

## **Fundamentals of development of country sides**

Formation of norms for the organization of industrial cooperation and integration in agriculture within the limits of the village and settlement, as well as rural communities to increase the share of the produced additional product in the countryside. Methods. Biological and natural analysis, the formation of elements of living matter - photosynthesis, the use of laws of physics, macroeconomic calculations. Results The special status of the branch of agriculture, where all the additional product, added value, which is the basis of socio-economic development of the society is produced in the cultivation, is substantiated. Conclusions An important element of novelty: the absolute complementary product is formed exclusively in cultivation, much of which must remain in the countryside. The practical value of the research is to solve one of the important national problems - self-development and structural self-defense of the agrarian sphere, which enables to solve as much as possible the issues of social and economic development of society.

What the Lord has given us - the language and the earth, Someone wants to take away. A. Malyshko

*Key words: photosynthesis, absolute complementary product, relative additional product, industrial cooperation, integration.*

Nowadays in Ukraine it is considered that industrial regions and cities are provided with their own funds, while agrarian regions are all subsidized, that is, they live at the expense of industrial regions. Such an opinion extends, in particular, to villages and settlements. This requires scientific rethinking and legal justification. The question is asked about the creation of structures that would protect Ukrainian land and agriculture. Recently, the winner of the Shevchenko Prize SP The klyosnik asked: "Is not it time to create a concrete institution for protecting the earth?" [10]. Agricultural production has a special natural status, which requires the attention of all humanity. What is this feature? First of all, it should be noted that in the former Soviet Union, as well as in the whole of Europe, there was the theory of labor cost of K. Marx (XIX c.), According to which only the work of the worker, the builder creates material goods, that is added value. This theory does not recognize any role of nature. Even in the XVIII century. Physiocrats, French economists, recognized land and crops as the only source of wealth for the nation, the people, and agricultural labor - the only productive labor. Humanity lives and develops exclusively through the use of wildlife. The sun through the photosynthesis in plant leaves gives the person energy for labor. From natural raw materials, food is produced, and human labor is spent on it. That is why the product obtained has a certain cost. However, the product created by nature, according to the teachings of F. Quesnay, is an absolute product, an absolute added value; Created by human labor, according to the teachings of A. Smith, is a relative product, a relative value added. The role of the energy of the universe and the Sun was first tested by Ukrainian scientists S. Podolinsky [6] and M. Rudenko [7]. It was they who thoroughly studied the similarity and difference between absolute and relative product, absolute and relative value. However, Marx did not recognize the results of S. Podolinsky, which had negative consequences for the scientist, and M. Rudenko's conclusions were considered by the Bolshevik authorities to be harmful, imprisoning the researcher for many years. To these studies Ukrainian scientists should apply and use them to deepen the science and development of the agrarian sector of the country's economy. Absolute value is created by nature - the energy of the universe and the sun with the use of land and water. If we take for a constant the presence of 3 types of solar energy: a) the energy of coal, oil and gas; B) the energy of the humus layer; C) the new energy of plants obtained from the Universe and the Sun), then the energy of the Universe and the Sun and the energy of the humus layer are concentrated exclusively in the agrarian sector - in cultivation, forestry, in the seas and oceans. Thus, the absolute added product, the absolute added value is the energy of the universe and the Sun, which for the planet Earth is a new, additional, which was not previously there, hence its name - the absolute new product, the pure product, the absolute

value added. Man by his own work only creates favorable conditions for obtaining and using an additional product, its value. Only afterwards are new types of products made using human labor, and therefore a new product created by human labor, and its value is a relative category, because the product is first created by nature and is new, absolute. Here human labor is merely a measure of the redistribution of the obtained absolute complementary product, of additional value. All living nature exists solely by external energy. It has been proved by science and practice that external energy is used only by plants, which with the help of photosynthesis, fertile soil and water form a new product - absolute value added. Consequently, the pure product, absolute value added is created in agriculture, that is, in agriculture.

The ability to receive energy through the leaves from the Sun and the Universe is a feature of each plant, which is well explained by scientists in the field of sugar beet production. In 1938, V. Savitsky concluded in his report on work on the study of the species *V. vulgare* of various variants of sugar, fodder, table and leafy beets, differing in energy of root growth and leafy growth, "All beer species without exception At the beginning of the development, the growth energy of the bottle is much larger than the energy of root growth. Then comes the period of intensified root formation "[8]. The results of such studies are confirmed by the law of nature: in order to obtain energy from the universe and the sun, leaves are needed for the absorption of this energy, only after that the substance produced in the leaf in contact with the soil is directed to plant nutrition through the root. This is an extremely complex natural laboratory, which is still not fully understood and understood. It is appropriate here to emphasize that vegetation as the only receiver of energy receives no more than 7% of all energy that enters the planet Earth. Therefore, in the future, humanity has a real opportunity to significantly increase the energy of the universe and the Sun for practical use during the period of lowering the temperatures on the planet Earth and the full use of such carriers of solar energy as oil, gas and coal. However, an increase in the volume of energy from the cosmos can occur, if humanity invented the new mechanism of receiving this energy, is able to act on the principles of photosynthesis, as in the leaves of the plant. Given that labor is used as a measure of redistribution of the new product derived from nature, the state and the market determine much more and far less redistribute value added. As a result, the absolute energy (additional product, added value) extracted in agriculture is transmitted as a relative value added to industry, construction, transport, culture, defense, science, health, and other industries where different things are produced and work is carried out. Historically, agriculture, where all the additional product and absolute value added is created, rural and peasantry are constantly deprived of material and financial resources that are formed on the basis of the new added value in the crop production. As a result, almost all rural areas lack the funds, material and labor resources for productive and socially effective development, which is confirmed by the neglected socio-economic status of the Ukrainian agrarian sector.

Why is this happening and what needs to be fixed? There are many reasons that should be mentioned (at least some): the destruction of the bases of agrarian production; Violation of the law of equilibrium of the possibilities of nature and human needs; The latest forms of crisis phenomena as a manifestation of an imbalance between the possibilities of nature and the needs of man; Inability to use land as one of the natural factors for obtaining an additional product; Irrational redistribution of value added in the country. Considering the destruction of the bases of agricultural production, one should pay attention to the fact that among the factors of production of the absolute added product - the Universe, the Sun, photosynthesis in leaves, water and soil - a person can influence positively or negatively only on a fertile layer of soil. It follows that the fertility of the soil, which directly affects the level of the economy of a country, depends on the person. In Ukraine things are nasty. Domestic agrohholdings for the sake of profit exhaust the land, and therefore the country and the people are waiting for trouble. Agrohholdings only with their monoculture technologies have destroyed many fertile lands, the humus content is catastrophically reduced; due to the disappearance of crop rotation, the soil structure and its fertility deteriorate, resulting in irreparable damage to the countryside, to the state and to nature. In addition, the harmfulness of agrohholdings is also found elsewhere: more than half of the leased rights to land shares of Ukrainians are concentrated in 30 very large (50-450 thousand hectares of land) and 300 large (more than 10 thousand hectares of land) of agrohholdings Peasants Modern agrohholdings require close attention: they are subjects of the direct transfer of Ukrainian land to the property of foreign natural and legal persons, many of these agrarian monsters already belong to foreigners (Denmark - 75 thousand hectares, Russia - 350 thousand hectares) [1]; Selling grain as raw materials abroad, agricultural holdings deprive Ukrainians of jobs, huge financial resources, restrain the development of livestock, deprive people of

high quality domestic foods. Studying the law of equilibrium between the possibilities of nature and the needs of man, we note that destroying the structure of the soil, reducing the content of humus in it, a person deprives himself and humanity of food, which is already insufficient on the planet Earth, the number of hungry people increases. We have witnessed how European countries are suffering from the influx of refugees from Africa, where the number of people suffering from food shortages is increasing; On the continent there is not enough land for growing plants; There are wars born of lack of food. According to our calculations, the area of land where arable land can grow, which is less than 10% of the Earth's surface, could receive energy for production that can provide food and other needs of 7 to 8 billion people on the planet [2]. With the growth of the planet's population began to use land suitable for cultivating land for construction, industry, roads, etc., humanity is forced to resort to the use of chemicals to increase yields, use genetically modified products and various substitutes. For example, in Ukraine after 1991 the area under sugar beets has decreased by four times, sugar production has been reduced, as a result - now in many foods we use sweeteners substitutes, among which 80% is synthetic. Ukraine has a special status: its fertile land is able to provide food twice or more than the population today; Ukrainian black earths have always attracted foreigners. During the Second World War, blacklands were transported to Germany by carriages. Today Ukrainian black earth is exported in various ways, even in packages. Given this, Ukrainians should use their own land as efficiently as possible to provide domestic needs for quality products and access to foreign markets. Consequently, each country should use the land rationally as one of the natural factors in generating energy for the production of an additional product. Many countries of the earth no longer have their own needs for the needs of the people, so they try not only to buy food on the world market, but first of all - to buy land in other countries. In the world arena, the main object in terms of acquiring land for the cultivation of plants is precisely Ukraine, which must take into account national policies.

Nowadays mankind experiences the consequences of violation of the laws of nature and unwanted human interferences in its processes: reduction of the possibilities of obtaining the energy of the universe and the sun by plants due to destruction and degradation of soil quality; Reducing the area of land capable of growing plants as the only possibility of the implementation of photosynthesis to obtain an additional product; Excessive consumption of all that creates nature on the planet Earth, using the energy of the Sun; Rapid population growth on the planet. There is no doubt that such natural and human factors lead to a disbalance between the possibilities of nature and excessive human needs. All this leads to the emergence of the latest forms of crisis phenomena, since the current financial crises have not fallen off about since 1997, which is not a manifestation of financial, credit, market or settlement processes, and the result of a violation of the balance of the possibilities of nature and human needs. In the national agrarian policy, these complex processes must be taken into account when solving the problems of land use and sale. Especially it should be borne in mind that from the end of the twentieth century. Such crises become permanent, they will not sink until humanity learns not to disturb equilibrium; otherwise, military confrontation will intensify. It is necessary constantly to be guided by the warning that economic chaos, land degradation, imperfect forms of government, ignorance of the laws of nature and their non-compliance are the cause of the death of the state, the nation, and the people. As the poet wrote: "Do not flee from the earth, because it will not catch up" [10]. In view of the above, we should carefully approach the formation of the land market and the attempt to lift the moratorium on it: the domestic land market should be, but under certain conditions and in compliance with legal norms; An external land market for Ukraine can not exist, it is necessary to legally prohibit the sale and privatization of agricultural land directly or through foreign legal entities and individuals. However, there are many people in the country who promote the sale of land to foreigners, even among agricultural scientists, there is no consensus on this issue. The authorities should remember that granting permission to sell land to foreigners will lead to the legal disappearance of the state, nothing will be managed, and an additional product obtained from nature will be swept to other states, as it is now. One must bear in mind and this is to guided that the earth - a gift of nature to receive the energy of the universe and the Sun, and therefore it can not be sold. It is no accident that in all countries of the world, even domestic sales of land is under strict control, and sales to foreign physical and legal persons in general is prohibited.

Exploring the problems of the land market, turn to history. LM Tolstoy wrote about agrarian reform P.A. Stolypin: "The reason for those revolutionary horrors that are now taking place in Russia are very deep grounds, but one, the closest of them, is the discontent of the people with the wrong distribution of land. ...

Injustice is that as there can not exist the rights of one person to rule others (slavery), so there can not exist the rights of one, any man, rich or poor, king or peasant, to own the land as property " 9]. The writer sharply condemned what PA statesman did. Stolypin with the land and its property "You are standing on a terrible crossroads: one road that you are unfortunately going to be - the road to evil deeds, bad fame and, most importantly, sin" [4]. There is good reason to believe that a well-known politician acknowledged the falsity of his land reform by writing the following answer: "Believe that, feeling often the possibility of a near death, one can not afford to think about these issues" [5]. To modern politicians of independent Ukraine we recommend to reflect on these words and on the activities of the well-known politician, who conducted a harmful agrarian reform and enforced land management, for which he paid for his life. Modern agrarian reform, compulsory changes in the boundaries of the districts, not taking into account the desire of the inhabitants of rural areas, the formation of foolish agricultural holdings and much more - all this contradicts the notion - the village and the village. Naturally, the absolute added value is also irrationally redistributed in the form of relative added value, which primarily affects the inhabitants of rural areas. Now, when agrohholdings grow mostly cereals, state politicians are constantly pleased that the agrarian sector is very successful. And is it so? No, because through the work activity in these or other spheres of production, the absolute added value created in the crop production is distributed as follows: the cultivation of raw materials and trade in this raw material - 12 - 15%; Storage and processing of raw materials for finished products - 25-30; Trade in ready products for use - 48-50; Other users 3-7%. Consequently, if agrohholdings sell grain abroad, then more than 80% of the absolute value added received in Ukraine, they are irrevocably given to foreign countries. The economy of the state, where the raw material is produced, degrades, the quality food, feed for livestock, jobs, financial resources are lost. What is most harmful is the export of nutrients that should remain in the country, and therefore no reforms, foreign loans would lead the state out of poverty and begging, if such an agrarian production would operate. The same applies to rural producers of raw materials - farmers and peasants, who leave only 12-15% of their relative value added. They leave the countryside by going to the city. Therefore, legislation on the sale of such raw materials as grain, as well as the existence of agricultural holdings as structures harmful to the country and agriculture should be reviewed. In rural areas, it is advisable to preserve the unity of villages and settlements on the basis of production co-operation; To revitalize livelihoods, to return financial resources through integration, which involves uniting in villages and settlements of 3 spheres on a cooperative basis: a) production of raw materials; B) its storage and processing; C) the implementation of finished products for use. Our studies give the right to state that the first and most important in the current situation of agrosphere development should be the solution of the problem of increasing the efficiency of rural life within rural and settlement councils, as well as territorial communities. It is especially important in the intentions of the authorities to carry out territorial reforms, which require significant financial resources for new communities, and their centralized budgeting will no longer be possible due to the decentralization of management. It should be noted that the financial resources created by the agro-industrial complex are not inferior to the financial resources of the oil and gas industry. In order to preserve rural communities that are expected to formally organize and at the same time prevent degradation of peasants, even before the land market is introduced, it is necessary to focus state attention on industrial co-operation and integration in rural areas.

The basis of industrial cooperation and integration is proposed to put such theoretical and practical concepts. First, co-ownership of land owners is evidence that the Sun and Earth, which are the basis for the creation of an additional product through photosynthesis, belong to all that is a common property, albeit on a private basis. Secondly, industrial co-operation and integration are formed voluntarily on the basis of private property, the state only creates favorable conditions for such processes. Third, integration, which involves the production of raw materials, their processing and the receipt of the final product within the production cooperatives of villages and settlements, can effectively act in the formation of territorial communities. It is the integration of production activities (production of raw materials, processing and trade in finished products) within the territorial communities to ensure the receipt of financial resources for their production and social needs, the development of social and industrial infrastructure in the conditions of entry into the world market and the restriction of centralized budget financing of agricultural production. In the end, the creation of integrated production cooperatives in rural areas solves the problem not only of a specific country, say Ukraine, but also of the problems of civilization of the planet Earth, which is experiencing an unbelievable increase in population concentration in huge cities where there is a problem of providing fresh water, deteriorating ecology

, Reduction of social needs, deterioration of transport services, reduction of land fertility by cultivating products exclusively by means of chemical technology, etc. Therefore, it is necessary to adopt a legislative act "On Industrial Cooperation and Integration in Agriculture" (the draft core provisions are presented below), which would facilitate rural production and cooperation in the rural areas. Village and town councils, as well as new formations of territorial communities, should become the center of the organizational structure of industrial cooperation and integration in the production of final products. The basis of the proposed formations should be the statement that the land should serve not as a matter of profit, but as a means of effective manifestation of the energy of the universe and the Sun in the locality with the help of human labor. In order to comply with such conditions, it is necessary to legislatively and normatively define: firstly, to sell or rent a land; Secondly, the development of rules for the association of agricultural producers should be taken into account that it is voluntary on the basis of different forms of ownership of land, property and means of production. The proposed approach to structural organizational changes in the countryside in the conditions of the globalization processes of the present solves one of the important national problems - the problem of self-development and structural self-defense of the agrarian sphere. The first point is the problem, which requires an urgent departure from the existing export-oriented economy in Ukraine and the transition to a national economy, which will dominate the balanced production of end-consumer goods, ensuring the formation of high-tech industrial and civilized social infrastructure in rural areas. Under such conditions agriculture in the integration of the country's agro-industrial complex will play a decisive role in solving this problem.

The main structure of the project. I. General provisions on the use of land: the special conditions of the internal land market are determined; The main owners of land shares are peasants; It is intended to promote personal peasant and farmer's, tenants and other land users in association of production cooperative and other large integrated farms of the local rural community within the limits of village and settlement councils; It is recommended to legislatively prohibit the sale or privatization of agricultural land directly or through artificial persons to other states, foreign legal entities and individuals; It is determined that all owners who have the right to use land, in particular all sizes of holdings, organizationally concentrate in the structures of the rural community; Provides for the creation of conditions for peasant, family and commodity farmers, cooperatives and state farms for the effective integration of agricultural raw materials production, processing and sale of end-use products. II. Co-operation in the possession and use of land as the organizational basis of territorial rural communities: A. The main condition - collective use of land. The transition to the internal market of land should take into account special circumstances: Ukraine is almost the only country in the world where historically rural settlements have been formed; One of the main problems of the Ukrainian village is the contradiction between individual, collective and state interests. Taking into account the features of the Ukrainian village and eliminating contradictions in it can be achieved on the basis of production cooperation in the possession and use of land, production of agricultural products, its deep processing and sale. In order to prevent chaos in the transition of land from one owner to another and the speculative use of them during the introduction of the land market, land resources should be concentrated in the collective use of rural communities on the basis of production co-operation. In this context, it is proposed to create a collective agrarian enterprise (KAP) within the boundaries of village and settlement councils, which should include: communal lands owned by the village or settlement council; Land units of the peasants and their successors; State land owned by the state; Holdings of different sizes that lease land within the respective village or settlement council. It is possible that such a production co-operation will form the 5th collective owner of the land - the rural community.

It is these collective owners who have to concentrate the land of each village, settlement or other settlement, only between them will undergo the processes of lease, donation or sale of land on the basis of statutory norms and rules of production cooperation. Establishment of organizational and legal norms and rules in the field of land relations is solely the prerogative of the state, which only creates favorable conditions for voluntary association, which requires approval of a number of relevant laws of Ukraine. Each village or settlement territorial community, on the basis of state norms and rules, adopts its own statute of industrial cooperation and integration, which specifies national norms and rules. B. Priority of acquiring the right to use land. The owner of a land parcel or a tenant voluntarily and independently enters the cooperative with his share or property; If he wants to rent him, then the advantage is given in the following order: 1) the inhabitants of the given village or settlement; 2) rural community on the terms of cooperation; 3) the state, if it has interest to

the land plot; 4) an external tenant who is obliged to become a member of the rural community on the terms of cooperation, subject to the state norms and norms, requirements of agricultural machinery and rules of lease. V. Special conditions of sale or lease of land plots. If a land plot is contained within the land parcels of other owners, then the sale or lease may be carried out in agreement with the owners of neighboring plots and the collective of the cooperative economy; The land of collective and communal ownership of rural communities can not be sold, they only have the right to lease; A large tenant may receive the right to lease part or all of the land of the community only by a decision of the collective of the cooperative economy and local authorities - a territorial community that determines the tenant's responsibility for the socio-economic infrastructure of the village or settlement; A person may acquire the right to purchase or lease land, provided that he has the appropriate education and experience in agriculture for at least 3 years. G. Peasant estates and their lands. This important problem needs to be solved in the direction of effective use of farmyard land plots with kindergartens and buildings: 1) farmers who do not live in the countryside, or their descendants, can sell, rent or give land to any of Ukrainian citizens or Rural territorial community under the conditions specified in the statute of the industrial cooperation; 2) land may be used to grow the produce for the needs of the village or settlement, provision of farmsteads to young families, specialists of farms belonging to production cooperatives for the construction of housing; 3) other target uses for cooperative and public needs. III Integration bases of raw material production, its processing and sales of final consumption products. A) Overall integration efficiency. The production-integrated cooperation is formed, which corresponds to the functioning of the famous agroindustrial complex (agroindustrial complex), which is still divided into two parts: the agricultural part of the complex, that is, the production of raw materials is concentrated in the countryside, and its industrial and trading parts are in cities. This is the main cause of rural producers' poverty. Industrial cooperation in the possession and use of lands of rural communities contributes to the transition to the integration in this area of the economy, the solution of a number of urgent needs of rural areas. Integration in industrial cooperation enables to concentrate the ownership and use of land within villages, settlements and territorial communities; The unification of all production-technological processes makes it possible to carry out the entire cycle of agro-industrial production: the production of raw materials, its deep processing, the realization of final consumption products. Thus, on the territory of the rural community, which includes villages and settlements, there are processing enterprises for storing grain, baking bakery products, producing forages, processing milk, meat, vegetables and fruits. If a plant, for example sugar or vodka, is located on the territory of a rural community, then he and his owner must voluntarily enter the production cooperation, and if not, then the relations in the use of raw materials must comply with the rules of production cooperation of the area. The trading base forms without the intermediaries a rural community based on the conditions of cooperation. Each territorial community will have its own trading system, which will allow intermediaries to avoid raising prices.

Then the grain intended for food needs will not be imported from the silos of large cities, but will store it in the countryside, they will bake various bakery products and will put them in all cities and villages of the territorial community, district, region. This should be done with cereals, milk, live cattle and poultry, sugar beet and other agricultural raw materials. For this, small, medium and large enterprises will be built in large villages, small and medium-sized towns within rural areas, and there are already many of them, they are independent, but use raw materials grown on the lands of certain communities, which needs to be defined. Relations Industrial co-operation and integration will enable to solve a number of important problems at the level of rural communities. Industrial and social infrastructure. Integration of the 3 sectors of the agroindustrial complex (APC) within the rural communities through the conditions of industrial cooperation will enable to solve a number of problems, in particular: to direct significant financial resources created in the agrarian sector to its own development and social infrastructure of the countryside; The processing of agricultural raw materials in rural areas will create a large number of jobs; The agro-sphere will turn from the consumer of budget funds to a profitable structure that will contribute to the budgets; Local authorities and rural communities will independently solve the problems of social infrastructure. The state can help existing private processing enterprises to define their market relations on a cooperative basis with rural communities. Working places. Many jobs will be created as a result of the restoration of local dairy factories, meat processing factories, grain processing for flour, mixed fodders and baking products, biodiverse production and processing of biofuels and feed, processing of sugar raw materials for sugar. All this is not the case now, agroholdings export grain to other states, where huge numbers of jobs are created, depriving these places of Ukrainian workers. Financial

resources If within the rural areas there will be processing enterprises and trade networks operating in cooperation with rural communities, then the lion's share of the created absolute value added will come to use for the use of the latest technologies, the needs of the peasants, the villages and the development of social infrastructure in it. An important consequence of such changes is that the supply of end products from rural areas to large and medium-sized cities will bring significant financial resources to the countryside. The implementation of the proposed integration processes will provide the formation of a powerful source of financial resources to fill the budgets of the country at all levels of government. Possible economic and social result of the proposed production cooperative and integration formations in the conditions of market relations: an important contribution will be made in solving the problem, in which the economy now develops in conditions of the imbalance of the basic law of market relations, when the demand in the country significantly exceeds the supply; It will prevent the growth of external debt, which, because of constant crisis waves, poses a threat to the country; The financial resources that will come to the countryside will increase considerably, for the gross accumulation of fixed capital and the strengthening of socio-economic infrastructure; Village and settlement authorities will have their own budget for solving social and production problems; The country will not import unlimited quantities of agricultural products that are naturally and effectively grown in our natural environment; Social infrastructure will improve: hospitals and ambulances that were functioning earlier will be restored; Kindergartens will appear in villages; Gradually increase the number of pupils in schools; There will be a need to build housing for specialists in the agro-industrial complex and rural community, teachers, doctors, and other specialists. In order to identify positive results and gaps, it is desirable to carry out an experimental implementation of proposals on the example of 2 or 3 districts of certain regions of Ukraine. Here you should take advantage of the practice of large agricultural enterprises.

### **Conclusions**

An important element of novelty: the absolute complementary product is formed exclusively in cultivation, a large part of which must remain in the countryside. The practical value of the research is to solve one of the important national problems - self-development and structural self-defense of the agrarian sphere, which enables to solve as much as possible the issues of socio-economic development of society.

### **Bibliography**

1. Gaiducky P. Independent Economy of Ukraine / P. Gaiducky. - K., 2014. - P. 146 - 147.
2. Panasyuk B.Ya. Climate, economy, people. Selected Works / B.Ya. Panasyuk - Nizhyn: Aspect-Polygraph, 2015. - T. 9. - P. 120.
3. Panasyuk B.Ya. On the production of grain in Ukraine and its use. Selected Works / B.Ya. Panasyuk - K.: NTC IAE, 2015. - Vol. 8. - P. 462 - 466.
4. Letter L.N. Tolstoy P.A. Stolypin, July 26, 1907 // Tolstoy L.N. Poln. Assembly Soch - T. 77. - P. 164 - 168.
5. Letter П.А. Stolypina L.N. Tolstoy, October 20-23, 1907 // Anniversary Sb. / L.N. Tolstoy - M., L., 1928. - P. 91- 92.
6. Podolinsky S.A. Selected Works / S.A. Podolynsky; Compiler L.Ya. Korniychuk - K.: KNEU, 2000. - 311 p.
7. Rudenko M.D. The Energy of Progress: Essays on Physical Economy / M.D. Rudenko - K.: Youth, 1998. - 522 pp.
8. Savitsky V.F. To study the biotips of sugar beet and their hybrids, differing in energy of root growth and leaf formation / V.F. Savitsky (article, report for 1938). - 35 s.
9. Tolstoy L.N. Complete Works of Collections / L.N. Tolstoy - M., L., 1928. - Vol. 77 - 78. - 780 pp.
10. Three Steps of Stepan Kolesnik. - K., 2013. - № 6. - C. 2.