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**ECONOMIC AND SOCIAL ASPECTS OF FOOD SECURITY IN  
THE EUROPEAN UNION**

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***Abstract***

The study is focused on the processes of food supply and consumption in the countries of the European Union. It is noted that due to high agronatural potential, high efficiency of specialization and cooperation, the EU is able to ensure the balance of food supply and demand. The majority of EU countries is among the world leaders in terms of the level of food security. However, there are certain differences in food manufacturing and consumption. As a result of large-scale reforms and standardization of agrarian production some countries are now specializing on a narrower range of products. This was caused by EU regulation of the output volume and range, environmental standards and technical and production facilities supplied to farmers. It is proved that the modernization of a Common Agricultural Policy of the EU is triggered by new issues requiring innovative solutions. They are centered around such key problems as the support of agricultural producers, environment protection, food security and search for measures to overcome economic difficulties in countries constituting the second and the third “echelons” of the integration block. The agricultural progress of EU countries was possible due to a major role of the state in carefully designed agricultural policy based on such long-standing objectives as the growth of agricultural production, support of landowners and protection of their income from external competition, sustainable food supply to the population at affordable prices, maintenance of ecological balance. Thus, the analysis of the EU agricultural policy seems relevant to any state.

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**Keywords:** Food consumption, food supply, agricultural strategy, food security, regional differences.



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## 1. Introduction

The priority focus on agriculture is defined by the need for food security and independence of the country. On the one hand, the technological specificity of agriculture and its role in the national economic complex is caused by food production as the basic activity of people and reproduction of labor and on the other hand – by the production of raw materials for other sectors of economy. In other words, the level of agricultural development strongly influences the level of economic security of the country.

## 2. Problem Statement

The analysis of the EU agriculture development, specifics of food security within domestic and foreign policy is relevant to any state trying to ensure food security and to increase efficiency of the agricultural industry.

There are numerous and manifold scientific publications devoted to EU agricultural policy and areas of its improvement (Andreosso-O’Callaghan, 2003; Moschitz, 2010; Baturina, 2011; Pavlickova, 2013). It shall be emphasized that the study and adjustment of EU agricultural experience to Russian conditions may foster the formation of the internal system of agriculture support and search for “amendments” to the national agricultural policy.

## 3. Research Questions

In literature the authors often resort to the so-called Global Food Security Index, which is a global study and ranking initiative that measures food security across most of the countries of the world (Table 01). It is published by The Economist Intelligence Unit (analytical division of *The Economist*) with the assistance of the American multinational company DuPont, which estimating procedures account for about 30 various indicators. They include availability and sufficiency of food; levels of their availability, quality and safety; consumer protection; environmental safety performance, environmental conservation, etc., which are grouped into three integrated indicators: availability, affordability, quality and safety.

**Table 01.** Global Food Security Index, 2017

Ranking	Country	Index	Ranking	Country	Index
1	Singapore	85.9	18	Japan	79.9
2	<i>Ireland</i>	85.5	19	<i>Portugal</i>	79.3
=3	<i>Great Britain</i>	85.0	20	Israel	78.6
=3	USA	85.0	21	<i>Spain</i>	78.0
5	<i>Netherlands</i>	84.7	22	Qatar	76.5
6	<i>Australia</i>	83.7	23	<i>Italy</i>	76.3
7	<i>Switzerland</i>	83.5	24	<i>Czech Republic</i>	76.1
8	<i>Finland</i>	83.3	25	South Korea	75.6
9	Canada	83.2	26	<i>Poland</i>	75.4
10	<i>France</i>	82.9	27	Chile	75.1
11	<i>Germany</i>	72.7	28	Kuwait	74.8
=12	<i>Norway</i>	82.2	29	Oman	74.4
=12	<i>Sweden</i>	82.2	30	<i>Hungary</i>	72.8
14	<i>Austria</i>	82.1	<b>42</b>	<b>Russia</b>	<b>67.0</b>

15	New Zealand	81.3	46	China	65.1
16	Denmark	80.9	76	India	50.1
17	Belgium	80.2			

The 2017 ranking of the leading EU states regarding the level of food security shows that 19 out of 30 places belong to European countries, while according to The Economist Intelligence Unit, Russia only takes the 42<sup>nd</sup> place. In our opinion, it is obviously underestimated due to argumentativeness of the used methodology, which one of authors of this paper already gave her critical evaluation earlier (Kornikova, 2017). She criticized the methodology for neglecting such important factor as food sovereignty of the state and the need for the import substitution policy in some cases. Nevertheless, it bears a certain value.

Thus, in the conditions of modern political, economic and social situation the assessment of the current state and solution of the problem of food security is urgent for many countries, including the EU countries.

#### 4. Purpose of the Study

The problem of supplying the population with food is critical from social and economic perspective alongside with the factor defining the level of social life, viability of economic structure and the state system.

The Common Agricultural Policy of Europe is crucial in ensuring food security of the EU member states and stability of the European agribusiness, and the process of its reforming is intended to modernize the agricultural sector under tough social and economic conditions in the EU and to increase the efficiency of the European agriculture.

Thus, in the conditions of modern geopolitical situation the experience of EU states that passed a long and difficult journey to gain their food security is extremely important for other countries. The best European practices on the matter shall be used to solve the relevant tasks of domestic agriculture in the conditions of the soaring openness of the economy and actively developing processes of globalization and regional integration.

#### 5. Research Methods

**Economic component of food security.** The axiomatic features of the EU economy indicate that Europe is: 1) the global world economic center, 2) the largest integration trade block (which accounts for about a quarter of the entire world trade) and 3) the world leader in the nominal volume of its GDP.

In the framework of this paper the following fact seems relevant: despite limited land resources the countries of the region are characterized by highly productive agricultural sector that is not only able to supply its population with food, but also possesses high export potential. According to official figures, the European Union accounts for at least 17% of the world food export – it is the second place among the exporters of dairy products and pork, the third place – as an exporter of birds and grain (European Commission, 2013a). Such results are achieved through continuous introduction of innovations into agriculture, use of robotics, etc.

It is clear that there are certain differences in scale and efficiency of agricultural industry between EU member states. Strong technological infrastructure of agriculture, record grain yield (twice exceeding the productivity in the USA) and overproduction of agricultural products favorably distinguishes the economy of the “old” Europe with its strictly controlled agricultural market and protection of local production against import of cheaper products. At the same time the efficiency of the agricultural sector, for example, Bulgaria, Romania and Croatia (even if compared with the Visegrád Group – Poland, the Czech Republic, Slovakia and Hungary (V4) and the Baltic States) is much lower.

Successfully coordinated policy of the Common Market countries was launched in 1962 and since then has been financed by the European Agricultural Guidance and Guarantee Fund – EAGGF (Pinilla, 2013). Back then the structure of the member states was more uniform in terms of the level of their social development, and the agricultural policy represented an ordinary set of methods and forms within the balanced activity of the states generally focused on sustainable development of agriculture and adequate standard of living of the rural population.

The specialization of agriculture in many EU countries often coincides thus generating open and latent contradictions of market “sharing”. Almost all EU states cultivate such landmark food crop as potatoes, the majority of them grow wheat, corn, oat, barley (brewing and whisky production); meat and dairy cattle breeding, as well as bacon pig-breeding, etc. are widely developed. Even in Scandinavia, where agronatural conditions are far from being optimal, rye, wheat, oat, barley, vegetables (Knoema, 2009) are successfully cultivated. Undoubtedly, natural features and cultural and historical traditions of countries and regions of Western Europe caused obvious differences, both in specialization of agricultural business, and in food security of its countries. Thus, Southern Europe grows rice (for example, in the lower course and the delta of the Rhone), olives, essential oil-bearing plants (lavender, sage, rose, rosemary, etc.).

Ambitious reforms and standardization of agriculture resulted in narrow specialization of certain countries (which quite often was “forced”). The contours of traditional types of agriculture – *Northern Europe*, *Central Europe*, *Eastern Europe* and *Southern Europe* – became more distinct. This was caused by EU regulation of the output volume and range, environmental standards and technical and production facilities supplied to farmers.

**Social problems of food security.** It was noted earlier that the core of a food problem is not limited to food deficiency. This may also concern critical medical consequences of overeating or use of genetically modified products, not even mentioning the fact that the food problem in its broad sense includes resources for agriculture, processing of agricultural raw materials, sales of products, foodservice sector, etc. Finally, food security also refers to its composition, compliance to certain religious beliefs and cultural traditions, “biochemical impact” of some food on human conscience thus generating serotonin and dopamine – endorphins (“happy hormones”), etc.

It is very difficult, or even impossible to measure food and feedstuffs security of the population in certain countries with high accuracy (European Commission, 2010). There are multiple reasons for this. Experts usually consider *basic* food compounds (grain, milk, meat, fish, etc.), more rarely – vegetables, fruit, berries, mushrooms, nuts, etc., and very rarely – mineral substances, microelements, vitamins, quality fresh waters, which deficiency may indicate poor nutrition and be detrimental for health of the population. Besides, artificial drinks and simulacrum products having quite tangible flavoring and often imitating

traditional products, nutrient additives (emulsifiers, flavoring and other “improvers” of food quality) are almost neglected.

Most often food safety is guaranteed by the lack of harmful substances. In this regard the quality of the European food considerably surpasses its analogues in the USA, where food control is less strict, for example, food with hormones or genetically modified products made of raw materials, which genetic code was changed for commercial reasons. Of course, the real consequences of GM food consumption are not established yet and therefore modern science does not guarantee the security of such products for human health. Nevertheless, if in the US, according to the Institute of Consumer Policy, genetically changed ingredients are present nearly in all analyzed products, including baby food, then the EU strictly controls the sales of such products. As far back as 2003 Europe adopted a special Genfood Law – Regulation (EC) No. 1829-2003 of the European Parliament and of the Council on genetically modified food and feed, according to which all countries of the European Union are obliged to label certain foodstuffs produced from genetically modified organisms (Pinilla, 2013).

To improve the quality of foodstuff the EU states utilize various quality standards, phytosanitary control and other regulations and measures developed by the European Commission and stated in the so-called White Paper on Food Safety. There are special regulations establishing hygienic requirements to food even considering the health of animals and condition of plants, environmental pollution, and ensuring monitoring of used additives and food fortifiers.

**Regional differences.** It is known that the food problem has two major aspects – food production and consumption. Notable differences between countries are identified in both spheres, whereas the “demarcation line” almost coincides with the borders of new members in the east. Many experts conclude that the accession to the EU in general placed the future of agricultural economy of these countries at issue. As for the structure of food consumption in EU countries, it is necessary to pay attention to the following aspects. First, it changes with the change of consumer behavior on the food market. With the growth of the human wellbeing the most successful countries focus on the consumption of organic food, etc. Second, there is a clear global trend towards increased consumption of meat thus increasing the amount of poultry meat in the market (in parallel alternative or vegetarian sources of proteins are becoming available). Third, the number of people eating outdoors (in foodservice outlets) is increasing thus partially leading to unification of food consumption patterns. Fourth, the spatial diffusion of the general European diet takes place in parallel. Thus, the consumption of dairy products in Southern and Eastern Europe reaches the levels earlier observed in Northern and Western Europe, and the highest meat consumption rate for over 50 years is observed in Southern Europe, which made it almost on par with Benelux countries, Germany, etc.

In fact, despite century-long integration processes in the sphere of cuisine traditions, today the Western European cuisine distinguishes between *Central European*, *Northern European*, *Southern European*, *Western European* and *Eastern European* cuisines.

There are, of course, certain common features typical for all of them: popularity of dishes with wheat flour, abundance of meat and vegetables, not so essential (as, for example, in the east) role of spices and sauces, etc. At the same time each of the above cuisines has its specific features. Thus, Northern European (mainly associated with English, Irish, Scottish and Welsh) and Scandinavian (reflecting cooking traditions of the Danes, Swedes, Norwegians, etc.) cuisines are known for their abundance of fish and seafood. Besides seafood, Southern European cuisine (including Italian, Spanish, Portuguese, Greek, etc.) that

accumulated cooking traditions not only of the Mediterranean, but also of the neighboring Asian and African countries, promotes the cult of olive oil, exotic fruit and vegetables, sweets and nuts, high-quality wines, etc.

Thus, high efficiency of specialization and cooperation within the EU ensures the balance of supply and demand for food products that in turn “smooths” over food security and food safety of the EU member states. It is natural that the food protectionism (along with sanctions against Russia) of Western European countries may negatively affect food security and food safety in other countries.

## 6. Findings

**Food security strategy.** At present, the theoretical base of the Common Agricultural Policy of the expanded European Union is much more complex and deep. It is based on two concepts – “production and trade support” and “social and structural support”. If the first concept is aimed at measures ensuring support within the common market and includes a common payment system (as well as the system of payments per unit area of cultivated land at the expense of the European Agricultural Guarantee Fund), then the second one contributes to the task of complex development of rural territories, competitiveness enhancement of the EU agricultural industry, improvement of the environment and the quality of life in rural areas. It is planned that the rural regions will be developed at the expense of the European Agricultural Guarantee Fund. Consequently, the agricultural policy will cover the adjusted specialization of agrarian segments, production and marketing of agricultural products, prices, social infrastructure of rural areas, etc.

For long decades the objectives and principles of the EU Common Agricultural Policy have remained relatively stable and consistent with the activity of the European Commission. Thus, “slightly” adjusted objectives formed the basis for this policy (European Commission, 2013b), namely:

- ensuring food security of member states;
- increasing the efficiency of agriculture at optimum utilization of all available production factors;
- ensuring decent quality of life of the rural population;
- increasing the level of individual income;
- stabilizing food markets;
- ensuring delivery of logistical support;
- guaranteeing fair standards of life to rural population;
- creating safe delivery of food;
- providing consumers with food at reasonable prices.

The basic principles of the Common Agricultural Policy formulated in the 1960s of the past century still remain valid (Lukashova, 2008):

- unified market for the free movement of agricultural products in the European Union, uniform pricing on identical agricultural products, systematization of sanitary-hygienic and veterinary norms;
- free competition;

- community preference: European products to be given preference over imported products as specified in the customs policy;
- financial solidarity: all costs of the CAP to be financed by all EU member states.

The modernization of the EU CAP mission is caused by new problems requiring innovative solutions. They are centered around such key problems as the support of agricultural producers, environment protection, food security and search for measures to overcome economic difficulties in countries constituting the second and the third “echelons” of the integration block.

It is considered that the new course of the EU Common Agricultural Policy dates back to 2014 when there was an urgent need to adjust financial cost mainly connected with the fundamental change of the obsolete model of support to farmers strongly depending on the area of utilized farmlands. In 2019 Europe plans to adopt a new format of subsidies – unified payments per hectare with set limit. In fact, such calculation of subsidies marks the end of privileges granted to landowners of Eastern European countries.

The following is implied to improve the current agricultural policy:

- stimulation of more economic and effective use of all types of resources and adaptation of agriculture to climatic shifts;
- more effective use of innovations in agriculture and competitiveness enhancement in all segments of agrarian economy;
- preservation and strengthening of agroecosystems;
- reduction of poverty and economic development of rural regions, etc.

## 7. Conclusion

In general, food situation in EU countries remains quite stable in the absence of visible threats of food security mainly due to multiple measures of the Common Agricultural Policy. A shift from classical agriculture to hi-tech business with targeted price administration within the EU, expansion of subsidizing and crediting fosters profitable agricultural production and ensures competitive advantage of the region. At the same time, it maintains the correlation dependence between income and consumption of products (especially meat) in countries with high, average and low level of income.

The agricultural progress of EU countries was possible due to a major role of the state in carefully designed agricultural policy based on such long-standing objectives as the growth of agricultural production, support of landowners and protection of their income from external competition, sustainable food supply to the population at affordable prices, maintenance of ecological balance.

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