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PROSPECTS FOR THE AGRICULTURAL SECTOR OF THE VOLYN REGION IN THE FRAMEWORK OF THE ASSOCIATION **AGREEMENT BETWEEN**

ГОСПОДАРСТВА ВОЛИНСЬКОГО РЕГІОНУ В РАМКАХ УГОДИ ПРО АСОЦІАЦІЮ МІЖ УКРАЇНОЮ ТА ЄС **UKRAINE AND THE EU**

Urgency of the research. The agricultural sector is an important component of the economy of Volyn region. However, at this stage of development in the industry there are several key problems to be resolved in the future.

Target setting. Despite the fact that Volyn region occupies a special place in the geostrategic context of social and economic and political development of Ukraine, as the region is geographically bordered by two European countries, in our view, this opens up significant prospects of development of the analyzed sector of agriculture in Volyn, particularly in the framework of the signed Association Agreement between Ukraine and the EU.

Actual scientific researches and issues analysis. Agricultural Economics were studied in the works of B. Gldych, M. Berdar, O. Borodina, A. Bulatova, S. Pysarenko, V. Zbarski, V. Matsybora. Clusterization processes, including in the agricultural sector, were studied in the works M. Porter, E. Fezer, H. Swon.

Uninvestigated parts of general matters defining. However, actual remains the problem of the study of the prospects of agriculture in the country as a whole and at the local level, taking into account regional peculiarities and possibilities of cross-border cooperation, increase exports of agricultural products to the EU.

The research objective is analysis of the status and prospects of development of the agricultural sector of the Volyn region, considering the possibility of such a development due to the deepening of cooperation of our country with the EU, namely the current Association Agreement between Ukraine and the EU.

The statement of basic materials. The article analyzes the main indicators of agriculture in the region, including indices in agricultural production. The problems of agricultural exports to the EU. It was found opportunities on increasing exports of agricultural market within the region signed the Association Agreement between Ukraine and the EU.

Conclusions. Considering that the EU has unilaterally cut the export duties, on condition of passing the appropriate certification, we believe that the region will be able to increase exports of agricultural product to the EU that provides significant opportunities for the development of agricultural enterprises in the region.

Keywords: agriculture; industry; region; export; import; Association; cooperation; cross-border cooperation.

Актуальність теми дослідження. Аграрний сектор є важливою складовою економіки Волинського регіону. Разом з тим, на даному етапі розвитку в галузі існує низка ключових проблем, які потребують вирішення в перспективі.

ПЕРСПЕКТИВИ ГАЛУЗІ СІЛЬСЬКОГО

Постановка проблеми. Зважаючи на те, що Волинський регіон займає особливе місце в геостратегічному контексті соціально-економічного та зовнішньополітичного розвитку України, оскільки географічно межує з двома європейськими державами, це відкриває значні перспективи, щодо розвитку галузі сільського господарства Волині, особливо в рамках підписаної Угоди про Асоціацію між Україною та ЄС.

Аналіз останніх досліджень і публікацій. Економіка сільського господарства досліджується в роботах Б. Гладич, М Бердар, О. Бородіної, А. Булатова, С. Писаренко, В. Збарського, В. Мацибори. Процеси кластеризації, в тому числі в сільському господарстві, вивчені в роботах М. Портера, Е. Фезера, Н. Свон.

Виділення недосліджених частин загальної проблеми. Однак, недостатньо опрацьованою залишається проблематика дослідження перспектив сільського господарства в країні в цілому та на місцевому рівні, зважаючи на регіональні особливості та можливості транскордонної співпраці, щодо нарощення експорту продукції сільського господарства України в країни ЄС.

Постановка завдання. Метою дослідження є аналіз стану та перспектив розвитку галузі сільського господарства Волинського регіону, враховуючи можливості такого розвитку обумовлені поглибленням співпраці нашої країни з ЄС, а саме діючою Угодою про Асоціацію між Україною та ЄС.

Виклад основного матеріалу. У статті проаналізовано основні показники галузі сільського господарства регіону, зокрема індекси обсягів сільськогосподарського виробництва. Досліджено проблеми експорту сільськогосподарської продукції до країн ЄС. З'ясовано можливості, щодо нарощення експорту продукції аграрного ринку регіону в рамках підписаної Угоди про Асоціацію між Україною та ЄС.

Висновки. З огляду на те, що ЄС в односторонньому порядку пішов на зниження експортних мит тому, власне, за умов проходження відповідної сертифікації, область зможе збільшити експорт до ЄС продукції сільського господарства.

Ключові слова: сільське господарство; галузь; регіон; експорт; імпорт; асоціація; співпраця; транскордонне співробітниитво.

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Urgency of the research. The agricultural sector is an important component of the economy of Volyn region. Together with the food industry, farmers provide one-third of the gross regional product. The key problems of the industry at this stage of development are: a small number of service cooperatives, uneven development of production, the lack of order in the use of land shares, the lack of investors and low prices of the products.

Target setting. Despite the fact that Volyn region occupies a special place in the geostrategic context of social and economic and political development of Ukraine, as the region is geographically bordered by two European countries, in our view, this opens up significant prospects of development of the analyzed sector of agriculture in Volyn, particularly in the framework of the signed Association Agreement between Ukraine and the EU.

Actual scientific researches and issues analysis. Agricultural Economics and problems of the agricultural sector in general were studied in the works of B. Gldych (2002), M. Berdar (2010), O. Borodina (2009), A. Bulatova (2003), S. Pysarenko (2010), V. Zbarski (2013), V. Matsybora (2013), and many other scientists. Clusterization processes, including in the agricultural sector, were studied in the works of many foreign scientists, including M. Porter (2006), E. Fezer (1998), H. Swon (1996).

Uninvestigated parts of general matters defining. However, actual remains the problem of the study of the prospects of agriculture in the country as a whole and at the local level, taking into account regional peculiarities and possibilities of cross-border cooperation, increase exports of agricultural products to the EU.

The research objective is analysis of the status and prospects of development of the agricultural sector of the Volyn region, considering the possibility of such a development due to the deepening of cooperation of our country with the EU, namely the current Association Agreement between Ukraine and the EU.

The statement of basic materials. Analyzing the sector of agriculture, first of all it is necessary to analyse the indicators which characterize the place and role of agriculture in the economy of the region. In particular, attention should be payed to indexes of volume of production of agriculture in general and its profitability, dynamics and structure of volumes of crop production and the main types of livestock products, trends and pricing policies of sale of agricultural products by agricultural enterprises, including sale abroad.

In general, during the years of Ukraine's independence, the industry has experienced significant changes, which primarily concern the issues of land ownership and organizational and legal forms of managing on village.

As of 1 November 2015 agricultural production in the region was led by 311 enterprises of various organizational and legal forms of management (excluding farmers). Among them, more than 71% of the total were business companies and private enterprises, in the ownership and use of which was for 84.0% of agricultural land. Now there are 680 existing farmlands [1].

Cooperatives dominate in Kamin-Kashyrskii, Ratnivskii, Lubeshivski, Manevytski, Starovyzhivski regions. In the forest-steppe zone the preference was given to business companies and private enterprises. In Volodymyr–Volynski, Gorokhivskyi and Lutsk regions, their specific gravity exceeds 85%.

Calculations of the development of agriculture are conducted separately according to the crop considering acreage and yield of the respective crops and livestock basing on livestock and productivity of livestock and poultry [2].

To analyze the volume of production of the industry, the general indicator is the volume index of agricultural production, which reflects the relative level of changes in total physical volume of agricultural goods produced over certain periods of time, that are selected for comparison. In its composition this index is an index of gross output of agriculture, which includes, along with products intended for marketing, the products of agricultural origin used in the production process, namely: seed and feed, as well as the work associated with the cultivation of the crop next year [3].

To calculate the volume index of agricultural production the Laspeyres formula was selected.

The essence of the Laspeyres formula is: comparison of prices of the current period (p1) and the base (p0) on the same set of goods (q0).



The Laspeyres formula shows how more expensive the goods become in the current period, the calculation is presented below [4].

$$L_{i} = \frac{\sum p_{1}q_{0}}{\sum p_{0}q_{0}} \tag{1}$$

The table 1 illustrates the evolution of indices of agricultural production of Volyn region in the period 2013-2015 (in % to previous year).

Indices of agricultural production Volyn

Table 1

					0.1 0 0.01				
Year	All categories			Including					
	Production of agriculture	from it		Agricultural enterprises			Households		
			¥	Production of agriculture	from it		e.	from it	
		crop	lives-tock		crop	lives- tock	Production of agriculture	crop	lives- tock
2013	102.6	100.5	105.3	107.4	105.5	109.4	100.5	98.6	103.2
2014	106.3	108.6	103.4	118.9	125.4	112.1	100.4	101.7	98.7
2015	95.4	96.1	94.5	98.8	94.5	103.6	93.5	96.9	88.9

Source: Ukrstat, further elaborated by the author

As can be seen from table 1 during the analyzed period in 2015 compared to 2014 there is a decreasing trend of volume index of agricultural production, namely both crop and livestock production. It should be noted that in January–July 2016, the volume index of agricultural production compared to the corresponding period in 2015 amounted to 105.2%, including in agricultural enterprises – 108.6%, households – 102.6%. The volume of agricultural products amounted to 2.5 billion UAH, 54.6% of which are produced by households.

Thus, according to the rate of production in the first half of this year Volyn region took the 7th place, and the volume of production in calculation per capita – 12th place in the state, at the same time in 2015 according to this indicator, Volyn took the 13th place [6].

It should be noted that in modern conditions of managing agricultural producers are oriented to the production of crops as it is more cost-effective. Analyzing the crop as a whole, it should be noted that in recent years significant changes have occurred in the structure of industrial crops production in agricultural enterprises. Earlier, namely in the period up to 2005, the households of Volyn grew mostly sugar beets, now preference is given to rapeseed and soybeans. In 2015, agricultural enterprises have grown rapeseed to 85.2 thousand tonnes comparing to 5.9 thousand tons in 2005 and 68.5 thousand tonnes of soybeens as against 0.3 thousand tonnes, respectively.

In recent years, the structure of sown areas in Volyn region has undergone significant transformations. Thus, in 2014, the acreage of soybeans has increased to 30 thousand hectares. In the future, we can assume that this trend will continue for the stability of prices and demand for this crop. The area for the cultivation of corn has increased 10-fold and acreage of rapeseed - 8 times.

In the scientific literature as the production of major crops, as a rule, are taken assembled products (gross harvest) as the main, and with repeated and inter-row sowings [7].

Table 2 represents the generalized analysis of crop production in Volyn region for the period 2013-2015.

Production of crops in Volyn region

Table 2

	Production of major crops, thousand tons								
Year	grains and legumes	sugar beet (factory)	sunflower seeds	potato	vegetables	fruits and berries			
2013	9020.3	5799.7	17.6	10869.8	2820.7	376.4			
2014	10367.7	6507.2	42.2	11321.4	2770.8	402.0			
2015	10622.8	4201.9	52.1	10988.1	2764.4	378.6			

Source: Ukrstat, further elaborated by the author

As it is shown in table 2, in the structure of agricultural production in the Volyn region among agrarians the higher specific gravity in the analyzed period was the cultivation of grain and technical crops as well as potato production.

In fact, the volume index of crop production for the period of the first half of 2016 compared to the corresponding period of the 2015 was 118.8%, including in agricultural enterprises – of 119.9%, in households – 117.7%. The share of households was 47.2%.

The growth in crop production in the current year is due to much higher rates of harvesting of early grain crops. There were harvested the areas which are 1.5 times higher because of better than last year weather and climatic conditions.

The livestock industry strongly influences the economic potential of Volyn, because it provides the population with food and industry with raw materials. It is the most labor-intensive industry, which throughout the year provides work for the rural population. During last years, the region commissioned 20 new livestock farms and complexes. Continues work on the introduction of new technologies in the field of dairy cattle breeding, there are 10 milking parlours.

The volume index of production of livestock products for the period of January-July of the current year compared to the corresponding period in 2015 amounted to 99.4%, including in agricultural enterprises – 102.4%, farms of the population – 97.4%. More than half of animal products (58.4 percent) is received in households.

The production of major livestock products in Volyn region for the period 2013-2016 was characterized by such data as shown in table 3.

It should be noted that this year almost 90% sold livestock and poultry in the Volyn region was accounted for Volodymyr-Volynskyi, Turiysk, Lokachi and Gorokhivskzi regions where large poultry enterprises operate. Milk production increased in agricultural enterprises of 10 regions, the most substantial – Ivanychivskii and Volodymyr-Volynski (respectively 23.4% and 20.7%). More than 60% of milk is received by agro-industrial enterprises of Lutsk and Gorokhivskyi regions. Egg production in agricultural enterprises increased, as a result of increasing of livestock by a quarter, and the productivity of laying hens by 1.4% [6].

Production of main livestock products in Volyn region

Table 3

	The production of major livestock products						
Year	meat (slaughter weight), thousand t	milk, thousand t	eggs, million pcs	wool, t			
2013	104.9	467.0	185.1	18.5			
2014	116.9	459.3	190.2	18.2			
2015	120.5	425.2	193.9	17.2			
Januar-July 2016	87.7	256.4	147.7	13.2			

Source: Ukrstat, further elaborated by the author

An important indicator of development of the industry of agriculture is the marketing of agricultural products. The total volume of sold own developed products by agricultural enterprises in January–July 2016 in comparison with the similar period of 2015 decreased by 5.2%, including plant products – by 31.4%, livestock products, on the contrary – increased by 16.1%.

Average prices of sale of agrarian production by agricultural enterprises on all areas of implementation in January–July of the current year compared to the corresponding period in 2015, increased by 5.5%, including livestock products – by 12.9%, crop production – decreased by 3.3%.

In agriculture as in other sectors, there are problems. Analyzing the problems of the industry as a whole in the region, the following should be noted: a small number of service cooperatives, the uneven development of production, the lack of order in the use of land shares, the lack of investors and low prices.

In addition to these, one of the currentl key challenges of the industry, which poses a threat to the sustainable development of the region is that large commercial enterprises, increasing volumes of crops, applying pesticides, which pollute the environment and pose risks to product quality. During the

last five years the use of pesticides increased 2.2 times. Management of organic and ecological production can prevent such a threat. This production has a high potential to the livelihoods of the rural population because it is less mechanized and requires more manual labor. However, organic products are more expensive than traditional.

Despite the fact that the proportion of households decreases they are the main producers of the production industry in the region (99% of potatoes, 96% of vegetables, 92% of fruits and berries, 84% of the milk). The households are structured in the family farms. According to the survey, which provides the Main Department of Statistics in the region, the population sells a fifth part of milk and meat, which produces 9% vegetables 6% grain, 10% potato [1].

The problem of marketing milk, fruits and vegetables produced by small farmers and individual farms, is the main. A great discrepancy in the prices of raw materials that are bought from farmers, with the market price of the finished product is observed. Only cooperation can ensure their economic independence and raise the standard of living of the rural population.

Another problem is that now there are only 17 service cooperatives. There are no cooperatives in Liubeshivski, Liubomlski, Manevitski and Ratnivski regions. Thus, another problem of this sector is that agricultural production develops unevenly in the districts. Leaders of agricultural production is the Volodymyr-Volynski, Gorokhivskyi and Lutsk regions, the grain - Gorokhivsky, Lokachynski, Lutski, Volodymyr-Volynskyi districts. Most milk is produced in Lutsk, Gorokhivskyi, Turiisk and Volodymyr-Volynski districts.

In potato production lead Ratnivskyi, Lyubeshivskyi, Kamin-Kashyrskyi and Manevytskyi areas. Therefore, in these areas, in our view, it is advisable to build a potatoemini-processing plants, manufacture of semi-finished products.

In Shatski, Liubomlski and Lubeshivski districts it is advisable to promote agritourism and to take a rest during the year because natural landscapes provide an opportunity to develop tourism not only in summer but in other seasons. In fact, "green tourism" is now very relevant in the world and cross-border partners of the region may be interested in its development. This can be a source of investment in the industry.

An important issue in the development of the industry for many years is that the main source of financing of capital investments, as before, remain the own funds of enterprises. In the development of the enterprises of agriculture, forestry and fisheries at the end of 2014 was invested 14.6 million dollars of U. S. foreign direct investment, or 5.4% involved in the investment area. These funds were primarily received by businesses that were engaged in crop production (10.6 million US dollars, or 72.4% of their total volume) [3].

Foreign investment was carried out by partners from 10 countries and they invested in 20 companies. The largest volume was invested by non-residents of Slovakia, Cyprus and Poland. These countries account for 93.7 per cent of foreign investment.

A key challenge for the industry is to find enterprising citizens of the region and investors who in the framework of public-private partnership will solve the issue of the increase in production, as the development of the competitiveness of rural areas. In this case, if specifically consider the development of the livestock industry and processing, first of all we are talking about creating of new jobs.

Another pressing task at present is to make an inventory of all agricultural lands in the region, as there are land units that have no heirs, these sites lease village councils and there are units that are not used at all.

One of the main problems remains the problem of land use. The main taxes that form the regional budget, are income tax of physical persons and land tax. Thus, today in most parts of the region, payments for use of land shares are not held as expected.

Regarding the prospects of development of the industry in the region, it should be noted that in region there are all conditions for development of meat cattle breeding. In the region there are 380 thousand hectares of pastures that can be used for this. Besides beef is very expensive and this meat is produced a little, because 80% of the area is poultry production.

Speaking about opportunities for the innovative development of the agricultural sector of the Volyn region, it is important to create clusters of agricultural enterprises in the region.



Based on the existing definitions of "cluster" given by leading authors we can highlight the following features of such entities: geographic proximity of participants, industry specialization of the territories and the union of participants in the technological chain, the interaction within a cluster of government, business, institutes, cooperation of the participants and the synergetic effect from the cooperation [8; 9; 10; 11].

The cluster approach in the agricultural sector will contribute to the creation of fundamental conditions for innovation, knowledge and technology exchange, as a consequence, increase the productivity and efficiency of the industry.

The obstacle for clustering right now is that it is very difficult for the service cooperatives to talk with processors, which are virtually monopolists in the market.

In addition to cluster formations, it is necessary to speak about possibility of integration of small enterprises with great potential. The involvement of small producers in associations will form the primary base of quality products which can be exported in terms of global competition.

Considering that EU is the world's largest common market, many entrepreneurs from around the world, including from Ukraine, are seeking to export their products to the EU. Agricultural enterprises is no exception and want to export their products to the EU.

Among the largest exporters of agriculture in Volyn region are the following [12]:

- 1."Ahrotekhnika", LLC cake, maize grain, sunflower oil, rapeseed oil, soybeans, soy, chickens, fodder (exports to Poland, the Czech Republic, Lithuania, Georgia, Belarus, Moldova, Russia);
- 2. LLC "Company "Milgrain" sugar beet pulp, soybeans, wheat, corn (Lithuania, Poland, Hungary, Belarus):
 - LLC "Agroindustrial group, Pan Kurchak" carcases of chickens (broilers) (Kyrgyzstan);
- 4. Ltd. "Ukrainski torhivelni merezhi" (Ukrainian trading network) poultry meat (Moldova, Armenia):
 - 5. PE "Volynecoresource" -corn grain (Poland);
 - 6. LLC "VMP" pork, soya (Russia, Poland, Latvia);
 - 7. LLC "Dzherela" chicken carcass (Kyrgyzstan);
 - 8. LLC "Poultry complex "Gubin" grain wheat, chicken carcass (Moldova);
 - 9. LLC "Vilia treid " the grain of wheat (Poland);
 - 10. TH "Saliut" casein, sugar (Czech Republic, Germany);
 - 11. PE Lesvk L. M. vegetables and fruits (Lithuania):
 - 12. LLC "Zakhid Retail" (West Retail) fruits and vegetables (Belarus).

As you can see, the majority of exporters in the region are implementing a marketing plan to cross-border neighbor, namely Poland which is a member of the EU, which seeks to integrate our country. The EU, which is characterized by a high level of consumption of food and agricultural products is one of the largest partners of Ukraine in trade of these products. However, this trade is hindered by high tariffs and non-tariff measures.

The current Agreement on Association between Ukraine and the EU facilitates the elimination of non-tariff trade barriers, and will also facilitate Ukraine's integration to the internal EU market and common regulatory space in the majority of sectors of the economy and public life of Ukraine [13].

The largest buyers of Ukrainian agricultural products to the EU, except Poland are:

- the largest buyers of domestic grain crops in money terms are Germany, Austria and Hungary;
- in the EU the largest buyers of Ukrainian maize are Spain, Italy and the Netherlands;
- seeds and fruits of oil crops make up more than 20% of Ukrainian export to France, Belgium, Greece and the Netherlands [3].

Problems of agricultural exports are related to the fact that the EU legislation lays down strict requirements concerning safety and product quality, which greatly affects the promotion of domestic agricultural production to the EU market. Now milk which is bought from private producers in the regions can not be taken to the EU markets, because its processing requires other technologies.

Currently, the problem is also the fact that potential exporters do not have enough information regarding how to export products. To solve this problem were established the export helpdesk - an



online service created by the European Commission in order to help businesses from countries that are developing, to get free access to information regarding the terms of exports to the EU.

The export helpdesk is actually an Internet resource where online users can find information about the conditions of trade with the EU, in particular regarding existing duties, preferential trade agreements, statistics, other specific requirements for the production [14].

It should be noted that relatively recently, Ukraine has received permission for export of agricultural products, namely by Regulation (EC) 31.01.2013 № 88/2013, Ukraine is included into the list of third countries eligible to export meat, poultry and eggs.

It is important to understand that the mere existence of quotas does not open the European market for Ukrainian products. The Ukrainian company should have a permission for export deliveries. At the moment there are very few such enterprises. Manufacturers of poultry and egg products that have achieved access to the European market more than one year primarily will be able to use quota [15].

Thus, domestic agricultural enterprises have the ability to export to member countries of the EU:

- marine fish for human consumption (Decision of the European Commission (EC) from 06.11.2006 n 2006/766/EC);
 - poultry, eggs and egg products (Regulation (EU) 31.01.2013 № 88/2013);
 - the bee honey;
- milk powder and products of animal origin not for human consumption (by-products) (Regulation of the European Parliament from 03.10.2002 No. 1069/2002, and Regulations (EU) from 25.02.2011 №142/2011) [16].

The safety of food products exported to the EU must be equivalent to products of the EU countries. The EU has introduced regulation in respect to certain groups of food products such as food products of animal origin, products of fish origin and composite food products.

Conclusions. The agro-industrial complex of Volyn region is the leading sector of the economy, which creates one-third of the gross output of the region. The analyzed border region carries out cross-border cooperation with two European States. Enterprises of the region, including agriculture, actively carry out the export of its products to these countries and other EU countries. Such cooperation is particularly relevant now, namely in the framework of the signed Association Agreement between Ukraine and the EU, as it has the potential of deepening.

Considering that the EU has unilaterally cut the export duties, on condition of passing the appropriate certification, we believe that the region will be able to increase exports of agricultural product to the EU that provides significant opportunities for the development of agricultural enterprises in the region. The EU side reaffirmed its willingness to initiate verification missions in agricultural enterprises to accelerate the process of their certification.

Concerning the possibilities of exports from Ukraine to the EU of certain products of animal origin, it should be noted that today are approved Plans for state monitoring regarding milk, eggs, honey, poultry and aquaculture.

We believe that agricultural enterprises of the region must take advantage of the opportunities that currently exist in the framework of the agreement on Association of Ukraine with the EU to establish close long-term relations with foreign partners on the European market, which in the future will allow them to make their products more secure, competitive, for the sake of future profitability and development of the industry in the region as a whole.

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