

UKRAINIAN AGROFOOD MARKET RESEARCH

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1. GENERAL INFORMATION

The favorable geographical location of Ukraine, extremely fertile black soil, decent infrastructure and relatively cheap labour force make the country's agribusiness sector highly competitive. A lot has been achieved in the country over the past 25 years to enable Ukraine to live up to its status as the "breadbasket of Europe" and to help, at least partly, address the global challenge of sustainable food supply and food security. Ukrainian agricultural sector is considered as attractive for investment opportunities. The Ukrainian government encourages foreign investors to invest into agricultural business in Ukraine.

Referring to the statistics of the previous years, Ukrainian agriculture has been securing approximately 11-14% of national GDP within the last few years. Approximately 17% of working population is employed in agriculture. The agricultural sector covers 70.8% of Ukraine's total landmass (42.7 million ha). Agricultural products accounted for 42.5% of Ukraine's export in 2016 (by 4.5% more than in 2015). The government is making it easier for agribusinesses to operate, and farms are more productive. As part of its deregulation efforts, the government canceled 14 previously required permits and eliminated six licensing requirements for agribusinesses. In 2017, the government continued deregulation, privatization and aligning safety and food standards with those of the European Union.

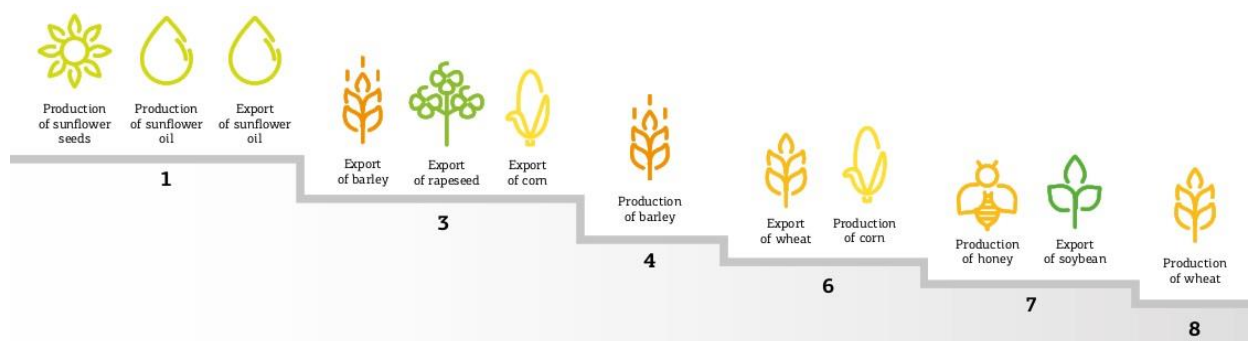
Ukraine has 42.7 million hectares of agricultural land, which comprises 71% of the country's total area. Among them: 76% - arable land (32.5 million hectares), 13% - pastures (5.4 million hectares), 6% - grasslands (2.4 million hectares), 2% - perennial plants (0.9 million hectares). Agricultural land in Ukraine includes cultivated land (grains, technical crops, forages, potatoes and vegetables, and fallow), gardens, orchards, vineyards, and permanent meadows and pastures. Ukraine is richly endowed with chernozem (also known as "black soil"), one of the most fertile soils worldwide. 28% of the world's resources of chernozem are located on the territory of Ukraine. Chernozem, a black-colored soil that contains a very high percentage of humus (3% to 15%) along with phosphoric acids, phosphorus and ammonia, occupies 41% of Ukraine's total area and even more of its agricultural land (54%), and plow land (58%). Ukraine has favorable climate for large-scale agriculture, rich agricultural soils and access to abundant land and water resources.

Currently, owners of land cannot sell it due to Moratorium on Sale of Agricultural Land. The Verkhovna Rada (the Parliament of Ukraine) has extended the moratorium until January 1, 2019.

Agricultural production made up 11.6% of Ukraine's GDP in 2016 (277 billion UAH). The basis of agriculture is crop production – 72.8% of the total agricultural production, animal production states 27.2%.

Ukraine has a strong position in practically all stages of the food supply chain, in particular, with regard to raw material, production, processing, wholesale and retail trade, consumption, export. The export process is supported by the strong infrastructure. In recent years, the Ukrainian agribusinesses managed to reach an almost impossible result – they have completely redirected foreign trade from the large market of the Russian Federation to the markets of Asia, EU, and Africa.

Figure 1. Ukraine's place in the world food market¹



Source: AEQUO, Baker Tilly, Crédit Agricole

Ukrainian farming business is looking for new business development locations, markets and instruments. Obviously, value adding niches of fruits, veggies and organics foods are most promising on the global food market. European Union, Middle East, Asia and Oceania are markets to consider for trade development. Processed and dried products with customized service for each local market is a high margin niche in mentioned regions for major number of Ukrainian farming businesses, which may contribute impressive results through strategic investments and steady quality improvement.

Exports of Ukrainian agricultural and food products reached 14.7 billion USD in the 10 months of 2017 and showed an increase of 22.7% or 2.7 billion USD compared to the corresponding period of 2016. While imports increased by 8% and amounted to 3.6 billion USD. At the same time, the share of agricultural products export level in terms of the general export structure of Ukraine has not changed and remained at the level of 41.8% (42.8% in 2016). The main products exported were sunflower, safflower and cotton oil – 24.8% of agricultural export value, corn – 16.5%, wheat – 15.1%, rapeseeds – 5.1%. In addition, soybeans, sunflower meal, barley and poultry meat. Imports - tobacco raw materials, frozen fish, sunflower seeds and citrus.

Table 1. The list of the top exported products during January-October 2017

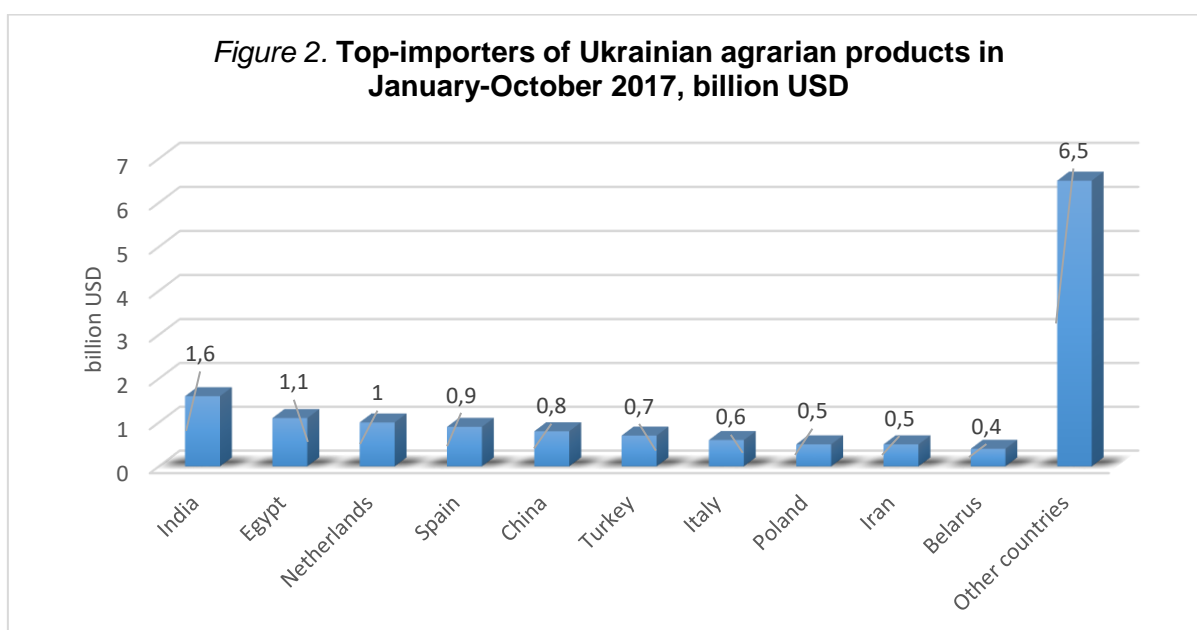
No.	Product name	Export	
		tons	Thousand USD
(1)	(2)	(3)	(4)
1	Sunflower, safflower or cotton oil	4 890 702	3 645 971
2	Maize	15 566 335	2 423 724
3	Wheat and a mixture of wheat and rye	14 217 906	2 248 791
4	Rape seeds	1 829 251	750 218
5	Soy	1 923 946	722 087
6	Barley	4 615 984	672 006
7	Oilcake and other solid wastes obtained from the extraction of vegetable fats and oils, with the exception of soya and peanut butter residues	3 945 262	655 326

¹ Production (except for honey) is indicated for 16/17

(1)	(2)	(3)	(4)
8	Meat and by-products of Poultry	228 635	322 958
9	Cigars, cigarillos and cigarettes with tobacco or its substitutes	26 006	234 056
10	Sugar	484 915	232 595
11	Vegetables beans dried	510 389	128 612
12	Chocolate and other products containing cocoa	48 220	118 446
13	Bakery, confectionery	82 623	113 497
14	Soybean oil	143 863	108 179
15	Extracts of malt; flour products, cereals	55 262	103 337
16	Honey	53 716	103 206
17	Butter and other fats made from milk	23 493	96 813
18	Sugar confectionery	65 842	93 268
19	Oil cake and other solid waste of soybean oil	236 964	83 874
20	Wheat flour	356 930	77 027
	Total, from selected products:	49 306 244	12 933 991
	TOTAL	53 412 328	14 696 166

Source: State Statistics Service

Concerning the geography of exports, India (11.3% of total exports), Egypt (7.5%) and the Netherlands (6.9%) have formed the three leading countries among the importers of Ukrainian agricultural products in January-October 2017. At the same time, the global regional breakdown of agricultural exports has not changed: Ukraine has exported to Asia more than 42% of agricultural products (6.3 billion USD), to the EU countries – 32.2% (4.7 billion USD), to African countries – 15% (2.2 billion USD) and to CIS countries – 7.5% (1.1 billion USD). These statistics confirm the preliminary forecasts of the Ministry of Agrarian Policy and Food of Ukraine for increasing the annual volumes of agrarian exports by 15-20% in 2017 compared to the previous year.



Source: Agropolit, State Statistics Service

During January-October 2017, supplies to the world markets of following products has increased considerably: apricot, cherry, peaches, plum - 8.6 million USD, wheat flour – to 17.7 million USD, sugar - 121.4 million USD, meat and offal of poultry - to almost 83 million USD, butter - to 69.1 million USD, frozen beef - to 36.1 million USD, bakery and confectionery products - to 23.8 million USD, extracts of malt, flour products, cereals - 52.6 million USD.

From July 1 to November 30, 2017, almost 17 million tons of Ukrainian grain of the *new crop* has been delivered to foreign markets. Including wheat - 9.9 million tons, barley - 3.7 million tons and maize - 3.3 million tons. In addition, during this period 166.7 thousand tons of flour have been exported. In general, exports of grain crops and flour from Ukraine (in terms of grain) in July-November 2017 reached 17.2 million tons. According to the State Service of Ukraine for Food Safety and Consumer Protection, since the beginning of the current marketing year, Ukraine has exported 2.8 million tons of oilseeds, which is 1 million more than last year (in 2016, oil exports by the same date amounted to almost 1.8 million tons). The most exported oilseeds is a rape - over 1.8 million tons. Compared to last year's figures, the export growth of these products exceeds 1 million tons (last year on this date there were exported nearly 0.8 million tons of rape). Also, soybeans are in the structure of exports, which Ukraine supplied to other markets in the current marketing year with volumes of 0.93 million tons, almost at previous year's level (2016 - 1 million tons). As previously reported, almost 60 million tons of grain and legumes have already been harvested.

The geographical breakdown of agricultural imports accounted for: the EU - 44% of agricultural import value, Asia - 24%, America - 16%, Africa - 5%, CIS countries - 4% and others.

2. CROP PRODUCTION

The *main crops* sowed in Ukraine (as of 2016) are wheat 6.2 million hectares (19% of arable land), sunflower – 6.1 million hectares (19% of arable land), corn – 4.2 million hectares (13% of arable land), barley – 2.9 million hectares (9% of arable land), soybean – 1.9 million hectares (6% of arable land), and rape – 0.5 million hectares (2% of arable land). These crops occupy 68% of arable land in Ukraine. The biggest profits are produced by corn, sunflower and rape. At the moment Ukraine is among the world leaders as far as the export of grain is concerned and is one of the biggest exporters of barley and sunflower oil worldwide.

Ukraine is also emerging as a major producer of organic food, by virtue of its unspoiled soil. Already, hundreds of thousands of hectares are devoted to organic farming and agricultural officials and experts believe that Ukraine can become a major exporter and help satisfy the increasing demand in Western Europe for such products.

Annual production of wheat in Ukraine is 15 to 26 million tons. The entire cereal production reaches 90-100 million tons. Local needs, even if dramatically increased, take 35 to 40 million tons, making around 50-60 million tons available for exports in the sphere of agriculture. Ukraine thus occupies sixth place on the world grain export market.

Most of the exported grain is destined for the countries of Middle East and North Africa. The Ukrainian Ministry of Economic Development and Trade subjects export contracts for certain

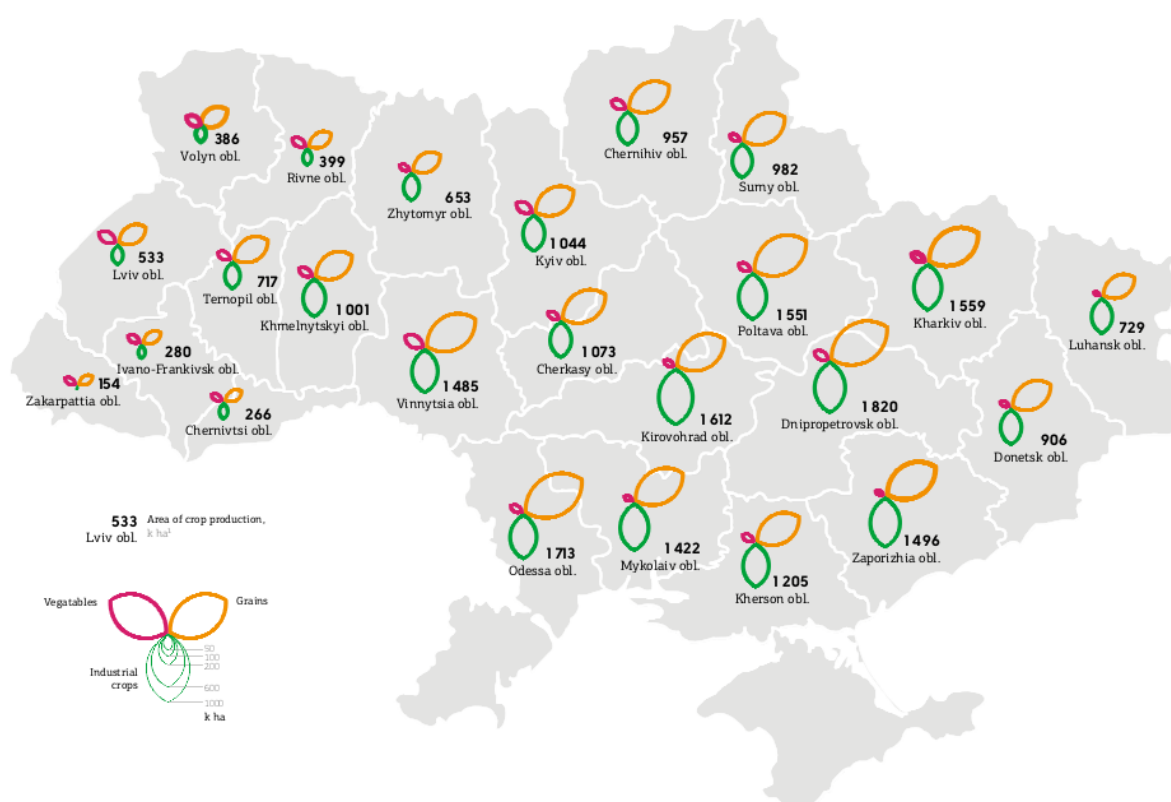
groups of agricultural products to registration. The key items exported from Ukraine are subjected to licensing and/or quotas where applicable and must be registered prior the export.

In 2016, Ukraine established itself as an export leader in several categories (Figure 1):

- 1st place in world export of sunflower oil, 4.8 billion USD (32% of total world export);
- 3rd place in world export of barley, 653.4 million USD (8.5%);
- 3rd place in world export of maize, 2.4 billion USD (8.4%);
- 6th place in world export of wheat, 2.6 billion USD (7.2%);
- 7th place in world export of soybean, 645.3 million USD (1.3%).

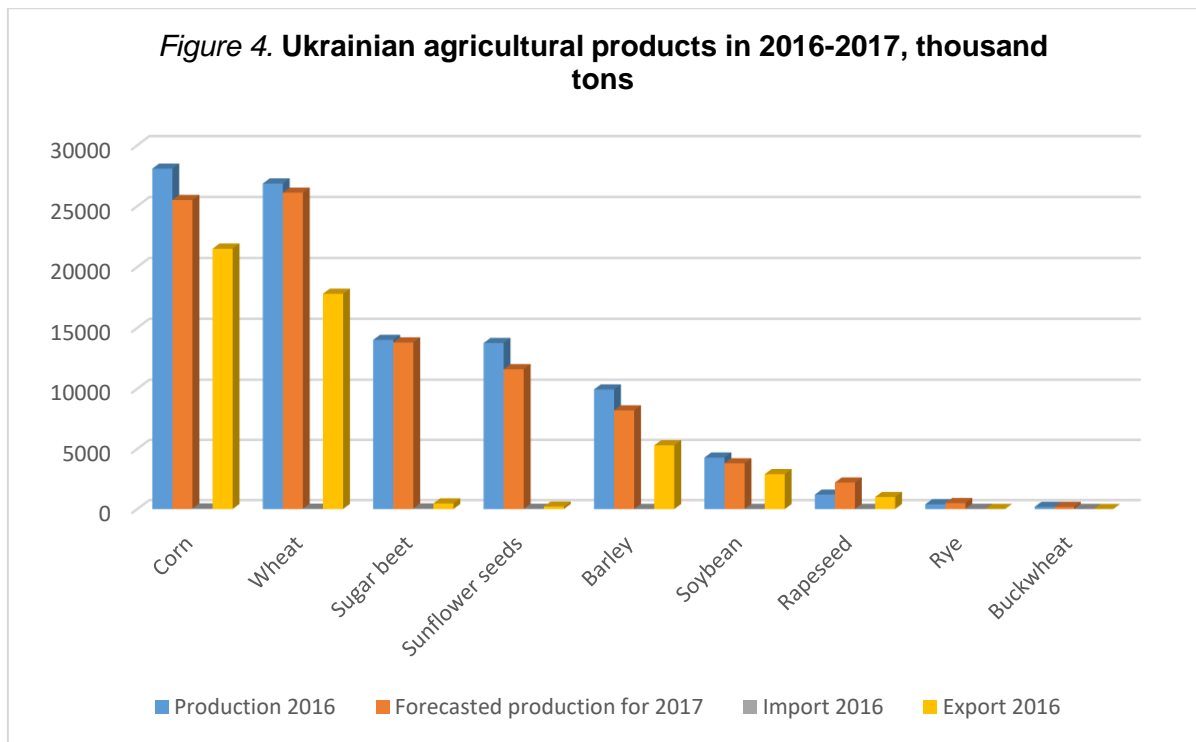
The production of cereal and industrial crops tends to be the focal point for agricultural enterprises. Major cereal crops of grain markets in Ukraine incorporate winter wheat, spring barley and fodder maize. Winter wheat is the core crop for both private farms and agricultural enterprises.

Figure 3. Regional specialization in crop production



Source: AEQUO, Baker Tilly, Crédit Agricole

In accordance with the Ministry of Agrarian Policy and Food, Ukraine has collected unprecedented 66 million tons of crops in 2016. The forecasts for 2017 are as following: total grain crops – 62.3 million tons, including: wheat – 26.1 million tons, rye – 497.4 thousand tons, barley – 8.2 million tons, corn – 25.5 million tons, buckwheat – 180 thousand tons. Expected production of soy – 3.8 million tons, rape – 2.2 million tons, sunflower – 11.6 million tons, sugar beet – 13.8 million tons. In addition to this, record-breaking productivity of land was achieved: wheat – 42.1 centners per hectare, rye – 27.3 centners per hectare, corn – 66 tons per hectare, peas – 31.3 centners per hectare (Figure 4).



Source: Ministry of Agrarian Policy and Food of Ukraine, AEQUO, Baker Tilly, Crédit Agricole

Ukraine continues developing closer economic ties with the European Union. This is displayed in the growth of exports to the EU, both of grains and milling industry goods. Ukrainian government aims to double grain production by 2020, compared to the 2015 level.

Wheat

In Ukraine wheat is grown all across the country, but central and south-central regions are the key growing areas. Wheat is planted in autumn and harvested throughout July or August of the following year. About 97 % of it is winter wheat.

Ukraine produces mostly the hard red winter wheat of bread wheat. Normally, around 80% of domestic wheat crops are considered to be of milling quality according to national standards. Wheat is widely used for production of pastry and bread. Ukraine's bakery production has a substantial strategic role in the domestic economy and accounts for 15% of national food industry. In addition, wheat tops the grain prices in Ukraine, being the most expensive grain. Wheat is produced by both agricultural companies and the private sector, which is represented by residents and households of the rural areas and is responsible for 19 to 20% of the annual wheat production.

In 2017 Ukraine wheat production amounted to 26.6 million tons. Ukraine wheat exports continue to grow, mainly in North Africa and Asia. In the past 20 years, Ukraine's wheat exports surged from fewer than 2 million tons to 16.5 million tons in 2017/18.

Corn

The planting zone of corn has increased despite a number of constraints, such as obsolete and insufficient harvesting equipment, the high cost of production, especially post-harvest drying costs, and pilferage. The main growing region is eastern and southern Ukraine, although rainfall in some oblasts (regions) in the extreme south is too low to support growth of this crop. Corn is usually planted in late April or early May. Harvest starts in mid-September and is completing by early November. Only 25-50% of general corn area is harvested for grain, the remainder being cut for silage, normally throughout August.

Spring frosts and adverse weather conditions, which developed throughout the most territory of Ukraine in the period of corn ripeness and harvesting, caused some reduction of grain yield and quality indices. According to “APK-Inform Agency” (leading agribusiness consulting agency in the CIS countries) analysts, despite increasing of the planted areas under the grain in 2017/18 MY by more than 5% – to 4.52 million ha, the harvested areas were estimated at 4.48 million ha. Therefore, in terms of the average yield at 5.97 t/ha, Ukrainian agrarians will manage to harvest 26.7 million tons of corn, a decrease of 4.8% compared with last year.

Taking into account the carry-over stocks, which in the current season almost halved compared with last year, and total nearly 715 thousand tons, in 2017/18 MY the export potential of corn from Ukraine is forecasted at 19.2 million tons, down nearly 10% compared with the previous season figures.

Industrial crops in Ukraine are sugar beet, sunflower and rapeseed. Numerous farms specialize in production of the first two crops.

Sugar beet

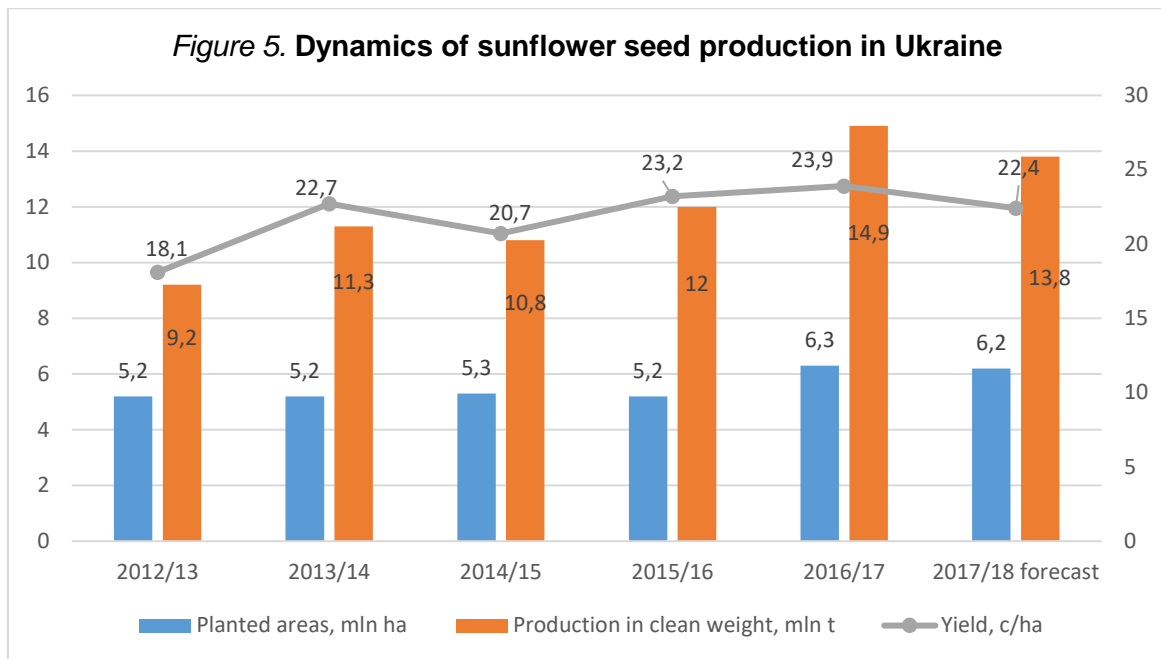
Sugar beet is primarily grown in central and western regions. The beet is planted at the end April – beginning of May and harvested from mid-September until the end of October. The Ukrainian sugar industry contributes about 1.2% to GDP.

According to the National Association of Sugar producers of Ukraine “Ukrsugar”, during January-November 2017, 551 thousand tons of sugar were exported, which is 64% more than in the same period of the last year – 335.25 thousand tons. The geography of exports did not change significantly. The main deliveries were carried out to Turkmenistan (14%), Sri Lanka (14%), Switzerland (12%), Azerbaijan (11%) and Turkey (10%). Such an increase was conditioned by the favorable price situation in the world market at the beginning of the year and a significant increase in sugar production. As of December 2017, 1.75 million tons of sugar were produced and 12.27 million tons of sugar beet processed.

In total, 46 sugar refineries worked in the season, 24 of which have already completed the production season.

Sunflower

Over recent years, the market of sunflower has experienced a simultaneous intensification and extensification of production .



Source: APK inform

According to the estimations of “APK-Inform” the official harvest of sunflower seed in Ukraine during the whole last season in 2016/17 MY broke a record and reached 14.9 million tons (Figure 5). During five recent years, the figure increased by 62%, due to a growth of both yield indices (up 32%) and planted areas (up 21%).

During several recent years, the market of *high-oleic sunflower* seed started actively developing, with annual increasing of both planted areas and the share in the general structure of sunflower seed areas. In 2016/17 MY Ukraine planted high-oleic sunflower seed throughout 260 thousand ha, an increase of 90 thousand ha (up 53%) compared with the previous season, and totaled 4.1% of the general planted areas under sunflower, against 3.3% in the previous season. The harvest volumes reached nearly 630 thousand tons, and taking into account segregation processes, the figures were estimated at 550 thousand tons (up 70%).

Increasing of the total supply of sunflower seed resulted in increasing of its processing volumes by 24% in the previous season, to 14.5 million tons. In 2016/17 MY, sunflower seed processing capacities increased by 2.2 million tons (to 17.7 million tons) compared with the previous season, which became a fairly impressive increase taking into account the country's economic crisis. Ukraine mainly managed to reach the increase not due to construction of new plants, but at the expense of modernization of already working facilities, which are mainly located in the southern region of the country. At the same time, many investments scheduled for 2016/17 MY still failed to be realized.

Also, last season has resulted in some redistribution of the market of sunflower oil between its players. Among the most significant ones - strengthening of the positions of Kernel Group, Bunge Ukraine, ViOil, and declining of the market shares of Optimus and Mironivsky Hliboproduct (Table 2).

Table 2. TOP-10 companies by sunflower oil production in Ukraine

№	Company	Production, thousand tons		Changes 2016/17 to 2015/16	Company shares, %	
		2016/17	2015/16		2016/17	2015/16
1	Kernel Group	1 480	914	62%	27.6	22.4
2	Bunge Ukraine	575	285	up 2 times	10.7	7.00
3	ViOil	386	273	41%	7.2	6.7
4	Optimus	337	349	-3%	6.3	8.6
5	Mironivsky Hliboproduct	320	319	=	6.0	7.8
6	Allseeds Black Sea	233	121	up 2 times	4.4	3.0
7	Delta Wilmar CIS	218	163	34%	4.1	4.0
8	Cargill	204	190	8%	3.8	4.6
9	COFCO Agri	176	103	70%	3.3	2.5
10	ADM Ukraine	162	72	up 2.2 times	3.0	1.8
	<i>Others</i>	<i>1 264</i>	<i>1 295</i>	<i>-2%</i>	<i>23.6</i>	<i>31.7</i>
	TOTAL	5 355	4 084	31%	100.0	100.0
	<i>Final appraisal</i>	<i>1 000</i>	<i>860</i>	<i>16%</i>		
	Total with appraisal	6 355	4 944	29%		

Source: APK inform

Increasing of sunflower oil supply, together with relatively stable domestic consumption, led to increasing of its exports from Ukraine in 2016/17 MY to a record level of 5.85 million tons, which exceeded the previous season volumes by 30%. During 5 recent years, the export volumes of sunflower oil increased by 80%.

In 2016/17 MY, Ukraine supplied sunflower oil to 130 countries, against 126 countries in the previous season. The leading four countries-importers remained unchanged, with slight adjustments in their shares in the general structure – China, India, the Netherlands and Spain. The supplies of Ukrainian sunflower oil to countries of the European Union increased by 21% to 1.7 million tons, including Spain - up 41%, to 540 thousand tons, the Netherlands - up 12%, to 423 thousand tons, Italy - up 17%, to 332 thousand tons, the UK - up 53%, to 100 thousand tons.

Rapeseeds

In Ukraine, in 2017 rapeseed production is expected to almost double (by 91.9%) and amount to 2.3 million tons, which will allow the export of 1.85-1.95 million tons of seeds. This growth is connected with the increase of the area under rapeseed by almost 1.8 times, and with the increase of its productivity by 7.4%.

During January–August 2017 Ukraine exported 786.39 thousand tons of rapeseed in the amount of 318.54 million USD, - according to the DFS. In August 2017, the export of rapeseed was 516.77 thousand tons.

Table 3. TOP-10 rapeseed oil exporters in 2016/17 MY

No	Company	Share, %
1	Majola	28.2
2	Vector-M	11.5
3	Agrointer	8.5
4	Bessarabia-Agro	7.8
5	Zahid-Agroinvest	6.6
6	Kernel	6.3
7	Pan Kurchak	5.3
8	Spezavtoinvest	5.1
9	VIOIL	3.4
10	Hlebprom	2.6
	<i>Other</i>	15.0
	Total	100.0

Source: Proagro

The main importers of Ukrainian rapeseeds in 2017 were: Pakistan (179.66 thousand tons amounting to 70.75 million USD), Belgium (149.33 thousand tons in the amount of 60.49 million USD) and Germany (114.34 thousand tons in the amount of 55.86 million USD). The largest importers of Ukrainian rapeseed in 2016 were France (84.65 million USD), Poland (73.08 million USD) and Germany (65.87 million USD).

3. ANIMAL PRODUCTION

Animal production is an underappreciated branch in the Ukraine's agriculture sector. Currently, the production of pork and beef declined compared to the previous period due to the reduction of meat consumption these animals. However, for the expansion of markets, Ukrainian producers of pork and beef in 2016 initiated the procedure for recognition of their production to high standards of the EU. Now this process has already begun and Ukrainian producers are expected to gain access to the markets of the European Union and the Middle East in the nearest future. On the other hand, the poultry sector demonstrates a positive tendency. Promoting of Ukrainian products on international markets and requirements to comply with the HACCP system since 2017 will help in reaching new markets.

Figure 6. Regional breakdown of animal products, thousand tons



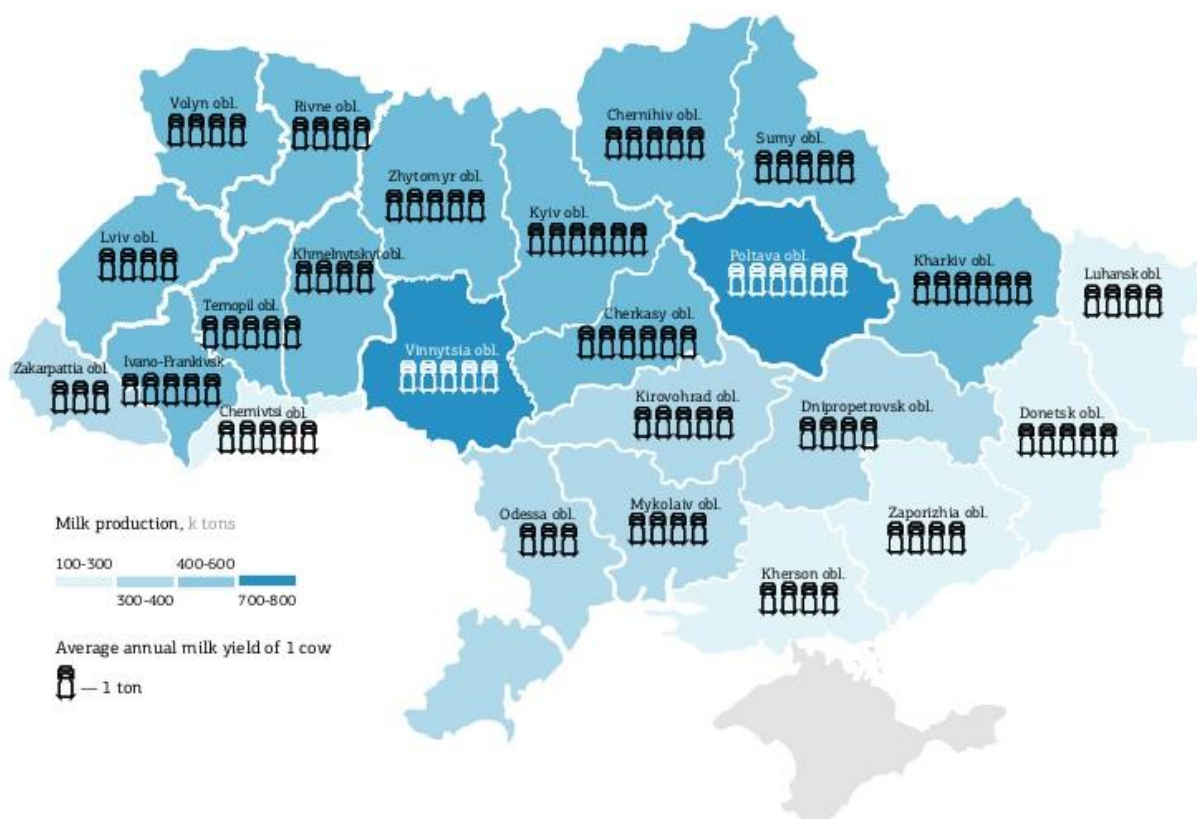
Source: AEQUO, Baker Tilly, Crédit Agricole

Milk and dairy production

Dairy farming is one of the major livestock industries in Ukraine and, before crisis, this segment demonstrated a trend towards its active development, but the situation in the dairy sector became more complicated in 2014. The biggest problem for the dairy sector was the loss of the Russian market, which accounted for about 80% of exports of dairy products. Consequently, the number of cows began to decline rapidly. In 2014, the number of cows decreased by 3.2% — to 2.36 million heads. In 2014, milk production in Ukraine amounted to 11.23 million tons, which is by 0.4% more than in 2013. There was also an increase of milk production by agricultural enterprises and a decrease of its production by households. The share of industrial milk production increased by 24% and its supplies to processing — up to 52%.

Growth of productivity of cows became a significant achievement of the dairy sector. During the past five years, yields have risen by 32% in 2014; average annual yield per cow constituted 5228 kg. Poltava and Vinnitsa regions are leading in milk production. Kyiv and Poltava regions are the leaders in average annual milk yield of one cow (Figure 7).

Figure 7. Milk production in Ukraine 2016



Source: AEQUO, Baker Tilly, Crédit Agricole

According to the State Statistics Service, production of milk in Ukraine in January-November 2017 (excluding the temporarily occupied territory of Crimea and Sevastopol, part of the ATO – antiterrorist operation zone) decreased by 0.6% compared to the same period in 2016, to 9.681 million tons., egg production increased by 3% to 14.518 billion units.

The export of dairy products from Ukraine in January-June 2017 in monetary terms amounted to 117.2 million USD, which is 76.6% more compared to 6 months 2016.

In monetary terms condensed milk and cream (35% amounting to 40.0 million USD) and butter (38% amounting to 44.8 million USD) were the basis of dairy exports for 6 months 2017. Export of cheese and whey made up 12% (14.3 and 3.6 million USD respectively), liquid milk and cream – 2% (2.6 million USD), yogurts and kefir – 1% (1.5 million USD).

In volume terms dairy exports for 6 months 2017 amounted to 63.2 thousand tons, namely: condensed milk and cream (37% amounting to 23.3 thousand tons), butter (19%, 12.3 thousand tons), whey (28%, 17.9 thousand tons), cheese (7%, 4.12 thousand tons), liquid milk and cream (6%, 4.09 thousand tons), yogurts and kefir (2%, 1.5 thousand tons).

The leadership in the export of milk powder and cream belonged to Vinnytsia Dairy Plant “Roshen” (15%), Starokostiantynivsky Dairy Plant (8%), Belotserkivska Agro-Industrial Group (8%), Ruzhin-Moloko (4%) and Veselynivsky Skim Milk Plant (4%). Thus, the five largest exporters provided 39% of the supply of this product abroad in January-June 2017.

In the butter segment, the leading export companies in the period were Vinnytsia Dairy Plant Roshen (12%), Starokostiantynivsky Dairy Plant (7%), Yagotyn Dairy Plant (7%), Veselynivsky Skim Milk Plant (3%) and Ichnyan Plant of dry milk and butter (2%). These companies provided 32% of butter exports. Top importing countries of butter were Turkey, Morocco and the Netherlands.

Five major cheese exporters shipped nearly 72% of the total volume of supplies from Ukraine in 6 months 2017. In particular, Como-Export provided 21.4%, Cheese Club – 17%, Laktalis-Ukraine 15%, Bel Shostka Ukraine – 13% and Milkiland-Ukraine 7%. In 2016 Ukrainian companies sold abroad 8.1 thousand tons of cheese, which is 26% lower than in 2015 and 2.4 times less than the volume exported in 2014. The largest buyers of these products in the past year were Kazakhstan (13.1 million USD, or 54%), Moldova (6.5 million USD, or 27%) and Egypt (1.9 million USD, or 8%).

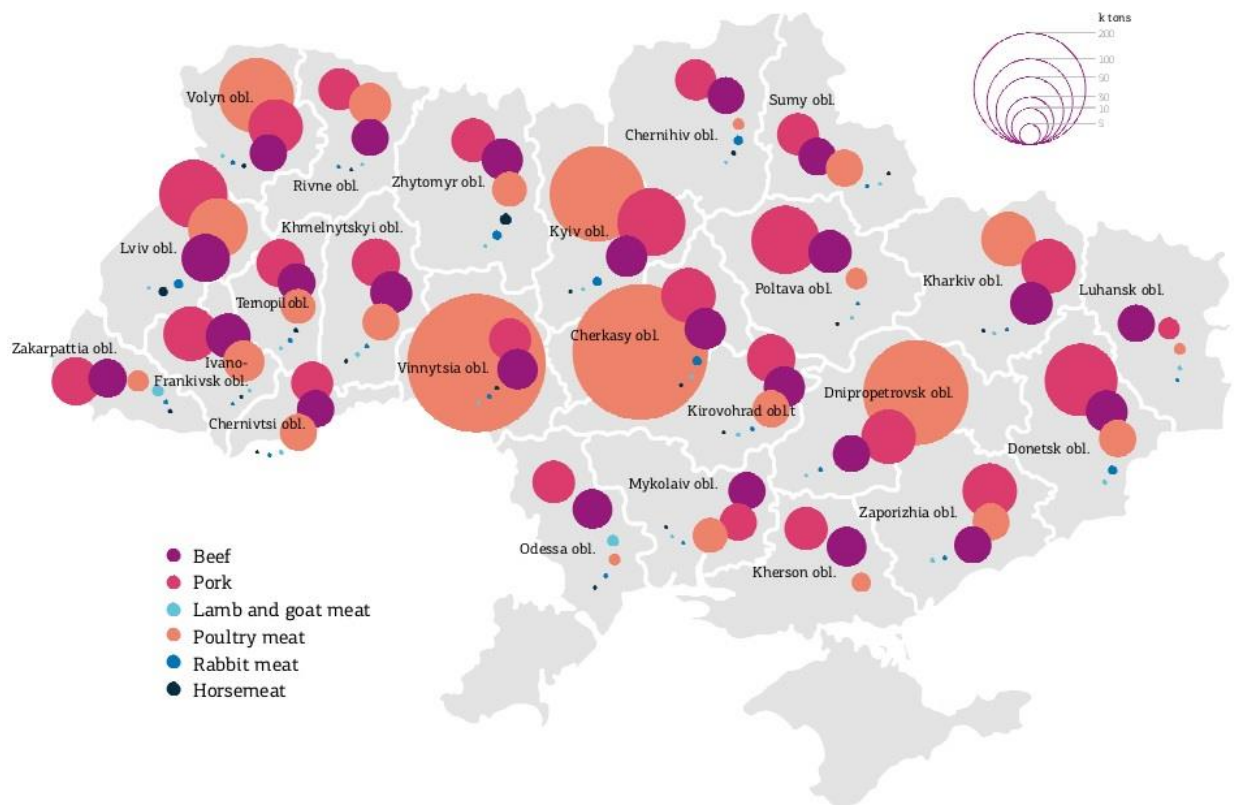
The main challenge for the dairy industry in Ukraine is finding new export markets and developing the existing markets. To do this, it is important to develop a systemic state export policy that requires work with each particular country of destination. One of the perspectives for Ukraine is also an export-oriented organic milk production, as more and more people pay attention to health and are willing to pay for quality products. The demand for dairy products for baby food is also increasing around the world, especially in China.

On January 10th, 2016 the Ukrainian milk processing companies received the access to the EU market from the European Commission. The first country to receive Ukrainian dairy products was Bulgaria.

Meat production

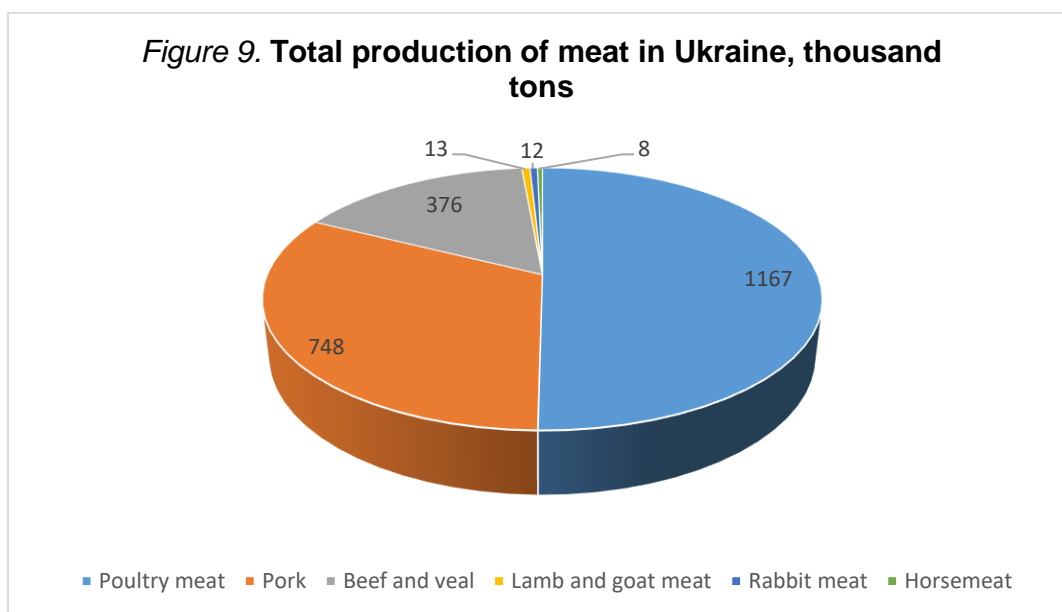
Ukraine produced 1.637 million tons of meat in January-September 2017, reporting an increase of 0.2% compared to the similar period from the previous year. By meat type, 0.1% increase in beef production, 1.4% in poultry production, and 1.6% in pork, compared to the similar period in 2016 were reported. Vinnytsia, Cherkasy and Dnipropetrovsk regions were the absolute leaders in animal production in Ukraine. In these regions, 37% of all animals in Ukraine are bred (Figure 8). According to the experts, in view the purchasing power of the population, the total consumption of meat and meat products in 2017 is estimated at 52.5 kg per person (ration allowance is 80 kilograms per person).

Figure 8. Meat and meat products in Ukraine in 2016



Source: AEQUO, Baker Tilly, Crédit Agricole

The biggest profits in animal breeding are produced by poultry and pig breeding (Figure 9). Other branches of animal breeding, such as turkey, rabbit and duck breeding also develop gradually.



Source: AEQUO, Baker Tilly, Crédit Agricole

During January-September 2017, Ukraine's meat and meat products exports increased by 23% compared to 9 months 2016, reaching 268 thousand tons. Whilst, the meat imports rose by 22% in the same period, reaching 156 thousand tons.

The biggest growth in export sales was observed in poultry segment. Poultry meat shipments from Ukraine accounted for 79% of the country's total meat exports, namely 212 thousand tons were exported increasing by 19% compared to January-September 2016. In value terms the growth made up 38.2% amounting to 294.9 million USD. Exports of poultry meat from Ukraine by the end of 2017 is expected to make up about 240 thousand tons. Ukrainian poultry producers exported to 63 countries in 2017, among them to a number of states in the Middle East, Central and East Asia and Africa. The increase in poultry exports was based on the strong demand reported in Egypt (buying 17.1% of total supplies), the Netherlands (14.3%), Iraq (8.8%), Belarus (8.4%) and Azerbaijan (7.6%).

Table 4. Top-5 exporters of poultry meat

No	Company	Export share, %
1	Myronivsky Hliboproduct (MHP)	85.6
2	APC Dneprovskaya	5.6
3	Pan Kurchak	3.1
4	Agro-Oven	2.1
5	Agromars Eksim	0.5

Source: *Latifundist*

In general, these 5 companies provide 97% of all exports (Table 4), which indicates a significant level of monopolization of supply. Large enterprises benefit from the scale of production and ensure the stability of product quality and the rhythm of supply. All these companies have a full cycle of their own production.

The increase in export of poultry indicates a significant success for the industry, which, prior to 2015 had relied on Russia for the majority of its export sales. During the recent years almost all Ukrainian exports were redirected to different foreign markets.

Beef is a key export focus, since domestic demand in Ukraine is weak. The demand for Ukrainian beef and pork was also high and the trend continues. Countries such as Belarus, Azerbaijan, Kazakhstan, Georgia and Moldova, import the largest volumes of beef and pork from Ukraine. Meanwhile, exports to the Western markets are limited by difficulties in obtaining import permits from potential buyers and their regulators. The main obstacle for Ukraine to export beef to the EU is the difference between Ukrainian system of registering and identifying livestock and such systems used in the EU. On top of that, Ukraine still needs to prove its status of a country free from bovine spongiform encephalopathy. Per representation of the Ministry of Agrarian Policy and Food, negotiations with the EU were ongoing to secure permissions for Ukraine to enter the European market. The necessary permits are expected to be issued to Ukrainian farmers in early 2018.

During January-July 2017 the volume of export of fresh beef was 6.5 thousand tons (6.4 thousand tons of which were exported to Belarus). Revenue from the export of this group of goods was 17.2 million USD in the reporting period. The list of the main exporters of this product is much more differentiated. The first place in terms of sales volume in tons is held by the company Antonovsky MK (16.1%), followed by Agro-Product (14.7%), Zeus LTD (7.6%), Konotopmyaso (7.4%) and Svizhenka (6.9%). Frozen beef was purchased by foreign buyers in the amount of 16.9 thousand tons worth 47.3 million USD. Top-5 exporters: Agro-Product (9.1% of the volume of supplies in physical terms), Rachinmyaso (7.5%), Lubnymyaso (6.7%), Zeus-LTD (4.5%), Prodkompaniya (4.3%).

Sales of fresh, chilled and frozen pork amounted to 3.9 thousand tons (8.3 million USD). The most significant volumes of supplies were made by the companies APK-Invest (47.7%), Exim Food (9.5%), Kremenchuk Myaso (5.6%).

Regarding the Ukraine's meat imports, which are mainly represented by pork and poultry meat, most meat products in 2017 were imported from Poland and Germany. The share of imports in domestic food consumption in January-September 2017 was 10%.

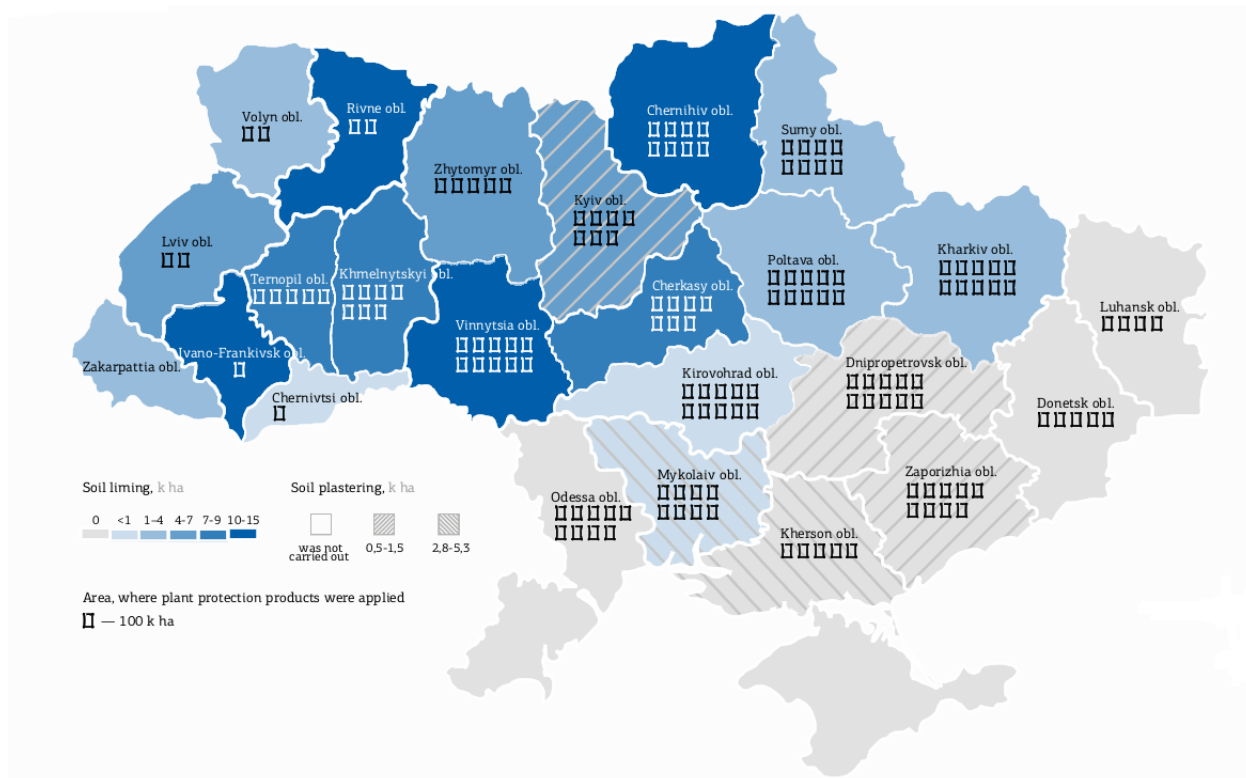
4. FERTILIZERS

Ukraine is one of the world leaders in fertilizers production, specializing in nitrogen fertilizers. Ukraine's share on the global mineral fertilizer market is 8%. There are 6 big mineral fertilizer producers: "Odessa Port Plant", "DneprAzot" (part of Privat Group), "Rivneazot" (Rivne), "Azot" (Cherkasy), PJSC "Severodonetsk Azot" (Severodonetsk), PJSC "Concern STIROL" (Horlivka), which are part of the OSTCHEM (a holding company that consolidates the GROUP DF assets in nitrogen fertilizer production, distribution and shipping). OSTCHEM is ranked 3rd in the world for nitrate production, 4th for ammonia production and 12th for urea production. OSTCHEM enterprises' core products are: nitrogen fertilizers such as ammonia, urea, ammonium nitrate, CAN (calcium ammonium nitrate), UAN (urea ammonium nitrate), and ammonium sulphate. In addition to fertilizers, the Group's enterprises produce organic chemicals and organic acids (adipic acid, succinic acid, methanol, caprolactam, vinyl acetate, polystyrene). Two of the abovementioned producers – "Severodonetsk Azot" and "Concern STIROL" do not work, because they are located in the ATO (Antiterrorist Operation) zone in the East of Ukraine.

The largest share of the Ukrainian market of mineral fertilizers belongs to ammonium nitrate. In total consumption of fertilizers its share amounted from 45 to 50%. A cheaper alternative to ammonium nitrate is ammonium sulfate. The excess of acidity is compensated by the lowest price among the other solid nitrogenous fertilizers and the availability of easily digestible form of sulfur.

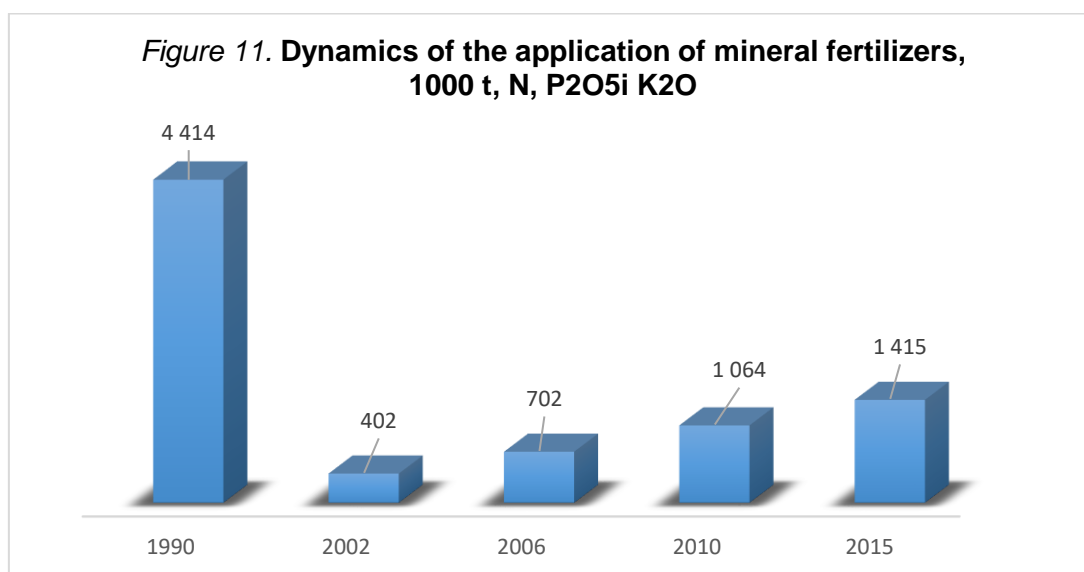
The second largest consumable fertilizer in Ukraine is NPK (a complex fertilizer of different formulas, of which the most popular are the ammonium nitrate phosphate fertilizer (NPK 16:16:16), and diammonofoska (NPK 10:26:26). Considering that the Sumykhimprom plant has successfully introduced these brands, the growth of domestic consumption of NPK in Ukraine by 63% is natural.

Figure 10. Fertilizers and plant protection products application



Source: AEQUO, Baker Tilly, Crédit Agricole

The diversification of CAM supply sources can lead to more substantial growth of the market. Besides two traditional suppliers, OSTCHEM and Eurochem, CAM importers of Belarussian origin and Ukrainian non-industrial producers of CAMp (products based on carbamide-ammonium mixture) are going to play a prominent role in the market.

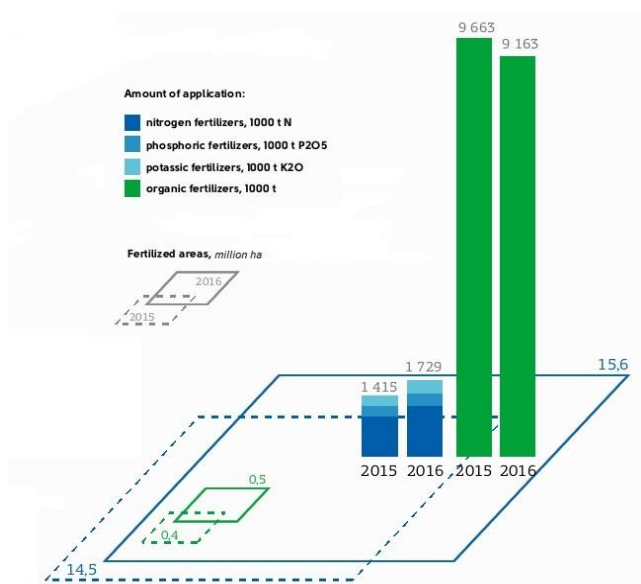


Source: AEQUO, Baker Tilly, Crédit Agricole

Total dependence of the Ukrainian agrochemical industry on the imported raw materials and the high proportion of imported fertilizers on the market dictate the dependence of Ukrainian prices on the world market prices. Since the inflation and devaluation rate is unpredictable, many export-oriented agricultural enterprises forecast the prices for mineral fertilizers on the basis of the US dollar equivalent.

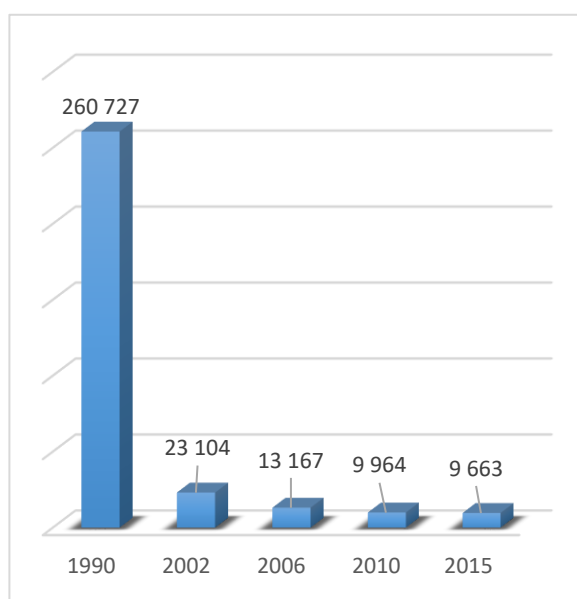
On the world markets of fertilizers a reduction in prices was a dominant trend in 2015. High harvests in previous years, a decrease in the cultivation of "fuel" crops due to the oil prices decrease, reduction of production costs of fertilizers and surplus of the market will contribute to the low price level of fertilizers during the year.

Figure 12. The application of mineral and organic fertilizers in Ukraine in 2015-2016



Source: AEQUO, Baker Tilly, Crédit Agricole

Figure 13. Dynamics of organic fertilization, 1000 t



Source: AEQUO, Baker Tilly, Crédit Agricole

5. INVESTMENTS IN AGRICULTURE

In the recent years, economic growth of Ukraine has become critically dependent on the agricultural sector's prospects. In 2010-2016, the industrial share in the country's GDP dropped from 31.3% to 26.3% (down 5 p.p.), while the agriculture's contribution grew from 8.3% to 14.4% (up 6 p.p.). Over the three years (2014-2016), the export share of agricultural produce expanded from 31% to 42.5% growing by 11.5%). According to preliminary assessment, the agricultural sector accounted for almost one-third (28%) of currency receipts in 2016.

Further growth of the agricultural sector requires affordable and sizable financing. The financing goals may include the following:

- expanding the production volume and assortment of agricultural products;
- improving their quality and increasing the added-value share;
- major overhaul of production facilities and technologies;
- optimization of the production-sale cycle.

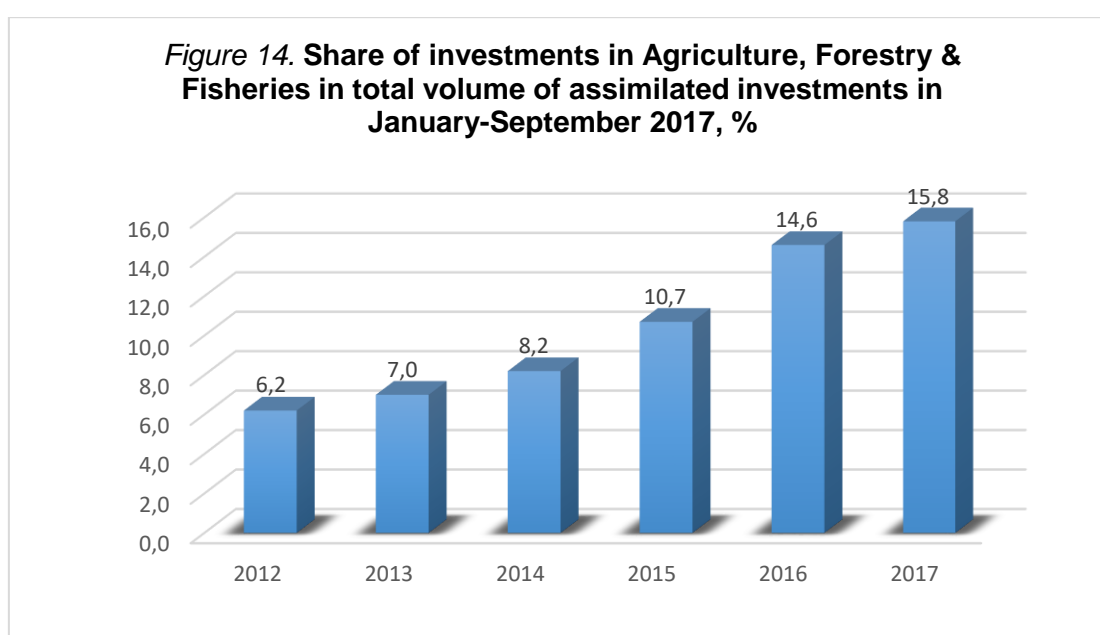
Indeed, growth of capital investment in the Ukrainian agriculture has far outpaced growth of agricultural output. The gain in investment was 27.1% in 2015 and 49.5% in 2016, while gross agricultural output sank by 4.8% in 2015 and increased 6.1% last year. At the same time, the agriculture’s portion in the total investment volume steadily grew from 6.2% in 2012 to 15.8% in 2017.

In January-September 2017, 40.5 billion UAH of capital investments have been invested in agriculture, hunting and related services, which is by 37.8% more than during the same period last year (Table 5). In general, the share of capital investments in agriculture amounted to 15.8% of the total volume. (Figure 14)

Table 5. Capital investments in Agriculture, Forestry & Fisheries in January-September 2017

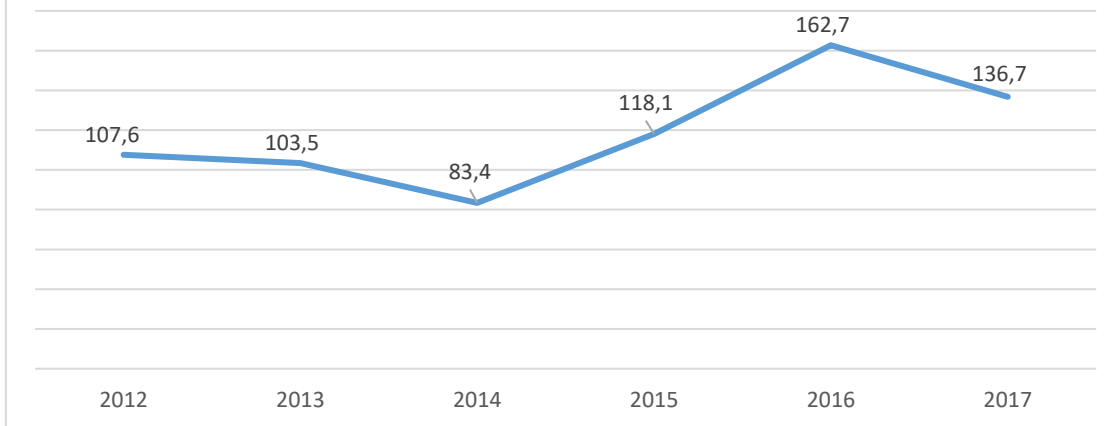
	Amount of investments, million UAH	Increase (decrease) to Jan-Sep 2016, %
CAPITAL INVESTMENTS IN AGRICULTURE, FORESTRY AND FISHERIES, TOTAL	40980.3	36.7
<i>including:</i>		
agriculture, hunting and related services	40490.1	37.8
forestry and logging	459.5	-19.2
fisheries	30.7	0.6

Source: Ministry of Agrarian Policy and Food of Ukraine



Source: Ministry of Agrarian Policy and Food of Ukraine

Figure 15. Indices of capital investments in Agriculture, Forestry and Fisheries in Jan-Sep 2017 compared with Jan-Sep 2016, %



Source: Ministry of Agrarian Policy and Food of Ukraine

In January-September 2017, 40.5 billion UAH of capital investments have been invested in agriculture, hunting and related services, which is by 37.8% more than during the same period last year. In general, the share of capital investments in agriculture amounted to 15.6% of the total volume.

The main source of financing of capital investments remains the own funds of enterprises and organizations, at the expense of which there were assimilated the 72% of the total volume.

During the same period, capital investments in the production of food products, beverages and tobacco products reached 12.7 billion UAH, which is 7.5% more than in the 9 months of 2016. In general, the share of capital investments in food processing amounted to 14.6% of the total volume of such investments in the industry.

According to the Ministry of Agrarian Policy and Food of Ukraine, as of July 1, 2017, 233 investment projects were implemented in the agrarian sector with a total estimated cost of 36.7 billion UAH. The implementation of ongoing projects is expected to create more than 16,000 new jobs. Most of the projects are implemented by small and medium businesses. According to the directions of the projects, there is a noticeable tendency to change the emphasis on animal husbandry, which is almost half of the total number of projects, namely 49%. In particular, livestock – 25%, pig farming – 14%, poultry farming – 10%. Among other areas of implementation of investment projects are treatment, storage and processing of grain and technical crops (21%), vegetable and fruit storage (9%), processing of agricultural raw materials (7%), perennial plants (5%), irrigation – 10 units (4 %), and others (5%).

6. USEFUL LINKS AND DATA SOURCES

- State Statistics Service of Ukraine <http://www.ukrstat.gov.ua/>
- Ministry of Agrarian Policy and Food of Ukraine <http://www.minagro.gov.ua/>
- National Bank of Ukraine <https://www.bank.gov.ua>
- State Fiscal Service of Ukraine <http://sfs.gov.ua>
- State Service of Ukraine for Food Safety and Consumer Protection <http://www.consumer.gov.ua/>
- Ukrainian Agribusiness Club (UCAB) <http://ucab.ua>
- National Association of Sugar producers of Ukraine (Ukrsugar) <http://www.ukrsugar.com>
- European Business Association (EBA) <https://eba.com.ua/>
- American Chamber of Commerce <http://www.chamber.ua/>
- Latifundist Media (Latifundist.com, Elevatorist.com, Agropolit.com) <http://latifundistmedia.com/>
- APK Inform <https://www.apk-inform.com>
- Proagro <http://www.proagro.com.ua/>
- Ukragroconsult <http://www.ukragroconsult.com/>
- Agravery <http://agravery.com/>
- Ukrainian Food Export Board (UFEB) <http://www.ukrainian-food.org>
- Ukrainian Agrarian Federation (UAC) <http://agroconf.org>
- Agroportal <http://agroportal.ua>
- Interfax <http://interfax.com.ua/>
- Unian <https://www.unian.net/>
- Ukrainian Food Expo <http://ufexpo.com.ua>