Rural entrepreneurship in the region

Ekaterina Abilova¹, Evgenia Zakharova¹, and Denis Davydov¹

¹Chelyabinsk State University, 129, str. Kashirin brothers, 454001, Chelyabinsk, Russia

Abstract. The village as a socio-territorial subsystem of society is a single socio-economic, territorial, natural, historical and cultural complex. The agricultural policy of any developed country should be aimed, first of all, at ensuring food security, preservation of the rural population, and the rural way of life in the conditions of competition. The components of which are the rural population, the totality of social relations related to its vital activity, the territory and the material objects located on it are components of this complex. Therefore, the sustainable development of rural areas is the basis for the stable development of the regions, both economically and socially. Farming in the context of new trends and vectors of development plays a huge role in improving the well-being of each region and the country as a whole. The main trends in the development of rural entrepreneurship in the region are identified. The contribution of small businesses to the formation of food security in the region is determined. The main conclusions of the study are reduced to the identified systemic problems of small business development in the Chelyabinsk region.

1 Introduction

In Russia, almost a third of the population lives in rural areas, and rural areas occupy three-quarters of the country's area.

Today, in rural areas, there are processes of reducing the number of settlements and the degradation of valuable lands [14,13]. All this has serious negative consequences, so the problem of rural revival and development is becoming a priority and a national scale. At the same time, Russian agriculture has a huge and still unrealized potential. A significant role in its development belongs to the subjects of rural entrepreneurship [8].

The Chelyabinsk region is one of the richest regions in Russia in terms of natural and climatic resources, covering a total area of 88.5 thousand square kilometers. A characteristic feature of the region is a highly developed industry that has a certain impact on the development of agricultural production [14]. The situation of the agro-industrial complex of the Chelyabinsk region is quite complex. This is a consequence of the model of market reforms adopted in Russia which escalated the economic contradictions within the country's agro-industrial complex. The region is affected by the effects of the 2020 drought and the coronavirus pandemic. All this hinders the ability of the agro-industrial complex of the region to double the gross product and improve the standard of living of the population.
At the same time, it is quite obvious that in order to form a highly efficient and competitive agro-industrial complex of the Chelyabinsk region, it is necessary to create conditions for its expanded reproduction which can be provided only with the sustainable development of rural areas. This problem is one of the key directions of the country's agricultural policy. In modern conditions [2], peasant farms have acquired an important role in the economic development of the village. It should be noted that peasant farms that have survived to this day, working in rural areas at the present time, as a rule, are strong farms and reliable partners.

Peasant farms play an important role not only in the production of agricultural products, turning into a successful important agribusiness, but also, most importantly, perform a number of socially significant functions: they contribute to solve social problems in rural areas, provide jobs, employment and increase the income of the rural population.

The fundamental scientific task of the project is conceptualization of promising trajectories for the development of farming in modern environmental conditions, taking into account the existing challenges and threats, unique features of the studied phenomenon (farming), its ability to overcome the consequences of unforeseen circumstances (coronavirus pandemic, natural disasters, man-made disasters, political tension, etc.).

Until recently, in most of the economic literature, private household of the population was interpreted as a natural-consumer household [12]. It was believed that it produced products only for personal consumption. And the surplus is sold on the market of consumer cooperation. The reforms led to a new stage in the history of private households of the population. As a result of a sharp deterioration in the economic conditions of reproduction in agricultural enterprises, a fundamentally new production structure has developed in the agricultural sector. Private households of the population have turned from auxiliary into the predominant source of production [7,3].

2 Materials and methods

The purpose of the study is to improve the conceptual approach to determining promising trends in development of farms in the context of modern crisis phenomena and threats, taking into account, firstly, organizational and technological uniqueness of the households themselves, secondly, the state of the environment, its mobility and challenges. In the current economic conditions, the private households of the population managed to make up for the decline in production to a large extent.

The share of products produced in private households of the population is high. It is 73.9% for potatoes, 55.5% - for vegetables, 8.8% - for meat (in carcass weight), 54.9% - for milk, 4.5% - for eggs, 92.3%, - for wool, which indicates a significant contribution of the private sector to the food supply of the region.

At present, and for the long term, the function of self-sufficiency of families remains the main one for private households. At the same time, as a result of the development of cooperation between private households and the collective sector, the commodity function of private households of the population is becoming more significant. At present, there is again the conclusion of contracts for the supply of milk from private households of the population. The households produce products specifically for sale. A relatively specialized commodity production is being created. In private households of the population, families already keep 2-3 cows, as currently the purchase prices for milk have increased, and work has been organized to collect milk.

We will analyze the current state of rural entrepreneurship and its role in the development of agriculture in the Chelyabinsk region. The dynamics of agricultural production in actual prices by categories of farms in the Chelyabinsk region is presented in Table 1.
Table 1. Dynamics of agricultural production by categories of farms in the Chelyabinsk region in actual prices: million rubles. 1991 - billion rubles (Source: compiled by the authors according to the data of the Territorial Body of the Federal State Statistics Service for the Chelyabinsk Region).

| Indicator                      | Year   | Farms of all categories |
|-------------------------------|--------|-------------------------|
|                               | 1991   | 2000                    | 2010   | 2015   | 2016   | 2017   | 2018   | 2019   |
| Agricultural products         | 4.7    | 17828.3                 | 59566.9| 118268.3| 128372.6 | 125635.1| 119416.6| 124381.1|
| including: crop production   | 1.7    | 7636.5                  | 19881.6| 44123.5  | 48009.9  | 47347.0  | 41665.6  | 42057.3  |
| animal husbandry             | 3.0    | 10191.8                 | 39685.3| 74144.8  | 80361.7  | 78288.1  | 77751.1  | 82323.7  |
| Agricultural organizations    | 3.1    | 7139.5                  | 22678.7| 66262.3  | 73598.4  | 73570.4  | 70168.3  | 74837.1  |
| including: crop production   | 0.6    | 4305.0                  | 5644.3 | 14275.8  | 14288.9  | 16552.1  | 14034.2  | 14340.5  |
| animal husbandry             | 1.0    | 5661.3                  | 17376.2| 21024.0  | 21284.0  | 19595.7  | 56134.1  | 60494.1  |
| Households of the population | 1.6    | 9966.3                  | 35095.9| 44029.8  | 44826.1  | 38776.4  | 37333.7  | 36364.6  |
| including: crop production   | 0.6    | 4305.0                  | 14431.8| 23005.8  | 23542.1  | 19180.7  | 17507.7  | 16550.8  |
| animal husbandry             | 1.0    | 5661.3                  | 20664.1| 21024.0  | 21284.0  | 19595.7  | 19826.1  | 19813.7  |
| Peasant farms (farming enterprises) | -     | 722.5                   | 1792.5 | 7976.2   | 9947.1   | 13288.3  | 11914.7  | 13181.7  |
| including: crop production   | -      | 538.0                   | 1016.0 | 6699.5   | 8529.9   | 11614.1  | 10123.9  | 11165.9  |
| animal husbandry             | -      | 184.5                   | 776.3  | 1276.7   | 1417.2   | 1674.2   | 1709.8   | 2015.7   |

The analysis of the data shows that the share of small businesses which should include peasant farms and private households of the population, in the production of agricultural products exceeds the share of large businesses which include agricultural organizations.

3 Results

The information base of the study was made up of: statistical and analytical materials of the Federal State Statistics Service of the Russian Federation (Rosstat); data from the All-Russian Agricultural Census 2016; information from the Ministry of Agriculture of Russia and its regional body on the problem under study; data obtained by the authors in the region municipalities and in the course of surveys (questionnaires and interviews) of rural residents, heads of peasant (farmer) households, representatives of administrations. The change in the structure of agricultural products by category of farms is presented in Table 2.
**Table 2.** The structure of agricultural products by categories of farms in the Chelyabinsk region in actual prices, as a percentage of the total.

| Category of farms                      | Year     | 1991 | 2000 | 2010 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---------------------------------------|----------|------|------|------|------|------|------|------|------|
| Farms of all categories               |          | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  |
| Agricultural organizations            |          | 66.0 | 40.0 | 38.1 | 56.0 | 57.3 | 58.5 | 58.7 | 60.2 |
| Households of the population          |          | 34.0 | 55.9 | 58.9 | 37.3 | 34.9 | 30.9 | 31.3 | 29.2 |
| Peasant farms (farming enterprises)   |          | -    | 4.1  | 3.0  | 6.7  | 7.8  | 10.6 | 10.0 | 10.6 |

The value expression of agricultural products does not always really reflect the existing picture of production, since it is diverse in terms of types and production technology.

Production and structure of production of the main types of agricultural products by categories of farms for the last 3 years are presented in table 3.

**Table 3.** Production and structure of production of the main types of agricultural products by categories of farms of the Chelyabinsk region.

| Production                              | Production of the main types of agricultural products, thousand tons |
|-----------------------------------------|---------------------------------------------------------------------|
|                                        | Agricultural organizations  | 2015 | 2016 | 2017 | 2018 | 2019 |
| grain (in weight after processing)      |                        | 933.4 | 1027.4 | 1107.8 | 830.7 | 797.3 |
| potatoes                               |                        | 68.1  | 53.2  | 69.4  | 71.1  | 50.3  |
| vegetables                             |                        | 52.3  | 52.3  | 49.8  | 45.1  | 41.2  |
| livestock and poultry for slaughter (in carcass weight) | | 441.1 | 475.6 | 478.6 | 487.8 | 479.2 |
| milk                                   | 133.8                  | 156.1 | 164.8 | 168.5 | 164.3 |
| eggs, million pcs                      | 1474.2                 | 1515.3 | 1597.1 | 1546.2 | 1529.6 |
| wool (in physical weight)              | -                      | -     | -     | -     | -     |

| Production                              | Production of the main types of agricultural products, thousand tons |
|                                        | Households of the population  | 2015 | 2016 | 2017 | 2018 | 2019 |
| grain (in weight after processing)      |                        | 96.9  | 107.3 | 116.8 | 100.8 | 93.4  |
| potatoes                               |                        | 539.5  | 505.5 | 444.3 | 433.8 | 374.5 |
| vegetables                             |                        | 112.9  | 105.0 | 93.5  | 88.5  | 79.7  |
| livestock and poultry for slaughter (in carcass weight) | | 58.4  | 54.7  | 51.6  | 49.6  | 46.8  |
| milk                                   | 292.7                  | 280.3 | 246.5 | 238.6 | 228.5 |
| eggs, million pcs                      | 97.6                   | 89.0  | 81.0  | 76.5  | 71.8  |
| Production                          | Agricultural organizations | Households of the population |
|------------------------------------|---------------------------|------------------------------|
| wool (in physical weight)          |                           |                              |
| Peasant farms (farming enterprises) and individual entrepreneurs |                           |                              |
| grain (in weight after processing) |                           |                              |
| 2015                               | 366                       | 2015                         | 5.7                         |
| 2016                               | 358                       | 2016                         | 5.5                         |
| 2017                               | 340                       | 2017                         | 5.1                         |
| 2018                               | 330                       | 2018                         | 5.5                         |
| 2019                               | 312                       | 2019                         | 5.3                         |
| potatoes                           |                           |                              |
| 2015                               | 37.6                      | 2015                         | 86.2                        |
| 2016                               | 38.2                      | 2016                         | 87.3                        |
| 2017                               | 51.0                      | 2017                         | 78.7                        |
| 2018                               | 77.0                      | 2018                         | 74.5                        |
| 2019                               | 81.9                      | 2019                         | 73.9                        |
| vegetables                         |                           |                              |
| 2015                               | 6.4                       | 2015                         | 74.1                        |
| 2016                               | 13.5                      | 2016                         | 71.4                        |
| 2017                               | 17.8                      | 2017                         | 58.1                        |
| 2018                               | 16.8                      | 2018                         | 58.8                        |
| 2019                               | 22.7                      | 2019                         | 55.5                        |
| livestock and poultry for slaughter (in carcass weight) |                           |                              |
| 2015                               | 3.5                       | 2015                         | 12.0                        |
| 2016                               | 3.8                       | 2016                         | 10.7                        |
| 2017                               | 4.5                       | 2017                         | 9.0                         |
| 2018                               | 4.5                       | 2018                         | 9.2                         |
| 2019                               | 5.1                       | 2019                         | 8.8                         |
| milk                               |                           |                              |
| 2015                               | 18.0                      | 2015                         | 62.7                        |
| 2016                               | 18.8                      | 2016                         | 61.6                        |
| 2017                               | 21.7                      | 2017                         | 56.9                        |
| 2018                               | 22.5                      | 2018                         | 55.5                        |
| 2019                               | 23.5                      | 2019                         | 54.9                        |
| eggs, million pcs                  |                           |                              |
| 2015                               | 1.3                       | 2015                         | 6.2                         |
| 2016                               | 1.3                       | 2016                         | 5.5                         |
| 2017                               | 1.2                       | 2017                         | 4.8                         |
| 2018                               | 1.2                       | 2018                         | 4.7                         |
| 2019                               | 1.1                       | 2019                         | 4.5                         |
| wool (in physical weight)          |                           |                              |
| 2015                               | 28                        | 2015                         | -                           |
| 2016                               | 28                        | 2016                         | -                           |
| 2017                               | 29                        | 2017                         | -                           |
| 2018                               | 26                        | 2018                         | -                           |
| 2019                               | 26                        | 2019                         | -                           |

The structure of production of the main types of agricultural products, in percent.
|                | 2015 | 2016 | 2017 | 2018 | 2019 |
|----------------|------|------|------|------|------|
| wool (in       | 92.9 | 92.7 | 92.1 | 92.7 | 92.3 |
| physical       |      |      |      |      |      |
| weight)        |      |      |      |      |      |
| Peasant farms  | 2015 | 2016 | 2017 | 2018 | 2019 |
| (farming      | 39.3 | 41.7 | 46.9 | 49.9 | 49.9 |
| enterprises)  |      |      |      |      |      |
| grain (in      | 4.9  | 5.3  | 9.0  | 13.2 | 16.2 |
| weight after   |      |      |      |      |      |
| processing)    |      |      |      |      |      |
| potatoes       | 2.8  | 5.9  | 11.0 | 11.2 | 15.8 |
| vegetables     |      |      |      |      |      |
| livestock and  | 0.6  | 0.7  | 0.8  | 0.8  | 0.9  |
| poultry for    |      |      |      |      |      |
| slaughter (in  |      |      |      |      |      |
| carcass        |      |      |      |      |      |
| weight)        |      |      |      |      |      |
| milk           | 3.9  | 4.1  | 5.0  | 5.3  | 5.6  |
| eggs, million  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  |
| pcs            |      |      |      |      |      |
| wool (in       | 7.1  | 7.3  | 7.9  | 7.3  | 7.7  |
| physical       |      |      |      |      |      |
| weight)        |      |      |      |      |      |

The analysis of data shows that grain production is mainly concentrated in agricultural organizations (44.8%).

But recently, comparing the indicators of production of the main types of agricultural products in the peasant farms of the region with the level achieved by the collective public sector, we can make certain conclusions that despite the low level of production organization, poor availability of tractors and agricultural machines in comparison with the public sector, as well as the need to solve many organizational issues in addition to production, all this did not prevent peasant farms from producing almost half (46.9%) of grain in the region, this indicates their high potential in providing them with appropriate support.

It should be noted here that peasant farms are increasingly choosing grain production as their specialization.

There is a constant reduction of cattle in the region even though the state has been increasing its support for cattle breeding in recent years [6,1]. A significant decrease in the dairy herd (cows) is observed in agricultural organizations. Their number decreased by 23% in 2019 compared to 2000. However, it is difficult to consider the farms of the population as a significant reserve for the dairy industry, since the nature of their production is mainly consumer-oriented with low marketability. The poor quality of milk produced in peasant farms and households is explained by the lack of coolers, various sanitary and hygienic conditions, and the inability to mechanize production processes. Improvement of the financial capabilities of milk producers and their sustainable development in the production of dairy products is possible only by eliminating some of the factors that include the instability of the markets for agricultural products, the seasonality of the price value caused by the fact that milk production is seasonal.

As it was already noted above, the households of the population (personal subsidiary farms) has the leading role in the production of agricultural products. The excess of milk yield compared to meat yield in the households of the population is explained by the greater role of agricultural organizations in the development of poultry farming.
4 Conclusion

Thus, the development of rural entrepreneurship in the Chelyabinsk region is an important condition for the progressive development of the agro-industrial complex of the region, increasing agricultural production, strengthening food security, increasing employment and income of the rural population, and solving other social problems in rural areas.

Dynamic and complex environment for the functioning of peasant (farmer) households requires an appropriate (interdisciplinary, integrated) approach to determining the promising trajectories of their development [9,5]. The significant dependence of the functioning of peasant (farmer) households on a number of factors, including economic, social, political and other processes, determines a special conceptualization of the prospects for the development of domestic farming in a mobile institutional environment, in conditions of high uncertainty and risks, challenges and threats. The interdisciplinary conceptual approach developed in the course of our study is distinguished by both methodological novelty and applied possibilities of its use in the study (and forecasting) of development of farming in Russia [11,10]. The scientific novelty of the research, as a result, lies, on the one hand, in its fundamental content (development of a concept for determining promising trajectories for development of farms in the face of modern challenges and threats), on the other hand, in the originality of the applied research results, namely, in the fact that the obtained during the implementation of the project, scientific and practical recommendations can be used in the specification of the role and capabilities of peasant (farmer) households in overcoming consequences of a pandemic, and in a broader sense in determining such important aspects of their activities as functioning in new environmental conditions, associated with modern restrictions (violation of international, interregional and local relations, closed territories, suspension of some enterprises, self-isolation of the population, etc.), organization of logistics, marketing and other transactions with agricultural products and resources in conditions of qiravization of the economy (in coordination of transactions with counterparties, partners, government and public structures), performance of socially significant social and environmental functions in the countryside to ensure national security (food, biological, environmental, etc.), creating conditions for successful solution of problems in the development of the agricultural sector and rural areas in difficult socio-economic situations.

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