



THE PROSPECTS OF SMALL BUSINESS ENTITIES IN THE AGRICULTURAL PRODUCTION SYSTEM OF UKRAINE

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Abstract

Research background: The number of small agricultural enterprises in Ukraine has been decreasing in recent years, and their share in the total volume of production and sale of agricultural products has remained stable at a relatively low level. At the same time, there is a public demand for the growth of the role

of small agricultural enterprises, which can perform important economic and social functions. Ensuring the effective development of small agrarian business entities involves the use of strategies and approaches that take into account the specifics of the relevant groups of agricultural producers.

Purpose: The purpose of the paper is to justify the prospects of small agrarian business in Ukraine, taking into account the trends of its development, including in the conditions of martial law.

Research methodology: The research used data from the State Statistics Service of Ukraine. The research methodology is based on the general dialectic approach and includes the following methods: induction, deduction, analysis of dynamic series, and graphical.

Results: The peculiarities of the formation of the contribution of small agricultural enterprises into the supply of agricultural products in Ukraine are revealed. A generally high level of economic efficiency, a satisfactory level of technological efficiency and a relatively low level of social efficiency of small farms were established. Prospective strategies for the development of various categories of small agricultural enterprises are outlined, taking into account the mechanisms and sources of their support, which can be used in the conditions of martial law and the post-war period. The application of these strategies can ensure positive socio-economic changes in the agricultural production system of Ukraine.

Novelty: A differentiated assessment of the results of the activities of small enterprises and individual entrepreneurs in the agricultural economy of Ukraine in the pre-war period and in the conditions of martial law was carried out. The prospects for the development of small farms in the post-war period are outlined, taking into account changes in the environment of their operation and the application of separate regulatory instruments.

Keywords: agriculture, small agricultural enterprises, individual entrepreneurs, efficiency of farming

JEL classification: O13, Q12, Q18

Introduction

The set of producers of agricultural products in Ukraine can be divided into two large groups – business entities and households. Business entities include enterprises (legal entities) and natural persons registered in accordance with the established procedure as individual entrepreneurs (Verkhovna Rada of Ukraine, 2003). Households carry out production activities primarily for the purpose of meeting personal needs in food products. They can sell part of the produced products, but their activity is not entrepreneurial (Verkhovna Rada of Ukraine, 2003b). The activity of households is not the subject of our research. Prospects for the development of agriculture in Ukraine are primarily related to the activities of business entities.

In the system of commercial agricultural production of Ukraine, there are both large-sized enterprises that use thousands of hectares of land, and small farms, where a few people cultivate land with an area of several hectares. The employees of small farms are often family owned. In the world family farmers have proven their capacity to provide innovative responses

to emerging social, environmental and economic challenges. In addition to food production, they perform environmental, social and cultural functions, and are custodians of biodiversity, preserving the landscape and maintaining community and cultural heritage (FAO and IFAD, 2019, p. 7). Small agricultural producers demonstrate high adaptability to changing operating conditions (Wiggins, Kirsten, Llambi, 2010). They are characterized by high mobility, and flexibility in responding to changes in the market situation.

In Ukraine, the emergence of a significant number of small agricultural enterprises was the result of the reorganization of large collective and state farms in the 1990s. The main argument in favor of the creation of small farms was a reference to the experience of those economically developed countries where such farms are the main form of agricultural production and are characterized by quite high efficiency. However, the actual results of small agricultural enterprises activity in Ukraine do not allow them to take stable competitive positions in the agricultural market. Their economic role in agricultural production remains not very important. This is due to a number of reasons, including the lack of consistent state support for farms that use land areas with a total area of no more than 100 hectares, the low level of diversification of the economy of rural areas, which leads to the migration of rural youth, the low level of opportunities for attracting financial resources and investments etc. (Cabinet of Ministers of Ukraine, 2017). New technologies and modern technical support of production processes are inaccessible to most small agricultural enterprises due to their high cost (Maslak, Maslak, Huzhvenko, 2018, p. 34; Petrunenko et al., 2021, p. 292). In recent years, the role of large and ultra-large enterprises, including agricultural holdings, has been increasing. The potential of small agrarian business is at a rather low level. This leads to the aggravation of a number of contradictions that complicate the socio-economic development of rural areas and ensuring the country's food security. But the period of war with the Russian invaders has made adjustments to the state of agriculture, and actually small agricultural producers showed themselves to be more mobile entities and more capable of adapting to sudden changes in farming conditions. And almost all the assistance of Ukraine's foreign partners, aimed at rebuilding the country's economy, in agriculture is mainly oriented at small producers. Therefore, the study of prospects for the development of small agricultural producers in Ukraine is particularly relevant

1. Literature review

The development of small entrepreneurship is considered as one of the main directions of creating a competitive market environment in agriculture (Sirenko, Lunkina, Burkovska, Mikulyak, 2022, p. 162). V. Lypchuk and S. Korobka consider small enterprises as a buffer zone, which reduces the risks of destruction of the potential of large-scale agricultural production (2011, p. 191), which has become widespread in Ukraine.

In the European Union, integration with which is Ukraine's strategic plan, small family farms are an important element of the social agriculture model. They are in the center of the multifunctional development of regions. In its resolution (2014), the European Parliament proposed to the EU member states to more widely apply instruments of financial support to small farms and other measures aimed at increasing their competitiveness, viability and profitability.

Scientists note the high dependence of a large number of small farms in the EU on subsidies (Veveris, Sapolaite, Giedre Raisiene, Bilan, 2019). M. Glowinkel, M. Mocan, M. Kulkens believe that the existing policy of supporting small farms cannot prevent their displacement from the market in the long-awaited perspective (2022). The need for such support is important, given the role of small farms in the development of rural areas and job creation (Cardillo, Cimino, 2022). At the same time, the application of universal approaches to the organization of support for small farms is unlikely to be effective, this policy should take into account regional specificities (Rivera et al., 2020; Vecchio, De Castro, Masi, Adinolfi, 2022).

The team of researchers, based on the results of processing a large amount of data on the activities of small farms in the countries of the European Union, published material on the use of various business strategies by these farms, taking into account the size of the farm, its specialization, the local market situation, including under the influence of national characteristics (Galli et al., 2020). C. Forgacs, based on the results of the analysis of statistical data on the activity of farms in a number of Central and Eastern European countries, confirmed the thesis that specialization creates better conditions for the survival of small farms (2016, p. 227). On the other hand, for many small farms in the European Union, it is important to diversify activities with the possibility of receiving income from non-agricultural activities (Khanal, Mishra, 2014; Salvioni, Papadopoulou, Santos, 2014; Wiggins, Kirsten, Llambi, 2010).

A. Koraus et al. on the basis of processing data on the activity of small agricultural enterprises in Slovakia, note the importance of innovative activities to ensure the development of such enterprises (2020). V. Ristanovic, A. Tosovic-Stevanovic, S. Maican, A. Muntean, after

analyzing the activities of small farms in Serbia, Romania and Moldova, came to the conclusion that these farms focus on the possibility of obtaining a high price due to the quality of their products (2022). W. Jang and C.M. Klein consider the models of small agricultural enterprises with their products to the consumer in retail markets and their sale through agricultural cooperatives, considering the relevant decisions as strategically important for farms (2011).

The need for government support of small farms is relevant not only for the countries of the European Union. Public policies have a major impact on family farm success and food security in Brazil (Rada, Helfand, Magalhaes, 2019). Considering the activities of small and micro enterprises in China's agriculture, L. Wang emphasizes the need to create a specialized system of financial support for such enterprises, considers innovative approaches to their direct financing using Internet technologies (2018).

Among scientific publications on the problems of the development of small agricultural enterprises in Ukraine, a special place is occupied by the presentation of the results and prospects of the activity of a separate category of producers of agricultural products – private farms. According to Ukrainian legislation, a private farm is a form of entrepreneurial activity of citizens who have expressed a desire to produce marketable agricultural products, to carry out their processing and sale for the purpose of obtaining profit on areas of land provided to them for ownership and/or use. A private farm can be created by one citizen of Ukraine or several citizens of Ukraine who are relatives or family members, in accordance with the law (Verkhovna Rada of Ukraine, 2003a). So, a feature that distinguishes private farms from other small agricultural enterprises in Ukraine is the presence of family ties between private farm members who jointly own property and carry out joint production and other activities (Zbarskyi, 2013, p. 112).

According to Ukrainian researchers, benefits from the formation and functioning of small farms confirmed by data worldwide can be achieved in Ukraine as well. It is about the potential of private farms in the implementation of important economic and social functions related to the expansion of the offer of agricultural products in terms of assortment and forms of promotion to the consumer, the preservation of rural settlements and the rural way of life, ensuring the stability of biocenoses and improving the ecological situation in rural areas (Nikitchenko, Stepura, Fedoruk, 2022, p. 255; Savka et al., 2022, p. 208. In solving the problems of employment, increasing the income level of the rural population, special hope is placed on a separate category of private farms – family farms (Amons, 2019, p. 18; Malik, Mamchur, 2020, p. 32; Shpykuliak, Aliexsieieva, 2021, p. 102) .

According to S. Amons, private farms have a high degree of adaptability to market signals, and flexibly react to changes in the market situation (2019, p. 24). Taking into account this circumstance, S. Prylipko, N. Shevchenko, O. Hryshchenko consider it to be recommended for small family farms to conduct economic activity on the area of not less than 100 hectares (2016, p. 20). Researchers of the development of private farms in Ukraine emphasize the importance of state support for this form of management (Averchev, Avercheva, 2020, p. 19; Koverko, 2020; Stupen, Dudych, Dudych, 2020, p. 100). Taking into account the limited financial capabilities of the government, it is proposed to concentrate state support on the development of small farms, excluding medium and large agricultural enterprises from the list of entities that receive financial assistance (Varchenko et al., 2020, p. 542).

Among other important factors that should ensure the development of private farms in Ukraine, is the development of service cooperation, the deepening of the specialization of production in farms and the improvement of their use of marketing (Yavorska, Prus, 2019, p. 283), the active and constructive position of professional associations, political parties, (Korynets, Malik, 2018, p. 65), grant support for novice farmers, and the expansion of cooperation between farmers and territorial communities regarding the implementation of social projects at the local level are named (Varchenko et al., 2020, pp. 540–541).

The presence of an obvious inconsistency between the actual state of small private farms in the agricultural economy of Ukraine and public expectations of their development makes it necessary to continue researching the activities of small farms in changing macroeconomic and institutional conditions, including those related to hostilities on the territory of the country.

2. Data and methodology

In the legislation of Ukraine, there is no clear classification of agricultural enterprises according to their size. In our research, we used official data from the State Statistics Service of Ukraine, which, when processing information on the activities of enterprises, applies the division of economic entities in accordance with the Commercial Code of Ukraine. The Code singles out micro-entrepreneurs among business entities. These include officially registered individual entrepreneurs and legal entities (micro-enterprises) – economic entities in which the average number of employees for the reporting period (calendar year) does not exceed 10 people and the annual income from any activity does not exceed the amount equivalent to 2 million euros (Verkhovna Rada of Ukraine, 2003). It is worth noting that the main limiting

factor is the number of employees, since in order to obtain an annual income of 2 million euros, an agricultural enterprise in Ukraine needs at least 1,000 hectares of land.

Providing data on the activities of enterprises, the State Statistics Service of Ukraine (2017–2022) allocates in a separate category the enterprises of crop and animal production, hunting and related service activities (code 01 according to the classification of types of economic activity used in Ukraine). In 2022, the share of active business entities – micro-enterprises of hunting, trapping and related service activities was 1.0%, the share of the volume of products sold by them – 0.07% of the total indicators of micro-enterprises assigned to activity code 01. Among individual entrepreneurs, the corresponding indicators were only 0.06% and 0.008%. Therefore, the data given in subchapters 3.1 and 3.2 of this article on the results of activities by crop and animal production, hunting and related service activities group objectively reflect the results of the functioning of small business entities in agriculture.

To analyze a number of indicators in the environment of small business agrarian entities, the indicators of the State Statistics Service on the activities of private farms were used. Some of the private farms in Ukraine are quite large. But in general, the performance indicators of private farms quite objectively characterize the development processes of small agricultural enterprises.

Information processing was carried out using statistical research methods, in particular, determination of dynamics indicators, and the share of individual groups of business entities in their total population. During the period of martial law in Ukraine, the State Statistics Service of Ukraine significantly reduced the volume of publication of information on the activities of business entities. This forced us to limit the period of statistical data analysis for a number of indicators to 2020.

Existing restrictions on the possibility of using official information did not have a significant impact on the formulation of research results. The main trends and regularities that formed in the environment of small business entities in agriculture in the pre-war period are relevant for reflecting the specifics of the development of the corresponding sector of the agrarian economy at the present time. This, in particular, is confirmed by the results of the processing of the data published by the State Statistics Service of Ukraine during the preparation of the article, on the activity of business agrarian entities in 2022.

3. Results and discussion

3.1. Dynamics of the number of small agrarian business entities and their contribution to the formation of the supply of agricultural products

In general, the situation is typical for economic systems, when the group of the smallest subjects is the most numerous, but occupies a rather small share of the market, which is also typical for the agriculture of Ukraine. Small business entities, which include microenterprises and natural entities-entrepreneurs, accounted for 89.2% of the total number of active crop and animal production, hunting and related service activities business entities in 2021 (Table 1). Within this group of entities, microenterprises accounted for 67.4% of their total number, and natural entities-entrepreneurs accounted for 32.6%.

Table 1. Number of active crop and animal production, hunting and related service activities business entities in Ukraine

Index	2017	2020	2021	2022	2021 to 2017 (%)	2022 to 2021 (%)
All business entities	69,536	67,121	64,960	48,378	93.4	74.5
including enterprises	48,311	47,752	46,070	31,740	95.4	68.9
of them are microenterprises	41,320	40,885	39,044	25,627	94.5	65.6
individual entrepreneurs	21,225	19,369	18,890	16,638	89.5	88.1

Source: calculated by the authors using data from the State Statistics Service of Ukraine.

In recent years, the total number of agricultural business entities in Ukraine has been decreasing. There is a typical tendency for global agriculture to increase the concentration of production. The smallest (and they are mostly the weakest) business entities cease their activities, and their land resources and market shares go to more successful, larger businesses. During 2017–2021, the total number of active crop and animal production, hunting and related service activities business entities in Ukraine decreased by 4,576 units, or by 6.6%. The reduction occurred due to the small business entities: the number of micro-enterprises decreased during this period by 5.5%, individual entrepreneurs – by 11.0%, while the number of larger enterprises increased slightly. It should be noted that the rates of reduction in the number of active subjects of small agrarian business during the specified period were quite high, which characterizes the environment of agrarian business in Ukraine as unfavorable for small farms.

The noticeable decrease in the number of business entities in 2022 is due to the fact that the State Statistics Service of Ukraine provided data without taking into account temporarily occupied territories and territories where hostilities took place.

Table 1 shows data on active subjects - those who carried out a certain economic activity and submitted reports on it to the bodies of the State Statistics Service of Ukraine. Their number is much smaller than the number of registered subjects – entered in the Unified State Register of Enterprises and Organizations of Ukraine. In terms of dynamics, the gap between registered and operating entities of small agrarian business is growing. This, in particular, is evidenced by the data on the number of farms in Ukraine (Figure 1).

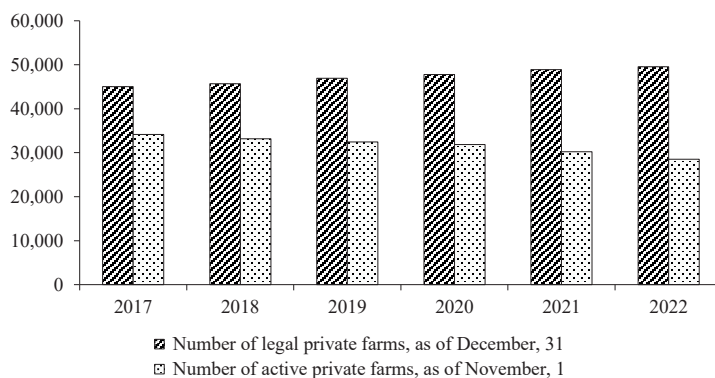


Figure 1. Number of privately owned farms in Ukraine

Source: own elaboration.

The growth in dynamics of the number of private farms registered in Ukraine indicates the presence of a certain potential for the further development of small agrarian business: there are many people who consider it a promising type of activity. On the other hand, the decrease in the number of active private farms indicates that it is very difficult to realize this potential in modern conditions. The share of economically inactive private farms in Ukraine as of the end of 2022 exceeded 42%. The growth of this indicator is observed in various regions of the country, not only those where hostilities are taking place.

Despite the decrease in the number of active small agrarian business entities, the volume of products produced and sold by them is growing dynamically. Many small farms have formed production potential that enables them to occupy fairly stable market positions. At the same time, the share of small farms in the total volume of products sold by agrarian business entities remains relatively stable (Table 2, Figure 1). By 2022, large and medium-sized agricultural

enterprises of Ukraine also demonstrated fairly high rates of increase in the volume of product sales. The steady demand for agro-food products in Ukraine and in the world contributed to the growth of production volumes. Business entities of different sizes are able to take part in satisfying this demand in certain market segments.

Table 2. Volume of products sold by acting producers of crop and animal products, hunting and related service activities in Ukraine, UAH million

Index	2017	2020	2021	2022	2021 to 2017 (%)	2022 to 2021 (%)
All business entities	447,459.3	601,972.5	910,302.2	652,998.8	203.4	71.7
including microenterprises	53,626.3	76,581.7	101,891.1	75,878.8	190.0	74.5
individual entrepreneurs	10,022.5	14,155.8	19,213.7	1,010.1	191.7	5.3

Source: calculated by the authors using data from the State Statistics Service of Ukraine.

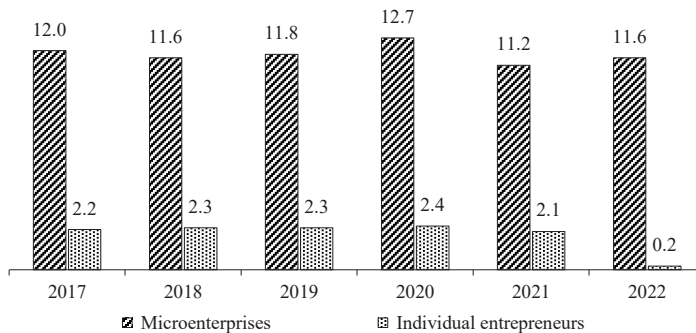


Figure 2. Share of the small agrarian business entities in the total volume of products sold by acting producers of crop and animal products, hunting and related service activities in Ukraine (%)

Source: own elaboration.

In 2022, the share of micro-enterprises in the total volume of products sold by small agrarian business entities did not change significantly. Instead, the share of individual entrepreneurs in the sold products decreased sharply (Figure 2). This situation is typical for other branches of the economy of Ukraine, which is obviously related to the peculiarities of reporting by individual entrepreneurs in the conditions of martial law.

Table 3 shows data on the production of agricultural products by private farms of Ukraine. The total production volume of agricultural products at constant prices of 2016 (such a calculation neutralizes the influence on the formation of value indicators of inflation)

increased during 2017–2021 by 43%. It was found that during the specified period, the rates of growth of production by farms of grain were (by 63%), fruits and berries (by 2.1 times), poultry meat (by 2.0 times), eggs (by 62%).

Table 3. Agricultural production in privately owned farms of Ukraine

Index	2017	2020	2021	2022	2021 to 2017 (%, ±p.p.)	2022 to 2021 (%, ±p.p.)
Agricultural production in 2016 prices, million UAH	63,277.2	65,771.8	90,259.5	59,817.9	142.6	66.2
including: crop production	60,491.7	62,295.1	86,420.9	56,239.3	142.9	65.1
animal production	2,785.5	3,476.7	3,838.6	3,578.6	137.8	93.2
The share of private farms, %, in agricultural production in 2016 prices	10.2	10.7	12.7	11.2	+2.5 p.p.	−1.5 p.p.
including: crop production	12.6	13.2	14.9	13.5	+2.3 p.p.	−1.4 p.p.
animal production	2.0	2.5	2.9	3.1	+0.9 p.p.	+0.2 p.p.
The share of private farms, %, in production:						
grain and leguminous crops	14.0	14.9	16.5	15.6	+2.5 p.p.	−0.9 p.p.
factory sugar beet	7.4	4.6	4.8	5.5	−2.6 p.p.	+0.7 p.p.
oil crops	19.0	18.9	20.4	18.9	+1.4 p.p.	−1.5 p.p.
including sunflower	19.3	18.8	20.2	18.3	+0.9 p.p.	−1.9 p.p.
potatoes	0.5	0.5	0.6	0.5	+0.1 p.p.	−0.1 p.p.
vegetables	2.9	3.0	2.4	1.3	−0.5 p.p.	−1.1 p.p.
fruits and berries	3.7	4.5	7.2	7.1	+3.5 p.p.	−0.1 p.p.
meat (in slaughter weight)	2.5	3.1	3.5	...	+1.0 p.p.	...
milk	1.9	2.4	2.8	...	+0.9 p.p.	...
eggs	0.6	0.8	1.0	...	+0.4 p.p.	...

Source: calculated by the authors using data from the State Statistics Service of Ukraine.

In 2022, the indicators of production volumes of private farms decreased significantly, since a significant part of the economic entities are located in the temporarily occupied territory and in the zone of active hostilities. However, the share of private farms in the total volume of production of the main types of agricultural products in 2022 did not change significantly compared to previous years (Table 3).

The share of private farms in the total volume of agricultural products was growing until 2022. This result was formed due to a certain reduction in the production of household products, whose role in the agricultural production system of Ukraine is decreasing. Mostly

private farms specialize in the production of plant products. In 2021, it accounted for 95.7% of all agricultural products produced by them, in 2022 – 94.0%.

The share of farms in the production of grain and oil crops is particularly noticeable. Ukraine occupies a high position among world exporters of these products. Small farms rarely act as exporters of their products. Export parties are formed by agro-traders, thanks to whose activity prices for grain and oilseed crops in Ukraine are maintained at attractive prices for farms. Private farms occupy a rather prominent place among fruit and berry producers. A significant share of berry products (in particular, blueberries, raspberries, blueberries) was exported in fresh frozen form to the countries of the European Union. Therefore, export opportunities affect the formation of specialization not only of medium and large agricultural enterprises, but also of small farms.

3.2. Analysis of the efficiency of small agricultural producers

The results of the conducted analysis give reasons to consider small farms as generally successful business entities. This, in particular, is evidenced by indicators of the economic efficiency of small agricultural enterprises, which reflect the financial results of their operation (Table 4, Figure 3). The growth of production volumes by agrarian business entities, including small ones, until 2022, was based on a solid economic basis. It should be clarified that we are talking about active business entities. A large number of inactive enterprises does not give grounds for overly optimistic conclusions.

Table 4. Economic efficiency of agricultural, hunting and related services enterprises in Ukraine (%)

Enterprises	2017	2018	2019	2020	2021	2022	For reference: general economics in 2022
Profitability of operating activities							
All enterprises	23.2	18.9	19.8	19.1	41.8	20.7	3.3
Microenterprises	24.5	16.5	15.7	18.2	38.2	14.2	-7.0
Profitability of all activity							
All enterprises	16.5	14.2	16.6	14.0	37.8	13.7	-3.2
Microenterprises	7.8	7.9	9.0	15.3	35.3	9.8	-13.8

Source: calculated by the authors using the data of State Statistics Service of Ukraine.



Figure 3. Share of loss-making agricultural, hunting and related services enterprises in Ukraine (%)

Source: own elaboration.

The main reason for the deterioration of economic efficiency indicators of agricultural enterprises, including micro-enterprises, in 2022 was logistics problems. They limited the growth of prices for agricultural products due to problems with their sales, instead they led to a significant increase in the cost of material resources imported into Ukraine. In the post-war period, after solving logistical problems, we can count on a return to comfortable price parameters for agricultural producers.

We note that there is a high level of economic efficiency of agricultural enterprises compared to enterprises of other industries. Indicators of profitability of operational activity and profitability of all activities of agricultural enterprises in recent years, including 2022, significantly exceeded the average ones for the economy as a whole, and the share of unprofitable enterprises was significantly lower. This indicates the high investment attractiveness of agrarian business in Ukraine, which to some extent also extends to small enterprises.

Indicators of economic efficiency of micro-enterprises in agriculture to a certain extent, but not too significantly, were inferior to the indicators of larger enterprises. They significantly exceeded the indicators of micro-enterprises in other main sectors of the economy, whose activity in 2022 was unprofitable. In particular, the total level of fewer microenterprises in Ukraine in 2022 was 7.0%, including in industry – 5.0%, in construction – 17.5%, in transportation and storage – 0.9%. We conclude that the vast majority of small farms have the resources and incentives to implement plans for further development.

The economic efficiency of small farms in agricultural industries is characterized by the profitability indicators of certain types of products in private farms (Table 5). The profitability indicators of most types of crop production were quite high. The cultivation of grain and oil

crops, the production of potatoes, fruits and berries is especially profitable for farms. Indicators of profitability of livestock products in private farms were relatively low, but in general they exceeded similar indicators in agricultural enterprises (State Statistics Service of Ukraine, 2022, p. 164).

Table 5. Profitability level of agricultural production in privately owned farms of Ukraine (%)

Product name	2017	2018	2019	2020
Grain and leguminous crops	27.9	26.1	14.5	23.8
Sunflower	41.2	30.3	24.7	37.3
Sugar beet	20.0	-2.2	-4.8	-11.7
Vegetables	19.5	7.6	17.8	7.7
Potatoes	28.9	28.0	50.3	29.5
Fruits and berries	36.1	22.6	38.6	41.5
Milk	25.9	18.0	20.1	22.5
Cattle for meat	-2.1	-6.4	-14.6	-9.5
Pigs for meat	-6.7	1.1	1.4	1.8
Poultry for meat	3.5	6.8	13.2	10.7
Poultry eggs	14.1	9.3	-9.8	-0.7

Source: calculated by the authors using the data of State Statistics Service of Ukraine.

The main indicators of the technological efficiency of crop production are the yield of agricultural crops. The data presented below in Table 6 show that the productivity of most crops in private farms remains lower than the average in all agricultural enterprises. Currently, farms use production technologies that are not as effective as large agricultural enterprises. However, productivity in farms in recent years has grown at a generally higher rate than in agricultural enterprises, which indicates a narrowing of the gap in applied technologies. We also support the opinion of scientists who believe that productivity should not be considered as a strong indicator of the relationship between the size of farms and their efficiency (Aragon, Restuccia, Rud, 2022; Ricciardi et al., 2021). The influence of other factors related to the peculiarity of the formation of production costs in small enterprises, flexible pricing, etc., is quite significant on profitability indicators.

The social efficiency of the enterprise characterizes the compliance of the results of its activity with the social needs of the employees employed in it. The main indicator of social efficiency is the level of remuneration of employees. The social efficiency of business entities is also evidenced by the number of jobs created by them.

Table 6. Yield of agricultural crops in Ukraine, c/ha

Crop	Private farms			All enterprises			Indicator of private farms in percentage to the indicator of all enterprises		
	2017	2021	2022	2017	2021	2022	2017	2021	2022
Grain and leguminous crops	37.1	50.4	41.8	45.6	59.3	50.3	81.4	85.0	83.1
Sunflower	18.8	23.6	19.0	21.3	25.6	22.4	88.2	92.2	84.8
Sugar beet	499.1	549.6	587.4	484.1	486.6	553.6	103.1	112.9	106.1
Vegetables	348.4	346.7	269.8	435.3	420.5	282.4	80.0	82.4	95.5
Potatoes	189.2	215.5	226.7	238.4	253.1	261.1	79.4	85.1	86.8
Fruits and berries	69.4	154.9	154.4	64.9	108.7	105.6	106.9	142.5	146.2

Source: calculated by the authors using data from the State Statistics Service of Ukraine.

As mentioned above, small farms in Ukraine are expected to create jobs with a sufficiently high level of remuneration, which will contribute to the solution of social problems in rural areas. So far, the level of realization of these hopes is rather modest. The tendency to decrease the number of active small agrarian business entities negatively affects the number of workers employed on the respective farms (Table 7).

Table 7. Number of employees of crop and animal production, hunting and related service activities, persons

Business entities	2017	2020	2021	2022	2021 to 2017 (%)	2022 to 2021 (%)
Number of persons employed by business entities						
All business entities	556,527	509,959	511,098	433,367	91.8	84.8
including enterprises	525,195	479,022	480,630	407,985	91.5	84.9
of them are micro-enterprises	101,354	94,388	101,833	75,665	100.4	74.3
individual entrepreneurs	31,332	30,937	30,468	25,382	97.2	83.3
Number of employees of business entities						
All business entities	501,033	462,976	460,015	397,207	91.8	86.3
including enterprises	490,926	451,408	448,437	388,463	91.3	86.6
of them are micro-enterprises	69,015	68,312	71,324	57,566	103.3	80.7
individual entrepreneurs	10,107	11,568	11,578	8,744	114.6	75.5

Source: calculated by the authors using data from the State Statistics Service of Ukraine.

The number of employed workers consists of hired workers (working under labor contracts or contracts and receiving wages) and persons who are owners, founders of enterprises and

members of their families. In micro-enterprises in agriculture, the share of employees was 76% in 2022, in individual entrepreneurs – 34%. In small agricultural enterprises, the use of hired workers is a fairly common practice. Instead, private family farms have the right to hire employees exclusively for the use of seasonal and individual jobs that are directly related to farm activities and require special knowledge and skills (Verkhovna Rada of Ukraine, 2003a).

In 2022, in crop and animal production, hunting and related service activities, small business entities accounted for 24.8% of employed workers and 17.1% of hired workers. In terms of dynamics, the number of employees in the agricultural enterprises of Ukraine is decreasing. In small farms, the trend until 2022 was more optimistic, despite the decrease in the number of active entities. Therefore, small agrarian business to some extent fulfills the function of creating additional jobs in rural areas. The profitability of these jobs is characterized by indicators of remuneration (see Figure 4).

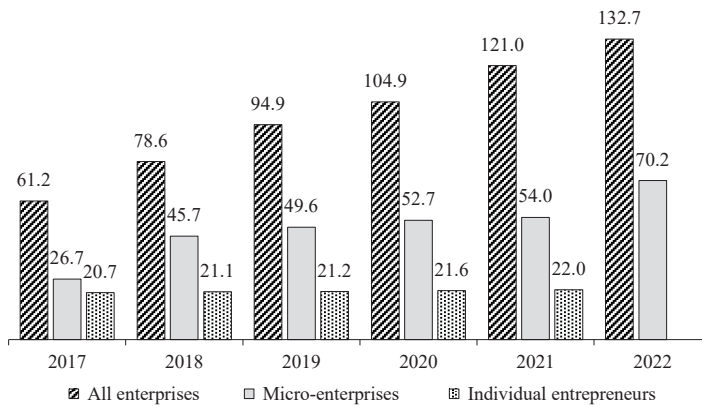


Figure 4. Labor costs per employee in agricultural, hunting and related services activities in Ukraine, thousand UAH

Source: own elaboration.

Figure 4 shows data on wages only for employees. Owners and founders of small farms (members of private farms) are not paid a salary. Their income is formed on the basis of the income of the farm. In 2022, the profitability of the operational activity of agricultural, hunting and related services of micro-enterprises in Ukraine was 14.2%. Profit per employee, which belonged to the category of owners and founders, amounted to 358 thousand UAH. Compared to 2021, these indicators decreased significantly, and part of the profit had to be invested in the development or maintenance of farms. At the same time, there are grounds for concluding that

the incomes of the owners of small farms make it possible to provide them with an adequate level of social protection in the vast majority of cases.

Labor costs per employee in small agribusiness entities are small, as employees are engaged mostly only in seasonal work. The level of remuneration of employees in medium-sized agricultural enterprises is estimated to be relatively low. It is inferior to the level of wages in other main sectors of the economy. Therefore, the level of social efficiency of small agrarian business entities cannot be considered high based on the wage rate of employees.

3.3. Support for the development of small privately owned agricultural farms

In many countries of the world, in the agriculture of which producers of different sizes coexist (and compete), support for small farms is used. Such support is declared and implemented in practice in Ukraine as well. Assistance in the creation and arrangement of private farms has been provided for by a number of regulatory documents since the first such farms appeared in Ukraine in the early 1990s. The level of fulfillment of declared intentions remained quite low, which became one of the reasons for the insufficient development of small agrarian business. But the tools of such support were constantly being improved, some of them are used in Ukraine and in the conditions of martial law.

In Ukraine, a support system for small farms is being formed, the components of which are: support through the implementation of programs financed from the state budget at the national level; support from local budgets; support from non-governmental structures (private business, foreign organizations, etc.). Government programs financed from the state budget of Ukraine have a noticeable impact on the development of small agrarian business. The Law of Ukraine “On farming” specifies the provision of support from the state budget to private farms in the period of formation (the first three years after being formed) and private farms that operate in mountain settlements, in the Polissia zone (difficult for agriculture because of the natural conditions). For private farms with the status of family, additional state support is provided to compensate for the payment of a single contribution to the mandatory state social insurance of members of private farms. Assistance is provided for a private farm headed by a young person (under 35 years of age) (Verkhovna Rada of Ukraine, 2003a). The specified areas of state support are only declared; their actual financing is carried out on the basis of government decisions made each year.

Assistance from the state budget is provided through a special institution – the State Farm Support Fund. In 2023, the Fund provided support under the budget program for competitive loans for up to 5 years in an amount not exceeding UAH 1 million (The Ministry of Agrarian

Policy and Food of Ukraine, 2023). Among other programs, the implementation of which was initiated through the fund in the pre-war period and can be resumed in the near future thanks to the financial support of the European Union, we highlight the provision of a budget subsidy for 1 ha of agricultural land (for farms with up to 120 hectares of land under cultivation) and the provision of a special budget subsidy for keeping cows (for farms keeping up to 100 cows).

Far less funds are allocated from local budgets (oblast, district, community) to support small farms than from the state budget. Relevant programs are mostly formed taking into account local priorities and problems. Often they are aimed at the implementation of projects in specific branches and sectors of agricultural production.

We can consider the direction of such programs with the example of the Lviv region. In 2023, the following programs were financed in the region at the expense of the regional budget:

- a) support for business entities in the field of organic production, which can receive a subsidy based on 1 hectare of agricultural crops;
- b) subsidy on an irrevocable basis for increasing the number of cows;
- c) compensation of part of the costs for the purchase of agricultural machinery and equipment based on financial leasing contracts;
- d) preferential lending for the implementation of business plans, including to newly created entities or those starting a new direction of agricultural activity.

When deciding on financial support under all the mentioned programs, preference was given to war veterans, and business entities headed by a young person under the age of 35 (Lviv RSA, 2023).

Non-governmental structures participate in the support of small agrarian business entities through financing or co-financing with other participants in grant support programs for investment projects. An example of such a program implemented in previous years is the grant support for the creation of new and expansion of existing agricultural cooperatives financed by the agricultural holding “Mriya” (AgroTimes, 2017). During 2014–2021, the implementation of the large-scale project “Development of the dairy business in Ukraine” was carried out, in the financing of which the Ministry of Foreign Affairs, Trade and Development of Canada, the “Danone” Company in Ukraine, the International Charitable Foundation “Dobrobut Hrodam”, Dnipropetrovsk and Lviv Oblasts participated in the state administration. As part of the project, a set of measures was implemented to support small milk producers through the creation and development of cooperatives serving these producers (LADS, 2017–2021).

In the conditions of martial law, there were certain changes in the mechanisms of grant support for small agrarian businesses in Ukraine from non-governmental structures. Thanks to the large-scale participation of international donors, an extensive system of grant support for business start-ups and recovery projects was formed. Often, these programs do not relate to a certain industry, but to projects and initiatives in various spheres of the economy, including agriculture.

Among the programs aimed at supporting agrarian business, taking into account the realities and consequences of the war in Ukraine, we will single out the project “Family farming school for veterans”. The project is carried out by the National Association of Agricultural Advisory Services of Ukraine with the support of the US State Department. Its goal is to increase opportunities for the creation of family farms by veterans of the war in Ukraine, who have the right to receive plots of land for households as a priority (National Association of Agricultural Advisory Services of Ukraine, 2023). Another project that illustrates the spectrum of international support for small agrarian business in Ukraine is the Food and Agricultural Organization of the United Nations program, funded by the European Union, which provides grant support to producers of berries, vegetables, aquaculture, certain food products with geographical indication in a number of regions of Western Ukraine (Delegation of the European Union to Ukraine, 2022).

In connection with the war, the scale of state support for small agricultural producers in Ukraine decreased and, obviously, will remain limited in the first post-war years. At the same time, we can see an increase in the potential of grant support programs in which small farms can participate. In Ukraine, a network of agricultural advisory services and other structures that are ready to provide consulting support to agrarian business entities in obtaining such grants has been formed.

3.5. Strategies for the development of small agrarian business entities.

The characteristics of small agrarian business entities in Ukraine are characterized by a high variation in terms of size, formed material and technical base, and specialization. The set of relevant characteristics affects the choice of a development strategy that can be recommended to various small farms.

Among the subjects of small agrarian business, we will single out a group of relatively large private farms that have been operating for a long time (more than 20 years). Using the opportunities of the initial stage of the land reform in Ukraine and the privatization of collective farms, they received the use of large areas of land (more than 100 hectares) and

provided themselves with technical means quite well. Mostly, such enterprises specialize in the cultivation of grain and oil producing crops. Guaranteed product sales channels at sufficiently high purchase prices enables them to continue to adhere to their chosen specialization. The successful functioning of such enterprises is possible when implementing a strategy of cost minimization thanks to the modernization of production and the introduction of technological innovations.

Enterprises (in particular, private farms) with a land use area of more than 100 hectares were created mainly in the 1990s – at the beginning of the 21st century. A new wave of their intensive appearance at the current stage of the development of agriculture in Ukraine is unlikely. The main reason is the lack of opportunity to accumulate large areas of land. Small farms are often absorbed by large agricultural enterprises. Under the current conditions, the main option for the creation of new small agrarian business entities is the transformation of the most developed households into such ones. We are talking about the creation of farms, the area of which used land will not exceed a few dozen (and often only a few) hectares. According to the State Statistics Service of Ukraine, even during 2022, when martial law was introduced in Ukraine, the number of registered individual entrepreneurs in the field of agriculture increased by 11.3% (State Statistics Service of Ukraine, 2023).

In 2021, in Ukraine, the share of enterprises with a land use area that did not exceed 50 hectares was 41% of the total number of enterprises, which had agricultural land. The orientation of such enterprises to the cultivation of only grain and oil producing crops is irrational, since the amount of income from the cultivation of these crops will not be sufficient to ensure adequate social protection of the employees of these enterprises. It is promising for them to grow labor-intensive plant products, the implementation of which allows obtaining a significant income per unit of land area used. For example, in 2022, agricultural enterprises of Ukraine from the sale of grown products were able to receive about UAH 32,000 in revenue per 1 ha of cultivated area for cereals, oilseeds – 35, sugar beets – 85, potatoes – 120, vegetables – 400, fruits and berries – UAH 90,000. Recommended for small agribusiness entities is a focusing strategy, which involves concentrating attention and efforts on market segments in which large agricultural producers are not interested. The possibilities of obtaining competitive advantages in certain market segments reflect the prices of products sold by the main groups of agricultural producers (see Table 8). Small private farms are able to achieve favorable positions in the vegetable, fruit and berry markets. High household sales prices for potatoes and poultry indicate that the relevant market segments are also attractive for small agrarian businesses, in particular for individual entrepreneurs created on the basis of households. A high price can be achieved

due to a convenient way of delivering products to the target group of consumers. It is thanks to this that the relatively high price of milk sales (by households) of Lviv Oblast households was formed.

Table 8. Average sales prices of the main types of agricultural products in the Lviv region, 2020, UAH per centner

Product name	Agricultural enterprises	Private farms	Households
Grain and leguminous crops	484.6	479.0	367.2
including: wheat	497.6	482.1	405.7
maize	480.3	456.2	–
Soya beans	1,152.4	1,111.4	–
Rapeseed and colza	1,087.5	1,066.3	–
Sunflower	1,169.8	1,069.7	–
Sugar beet	90.1	62.7	–
Potatoes	531.1	537.9	936.4
Vegetables	710.5	1,486.6	1,593.6
Fruits and berries	475.6	2,680.6	1,371.4
Live agricultural animals:			
cattle	3,352.0	3,483.7	4,212.6
pigs	3,989.8	3,511.5	8,032.8
poultry	2,535.7	2,688.4	6,010.1
Milk	889.1	809.3	1,292.6

Source: Main Statistical Office in the Lviv Region (2021).

Growing vegetables, potatoes, fruits and berries, grapes, specializing in poultry and beekeeping is economically feasible for small agrarian business entities. State support for the dairy business acts as an incentive for the creation of family dairy farms. In particular, 48 such farms were created in the Lviv region in 2020–2022, and their total number is now about 100. Starting mostly with 5 cows, they increase their herd to 10–50 (AgroTimes, 2022). The role of family farms in forming the supply of dairy raw materials is currently insignificant. However, it may increase in the future, taking into account the decrease in milk production in households, which are now the main milk producers.

A promising option for small agrarian business entities is the strategy of differentiation. It involves offering the consumer a special (unique) value – a product that has no analogues in terms of characteristics. Examples of such a strategy are the breeding of quail or ostrich, the cultivation of rare types of vegetables and fruits, the production of products with a unique taste

and color using special technologies. The agri-food market is characterized by the presence of a large number of consumers with differentiated requests, which determines the possibility of the successful implementation of an original business project by small enterprises.

The need for fuller use of the available production potential, finding additional sources of income stimulates small agrarian business entities to search for options for a diversification of activities. In Ukraine, there are well-known examples of farmers successfully organizing the processing of agricultural products and selling processed products under their own brand. It is promising for individual small farms to participate in projects involving the use of the region's recreational or tourist attractions. It is about activities related to the development of agrarian tourism and culinary tourism.

To solve a number of problems related to insufficient resource provision, the organization of commercial activities, small agrarian business entities use the strategy of cooperation. As of January 1, 2023, there were 1,262 agricultural service cooperatives in Ukraine. In recent years, their number has not changed significantly (State Statistics Service of Ukraine, 2023). It should be noted that even in the pre-war period, the share of active agricultural service cooperatives did not exceed 60% of the number of registered ones (Sheremeta, 2019).

In general, the development of agricultural cooperation in Ukraine is insufficient. This is due to a number of reasons (imperfect institutional support, low social activity of farmers, financial problems, etc.). In the conditions of the war in Ukraine, the possibilities for the development of agricultural service cooperatives became more difficult. However, cooperation continues to be considered as one of the important tools for solving the problems of small farms.

The acquisition of competitive advantages by the agricultural enterprises of small businesses requires, as a rule, the activation of their cooperation with consumers. They are recommended to target narrow groups of buyers, satisfy and at the same time form their requests. Such activity is carried out as part of the implementation of the marketing functional strategy.

Conclusions

The subjects of small agrarian business in Ukraine are small agricultural enterprises, the average annual number of employees of which does not exceed 10 people, and individual entrepreneurs, whose main activity is the production of agricultural products. The total number of active small agrarian business entities in Ukraine is decreasing dynamically, which

characterizes the environment of their functioning as quite unfavorable. At the same time, the number of registered small agricultural enterprises is growing, that is, interest in this business remains.

The contribution of small agrarian business entities to the formation of the supply of agricultural products in Ukraine in recent years has been stable at a relatively low level. Small farms do not show significant interest in the production of livestock products. They receive their main income from the production of grain and oil producing crops. Their contribution to the formation of the supply of fruits and berries is noticeable.

Operating small agricultural enterprises demonstrates high indicators of economic efficiency. According to these indicators, they are to some extent, but uncritically, inferior to large and medium-sized agricultural enterprises and significantly exceed small enterprises in other main sectors of the economy. Until 2022 – the beginning of the active phase of the war in Ukraine, the productivity indicators of the main agricultural crops in small enterprises grew at a high rate. Although small agrarian business entities are able to create a significant number of jobs, they do not provide their employees with a high level of wages throughout the year. So far, small farms in Ukraine have not demonstrated a noticeable impact on solving social problems in rural areas.

In Ukraine, a support system for small farms has been formed. It consists of a number of programs, the financing of which is carried out at the expense of the state budget, local budgets, and non-governmental structures. During the war, options expanded and support from international donors increased. Most of the support programs are of a grant nature, in order to receive funds for the implementation of a certain project, you need to go through a competition. The competitive nature of supporting small agrarian business will be the main one in the post-war period as well, given the lack of funds for general subsidized support of agricultural production in Ukraine.

Development strategies recommended to small agrarian business entities involve the search for market niches that are not of interest to large agricultural producers. The production of plant products is recommended, the implementation of which makes it possible to obtain a significant income per unit area of used land – vegetables, potatoes, fruits, berries, and grapes. The development of beekeeping and poultry farming with a focus on the target group of buyers is promising. A number of targeted support programs are stimulating the creation of family dairy farms.

The main option for the creation of small agrarian business entities in Ukraine should be considered as the transformation of the most developed households into family farms and

individual entrepreneurs. The use of effective mechanisms for supporting small farms, which implement a rational development strategy, can ensure the growth of the role of small business in the agricultural production sector of Ukraine.

References

- AgroTimes (2017). Agroholding “Mriya” has announced a competition for the support of cooperatives. Retrieved from <https://agrotimes.ua/elevator/agroholding-mriya-ogolosiv-konkurs-na-pidtrimku-kooperativiv> (15.04.2023) [in Ukrainian].
- AgroTimes (2022). Dairy farms predominate among family farms in Lviv Oblast. Retrieved from <https://agrotimes.ua/tvarinnitstvo/sered-simejnyh-ferm-lvivshhyny-perevazhayut-molochni> (15.04.2023) [in Ukrainian].
- Amons, S.E. (2019). Farm households and their role in the development of the agricultural economy sector. *Economy. Finances. Management: actual issues of science and practical activity*, 5, 17–28.
- Aragon, F.M., Restuccia, D., Rud, J.P. (2022). Are small farms really more productive than large farms? *Food Policy*, 106, 102168. DOI: 10.1016/j.foodpol.2021.102168.
- Averchev, O., Avercheva, N. (2020). Directions of the efficiency improvement of land resources use on the farms. *Ekonomika ta derzhava*, 5, 15–22. DOI: 10.32702/2306-6806.2020.5.15.
- Cabinet of Ministers of Ukraine (2017). Concept of development of private farms and agricultural co-operation on 2018–2020: Order dated September 13, 2017 No. 664-r. Retrieved from <http://zakon3.rada.gov.ua/laws/show/664-2017-%D1%80> (5.04.2023) [in Ukrainian].
- Cardillo, C., Cimino, O. (2022). Small Farms in Italy: What Is Their Impact on the Sustainability of Rural Areas? *Land*, 11(12), 2142. DOI: 10.3390/land11122142.
- Delegation of the European Union to Ukraine (2022). FAO and EU are launching investment grant programme for farmers from west of Ukraine. Retrieved from https://www.eeas.europa.eu/delegations/ukraine/fao-and-eu-are-launching-investment-grant-programme-farmers-west-ukraine_en?s=232 (15.04.2023).
- European Parliament (2014). On the future of small agricultural holdings, Report of the committee on Agriculture and Rural Development 2013/2096(INI), Luxembourg, European Parliament. Retrieved from https://www.europarl.europa.eu/doceo/document/A-7-2014-0029_EN.html?redirect (8.04.2023).
- FAO and IFAD (2019). United Nations Decade of Family Farming 2019–2028. Global Action Plan. Retrieved from <https://www.fao.org/3/ca4672en/ca4672en.pdf> (8.04.2023).

- Forgacs, C. (2016). Is Specialization a Way for Small Farms in Central and Eastern European Countries to Adjust? *Proceedings of the International Conference "Economic Science for Rural Development"*, 42, Jelgava, LLU ESAF, 21–22 April 2016, 221–227.
- Galli, F., Grando, S., Adamsone-Fiskovica, A., Bjorkhaug, H., Czekaj, M., Duckett, DG, Almaas, H., Karanikolas, P., Moreno-Perez, OM., Ortiz-Miranda, D., Pinto-Correia, T., Prosperi, P., Redman, M., Rivera, M., Toma, I., Sanchez-Zamora, P., Sumane, S., Zmija, K., Zmija, D., Brunori, G. (2020). How do small farms contribute to food and nutrition security? Linking European small farms, strategies and outcomes in territorial food systems. *Global Food Security – Agriculture Policy Economics and Environment*, 100427. DOI: 10.1016/j.gfs.2020.100427.
- Glowinkel, M., Mocan, M., Kulkens, M. (2020). The EU Subsidy Policy Cannot Prevent the Market Exit of Especially Small and Medium-Sized Enterprises. *Springer Proceedings in Business and Economics*. In: Prostean, G., Lavios Villahoz, J., Brancu, L., Bakacsi, G. (eds.), *Innovation in Sustainable Management and Entrepreneurship*, 725–734, DOI: 10.1007/978-3-030-44711-3_55.
- Jang, W., Klein, C.M. (2011). Supply chain models for small agricultural enterprises. *Ann Oper Res*, 190, 359–374. DOI: 10.1007/s10479-009-0521-8.
- Khanal, AR., Mishra, AK. (2014). Agritourism and off-farm work: survival strategies for small farms. *Agricultural Economics*, 45(S1), 65–76. DOI: 10.1111/agec.12130.
- Koraus, A., Haviernikova, K., Gombar, M., Cernak, F., Felkan, M. (2020). Dimensions and their elements affecting the innovative activities of agricultural SMEs toward their sustainable development. *Entrepreneurship and Sustainability*, 8(2), 1142–1157. DOI: 10.9770/jesi.2020.8.2(68).
- Korynets, R.Ya., Malik, L.M. (2018). Institutionalization of family farms in social and economic environment. *Ekonomika APK*, 4, 60–69.
- Koverko, Yu. (2020). Legal fundamentals of the state support of family farm business. *Dnipro Scientific Journal of Public Administration, Psychology, Law*, 1, 45–49. DOI: 10.51547/ppp.dp.ua/2020.1.8.
- Kuznyak, B. (2019). Problems of development of farms and their servicing cooperatives in Ukraine. *Economy of Ukraine*, 5, 68–78.
- LADS (2017–2021). Development of dairy business in Ukraine. Retrieved from <http://lads.com.ua> (15.04.2023) [in Ukrainian].
- Lviv RSA (2023). Department of Agricultural Development. Retrieved from <https://loda.gov.ua/structural-unit/17057?categoryId=6539> (20.04.2023) [in Ukrainian].
- Lypchuk, V.V., Korobka, S.V. (2011). Development of small entrepreneurship in agriculture. Lviv: Spolom [in Ukrainian].
- Main Statistical Office in Lviv Region (2021). Agriculture of Lviv Region 2020: The Statistical Yearbook. Lviv [in Ukrainian].

- Malik, M.Yo., Mamchur, V.A. (2020). Socio-economic orientation of family farms in entrepreneurial activity. *Ekonomika APK*, 9, 30–41. DOI: 10.32317/2221-1055.202009030.
- Maslak, O.M., Maslak, N.G., Huzhvenko, S.M. (2018). Development of farms in Ukraine: state and prospects. *Odesa National University Herald*, 23(8), 61–65.
- National Association of Agricultural Advisory Services of Ukraine (2023). Family farming school for veterans. Retrieved from <http://dorada.org.ua/uk/shkola-simejnogo-fermerstva-dlya-veteraniv-ta-veteranok> (20.04.2023) [in Ukrainian].
- Nikitchenko, S.O., Stepura, L.O., Fedoruk, Yu.V. (2022). Economic fundamentals of non-agricultural activity of Ukrainian farms. *Food Resources*, 10(18), 248–256. DOI: 10.31073/foodresources2022-18-24.
- Petrunenکو, Ia., Pohrishchuk, O., Plotnikova, M., Zolotnytska, Yu., Dligach, A. (2021). Development of Small Farms in the Agro-Industrial Complex. *International Journal of Computer Science and Network Security*, 21(3), 287–294. DOI: 10.22937/IJCSNS.2021.21.3.37.
- Prylipko, S., Shevchenko, N., Hryshchenko, O. (2016). Efficiency of small farms functioning in Ukraine. *Economic Annals-XXI*, 158(3–4), 17–21. DOI: 10.21003/ea.V158-04.
- Rada, N., Helfand, S., Magalhaes, M. (2019). Agricultural productivity growth in Brazil: Large and small farms excel. *Food Policy*, 84, 176–185. DOI: 10.1016/j.foodpol.2018.03.014.
- Ricciardi, V., Mehrabi, Z., Wittman, H., James, D., Ramankutty, N. (2021). Higher yields and more biodiversity on smaller farms. *Native Sustainability*, 4, 651–657. DOI: 10.1038/s41893-021-00699-2
- Ristanovic, V., Tosovic-Stevanovic, A., Maican, S., Muntean, A. (2022). Economic overview of the distribution channels used by Eastern European small farms for their agricultural products. *Agricultural Economics (Czech Republic)*, 68(8), 299–306. DOI: 0.17221/168/2022-AGRICECON.
- Rivera, M., Guarin, A., Pinto-Correia, T., Almaas, H., Mur, LA., Burns, V., Czekaj, M., Ellis, R., Galli, F., Grivins, M. (2020). Assessing the role of small farms in regional food systems in Europe: Evidence from a comparative study. *Global Food Security*, 26, 100417. DOI: 10.1016/j.gfs.2020.100417.
- Salvioni, C., Papadopoulou, E., Santos, M.D. (2014). Small Farm Survival in Greece, Italy and Portugal. *EuroChoices*, 13(1), 52–57. DOI: 10.1111/1746-692X.12053.
- Savka, M., Cherneviy, Yu., Yatsiv, I., Balaniuk, I., Shelenko, D., Yatsiv, S. (2022). Forecasting Parameters of Farm Development at the Regional Level Using the Stella Program. *Management Theory and Studies for Rural Business and Infrastructure Development*, 44(2), 209–222. DOI: 10.15544/mts.2022.22.
- Sheremeta V. (2019). The number of service cooperatives is growing in Ukraine. Retrieved from <https://minagro.gov.ua/news/v-ukrayini-zrostaye-kilkist-obslugovuyuchih-kooperativiv-viktor-sheremeta> (1.04.2023) [in Ukrainian].

- Shpykuliak, O.H., Aliksieieva, O.V. (2021). Development of farms in the organizational and economic support of employment of the population. *Ekonomika APK*, 4, 95–107. DOI: 10.32317/2221-1055.202104095.
- Sirenko, N., Lunkina, T., Burkovska, A., Mikulyak, K. (2022). Prospects for the Development of Small Agricultural Business Entities in the Market Environment. *Ikonomicheski Izsledvania*, 31(3), 162–175.
- State Statistics Service of Ukraine (2017–2022). Statistical information / Economic statistics / Monetary and finance statistics. Retrieved from <http://www.ukrstat.gov.ua> (10.10.2023).
- State Statistics Service of Ukraine (2022). Agriculture of Ukraine 2021: The Statistical Yearbook. Kyiv.
- State Statistics Service of Ukraine (2023). Statistical information / Economic statistics. Register of statistical units. Retrieved from <http://www.ukrstat.gov.ua> (15.04.2023).
- Stupen, N., Dudych, L., Dudych, H. (2020). Prospects for farming development in Ukraine. *Ahrarna Ekonomika*, 13(1–2), 95–100. DOI: 10.31734/agrarecon2020.01.095.
- The Ministry of Agrarian Policy and Food of Ukraine (2023). Ukrderzhfond announces a competition for obtaining financial support by farms. Retrieved from <https://minagro.gov.ua/news/ukrderzhfond-ogoloshuye-konkurs-na-otrimannya-finansovoyi-pidtrimki-fermerskimi-gospodarstvami> (20.04.2023) [in Ukrainian].
- Varchenko, O.M., Krysanov, D.F., Shubravska, O.V., Khakhula, L.P., Gavryk, O.Y., Byba, V.A., Honcharuk, I.V. (2020). Supply Chain Strategy in Modernization of State Support Instruments for Small Farms in Ukraine. *International Journal of Supply Chain Management*, 9(1), 536–543.
- Vecchio, Y., De Castro, P., Masi, M., Adinolfi, F. (2022). Do Rural Development Policies Really Help Small Farms? *EuroChoices*, 20(3), 75–80. DOI 10.1111/1746-692X.12338.
- Verkhovna Rada of Ukraine (2003). The Commercial Code of Ukraine. Retrieved from <https://zakon.rada.gov.ua/laws/show/436-15#Text> (5.04.2023) [in Ukrainian].
- Verkhovna Rada of Ukraine (2003a). *On farming*: Law of Ukraine dated June 19, 2003 No. 973-IV. Retrieved from <https://zakon.rada.gov.ua/laws/show/973-15> (5.04.2023) [in Ukrainian].
- Verkhovna Rada of Ukraine (2003b). *On personal peasant households*: Law of Ukraine dated May 15, 2003 No. 742-IV. Retrieved from <https://zakon.rada.gov.ua/laws/show/742-15#Text> (5.04.2023) [in Ukrainian].
- Veveris, A., Sapolaite, V., Giedre Raisiene, A., Bilan, Y. (2019). How Rural Development Programmes Serve for Viability of Small farms? Case of Latvia and Lithuania. *Agris On-line Papers in Economics and Informatics*, 11(2), 103–113. DOI: 10.22004/ag.econ.294159.
- Wang, L. (2018). Game Analysis and Countermeasure of Internet Finance and Financing of Agricultural-related Small and Micro Enterprises. *Proceedings of the 4th Annual*

International Conference on Social Science and Contemporary Humanity Development. Advances in Social Science Education and Humanities Research, 281, 476–480. DOI: 10.2991/sschd-18.2019.86.

Wiggins, S., Kirsten, J., Llambi, L. (2010). The Future of Small Farms. *World Development*, 38(10), 1341–1348.

Yavorska, T.I., Prus, Ju.O. (2019). Modeling factors of increasing the profitability of farmers as a small business entity. *Scientific papers of Dmytro Motornyi Tavria state agrotechnological university (economic sciences)*, 1, 277–285.

Zbarskyi, V.K. (2013). Management of the development of small agricultural enterprises. *Visnyk Sumskoho Natsionalnoho Ahrarnoho Universytetu. Finansy i Kredyt*, 1, 108–115.

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