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## GLOBALIZATION AND DEVELOPMENT OF UKRAINIAN AGRICULTURE

**Abstract.** Ukrainian agriculture has a great potential for development in the framework of globalization and EU enlargement. The main direction for this aim is increasing of competitiveness of agricultural products through improvement of agricultural education and research. Taken under consideration the energy problems that world economy faces more and more, agriculture should play important role in keeping a country's energy balance by supplying renewable energy sources like biodiesel, ethanol, and hard organic fuel.

Key words: agricultural development, energy sources, agricultural education and research, competitiveness

The world economy has a clear tendency to globalization. Enlargement of EU and new negotiations in the framework of Doha round of WTO are the examples of this tendency. Any country, including Poland or Ukraine, more and more becomes a part of a globalization process. In this connection development of Agricultural Economics as an important part of Economics is a promising direction for Ukrainian scientists.

Regarding to the basis economic dilemma that consist in unlimited society's wants and limited economic resources, the main task of Economics as a Science is determination of directions for the use of scarce resources. To do it in new economic conditions determined by the process of globalization, new approaches in the theory and applied Economics should be developed.

In the economic theory it is needed to get back to the initial principles of economic development. First of all it is connected with the energy balance of the whole society and the individuals. Everything what surrounds us has an energy value. Above all important things are foodstuffs without which people can not live. To heat dwellings people use energy accumulated in the past like gas, oil, coal, wood or synthetic energy sources such as nuclear or thermonuclear power. The same energy is needed to produce the products of industry: to smelt steel, manufacture equipments, machines and vehicles, build roads, other constructions and houses, produce the products of chemical industry and others like that. Thus the life of people on Earth and also the economic development of society is determined by energy balance existing in the certain moment of time. Thus the development of economy and society will be determined by this balance and, consequently, it will be a crucial issue for the socio-economic development of Ukraine in the XXI and next centuries.

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Already today Ukraine runs into definite energy problems. They are the well known events which took place at the beginning of the current year related to the gas supply to Ukraine and the European Union from Russia and Turkestan, periodic so-called «oil crises», crises related to the markets of agricultural products and foodstuffs such as cereals, sugar, meat. With all of them according to the specialized forecasters Ukraine can be faced in the near future. That is why the energy safety of the country and development of the industry branches that will secure a balance in it will determine directions of the socio-economic development of Ukraine in the XXI century.

Coming back to the economic theory it should be mentioned that David Ricardo and Karl Marx saw the substance of economic value in the labour input (labour theory of value). Embodiment of this theory in the economic and public development in the XX century created a bloodiest period in the civilization's history. Many countries including Poland and Ukraine were victims of implementation of this theory. In opposite to the market economy based on private ownership and market forces, Soviet Union style's economies were based on the state ownership and central economic planning.

Today there is a necessity to develop an economic theory on the energy basis. Ricardo, Smith and Marx did not explore the sources of additional value to the end. We should see additional value in creation of a new matter but together with the new matter also a new energy. It takes place only in the process of photosynthesis. Billions of years ago by means of photosynthesis such energy sources were created like coal, oil and gas which have an organic origin. It should be noted that the economic theory that is grounded on an energy value and called physical economy was created by French scientists in the XVIIth century. Ukrainian scientists also participated in development of this theory, for example, Serhiy Podolynskyi, who discussed with Karl Marx the theory of value founded on labour, which was also denied by Volodymyr Vernadskyi, first President of Ukrainian Academy of Science|, and lately Mykola Rudenko, an accomplished philosopher and writer.

Thus one of directions of the socio-economic development of Ukraine appears to be a realignment of agriculture, as a fundamental principle of the energy balance of society. In the worldwide specialization Ukraine takes a unique place. Not a single country in the world keeps such reserves of land that are suitable for production of agricultural products as Ukraine. This uniqueness can be expressed by a simple calculation: if in Ukraine there is one fourth of the world supplies of black soil and its population is 46 million people, then the other 75 % of black soil belongs to the 6 billion people of World population. In absolute numbers it looks so, that there are 0,5 hectares of black soil per one habitant of Ukraine and 0,015 hectares per one inhabitant of the World. That means Ukraine has resources of black

soil 30 times higher in comparison with the rest of World. This factor should be taken into account in the development of the socio-economic concept of Ukraine in the XXI century. However today we have a paradoxical situation in agriculture with regard to its productivity which is almost three times lower in comparison with productivity in the countries of Western Europe and North America. If in Ukraine the yield of grain and productivity of cows are respectively 2,5 - 3,0 tons/year, in the developed countries these indices are 7 - 8 tons/year. It should be taken under consideration that conditions for agricultural production in Ukraine are better than in majority of countries. That is why the purpose of increase of productivity and efficiency of resources in agriculture and, above all, the productivity of land, was the aim of the agrarian and economic reform implemented in Ukraine. Unfortunately, this reform has not reached the declared goals as yet. During the reform the situation in Ukrainian agriculture became even worse comparatively with the pre-reform period. Certainly this problem will remain for Ukraine also in the XXI century. First of all it will be connected with increasing the productivity of agricultural land as a fundamental principle of agriculture. In the next ten years Ukraine should produce about 100 million tons of grain, or 2,5 times more in comparison with the present level. It must be taken into account that gas and oil supplies earlier or later will end. They are limited, while production of agricultural goods appears repeatable and growing. Principle is simple: we put into ground in spring one grain, and in the autumn we harvest several dozens of grain. Exactly here we see the creation of a real additional value which thereafter due to labour forces passes into all other goods and services in the economy. Just as this displays the basic law of physical economy, also the law of energy conservation and transformation is working.

Other direction of the use of the limited production resources is concentration on those industries of economy where Ukraine can take competitive advantages above other countries of the world. First and foremost it applies to production of alternative energy sources: fuel on the basis of organic raw material (biodiesel and ethanol), hard organic fuel, development of water, wind and nuclear power engineering. Possibly in a near future our scientists will invent yet another energy sources. But in order that it happens it is necessary to finance domestic scientific research, both fundamental and applied. Ukraine can also take competitive advantages in such spheres of science and economy as medicine, space engineering, shipbuilding. Concentration on these directions of resources use will allow the country to produce competitive products that is the key element in the process of globalization. Unfortunately, today Ukraine takes only 84th place among 117 countries of the world regarding the level of competitiveness of industrial commodities.

From here one of the main problems that Ukraine faces to is the low quality of management at all levels, beginning from an enterprise to the government. The process of globalization is characterized by a sharp increase of exactly this key element of economic activity. Above all things it touches multinational corporations which swiftly conquer the national markets and they affect all segments of economy. The observance of standards of quality of products is a key factor of conquest of these markets by the transnational companies, which is achieved thanks to innovations in the management and marketing. All know the existent standards of quality such as ISO 9000, ISO 14000, ISO 17025, ISO 22000 and others. These standards apply to all parts of the economic activity of companies, from the technological processes to the quality of management. There is a hard competition between these companies which, essentially, does not leave place for national companies, because of too high quality of products, management and enormous financial streams which can be provided only by transnational companies. However, in order to maintain high competitive position under the present economic conditions, it is already not enough to provide the noted standards of quality. Today between front-rank companies there is a competition above these standards and the transnational companies win this struggle because they can provide more high-quality goods and services to the customers.

What in this situation should be done by Ukraine? First of all it is development of scientific research, teaching technologies and raising the level of staff skill. Fundamental and applied scientific research are needed for development of new technologies, in particular, for development of new energy sources, teaching and raising the level of staff skill in order to be able to follow modern tendencies in the economic science and management. Task of Agricultural Economics is not only to follow modern tendencies, but also to operate on the passing. In this approaches we can use a quotation from the famous Canadian hockey player, Wayne Gretzky. He said of his secret of success "I skate to where the puck is going to be, not where it is now." So we should look ahead at the actions and directions that will make Ukraine's agriculture and rural economy more productive and competitive under the global market conditions in the future.

In order to follow the modern tendencies in Economy first of all innovations should be provided in the educational process and state should support development of agrarian science. Agricultural science is a sphere of economy which can not successfully function only due to market initiatives but needs a assistance from the state. Scientific research in the field of agriculture play a vital part in the improvement of technologies that lower production costs, increase productivity of plants and animals and also help to cope with diseases of plants and animals. With the purpose of adaptation of the system of agricultural education to the requirements of current tendencies in economy it is necessary to revise the syllabuses and programs of subjects as well as the methods of teaching, including real possibilities of choice of subjects and teachers by the students. Financing of the agricultural education should be improved, especially the teachers' salaries in accordance with the active law of Ukraine, and the technical base of universities renewed, in particular in the sphere of computerization and access to the Internet.

Agricultural universities in Ukraine should become centres for the development of agricultural science as it is in the developed countries. Combination of education and research in the agrarian universities will give possibility to heave up the level of quality in these both directions. For this purpose the workload should be divided on two parts, educational and scientific.

Ukrainian Agricultural Economics should offer directions for development of the agroindustrial complex of Ukraine, formulate the bases for a new agrarian policy and a policy for rural development. This new policy can not and should not copy the Common Agricultural Policy of the European Union, the agricultural policy of USA or Canada. It should take into account Ukrainian realities and modern directions of development of world economy which are determined by the process of globalization. The main goal of this policy should be creation of a high competitive, specialized and efficient agriculture that secures an important role of Ukraine in the world agricultural markets and creates possibilities for its integration to the European Union. Criteria of estimation of the agricultural policy should be a growth of productivity and efficiency of agriculture and other connected with it industries.

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