



THEORETICAL AND APPLIED ASPECTS OF SUSTAINABLE DEVELOPMENT

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Edited by Tetyana Nestorenko and
Aleksander Ostenda

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PREFACE

The monograph takes a new look at various issues of science and education of European countries to ensure their sustainable development. In the modern world, with its European integration and orientation of education and science to fundamental human values, democracy, human rights, freedom to receive education, the emphasis is placed on educational and scientific tasks related to the realization of new professional tasks, answers to modern social challenges, preparation of a competitive professional etc. The entry of the world community into a new phase of cultural and historical development, the era of global and information systems and technologies, is accompanied by crisis phenomena, which touch on various spheres of human life, including science and education. Therefore, the scientific and educational issues for ensuring the sustainable development of European countries are currently relevant, and their solution will lead to scientific and educational changes, as discussed in this monograph.

The monographic research presents the scientific works of the team of authors that reveal different directions and aspects of science and education in providing sustainable development. These are: 1) The Economic Component of Sustainable Development; 2) The Role of Education in Sustainable Development; 3) Applied Aspects of Sustainable Development.

The first section of the monograph deals with issues related to economic development, with particular attention to social responsibility for business, conceptual foundations of agrarian sector, adaptive control of the personnel of the enterprises, issues of socio and ethnical marketing.

The second section of the monograph outlines the role of education in sustainable development. The authors considered the issues of methodological basis for ecological education, key competencies of education, postgraduate pedagogical education, and different innovative technologies. All the issues presented in the section have a significant impact on the improving of science and education, in each way contributing to their development.

The third section of the monograph «Applied Aspects of Sustainable Development» overviews environmental, linguistic, psychological aspects, the contribution of foreign scientists to the development of science and education.

The team of authors hopes that the monograph contains useful research results that are relevant for scientists, students and all those who are interested in different aspects of education and science taking into consideration their importance for different spheres of public life.

Yours sincerely,

Tetyana Nestorenko

Aleksander Ostenda

1.5. CONCEPTUAL FOUNDATIONS OF UKRAINE AGRARIAN SECTOR DEVELOPMENT

Formulation and implementation of the paradigm of sustainable development of the domestic agrarian sector will help overcome the ecological crisis, reduce anthropogenic impact on the environment, create conditions for social and economic well-being of the population, economic development and competitiveness of agricultural producers, strengthen the state's position at the international level.

Agrarian production raises the question of solving a complex of social and environmental problems, since the dominance of only economic interests causes irreparable damage to the environment, affects the quality of life of citizens, indirectly reduces the level of food security of the country and ultimately destroys the national security of the state. The combined interaction of the three main components (economic, environmental and social) is an effective way of ensuring the sustainable development of the agricultural sector of the national economy.

A modern development strategy should be understood as a generalized model of action, presented in the form of a set of developed measures and aimed at achieving long-term goals through changes and transformations in activity, taking into account market opportunities and available resources⁷³.

Strategy is a very important management mechanism, but the existence of an "ideal" strategy is impossible.

First, it is impossible to develop a "single" strategy for all enterprises or sectors of the economy, since the development strategy must take into account the unique features that will depend not only on the scale of strategic measures, but also on the development mechanisms embedded in the strategy.

Secondly, there are major changes over time, both internally and externally, which also require changes, often dramatically, in the development strategy. Despite the uniqueness of each development strategy, in modern science, a number of basic types of strategies, the most optimal for implementation in certain conditions, are identified, which undoubtedly facilitates and streamlines the process of forming a development strategy. At this stage of strategic management development, the formation of a development strategy is based, above all, on the choice of several alternative strategies. In this case, each of the options considered is formed by the scripting method, or based on standard solutions for widespread situations. Harvard School scholars (M. Porter, K. Prahalad, K. Andrews, G. Hemel), who remain the leader in this field, are the most comprehensive questions on the methods of forming the development strategy⁷⁴. M. Porter considered the process of formulating a strategy in terms of the competitive position of the company, based on the analysis of five forces of competition, which gives the developer an idea of the strengths and weaknesses of the company in the market and the most favorable position⁷⁵.

The process of developing a development strategy can be divided into three stages.

In the first stage, the main guidelines for development are identified, goals are set to be achieved.

The second stage involves gathering and analyzing information, identifying opportunities and limitations, identifying strengths and weaknesses.

In the third stage, more precise goals are defined⁷⁶.

Strategic planning involves the development of a baseline version of a development strategy as well as major alternatives. Then the developed variants are analyzed, and the most optimal of

⁷³ Gordienko P. L., Didkovskaya L. G., Yashkina N. V. (2011) Strategic analysis. 3 te ed., Remaking. et al., K: Allerta, 2011. 520 p.

⁷⁴ Bayura D. O., Petruk V. V. (2014) Theoretical Aspects of Development of Strategic Planning at Enterprises in the Conditions of Market Instability. Scientific Works of NSFI, 2014. Vol. 2 (67). – P. 153-158.

⁷⁵ Porter E. Michael (2005) Competitive Strategy: A Method for Analyzing Industries and Competitors; Trans. with English. M.: Alpina Business Bux, 2005. 454 p.

⁷⁶ Zhalilo Ya. A. (2009) Theory and practice of forming an effective economic strategy of the state: monograph. K.: NISD, 336 p.

them is selected, or the developers go back to the previous stage if none of the proposed variants was accepted. Once the development strategy is approved, the stage of its implementation begins, but the development of the strategy should not end there, it should be constantly adjusted to the changes that have occurred, and if necessary, promptly prepare a new version of the development strategy, laying in it the associated transition from the old version.

Ukraine's entry into the world economic space is seen as a new stage of development of the country, which should position itself as a state with an open economy, while at the same time protecting its internal market with acceptable methods. On the whole, the prospects for the agro-industrial complex of Ukraine will depend on the successful formation of conceptual bases of the strategy of development of the agrarian sector..

The agrarian sector of the national economy is regarded as a driving force and one of the main areas of implementation of the sustainable development concept.

The development of the agro-industrial complex is a large-scale task for Ukraine and is based on the implementation of different strategies: environmental, investment, innovation, integration, marketing, foreign economic strategies⁷⁷.

The ecological strategy is aimed at ensuring ecologically balanced development of the agricultural sphere of production, restoration of natural systems. It is an integral part of the overall competitive strategy, complementing and operating in conjunction with food strategies. The main tasks are to achieve positive changes in the safety and quality of food, to prevent soil degradation, water and air space, to promote the conservation of natural resources, to reorient the agrarian sector to the ecological vector of development. The result of the implementation of this strategy is a balanced use of natural resource potential; implementation of a unified policy on the rational use of natural resources and their reproduction; ensuring environmental security as a component of national security; implementation of international environmental agreements; integration of environmental and natural principles into sectoral and sectoral development programs; conservation of land resources; creation of technologies for the production of alternative energy sources based on agricultural raw materials; minimizing the adverse impact of production processes on the environment by stimulating the introduction of energy-saving technologies⁷⁸. The main strategic goal of the investment strategy is to achieve economic growth and sustainable socio-economic development through the implementation of a number of scientifically sound strategic and tactical objectives.

The formation of an effective economic mechanism to regulate the investment development of the agricultural sector as a driving force of socio-economic progress is considered as one of the most important components of the process of ensuring competitiveness in the context of the impact of the processes of globalization of the world economy, integration of Ukraine into the EU and systemic crises in the national economy. The implementation of this strategy envisages expansion of directions and sources of financing, reorientation of investment demand, improvement of forms and methods of investing, selection of the most progressive ones that take into account the interests of all parties, maximize their expected benefits and minimize and distribute risks.⁷⁹

The aim of the innovation strategy is to achieve economic, organizational and social impact through the introduction of state regulation mechanisms. The most important of them are:

- raising to a reasonable level the volume of state support for scientific research and mastering their results in agricultural production;
- establishment of a national system of information and advisory services for farmers on the availability and feasibility of using agronomy;

⁷⁷ Zavadiak R. I., Popovich V. V., Tsitsak L. M., Didovich Yu. O., Fedorovich O. A. (2010) Strategy as a Central Element of Strategic Management. Scientific Bulletin of Uzhgorod University. – Uzhgorod, 2010. Vol. 31: Series: Economics. P. 154-158.

⁷⁸ Ukraine's Environmental Policy Strategy to 2020 (project) [Electronic resource]. Document access mode: <http://www.ue-p.eu/our-activity/strategy/2011/september/strategia-ekologchnopoltiki-ukrani-do.html>.

⁷⁹ Strategic directions of development of agriculture of Ukraine for the period up to 2020 ed. Yu. O. Lupenko, V. Ya. Mesel-Veselyak. K.: SIC "IAE", 2012. 182 p.

- formation within the national agrarian innovation system of effective infrastructure (in particular, special agro-economic zones, agro-technical parks, agro-logistic complexes, information centers, etc.);

- formation of a system of training of specialists of the branch, capable to perceive and effectively put into practice the latest developments⁸⁰.

Implementation of agro-innovations implemented in the agrarian sphere provides growth of economic, environmental and social effects. The peculiarity of agro-innovation is the use in the innovation process of natural factors and components, which in this case act as direct objects of agro-innovation activity. In this context, the main tasks of an innovative strategy for the development of the agricultural sector are its technical and technological modernization, ensuring resource conservation in the industry, improving the quality characteristics of products produced, improving the environmental component of agricultural development.

Important in ensuring the development of the agro-industrial complex of Ukraine is the formation of the image of the state through the implementation of an appropriate strategy, the main tasks of which is to overcome the negative perception of Ukraine in the world, the formation and promotion of a unique image, brand. The competitive advantages of development include natural products that can be easily obtained in any village. The foreign economic strategy prioritizes attracting foreign investment and business development not only with traditional partners and leading countries of the world, but also reorientation to the needs of other trade relations agents.

The main tasks include:

- formation of optimal commodity and geographical structure of export of products;
- expanding the nomenclature of exports and increasing the production of the most competitive products in the world agri-food markets;

- neutralizing the risks of geographical diversification;

- preservation of traditional and attraction of new perspective markets of production.

In Ukraine there is no single clear strategic program for the development of the agro-industrial complex. However, there are a large number of approved agreements, programs and strategies that address the development of exports of agricultural products. Section 4. “New Economic Policy” of the Program of activity of the Cabinet of Ministers of Ukraine for 2015-2020 provides actions for active promotion of export and protection of the internal market:

- maximizing the benefits of the free trade regime with EU Member States;

- signature of free trade agreements with Canada, Turkey, Israel, the Gulf Arab Cooperation Council, and the West African Economic Community (by 2018), taking into account national interests;

- offensive policy by the Trade Representative of Ukraine;

- double the volume of exports of domestic production by 2019.

The Ukraine 2020 Strategy for Sustainable Development envisages the implementation of 62 reforms and government programs. Among the reforms and programs that have the greatest impact on the development of the export potential of the agro-industrial sector, the following should be noted:

Reform of the state customs and integration into the customs community of the European Union;

- Agriculture and fisheries reform;

- Land reform;

- Tax reform;

- Ukrainian Export Development Program;

- Ukraine branding program.

The Ministry of Agrarian Policy and Food (Ministry of Economic Development, Trade and Agriculture) of Ukraine has developed a single comprehensive strategy for the development of

⁸⁰ Concept of the State Target Program for the Development of the Agricultural Sector for the Economy until 2020 (Project) [Electronic resource]. Official Website of the Ministry of Agrarian Policy and Food. – Access mode: <http://minagro.gov.ua/apk?nid=16822>.

agriculture by 2015-2020. The purpose of the State Target Program for the Development of the Agricultural Sector for the Economy until 2020 is to create organizational and economic conditions for effective socially oriented development of the agricultural sector, stable provision of high quality and safe domestic agricultural products and industry with agricultural raw materials, production of high value added products, and high value added. in the world market of agricultural products and food. This strategy defines that the development of the agricultural sector of the economy can occur in two ways.

The first option is characterized by insufficient funding for the development of the agricultural sector, declaration of social, economic and environmental measures, in the absence of real mechanisms for their implementation. Provided that this option is implemented, the main problems of agricultural production development, including its integration into the world economic space, the formation of an efficient, socially oriented agricultural sector of the state economy, and the destructive processes of social infrastructure in rural areas are not ensured.

The second option involves identifying, developing and implementing the directions of development of the agricultural sector of the economy based on optimization of its production and social infrastructure, increasing the competitiveness of agricultural production, increasing its volume, improving the quality and safety of agricultural products, environmental protection and reproduction of natural resources, increasing the level of employment in rural areas, creating new jobs.

The second option is optimal, which will allow the agricultural sector of the economy to meet the needs of the internal market and secure a leading position in the world through stable export of agricultural products and products of its deep processing.

According to the estimates of the Ministry of Economic Development, Trade and Agriculture, the implementation of the State Target Program for Development of the Agrarian Sector will enable to ensure:

- increase in production of gross agricultural products by households;
- cessation of economic use of ecologically dangerous and economically inefficient land for a fixed term and their afforestation or afforestation;
- creation of a national seed and nursery system with efficient export potential;
- improving the breeding and productive qualities of animals;
- establishment of a state register of farm animals;
- increase in consumption of basic foodstuffs by 3-7 percent;
- ensuring efficient use of fisheries water bodies for fish production in aquaculture and bringing the total production of fish and other aquatic bioresources up to 130 thousand tons per year;
- increase in food production by 6-8 percent, including baby food by 9 percent;
- prevention of infections and protection of the population and territories in case of their occurrence;
- reduction of consumption of traditional energy resources by 8-10 percent;
- expansion of the base of formation of own financial resources and improvement of conditions of access to external sources, as a result of which the available volumes of financial resources will increase by 5-7 percent, and their cost will be reduced by 2.5-3 percentage points;
- improvement of the system of state support of agricultural production, ensuring its transparency;
- increasing the share of rural households engaged in value-added chains in the corporate sector;
- increase in the number of farms with annual sales of agricultural products in the amount equivalent to \$ 1 thousand. USA;
- saturation of the domestic market with high quality agricultural products at affordable prices;
- raising the average monthly wage of agricultural workers to the average level by economic sectors;

- creation of an effective information and marketing system;
- annual growth of export of domestic agricultural products up to 3-4 percent;
- increase of export opportunities of the food and processing industry of Ukraine due to the production of deep processing produced with the use of the latest innovative parameters, in particular, in the EU market by 5-7 percent.

The results of the analysis of the current state of Ukraine's export activity make it possible to determine the key task of state policy in the sphere of foreign economic activity to create an effective export support system that will ensure the sustainable development and realization of the country's export potential. The strategic goal of state support for exports is to strengthen Ukraine's position in the world markets for high-tech products, diversify supplies and ensure the competitiveness of domestic products in foreign markets through the effective use of economic, legal and political levers of influence.

It is worth noting that strengthening the cooperation of Ukraine in the agricultural sector is one of the main directions of the export support strategy. Implementation of the Export Development Strategy of Ukraine provides for:

- implementation of special export support programs at the expense of the state and local budgets, other sources, etc. taking into account the WTO norms and commitments made by Ukraine at the WTO accession;
- improvement and development of financial instruments to support Ukrainian exporters;
- functioning of effective export insurance and credit systems aimed at creating conditions for increasing volumes and increasing the share of exports of high-tech products (engineering, aviation and space, defense-industrial complex, etc.);
- reducing the risks associated with exporting Ukrainian goods and services;
- financing and insurance of export operations at the expense of public and private funds;
- assisting Ukrainian exporters in facilitating access to the markets of WTO member countries;
- implementation of systematic measures aimed at preventing the application of restrictive measures to domestic producers in the foreign market;
- creation of new markets for Ukrainian products, in particular in the countries of the Middle East, Africa, Latin America and the Asia-Pacific region;
- participation in the development and improvement of a system of world trade-oriented rules and requirements for WTO negotiations;
- support of Ukrainian exporters at the highest level of bilateral and multilateral negotiations and consultations;
- effective protection of interests of Ukrainian enterprises abroad;
- creating additional competitive and / or political benefits for Ukrainian exporters.

It is also advisable to take into account the agreed priorities of the EU Common Agricultural Policy for 2014-2020 in the formulation of national agrarian policy and regulation of agricultural practices, standardization of schemes and mechanisms of state support for agricultural producers. Focusing the development of Ukraine's agrosphere on the latest priorities identified by the European Community will update the principles of domestic agriculture, will allow to suspend the strengthening of disadvantaged socio-ecological processes in this area.

The most important direction of development of the national economy of Ukraine is the development of export potential of the agro-industrial complex. The agrarian sector of the Ukrainian economy has high potential, which can be strengthened by improving the mechanisms of distribution and utilization of resources in the industry and increasing the efficiency of inter-branch communications, which will allow to enter the foreign market. The agrarian sector of Ukraine, the basic component of which is agriculture, which forms food and within certain limits economic, environmental and energy security, ensures the development of technologically related sectors of the national economy and creates socio-economic conditions for rural development.

Ukraine's agriculture is not only a supplier of foodstuffs for the population and raw materials for processing enterprises, but also an important source of foreign exchange earnings to the country,

and forms the basis of Ukraine's foreign trade. As the global food problem intensifies and the search for ways to solve it intensifies, the role and importance of world trade in agricultural products and food is increasing. For Ukraine, with its strong agro-industrial potential, favorable natural and climatic conditions, vast area of agricultural land, developed transport network and other favorable factors, foreign trade activity on the world market of agricultural products can become the basis for overcoming the economic crisis. Given that the dynamics and effectiveness of export transactions with agricultural products depends to a large extent on the global agricultural market, the relevance of the analysis of these processes and the search for sources of increasing export volumes is increasing.⁸¹

During 2012-2018, there was a reduction in the export of goods with a simultaneous decrease in the export of agro-industrial products. Based on data from the State Statistics Service of Ukraine in 2018, there was an increase in exports, including agricultural products, compared to 2017. In 2018, total exports amounted to \$ 47.3 billion. United States, up 9.2% from 2017. As of the first half of 2019, total exports of products from Ukraine amounted to \$ 23.3 billion. USA, which is 3% less than in the same period last year. The dynamics of the agrarian sector showed a similar trend as the rest of export commodities, but the rate of decline in agri-food exports was lower than the general one and despite the decline after the crisis years of 2012 and 2013.

The record volume of agri-food exports in 2018 was \$ 22.2 billion. USA. The share of agricultural products and food in total Ukrainian exports is 29.7% in 2012 and 46.9% in 2018. Since the beginning of the two thousandths, the value of exports of Ukrainian agricultural products has increased fourfold (from \$ 4.3 billion in 2005 to \$ 22.2 billion in 2018), and its share in the structure of exports of goods has tripled. (from 12.5% to 46.9%) (Fig. 1)⁸². Total exports of goods from Ukraine over the period decreased by 31.25%, due to unfavorable global market conditions, changing priorities for foreign trade partnerships, reducing cooperation with historically priority importers, increasing foreign market requirements for quality of domestic products, strengthening foreign exchange controls over import operations.

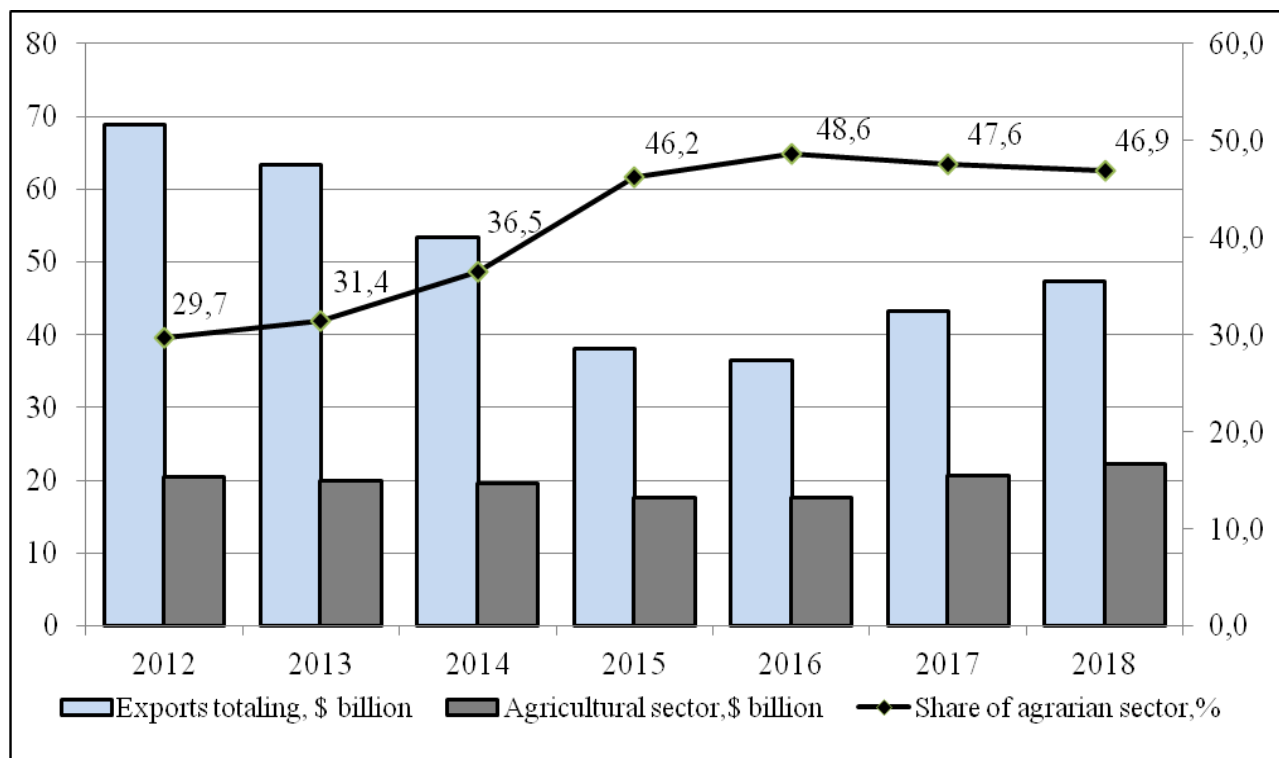


Fig. 1. Dynamics of Exports and Agricultural Sector of Ukraine, 2012-2018

⁸¹ Matalka S. M. Managing the efficiency of foreign economic activity of enterprises: a monograph. Lugansk: Knowledge, 2011. – P. 47.

⁸² Official site of the State Statistics Service of Ukraine. URL: www.ukrstat.gov.ua.

Imports for the development of the economy of the state are also of great importance for the import of goods, which ensures filling the national market with scarce goods; access to cheap and high quality finished products, raw materials, assemblies and components; Establishment of stable industrial relations in cooperation with foreign partners; introduction of new technologies through expansion of import of high-tech goods; increasing competition and stimulating increased production in the national territory⁸³.

Instead, the dynamics of agricultural imports to Ukraine have not undergone significant changes in volume and structure, such as agricultural exports. In 2018, the share of imports of agricultural products and food to Ukraine in the total volume of imports amounted to 8.6% (in 2005 – 7.5%), and the total value of imports decreased for the period 2012-2018 from 8.3 to 4, \$ 9 billion USA. The volume of agricultural imports to Ukraine is 8.49% lower than the volume of total imports and less than the volume of exports (Fig. 2). In general, the analysis of the structure of imports is characterized by a narrowing of its product range, which is due primarily to a decrease in household incomes, its purchasing sentiment, a decrease in the need for high-tech imports caused by devaluation processes, intensification of protection measures, and aggravation of military conflicts in the industrial conflict territories. The balance of foreign trade in agricultural products has remained positive for many years, while the total value of all imported goods, in the vast majority of periods, exceeded their export volume.

In particular, according to current data, in 2018, the overall balance of foreign trade in goods is negative ("-" \$ 9.6 billion), while the agricultural balance is positive ("+" \$ 13.6). The influence of geographical orientation of foreign trade on economic growth can be found in a wide analytical range: dependence of trade volumes and structure on distance to the trading partner country, traditional economic and socio-political ties, openness to investment from a certain region, intensity of scientific and technical cooperation etc⁸⁴.

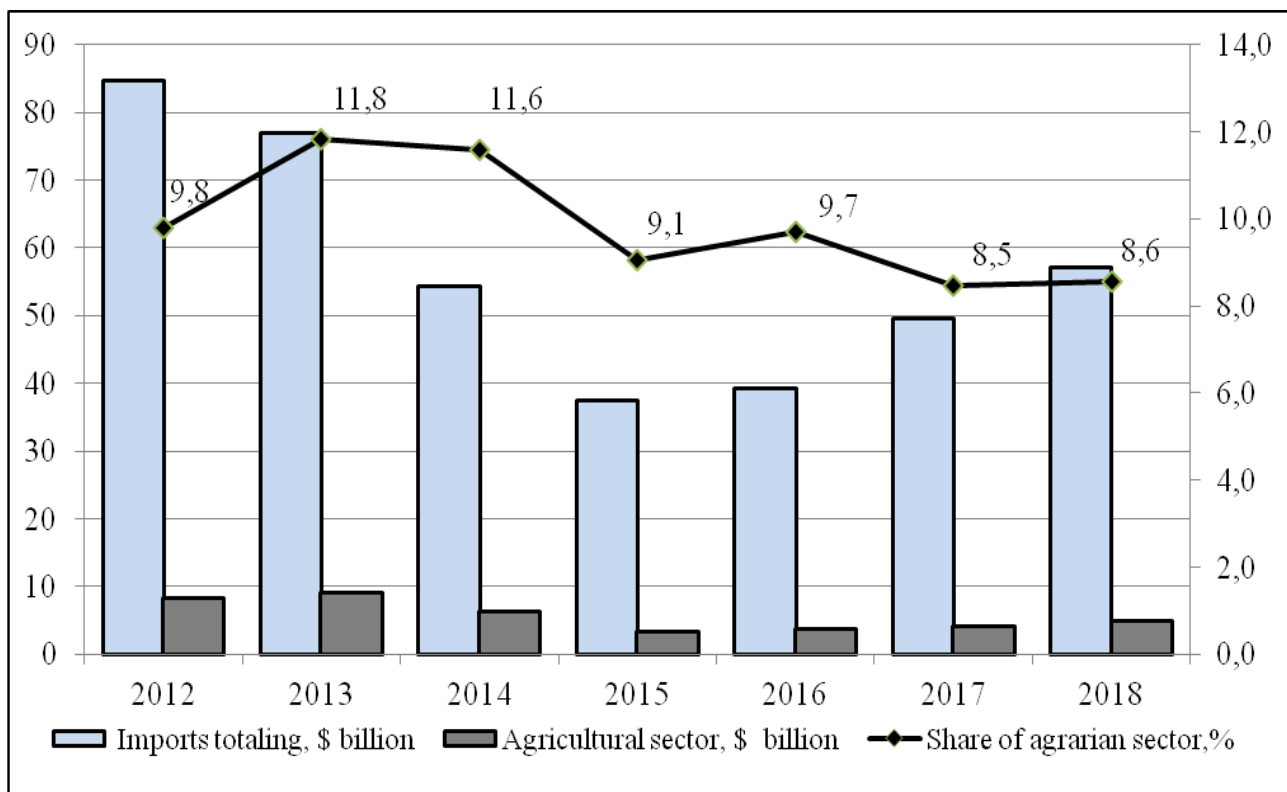


Fig. 2. Dynamics of Imports and Agrarian Sector of Ukraine, 2012-2018

⁸³ Dyba O., Osadchy E. (2014) The Impact of Globalization on the Socio-Economic Situation of Ukraine. The Securities Market of Ukraine. 2014. Lov. 7. P. 19-28.

⁸⁴ Foreign Trade of Ukraine in Goods and Services in 2018: Stat. Sat. / [for edit A. O. Frizorenko]. K.: State Statistics Service of Ukraine, 2018. 155 p.

Foreign trade deficit and overall GDP decline are also the result of changes in the geographical structure of international trade. The main instrumental factor in the effectiveness of geo-economic development of the countries of the world is the diversification of exports on the modern technological basis. The disadvantages of the structure of the national economy is the prevalence of commodity industries, so the gradual complication of the technological structure of exports is favorable to accelerate the dynamics of its development.

EU countries remain Ukraine's largest trading partners (Tab. 1.). The share of these countries in Ukraine's foreign trade in goods and services in 2018 amounted to 18.8%. The share of European countries in Ukraine's foreign trade in goods and services in 2018 was the share of Asian countries in Ukraine's foreign trade in goods and services made up 12.8% in 2018. In 2018, foreign trade in goods and services with Turkey increased by 7.7% (\$ +332.9 million) and amounted to \$ 4.6 billion externally foreign trade in goods and services with China in 2018 increased by 27.3% (+2.2 billion USD) and amounted to 10.1 billion USD.

Table 1. Ukraine's main trading partners in export of goods in 2018

Country	Exports of goods, billion USD	Share of the country in total goods,%	Growth rate 2018 to 2017,%
CIS countries	7	6,5	1,4
Europe	20,6	19,1	15,1
EU countries (28 countries)	20,2	18,8	15,4
Asia	13,8	12,8	6,2
Africa	4,1	3,8	2,5
America	1,6	1,5	33,3
Other countries in the world	40,3	37,5	11,0

The geography of agricultural supply over the last decades has significantly expanded, and today Ukrainian food is, in one way or another, represented on all continents of the planet. However, the main connoisseurs of products from Ukraine are the countries of Europe and Asia. The geographical structure of deliveries of the most common types of Ukrainian food is shown in Figs. 3.

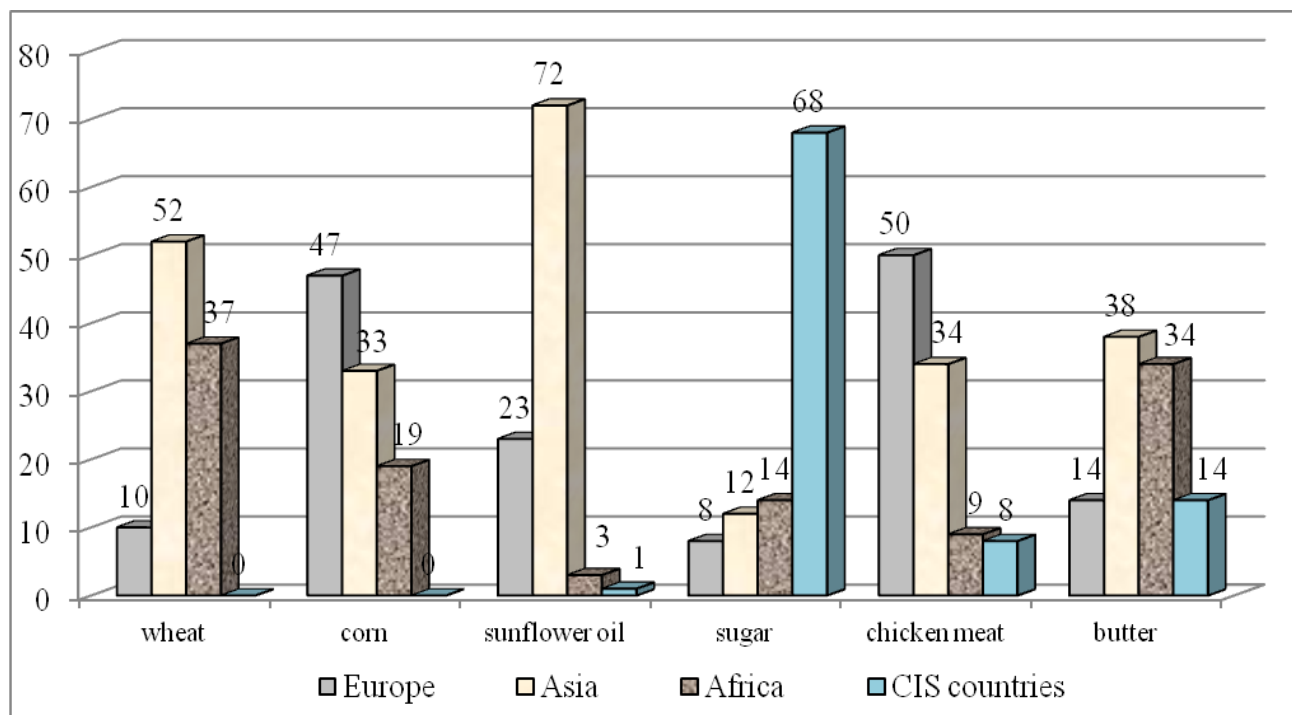


Fig. 3. Geographical structure of agricultural exports in 2018

Positives of Ukraine's foreign trade are: stable positive balance of export-import of services, reduction of the share of trade with the CIS countries due to the expansion of operations with other countries: Europe, first of all with the countries of the EU, Asia, Africa. Ukraine will have the opportunity to increase duty-free exports to the EU of wheat, corn, barley, oat and barley cereals and pellets. This proposal will also promote duty-free exports to the EU of more tomatoes, natural honey and grape juice. Exporters of industrial products also benefit from these trade preferences. In particular, they are Ukrainian manufacturers of footwear, fertilizers, aluminum products and consumer electronics.

In Ukraine, there are a number of factors that impede the strengthening of the competitiveness of agricultural products in foreign markets, the main ones being: low level of development of the financial and credit system, underdevelopment of insurance against industrial and credit risks, underdevelopment of agro - industrial infrastructure, which increase the cost of production. Ukrainian agricultural products are of poor quality and as a result the prices for them are decreasing⁸⁵.

To strengthen foreign trade security in the agrarian market in Ukraine, it is necessary to provide conditions for increasing the competitiveness of agricultural products: to create conditions for expanding integration and technological links between agricultural producers and food processing enterprises to form complexes that unite in a single technological chain grain production, pig production, cattle production and processing of raw materials into food products with high export preparedness; provide information support to investments in agricultural production development, simplify the process of registration of agricultural investments and provide guarantees of protection of land use to investors. Despite the growing volume of Ukraine's trade with the EU, the share of trade in agricultural products with Ukraine in the total foreign trade turnover of the EU countries remains extremely small.

The main products of Ukrainian export are cereals and oilseeds. The total value of all imported goods, in most periods, exceeds their export volume. On the whole, geographical and commodity structural shifts in Ukraine's foreign trade reflect the reorientation of exports and imports to more developed markets, which, on the one hand, widens the potential for increasing foreign trade turnover and, on the other, leads to increased competition, new procedural barriers. of high quality requirements. The main measures to strengthen the position of domestic agricultural products in foreign markets are the development of marketing infrastructure, state support and expansion of sources of financing, improvement of price relations for agricultural products and other sectors of the economy, regulation of land relations. Further research needs to attract investment to implement projects in the agro-industrial complex, which will be aimed at stimulating the production and export of agricultural products with maximum added value.

The largest importer of agricultural products from Ukraine is EU countries (\$ 4.55 billion). The most exported products to these countries are cereals (\$ 1.71 billion), vegetable oils (\$ 1.48 billion) and industrial seeds (\$ 1.1 billion). The EU countries that import Ukraine's most agricultural products are the Netherlands, Spain, Germany, Italy, Poland and Belgium. India in 2017 was the largest importer of agricultural products from Ukraine. Total exports to India amounted to \$ 1.85 billion. The export of sunflower oil alone amounted to \$ 1.58 billion. USA. The next most exported Ukrainian agricultural product is Egypt (\$ 1.17 billion). Egypt mostly imported cereals (\$ 0.83 billion), industrial seeds (\$ 0.16 billion), vegetable oil (\$ 0.10 billion) and animal products (\$ 0.07 billion) United States). In 2017, China imported agricultural products from Ukraine for \$ 1.03 billion. USA. In the commodity structure, China's largest exports were vegetable oil (\$ 0.51 billion) and cereals (\$ 0.45 billion). It should be added that in recent years, there has been a negative trend in the export of agricultural products from Ukraine to China, so in 2015, grain exports amounted to \$ 0.68 billion. USA.

⁸⁵ Zinoviev F. V., Yakushev O. O. (2012) Efficiency of using the export potential of Ukraine. Collection of scientific works of Tavrida State Agrotechnological University (Economic Sciences). No. 2 (18). Vol. 2. Melitopol: Suite. 2012. P. 401-410.

The largest importers of wheat from Ukraine were: Egypt (\$ 438.3 million), Indonesia (\$ 327.8 million), Bangladesh (\$ 308.8 million), India (\$ 257.3 million), the Philippines (\$ 135.7 million), Tunisia (\$ 132.3 million) and the Philippines (\$ 102.9 million). Egypt remains the largest importer of Ukrainian wheat since 2011. Indonesia is growing its imports of wheat from Ukraine every year, with exports amounting to \$ 64.4 million in 2011. USA, that is 5 times smaller. Bangladesh is also the country that is increasing its imports of Ukrainian wheat, which in 2013 was ranked 7th among importers with import volumes of USD 75.6 million. USA. It should be added that India started importing Ukrainian wheat only in 2017. The largest importers of rye were countries such as Poland (US \$ 1.1 million), Spain (US \$ 0.8 million), Bangladesh (US \$ 0.6 million), Indonesia (US \$ 0.5 million) and Belarus (\$ 0.4 million). Spain started importing Ukrainian rye only in 2014 and immediately became its largest importer – \$ 5.1 million. However, in 2015, exports of rye to Spain significantly decreased (17 times). Before Bangladesh, Ukraine started exporting rye only in 2015, and to Indonesia in 2017. Barley Ukraine exports most to Saudi Arabia (US \$ 295.2 million), China (US \$ 123.9 million), Libya (58.4 thousand tonnes), Turkey (US \$ 34.4 million) and Israel (\$ 27.1 million).

It is noteworthy that the share of barley exports to Saudi Arabia is 42% of total barley exports. USA. Ukraine started exporting barley to China in 2014 alone – \$ 38.1 million. US, the growth rate of barley exports to China is 325%. Oats Ukraine exports mainly to Pakistan (\$ 0.6 million), the Netherlands (\$ 0.1 million) and Germany (\$ 0.1 million). It should be noted that in 2015, oat exports to Pakistan amounted to \$ 4.8 million. US exports, ie exports to Pakistan have decreased by 8 times. The Netherlands started importing Ukrainian oats only in 2017, and Germany in 2015 – \$ 0.01 million. The US has increased imports by 10 times.

The largest corn importer from Ukraine was the Netherlands – \$ 435.6 million. USA. The Netherlands has increased its imports of Ukrainian corn almost twice compared to 2015. Egypt was the second country in terms of imports – \$ 394.5 million. The following are: Spain (\$ 336.5 million), China (\$ 323.3 million). China started exporting corn only in 2013 (\$ 26.1 million), so exports increased 12-fold. Corn exports to Italy totaled \$ 265.1 million. USA. It should be added that the growth rate of corn exports to Italy was 590%. In 2016, SGS Group (Switzerland) presented the grain quality requirements of some exporting countries, including the EU, Egypt, Indonesia, Israel, Bangladesh. According to the study, the quality of Ukrainian corn has improved in recent years. The moisture content in August 2015 was 13.9 versus 14.2 in August 2014, the amount of impurities decreased from 2.89 to 1.72, and in the analysis of exported corn it was found that none of the lots examined contains GMOs greater than 0, 1%, and more than 15% of corn does not contain GMOs at all. Buckwheat in 2015, Ukraine exported most to Poland (\$ 1.6 million), Germany (\$ 1.4 million), and South Africa (\$ 1.4 million).

The positive is that exports of some crops are increasing every year. For example, oat exports grew 3.5 times in 2018 compared to 2012, rye 1.5 times, wheat 1.2 times, buckwheat 1.1 times. Therefore, it is understandable that Ukraine is increasing its export capacity in this field every year and is also significantly reducing its import volumes. In the commodity structure of exports, animal products account for 3.2% of the total. Azerbaijan is the main importer of Ukrainian beef – \$ 20.2 million. The share of beef exports to Azerbaijan is 17% of total beef exports in Ukraine. Also Kazakhstan (\$ 18.6 million) and Belarus (\$ 17.6 million). In Ukraine, beef production is declining every year, due to a lack of production due to low demand and domestic prices. Therefore, the opening of EU markets for Ukraine could be a stimulating factor for the production of these products. Ukraine has not yet received a permit to export beef and pork to EU countries, although duty-free quotas for beef exports of 12,000 tonnes have been set within the EU's Free Trade Area.

The largest pork importers are Georgia (\$ 6.1 million) and China (\$ 2.1 million). However, pork exports decreased 5-fold compared to 2012. The largest poultry meat importers from Ukraine in 2018 were: the Netherlands (\$ 78.3 million), Egypt (\$ 65.2 million), Iraq (\$ 42.8 million), Germany (\$ 7 million) and China (\$ 21.0 million).

On the plus side, Ukraine has been authorized to export poultry meat to EU countries, but a high import duty on poultry meat does not allow chicken producers to enter EU markets with

volumes exceeding the very limited quota allocated to them – 16,000 tonnes. Ukraine exports most dairy products to Kazakhstan (\$ 40.5 million), Morocco (\$ 28.2 million) and Georgia (\$ 18.7 million) to Moldova (\$ 14.5 million) and Azerbaijan (\$ 12.5 million). In 2017, Ukraine entered new markets such as Qatar, Saudi Arabia, Morocco. Since January 2016, Ukrainian producers have the right to export dairy products to the EU, but the share of this market is quite small.

Exports of eggs from Ukraine decreased 1.5 times. The largest egg importers from Ukraine are the United Arab Emirates (US \$ 29.6 million), Iraq (US \$ 11.9 million) Qatar (US \$ 5.0 million), Sierra Leone (US \$ 3.5 million) Liberia (\$ 3.1 million). It is worth noting that the UAE is increasing its exports of eggs every year from Ukraine.

Aggregate exports of honey increased more than 4 times. In 2018, Ukraine exported natural honey to 43 countries. Germany's largest honey importer in 2018 was \$ 34.2 million. United States, followed by the United States (\$ 27.0 million), Poland (\$ 21.8 million), France (\$ 10.9 million), Belgium (\$ 8.2 million), Spain (\$ 6.5 million), Turkey (\$ 4.0 million), Denmark (\$ 3.8 million), Italy (\$ 3.0 million). Ukraine ranks second in terms of honey exports in Europe after Germany and fifth in the world. A positive trend is observed in the export of vegetable oil. For several years, Ukraine has been the world's largest exporter of sunflower oil; in 2018, its exports amounted to \$ 4,309.0 million. The United States, accounting for almost 40% of the world's sunflower oil exports. The largest importers of sunflower oil were: India, China, Spain, the Netherlands, Italy, Iran, Turkey and Egypt. It should be added that sunflower is the most marginal crop. There is a tendency to increase the processing of oilseeds, so in the current processing capacities 98.8% of the sunflower crop, 22.8% of rapeseed, 37.1% of soybean were processed this year.

Ukraine is not on the list of the world's largest exporters of agro-industrial products, but the increase in production capacity (production of agricultural products in recent years is decreasing) and entering new markets, full realization of export potential can significantly strengthen the position of Ukrainian producers in foreign markets. The task of this task may be to increase the output of crop and livestock production, provided that crop yields and livestock productivity are increased. The processes of formation and functioning of the agricultural market cannot be considered outside the context of European integration, which creates new opportunities for farmers in terms of providing preferential trade regime, overcoming tariff and non-tariff barriers, diversifying exports, accessing resources and more.

Thus, much attention is paid today to the European course of foreign economic activity of Ukraine both at the micro level and at the state level. Our research shows that Ukraine has significantly increased its exports to the EU after the signing of the Agreement. The European Union remains the largest importer of agricultural products from Ukraine. Although the Deep and Comprehensive Free Trade Area Agreement with the EU entered into force in January 2016, unilateral European preferences came into force from the end of April 2014, thus, in 2014, Ukrainian agricultural producers managed to save EUR 220 million in unpaid duties under the quota and in 2015 – EUR 280 million. As a result, the share of agricultural exports to EU countries was 28.2%.

For many products at the current stage of development of the respective industries, the problem is not so much the extremely limited annual quotas as the inability to meet the quality and safety requirements for EU export licenses. No less important is the region of Central Asia in terms of foreign trade relations in the agricultural sector. Central Asia is one of the largest importers of agricultural products in Ukraine. Our analysis shows that in recent years Ukraine has managed to increase its presence in these very promising markets. The attractiveness of increasing exports of agricultural products of Ukraine to this region is to increase the solvency of Central Asian countries, relatively fast transportation of products, as well as growing demand and the inability to meet its own resources. Also, the North African region is attracting Ukraine's attention, due in large part to its rich hydrocarbon reserves and good geographical location. North African countries are the richest in the continent. The geographical proximity to Europe led to their close socio-economic ties

with European countries. The increase in agricultural imports has led to the increase in demand for food in North Africa and the inability to meet its own resources, as well as an increase in the solvency of the region's population.

It is important for Ukraine and its agricultural sector to expand its external markets for agricultural products. In this regard, taking into account the results of our study, it is not in doubt that it is advisable to intensify cooperation with the countries of the North African region. Moreover, this activity is not linked to the introduction of various restrictions and procedures, such as those required by EU countries. Therefore, there are now prerequisites for expanding exports of Ukrainian agro-industrial products to the markets of North Africa. This is facilitated by the relative geographical proximity of Ukraine to the countries of the region, and thus the relatively rapid transportation of Ukrainian products, as well as the more favorable conditions for export.

Therefore, Ukraine is an active participant in world trade, so there are problems in optimizing the mechanism of institutional regulation of agricultural production in accordance with European standards. Ukraine needs to form new institutions for implementing market regulatory mechanisms. Adaptation of the domestic agrarian market to the modern landmarks of the globalization economy implies activation of the whole set of factors aimed at effective support of the industry, introduction of significant changes in the foreign trade policy of protection of producers, in accordance with the WTO and aimed at opening multifunctional agriculture⁸⁶. It is possible to characterize the tendencies of state support of agriculture in individual countries based on the data of the Organization for Economic Cooperation and Development. For the most accurate comparison of state support for agriculture in different countries and Ukraine, an approach has been chosen, which compares indicators not in absolute terms but in percentages to other indicators. Namely: an estimate of the support of farmers (PSE) to the total revenue of farmers; General Services Support Assessment (GSSE) to Aggregate Agriculture Support; transfers to producers from consumers of agricultural products (CSE) to the value of consumed products at domestic prices; total agricultural support (TSE) to gross domestic product.

Table 2. Dynamics of evaluation of support of agricultural producers (PSE) of Ukraine in comparison with individual countries

Country	2011	2012	2013	2014	2015	2016	2016 deviation from 2011, (+, -)
Ukraine	-1,91	1,5	-3,18	-8,22	-7,53	-9,46	-7,55
Russia	14,87	15,28	11,58	8,88	12,21	16,07	1,2
EU (28 countries)	18,35	19,13	20,47	18,36	19,14	20,99	2,64
USA	8,02	7,89	6,91	9,8	9,59	8,71	0,69
Japan	51,35	55,08	52,56	49,2	44,07	48,05	-3,3
China	10,31	17,84	19,49	20,21	15,67	14,51	4,2
Australia	3,12	1,97	2,07	2,27	1,81	1,95	-1,17
Canada	14,98	13,94	10,58	8,98	8,44	10,74	-4,24
Brazil	5,61	3,55	3,02	4,39	2,56	4,86	-0,75

The basic principles of state support are aimed at ensuring the sustainable development of the agricultural sector national economy, consistency and complexity implementation of state agrarian policy by local authorities self-government and state executive bodies. State support is based on national support priorities and is consistent with Ukraine's integration into the EU and the world's only economic space. The main elements of the state support system are a set of organizational, economic and legal measures, that are designed to improve performance agrarian sector of the economy, providing comprehensive and sustainable rural development, decoupling problems of social infrastructure⁸⁷.

⁸⁶ Ruda O. L. (2003) Organizational and economic principles of increasing the competitive production of grain (based on Vinnitsa region): Monograph. Vinnytsia: Nilan LTD. 2003. 220 p.

⁸⁷ Grischuk N. V. (2017) The assessment of priority sources of financing of the competitiveness of agricultural enterprises. Scientific Bulletin of Uzhgorod National University. International Economic Relations and the World Economy Series. Vol. 19 (1). 2017. P. 93-97.

The Producer Support for Agricultural Producers (PSE) reflects all transfers to producers, both from consumers and from taxpayers. Includes direct budget payments and MPS. In Ukraine, PSE has been negative since 2011, so in 2016 PSE is -2 536.1 million USD, and in relation to the gross income of agricultural producers is -9.46%. Consequently, direct budget transfers are not directed to the benefit of agricultural producers. In addition, a sharp decline in this indicator in 2014 may be caused not only by a decline in government support, but also by macroeconomic factors, in particular the depreciation of the national currency, which has caused a significant gap between domestic and world agricultural prices. As can be seen from the table, in the EU countries, PSE accounts for about 20% of agricultural producers' revenues, nearly 10% in the US and 50% in Japan.

The Consumer Support Index (CSE) is a general indicator of the impact of government support measures on agricultural conditions on agricultural consumption. In absolute terms, it represents the annual cost of transfers to consumers of agricultural products, and in relation to the value of consumed products - the rate of implicit tax (in the case of negative value) or subsidizing consumers (in the case of positive value). In Ukraine, the CSE indicator has been positive since 2011. The PSE and CSE indicators clearly reflect the state's implementation of policies towards producers and consumers, indicate how much the state balances and aligns the interests of producers and consumers in the agri-food market.

Table 3. Dynamics of support for agricultural producers (CSE) of Ukraine compared to individual countries

Country	2011	2012	2013	2014	2015	2016	2016 deviation from 2011, (+, -)
Ukraine	3,44	3,09	5,63	12,78	11,34	14,54	11,1
Russia	-14,44	-10,75	-6,84	-5,08	-9,29	-15,77	-1,33
EU (28 countries)	-2,74	-4,34	-5,79	-3,63	-4,0	-5,53	-2,79
USA	15,43	14,62	17,77	14,53	6,33	17,74	2,31
Japan	-44,24	-47,77	-43,12	-41,99	-38,57	-41,28	2,96
China	-6,79	-15,27	-17,06	-18,99	-12,12	-11,16	-4,37
Australia	0						0
Canada	-13,9	-15,81	-13,48	-8,83	-9,15	-11,67	2,23
Brazil	-3,6	-2,24	-1,35	-0,27	0,81	-1,81	1,79

Comparing Ukraine with other countries, it can be observed that in Ukraine in recent years PSE has acquired a negative value and CSE is positive, that is, state support is directed at consumers of agricultural products, while at the same time, in other countries, the opposite is true. effect (in the US, state support policies target both consumers and agricultural producers).

Table 4. Dynamics of General Services Support Assessment (GSSE) of Ukraine in comparison with individual countries

Country	2011	2012	2013	2014	2015	2016	2016 deviation from 2011, (+, -)
Ukraine	-971,6	58,1	-89,0	-11,3	-	-	971,6
Russia	17,7	11,6	19,7	16,3	14,12	12,50	-5,2
EU (28 countries)	15,4	13,7	13,3	14,3	11,34	9,78	-5,62
USA	6,9	7,0	11,9	8,2	11,47	10,53	3,63
Japan	17,2	15,0	16,3	15,2	18,29	17,31	0,11
China	17,3	11,6	11,1	10,5	17,11	14,07	-3,23
Australia	40,8	53,5	50,7	46,8	52,46	49,23	8,43
Canada	24,9	24,0	29,6	30,1	31,67	25,27	0,37
Brazil	13,9	18,4	18,6	14,0	28,48	21,66	7,76

The General Services Support Assessment (GSSE) reflects the total amount of government funding for research:

- in the field of agricultural development;
- agrarian education;
- training;
- innovation; inspection and control of the quality and safety of food, agricultural resources and the environment;
- infrastructure development and maintenance;
- marketing and product promotion;
- maintenance of public institutions and financing of other general services.

These transfers do not have a direct impact on farmers' incomes and consumer spending, but they do have a comprehensive effect on agricultural development. In Ukraine, GSSE has averaged \$ 150 million a year over the past 5 years. In other countries, this indicator is important in shaping overall support for agriculture.

Based on the above data, it can be observed that since 2011 in Ukraine, the GDP-related aggregate support for agriculture (TSE) has become negative, indicating that the country's ineffective strategic and tactical agricultural development policy, ie agriculture is becoming a donor to other sectors of the economy. Aggregate support for agriculture (TSE) is defined as the sum of three other indicators, namely the agricultural producer support (PSE), the consumer support index (CSE) and the general services support indicator (GSSE). It can be concluded that in developed countries, the agricultural sector is attracted by a sufficiently high level of government support. Particular attention is paid to the expenditures from the budget for the development of agricultural production. In Ukraine, the support of the agricultural sector from the state budget is characterized by a low level of budget financing.

Table 5. Dynamics of Aggregate Support for Agriculture (TSE) of Ukraine in comparison with individual countries

Country	2011	2012	2013	2014	2015	2016	2016 deviation from 2011, (+, -)
Ukraine	-0,043	0,756	-0,406	-2,226	-2,1	0	0,043
Russia	1,007	0,865	0,772	0,575	0,84	1,09	0,083
EU (28 countries)	0,742	0,764	0,817	0,707	0,66	0,68	-0,062
USA	0,54	0,533	0,52	0,549	0,42	0,49	-0,05
Japan	1,236	1,299	1,239	1,12	1,04	1,09	-0,146
China	1,858	3,004	3,212	3,268	2,52	2,23	0,372
Australia	0,173	0,138	0,144	0,136	0,13	0,14	-0,033
Canada	0,559	0,536	0,433	0,371	0,37	0,42	-0,139
Brazil	0,554	0,38	0,339	0,468	0,39	0,6	0,046

Currently, a new technological wave is unfolding in the world economy, which will be characterized by the development of robotics; biotechnologies based on the latest developments in molecular biology and genetic engineering; nanotechnology; systems of artificial intelligence. The relevance of flexible automation of production is increasing, the volumes of the use of renewable energy sources are significantly increasing, biotechnologies will become the basis for the development of agroindustrial complex. All this creates the preconditions for the formation of a new structure of markets for the means of production and production of the agro-industrial complex.

Ukraine has considerable potential to develop agro-industrial complex at the global level. This is due to strengths such as favorable agronomic conditions, the availability of multi-sectoral infrastructure, and the availability of knowledgeable working human capital. However, low levels of wages, high levels of corruption, a high level of inflation, import dependency, the use of outdated

production methods and technologies, and the imperfection of the financial and credit system remain the main constraints to the development of the agro-industrial complex.

In our opinion, there are two possible scenarios for the development of agroindustrial complex of Ukraine at the global level. The Local Development scenario envisages the achievement of stable growth of the sector and specialization in those segments of markets where the agricultural products of Ukraine are already competitive. According to our estimates, by 2030 Ukraine may increase its share in world exports of agricultural products, by the first scenario up to 1.5% and by the second scenario by 3.5%. The main drivers of the development of agro-industrial complex of Ukraine in the scenario "Local development" will be a gradual recovery of the economy, import substitution and further development of traditional export niches. Improving investment conditions will be driven by the effects of monetary and fiscal stimulus.

The main condition for the implementation of the Global Breakthrough scenario will be to accelerate the growth of the Ukrainian economy in the medium term by increasing public investment. This scenario involves additional investment in the development of scientific and innovative activities, support for agricultural exports and stimulate consumer demand for domestic products.

The main objective of the scientific and technological development of the agro-industrial complex of Ukraine is to ensure the competitiveness of Ukrainian products in the foreign and domestic markets, primarily through the creation, dissemination and application of the latest achievements of science and technology. The realization of this goal is intended to ensure the transition to high-productive (accelerated selection, active substances for modern veterinary preparations and plant protection products, etc.), high-tech (synthetic biology, food biotechnology, functional food, etc.), resource-efficient (rational, efficient), climate adaptive (regional varieties and breeds, irrigation complexes of new generation, vertical farms, etc.) production of agricultural raw materials and products from ysokym level processing. Mass production and export of competitive, high value-added products will be possible thanks to sustained growth in labor productivity and resource efficiency.

Therefore, important conditions for the development of agroindustrial complex will be:

- overcoming the scientific and technological backlog of the domestic agroindustrial complex from the level of the leading countries of the world and cost-effective reduction of its dependence on technology imports;
- formation of an innovative system in the agroindustrial complex, which ensures the creation and development of advanced domestic developments, as well as the adaptation of imported technologies where necessary;
- priority development of basic and applied research in perspective areas (including by attracting private investment);
- increasing the availability of new technologies for small and medium-sized businesses, farms and individual producers;
- leveling of technological level of large and medium-sized industries;
- prioritizing innovation in resource efficiency, storage, processing and logistics.

This scenario calls for international cooperation to be stepped up. This will be facilitated by the interest of a number of countries with limited agro-climatic capacities in the stable supply of agricultural products, raw materials and food, the creation of agricultural production in other countries with favorable agro-climatic conditions, including in Ukraine.

The forecast of the scientific and technological development of the agro-industrial complex lays the foundation for the formation of the sectoral system of technological forecasting. This system should be geared towards meeting the sector's demanding needs, taking into account the development of key manufacturing technologies.

The main functions of the technological forecasting system of agroindustrial complex of Ukraine in the future should be:

- regular monitoring of global technological trends, identification of technological threats and opportunities, formation of scenario conditions of scientific and technological development of agroindustrial complex;
- organizing the search and analysis of information on the level and results of research and technological development of domestic and foreign agricultural organizations, including breakthrough technologies that can have a radical impact on the complex structure of agricultural markets, to change the demand for agricultural products;
- provision of regular correction of directions of scientific and technological development and industry critical technologies of agroindustrial complex, as well as industry technological roadmaps;
- methodological support of the activities of the Ministry of Agrarian Policy and Food of Ukraine in the field of forecasting the scientific and technological and innovative development of the sector through a network of branch centers of forecasting on the basis of leading specialized universities;
- Ensuring the integration of the results into the national level strategic planning system.

The Ukrainian economy is facing the challenge of finding new sources of growth, one of which is to become a high-tech, global and competitive agro-industrial complex. Advancement in this direction requires improvement of the scientific and technical policy in the agroindustrial complex, improvement of the quality of methodological, informational and expert-analytical support of the relevant management decisions. In order to achieve this, it is important to ensure the effectiveness of the implementation of sectoral regulatory instruments. It is also necessary to increase the scale of funding for agricultural education and agrarian science, which is at an insufficiently high level today. The development of the agro-industrial complex of Ukraine will provide significant changes in the socio-economic sphere, will have a positive impact on the stability of economic growth, ensuring the economic security of the country, improving the level of employment and quality of life of the population.

Conclusions. The complex of measures that the state plans to take to develop the export potential of the agro-industrial sector in the long term is considered. We have analyzed strategic programs for the development of this sector, which are intended to meet the needs of the internal market and to secure leading positions in the world through stable export of agricultural products and products of its deep processing

On the basis of the analysis of agricultural export trends, three main foreign trade priorities of the agro-industrial complex of Ukraine were identified. One of the most important areas of cooperation is the development of trade relations with EU countries. This is due to the large volume of exports to the country, geographical proximity, high solvency of the population and unconditionally trade preferences. The analysis also shows that it is advisable to step up cooperation with the countries of the North African region and Central Asia. Our analysis shows that there is a growing demand for agricultural products and that in recent years Ukraine has managed to increase its presence in these very promising markets.

In our opinion, the use of a systematic, well-thought-out state approach for the introduction of a new generation of digital technologies and financial technologies into agriculture should become an important and promising part of the agricultural development strategy of Ukraine. Based on the scenario forecasting, we envisaged the development of the agro-industrial complex in the medium term. We have identified two major scenarios for the development of the agro-industrial complex of Ukraine until 2030. According to the first major drivers of development of Ukrainian agriculture will be: gradual economic recovery, import substitution and further development of traditional export niches. Improving investment conditions will be driven by the effects of monetary and fiscal stimulus. The second scenario, Global Breakthrough, involves the development and implementation of science and technology policy in the field of agriculture. The main objective of the scientific and technological development of the agro-industrial complex of Ukraine is to ensure the competitiveness of Ukrainian products in the foreign and domestic markets, primarily through the creation, dissemination and application of the latest achievements of science and technology. Thus,

the formation of a single strategy for the development of agro-industrial complex of Ukraine will give grounds to determine the keys to the state policy in the sphere of foreign economic activity, the creation of an effective export support system that will ensure the sustainable development and realization of the export potential of the agro-industrial complex of Ukraine.

Sustainable development is possible under the conditions of formation of long unity and interconnection in the reproduction of production potential, human resources and the environment. The decisive role in ensuring the sustainability of the agricultural sector and its individual industries is played by adjusting the effects of external and internal factors, as well as taking into account the need to combine the components involved. Therefore, sustainable development should be seen not as a solution to anthropogenic problems, but also as a basis for the most efficient use of the sector's potential.

The formulation of a strategy for sustainable development of the agricultural sector should be based on a set of factors and cover a series of stages in order to achieve strategic directions, economic efficiency, social significance, environmental security of the agricultural sector of the national economy, on the basis of which the introduction of public-private partnership.

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