

2. Institutional regulation of entrepreneurial activity in the organizational and economic support of the "green" deal and sustainable development of territorial communities

The status-functional characteristics of the role of entrepreneurial activity, acquired in the process of evolution, determine the ability to solve social and economic problems of territories, communities, society, individuals, etc. In the methodological sense, a constructive approach to defining the mission of this institution is its positioning as: "Entrepreneurial activity is determined by one of the benchmarks for the implementation of the Sustainable Development Goals by Ukraine. The development of agricultural entrepreneurship is an important determinant of the formation of the country's food security. Accordingly, there is a need for state support to create conditions for the development of entrepreneurial activity, especially small business and private farms" [24]. However, the development of the economy, territories on the basis of "greening" and (for) sustainable development with the direct participation of enterprises requires effective institutional regulation.

In the modern world, with the existing model of high-tech entrepreneurship, entrepreneurial activity, as a practice of ensuring the development of social, economic systems, and most importantly – a mechanism for satisfying the interests of people, communities – a number of global problems have been recognized, such as those that have arisen as tasks to be solved at the same time, namely: determination of climate change factors [50]; institutionalization of the principles of sustainable development – at all levels, including the state [51]; awareness of the limits of growth [52]; building a system of greed and thrift with available resources [53]; effective use of the achievements of human progress without prejudice to the processes of life [54]; formation of effective integrated [61] and cooperative [62] structures in rural areas, etc. This applies to society, the state, the economy and relevant industries in particular.

In Ukraine, the agricultural sector, and consequently territorial communities, are in a state of institutional turbulence [47], which should be associated with the need, in particular, to introduce effective institutional regulation of entrepreneurial activity on

the basis of a "green" course and sustainable development. In this regard, there is a need to create a reliable and powerful institutional mechanism for regulating the development of the agricultural sector, structuring entrepreneurial formations. The main role in this process is played by the state as a general economic institution that has a monopoly of power coercion to regulate socio-economic and market relations. Functionally, entrepreneurship, enterprises, as well as territorial communities are involved in this process in the status of objects, conductors, and acquirers of functions.

The priority of the given context of the problem for the development of territorial communities lies in the fact that the agricultural sector of the economy is a stable base for ensuring food security, the foundation for increasing exports of agricultural products and food. The industry is a significant guarantor of meeting the needs of the population, as well as the financial stability of the entire state, as it brings significant amounts of income to the national economic system of Ukraine. However, at this stage of development, the national economy is going through difficult times, because, trying to take an active part in world-class economic processes, the problem of competitiveness and efficiency of agricultural production is exacerbated. Therefore, methodologically, we again draw attention to the problem of institutional regulation of entrepreneurial activity. This topic requires further development and improvement, in particular in terms of projection on institutional changes that are constantly taking place and require improvement of institutional regulation factors [18]. At the same time, it should be borne in mind that research developments in the field of institutional regulation, development of the agricultural sector, rural areas, communities and entrepreneurship are quite wide-ranging [18 - 62].

Regulation as a function, mechanism, institutional attribute is a priori very important for ensuring the progressive development of the state and its economy, in particular certain industries and sectors. In the world economic thought, there has long been a recognized understanding of the essence and significance of the aspects of institutional regulation of economic processes, the functions and roles of state institutions in this regard are considered to be modeled. Expressing our research position on the issue of essential relations of the importance of institutional regulation

in ensuring the development of the agricultural sector and entrepreneurship, we will try to synthesize the judgments of other scientists. At the same time, we pay attention to the quintessence of the substantive characteristics of state regulation.

For example, V.S. Adamovska [19] is of the opinion that state regulation of the economy is "a set of forms and methods of purposeful influence of the state on the development of the social mode of production (including productive forces, technical-economic, organizational-economic and socio-economic relations) for its stabilization and adaptation to changing conditions" [19]. Forms and methods of regulation are inherent in institutions that are authorized by the state to perform regulatory functions to implement the policy of promoting the development of productive forces and industrial relations. A similar context of the issue is also noted in relation to the agricultural sector and entrepreneurship. Accordingly [19], the vision of the role and significance of the state in the regulatory mechanism for promoting the development of the economy and individual industries corresponds to the prioritization of power coercion. We believe that institutional regulation is a multifaceted set of methods of influencing economic and other processes in order to streamline them, among which the state.

In turn, O. Tarnavska [20] believes that in the economic sense, state regulation acts as a separate function that is carried out by the relevant apparatus. Although its nature and character are also determined by the nature and character of production proper, the function of state regulation is carried out through the conscious organizational activity of the state administrative apparatus [20]. Thus, it would not be wrong to consider state regulation among the main set of the institutional sector. At the same time, it is expedient to note that in the institutional environment, the main role belongs to the state, in particular through the ability to create appropriate institutions that are supported by official authorities. A strong state means strong institutions that protect the rights of citizens, entrepreneurs, and property through democratic laws and procedures. A weak institutional sector undermines the overall economic potential of the country [48]. In Western countries, the state has initiated the formation of an institutional environment depending on the degree.

Institutional regulation functionally embodies the system of institutional support, which is represented by a system of rules, norms, traditions, laws established by the state, as well as approved by society. These institutional factors correspond to the statuses of regulatory influence on socio-economic processes, sectoral development, and reproduce state policy measures. According to the Constitution of Ukraine, the only legislative body is the Verkhovna Rada of Ukraine, which forms the legislative support for agrarian development and the mechanism of procedural actions for their implementation. It is the Verkhovna Rada of Ukraine that approves national programs of socio-economic development and determines the mechanism for their implementation through the formation of a system of responsibilities and financial support.

Regulatory policy in the agricultural sector is carried out by the President of Ukraine, the Cabinet of Ministers of Ukraine, the National Bank of Ukraine, central and regional executive bodies, local self-government bodies, state specialized institutions and organizations.

Currently, Ukraine faces the task of developing mechanisms of state agrarian policy to increase the efficiency of using the existing potential of the agricultural sector of the economy to ensure the development of territorial communities in the context of post-war reconstruction in particular. To this end, special attention should be focused on creating prerequisites for its institutional support, which, first of all, provides for the formation of mechanisms of interaction between the state and business, the development of a system of agricultural advisory services in the form of information and consulting assistance to agricultural producers and the rural population, the development of small-scale agricultural production to ensure the integration of personal farms of the population into market mechanisms of functioning agricultural sector, increasing the efficiency of the functioning of self-regulatory organizations in the agricultural sector in order to eliminate excessive regulation, decentralization of the management decision-making process. It is also necessary to focus the measures of the state agrarian policy on the issues of increasing the efficiency of the use of instruments of regulation of the agricultural market, which will help to ensure the free transparent

movement of agricultural products, smooth out price fluctuations, meet the needs of consumers in high-quality and affordable food, as well as the development of the agricultural logistics system as a factor in increasing the profitability of enterprises by reducing general production costs and achieving year-round provision of the population with food at affordable prices [22].

Since Ukraine gained independence, more than 150 laws related to agricultural activities and the countryside have been adopted. However, the situation in rural areas has not improved significantly. In general, the state has a large number of regulatory documents in the field of regulation of the agrarian sector of the economy, but a significant number of them are not implemented due to lack of funding, and therefore have a declarative nature. Insufficient consistency and inconsistency of the legislation of Ukraine, as well as its selective implementation, negatively affects the production and sale of agricultural products. The implementation of the existing provisions of regulatory documents is often not at the proper level. Therefore, there are grounds to assert the need to improve regulatory institutions in the agrarian sector of the economy [21].

The results of the development of the agricultural sector and entrepreneurship as its driving force depend significantly on institutional regulation, which, as we have noted, can relate to the influence of the state and the influence of market institutions. In the context of Ukraine, the market context of the assessment of institutional regulation indicates that market institutions turned out to be more favorable to the motivations for the effective development of the agricultural sector than the state ones. The motivation to produce a larger volume of certain types of products is constant and, according to the trend projection, will continue in the future. The state of agricultural production in Vinnytsia region can be analyzed using the table 1.

Table 1

References of agricultural products in the Vinnytsia region for 2010-2022.
(at the current prices of 2016; % to the front rock)

Years	Farms of all categories			including enterprises		
	Agricultural products	From there		Agricultural products	From there	
		Crop production	Livestock products		Crop production	Livestock products
2010	100,1	100,3	99,3	101	100,7	103,7
2011	119,4	125,8	99,4	125	127,7	103,7
2012	96,4	92,8	110,7	95,3	91,2	134,5
2013	122,9	120,8	130,1	133,6	124,7	190,5
2014	111,1	109,9	114,8	114,6	109,6	135,8
2015	91,7	83,9	114,7	88,6	79,8	118,7
2016	116,9	124,6	100,4	125,1	134,7	103,1
2017	95,9	94,9	98,6	94,1	92,3	99,4
2018	110,6	113,5	103,1	116,1	119,1	107,8
2019	101,1	94,5	120	103,8	94,4	132,5
2020	85,2	78,2	100,6	82,9	74	102,5
2021	122,1	136,3	97,7	129,1	147,5	100,1
2022	81,7	75	97,9	78,4	69,1	100
	Deviation					
2022/ 2010	-18,4	-25,3	-1,4	-22,6	-31,6	-3,7
2022/ 2021	-40,4	-61,3	0,2	-50,7	-78,4	-0,1

Source: formed and calculated by the authors on the basis of data from the Main Department of Statistics in Vinnytsia region

So, from Table 1, we can conclude that for the period 2010-2022 indices of agricultural production in Vinnytsia region have decreased sufficiently. In general, for this period, the index of agricultural production decreased by 18.4%. At the same time, the enterprise index for 2010-2022. decreased by 22.6%. In 2022, this index decreased significantly compared to the previous year, namely agricultural products of all categories of farms by 40.4%, enterprises – by 78.4%. The main reason for this situation is military operations on the territory of Ukraine.

Institutional support for the mechanism of development of the agrarian sector of Ukraine is, first of all, the prerogative of public authorities that ensure the formalization of institutions: the creation of formal and the consolidation of informal ones with the help of regulatory and legal mechanisms [22]. The implementation of the institutional policy of regulation contributes to the formation of a certain level of competitiveness of the agricultural sector, and therefore the development of entrepreneurship.

In order for the state to control and regulate the development of the agricultural sector, it is necessary for its participation in the process of functioning of economic entities in this sector. Therefore, it is quite important to establish a relationship between the state and agricultural business. The main forms of interaction between the state and business, which are more or less developed today in the agrarian sector of Ukraine, are: public-private partnership; cooperation in the development of agricultural clusters and technology parks; interaction of state and local authorities with self-regulatory organizations; partnership at the local level to support the initiatives of rural communities in the development of social infrastructure of villages.

The mechanism of cooperation between state authorities, local governments, the private sector in the form of public-private partnership allows to ensure coordination and consideration of mutual interests of the state and business in the implementation of joint innovation and investment projects, targeted sectoral programs, etc. For the state, the main advantages of such a partnership are the intensification of investment activity, effective property management, increasing the efficiency of market infrastructure, and stimulating entrepreneurial activity. For private business, the advantages, first of all, lie in access to resources, the use of which was previously impossible, the simplification of permitting procedures, and the expansion of the possibility of obtaining loans on preferential terms under state guarantees.

According to the Law of Ukraine "On Public-Private Partnership", the areas of application of public-private partnership related to the agricultural sector may be the implementation of projects to ensure the functioning of irrigation and drainage systems, as well as the construction and/or operation of sea and river ports and their infrastructure [23].

Entrepreneurship is extremely important for the agricultural sector at this stage of transformation. Entrepreneurship plays a sufficient role in the sustainable development of the agricultural sector from an economic and social point of view, as it is one of the factors influencing economic growth, ensuring a sufficient level of employment and increasing the income of the rural population [48]. Therefore, the state is constantly trying to coordinate and regulate agricultural entrepreneurship.

Domestic agricultural entrepreneurship is characterized by frequent institutional traps caused by defects in institutionalization. In practice, the entrepreneur follows the current institutional (economic) order or tries to circumvent it by breaking the rules. The main problem of the development of entrepreneurship in the agrarian sector is the effectiveness of the institution of property and entrepreneurship [26], the effectiveness of the structure of the agrarian economy, as well as the motivation of entrepreneurs to work for the benefit of society [26], depend on its solution [26]. This is the paradox of risk, because in certain situations that can be built up by the actions of the entrepreneur himself, or be built into the existing institutional order, the entrepreneur falls into an institutional trap that worsens the level of institutional security of the enterprise. The dilemma of an institutional trap for an entrepreneur is the objective inability to solve any situation in a legal, competitive way to make a profit, so there is a choice – to violate the norms, order or not to violate and "lose". Usually, an entrepreneur motivates his actions by solving this kind of situation, and this is the nature of entrepreneurship [27].

The main tasks of improving the institutional support for the development of agricultural enterprises can be considered those that create conditions for the implementation of the main functions of entrepreneurship: innovative, organizational, economic, social, personal.

In addition to the proposed tasks of improving the institutional support for the development of agricultural enterprises in Table 2, we consider it necessary to improve the credit system by issuing "cheap" loans for farms and private farms. As a result, the level of confidence of business entities in banks, including the state, will increase.

In turn, the state, through constant monitoring, its levers of influence and gradual changes in institutional support, is trying to eliminate the created institutional traps for agricultural producers. However, this process is very complex and requires significant labor, financial and other costs.

Table 2

Priority tasks of improving the institutional support for the development of agricultural enterprises

Implementation of entrepreneurship functions	Content
Economic and organizational	Increasing the number of business entities, increasing the level of business activity
	Improvement of resource and logistical support of business entities
	Increasing the level of efficiency of financial and economic activities and strengthening the motivation of the population of rural areas for entrepreneurial activity
	Intensification of integration and cooperative processes between small businesses in the agricultural sector and other sectors of the economy
	Reduction of transaction costs of business entities
	Ensuring counteraction to raiding and illegal seizure of property and assets
Innovative	Increasing the share of innovative products manufactured by enterprises
	Development of information and advisory infrastructure
	Building an advisory service
Social	Growth of indicators: the number of schools, kindergartens, hospitals, roads, cultural institutions, paved roads, access to the Internet, modern communications
Personality	Increase in income from business activities of rural residents
	Increasing the attractiveness of lifestyles in rural areas
	Opportunity for self-realization and comprehensive development

Source: [31]

Summarizing the above, we can conclude that entrepreneurial activity, the agrarian sphere of the economy of our state requires effective institutional regulation by the state. Accordingly, due to the creation of appropriate institutional support, its continuous improvement in accordance with the needs of domestic farmers. Institutional support can influence business entities both positively and vice-versa – negatively. After all, at the present stage of development of the agricultural sector, there are a large number of institutional traps that are a sufficient obstacle to the normal functioning of agricultural producers [19].

The development of rural areas in modern Ukraine follows the area of

multidirectional problems, among which the need to achieve sustainable development stands out globally. The format for solving this problem is subject to the traditions of world practice, but in our country, taking into account the peculiarities of the functioning and structure of the economy, the resource capabilities of industries, territories, it is associated with the formation of capacities and institutions for the implementation of energy security practices. The problem of energy security in general and rural areas in particular has become even more relevant with the emergence of fundamental risks of loss of energy capacities under the influence of the military factor. Therefore, from a scientific point of view and in connection with the force majeure dynamics of the situation, there was a need to propose a scientifically grounded concept of organizational and economic support for the implementation of the potential of renewable energy sources. In the applied aspect, from the point of view of the institutional capacity of organizations, we see cooperation as a priority, as well as the introduction of the principles of a "green" economy, which will contribute to the sustainable development of rural areas [56]. In this case, an important role should be played by the national practice of creating energy cooperatives with the participation of peasants, entrepreneurs and other interested subjects of socio-economic exchange in the countryside [57]. We consider this context of formulation of the problem to be appropriate in view of the fact that now in our country there is an urgent need to introduce effective mechanisms for guaranteeing energy security, and on the other hand, the agricultural sector has an exceptional potential to provide it without worsening the food supply of the population.

The diffusion of knowledge on the problem presented for development is based on the results of scientific research and the work of many researchers. The key to substantiating the essence and methodical coordination of the content of the conceptual foundations for the development of cooperation in the realization of the potential of renewable energy sources for sustainable development of rural areas are the doctrine of cooperation, renewable energy, "green" economy and sustainable development in general [32].

The realization of the potential of renewable energy sources for rural areas of

Ukraine is of great importance, which is associated with the problem of energy security and the need to ensure the implementation of the principles of sustainable development. The very process of exchange transactions in the area of relations to achieve these goals is institutionally, organizationally and economically related to agricultural entrepreneurship, as well as the activities of structures, in particular cooperative ones, which are able to accumulate the potential of raw materials for the formation of renewable energy sources. It should be noted that agricultural enterprises, regardless of the size and organizational form of management, against the background of the problems inherited by the factor of military aggression against Ukraine, are implementing strategies for preserving business, optimizing benefits and costs in the current market conditions. Thus, unfortunately, there is no question of purposeful actions to achieve sustainable development of rural areas, for most economic entities the context of the survival of the economic system is relevant. This is evidenced by practitioners, although the ability to achieve the effects of sustainable rural development remains, including through the development of cooperation in realizing the potential of renewable energy sources.

Cooperation creates a socially effective institutional mechanism, with the participation of entrepreneurs, farmers, communities, which is able to: balance national capacities in the field of energy security on the ground; to ensure progressive, socio-economically beneficial movement towards achieving the UN Sustainable Development Goals for the period up to 2030, as well as the implementation of elements of the European Green Deal.

The Green Deal policy is subordinated to the search for ways to create an effective roadmap for the implementation of the agenda to achieve the UN Sustainable Development Goals for the period up to 2030. The latter are a kind of basis, from which the emerging models of institutional sectors of socio-economic interaction of market entities are based and on the approval of which are directed. For example: in the agricultural entrepreneurship sector – the program construct of the Decade of Family Farming for 2019-2028; in the field of general positioning of the principles of interaction of productive forces and the development of industrial relations – the

concept of "green" economy, inclusive development, determination of the boundaries of economic growth, systems of organization of savings production, etc.

Management of the development of the national economy should be considered as an element of the structural and complementary approach to ensuring endogenous functioning, according to which its constant development in the context of influence global processes is achieved on the basis of the implementation of a system of measures regarding determination of basic directions of action, strategic priorities and tools regulation [33].

The institutional mechanism of the "green" economy is characterized as a practical representation of the functionality of institutions and institutions to facilitate the implementation of the European Green Deal. For this institutional mechanism, it is effectively represented in the segments of economic and socio-economic interactions: macro – (global and national economy); meso – (economics of the industry and region); macro level (development of business entities). It should be noted that in the spring, direct practices for the implementation of green transformation measures (structural changes for the implementation of the "green" course) are taking place in the sector of entrepreneurship development, in particular agricultural enterprises.

We believe that the "green" economy organizationally and structurally, and its institutional mechanism functionally, should be considered as a conceptual model for organizing the interaction of productive forces and the development of production relations. Thus, we emphasize that the "green" economy is a means of achieving the UN Sustainable Development Goals for the period up to 2030, the implementation of the European Green Deal, which is formed on the basis of certain resources, organizations and institutions. All this set of components is set in motion with the help of an institutional mechanism.

The European Green Deal as a certain course of action can be recognized as an institutionally ordered set of rules, norms, traditions, on the basis of the implementation of which the practice of formalizing the status of the "green" economy is implemented. It is also a formal part of its institutional mechanism, presented for the implementation of: global, basic effects, such as the UN Sustainable Development Goals for the period

up to 2030, for example, by the program factor (specific to the agricultural sector) of the Decade of Family Farming for 2019-2028; achievement of derived results; inclusiveness of socio-economic interaction.

In general, without positioning judgments as unambiguous, we are inclined to believe that the "green" economy, unconditionally implemented with the help of a "specialized" institutional mechanism, is an objective construct of building economic systems on the basis of sustainable development.

The "green" economy, according to the idea of its essence in terms of characteristics and functionality, is positioned as an organizational and institutional model of interaction of productive forces and the development of industrial relations, implemented for the implementation of measures of "green" growth. The diffusion of ideas, practices and innovations of the "green" economy is quite active in the modern world, in particular within the framework of strategies for achieving sustainable development – a global trend of socio-economic growth. One of the examples of the model and mechanism of institutionalization of this concept of building society and economy is the introduction of the European Green Deal. One of the goals of market transformation is to create market institutions that collectively form the institutional matrix of the agrarian system [34].

According to the draft order of the Cabinet of Ministers of Ukraine "On the National Action Plan for the Development of Renewable Energy for the Period up to 2030" [35], energy consumption from renewable sources in 2030 should be 27%. Therefore, it is important to increase the production and consumption of renewable energy in rural areas through the creation of energy cooperatives in communities.

At the beginning of March 2022, the European Commission presented the REPowerEU initiative, which aims to end the EU's dependence on Russian fossil fuels by 2030. In the RES sector, it is proposed [36]: to increase the share of capacity of rooftop solar installations, domestic wind turbines, heat pumps and the implementation of energy saving actions to improve the energy efficiency of buildings; simplify the permitting procedure to accelerate the implementation of RES projects and improve the grid infrastructure in the electricity sector; accelerate the decarbonization of

industry through the transition to electrification and renewable hydrogen, expanding low-carbon production capabilities; by 2030, double the EU's targets for biomethane production to 35 billion cubic meters per year, especially from agricultural waste; accelerate the development of a regulatory framework for the European hydrogen market and the development of integrated gas and hydrogen infrastructure, hydrogen storage facilities and port infrastructure, as well as pilot projects for the production and transportation of renewable hydrogen produced in the EU's partner countries [36].

In June 2022, Ukraine became a candidate for membership in the European Union. Accordingly, in order to continue moving in this direction, it is necessary to harmonize the legislation of our state in the fields of energy, environment and combating climate change. One of the most important chapters of EU legislation within the framework of the European Green Deal is Chapter 16, which regulates energy markets and energy security (with special attention to the development of climate-neutral energy) [37].

Cooperation is a partnership in the economic sphere, it is implemented through many organizational forms [33]. For the country's economy, it is important what degree of cooperation development will satisfy domestic needs in the near future [38].

Revitalizing the cooperative movement is the path to success in many areas of achieving sustainable development. Cooperatives are a sustainable form of economic organization, because they implement the principles of sustainability, in particular the principle of caring for society. Cooperatives are the most capable integration formations to realize the expectations of sustainable management. We believe that cooperation and cooperatives are the future in achieving sustainable rural development.

Energy cooperatives can be an incentive for the development of the local economy. For example, when creating the production of pellets or briquettes for heating communal buildings in the community, local farmers or entrepreneurs will receive funds for the purchase of raw materials. Moreover, the outflow of money from the community that pays for gas will be reduced, and new jobs will be created in the community, and the local budget will be filled. Thus, as a result of the activities of energy cooperatives, everyone in the community can benefit, but not the monopoly

suppliers [39].

Green energy cooperatives are associations of citizens and other business entities for the purpose of producing, consuming and selling clean energy from renewable sources [37, c. 251]

To further develop the Energy Communities, the European Green Deal has set the goal of "active participation of consumers, both individually and through energy communities, in all markets, through the production, or consumption, sharing or sale of electricity". To this end, the EU states that residents and energy communities should have equal access to the same incentives, means of financial support and advanced technologies as corporations. Also, the EU and its Member States should help energy communities develop innovative financing schemes, that bidding procedures for wind and solar projects should be simplified for cooperatives, and that local community preferences should be taken into account when awarding a winning bid for renewable energy projects. The European Commission estimates that by 2030, energy communities could own 17 percent of the installed wind capacity in the European Union and 21 percent of the installed capacity of solar power plants. By 2050, half of Europe's population will be able to produce energy through rooftop and other methods, with 37 percent of that energy coming from energy communities [40].

There is a clear advantage of partnerships between municipalities and citizen groups to create and manage renewable energy projects. Citizens' initiatives from below can go hand in hand with the political goals of local authorities. From foreign experience, it is noticeable that the approach to their joint participation brings economic, social and environmental benefits to communities. It is also extremely important for the development of energy cooperatives in rural areas.

Energy cooperatives are an element of energy democracy, which is an important factor in building a "green" economy, i.e. ensuring wider social participation and the transition from centralized to decentralized energy production. In Ukraine, there are also examples of the creation and operation of energy cooperatives, but their number is insignificant. These include "Sunny City" in Slavutych, "Solar Cloud" in the Ternopil region. However, only the first one became fully operational and began to

bring economic benefits.

It is worth highlighting the need to implement environmental projects. Environmental friendliness of territories is achieved through the use of a cooperative mechanism to promote the introduction of production and economic activities in the countryside and social and household maintenance of systems that will work on modern energy-saving technologies.

On July 3-4, 2022, at a conference in Lugano (Switzerland), Ukraine presented the Post-War Recovery Plan, which provides for the construction of 30 GW of green energy by 2030 [27]. According to the plan, about USD 130 billion will be needed to strengthen energy independence and implement the Green Deal. This plan is aimed mainly at the development of green hydrogen production and the development of nuclear energy. Therefore, the public called for the development of distributed generation to be included in the goals of the Post-War Recovery Plan, which was presented at the above conference [41].

In order to actively develop energy cooperation in the countryside in the post-war period of the country, it is necessary to unite citizens, municipalities and businesses. Foreign examples demonstrate that citizens provide mainly the financial component of the creation of an energy cooperative, and businesses are also able to invest certain financial resources. In Ukraine, in rural areas, business representatives are mainly farmers, who can provide agricultural waste as raw materials. Local governments, in turn, can provide premises, buildings, land for the construction of biogas plants, solid fuel boiler houses, installation of solar panels, wind turbines. In addition, they may be responsible for documentation, submission of relevant reports, etc.

Farmers who become members of an energy cooperative will be able to provide raw materials and agricultural waste for processing in this cooperative [58]. Thus, the agricultural business will be able to increase the added value. Thus, Ukraine will change its status from a raw material appendage to an exporter of high value-added products. The higher the level of processing of agricultural raw materials, the greater the added value. The production of flour from 1 ton of wheat has an added value of \$ 220. and the production of organic acids and amino acids from wheat – 940 USD.

United States. Thus, the use of agricultural raw materials to support the activities of energy cooperatives will increase the income of farmers, provide electricity and heat to the local population, provide income to citizens who are members of cooperatives and increase the amount of state and local taxes paid. Thus, the above-mentioned scheme for the development of energy cooperatives will accelerate the construction of a "green" economy based on sustainable development, including rural areas.

The number of electricity facilities by region, including Vinnytsia region, can be seen in Table 3.

Table 3

Number of electricity facilities using alternative sources by region,
as of 01.01.2023

№П/П	Region	Quantity
1	Mykolaiv Region	137
2	Dnepropetrovsk Region	127
3	Kherson Region	110
4	Zaporizhia Region	80
5	Odessa Region	73
6	Khmelnyskyi Region	142
7	Vinnytsia Region	149
8	Lviv Region	77
9	Kirovohrad Region	71
10	Kyiv Region	102
11	Zakarpattia Region	86
12	Ivano-Frankivsk Region	126
13	Zhytomyr Region	44
14	Cherkasy Region	51
15	Ternopil Region	72
16	Donetsk Region	12
17	Chernivtsi Region	21
18	Lugansk Region	5
19	Poltava Region	21
20	Chernihiv Region	20
21	Kharkiv Region	28
22	Sumy Region	9
23	Rivne Region	15
24	Volyn Region	9

Source: formed by the authors on the basis of [46]

So, from Table 3, we can see that in the Vinnytsia region, the number of electricity

facilities using alternative sources as of 01.01.2023 was 149. Compared to other regions, this was the largest number. This testifies to the active development of alternative energy in the Vinnytsia region. In addition, biogas production is also developing, which is positive, since agricultural raw materials and waste are processed.

Energy cooperatives as an organizational basis for the introduction of a "green" economy in the implementation of the principles of sustainable development of rural areas play an important role. Since, it unites citizens, businesses and municipalities to achieve a common goal: providing citizens with the proper amount of heat and energy, administrative buildings, schools, kindergartens, warehouses, workshops; reduction of greenhouse gas emissions through the use of environmentally friendly energy sources; reducing unemployment in rural areas by creating additional jobs; increase in the added value of agricultural products as a result of their internal processing. Thus, energy cooperatives are developing in three important areas: economic, environmental and social, which are the basis for building a "green" economy and achieving sustainable development in the future.

The institution of cooperation, in the mechanism of organizational and economic support of processes for the realization of the potential of renewable energy sources, plays the role of a connecting link in the system "production-distribution-exchange-consumption". In practice, there is the creation of cooperative structures, i.e. energy cooperatives – business entities that actually become: moderators of the implementation of the principles of the "green" economy; leaders of the principles of sustainable development of rural areas. Accordingly, through such functionality of cooperation, the institutionalization of the national model of energy security is carried out with the involvement of agricultural resources and territorial communities. After all, thanks to the development of cooperation, there will be a real opportunity to consolidate efforts, to form organizations structured with effective coordination. Similar to this context, activities in the field of realizing the potential of renewable energy sources are positioned through the functionality of the institutional framework of the "green" economy. That is, the development of renewable energy based on the use of agricultural resources and territories will contribute to the "green" energy

transition and strengthening energy security for sustainable development [32].

In Ukraine, "green" sectors of the agri-food system of various specializations are gaining accelerated development, among which the production of organic agricultural products, which is widespread in farms, occupies a prominent place. The expansion of the presence of this area of management is dictated by: the priorities of the domestic and foreign markets; increasing the intellectual level of consumers, widespread awareness of the importance of healthy eating. The niche of the organic segment of the market is gradually being filled, in particular, for Ukraine, organic production is certainly promising as a model for implementing the Sustainable Development Goals and, in particular, the introduction of the principles of a "green" economy. The contours of the institutional model of the agricultural sector are gradually emerging, because if you focus on the trends of the EU countries, then now ecological and organic products are most noted there in ensuring the health of nations. The production of organic products is an important area for investment in Ukraine, as it follows the potential for growth and development [42].

The main ones are: the analysis of the current production of organic products; to address the prospects for the development of organic production in farms; viability streamuyuchi faktori rozvitku simeynykh farms [58]; proponuviti vozdit sovseignnogo stimulvannya.

Organic production, as one of the types of green business, is becoming more and more popular. Over the past 10 years in the United States, the area of registration in the Federal Domestic Insurance Program (FCIP) of organic fruits, zocream berries and grapes has grown. These crops occupy the largest area among all organic fruit crops between the programs. In 2021, 27 thousand rubles were insured. akriv organichnykh yabluki i ponad 15 tys. acres of organic grapes. More than 25% of Russia's production in the U.S. should be concentrated in these and other special cultures [38].

Huge organizations and associations, such as the International Association of Participants of Organic Production "BIOLan Ukraine", the Certification Body "Organic Standard", the Participants of the Organic Agricultural Government "Naturprodukt", The all-Ukrainian community organization "Club of Organic

Landing", the All-Ukrainian Community Organization "Zhiva Planeta", the Trade House "Organic Era", the Information Center "Green Dossier" and others, have become active popularizers of organic production in Ukraine. They have joined forces to distribute healthy, safe for consumption products that are grown in accordance with the requirements of organic production. In particular, since 2005, the Organic Federation of Ukraine has been operating, which includes producers, scientific and educational institutions, business structures and government agencies interested in the development of organic production in the country. Such organizations and associations are also engaged in product certification and provide information on the current state of the organic market in Ukraine, prospects for its development and problematic aspects of this market [36].

Organic production is mostly inherent in farms, including family farms, which is noted as a global priority of the UN Decade of Family Farming [44].

For the most important reasons for Ukraine today, it is the support of the farmer's movement in the minds of the war hour and the war war - the transformation of the farmer at the main guarantor of food security. In the current realities of rural farming, it is not a guarantee of food security, but a support for migrants, ensuring the development of the territory.

The activity of the peasant hospodarstvos, the zokrema of special peasant and family farmers, as well as other small forms of agrarian enterprise, is re-localized to the local level. That is why it is possible to effectively influence the situation of the formation of food security. To create an economic and social mission, which basically affects the satisfaction of the population's needs and the special prospects for the war-going restoration of agricultural territories.

The modern practice of functioning and development of peasant farms, in particular family farms, personal and even households, which are associated with the implementation of the mission of agrarian entrepreneurship. The next trajectory of development of small family business entities is emerging. According to the analysis of trends in the farming business, namely:

- 1) multiplying the number of craft producers, local businesses based on

family, kinship, as well as local (territorial) traditions of creating an agri-food product (for example, the Eco-farm "Play", which uses 4 types of milk for the production of cheese); GREEN FUTURE grows 26 types of lettuce, basil, their main idea is to sell a prefabricated consumer basket of greens to the local consumer; Mukko Cheese Factory is adapting to the realities of the market: it produces more cheeses that are in demand and reduces the production of more expensive products, such as cheese with truffles; "Brother's Farm" specializes in dairy products, their workshop is certified according to the HACCP system; vertical farm Smart Oasis Farm – basil production; goat farms specializing in the production of cheese (fetta, crotten) – the farm "Chevret", the farm "Grandma Goats", which, in addition to the production of goat's milk and gourmet cheeses, founded a soap manufactory that produces about 30 types of soap from goat's milk and butter, which has no analogues in the whole world) [32];

2) consolidation of opportunities and resources for the development of product processing, in particular through the mechanism of organizing joint activities and cooperation, participation in international project initiatives and grant support for family farming, etc.;

3) gradual trend orientation of small agribusiness on the principles and principles of sustainable development, taking into account the content of inclusiveness in food supply, as a way to expand the possibilities of organizing access to sales channels, with awareness of the qualification of the social mission of the family farmer as an economic moderator of practices for preserving the village as a living environment and management;

4) actualization of the trend of small farms abandoning the raw material model of management, as well as the transfer of business from the "gray zone" of the market to a system of transparent, official transactions to maximize the opportunities for applying for resources of local, state and international support, etc [43].

Among the creative proposals for the family farm, we see such a respectable one on the current stage, at the world scale the formation of food products as organic production. It is also called alternative and positional within the framework of the concept of green growth, as well as the mechanism of ensuring the development of

steel. Organic farming combines national traditions, innovations and science in order to improve the environment, prevent gradation processes in soils, create a farming system that brings minimal harm to nature and provides humans and fauna with biologically complete products [32].

Promoting the development of farming in Ukraine, in particular family-type farms, in our opinion, should take place in the following areas: ensuring positive institutional support for the sustainable development of farms; assistance to farms in the development of organic production and certification of their land; facilitating the return of young people to rural areas for permanent residence and the creation of farms by them (involvement of young people); encouraging farms to create cooperatives; strengthening farms to make them imperceptible to external negative factors, including global warming, limited water resources, etc.; introduction of insurance of farms against agricultural risks, weather conditions, etc.; encouraging the use of alternative energy sources in the business process; financial support for farms.

The production of organic products with subsequent access to the European market should become an end in itself for small (family) farmers. These are exclusive activities that allow you to receive much higher incomes than from traditional agricultural products, both in crop production and animal husbandry.

Organic agriculture not only provides an increase in production, but also has a positive impact on the environment and human health. It reduces the use of chemical fertilizers and pesticides, which reduces the negative impact on the environment and reduces the risk of disease. Also, organic products have a higher nutritional value and a positive effect on human health.

In addition to economic benefits, organic production ensures the balance of "green" interests in society, as its development gradually leads to the efficient use of natural resources of the agricultural sector and related industries (forest lands, etc.), improvement of the ecological condition of territories, introduction of a healthy diet model, etc. Also, the introduction of institutional norms of organic business, their perception by interested market agents, provides a special way of production within the model of "green" business and entrepreneurship in the agri-food sector, which

accordingly contributes to sustainable management, compliance with standards by all stakeholders. The respect of motivations in this regard is enormous, not fully understood, but it indicatively affects consciousness, forms motivations and encourages the implementation of the unchanged course of business "organic" projects, otherwise statuses change – a consequence of destruction is projected, which is almost impossible to overcome in order to return to the market (especially for the manufacturer) [55]. The correlation of the model of sustainable development, organic business with social and economic statuses is so significant that its development occurs as an end in itself for a person. This is a paradox that takes into account the conditional compliance of the perspective of human life on earth with the criteria of sustainable development, reasonable limits of growth and even the priorities of lean production. Die Bedeutung des kreativen Trends der ökologischen und sozialen Verantwortung eines Geschäftsmannes, der gezwungen ist, die Umweltaspekte der Entwicklung des Lebensumfelds und des Managements zu berücksichtigen, wird ebenfalls erkannt. Dies ist auch die gesellschaftliche Bedeutung des ökologischen Landbaus, daher wird er zu Recht als Schlüsselindustrie zur Erreichung der Ziele für nachhaltige Entwicklung angesehen.

Farms, especially family farms, turned out to be the most adapted to modern challenges. Organic production is already one of the directions of agricultural production of family peasant farms (farms). Peasant farms show exceptional institutional, organizational and economic mobility and have shown a remarkable ability to guarantee local food security, albeit in the model of "survival" (here they are most effective), which is consolidated into the national sustainability of the mechanism for solving this problem [32].

The institutionalization of the "green" economy is a consequence of globalization, and the practice of "greening" industries and production is the diffusion of knowledge to strengthen the ecosystem's ability to self-reproduce, the formation of recovery abilities.

The agricultural sector functions in direct relationship with nature, so it needs primary attention in the context of positioning the "green" course. Based on conceptual

positions, as well as logical expediency, there is a scientific and research need for a theoretical and methodological definition of the institutional aspects of the formation of a "green" economy in the agricultural sector. This constitutes a vision for the development of the agricultural sector to achieve the UN Sustainable Development Goals for the period up to 2030.

The conceptualized characterization of the institutional aspects of the formation of the "green" economy is an important issue, because: the "green" initiative for farmers, entrepreneurs, consumers is a blessing in social terms, and in economic terms it is a dilemma. "Greening" of agricultural activities and the functionality of socio-economic interactions in rural areas requires organizational and economic restructuring of all links of the "production-distribution-exchange-consumption" system. Accordingly, institutional aspects, building the necessary system of rules and norms for the development of a "green" economy have become one of the key issues for the formation of a globally competitive agricultural sector of Ukraine.

Organizational and economic transformations that are taking place in the modern world normalize the forward movement towards the model of sustainable development. A creative approach to scientific solution and practical positioning of the "green" context of the problem is necessary.

The cultivated principles of sustainability and "green" growth show that the agricultural sector at the national level needs the establishment of an effective institutional mechanism. The motivational priority of such actualization of the problem is the introduction of mechanisms that would ensure the introduction of inclusive statuses, accessibility to agricultural benefits with their preservation for future generations. Issues related to the formation of the institutional mechanism of the "green" economy are of immediate relevance. At the moment, the issue of the environmental situation in the world is acute. This problem has led the world community to a dead end, since the resource potential of the planet can meet its needs only until 2050, and then there is a global economic, social and natural resource crisis [45].

A creative approach to the principles of scientific solution and practical

positioning of this problem, especially its "green" context, is necessary. The "green" economy is designed to ensure environmentally oriented well-being of the population with minimal risks to the environment. It includes radically new priorities of farming and directions of manifestation of economic factors in the environment. The theoretical structure of the study of the problem is built in accordance with the methodology of institutionalism.

Economic relations in society are regulated by institutions that form the basis for structuring the interactions of economic agents and functionally represent the mechanism for organizing the interaction of stakeholders in the implementation of relevant transactions. In the process of economic assessment of the factors and conditions for the formation of the institutional mechanism of the "green" economy, it is determined that a green transformation is taking place. This concept is being actively implemented, and an institutional mechanism for encouraging action in this direction is being formed. Ukraine, on the other hand, is in conditions of resource and energy dependence due to the use by enterprises of outdated environmentally harmful technologies that are energy-intensive, so the choice of a strategy for the development of the national economy according to the principles of "green economy" is necessary to ensure economic and environmental security and establish social justice among the population.

The development of the agricultural sector according to the principles of the "green" economy requires the creation and transformation of institutions. It is difficult for the state to establish contact with business entities on its own. Therefore, self-regulatory organizations become a link between the state and business. However, in Ukraine, their role is actually performed by industry associations and public organizations. The main non-governmental organizations in Ukraine, whose activities are aimed at the development of the agricultural sector on the basis of the "green economy", are: the Federation of Organic Movement of Ukraine, the Public Union "Organic Ukraine", the Public Union "Bioenergy Association of Ukraine", etc.

Based on the results of the analysis of the institutional aspects of the problem under study, indicators for assessing the development of the "green" economy and

sustainable development in the agricultural sector are proposed, namely: the number of "green projects" related to the development of the agricultural sector; the number of family farms representing "green" tourism; net profit of enterprises from "green" transactions; the number of disposed landfills in the country that are located in rural areas; the share of enterprises that use "green" technologies; percentage of family farms engaged in organic farming out of the total; part of advisory services that advise and help small businesses switch to environmentally oriented production; the share of family farms that use renewable energy sources in the management process; the number of "green" jobs in the agricultural sector for people with disabilities; share of agricultural enterprises that use low-waste or waste-free production [45].

The institutionalization of "green" activities is in the interests of the state of Ukraine in the context of strengthening the capabilities of Euro-Atlantic integration. In conceptual terms, the basic task that is solved by society, the state in the process of establishing a "green" economy is the construction of a renewable system of socio-economic interactions. In a practical sense, the development of a "green" economy in the agricultural sector of Ukraine is associated with the following priorities: guaranteeing food and energy security, preventing hunger; formation of the necessary resources and strengthening of institutional capacities of the industry to ensure "green" reconstruction; restoration of competitiveness of economic (entrepreneurial) systems in rural areas on the basis of the "green" course; economical use of agricultural resources in the context of the paradigm of ensuring climate neutrality and, in general, sustainable development [45].

"Green" areas of economic activity such as: production of biological fuels from raw materials of agricultural origin; organic agriculture; production and supply of organic food to the market; The creation of a "green" market infrastructure and the development of rural areas are necessary for the national economy and society. Such a need is relevant in providing a way out of existing destructive situations, which are a factor limiting competitiveness.

Summarizing the above research judgments, we note that the development of territorial communities in Ukraine should be prioritized in the context of ensuring the

"greening" of socio-economic systems and achieving their sustainability as a global trend, including in the context of the negative impact of the military factor. Extremely important roles in the organizational and economic provision of sustainable development are inherited by entrepreneurial activity, and functionally – its institutional regulation. Thus, in particular, agrarian entrepreneurship plays a practical predominant relevance in this context of the development of rural territorial communities.