted rate for a prolonged period. Agribusiness in Georgia is eligible for a full sales and use tax exemption on agricultural equipment and production inputs through the Georgia Agriculture Tax Exemption program (GATE).
	Romania	Poland	Ukraine
	State support for agriculture is within the framework set by the EU and is mainly provided in the form of subsidies and grants from both EU and national institutions.	State support for agriculture is within the framework set by the EU and is mainly provided in the form of subsidies and grants from both EU and national institutions. Support is mainly provided in the form of a grant.	4 large state programs: supporting livestock breeders and cheaper equipment, support for gardeners and farming, program for cheaper loans (compensation of interest), and planned loan guarantee fund for the purchase of land. Moreover, compensation for the purchase of agricultural machinery of Ukrainian production and special tax regime are provided.

Source: public sources



2.5.5. Auxiliary sectors and supporting information

Ukraine does have state support programs for HVA, but their scale is much lower than at peer countries (2/2)

Incentives for FDI specifically in agriculture	Moldova	Kazakhstan	Georgia
	N/A	N/A	N/A
	Romania	Poland	Ukraine
	N/A	N/A	N/A
Direct* state support of agriculture per one dollar of GDP generated by agriculture, USD	Moldova	Kazakhstan	Georgia
	0,05	0,11	0,09
	Romania	Poland	Ukraine**
	0,22	0,35	0,01
Market for agricultural land	Moldova	Kazakhstan	Georgia
	Y	N, only possible to rent agricultural land for up to 25 years	Y
	Romania	Poland	Ukraine
	Y	Y	N
Agricultural land could be owned by foreigners (Y/N)	Moldova	Kazakhstan	Georgia
	N	N	N, foreigners can only inherit agricultural land
	Romania	Poland	Ukraine
	Y*, EU citizens could buy land if it would be used as intended, education or experience in agriculture is required	Y*, foreigners could buy land if they are married to a citizen of Poland and live in Poland for the last 2 years or if they live in Poland for 5 years after receiving a residence permit.	N

Source: public sources

* Not takes into account tax incentives, utilized by the Agri-sector

** Even though state support of agriculture in Ukraine is low, it is not distributed equally. The biggest players of this market receive significant part of it.



2.5.5. Auxiliary sectors and supporting information

Grant support from international donors for the agricultural sector and HVA

(1/2)

Donor	Project Name	Amount	Timeline	Description
The World Bank (IBRD, IDA)	Accelerating Private Investment in Agriculture Program	Commitment Amount USD 200m	2019 - 2025	The Program aims to increase agricultural sector competitiveness, diversification, and growth by enhancing the efficiency and targeting of sectoral support policies, improving transparency and efficiency of use in the state agricultural land, and improving agribusiness SMEs' access to export markets. All of these are key preconditions for the successful development of the agriculture sector.
Government of Canada	Project for vegetable growing + dairy development project	Total budget of 2 projects: CAD 40m (USD 30m)	2015 - 2022	Canadian development projects are aimed to support Ukrainian cooperative associations comprising small and medium producers.
EU	EU Support for the Development of Agriculture and Small Farms in Ukraine	EUR 26 m (USD 30m)	Signed in: 2020	According to the Project, Ukraine would be assisted in creating a more inclusive and competitive agricultural sector focused on the development of small and medium-sized farms and businesses. EU assistance will focus on: (1) carrying out institutional and sectoral reforms in agriculture and rural development; (2) ensuring access to funding for small farms through the introduction of grant programs.
Swiss Government	Swiss Cooperation Programme Ukraine	Indicative budget: CHF 17.3m (USD 19m)	2021 - 2023	The objective of this domain is to facilitate competitive and inclusive growth. To this intent, Switzerland continues to priorities market access and value chain development with a focus on SMEs in the agricultural sector. It will expand financial sector support and access to finance for SMEs.
Federal Ministry of Food and Agriculture, Germany	AgriTrade Ukraine	Project Budget: EUR 2,14m (USD 2,5m)	2016 - 2021	Project objective is to enable Ukrainian agricultural and food companies in terms of their capacities to identify European export markets, enter them, consolidate and grow in them, and prepare to open their own markets. Furthermore, the project aims at informing German companies on agricultural trade issues with Ukraine. Among target groups, there are Ukrainian agricultural producing, processing and trading companies that have an interest in export to the EU.

Source: OPEN



2.5.5. Auxiliary sectors and supporting information

Grant support from international donors for the agricultural sector and HVA

(2/2)

Donor	Project Name	Amount	Timeline	Description
USAID, Chemonics international	Agriculture Growing Rural Opportunities (AGRO)	No info	2019 - 2024	The project is helping to accelerate the economic development of rural Ukrainian communities with the greatest need through a better governed agricultural sector, which encourages more productive, modern, and profitable micro, small, and medium (MSMEs) agricultural enterprises that are successfully integrated into competitive markets both in Ukraine and internationally.
USAID	VTrade Fruits and Berries initiative	No info	in progress	The core of the project is market research, which aims to provide companies with up-to-date data on global changes and trends in key markets and search for new opportunities, and informing about short-term business strategies. The objective is a promotion and popularization of Ukrainian berries, fruits and vegetables on the domestic and world markets with the help of innovative online platforms and virtual tools.
FAO	Country Programming Framework	No info	2020 - 2022	Development of the agri-food production chain and market access with a strong focus on support for small-scale farmers and value chain development, and technical and policy guidelines for both the public and private sector, including reinforcement of the cooperatives' legal framework.
MEDA	Ukraine Horticulture Business Development Project (UHBDP)	No info	2014 - 2021	This business development project is a 7-year initiative to improve the horticultural market system for small farmers and entrepreneurs in southern Ukraine. UHBDP bridges the gap between Ukraine's elementary agricultural business practices and low yields with technological incentives, e-commerce platforms, business skills training, and provide market linkages to increase yields and incomes.
Program is supported by SECO (Swiss State Secretariat for Economic Affairs)	Quality FOOD Trade Program	No info	in progress	Program focuses on value addition for the export and domestic market in relation to the organic and dairy sectors. By doing so, it contributes to the overarching goal of sustainable and inclusive growth in Ukraine. The program prioritizes two thematic areas in both sectors: (1) regulatory framework and business environment to strengthen product quality and safety and (2) capacity development to improve trade capacities.
UK via EIB	Assistance to Ukraine	No info	2019 - 2020	This project helps small and medium-sized enterprises and financial intermediaries develop the skills and knowledge they need to identify, design and assess investment opportunities, including unlocking the EIB's loan financing. This will help improve the productivity and efficiency of the agrarian food value chain.

Source: open sources



2.5.5. Auxiliary sectors and supporting information

Financing from international organizations for Ukrainian agricultural sector

Donor	Project Name	Amount	Timeline	Description
EIB	Agricultural program	EUR 400m (USD 473m)	Signed in: 2019	The purpose of this project is to provide long-term financing for small and medium-sized enterprises (SME) in the agricultural sector of Ukraine. The EIB loan will be provided through financial intermediaries in the private and public sectors.
EIB	Support of agriculture	EUR 90m (USD 107m)	2019	Financing of projects of the Kernel agricultural group.
EBRD	Kernel Grain Working Capital	Commitment amount USD 80m	Approved in: 2019	Provision in the form of participation in a syndicated senior secured revolving credit facility to finance working capital needs of Kernel Group. Transition impact of the project is supposed to be through the expanded access to and usage of open digital solutions for precision agriculture, which will benefit Kernel Group and partner farmers in their daily operations.
EBRD	RF - Nibulon WC Loan	Commitment amount USD 27m	Approved in: 2020	A senior secured loan to Nibulon LLC under the Resilience Framework. The loan will enable Nibulon LLC to secure sufficient working capital financing for the following seasons and support in further developing its trading activity in Ukraine amid the adverse impact of COVID-19 on its business.
The IFC, Supported by funds from the Netherlands Agency for Economic Development (EVD)	Ukraine Agri-Finance Project	Commitment amount from IFC USD 20m	2010 - present	The main objective of the project is to increase access to finance for Ukrainian farmers through financial institutions and support farmers' agricultural production. IFC's holistic approach will result in improved access to finance for farmers and producers. The project will facilitate investment in Ukraine's agricultural sector. It is expected that innovative tools and mechanisms developed by the project will help increase volumes and improve terms of credit received through the positive linkage of agri-insurance and finance.
BMZ via KfW, Germany	Financing of the agriculture sector	Subordinated debt of USD 17m with OTP leasing and USD 3,5m with PJSBank Lviv	2019 - 2026	This is a subproject of a program of cooperation with Ukraine in the framework of economic development policy.
EBRD	DFF - Enzym	Commitment amount EUR 7m (USD 8,3m)	Approved in: 2020	The project will support an investment program at PrJSC Enzym, which includes: (1) construction of the new production facilities for yeast-based products such as yeast extracts and inactive yeast; (2) expansion of the fermentation capacities at the existing yeast production (to be used by the new production as well); (3) construction of the water treatment facilities.
EBRD	RF - Kormotech WC	Commitment amount EUR 3.3m (USD 3,9m)	Approved in: 2020	The provision is supposed to provide working capital financing to Kormotech LLC in response to the COVID-19 impact.
EBRD	DFF - Lantmannen Ukraine	Commitment amount EUR 3m (USD 3,5m)	Approved in: 2020	Provision of a senior long-term loan to PrJSC Lantmannen Axa, a breakfast cereal producer. The project will support improvements and expansion of production lines and higher value-added products, which is expected to lead to an improvement in profitability and efficiency.

Source: open sources



2.5.5. Auxiliary sectors and supporting information

Support from international donors for sectors that are related to agriculture

Donor	Project Name	Amount	Timeline	Description
The financial support of the Government of Canada	CUTIS	The budget for 2020: USD 1,7m	2016 - 2021	CUTIS project, in partnership with the Ministry of economic development and Export Promotion Office, will provide Ukrainian businesses with the information needed to export their goods to Canada and attract Canadian investments. The project will support the participation of Ukrainian businesses in trade fairs, exhibitions and B2B-events aimed at expanding business connections with Canada.
The IFC, Supported by funds from the Canadian International Development Agency (CIDA)	Developing Agri-Insurance Industry in Ukraine	No info	2007 - present	The project aims to boost the use of agri-insurance as a risk management tool by establishing a sustainable agri-insurance system based on public-private partnership, enhancing the technical capacity of insurance companies and fostering access to finance via the use of insured crops as collateral.
USAID, WOCCU	Credit for Agricultural Producers	No info	2016 - 2023	The project supports broad-based, resilient economic growth by strengthening the capacity of Ukrainian credit unions to expand agricultural lending to increase employment and income opportunities in rural Ukraine. The project is creating a legal and regulatory environment to strengthen credit unions as non-bank financial service providers

Source: open sources

2.5.5. Auxiliary sectors and supporting information

There are no HVA-specific measures that could improve Ukraine's standing in the World Bank's "Ease of Doing Business Index" and the World Economic Forum's "Global Competitiveness Index"

Rankings

We analysed three international rankings for indicators that are either specific to agriculture or are more applicable to agriculture than to other sectors. The rankings analysed include:

- ▶ Ease of Doing Business Index, prepared by World Bank Group
- ▶ Global Competitiveness Index, published by the World Economic Forum
- ▶ Global Food Security Index, calculated by The Economist Intelligence Unit ("EIU")

Indicators of "Ease of Doing Business Index" by World Bank Group associated with agriculture

We identified no indicators of sub-indicators that are part of the Ease of Doing Business Index that are associated with agriculture more than with other sectors.

Indicators of "Global Competitiveness Index 2019" associated with agriculture

While none of the indicators is associated with agriculture directly, however, four out of 29 international treaties that are taken into account when establishing countries value of indicator 1.26, "*Environment-related treaties in force*," concern agriculture, namely:

- ▶ The Convention on Wetlands of International Importance especially as Waterfowl Habitat, 1971 Ramsar;
- ▶ The Convention on Biological Diversity, 1992 Rio de Janeiro;
- ▶ The Agreement relating to the Provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 1995 New York;
- ▶ The Cartagena Protocol of Biosafety to the Convention on Biological Diversity, 2000 Montreal; the International Treaty on Plant Genetic Resources for Food and Agriculture, 2001 Rome;

Note that as Ukraine is a party of all four of that treaties, it cannot improve its position in the Index by ratifying any of them.



2.5.5. Auxiliary sectors and supporting information

Ukraine's position in the "Global Food Security Index" compiled by the Economist Intelligence Unit could be improved (1/3)

Indicators of "Global Food Security Index"

Global Food Security Index ("GFSI") measures drivers and underlying factors of countries' food security. The study also assesses a country's exposure to the changing climate impact, susceptibility to natural resource risks and the level of the country's adaptation to these risks.

The table below summarizes Ukraine's performance on selected agriculture-related indicators of 2019 GFSI as well as natural resources and resilience indicators.

Very Good (80+)			Good (60.0-79.9)			Moderate (40.0-59.9)			Very weak (0-19.9)		
Indicator	Score	Rank	Indicator	Score	Rank	Indicator	Score	Rank	Indicator	Score	Rank
Food safety	99.9	60	Volatility of agricultural production	70.0	91	Sufficiency of supply	57.1	67	Public expenditure on agricultural R&D	1.1	89
Food loss	90.4	45	Micronutrient availability	67.3	50	Protein quality	53.3	45	Nutritional standards	0.0	109
Agricultural import tariffs	85.5	15	Dietary diversity	67.2	38	Food safety programs	50.0	74	Early warning measures/climate smart ag	0.0	66
Grassland	99.2	60	Land degradation	75.0	79	Access to financing for farmers	50.0	59			
Food import dependency	100.0	1	Forest change	62.0	43	Agricultural infrastructure	40.7	71			
Disaster risk management	100.0	1	National agricultural risk management system	66.7	57						

Note: none of indicators was included into "Weak category (20.0-39.9)" in 2019

We understand that the GFSI is not a primary indicator to look at for international investors when making investment decisions. On the other hand, the security of the food supply chain is an important factor in the attractiveness of the Ukrainian HVA sector for international investors. In addition, the rapid positive dynamics of Ukraine in GFSI could be an additional argument for potential international investors in HVA to shortlist Ukraine as a destination for investments.

On the next page was describe certain steps that could be made to improve Ukraine's position in GFSI, mainly based on the methodology of the GFSI's indicators that Ukraine scored "Very weak" and "Moderate."

2.5.5. Auxiliary sectors and supporting information

Ukraine's position in the "Global Food Security Index" compiled by the Economist Intelligence Unit could be improved (2/3)

Indicators of GFSI where Ukraine scored "Moderate"

Sufficiency of supply. This indicator is composite and basically measures the availability of food. It consists of average food supply based on data from FAO and dependency on chronic food aid based on data from OECD. Average food supply is an estimate of the sufficiency of the food supply to meet average dietary needs. According to the Methodology, the estimation of this indicator includes a number of undernourished people. Based on FAOSTAT, in Ukraine 3-year average (2016-2019) number of undernourished people was 1.6 million. In order to uphold the position of Ukraine, it is necessary to work at social safety net.

Protein quality. Based on data from FAO, WHO and US Department of Agriculture Nutrient Database, this indicator measures the amount of high-quality protein in the diet using the methodology of the Protein Digestibility Corrected Amino Acid Score. There are nine essential amino acids that humans cannot synthesize and must consume through dietary sources. Ukraine's score in the indicator could be improved by promoting of availability and consumption of the amino acids in question.

Food safety programs. The indicator is based on EIU scoring. It is a composite indicator assessing the presence and nature of food safety-net programs. Sub indicators include (1) presence of food safety-net programs, (2) funding for food safety-net programs, (3) coverage of food safety net programs, (4) operation of food safety-net program. Development of food safety-net programs for providing food, either directly or through instruments that may be used to purchase food, would improve Ukraine's score.

Access to financing for farmers. It is a qualitative scoring by EIU analysts. A measure of the availability of financing to farmers from the public sector. According to the Methodology, now Ukraine provides some multilateral or government financing. In order to improve the score, farmers financing should be further developed.

Agricultural infrastructure. Qualitative scoring by EIU analysts. It is a composite indicator that measures the ability to store crops and transport them to market. Sub indicators include (1) the existence of adequate crop storage facilities, (2) road infrastructure, (3) port infrastructure, (4) air transport infrastructure, (5) rail infrastructure, (6) irrigation infrastructure. The Methodology does not provide specific criteria for scoring. However, the further development of the respective infrastructure could be a boon for the investment potential of the Ukrainian HVA sector.



2.5.5. Auxiliary sectors and supporting information

Ukraine's position in the "Global Food Security Index" compiled by the Economist Intelligence Unit could be improved (3/3)

Indicators of GFSI where Ukraine scored "Very weak"

Public expenditure on agricultural R&D. This indicator is based on data from United Nations. According to the methodology, it is a measure of government spending on agricultural R&D, as captured through the Agricultural Orientation Index. In order to improve this indicator, Ukraine should invest more into agricultural R&D through the local budgets as well as through state budget. Investment in agricultural research and development supports improvements in the quality and availability of agricultural technology.

Nutritional standards. This indicator is based on EIU scoring. It is a composite indicator that measures government commitment to increasing nutritional standards. It comprises sub-indicators: (1) national dietary guidelines, (2) national nutrition plan or strategy (3) nutrition monitoring and surveillance. As Ukraine has got 0.0 for this indicator, in order to get points, it is necessary to achieve progress in any of that sub-indicators.

Early warning measures/climate-smart agriculture. It is an assessment of commitment to developing early-warning measures for the agricultural sector and investing in climate-smart agriculture practices based on data from the research program on Climate Change, Agriculture and Food Security. In order to improve the score, Ukraine should invest in the development of the respective measures, for example, urban and suburban agriculture or crop adaptation to climate change.



2.5.5. Auxiliary sectors and supporting information

There is a set of international conferences and events that could be used to promote Ukrainian HVA

Key agriculture, food and beverages industry events

Event	Location	Place	Next dates	Description
Paris International Agricultural Show	Professional organizations in the agriculture industry from 27 countries	Paris, France	27 February - 7 March 2021	Annual meeting place for all key players of the agricultural world
KazAgro/Kazfarm	Representatives and decision-makers of more than 300 companies from 32 countries.	Nur-Sultan, Kazakhstan	October	Held in the form of congresses, seminars and meetings with well-known speakers in their field
AgroExpo Uzbekistan/Agrotech Expo	Companies' owners and managers, as well as other participants from 17 countries in the region	Tashkent, Uzbekistan	9-11 June 2021	International exhibition covering agricultural machinery, horticulture, plant production and animal husbandry
EIMA International	Professional business visitors and other participants from 50 countries	Bologna, Italy	3-7 February 2021	An event for the agricultural machinery industry
EuroTier	Key industry experts and exhibitors from more than 60 countries	Hanover, Germany	9-12 February 2021	The world's leading trade fair in animal farming.
EuroTier Middle East	Participants from 40 countries across a range of roles and livestock segments.	Abu Dhabi, UAE	8-10 March 2021	The event consists of a trade fair, conferences, workshops and networking
Anuga FoodTec	Decision-makers and other participants of the food and beverages industry	Cologne, Germany	23-26 March 2021	International trade fair for food and beverage technology industry
Caspian Agro	Visitors from 51 countries	Baku, Azerbaijan	19-21 May 2021	Major regional forum for producers of agricultural products and food
TECHAGRO	Exhibitors from 37 counties as well as experts and representatives.	Brno, Czech Republic	11-14 April 2021	It is one of the three largest agricultural fairs in Europe. In 2021 it will take place in parallel with Animal Tech, the national livestock exhibition and biomass fair
FoodExpo Qazaqstan	Representatives of 456 companies from 36 countries and a wide range of visitors	Almaty, Kazakhstan	3-5 November 2021	Central Asian International food industry exhibition.
WorldFood Ukraine	Both companies and visitors from 25 countries, mainly producers.	Kyiv, Ukraine	3-5 November 2020	The exhibition is focused on the manufacturers and suppliers of food products and beverages, processing companies, distributors, exporters, importers.
The Middle East Organic and Natural Product Expo	Main part (over 50%) of the visitors are companies' owners, directors and managers	Dubai, UAE	15-17 December 2020	The largest gathering of bioproducts in the region focusing on the 5 natural market segments such as Food & Beverages, Health, Beauty, Living and Environment
Global Forum for Innovations in Agriculture	7,330 attendees and 120 countries represented, mainly experts of the industry.	Abu Dhabi, UAE	31 August - 1 September 2021	The largest agriculture event in the Middle East
World Dairy Expo	Dairy producers and other organizations from 94 countries.	Madison, WI, USA	28 September - 2 October 2021	The must-attend event for everyone in the global dairy industry
China International Modern Agricultural Exhibition	More than 2,000 exhibitors and 50,000 visitors, mainly experts and professionals.	Beijing, China	22-24 May 2021	No. 1 Exhibition of China's Modern Agriculture, the world's largest demonstration and communications platform for high-end new technology in the field of agriculture

- ▶ The summary of main investment conferences, exhibitions, fairs and other events of the agriculture, food and beverages industry is presented at the table to the left.
- ▶ Most events are held each year on a regular basis.
- ▶ In 2020, many events were rescheduled to 2021 or organized in online format due to global anti-epidemic restrictions.

2.5.5. Auxiliary sectors and supporting information

Legal enablers for HVA (1/6)

Irrigation

Background

- ▶ Ukrainian agriculture in southern steppe areas is sensitive to the proper amount of water. The area of irrigated land in Ukraine has decreased by 70% over the past 20 years. As a result, the area of available irrigated land, according to the State Agency of Water Resources, is about 2.1 million hectares, of which only a quarter is irrigated – 500 thousand hectares
- ▶ In 2017, EBRD estimated that Ukraine was losing about USD 1.5 billion in revenue per year, not producing approximately 10 million tons of grain crops due to low irrigation of arable land
- ▶ All irrigation systems in Ukraine were historically owned by the state. After the collapse of the Soviet Union, most of the irrigation systems remained in state ownership. Due to the lack of budget financing, they became outdated and inefficient
- ▶ After the collapse of the Soviet Union, the lands of former state-owned agricultural enterprises were distributed to their owners together with parts of irrigation infrastructure. Agricultural producers now use these land plots and the irrigation infrastructure on the lease basis

Legislative framework

- ▶ The irrigation system of Ukraine is governed by the [Law of Ukraine "On Melioration of Lands."](#) According to this Law, the Ukrainian irrigation system consists of three parts: state-owned major infrastructure (channels), interfarm systems owned by the state or local councils, and internal systems that may be owned by local councils (jointly), legal entities and individuals
- ▶ The Law provides for the CMU's obligation to define the list of the irrigation infrastructure that can be only owned by the state so that to specify the interfarm infrastructure and transfer it to the local councils. However, the CMU did not approve the relevant list. State-owned irrigation systems are now managed by the State Agency of Water Resources of Ukraine and its local divisions
- ▶ In terms of access to irrigation objects, owners and lessees of irrigated lands are entitled to demand the establishment of land easements on the neighboring plots to ensure construction, maintenance and operation of irrigation infrastructure. In most cases, the easement is established on a paid basis
- ▶ The legislation also provides for the right of agricultural producer that invested in the internal irrigation systems for reimbursement of costs by the owners of leased land and owners of neighboring plots under the provisions of a special agreement

Reform initiatives

- ▶ Although the agricultural producers suffer significant losses in connection with the poor development of irrigation infrastructure, they still do not invest in irrigation systems. The key constraints are (i) unclear legislative rules for the title to irrigation infrastructure and (ii) the moratorium on the purchase/sale of agricultural land, which has brought about several problematic issues for the renewal of irrigation systems. These uncertainties are the major blockers for investment in long-term projects related to modernization, restoration or expansion of irrigation systems. In addition, small and medium farmers in Ukraine have limited access to cheap loans because they cannot use the land as security for attracting necessary loans from the banks. Therefore, farmers often prefer to grow annual crops and do not invest in the long-term projects
- ▶ The Government set out its vision of the complex irrigation reform in the [Irrigation and Drainage Strategy of Ukraine until 2030](#), dated 14 August 2019. The Strategy provides for such measures as carrying out institutional reform of water resources management and limiting the management functions of the State Agency of Water Resources of Ukraine in respect of irrigation infrastructure; creation of new management structures - water users' organizations (WUOs); preservation of state ownership only with respect to the main objects of irrigation infrastructure; complex modernization of irrigation infrastructure; promotion of investment projects in this area
- ▶ The current reform initiatives imply that WUOs would receive separate authorities related to the maintenance of the irrigation infrastructure. In particular, WUOs could be responsible for water withdrawal, its delivery to the water user for hydraulic melioration, and further water drainage. Another focus area of the reform is the development of bankable mechanisms for investment in upstream irrigation infrastructure (pump stations)
- ▶ According to publicly available information, there are two draft laws developed to implement the current irrigation sector reform, specifically:
 - ▶ The Draft Law on water users' organizations and stimulation of the hydraulic melioration of the land
 - ▶ The Draft Law on amendments to the Law on Concession regarding the specifics of transferring pump stations into the concession
- ▶ As we understand it, the key public sector stakeholder in charge of the development of the two draft laws is the State Agency of Water Resources. The draft laws have not been registered with the Parliament, so their final text for the parliamentary readings is not yet available
- ▶ The Parliament is also considering another [Draft Law No. 3852](#) amending the PPP legislation and providing the possibility of PPPs in respect of interfarm and internal irrigation systems

2.5.5. Auxiliary sectors and supporting information

Legal enablers for HVA (2/6)

Land consolidation

- ▶ Historically, at the time of the collapse of the Soviet Union, agricultural lands were owned by state-owned collective enterprises ("kolhosps") and state-owned enterprises ("radhosps"). During the reforms of the 1990s, their land was predominantly distributed among their workers. It created a situation where former fields of kolhosps and radhosps would consist of dozens of land plots owned by individuals
- ▶ Due to the land moratorium, such land plots are now used by agricultural producers on a lease basis. Agroholdings lease certain land plots and some individuals are willing to conduct farming activity on their own plots that are not connected to each other. This situation limits agricultural producers in the use of intensive farming methods, such as irrigation or spraying of agrochemicals by aviation. This can be resolved by land consolidation
- ▶ To address this issue, the Parliament adopted the [Law on Amendments to Certain Laws of Ukraine Concerning Resolution of the Issue of Collective Land Ownership, Improvement of Land Use Rules in respect of Agricultural Land, Prevention of Raiding and Stimulation of Irrigation in Ukraine](#) in 2018, introducing the mechanism for exchange of leased plots between lessees through entering a sublease agreement. However, these amendments have the limited impact since:
 - ▶ It is required to use at least 75% of land area (i.e., respective field) to get access to exchange procedures
 - ▶ Such exchange should be installed under complicated procedure and then registered in the State Land Cadaster
 - ▶ Only plots from the same land area may be offered for exchange
 - ▶ Exchange is possible only if both plots have the same value or if the difference between their value does not exceed 10%
 - ▶ Sublease agreements require permission from the lessor
 - ▶ The law does not establish a compulsory procedure for the exchange
- ▶ Thus, the adopted law has not solved the existing problem. To address this, the State Service of Ukraine for Geodesy, Cartography and Cadaster developed the [Draft Law on Amendments to Certain Legislation of Ukraine on Land Consolidation](#) and is going to submit it to the Parliament. The draft law provides for the following:

- ▶ Abolition of the requirement to get lessor's approval for entering into a sublease agreement
- ▶ Introduction of lessee's right to demand an exchange in court
- ▶ Abolition of the requirement to have a "significant share" of rights to use agricultural land located within the relevant area to get access to the exchange mechanism
- ▶ These amendments are expected to address the majority of existing problems and accelerate the process of land consolidation, as well as eliminate fragmentation of land plots

Cooperation of farmers in order to create and maintain infrastructure

- ▶ Ukraine's major problem is the insufficient amount of necessary infrastructure for agricultural activities (laboratories, refrigerators, warehouses). The solution to this problem can be the cooperation of agricultural producers
- ▶ In 2020, the Parliament adopted the new [Law of Ukraine "On Agricultural Cooperation."](#) The Law allowed legal entities to participate in cooperatives. This created new opportunities in the area of agricultural cooperation since the previous law provided those rights to private individuals only
- ▶ Cooperatives may be created to provide their founders with services, such as technological, transport, melioration, repair, construction, veterinary, accounting, audit and scientific consulting services. The new Law abolished division into production and servicing cooperatives and introduced the possibility to combine different activities instead. The servicing cooperatives may qualify as a non-profitable organization for the purposes of taxation
- ▶ The law establishes mandatory re-registration of existing cooperatives within three years
- ▶ The [Resolution of the CMU "Certain Issues of Implementation of the Law of Ukraine on Plant Quarantine"](#) adopted in November 2019 allows the work of private phytosanitary laboratories that can conduct phytosanitary examinations for the purposes of export

2.5.5. Auxiliary sectors and supporting information

Legal enablers for HVA (3/6)

Rotation of crops

- ▶ Rotation of crops is necessary both to maintain the fertility of the soil and provide high yields for farmers. Under normal conditions, farmers themselves should be most interested in this. At the same time, there is a widespread practice of farmers trying to get the highest possible profits and resorting to the subsequent cultivation of high-profitable but depleting crops, such as rapeseed or sunflower. This creates a complex situation, where on the one hand, it is reasonable to allow the farmers to define their crop rotation by themselves, but on the other hand, there is a certain need for state control over the protection of soil's fertility
 - ▶ Having previously abolished all USSR legislation on crop rotation, Ukraine reintroduced the new one under the Law of Ukraine "On Amendments to Certain Legislation of Ukraine Concerning the Preservation of Soil Fertility" No. 1443-VI dated 4 June 2009. This Law failed to overcome the existing regulatory problems and gave rise to the new ones
 - ▶ The law provides for mandatory requirements to adopt internal regulations on crop rotation for farmers using land plots designated for commercial farming. Article 55 of the Code of Ukraine on Administrative Offences sets administrative fines from UAH 5,100 to UAH 8,500 (approx. USD 180-300) for the breach of this requirement, applicable to responsible officers of farming companies
 - ▶ The Law and the Procedure for Development of Land Management Projects that Provide Ecological and Economic Justification of Crop Rotation and Land Management approved by the CMU's Resolution No. 1134 dated 2 November 2011 stipulate that land management projects should be developed on the basis of an agreement with specialized companies and private entrepreneurs. The client should also provide the materials on cropping history for the previous three years
 - ▶ Land management projects' provisions should correspond to the terms of reference developed based on the approved normatives. The normatives set recommended percentages of planted acreage under each type of crops for different agricultural regions of Ukraine and acceptable terms between the two subsequent cultivations of the same crop on a certain field
 - ▶ Governmental Action Plan for Deregulation of Economic Activity and Improvement of Business Climate stipulates that the Mineconomy should have developed a draft law on the abolition of state control over rotation of crops. According to the governmental data, there was no progress in this regard as of 28 October 2020
 - ▶ From the practical perspective, one of the reasonable ways to promote rotation of crops and conservation of land is probably not regulation but the establishment of an efficient private market for agricultural land, what Ukraine has begun doing now. The reason is simple: The land market will allow the creation of professional landowners (farmers or land aggregators) that will very much care about the land's productivity as it defines the value of the land as an asset.
- #### ▶ Privatization of the state agricultural enterprises
- ▶ The state still owns a significant number of agricultural enterprises. They may be privatized according to the Law on Privatization
 - ▶ State-owned enterprises usually use lands under the permanent use title according to the Land Code of Ukraine. However, in the case of privatization, such a right is terminated and is not transferred to the buyer. State-owned lands of the privatized enterprise may be, however, leased out to the investor
 - ▶ The vast majority of state-owned agricultural enterprises are objects of small privatization, as the value of their assets typically does not exceed UAH 250,000,000. It means that such objects are sold through electronic auctions
 - ▶ Lists of objects of small privatization that are subject to privatization are formed and published by the State Property Fund of Ukraine on its website. A potential buyer can apply to the State Property Fund of Ukraine to include the company in such a list
 - ▶ While privatizing the real estate or shares of the enterprise which had permanent use of its agricultural land would need to go through a separate procedure to lease it out.

2.5.5. Auxiliary sectors and supporting information

Legal enablers for HVA (4/6)

Agricultural insurance

- ▶ Peculiarities of the Ukrainian climate, especially in the southern part of Ukraine, may cause large damages to the agricultural producers due to variance in yields and significant risk of crop failures. It gives rise to the need for a developed system of agricultural insurance. However, Ukraine should address certain legal issues in this area first
- ▶ Apart from general regulations on insurance set out in the [Law of Ukraine "On Insurance,"](#) Ukraine has developed the legal framework for state support in this area under the [Law of Ukraine "On Specifics of State-Supported Insurance of Agricultural Products"](#)
- ▶ The Law provides agricultural producers with state subsidies for insurance premiums. However, according to [Mineconomy](#), such subsidies have not been granted since 2012 (when the Law was adopted) due to the lack of funds and other complex issues
- ▶ The Law has also established the Agrarian Insurance Pool – an organization of insurers allowed to operate at the market of state-supported insurance of agricultural products. Membership and financial contribution to the Pool are mandatory. The main functions of the Pool are to:
 - ▶ Provide for the cooperation of insurers
 - ▶ Develop standardized insurance products
 - ▶ Accumulate funds for covering emergency risks (large droughts, floods, etc.)
- ▶ This mechanism has also shown its ineffectiveness. According to the [Mineconomy](#), only four insurers out of 64 companies that have licenses for such activity) are members of the Pool are currently members of the Pool; three of them have not insured any agricultural products as of 2016
- ▶ To combat these problems in agricultural insurance, the Mineconomy, [with the support of IFC](#), is developing the [Draft Law "On Amendments to the Tax Code of Ukraine and Certain Other Laws of Ukraine on Improving the Legal Regulation](#)

[of Insurance of Agricultural Products with State Support."](#) The Draft Law increases the CPT rate in respect of profit obtained by insurers under the agreements on the insurance of agricultural products with state support to 3.5% (instead of the current rate of 3%) and allocates these funds for state support in this area

- ▶ The Draft Law also provides state support for insurance in respect of the significant reduction of profits from the sale of agricultural products, establishes a broader list of risks and abolishes the Agrarian Insurance Pool as an inefficient structure
- ▶ The Draft Law [has already been approved by the State Regulatory Service on 7 December 2020](#) and is subject to further consideration by the CMU



2.5.5. Auxiliary sectors and supporting information

Legal enablers for HVA (5/6)

Digitalization in the SPS area and accession to the international SPS systems

- ▶ SPS area is of the highest importance for both Ukrainian exporters, importers and farmers purchasing seeds or pedigree stock
- ▶ Based on [data](#) available on the Unified State Portal for Administrative Services, the Food Safety Service provides the following administrative services in the SPS and food safety areas:
 - ▶ Issuance of international veterinary certificates
 - ▶ Issuance of the conclusion of the state sanitary and epidemiological examination
 - ▶ Issuance of operating permit for facilities for processing inedible products of animal origin or for production, mixing and preparation of feed additives, premixes and feeds
 - ▶ Issuance of quarantine certificate
 - ▶ Issuance and renewal of exploitation permit for food market operators for the production and/or storage of food products of animal origin
 - ▶ Issuance of phytosanitary certificate or phytosanitary certificate for re-export
- ▶ According to the [Head of the Food Safety Service](#), the service deals with approx. 31k administrative services per year, 90% of them are provided in paper form
- ▶ SPS area has a problem of insufficient digitalization. For instance, Procedures for obtaining [veterinary phytosanitary and quarantine](#) certificates do not provide for an electronic form of application and submission of the documents. They are granted in paper form only. Also, there is no electronic exchange of SPS documents with the competent authorities of other countries, which creates additional time delays for exporters
- ▶ According to Mineconomy, in 2021, the Food Safety Service [will launch a large digitalization campaign](#) in the SPS area concerning:
 - ▶ Digitalization of register of facilities of market operators. Such innovation should significantly speed up the process and make it significantly easier. The relevant procedures will be carried out through the portal of electronic services "Diia" or through the Food Safety Service's website
 - ▶ Digitalization of certain phytosanitary procedures:
 - ▶ Filing an application online
 - ▶ Conducting analysis of executed documents
 - ▶ Prevention of forgery of documents
 - ▶ Simplification of the exchange of SPS documents between trading partners, operational control over the movement of goods
 - ▶ Exchange of electronic phytosanitary certificates with trading partners
 - ▶ Integration of the national system with [the Global ePhyto Hub](#). The Hub is an international system of integrated phytological databases that facilitates the exchange and counteraction to falsification of phytological certification of the participating countries created for parties to the International Plant Protection Convention. [More than 40 countries](#) have already joined the system, including the EU member states, United States, Australia, Mexico and New Zealand
- ▶ In October 2020, the Minister of Economic Development, Trade and Agriculture also [announced](#) that Ukraine is going to join the [TRACES](#) (Trade Control and Expert System) system. TRACES is a web-based EU veterinary certification tool for control of exports/imports of animals and goods of animal origin. To integrate with this electronic system, it is planned to introduce a system of electronic veterinary certificates with the ability to verify their authenticity

2.5.5. Auxiliary sectors and supporting information

Legal enablers for HVA (6/6)

Geographical indications

General provisions

- ▶ A geographical indication is a widely used instrument to protect producers of popular products (mostly agricultural) from unfair competitors and to maintain genuine production technologies
- ▶ In 2019, in order to carry out its obligations under the Association Agreement, Ukraine made fundamental amendments to the outdated Law of Ukraine "On Protection of Rights to Geographical Indications" adopted in 1996, harmonizing Ukrainian legislation on geographical indications with the Regulation (EU) No 1151/2012 of the European Parliament and of the Council of 21 November 2012 on quality schemes for agricultural products and foodstuffs
- ▶ The Law defines a geographical indication as to the name of the location identifying the good originating from a particular location and special quality, reputation or other characteristics that it has mainly due to that geographical place of origin, and/or at least one of the stages of production of which is carried out in that geographical location. Geographical indication of the product might get legal protection even if alive animals, milk or meat used for the production of a respective good originated from other location, provided that such other location is defined and local producers there comply with production conditions and are subject to the relevant control
- ▶ The Law stipulates that legal protection of intellectual property rights to geographical indications is granted for an indefinite period upon the state registration. The only subjects entitled to initiate registration are the association of producers of particular goods or sole producers (subject to specific requirements)
- ▶ In order to register the indication, the eligible subject should apply to the Ukrainian Institute of Intellectual Property ("Ukrpatent"). An electronic application is also allowed. Application and attached documents are subject to mandatory examination. In case of a positive conclusion of the examination, Ukrpatent publishes the application in its official bulletin and any person has the right to file an objection against such registration within three months. Such objection is subject to additional consideration by Ukrpatent and may result in refusal to register the geographical indication. If the positive conclusion remains successful, Ukrpatent registers the indication in the State Register of Geographical Indications of Ukraine after payment of an administrative fee
- ▶ The geographic indication may not be registered if it is the same or very similar to an already registered trademark, plant variety or animal species, or if it could mislead the consumer. It is also prohibited to register geographical indications qualifying as specific names and referring to certain types of things (for instance, renowned trademarks "Morhynska" or "Yahotynske" derived from the particular geographical areas of Ukraine, so the use of similar geographical indications may mislead consumers)

Intellectual property rights to geographical indications

- ▶ The term "use" in respect of geographical indications refers to placing it on the product label or packaging of the product, as well as usage in advertising and documents accompanying the goods
- ▶ The associations or sole producers have exclusive rights to:
 - ▶ Use a geographical indication
 - ▶ Take measures to prohibit the use of geographical indications by persons not entitled to do so
 - ▶ Carry out conformity assessment and certification activities in respect of goods, which producers are willing to register a geographical indication
 - ▶ Inform consumers about the special qualities of the product

Legal protection

- ▶ The Law prohibits:
 - ▶ Direct or indirect commercial use of a registered geographical indication for goods that are not covered by the scope of a geographical indication and are similar to goods for which the geographical indication is registered, or if such use is the damaging reputation of the product
 - ▶ False or misleading use of a registered geographical indication, even if it represents a true place of origin of goods or if the registered indication is translated, transcribed or transliterated or accompanied by the words "style," "type," "method," "which is produced in," "imitation," "taste," "similar," etc.
 - ▶ Other false or misleading use of a geographical indication on the inner or outer packaging, advertising materials or documents relating to the respective goods
 - ▶ Other use which may mislead the consumer as to the true origin of goods
- ▶ Intellectual property rights to geographical indications may be protected by request to terminate violation of rights and compensate the incurred damages

Current achievements

- ▶ Since the adoption of the new edition of the Law, Ukrainian associations of farmers [have registered](#) three Ukrainian geographical indications: Gutsul sheep bryndza, Gutsul cow bryndza, Melitopol merry. Ten indications are planned to be registered in 2021, including Carpathian honey, Kherson watermelon, Zakarpattia, Shabo, Bilhorod-Dnistrovskyi, Yalpuh vines and Bessarabian nut



2.5.5. Auxiliary sectors and supporting information

Regulatory gaps of HVA (1/3)

We have defined regulatory bottlenecks that need to be addressed to ease doing business in agriculture to make it investment attractive.

Lack of digitalization of auctions for obtaining land for lease

Selection of the potential lessee of water object and land plots conducting through land actions that are not holding in electronic form yet. Lack of the land's auction digitalization is time consuming and impacts transparency

Land auctions in respect of the right to lease take place only with the physical presence of bidders' representatives

It creates additional expenses and limits the investor's participation in the multiple auctions that may take place simultaneously

Transition to electronic auctions can improve investor's access to the lease of land and water objects land enhance the transparency of the tender procedures. As for a good example, similar electronic mechanisms have been already introduced in respect of small privatization and obtaining permits for subsoil use

Draft Law No. 2195 dated 1 October 2019 (adopted in the first reading on 14 November 2019 and waiting for the second reading) aims to introduce an electronic form of land auctions for state-owned and municipal lands (including lands beneath water objects). The Committee on EU Integration of the Parliament concluded that the provisions of the Draft Law are in line with Ukraine's EU integration obligations

Ease of access to the land lease can contribute to the investment attractiveness of the Ukrainian agricultural sector

Underregulated issues on the lease of state and municipal agricultural land

In Ukraine, foreign individuals and entities can not purchase land plots, only a lease option is available. Lease conditions for state and municipal plots are limited by the template agreement, which does not provide special arrangements on land improvements that discourage investments in high value agriculture

Investments in HVA agriculture usually involve long or middle-term commitments such as improvement of characteristics of the soil, changes of terrain and/or placement of engineering infrastructure or perennial plantings that are land improvements. Law on Land Lease stipulates that after the termination of the land lease, agreement the investor can have reimbursement for such improvements if prior lessor's written consent was obtained. However, the Law and CMU regulation do not establish the precise procedure for such reimbursement

In certain jurisdictions (for instance, the Australian state of New South Wales), the lessee has a right to fair compensation in respect of land improvements carried out without prior consent of the lessor but listed in law (e.g., drainage, fertilization and liming)

The above issues can be potentially addressed by the introduction to the template agreement on state or municipal land lease clear mechanism for reimbursement of costs invested in land improvements

Lack of the mechanism of obtaining land

Privatization of farm complex stipulates that solely land plots required for maintenance and use of the privatized object may be obtained without auctions/ At the same time surrounding agriculture land plots as well as land plots in case of shares privatisation can be obtained only under the competitive procedures

Privatization of state and municipal enterprises does not provide for the succession of the right of permanent use of land plots (Article 28 of the [Law on Privatization](#))

Thus, in the case of privatization of shares (stakes), the right of permanent use of land plots of farm complex is not subject to succession. Also, there is no procedure of succession of shares (stakes)

At the same time, in case of lease or concession of single property complex or real estate located on state and municipal land plots, these lands are not subject to the land auction (Article 134 of the [Land Code](#))

The rules of obtaining a lease on land after the privatization of agriculture facilities or share of the agricultural enterprise may be revised and streamlined to attract investments by effective privatization of agricultural businesses



2.5.5. Auxiliary sectors and supporting information

Regulatory gaps of HVA (2/3)

Need for further improvement of legislation on land consolidation

Historically, there is a problem of land defragmentation (a division of fields into dozens of plots owned by private individuals). This issue leads to the situation when agricultural producers practically cannot lease the whole amount of land massive (field) that complicates the use of advanced agricultural technologies such as treatment of fields with chemicals using aviation, irrigation, etc.

Existing regulation does not allow agricultural producers to address the aforementioned issue by the provision of exchange mechanism for leased land plots with requirements that are hard to comply with, in particular:

It is required to use at least 75% of massive of land to get access to exchange procedures

Such usage should be evidenced through the sophisticated procedure

Only plots from the same land massive may be offered exchanged

Both plots should have the same value or if the difference should not exceed 10%

Entering sublease agreements under the exchange procedure requires permission from the lessor

Development of respective exchange mechanism to land consolidation will enable efficient use of advanced farming technologies, conduct organic production that can be beneficial for investors

Complicated access to irrigation systems

The Ukrainian irrigation system is of high importance for southern Ukraine areas, which suffer from insufficient hydration. At the same time, it is outdated and needs modernization

The key problem is related to the state-owned interfarm irrigation systems that provide water transfer from the irrigation facilities of state importance (canals) sourced by the major rivers to the internal irrigation systems managed at the local level. The budget funding is insufficient and cannot cover the required modernization costs. This creates a need for private investment

The most likely potential investors are local farmers who will mostly benefit from the increase of yield in case of modernization of irrigation systems

However, the legislation does not contain any measures that could possibly secure private investments into interfarm irrigation systems. For instance, interfarm systems can be only in ownership of the state (Article 11 of the Law of Ukraine "On Melioration"). Moreover, according to Article 24 of the mentioned Law, interfarm systems can only be used by state-owned and municipal entities

Considering the importance of access to the irrigation system for agriculture, in order to attract investments the Government may develop effective mechanisms of funding and construction of irrigation systems (including respective PPP options and establish water use organizations) to meet state and investors needs

Lack of digitalization in the SPS sphere (services and reporting)

The majority of administrative services provided by the Food Safety Service in the SPS sphere is provided only in paper form. Submission of documents and obtaining veterinary, phytosanitary and quarantine certificates that are extremely important for customs clearance of agricultural production in electronic form may lead to the reduction of transaction costs and time needed for such procedures

SPS sphere is highly important for agricultural exporters, but there is no electronic form to apply for obtaining veterinary phytosanitary and quarantine certificates

Also, there is no electronic exchange of SPS documents with respective authorities of other countries, which creates additional time delays for exporters. In particular, Ukraine does not take part in the international systems of exchange of veterinary, sanitary and phytosanitary documents and data such as ePhyto Hub and TRACES. Accession to such systems may reduce time delays for exporters since the Food Safety Service will send veterinary, phytosanitary and quarantine certificates via electronic means at once to the competent authority of the recipient country

Development of electronic form of application and electronic certification and integration with international SPS systems (ePhyto Hub and TRACES) can ease of doing business and provide investors with transparent SPS administrative services



2.5.5. Auxiliary sectors and supporting information

Regulatory gaps of HVA (3/3)

Lack of prevention of water pollution / Inefficient prevention of water pollution

Water pollution is one of the main problems of the agricultural industry. It causes deaths and diseases of aquatic organisms, pollutes organic facilities and brings damages to businesses. Ukrainian law sets different measures to prevent such pollutions, but still, not all of them are enforceable

Ukrainian laws set out the limits for the discharge of pollutants and establish the [list](#) of pollutant substances, the discharge of which is subject to state control and regulation. Water objects are surrounded by water protection areas prohibiting the use of any toxic agrochemicals (Articles 88 and 89 of the [Water Code of Ukraine](#)). State control over compliance with water protection requirements is carried out by [the State Environmental Inspectorate of Ukraine](#)

The liability for water pollution may include:

- ▶ [Administrative fines](#) (up to USD 5)
- ▶ Temporary [suspension or termination of business activity](#) by the State Environmental Inspectorate of Ukraine in case of significant violations (this authority is not efficiently enforceable)
- ▶ [Criminal liability](#) for pollution of inland water objects and seas that harmed or endangered human lives and health or environment (fines up to USD 3,000 or imprisonment for up to five years)

Based on publicly available [information](#), we understand there are numerous instances of violations in this area, which implies a lack of preventive force of the current framework for liability for water pollution

To protect investors in aquaculture, organic business and the environmental ecosystem, it is advisable to develop the respective mechanism of preventive measures and enforcement of adequate liability for water pollution

Insufficient protection of bees from agrochemicals

Ukrainian beekeepers often suffer significant losses from the use of agrochemicals. Ukrainian beekeepers' community even [applied](#) to the Government to take measures to protect bees from the application of agrochemicals causing their diseases and deaths.

Ukrainian legal framework has certain gaps in the protection of bees:

Inefficient procedure for notifying the beekeepers on use of agrochemicals

The Law on Beekeeping provides for farmers' obligation to notify all beekeepers within a three km area around the place about the usage of agrochemicals three days prior to such via through the media. This procedure is unrealistic due to the current state of development of local media in rural communities and the lack of digitalization of the notification procedure

Violation of the rules of use of agrochemicals, including failing to notify beekeepers, leads to the imposition of a fine by the Food Safety Service. The amount of fine is set out in Article 83 of the [Code of Ukraine on Administrative Offences](#) at UAH 170 (approx. USD 6.1). Such amount is insufficient to prevent farmers from committing violations

No limits the use of agrochemicals toxic for bees

Ukrainian legislation does not provide for any limitations of the use of certain types of agrochemicals as the EU has a restriction for the use of extremely toxic for bees agrochemicals such as thiamethoxam or imidacloprid aimed to protect honey bees

Setting up an efficient preventive mechanism of bees intoxication by agrochemicals and restriction of use harmful ones can contribute to the development and investment attractiveness of the beekeeping business

2.5.5. Auxiliary sectors and supporting information

With some exceptions, Ukrainian HVA sub-sectors have low involvement in international supply chains (1/4)

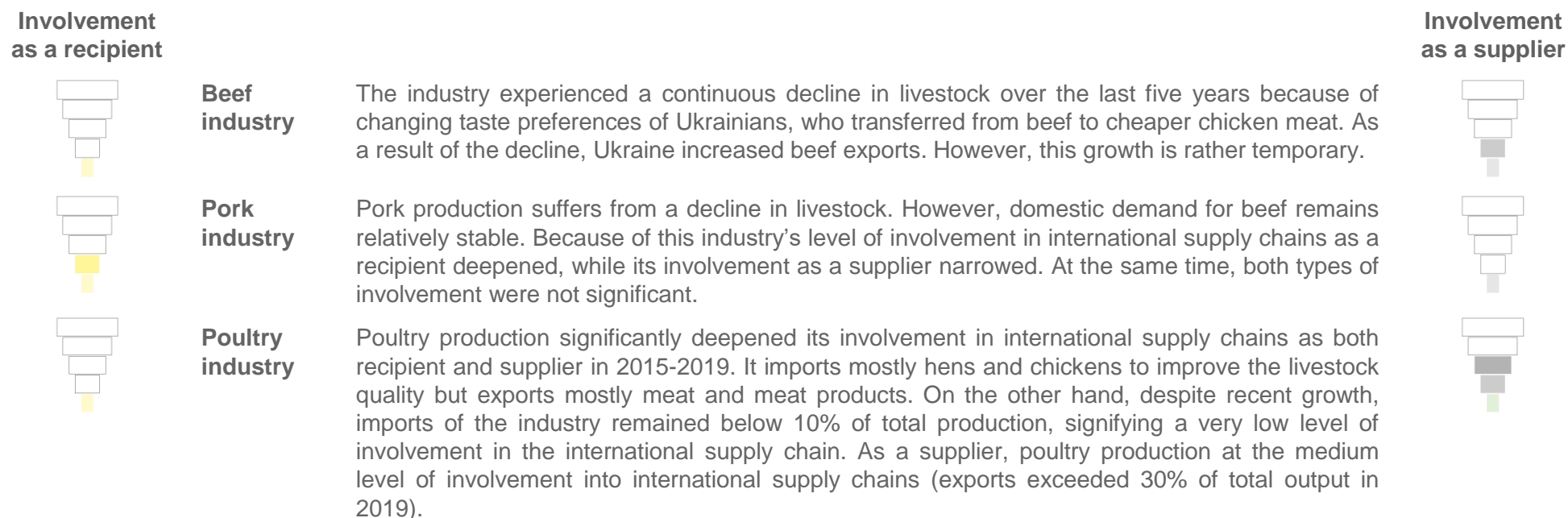
Level of sector involvement in international supply chains

HVA sector has significant distinctions in terms of supply chain involvement as compared to the other sectors (e.g., manufacturing). With the limited exception, the number of stages in the HVA sector is lower than in the other sectors and the raw materials are harder to transport for long distances due to their organic nature (threat of spoilage). Our approach for assessing the involvement of certain sub-sectors of HVA was based on the assessment of the level of import/export in this sub-sector relative to the total consumption/production in the sub-sector. Sub-sectors with high relative levels of import/export are considered as the ones with high involvement in the international supply chains.

The involvement of Ukrainian HVA agricultural production into international supply chains is below its potential level. Economic and political shocks were the major reason for that. The latest shock, conflict with Russia, forced Ukraine to reformat its foreign trade in general and foreign trade in HVA agricultural products in particular.

Meat and meat products

Export of meat and meat products almost doubled from 2015 to 2019 to 487 thousand tons, while import increased by 65.2% to 261 thousand tons. However, a more in-depth analysis reveals a more diverse picture:





2.5.5. Auxiliary sectors and supporting information

With some exceptions, Ukrainian HVA sub-sectors have low involvement in international supply chains (2/4)

Milk and dairy products

Involvement as a recipient



The decrease of the cattle livestock in Ukraine leads to lower output of raw milk. Note that the decrease of the livestock is partially offset by the utilization of breeds of cows with higher milk productivity by medium and large farms. Note that only around 42% of produced milk undergoes further processing, which limits the production and export of milk products. After a brief increase in 2017 due to growth in world milk prices, Ukrainian milk exports returned to the downwards trend. In 2019, Ukrainian milk and dairy exports amounted to slightly over 6% of total production, indicating very low involvement in international supply chains as a supplier. Ukraine exports mainly instant skimmed milk powder, butter and spreads. Similarly, the Ukrainian milk and dairy industry has a very low level of involvement in international supply chains. Its imports of milk and dairy products (mostly different types of cheese and fermented dairy foods) reached just around 3.5% of total milk and dairy output despite continuous growth over the last five years.

Involvement as a supplier



Eggs

Involvement as a recipient



Ukrainian egg production steadily deepened its involvement in international supply chains as a supplier since 2016. In 2019, Ukraine exported more than 20% of produced eggs and egg products (mostly egg mixtures). Thus, the level of involvement in international supply chains as a supplier is low but has a good potential for growth, taking into account the recent lifting of a ban to export eggs and chicken meat to the EU. As a recipient, the Ukrainian egg industry has a very low level of involvement in international supply chains, as imports of eggs and egg products amounted to 0.5% of total egg production in 2019.

Involvement as a supplier



Sugar

Involvement as a recipient



The share of exports was around 30% of domestic production in 2017. Ukrainian exports and production dropped significantly over the next two years due to a supply glut in the world market and increased competition. In 2019, sugar exports amounted to 16.6% of total output, indicating low involvement of the industry into international supply chains as a supplier. At the same time, imports did not exceed 1% of total output since 2012, meaning that involvement of the industry into international supply chains as a recipient is a very low level.

Involvement as a supplier





2.5.5. Auxiliary sectors and supporting information

With some exceptions, Ukrainian HVA sub-sectors have low involvement in international supply chains (3/4)

Horticultural products

Involvement
as a recipient



Vegetables

Domestic vegetable production has enough nominal potential to more than fully cover domestic demand. At the same time, there is a continuous upwards trend of vegetable imports. However, the record high imports of vegetables in 2019 amounted to 3.1% of total domestic output. Exports of vegetables never exceeded 5% of total domestic output (2.8% in 2019). Therefore, the involvement of the subsector in international supply chains as a recipient and supplier is very low.



Fruits, berries and nuts

The fruits and berries subsector of Ukraine has enough nominal capacity to satisfy domestic demand. At the same time, there is a strong trend of increase in imports since 2014 mainly due to the consumers' preferences for fruits that are not cultivated in Ukraine, e.g., bananas, oranges, etc. which resulted in the 42.3% share of import in domestic production, that represents a high level of involvement of the subsector into international supply chains as a recipient. There is also an upwards trend in exports since 2016. In 2019, exports of fruits and berries amounted to 17.4% of domestic output. Thus, the involvement of the subsector in international supply chains as a supplier is rather low.

Involvement
as a supplier



Ethanol

Involvement
as a recipient



Ukraine has experienced a continuous decline in ethanol production since 2013. The level of involvement of the Ukrainian ethanol industry in international supply chains as a recipient is a very low level because of almost zero imports. Around 14% of ethanol output was exported in 2019, meaning that as a supplier ethanol industry is involved in international supply chains at a low level.

Involvement
as a supplier



Biofuels

Involvement
as a recipient



There is almost no biofuel production in Ukraine. The introduction of excise taxes on biofuels at the level of excise for conventional fuels severely decreased the attractiveness of the industry. At the same time, there is no legislation stimulating the use of biofuels. Therefore, the consumption of biofuel is below 1% of total fuel consumption. Therefore, the Ukrainian biofuel industry has almost no involvement in international supply chains as both recipient and supplier.

Involvement
as a supplier





2.5.5. Auxiliary sectors and supporting information

With some exceptions, Ukrainian HVA sub-sectors have low involvement in international supply chains (4/4)

Bread, bakery and flour

Involvement as a recipient



Traditionally, bread, bakery and flour production was oriented on the domestic consumer in Ukraine. The share of exports in domestic output was below 10% in 2019, while imports were more than two times lower than exports. Therefore, the level of involvement of the industry in international supply chains as both recipient and supplier is very low.

Involvement as a supplier



Animal feed

Involvement as a recipient



Animal feed production is oriented on the domestic market in Ukraine. Its output is on a downward trend for some time in the country. Both exports and imports are insignificant (both were below 1% of total output over the first nine months of 2019). Thus, the involvement of the industry in international supply chains as both recipient and supplier is at very low level.

Involvement as a supplier



Wine

Involvement as a recipient



Imports of wine posted high growth over the last five years, while exports were in the downward trend mainly due to the increase of the income levels. In 2019, wine exports dropped more than five times as compared to 2018. The share of exports in total output fell below 10%, indicating very low involvement in international supply chains as a supplier. Imports, in turn, increased to record volumes in 2019, reaching more than 60% of domestic output. Thus, the level of involvement of the wine industry in international supply chains as the recipient is very high.

Involvement as a supplier



2.5.6. General regulation of HVA



2.5.6. General regulation of HVA

International treaties 1/3

Association Agreement between the European Union and Ukraine (ratified on 2014) and Plan of Measures for Implementation of the Association Agreement approved by Resolution of the CMU No. 1106 dated 25 October 2017

- ▶ Parties should cooperate to promote agricultural and rural development, in particular through a gradual approximation of policies and legislation
- ▶ The CMU should align regulations regarding agriculture with the respective EU legislation listed in Annex XXXVIII Agriculture And Rural Development to Charter 17 of Association Agreement:
 - ▶ **Quality policy** (on geographical indications and designations of origin for agricultural products and foodstuffs, which was repealed by Directives on quality schemes for agricultural products and foodstuffs and on the establishment of the Union symbols for protected designations of origin, protected geographical indications and traditional specialties guaranteed) – certain provisions were implemented in the Law on Protection of Rights to Geographical Indications and may be further implemented under the Draft Law on Peculiarities of Legal Protection of Geographical Indications, Traditional Guaranteed Features, Protection of Rights and Application of Quality Schemes for Agricultural Products and Food Products
 - ▶ **Organic farming** (on organic production and labeling of organic products) – partially implemented in the Law on the Basic Principles and Requirements for Organic Production, Circulation and labeling of Organic Products, as well as in subsidiary regulations (Procedure for Organic Production and Circulation of Organic Products and List of Substances Allowed to Be Used in the Process of Organic Production)
 - ▶ **Genetically modified crops** (on the co-existence of genetically modified crops with conventional and organic farming)
 - ▶ **Biodiversity** (on the conservation, characterisation, collection and utilisation of genetic resources in agriculture)
- ▶ **Marketing standards for live animals and animal products** (on the system for identification and registration of bovine animals and regarding the labelling of beef and beef products, on honey, etc.) – partially implemented in the Law of Ukraine "On Identification and Registration of Animals" and subsidiary regulations (in particular, Procedure for Identification and Registration of Bovine Animals approved by Order of the Ministry of Agrarian Policy and Food of Ukraine No. 642 dated 4 December 2017, Requirements for Honey approved by Order of the Ministry of Agrarian Policy and Food of Ukraine No. 330 dated 19 June 2019, etc.)
- ▶ Also, the following EU best practices and standards were implemented:
 - ▶ The organisation of official control on products of animal origin intended for human consumption was implemented – in the Law of Ukraine "On State Control over Observance of Legislation on Food, Feed, Animal By-products, Animal Health and Well-being"
 - ▶ Requirements for feed hygiene and the placing on the market and use of feed – in the Law of Ukraine "On Safety and Hygiene of Feed"
 - ▶ General principles and requirements of food legislation, establishing the European Food Safety Authority and laying down the procedures in the food safety area, – in the Law of Ukraine "On the Basic Principles and Requirements for Food Safety and Quality"
- ▶ Provides for approximation in the Sanitary and Phytosanitary (SPS) area and in the area of organic production and animal husbandry. It also provides for the implementation of EU Regulation No 853/2004 of 29 April 2004 on the hygiene of foodstuff introducing HACCP-based measures and procedures. These rules say that food safety is a result of several factors: legislation should lay down minimum hygiene requirements; official controls should be in place to check food business operators' compliance, food business operators should establish and operate food safety programs and procedures based on the HACCP principles
- ▶ Is aimed at the promotion of the quality policy of agricultural products in the areas of standardization, production requirements and quality schemes

2.5.6. General regulation of HVA

International treaties 2/3

- ▶ Parties commit to progressively establish a free trade area during a transitional period within 10 years from the date the deep and comprehensive free trade zone for specified categories of products enters into force
- ▶ Each Party should reduce or eliminate customs duties on originating goods of the other Party in accordance with the Schedules set out in Annex I-A ('Schedules') of the Association Agreement. The base rate of customs duties to which reductions are applied is specified in Annex I of the Association Agreement
- ▶ The Association Agreement says that in case a Party reduces its applied favoured nation customs duty rate, such duty rate should apply as a base rate if and for as long as it is lower than the customs duty rate calculated in accordance with that Party's Schedule
- ▶ **Tariff regime for Ukrainian export to EU.** Annex I-A provides zero-rate quotas for 40 categories of Ukrainian agri-food commodities exported to the EU, including poultry, eggs, pork, beef, milk and dairy products, crops, sugar, honey, vegetables, fruits starch, mushrooms, garlic, malt, ethanol, apple and grape juices
- ▶ Annex sets regular tariff rates for all goods that exceed quotas. Tariff rates are also set for other products
- ▶ Quotas may be reviewed based on mutual consent and interest. For example, quotas for poultry export were increased 2.5 times in 2019
- ▶ Annex provides for future increase of zero-rate quotas for 18 goods within 5 years from the date of application of the trade provisions of the Agreement (for example, a gradual increase in the tariff quota for grape and apple juices from 10,000 tons to 20,000 tons annually for 5 years)
- ▶ In addition, certain support quotas could be increased under the framework of additional trade preferences, for instance, EU Regulation No. 2017/1566 dated 2017 introduced additional zero-tariff quotas for Ukrainian agri-food imports
- ▶ Besides this, under the provisions of the Association Agreement (Article 29), the EU may reconsider trade conditions at Ukraine's request submitted 5 years from the date of application of the relevant provisions. Since the provisional application of the free trade regime between Ukraine and the EU began on 1 January 2016, Ukraine will be able to hold relevant consultations with the EU no earlier than 2021. As of 2020, the CMU is strongly determined to negotiate the increase in tariff quotas. The President of Ukraine recently stressed the need to hold discussions on expanding the free trade zone at the next meeting of the EU-Ukraine Association Council in February 2021
- ▶ Zero-rate quotas and tariff rates under the regime of provisional free trade area apply only to goods which origin from Ukraine or EU is evidenced pursuant to Protocol No. 1 to the AA (Article 26)
- ▶ Protocol No. 1 governs the procedure for determining the origin of goods for the use of preferences and sets the requirement to supplement Ukrainian goods exported to the EU with the EUR 1 certificate or declaration confirming Ukrainian origin of goods
- ▶ The Regional Convention on Pan-Euro-Mediterranean Preferential Rules of Origin (ratified by Law No. 2187-VIII dated 8 November 2017) is also applied to determine the origin of goods in accordance with the Council Decision of 26 March 2012. To apply for the preferential export duty to the EU, agricultural goods should have Ukrainian or EU origin, namely be raised (animals) or produced (meat, fish, dairy products, etc.) in Ukraine or the EU



2.5.6. General regulation of HVA

International treaties 3/3

International Plant Protection Convention of 1951 (ratified in 1997)

- ▶ Aims to prevent the spread of pests and promotes appropriate measures to control them
- ▶ Promotes international cooperation and harmonization
- ▶ Sets reasonable limitations on the use of phytosanitary measures
- ▶ Sets standards on pest risk analysis, requirements for the establishment of pest-free areas
- ▶ Establishes two bodies (the Secretariat and the Commission on Phytosanitary Measures) in charge of setting the International Standards for Phytosanitary Measures. Such standards are used as a basis for further development of national policies and coordination of efforts to combat the spread of plant pests

International Convention for the Protection of New Varieties of Plants of 1961 (ratified in 2006)

- ▶ Provides a specific form of intellectual property protection for new varieties of plants
- ▶ Defines criteria for new varieties, namely novelty, distinctness, uniformity, and stability
- ▶ Stipulates that another party must receive the breeder's permission before (i) producing or reproducing the protected variety, (ii) conditioning the variety for propagation purposes, and (iii) offering for sale, selling, marketing, importing, exporting or stocking the protected variety
- ▶ Defines the basic concepts of plant variety protection to be implemented in the national laws of the parties
- ▶ Specifies that protection should be granted for at least 20 years

Annexes to the Agreement establishing the World Trade Organization

The World Trade Organization's Agreement on Agriculture of 1994 (ratified in 2008)

- ▶ Provides guidelines for state policy in the areas of market access, state aid to domestic producers and export subsidies
- ▶ Restricts provision of state aid for domestic agricultural producers
- ▶ Bans non-tariff border measures
- ▶ Says that WTO members agree to "schedules" or lists of commitments that set limits on the tariffs they can apply and on the levels of domestic support and export subsidies
- ▶ The Mineconomy stated that the agreement does not limit reasonable state aid to the agriculture sector

The World Trade Organization's Agreement on the Application of Sanitary and Phytosanitary Measures of 1994 (ratified in 2008)

- ▶ Sets general restrictions on policies relating to food safety (bacterial contaminants, pesticides, inspection and labeling)
- ▶ Sets limitations in respect of sanitary and phytosanitary (SPS) measures that may affect international trade
- ▶ The parties should develop their own standards in the SPS area based on international standards

2.5.6. General regulation of HVA

General and dedicated sectoral laws 1/6

Land issues

Land Code of Ukraine No. 2768-III dated 25 October 2001

- ▶ Governs the relationships of Ukrainian and foreign individuals and legal entities, including state-owned companies, state and municipal authorities, and foreign states and international organizations in the area of ownership, use and disposition of land in Ukraine
- ▶ Establishes the scope of powers of state and municipal authorities in various land arrangements
- ▶ Defines the types of land plots and sets the rules for their usage (including restrictions and special regimes for using certain categories of land for commercial activities)
- ▶ Governs various administrative land procedures, including changing of land plot type, obtaining technical documents on the land plot, obtaining plots for use (for example, after the privatization of real estate), sets rules of tender procedures for sale or temporary use of state and municipal land plots
- ▶ Ownership title to agricultural land is not available for foreigners and foreign legal entities (Articles 81 and 82)
- ▶ Stipulates that irrigated lands cannot be leased for less than 10 years (Article 93)
- ▶ Foreign individuals and legal entities with foreign direct or indirect shareholders can not have property rights on the agricultural land. The moratorium also includes a ban on transferring the right to land allotment (share) into the charter capital of a business company.

Law of Ukraine "On Amendments to Certain Laws of Ukraine on the Conditions of Circulation of Agricultural Land" ("Land Market Law") No. 552-IX dated 31 March 2020

- ▶ Abolishes the previous 19-year moratorium on the sale of agricultural lands and gives a start to the land market in Ukraine from 1 July 2021

- ▶ Contains the following limitations:
 - ▶ Before 1 January 2024, private legal entities may not acquire agricultural land plots
 - ▶ Foreigners and corporations with foreign capital may not acquire agricultural land plots
 - ▶ Ukrainian citizens may own the total area of lands:
 - ▶ Until 1 January 2024 – 100 ha
 - ▶ After 1 January 2024 – 10,000 ha
- ▶ Has specific rules for banks:
 - ▶ Banks may solely act as pledgees of agricultural land plots and rights to them (lease, emphyteusis)
 - ▶ Prohibition to acquire agricultural land plots before 1 January 2024 does not apply to banks provided that they acquire agricultural land through foreclosure on mortgaged assets
 - ▶ Individuals may act as pledgers of land plots on loans obtained by private farms, small agricultural companies, agricultural cooperatives, as well as, under certain circumstances, on loans obtained by large and mid agricultural companies
 - ▶ Banks may act as collateral agents to secure the repayment of loans
- ▶ At the same time, the limitation regarding foreigners and corporations with foreign capital may be lifted by the referendum in the future. Regardless of the referendum results, the law prohibits obtaining title to agricultural land plots located less than 50 km from the state border of Ukraine by legal entities whose beneficial owners are not Ukrainian citizens
- ▶ Another issue may possibly arise from the decision of the Constitutional Court of Ukraine, which is currently considering a case about the constitutionality of the Land Market Law. If the law is declared unconstitutional, the law/its relevant provisions would be deemed invalid

2.5.6. General regulation of HVA

General and dedicated sectoral laws 2/6

Law on Land Lease No. 161-XIV dated 6 October 1998

- ▶ Contains the rules dealing with the land lease procedure, rights and obligations of lessors and lessees, protection of their rights
- ▶ Sets out the essential conditions of land lease agreements (e.g., object of lease, date of the lease agreement, rent fee), as well as the procedure for changing, terminating and prolongation of land lease agreements
- ▶ Defines the pre-emptive right of the lessee to lease the land plot
- ▶ The amount, conditions and terms of payment of rental fees are governed by the lease agreement (the threshold for lease payments for state and municipal land plots depends on the land tax rates)

Law of Ukraine "On Land Management" No. 858-IV dated 22 May 2002 governs procedural aspects of development and approval of land management documents

Law of Ukraine "On Melioration of Lands" No. 1389-XIV dated 14 January 2000

- ▶ Establishes state ownership over major irrigation infrastructure
- ▶ Divides Ukrainian irrigation system into state-owned major infrastructure (channels), interfarm systems owned by the state or local councils and internal systems that may be owned jointly by local councils or by legal entities and/or individuals
- ▶ Provides for the establishment of easements for using irrigation systems

Water Code of Ukraine No. 213/95-BP dated 6 June 1995

- ▶ Sets out the rules related to water objects and water infrastructure, water usage and water protection from pollution, clogging and depletion
- ▶ Sets out the key rules of the procedure for leasing the water objects
- ▶ Says that foreign individuals and legal entities may be the water users in Ukraine. Sets a requirement to obtain a permit for special use of water resources for aquaculture
- ▶ Provides for key measures to protect water objects from pollution

Enablers for investors

Law of Ukraine "On Agricultural Cooperation" No. 819-IX dated 21 July 2020

- ▶ Sets out the key rules for the operation of agricultural cooperatives, features of formation and activity of agricultural cooperatives
- ▶ Provides for a possibility of legal entity's membership in the cooperative
- ▶ Abolished division on production and servicing cooperatives
- ▶ Both legal entities and individuals may cooperate in agricultural production, transporting, storage and processing of the agricultural goods as well as providing related services such as melioration, assistance in pedigree animal breeding veterinary practice, consulting, recordkeeping)
- ▶ Cooperatives under certain conditions may benefit from the legal status of the non-profitable entity
- ▶ Sets the mandatory requirement for all existing agricultural cooperatives to reregister within three years after the Law's entry into force

Law of Ukraine "On Agrarian Receipts" No. 5479-VI dated 6 November 2012

- ▶ Establishes a special type of security – an agrarian bond ('crop receipt') that entitles its holder to demand harvested crops or pay money from its issuer in case of non-performance of a secured obligation
- ▶ Provides two types of agrarian receipts – commodity and financial ones. Under commodity receipt, the debtor should transfer harvested agricultural goods. Under financial receipt, the debtor undertakes to pay a sum of money, taking into account the prices for agricultural products
- ▶ Requires notarization of the agrarian receipt
- ▶ Provides for mandatory registration of agrarian bond in the State Register of Agrarian Bonds and State Register of Encumbrances on Movable Property
- ▶ Commodity agricultural receipts are discharged by supplying harvested crops on agreed terms (or transferring the warehousing documents). Financial agricultural receipts are executed by transfer of funds to the creditor's bank account
- ▶ After discharge, the holder makes the inscription on the execution of obligations and returns it to the issuer. Then the the issuer registers receipt's discharge in the respective registers
- ▶ Reform of agrarian receipts was launched with the support of IFC
- ▶ According to the IFC's data, 1535 agricultural receipts were issued in 2019

2.5.6. General regulation of HVA

General and dedicated sectoral laws 3/6

Tax Code of Ukraine No. 2755-VI dated 2 December 2010

- ▶ Agricultural producers with at least 75% of which activity consist of agricultural production can pay unified tax (instead of CPT) based on the total area of used land and its category (Articles 291, 292-1 and 293)
- ▶ Has the rules for determining the payment of land rent and rent for the use of water resources (applicable in case of making the artificial water object)

State support for agriculture producers

Law of Ukraine "On State Support for Agriculture in Ukraine" No. 1877-IV dated 24 June 2004

- ▶ Sets out the key principles of state policy in the budget, credit, price, regulatory and other areas of public administration to stimulate agricultural production, development of the market and ensure food security
- ▶ Introduces state regulation of prices for certain types of agricultural products
- ▶ Says that the state may compensate 25% of the cost of agricultural equipment manufactured in Ukraine under a special government program and within financing limits provided by the state program
- ▶ Sets out the essential mandatory conditions for obtaining state support for insurance of agricultural products (e.g., requirements to objects of insurance). More specific requirements and conditions of state support for 2021 are to be established by the CMU
- ▶ Provides for the mechanisms for reducing the cost of loans and compensation for lease payments
- ▶ Provides for the budget dotation for animal husbandry calculated per animal
- ▶ Provides for reimbursement of costs for viticulture, horticulture and hop growing
- ▶ Detailed provisions on state support are set in the following regulations:
 - ▶ Procedure for Using the Funds Provided in the State Budget for State

Support of Development of Animal Husbandry and Processing of Agricultural Products approved by the CMU's Resolution No. 107 dated 7 February 2018 (state support of animal husbandry)

- ▶ Procedure for Using the Funds Provided in the State Budget for State Support for Partial Compensation of the Cost of Agricultural Machinery and Equipment of Domestic Production approved by the CMU's Resolution No. 130 dated 1 March 2017 (partial compensation of costs of agricultural machinery manufactured in Ukraine)
- ▶ Procedure for Using Funds Provided in the State Budget for Financial Support of Activities in the Agro-industrial Complex by Reducing the Cost of Loans approved by the CMU's Resolution No. 300 dated 29 April 2015 (reducing costs of loans)
- ▶ Procedure for Using Funds Provided in the State Budget for the Development of Viticulture, Horticulture and Hop Growing approved by the CMU's Resolution No. 587 dated 15 July 2005 (viticulture, horticulture and hop growing)
- ▶ Procedure for Using Funds Provided in the State Budget for Financial Support of Measures in the Agro-industrial Complex on the Terms of Financial Leasing approved by the CMU's Resolution No. 648 dated 28 July 2010 (compensation of lease payments)

Law of Ukraine "On Amendments to Certain Laws of Ukraine Concerning the Functioning of the State Agrarian Register and Improvement of State Support of Agricultural Producers" No. 985-IX dated 5 November 2020

- ▶ Establishes the State Agrarian Register as a state automated information system for information on agricultural producers and agricultural activities they carry out. The agricultural producer should register in order to have access to the state subsidies
- ▶ Provides agricultural producers engaged in aquaculture or goat breeding with access to state subsidies

2.5.6. General regulation of HVA

General and dedicated sectoral laws 4/6

Law of Ukraine "On Specifics of State-Supported Insurance of Agricultural Products" No. 4391-VI dated 9 February 2012

- ▶ Provides for subsidies for agricultural producers to partially reimburse insurance costs
- ▶ Sets out the essential mandatory conditions for obtaining state support for insurance of agricultural products (e.g., requirements to objects of insurance)
- ▶ Establishes mandatory terms of state-supported insurance agreement of agricultural products (e.g., the term of the agreement and termination conditions)
- ▶ Establishes requirements for insurers

IP issues

Law of Ukraine "On Legal Protection of Geographical Indications in Ukraine" No. 752-XIV dated 16 June 1999 allows associations of agri-food producers to register and protect local Ukrainian geographic indicators and provides a respective registration procedure

Law of Ukraine "On Protection of Rights to Inventions and Utility Models" No. 3687-XII dated 15 December 1993 provides for the legal protection of intellectual property rights to inventions (for 20 years) and utility modes (for 10 years), sets out regulations on the registration procedure, determines patentability requirements

General permit procedures

Law on the List of Business Permits No. 3392-VI dated 19 May 2011 has provisions for the veterinary documents (international veterinary certificates, veterinary certificates, veterinary statements), the phytosanitary certificate, the quarantine certificate, the exploitation permits

Law on Licensing of Business Activities No. 222-VIII dated 2 March 2015 mandates to obtain licenses for the veterinary practice, production of veterinary drugs and cultivation of narcotic plants and precursors

Law of Ukraine "On Environmental Impact Assessment" (No. 2059-VIII dated 23 May 2017) requires completion of the special environmental impact assessment procedures prior to engaging in the "planned activities" indicated in this law. The list of planned activities is quite broad and includes, among others:

- ▶ Development of facilities for the rearing of certain animals and for intensive rearing of poultry and pigs (in large quantities)
- ▶ Agricultural and forestry development, reclamation and land reclamation (in large areas)

- ▶ Development of facilities for industrial utilization of animal waste
- ▶ Intensive aquaculture with high performance
- ▶ Food industry activities (food processing, packaging and canning of animal and plant products in appropriate quantities)
- ▶ The analysis of whether the relevant activity qualifies as the planned activity and thus requires the environmental impact assessment may need to be carried out on a case by case basis

Plants

Law of Ukraine "On Plant Quarantine" No. 3348-XII dated 30 June 1993

- ▶ Sets out the system and measures of state control over any plant, product of plant origin, place of storage, packaging, transport, containers, soil and any other organisms, objects or materials capable of transmitting or spreading regulated pests to prevent pests of plants
- ▶ Defines SPS control procedures over imported objects that are subject to control
- ▶ Requires to obtain quarantine certificate to evidence the safety of objects that are subject to control while transporting inside or outside of quarantine zone and defines the respective procedure (Article 29)
- ▶ Requires to obtain a phytosanitary certificate for exported objects that are subject to control (Article 46)
- ▶ Provides that:
 - ▶ The quarantine certificates are issued by the state phytosanitary inspectors based on the results of the prior phytosanitary examination within 14 days after application and are valid within another 14 days
 - ▶ The phytosanitary certificates are issued by the state phytosanitary inspectors based on the results of the prior phytosanitary examination within 8 hours after obtaining its results. The certificate is also valid within 14 days

Law of Ukraine "On Pesticides and Agrochemicals" No. 86/95-BP dated 2 March 1995

- ▶ Sets the requirements for agrochemicals to be used in Ukraine
- ▶ Determines the key rules of the procedure for registration of agrochemicals
- ▶ Sets restrictions on the use of agrochemicals in the production of raw materials for baby food



2.5.6. General regulation of HVA

General and dedicated sectoral laws 5/6

Law of Ukraine "On Protection of Rights to Plant Varieties" No. 3116-XII dated 21 April 1993

- ▶ Provides legal protection for intellectual property rights to plant varieties
- ▶ Requires registration of plant variety to be cultivated and then marketed in Ukraine

Law of Ukraine "On Seeds and Planting Stock" No. 411-IV dated 26 December 2002

- ▶ Provides for registration of seeds producers
- ▶ Sets the requirements for certification of seeds

Animal husbandry

Law of Ukraine "On Veterinary Medicine" No. 2498-XII dated 25 June 1992

- ▶ Sets the key rules for veterinary control and supervision
- ▶ Governs requirements, limitation and procedures in respect of veterinary measures
- ▶ Provides for mandatory registration of domestic animals
- ▶ Requires to obtain a veterinary certificate for export of goods of animal origin
- ▶ Introduces the registration requirement for feed additives

Law of Ukraine "on Animal Identification and Registration" No. 1445-VI dated 4 June 2009 establishes a registration and identification requirement in respect of cattle, horses, pigs, sheep, goats

Law of Ukraine "On Pedigree Breeding in Animal Husbandry" No. 3691-XII dated 15 December 1993

- ▶ Establishes a system of selection in animal husbandry
- ▶ Sets registration requirements for subjects of pedigree animal husbandry and pedigree animals
- ▶ Requires to keep records in respect of activities in pedigree animal husbandry

Law of Ukraine "on Beekeeping" No. 1492-III dated 22 February 2000

- ▶ Provides certain measures aimed at the protection of bees, including mandatory notifications about the use of agrochemicals
- ▶ Provides for state aid for beekeepers

Law of Ukraine "On Aquaculture" No. 5293-VI dated 18 September 2012

- ▶ Sets out the key principles of state policy in aquaculture
- ▶ Provides for quarantine and veterinary restrictions for the use of alien species of aquatic organisms
- ▶ Sets limitation in respect of the use of alien species and varieties of aquatic organisms

Law of Ukraine "On Safety and Hygiene of Feed" No. 2264-VIII dated 21 December 2017

- ▶ Introduces HACCP-based standards in the industry
- ▶ Establishes feed producers' obligation to obtain a permit and to register their facilities and feed additives
- ▶ Sets requirements for producing, labelling, packaging, transporting and trading animal feed and hygiene standards for feed, water and facilities where animals are kept

Law of Ukraine "On Amendments to the Final Provisions of the Law of Ukraine "On Feed Safety and Hygiene" in Order to Stabilize the Feed Market" No. 1033-IX dated 2 December 2020 provisionally allows the use of feed additives in the production of feed, as well as the import into the customs territory of Ukraine and the circulation of feed additives and feeds made of them if such feed additives are registered (permitted) in the EU

Animal waste management

Law of Ukraine "On Animal By-Products not Intended for Human Consumption" No. 287-VIII dated 7 April 2015

- ▶ Applies to wastes consisting of parts of bodies of both healthy and ill dead animals and certain other raw materials and products of animal origin (eggs, feathers, feed of animal origin)
- ▶ Divides such wastes into three groups depending on their safety
- ▶ Sets mandatory methods of treatment for each group of wastes (recycling, limited recycling or removal) and high administrative fines for violation thereof
- ▶ Obliges operators to develop HACCP-based procedures (Articles 20 and 23)
- ▶ Introduces traceability requirement for animal by-products (Article 22)
- ▶ Requires to register facilities dealing with processing of animal waste

Genetically modified organisms

Law of Ukraine "On State Biosafety System for Creating, Testing, Transportation and Use of Genetically Modified Organisms" No. 1103-V dated 31 May 2007

- ▶ Provides that genetically modified organisms (GMOs) used in the open system (i.e., in the environment) must meet the requirements of biological and genetic safety
- ▶ GMO intended for cultivation or breeding are subject to the prior state sanitary and epidemiologic examination and state registration
- ▶ Stipulates that the register should include data about varieties of agricultural plants and animal breeds created on the basis of GMOs, GMO food and feed sources
- ▶ Registration of GMOs is valid for five years

2.5.6. General regulation of HVA

General and dedicated sectoral laws 6/6

Food production

Law of Ukraine "On Basic Principles and Requirements for Food Safety and Quality" No. 771/97-BP dated 23 December 1997

- ▶ Governs relationships between state authorities, food market operators and consumers
- ▶ Determines the procedure for ensuring safety and certain quality indicators of food products produced, traded, imported (shipped) into and/or exported (shipped out) from the customs territory of Ukraine
- ▶ Requires to register involved facilities and acquire exploitation permits for them
- ▶ Sets requirements for certain indicators of food quality and sanitary measures
- ▶ Introduces the Hazard Analysis and Critical Control Points (HACCP) standards to agriculture, food processing and catering
- ▶ Stipulates that SPS regulations in respect of food are subject to review in case of receipt of new scientific data or comments from the trading partner

Fundamentals of the Legislation of Ukraine on Healthcare No. 2801-XII dated 19 November 1992 say that Ukraine provides children under the age of three with quality baby formulas and other baby food products made from environmentally friendly raw materials

Law of Ukraine "On Baby Food" No. 142-V dated 14 September 2006

- ▶ Sets basic requirements for food for children and infants
- ▶ Requires that the majority of raw materials to be used as components of baby food are cultivated in special agricultural zones with the better environmental situation

Law of Ukraine "On the Basic Principles and Requirements for Organic Production, Circulation and labelling of Organic Products" No. 2496-VIII dated 10 July 2018

- ▶ Defines the structure and principles of the Ukrainian organic certification system
- ▶ Sets out basic requirements for organic production

- ▶ Determines the rules of organic labelling

Law of Ukraine "On Information for Consumers on Food Products" No. 2639-VIII dated 6 December 2018

- ▶ Sets the requirements for food labeling. These include:
 - ▶ Name of the food product
 - ▶ Ingredients and their quantity (for certain ingredients) and substances that may cause allergies or intolerances
 - ▶ Net quantity in defined units of measurement
 - ▶ The date of durability and any special conditions for use and storage
 - ▶ Nutrition declaration (energy, fat, saturated fat, carbohydrates, sugar, protein and salt)
 - ▶ Name and address of operator (or importer) and country of origin
 - ▶ Instructions for use (if needed)
 - ▶ Actual alcoholic strength by volume (for beverages with alcoholic strength higher than 1.2%)
 - ▶ Use of genetically modified organisms (if applicable)
- ▶ Food label should be prepared in Ukrainian
- ▶ Harmonizes Ukrainian legislation with [Regulation \(EU\) No. 1169/2011 on the Provision of Food Information to Consumers](#)

Law of Ukraine "On State Control over Observance of Legislation on Food, Feed, Animal By-products, Animal Health and Well-being" No. 2042-VIII dated 18 April 2017

- ▶ Defines the legal and organizational principles and procedural rules for state control over compliance with the legislation on food, animal feed, animal health and welfare, as well as legislation on byproducts of animal origin during the import (shipment) of such byproducts to the customs territory of Ukraine
- ▶ Establishes the scope of powers of [the State Service of Ukraine on Food Safety and Consumer Protection](#) ([Resolution of the CMU No. 667 dated 2 September 2015](#))

2.5.6. General regulation of HVA

Strategic documents and legislative initiatives 1/5

Comprehensive Strategy for Implementation of Chapter IV (Sanitary and Phytosanitary Measures) of Section IV “Trade and Trade-Related Matters” of the Association Agreement approved by Decree of the CMU No. 228-p dated 24 February 2016

- ▶ Provides a plan for implementation of EU regulations in the area of sanitary and phytosanitary measures specified in annexes to the Association Agreement:
 - ▶ Basic principles and requirements for food and feed safety
 - ▶ State control in the area of sanitary and phytosanitary measures
 - ▶ Labeling
 - ▶ Specific requirements for food products of animal origin
 - ▶ Rules for ensuring the health of animals
 - ▶ Regulations in respect of seeds
 - ▶ Measures to combat specific animal diseases and pests
 - ▶ Regulations in respect of genetically modified organisms
- ▶ Although the latest deadlines for implementation stipulated in the Strategy are set for 2020, the current status of its implementation is only 55% ([source](#)) and the progress made during 2020 is only 9%

Strategy to Promote Private Investment in Agriculture until 2023 approved by Decree of the CMU No. 595-p dated 5 July 2019 aims to:

- ▶ Improve the system of state control over food safety
- ▶ Create favourable conditions for investing in market infrastructure and logistics
- ▶ Strengthen the protection of land ownership, transparency in the use of state-owned agricultural lands
- ▶ Improve access to factors of production and financial instruments for all agricultural producers
- ▶ Improve current state of financial, environmental and innovation risk

management in agriculture

Irrigation and Drainage Strategy of Ukraine until 2030 approved by Decree of the CMU No. 688-p dated 14 August 2019 provides for:

- ▶ Institutional reform of the management of irrigation infrastructure
- ▶ Transferring certain functions in irrigation to organizations of water users
- ▶ Modernization of irrigation infrastructure
- ▶ Investment promotion in the irrigation sector

National Waste Management Strategy in Ukraine until 2030 approved by Decree of the CMU No. 820-p dated 8 November 2017

- ▶ Admits problems existing in the area of agriculture waste management
- ▶ Promotes further processing of wastes of animal origin instead of disposal
- ▶ Provides for the development of an economic mechanism for the collection and transportation of plant waste suitable for the production of animal feed
- ▶ Provides for the introduction of economic instruments to stimulate the use of by-products of agricultural waste of animal origin
- ▶ Sets the goal to attract private investment for modernization and creation of new facilities in the agricultural sector in the area of management of waste of animal origin

Draft strategic and policy documents

Draft Strategy for Support of the Agricultural and Industrial Complex for 2021-2023 (presented by the Mineconomy to the Committee on Agricultural and Land Policy of the Parliament in September 2020) provides for 7 main state support programs, in particular:

- ▶ Financial state support (loans and insurance aid)
- ▶ Partial compensation of the cost of agricultural equipment
- ▶ Support for the production of niche crops, small-scale farming, horticulture, viticulture, hop growing, potato farming and livestock husbandry

2.5.6. General regulation of HVA

Strategic documents and legislative initiatives 2/5

EU's Green Deal (the official policy initiative enacted on 1 December 2019)

- ▶ Aims to reach climate-neutrality until 2050
- ▶ Provides for the transition to organic and less invasive agriculture and cutting down on the use of agrochemicals, development of agroecology and agroforestry
- ▶ The CMU declared its intention to participate in the Green Deal. Priority areas for Ukraine include, in particular, the development of sustainable agriculture. Also, the CMU plans to develop a roadmap and intends to set up a subcommittee or a separate body under the Council of Europe
- ▶ On 22 December 2020, the Parliament's Committee on Ecological Policy and Environment Management held the hearing on which different governmental bodies one more time emphasized the need for cooperation with the EU in respect of the EU's Green Deal and presented their view on Ukraine's priorities in this field, in particular:
 - ▶ Ukraine should develop its standards of animal well-being
 - ▶ Ukraine should take any necessary measure to ensure that Ukrainian goods exported to be exported into the EU in the future will not be subject to the planned carbon border tax
 - ▶ Ukraine should reform the existing carbon dioxide tax, introduce a system of trading carbon quotas (which may possibly lead to the development of the sector of carbon sequestration)
 - ▶ Ukraine should ensure access of its residents to the financial mechanisms of the EU's Green Deal

Provisional Special Commission of the Parliament

Ukrainian Parliament has created a special commission for investor protection by Resolution No. 683-IX dated 5 June 2020. The commission is tasked with developing investor-oriented laws and overseeing the treatment of investors by the Ukrainian law enforcement system. The commission has recently succeeded in protecting the interests of baby food producer LLC "Ekonia" from illegal pressure of law enforcement authorities

Prohibition of chlorpyrifos & chlorpyrifos-methyl

As a reaction to the prohibition of chlorpyrifos and chlorpyrifos-methyl in the EU from 31 January 2020, the special governmental commission recommended to the Ministry of Health of Ukraine to review the norms for the permissible content of these residues in agricultural goods

Draft Laws

Draft Law "On Amendments to the Land Code of Ukraine and Other Legislation on Improving the Management and Deregulation System in the Area of Land Relations" No. 2194 dated 1 October 2019 (was adopted in the first reading on 4 November 2019 and is being prepared for the repeated second reading in the Parliament) abolishes burdensome procedures of agrochemical passportization and state examination of land management documentation. Provides the local government authorities with the mandate to change the designated purpose of private land plots and execute control and screening over the protection of lands. The Parliamentary Committee on Agrarian and Land Policy recommended adopting the Draft Law.

Draft Law "On Amendments to the Tax Code of Ukraine Concerning the Value Added Tax Rate on Transactions for Supply of Certain Types of Agricultural Products" No. 3656 dated 15 June 2020 (was adopted by the Parliament on 17 December 2020 but needed to be signed by the President of Ukraine) sets the value added tax rate at 14% on operations on supply in the customs territory of Ukraine and import to the customs territory of Ukraine of certain products (whole milk, live pigs and cattle, wheat, rye, barley, oats, corn, sugar beets, soybeans, rapeseeds, sunflower). At the same time, the Parliamentary Main Scientific and Expert Department observed that the Draft Law should comply with the Council Directive 2006/112/EC on the common system of value added tax, according to which reduced rates should apply to the supply of goods set out in its Annex III (in particular, to foodstuffs for consumption by humans and animals). Thus, reduced rates should apply to goods for direct consumption and not to commodity production, as indicated in the Draft Law. Consequently, the Department found that the Draft Law needs to be duly substantiated for compliance with that Directive

2.5.6. General regulation of HVA

Legislative initiatives 3/5

Draft Law "On Amendments to Certain Legislation Concerning the Sale of State and Municipal Land Plots or Rights to Them (Leases, Superficies, Emphyteusis) through Electronic Auctions" No. 2195 dated 1 October 2019 (was adopted in the first reading on 14 November 2019 and is being prepared for the second reading in the Parliament) introduces sale of land plots of state and municipal ownership or rights to them through electronic auctions in the electronic trading system. The Parliamentary Committee on Agrarian and Land Policy recommended adopting the Draft Law.

Draft Law "On Peculiarities of Legal Protection of Geographical Indications, Traditional Guaranteed Features, Protection of Rights and Application of Quality Schemes for Agricultural Products and Food Products" (published for public discussion at the Mineconomy's official website in October 2020)

Provides for further implementation of EU regulations on geographical indications, in particular:

- ▶ Introduces the concept of traditional guaranteed features and conditions for granting legal protection to them
- ▶ Clarifies the list of rights and obligations arising from the state registration of geographical indications and conditions for granting legal protection to a geographical indication for agricultural products and foodstuffs as well as the grounds for a refusal to grant such protection
- ▶ Updates the requirements for documents for state registration of geographical indications and traditional guaranteed features
- ▶ Establishes the procedure for approval of specifications and other documents required for state registration of geographical indication for agricultural products and foodstuffs, traditional guaranteed features
- ▶ Determines the requirements for technical conditions to be met by the product for which the geographical indication or traditional guaranteed feature is claimed
- ▶ Establishes the procedure for certification of product's compliance with the respective specification

Draft Law "On Partial Credit Guarantee Fund in Agriculture" No.3205-2 dated 25 May 2020 (is being considered by the Parliament) provides for the establishment of a special institution for SMEs (which use agricultural lands in volumes not exceeding 500 ha) by partially guaranteeing the fulfillment of obligations of such entities to financial institutions under loan agreements

Draft Law "On Amendments to the Tax Code of Ukraine and Certain Other Laws of Ukraine on Improving the Legal Regulation of Insurance of Agricultural Products with State Support" (published for public discussion at the Mineconomy's official website in October 2020) sets a slightly increased CPT rate of 3.5% (the current rate is 3%) in respect of profit obtained by insurers under the agreements on the insurance of agricultural products with state support. Budget funds received due to such an increase shall be used for the provision of state support of agricultural products. Provides a broader list of risks to be insured with state support

Draft Law "On Amendments to Certain Laws of Ukraine (on Simplification of Examination Procedures, Registration of Plant Varieties and Circulation of Seed)" No. 3680 dated 18 June 2020 (is being considered by the Parliament)

- ▶ Aims to harmonize legislation on the use of plant varieties with EU legislation and international practice
- ▶ Brings the terms of Ukrainian legislation in line with international conventions and existing EU regulations
- ▶ Clarifies and simplifies formalities during the registration procedure of the plant variety
- ▶ Introduces electronic forms of applications
- ▶ Simplifies the procedure of the final stage of variety registration
- ▶ Abolishes several provisions that complicate the procedure of examination of new plant varieties

2.5.6. General regulation of HVA

Legislative initiatives 4/5

Draft Law "On Amendments to Certain Laws of Ukraine Concerning Foodstuffs and Other Sanitary Measures" (published for public discussion at the Mineconomy's official website in November 2020) harmonizes Ukrainian laws with the legal framework of EU in respect of state registration of food additives, enzymes and flavors in Ukraine, as well as in respect of state control and liability for violations of legislation in the area of food safety and quality

Draft Law "On Amendments to Certain Laws of Ukraine Concerning Bringing the Legislation of Ukraine in the Area of Baby Food in Line with the Requirements of EU Legislation" No. 4554 dated 29 December 2020 (is being considered by the Parliament) brings in line with EU acquis the terminology and certain requirements for infant and children food as well as the customer information about them

Draft Law "On Veterinary Medicine and Animal Welfare" No. 3318 dated 9 April 2020 (was adopted in the first reading on 17 June 2020 and is being prepared for the repeated second reading in the Parliament)

- ▶ Sets out the new rules for veterinary medicines similar to those enshrined in EU Regulation 2019/6 on veterinary medicines
- ▶ Stipulates that veterinary documents, as well as veterinary prescriptions, can be issued in both paper and electronic form and reduces the number of veterinary documents
- ▶ Provides private labs with the right to conduct veterinary examinations
- ▶ Stipulates that live animals can be imported into Ukraine without inspection of countries and facilities from which exports are made, provided that the veterinary status of these countries has not deteriorated and there have been no bans on imports from these facilities during the last 2 years
- ▶ The Parliamentary Committee on EU Integration found that the provisions of the draft law, in general, are in line with Ukraine's international obligations, but need significant refinement of certain provisions (e.g., on the animal quarantine, on the state registration of livestock facilities and market operators, on the procedure for state registration of veterinary medicines)

Draft Law "On Amendments to Certain Laws of Ukraine on Protection of Bees from Dangerous Works" No. 4510 dated 17 December 2020 (is being considered by the Parliament)

- ▶ Sets out the procedure for notifying beekeepers about the future use of agrochemicals through local councils
- ▶ Stipulates that the use of agrochemicals may be only conducted at night

Draft Law "On Amendments to the Code of Ukraine on Administrative Offenses and the Criminal Code of Ukraine Concerning Protection of Bees" No. 4511 dated 17 December 2020 (is being considered by the Parliament)

- ▶ Increases administrative fines amounting to approx. USD 480-600 for violation of the procedure for notifying beekeepers of future use of agrochemicals (current fine is approx. USD 6)
- ▶ Introduces administrative fines for other offences in the area of beekeeping, such as destruction of honey – harvesting areas and use of agrochemicals during the honey-harvesting period
- ▶ Introduces criminal liability for severe violations causing large damages

Draft Law "On Amendments to Certain Laws Regulating the Transfer of Melioration Systems for Temporary Use" No. 3852 dated 15 July 2020 (is being considered by the Parliament) provides for transferring interfarm and internal irrigation systems into the use of water users and their associations by means of PPP



2.5.6. General regulation of HVA

Legislative initiatives 5/5

Draft Law "On Plant Protection" No. 4600 dated 16 January 2021 (is being considered by the Parliament)

- ▶ Introduces the European model of traceability in the area of plant protection for the movement of certain plant species, plant products and other objects accompanied by plant passports set out in Regulations (EU) 2016/2031 and 2017/2313, as well as traceability of plant protection products
- ▶ Introduces state registration applicable to operators, users, distributors and consultants, laboratories and persons that have the right to carry out activities in the area of plant protection for the treatment of plant protection products
- ▶ Improves the system of legal regulation of circulation and state control of plant protection products, taking into account the relevant EU legislation
- ▶ Harmonizes phytosanitary measures with international and EU standards

Draft Laws "On Amendments to Certain Laws of Ukraine Regarding the Identification and Registration of Animals" No. 4396 dated 18 November 2020 and "On Amendments to the Code of Ukraine on Administrative Offenses to Strengthen Liability in the Area of Identification and Registration of Farm Animals" No. 4397 dated 18 November 2020 (is being considered by the Parliament)

- ▶ Provides for the approximation of procedures for registration and identification of cattle, pigs, sheep, goats and horses with Regulation No. 494/98,1082/2003 and No. 1505/2006
- ▶ Increases administrative fines for violation of rules of registration and identification of domestic animals, rules of animal quarantine and other veterinary and sanitary rules

Draft Law "On Amendments to Certain Laws of Ukraine Concerning the Introduction of Certain Types of State Support for Agricultural Producers" No. 3547 dated 27 May 2020 (is being considered by the Parliament) introduces state financial support for plant producers on irrigated lands by means of partial reimbursement (up to 50%) of costs spent on development of irrigation system, harvesting and processing equipment, and electricity used for irrigation needs



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