

# Active position of the country in the world market of agrarian products as an indicator of the underdevelopment level of its economy

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## Abstract

The article examines the role of countries in the development of the world market of agrarian products. At the same time, the world production and exports of agrarian products are considered not only in terms of countries, but also in terms of the most consumed species. The main tendencies of international trade of agrarian products are described. At the same time, we discuss only those agrarian products which are raw materials or have undergone the primary processing. The author of the research wants to confirm or refute the existing opinion that the active position of the country in the world agrarian market is a kind of evidence of the underdevelopment level of its economy.

**Keywords:** agrarian products; agricultural products; world market of agrarian products; world agrarian production; export of agrarian products.

## Introduction

There are five groups of factors that influence the global food problem and the extent of the country's participation in agrarian trade: natural conditions and population; world transport and communications, which provide a wide output of agricultural products to the external market; political situation in the world; the world economy and trade in their unity; poverty (Sots'ka Eu., 2015).

In general, agreeing with this position, we want to consider the poverty line in details, in particular, in terms of the level of economic development of agricultural products' producer-country and the exporter-country. Indeed, currently global trends are indicative of the development priority in the country's services (post-industrial economy) over the industrial sector (industrial economy), while it is considered that the advanced development of the agrarian sector (pre-industrial economy) is the main feature of developing countries.

This has led us to study the peculiarities of the development of the world agrarian market in order to substantiate the answers to the following questions: who is the main producer and seller of agricultural products at the international level: developed countries or developing countries? What is the percentage level of agrarian economy's influence on the country's economy development? Is the country's foreign trade in the

field of agrarian production an indicator of industry and services' underdevelopment in the country? The solution to those issues is the purpose of this work.

### **Theoretical and Methodological Bases.**

This scientific work is based on the certain theoretical and methodological conclusions we have made before.

We believe that there are three types of international markets related to the country's agrarian development, namely: the world food market, the world agrarian market, the global agrarian market.

In our opinion, the world agrarian market is formed at the expense of the agricultural production and implementation of the products in the form of raw materials (or after initial processing) at the international level. When it comes to the exchange of food on an international scale, then such a market should be considered as a global food market. If on the market, besides the actual agricultural products, the means of material and technical support of agrarian production are realized, we should talk about the world agrarian market.

Thus, when in this research we are talking about the export of agricultural products, then as an object of trade we consider unprocessed products (or products after primary processing) of plant growing, livestock and agrarian waste.

In order to substantiate the results in the research proces, we used a number of methods, including monographic; the economic and statistical method; dialectical, abstract and logical method; graphical methods and others.

## **Results**

### **General features of world agricultural production**

According to the World Food Program, the food crisis in the world continues. Thus, in 2016, the number of malnourished people was around 800 million (World Food Program, 2017). Taking into consideration the global projected increase in population by 2050 by 34% to 9.1 billion people (FAO, 2017 The State of Agrarian Commodity Markets 2015-16), the global demand for agricultural products will only be increased. At present, according to the World Trade Organization, the share of agriculture in the world trade of goods is more than 10% (WTO, 2017 World merchandise trade by major product grouping, 2006-2016), and according to the experts' forecasts it will continue to increase.

According to the World Bank data, in 2016, agriculture occupied 4% of the world's gross production. At the same time, it is determined that in 2016 in 20 countries the share of agriculture in GDP was from 26% to 61%. This group includes the countries of

Africa, Asia, the island states in the Indian and Pacific oceans. The leaders in terms of the share of agriculture in GDP are Sierra Leone (61%), Chad (50%) and Central African Republic (43%). In 49 countries of the world, the share of agricultural production in the production of total GDP amounted to 11 to 25% (Tajikistan, Albania, Madagascar, Ukraine), in 84 countries - 1-10% (Austria, Belgium, Italy) and in 5 countries the agrarian production is absent at all (Luxembourg, Singapore, Qatar), 36 countries did not provided any information (World Bank, 2017 World Development Indicators: Structure of output).

World agrarian production includes both the production of mass products (grain, oil, vegetables, beef, etc.), as well as the production of niche agricultural products (honey, rabbit meat, garlic, etc.), table 1.

Agricultural products	2015/2016	2016/2017	2017/2018 prognosis	Growth rate, % 2016/2017 until 2015/2016
Grain crops, including:	2467,9	2600,3	2530,9	105,36
Wheat	736,98	754,31	739,53	102,35
Corn	968,81	1068,79	1031,86	110,32
Rice	471,87	483,81	481,04	102,53
Barley	149,25	148,0	137,47	99,16
Sorghum	61,42	62,64	59,34	101,99
Rye	12,18	12,65	13,15	103,86
Oilseeds, including:	521,1	571,5	573,0	109,67
Soy	312,87	351,78	344,67	112,44
Sunflower	40,51	46,31	46,58	114,32
Rape	70,5	69,18	72,58	98,13
Cotton	96,76	106,54	114,73	110,11
Beef	68,0	67,9	68,4	99,85
Bird meat	111,0	114,9	116,2	103,51
Pork	116,9	117,2	116,4	100,26
Sheep's Meat	13,9	14,0	14,1	100,72

*Table 1. World production of major groups of agricultural products, mln t*

*Source: author's calculations based on USDA, 2017 World Agricultural Supply and Demand Estimates; USDA, 2017 Dairy: World Markets and Trade; USDA, 2017 Livestock and Poultry: World Markets and Trade.*

Thus, the most massive crops in the world are cereals and oilseeds. At the same time, the world's largest agrarian production industry is corn, wheat, rice, soybeans' producing. This situation is explained by several factors: food preferences of the majority of the world's population (rice, wheat), the possibility of using products in related industries (cotton, rape), development of energy-efficient technologies (soy, corn), etc. It should also be noted that among the livestock products pork and chicken take the main place.

It is worth paying attention to the increase of almost all types of agricultural products in dynamics (except barley) in the world production. At present, the efforts of most actors in the world market of agricultural products are aimed at increasing the volumes of production (both directly by manufacturers and governments of countries, international organizations, service companies, etc.).

The state role in the world agrarian production depends on the role of the products, food needs not only in own country, but also at the international level. It should be noted that agricultural products belong to the group of industrial goods and represent the commodity-raw materials which are necessary for the producing of essential products (grain, seeds of oilseeds, meat, etc.), although there are such types of agricultural products which are consumed in raw form immediately after the initial processing (vegetables, berries, honey, etc.). There are also a number of niche products that cover relatively insignificant but stable food needs and are characterized by an increase in demand (mustard, sorghum, walnut, garlic, etc.). Based on the above, we will look at different world markets for individual types of agricultural products and determine the main producing countries.

At present, there is a certain number of the world markets with individual types of agricultural products of varying levels of development. We consider this level as the volume of demand and supply of products in a particular market. So, the most developed markets in the world are the world grain market, the world market of oilseeds, the world meat market. Then, there are such markets as the world's garlic market, the world market of honey, the world market of walnut, and others, which have less sales.

Country	Area, million hectares			Yield, t/ha			Production, million tons		
	2015/16	2016/17	2017/18 prognosis	2015/16	2016/17	2017/18 prognosis	2015/16	2016/17	2017/18 prognosis
World	322,52	324,09	321,4	3,9	4,2	4,1	1259,04	1362,14	1316,44
USA	37,8	39,2	37,26	9,71	10,27	10,07	367,01	402,6	375,34
EU	30,21	29,45	29,89	5,05	5,16	5,11	152,65	151,96	153,5
China	40,16	38,99	37,27	5,76	5,83	5,98	231,4	227,44	223,04
Brazil	17,0	18,51	18,71	4,07	5,4	5,22	69,13	99,85	97,6
Argentina	5,78	6,84	6,8	6,56	7,12	6,91	37,94	48,67	47,25
Russia	15,23	15,14	15,6	2,46	2,69	2,67	37,43	40,77	41,65
Ukraine	7,62	7,83	7,56	4,38	5,01	4,91	33,39	39,26	37,09
Nigeria	13,1	13,3	13,15	1,37	1,39	1,39	17,95	18,5	18,25
India	24,51	24,5	24,15	1,58	1,8	1,75	38,7	44,2	42,2
Mexico	9,25	9,32	9,2	3,5	3,6	3,46	32,38	33,5	31,83
Canada	4,88	4,64	4,57	5,25	5,52	5,65	25,62	25,63	25,78
Australia	5,76	5,5	5,27	2,16	3,07	2,3	12,44	16,91	11,88

*Table 2 General characteristics of world grain production.*

*Source: formed by the author on the basis of USDA, 2017 World Agricultural Production.*

Exploring the official data of the US Department of Agriculture, it should be noted that the largest producers of grain in the world are the USA, China, the EU, Brazil and Argentina. In addition, the given data indicate that there is no direct proportional relationship between the size of the land and the volume of production. So, Russia, India, Nigeria have a significant amount of agrarian land on which cereals are grown, but at the same time, yields are lower compared to the other countries.

The world's main cultivating oilseeds are soy, sunflower, rape and peanuts. Their share in the overall structure of the world oil production varies from 83.25% in 2015 to 88.6% in 2017 in Brazil, Argentina, India, China, and the EU as the main producers of oilseeds.

Country	Area, million hectares			Yield, t/ha			Production, million tons		
	2015/16	2016/17	2017/18 prognosis	2015/16	2016/17	2017/18 prognosis	2015/16	2016/17	2017/18 prognosis
Soy									
World	120,08	120,50	126,94	2,61	2,92	2,72	312,87	351,78	345,09
Brazil	33,30	33,90	34,70	2,90	3,36	3,08	96,50	114,00	107,00
Argentina	19,53	18,35	19,10	2,91	3,15	2,98	56,80	57,80	57,00
India	11,67	11,40	12,00	0,59	1,01	0,96	6,93	11,50	11,50
China	6,51	7,20	7,80	1,81	1,79	1,79	11,79	12,90	14,00
Portugal	3,26	3,39	3,40	2,82	3,15	2,76	9,22	10,67	9,40
Sunflower									
World	23,36	25,22	25,18	1,73	1,84	1,86	40,51	46,31	46,82
Russia	6,45	7,18	7,20	1,42	1,51	1,53	9,17	10,86	11,00
Ukraine	5,50	6,40	6,40	2,16	2,22	2,27	11,90	14,20	14,50
EU	4,17	4,14	4,13	1,85	2,02	2,03	7,72	8,35	8,38
Argentina	1,27	1,72	1,60	2,13	1,98	2,13	2,70	3,40	3,40
China	1,04	1,08	1,10	2,60	2,59	2,59	2,70	2,80	2,85
Peanut									
World	24,77	25,48	26,14	1,63	1,68	1,66	40,42	42,89	43,39
China	4,62	4,75	4,85	3,56	3,58	3,59	16,44	17,00	17,40
India	4,55	5,50	6,00	0,98	1,26	1,10	4,47	6,92	6,60
Nigeria	2,50	2,50	2,50	1,20	1,20	1,20	3,00	3,00	3,00
Sudan	2,18	1,80	1,80	0,86	0,78	0,78	1,87	1,40	1,40
USA	0,63	0,63	0,72	4,31	4,12	4,08	2,72	2,58	2,93
Rape									
World	34,05	33,70	36,68	2,06	2,05	1,97	70,05	69,18	72,42
EU	6,51	6,57	6,65	3,38	3,12	3,18	22,00	20,47	21,15
Canada	8,32	8,05	9,54	2,21	2,30	2,20	18,38	18,50	21,00
China	7,53	7,00	6,80	1,98	1,93	1,93	14,93	13,50	13,10
India	5,75	6,50	7,20	1,03	1,09	1,00	5,92	7,09	7,20
Australia	2,36	2,33	2,60	1,25	1,78	1,23	2,94	4,14	3,20

Table 3 World production of basic oilseeds

Source: formed by the author on the basis of USDA, 2017 World Agricultural Production.

Vegetables are the main dietary products in many countries of the world, which results in significant volumes of their production. The world production of vegetables is estimated at 1,135,700,000 tons. Thus, potatoes, tomatoes, cucumbers, cabbage, onions carrots and other root vegetables are prevailed in the structure of production (Vegetable seed industry: India and World, 2016). The largest vegetable producers in the world are China, India, the USA, Turkey and Iran (The Top 5 Countries that Produce the Most Share of Vegetables).

The increase of the population's living standards and the related changes in the structure of agricultural products' demand have led to an increase and prevalence of livestock production over crop production in most developed countries. In some of them livestock products account for up to 60% of agricultural products' gross. The certain growth in the number of population and its income in developing countries also have an influence on the increased consumption of meat per capita. According to this, the world meat market is developing constantly. In 2016, the world production of meat has increased compared to 2015 by 0.3% and reached 320.7 million tons. However, the main producers of meat in the world are the US, Brazil, EU, India, Russia, China, Australia. The main place in the world livestock production takes pork, although the dynamics of production rate decreases slightly (in 2016 compared to 2015 by 0.7%), in second place there is poultry, or 36.23% of world output in 2016. The top three products of livestock concludes with beef, which is 68.4 million tons in 2016, or 21.33% of the world meat production (FAO, 2017 Food Outlook: BIENNIAL REPORT ON GLOBAL FOOD).

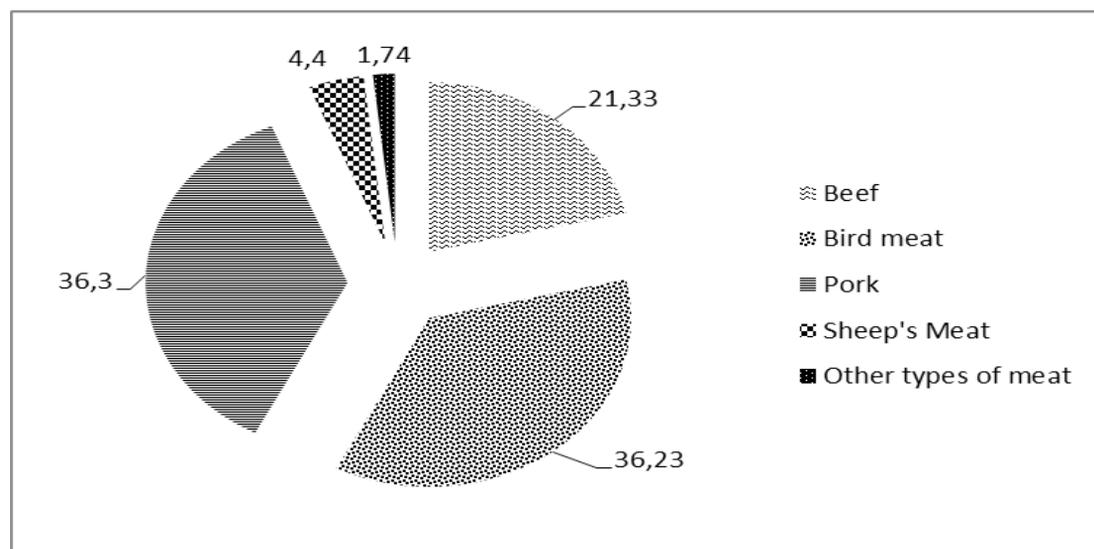


Figure 1 - Commodity structure of the world production of meat in 2016

Source: formed by the author on the basis of FAO,  
2017 Food Outlook: BIENNIAL REPORT ON GLOBAL FOOD

Native crops are able to diversify the monocultural direction of dominance in crop rotation of individual crops (sunflower, rape, corn), cultivation of which exceeds the normative limits significantly depleting the upper layers of the soil, resulting in their yield varies in certain years. In addition, in the world in the context of climate change, the risk of growing traditional crops increases and requires the producing of adopted plants in the conditions of crop rotation. Also, improving the standard of population living according to the international scale has contributed to the increase of non-traditional crops or niche crops in demand.

One of the largest niche types of the global agrarian market is the honey market. The world's largest producers of honey are China (about 650 thousand tons annually), Turkey (115 thousand tons), Iran (79 thousand tons), Russia (95 thousand tons) (Mackenzie, 2017).

The world wool production in 2016/17 was around 2.1 million tons. At the same time, China and the USA remain the main producers, which together produce 80% of the total amount of walnuts (USDA, 2017 Tree Nuts: World Markets and Trade World Markets and Trade).

The largest garlic producers in the world are China, which produces more than 20 million tons annually. India, South Korea, Bangladesh, Egypt, Russia (Top 10 Garlic Producing Countries) make an important contribution to the production of garlic in the world.

Table 4 shows the economic development of the countries of the world's largest producers of certain types of agricultural products.

Producing country	GDP of the country in 2016, billion dollars.	GDP per capita in 2016, USD	Share of agriculture in GDP of the country in 2016,%	Share of agriculture in GDP of the country in 2016, billion dollars
Corn				
China	11937,6	8583	9	1074,38
Brazil	2080,9	10020	5	104,07
Argentina	619,9	14062	8	49,59
Wheat				
China	11937,6	8583	9	1074,38
India	2439,0	1852	17	414,63
Russia	1469,3	10248	5	73,47
Rice				
China	11937,6	8583	9	1074,38
India	2439,0	1852	17	414,63
Indonesia	1010,9	3859	13	131,42
Sunflower				
Ukraine	104,1	2459	14	14,57
Russia	1469,3	10248	5	73,47
Argentina	619,9	14062	8	49,59

Soy				
Brazil	2080,9	10020	5	104,07
Argentina	619,9	14062	8	49,59
China	11937,6	8583	9	1074,38
Rape				
Canada	1640,4	42158	1,7	27,89
China	11937,6	8583	9	1074,38
India	2439,0	1452	17	414,63
Potato				
China	11937,6	8583	9	1074,38
India	2439,0	1852	17	414,63
Russia	1469,3	10248	5	73,47
Cucumbers				
China	11937,6	8583	9	1074,38
Turkey	841,2	10434	7	58,88
Iran	427,7	5252	11	47,05
Tomatoes				
China	11937,6	8583	9	1074,38
India	2439,0	1852	17	414,63
USA	19362,1	59495	1	193,62
Beef				
USA	19362,1	59495	1	193,62
Brazil	2080,9	10020	5	104,07
China	11937,6	8583	9	1074,38
Chicken				
Brazil	2080,9	10020	5	104,07
China	11937,6	8583	9	1074,38
India	2439,0	1852	17	414,63
Pork				
China	11937,6	8583	9	1074,38
Brazil	2080,9	10020	5	104,07
Russia	1469,3	10248	5	73,47
Honey				
China	11937,6	8583	5	1074,38
Turkey	841,2	10434	7	58,88
USA	19362,1	59495	1	193,62
Walnut				
China	11937,6	8583	9	1074,38
USA	19362,1	59495	1	193,62
Ukraine	104,1	2459	14	14,57
Garlic				
China	11937,6	8583	9	1074,38
India	2439,0	1852	17	414,63
South Korea	1529,7	27538,81	2	30,59

Table 4 Indicators of economic development of the world's largest producers of certain types of agricultural products

Source: formed by the author on the basis of World Bank, 2017 World Development Indicators: Structure of output; GDP by country Statistic from World Bank 1960-2016.

Thus, for the world’s largest producers of the main types of agricultural products the agriculture is not their leading industry. Thus, in China’s GDP agriculture takes about 9% or \$1074.38 billion, in the US GDP - 1% (\$193.62 billion), in Argentina’s GDP - 8% (\$49.59 billion). The largest share of agriculture in the GDP of the listed countries is 17% in India, 14% in Ukraine, 11% in Iran. The main peculiarity of these countries is the lowest GDP per capita in the country.

### The world exports of agricultural products

According to the World Trade Organization in 2016, the largest exporters of agricultural products in the world were the countries of the European Union, the USA and Brazil. At the same time, it should be noted that each segment of the world’s agrarian market has its largest exporters and importers.

The grain trade is one of the largest segments of the global agrarian market. Its volumes in recent years amounted to an average of \$185 million. Although, in practice, it is difficult to determine exact volumes due to differences in the statistics of different countries and international organizations. Table 5 shows the world trade figures of major crops, according to the US Department of Agriculture.

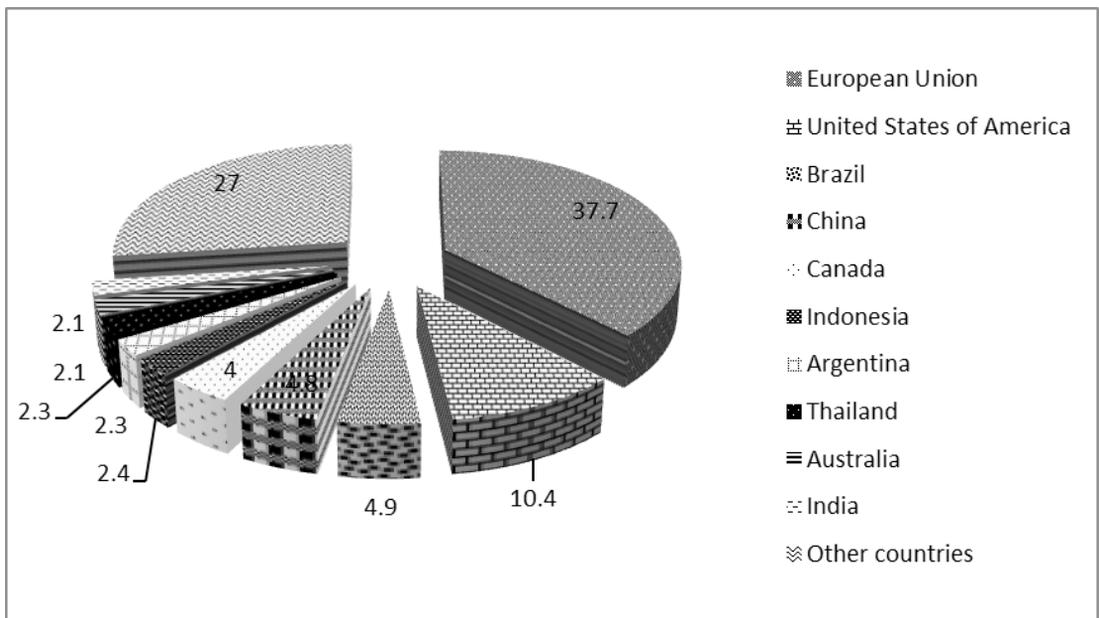


Figure 2. TOP 10 of the world exporters of agricultural products in 2016, %  
 Source: formed by the author on the basis of WTO, 2017 World merchandise trade by major product grouping

	2015/2016	2016/2017	2017/2018 prognosis	Growth rate, % 2016/2017 until 2015/2016
Corn				
World Trade	144,744	144,47	150,785	99,81
Major exporters, including: Brazil	35,382	22,0	33,5	62,18
Argentina	21,678	26,5	27,5	122,24
Ukraine	16,595	20,5	20,5	123,53
Major importers, including: Japan	15,194	15,0	15,0	98,72
Mexico	15,5	15,5	15,5	100,0
EU	13,768	13,1	15,0	95,15
Wheat				
World Trade	171,999	181,35	180,84	105,44
Major exporters, including: EU	34,686	27,0	30,0	77,84
Canada	22,136	20,0	22,0	90,35
Russia	25,543	29,0	30,5	113,53
Major importers, including: Egypt	11,925	11,5	11,925	96,44
Indonesia	10,116	9,9	9,5	97,86
Algeria	8,153	8,0	8,0	98,12
Rice				
World Trade	40,44	42,517	43,419	105,14
Major exporters, including: India	10,0	10,5	11,0	105,0
Thailand	9,867	10,0	10,0	101,35
Vietnam	5,088	5,8	6,0	113,99
Major importers, including: China	4,6	5,1	4,8	110,87
Nigeria	2,1	2,1	2,1	100,0
EU	1,816	1,850	1,9	101,87

Table 5. The world trade of main grain crops, mln tons

Source: formed by the author on the basis of USDA, 2017 Grain: World Markets and Trade

Thus, Brazil, Argentina, Ukraine, the EU, Canada, Russia, India, Thailand, Vietnam, Japan, Mexico, Egypt, Indonesia, Algeria, China and Nigeria have the largest impact on the development of the world grain market. It is the foreign trade and agrarian policy of these countries that directly affect the formation of prices and special conditions for the supply of grain in the world market.

The world market of oilseeds is one of the most dynamic segments of the global agrarian market. Thus, according to the Ministry of the United States Agriculture, the volume of the oilseeds' world trade has been growing rapidly in recent years, from 112.77 million tonnes in 2013 to a projected 172.89 million tonnes in 2018 (USDA, 2017 World Agricultural

Supply and Demand Estimates). The peculiarity of the world trade in oilseed crops is that, as a rule, not the raw materials (soybeans, sunflower seeds, rape, peanuts, etc.) are sold at the international level, but processed products such as oil. From this, volumes of the world trade in oilseeds are significantly lower than the production volumes.

The basic trade flow in the world market of oilseeds takes soybeans. At the same time the most powerful players in this market are Brazil, USA, Canada, Figure 3.

The trends of the world trade in rapeseed directly depend on the development of the market of the rape in a specific period in Canada, because this country independently forms more than half of the world's rape supply. Thus, in 2016/2017, Canada exported nearly 10.7 million tonnes of rape, or 75.5% of world supplies (USDA, 2017 Oilseeds: World Markets and Trade).

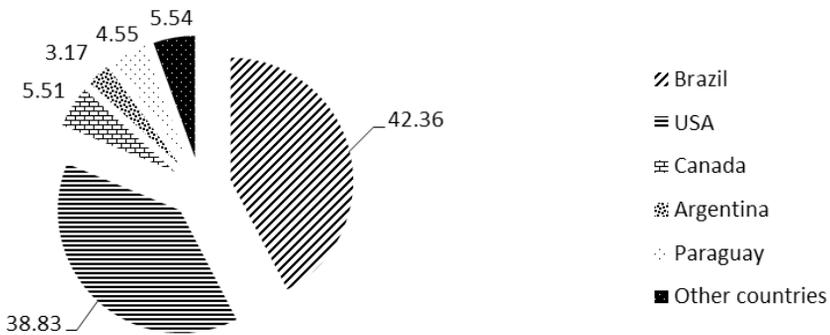


Figure 3 - The geographic structure of the world soybean exports in 2016/2017 MP, %  
 Source: formed by the author on the basis of USDA, 2017 World Agricultural Supply and Demand Estimates

The trade relations with regard to sunflower seeds at the international level are determined by the EU, Russia, Ukraine and Turkey, Fig. 4.

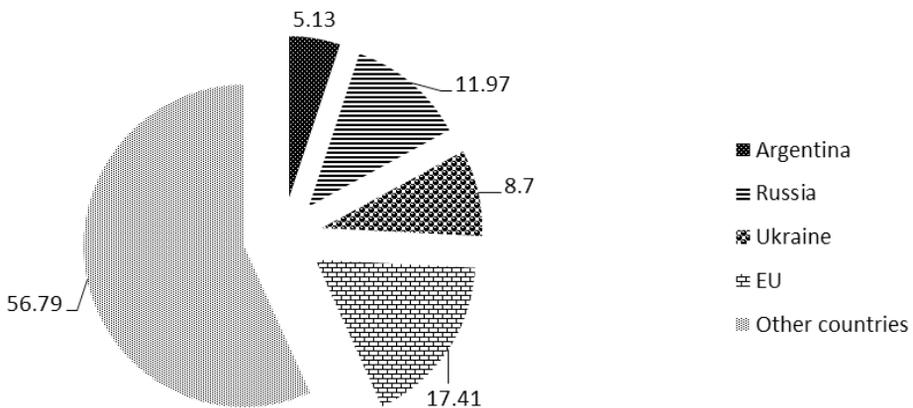


Figure 4 - Geographical structure of sunflower export in 2016/2017 MR  
 Source: formed by the author on the basis of USDA, 2017 World Agricultural Supply and Demand Estimates

In 2016/2017 the world exports of sunflower after primary processing (raw materials) amounted to only 4.9% of world production, the rest of the grown products were either consumed inside of the producing country or exported as finished products (mainly sunflower oil). The largest amount of raw materials in the world market was delivered to the EU - 400 thousand tons, Russia - 275 thousand tons and Ukraine - 200 thousand tons (USDA, 2017 Oilseeds: World Markets and Trade).

The worldwide vegetable trade is developing dynamically due to the growing demand for vegetables products on the world and domestic markets.

Product type	The volume of world exports, billion dollars USA	Major Exporters	Major Importers
Potato	3,7	Netherlands, France, Germany, Canada, China	USA, France, United Kingdom, Italy, Belgium
Tomatoes	8,4	Mexico, Netherlands, Spain, Morocco, Canada	Germany, Russia, United Kingdom, France, USA
Cabbage	2, 81	USA, China, Mexico, Netherlands, Italy	USA, China, Netherlands, Russia, United Kingdom
Cucumbers	2,32	Spain, Mexico, Netherlands, Canada, Belgium	USA, Germany, United Kingdom, Russia, Netherlands
Carrots, turnips, celery, radishes and other food roots	1,7	China, Netherlands, USA, Italy, Spain	Germany, USA, Canada, France, United Kingdom

*Table 6. General characteristics of the world exports of certain types of vegetables in 2016.*

*Source: formed by the author on the basis of Trade map – international trade statistics.*

The world trade of meat in 2016 increased by 2.8% compared to 2015 and amounted to 30.6 million tons. The main suppliers of the world meat market are Brazil, the USA, Canada, the EU, Mexico, Thailand, Argentina, Belarus. In the commodity structure of international trade, the primacy belongs to the poultry meat, which in 2016 was sold in the amount of 12.7 million tons, beef was sold in the amount of 9.3 million tons and pork - 7.5 million tons (FAO, 2017 Food Outlook: BIENNIAL REPORT ON GLOBAL FOOD).

It is important to note that the peculiarity of the development of the world meat market has the difference in the produced and sold volumes at the international level of products. Thus, pork in the world is produced almost twice more than beef, while more beef is sold. This tendency is caused by such factors of the world market of agricultural products' development as demand on the domestic market of the country-producer; priority in satisfying domestic food needs vs the needs of other countries; cultural and religious factors in the development of society in the country of the meat producer, etc.

According to the data of the Ministry of Agriculture of the USA, the world sales of natural honey in 2016 amounted to \$2.2 billion. At the same time, the cost of exports of natural honey increased by an average of 27.1% for all exporting countries since 2012, when natural supplies of honey were valued at \$1.8 billion. USA. The largest exporters of honey in the world are China, which in 2016 put honey on the world market for \$276.6 million, New Zealand - \$206.7 million, Argentina - \$168.9 million, Germany - \$144, 9 million, Sierra Leone - \$142.4 million. (Daniel Workman, 2017).

Ukraine exports' share of honey is growing at the fastest pace (by 247.9% compared to 2012), New Zealand (by 98.9%), Brazil (by 75.8%), Spain (by 36.5%), Belgium (by 32.1%) (Daniel Workman, 2017).

The main world sellers of walnut are the USA, Chile, Moldova, China, India, Ukraine. Moreover, the USA in 2016/2017 reduced the volume of exports by 15 thousand tons to 460 thousand tons, while Ukraine, on the contrary, increased its sales on the world market from 10 thousand tons to 75 thousand tons (USDA, 2017 *Tree Nuts: World Markets and Trade World Markets and Trade*).

The world market of garlic is by 70-80% controlled by China, depending on the marketing year. In 2016/2017, its volume amounted to \$2.48 billion. The United States was characterized by a sharp rise in the world prices of garlic due to the decline in China's production of this crop. In the given period India increased the volumes of export of garlic by 3 times. In general, in the world market of garlic, the main players are China, France, Spain, India, South Korea - sellers, and the Netherlands, South Africa, Germany, Italy, Japan - buyers (Rudolf Mulderij, 2016).

The Food and Agriculture Organization of the United Nations provides the following main theses of modern world agricultural trade:

1. The agricultural products' trade continues to evolve under the influence of high demand, especially in emerging economies. Over the past ten years, the world's export of agricultural products has increased almost threefold, and its volume has increased by about 60% over the same period.
2. The largest net exporters of agricultural products in the world are the countries of Latin America, where a significant increase in production outstrips sustained consumption of growth. The second largest net exporter is the North America. The Eastern Europe and Central Asia are in the process of moving from importers to net exporters
3. In the structure of exports of agricultural products, the share of products with primary processing is about 41%. The nature of agricultural products' usage is also changing. While cereal crops remain the basis of a diet. Their role in industrial applications is increasing and will continue to grow in the coming decades. At the world level, the main area of application of grain crops is food, but the fastest pace in

the grain sector is increasing demand for feed, which corresponds to changes in the nutritional benefits of the planet's population. In addition, about 12% of the world's consumption of fodder crops is recognized due to the production of ethanol (FAO, 2017, The State of Agricultural Commodities Markets 2015-16).

As for the dynamics of the market of individual crops, due to the high demand for vegetable oils and protein foods, the importance of oil seeds increases. The incomes' growth, outflow of population in cities and globalization of food habits play an important role in increasing the popularity of finished products, increasing the consumption of meat, vegetable oils and sugar. In addition, markets of individual niche types of agricultural products (honey, garlic, rabbit meat, etc.) are increasing.

### **Conclusions and Discussion**

The study of the world market of agricultural products has made it possible to distinguish the main world producers and exporters, and the given indicators of development of countries. That gave an opportunity to speak about the absence of a clear relationship between the level of economic development of the country, the role of agriculture in its economy and the place of the country in the world agrarian market. Thus, among the most active players in the world agrarian market are countries that belong to different groups according to the level of economic development (according to the UNO classification): the countries with the most developed world economy - the USA, Canada, France, Germany; transition Countries - Russia, Ukraine; developing countries: Argentina, Brazil, China, India, Indonesia, Iran, Turkey, South Korea, Chile (UNO / DESA, 2014 Country classification). In all of the listed countries, agriculture is not the leading industry, and only in Ukraine, India, Indonesia and Iran, the share of agriculture in GDP in 2016 was more than 10%. At the same time, it should be noted that if 1% of agriculture in the US GDP is \$193.62 billion, then 14% of agriculture in Ukraine's GDP is \$14.57 billion.

Producing country	The level of development of the country according to the UN classification	Country exporter	The level of development of the country according to the UN classification
Corn			
China	Developing economies	Brazil	Developing economies
Brazil	Developing economies	Argentina	Developing economies
Argentina	Developing economies	Ukraine	Economies in transition
Wheat			
China	Developing economies	Russian Federation	Economies in transition
India	Developing economies	Australia	Developed economies
Russian Federation	Economies in transition	Canada	Major developed economies
Rice			
China	Developing economies	India	Developing economies
India	Developing economies	Thailand	Developing economies
Indonesia	Developing economies	Viet Nam	Developing economies
Sunflower			
Ukraine	Economies in transition	Argentina	Developing economies
Russian Federation	Economies in transition	Ukraine	Economies in transition
Argentina	Developing economies	Russian Federation	Economies in transition
Soy			
Brazil	Developing economies	Brazil	Developing economies
Argentina	Developing economies	United States	Major developed economies
China	Developing economies	Canada	Major developed economies
Rape			
Canada	Major developed economies	Canada	Major developed economies
China	Developing economies	India	Developing economies
India	Developing economies	China	Developing economies
Potato			
China	Developing economies	Netherlands	Developed economies
India	Developing economies	France	Major developed economies
Russian Federation	Economies in transition	Germany	Major developed economies
Cucumbers			
China	Developing economies	Spain	Developed economies
Turkey	Developing economies	Mexico	Developing economies
Iran	Developing economies	Netherlands	Developed economies
Tomatoes			
China	Developing economies	Mexico	Developing economies
India	Developing economies	Netherlands	Developed economies
United States	Major developed economies	Spain	Developed economies
Beef			
United States	Major developed economies	Brazil	Developing economies
Brazil	Developing economies	India	Developing economies
China	Developing economies	Australia	Developed economies
Chicken			
Brazil	Developing economies	Brazil	Developing economies
China	Developing economies	Thailand	Developing economies
India	Developing economies	China	Developing economies
Pork			
China	Developing economies	Canada	Major developed economies
Brazil	Developing economies	Brazil	Developing economies
Russian Federation	Economies in transition	China	Developing economies
Honey			
China	Developing economies	China	Developing economies
Turkey	Developing economies	New Zealand	Developed economies
United States	Major developed economies	Argentina	Developing economies
Walnut			
China	Developing economies	United States	Major developed economies
United States	Major developed economies	Chile	Developing economies
Ukraine	Economies in transition	Ukraine	Economies in transition
Garlic			
China	Developing economies	China	Developing economies
India	Developing economies	Spain	Developed economies
Republic of Korea	Developing economies	Argentina	Developing economies

Table 7. The world's largest producers and exporters of certain types of agricultural products

The following comparison of the main producers and exporters of certain types of agricultural products allows to state the following:

- In the world markets of such products as sunflower and rape are the countries of “clean leaders”, both in production and in export: on the world sunflower market - Ukraine, Russia, Argentina; in the global rapeseed market - Canada, China, India;
- not all countries - the largest producers of a particular type of agricultural products are at the same time the largest exporters. So, no country from the top three world producers of potatoes, tomatoes, cucumbers is not among the top three of the world’s largest exporters of these types of agricultural products;
- in the world markets of most types of agricultural products there is no “clean” top three leaders. Thus, 1-2 of the top three producers’ leaders are export leaders, while other countries are simply the largest exporters.
- the situation with the absence of “clean leaders” in the world markets of certain types of agricultural products takes place due to demand for this type of production in the country of origin, to its foreign trade policy, the existence of international trade agreements within which producer countries should operate, etc.

Thus, the country’s active position in the world agrarian market does not prove its economic development, regardless of whether the country belongs to the largest world producers of certain types of agricultural products, or to its largest exporters.

We believe that studying the role of agriculture in the country’s economy and place of the country in the world agrarian market it is necessary to take into account not only the final result of the activity - the volume of produced or the volume of exported products. So, in order to answer the question whether or not the development of agriculture in the country is evidence of its underdevelopment in other fields, it is necessary to analyze the innovation of agriculture in the country, the existing infrastructure of the agrarian market in the country (including the available capacity of industrial processing of agricultural products), investment climate in the state and investment attractiveness of its agriculture, state agricultural policy, participation of the country in international trade agreements. The solving of the pointed issues will be the goal of our further research.

## Bibliography

1. Daniel Workman (2017) *Honey Exports by Country*. Worldstopexports. [Retrieved 2017-09-08] Available at: <http://www.worldstopexports.com/natural-honey-exporters/>
2. FAO (2017) *The State of Agricultural Commodity Markets 2015–16. Trade and food security: achieving a better balance between national priorities and the collective good*. Rome: Food and Agriculture Organization of the United Nations. Available at: <http://www.fao.org/3/a-i5090e.pdf>
3. FAO (2017) *Sustainable Food and Agriculture*. Rome: Food and Agriculture Organization of the United Nations. Available at: <http://www.fao.org/sustainability/en/>
4. FAO (2017) *Food Outlook: BIENNIAL REPORT ON GLOBAL FOOD*. Rome: Food and Agriculture Organization of the United Nations. Available at: <http://www.fao.org/3/a-l5703E.pdf>
5. *GDP by country Statistic from World Bank 1960-2016*. Available at: <https://knoema.com/mhrzolg/gdp-by-country-statistics-from-the-world-bank-1960-2016>
6. Katro, Eriona, and Vaeld Zhezha. «An analysis of the sources of competition discipline in the European Union and in Albania.» *Academicus International Scientific Journal* 13 (2016): 120-127.
7. Mackenzie (2017) *Ten countries that are the largest producers of the honey: sweetest natural food known to man*. [Retrieved 2017-09-10] Available at: <https://www.trendrr.net/6124/top-10-largest-honey-producing-countries-world-famous-best/>
8. Rudolf Mulderij (2016) *OVERVIEW GLOBAL MARKET GARLIC*. Freshplaza [Retrieved 2016-07-10] Available at: <http://www.freshplaza.com/article/164684/OVERVIEW-GLOBAL-MARKET-GARLIC>
9. Sots'ka Eu. (2015) *Holod – kompleksna problema liudstva*. Free Voice Information Analysis Center. Available at: <http://iac.org.ua/golod-kompleksna-problema-lyudstva/2015>
10. Spaho, Edi. «Albania's challenge for access and competitiveness in EU Market: When good will requires more than legal regulation. An inside of Albania's efforts to increase the presence of its domestic product in EU markets.» *Academicus International Scientific Journal* 6 (2012): 113-125.
11. *The Top 5 Countries that Produce the Most Vegetables*. Available at: <https://top5ofanything.com/list/0fe4983f/Countries-that-Produce-the-Most-Vegetables>

12. *The Potato Sector*. Available at: <https://www.potatopro.com/world/potato-statistics>
13. *Top 10 Garlic Producing Countries*. Maps of World. Available at: <https://www.mapsofworld.com/world-top-ten/garlic-producing-countries.html>
14. Trade map – international trade statistics. Available at: [http://www.trademap.org/tradestat/Country\\_SelProduct\\_TS.aspx?nvpm=1||||14|||2|1|1|2|2|1|2|1|1](http://www.trademap.org/tradestat/Country_SelProduct_TS.aspx?nvpm=1||||14|||2|1|1|2|2|1|2|1|1)
15. UN/DESA (2014) *Country classification. World Economic Situation and Prospects 2014*. Development Policy and Analysis Division of the Department of Economic and Social Affairs of the United Nations Secretariat. Available at: [http://www.un.org/en/development/desa/policy/wesp/wesp\\_current/2014wesp\\_country\\_classification.pdf](http://www.un.org/en/development/desa/policy/wesp/wesp_current/2014wesp_country_classification.pdf)
16. USDA (2017) *Dairy: World Markets and Trade*. Washington: United States Department of Agriculture. Available at: <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1861>
17. USDA (2017) *Grain: World Markets and Trade*. Washington: United States Department of Agriculture. Available at: <https://apps.fas.usda.gov/psdonline/circulars/grain.pdf>
18. USDA (2017) *Livestock and Poultry: World Markets and Trade*. Washington: United States Department of Agriculture. Available at: <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1488>
19. USDA (2017) *Oilseeds: World Markets and Trade*. Washington: United States Department of Agriculture. Available at: <https://apps.fas.usda.gov/psdonline/circulars/oilseeds.pdf>
20. USDA (2017) *Tree Nuts: World Markets and Trade World Markets and Trade*. Washington: United States Department of Agriculture. Available at: <https://apps.fas.usda.gov/psdonline/circulars/TreeNuts.pdf>
21. USDA (2017) *World Agricultural Supply and Demand Estimates*. Washington: United States Department of Agriculture. Available at: <http://usda.mannlib.cornell.edu/usda/current/wasde/wasde-07-12-2017.pdf>
22. USDA (2017) *World Agricultural Production*. Washington: United States Department of Agriculture. Available at: <http://usda.mannlib.cornell.edu/usda/current/worldag-production/worldag-production-11-09-2017.pdf>
23. *Vegetable seed industry: India and World*. Seed Times Vol 9 No. 3 & 4, July-December 2016, [https://issuu.com/nationalseedassociationofindia/docs/seed\\_times\\_july-dec](https://issuu.com/nationalseedassociationofindia/docs/seed_times_july-dec)
24. World Food Programme (2017) *Zero Hunger*. Rome: World Food Programme. Available at: <http://www1.wfp.org/zero-hunger>

25. World Bank (2017) *World Development Indicators: Structure of output*. Washington: World Bank. Available at: <http://wdi.worldbank.org/table/4.2>
26. WTO (2017) *World merchandise trade by major product grouping, 2006-2016 (US\$ billion)*. *World Trade Statistical Review 2017*. Geneva: World Trade Organization. Available at: [https://www.wto.org/english/res\\_e/statis\\_e/wts2017\\_e/wts17\\_toc\\_e.htm](https://www.wto.org/english/res_e/statis_e/wts2017_e/wts17_toc_e.htm)
27. WTO (2017) *World trade statistical review 2017*. Geneva: World Trade Organization. Available at: [https://www.wto.org/english/res\\_e/statis\\_e/wts2017\\_e/wts17\\_toc\\_e.htm](https://www.wto.org/english/res_e/statis_e/wts2017_e/wts17_toc_e.htm)