

THE ROLE OF HOUSEHOLDS IN BEEF PRODUCTION IN UKRAINE

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Abstract: *The purpose of the study was to investigate and determine the role of households in beef production on the basis of the generalization of theoretical provisions and the analysis of analytical data. In the course of the research it was revealed that in Ukraine, in the market conditions of management, an important role was given to entrepreneurship. There are three main groups of agricultural producers in Ukraine: agricultural enterprises, farms and households. The dynamics of cattle in terms of farm categories is shown. The main factors influencing the reduction of cattle and beef production in the current economic conditions have been identified. The structure of beef production is analyzed and the main producers are identified. It is difficult to estimate the role of households in beef and veal production. The main problem of the beef and veal market is the reduction of the commercial attractiveness of the livestock industry, which leads to a reduction in the number of cattle and, consequently, a reduction in meat production. The development of beef production in households is substantiated. In general, for most rural households engaged in cattle breeding in Ukraine and developing countries, livestock production was a source of food and cash, a means of survival.*

Key words: *households, cattle, beef, source of income.*

1. Introduction

A prominent place in the program of the transition of Ukraine's economy to the

market is given to the development of entrepreneurship, including small independent enterprises. The functions that small businesses fulfill in a market

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economy are well known to specialists. At the same time, the idea of small enterprises as technologically backward, which, simply put, hinder the successful development of the economy, has taken root among most economists and managers of enterprises and industries. The small business sector performs very important functions in the economies of developed countries. First, it provides the necessary mobility in market conditions. It creates deep specialization and extensive cooperation in production, without which its high efficiency is impossible. Secondly, it is able not only to quickly fill the existing niches in the consumer sphere, but also to pay off relatively quickly, sometimes using the latest equipment and technology. Third, small businesses create the necessary atmosphere of competition for the market. A variety of forms, that quickly appear and disappear, is ready to react immediately to any changes in market conditions. Fourth, (and this is, at least, the most important), it creates the environment and spirit of entrepreneurship, without which no market economy, built primarily on personal interest and initiative of producers, is impossible. Finally, a small business is a job provider for many segments of the population [29].

Meat is one of the main livestock products of greatest interest to the human population. In a global context, its importance lies not only in its nutritional properties associated with the contribution of protein (with amino acids with high bioavailability), fats, vitamins and minerals [15], [19]. Livestock and meat production affect the environment [6].

Livestock is one of the system-forming branches of the agricultural economy, the development of which contributes to

solving the country's food problem, financial stability of agriculture and vast employment [8].

Livestock is one of the fastest growing agricultural sectors. Sustainable livestock systems can help reduce poverty and end hunger, as well as improve nutrition and food security. They also have complex interactions with ecosystems. They contribute to solving the problems of environmental degradation and climate change as well as of biodiversity conservation. It is estimated that the existence of 60% of rural households in low and middle-income countries depends on livestock [30].

Beef production is one of the most important elements of the meat sector of the economy. Cattle farming, especially focused on meat, has always played an important role in overcoming the food problem. From an economic point of view, beef is not only part of the supply of agricultural products, but also a way to dispose of pasture land, which would otherwise have little value for food production. Meat production also has a stronger impact on the use of labor resources and thus contributes to the creation of jobs on farms and rural development in general [12].

The works of domestic and foreign scientists and specialists are devoted to the study of beef market problems. Shust and Radko [21] conducted the study of trends in the functioning of beef cattle breeding in Ukraine and provided the definition of the main factors of development of the industry for the future.

Based on analytical data, Leskiv [11] conducted the modeling of the dynamics of supply and demand in the market of meat and meat products.

New prospects for the beef market were determined by Kernasyuk [7], noting that “beef remains one of the promising, but still underdeveloped areas of diversification of domestic agricultural exports. If all conditions and permits for the export of this type of meat to the Middle East and North Africa are agreed upon, the livestock industry will receive a new impetus for development, as well as an additional incentive for revival. However, currently the opportunities to expand beef exports from Ukraine are objectively limited by a significant reduction in its production due to the long-term reduction in the number of cattle [7]. Given the severity of these problems, research in this direction needs to be deepened.

The aim of the study. On the basis of the generalization of theoretical positions and the analysis of analytical data, the aim is to investigate and determine the role of households in beef production.

2. Methodology

The theoretical and methodological basis and the information basis of the study were the scientific developments of domestic and foreign scientists on the problems of production and consumption of beef.

The information basis of this study is the official statistics of the State Statistics Service of Ukraine regarding the livestock and production of major types of meat [22].

The following methods were used in the research process: monographic – when detailing beef producers in Ukraine; comparative analysis – to compare indicators and identify trends in their change over time; statistical – when

assessing the beef market; abstract-logical – to formulate conclusions; tabular – for a visual representation of the results of the study.

3. Results and Discussions

The transition to the market economy was accompanied by the destruction of the corporate sector of agriculture and the living environment deterioration of the rural population by sustainable supply chain development [28].

The processes of uncontrolled concentration of production have led to structural deformations in the agricultural sector. Thanks to state intervention, the corporate sector has emerged, monopolizing economic power and political rent. On the other hand, there is an individual sector (households and family farms), which is practically not supported by special program activities. Corporate farms produce the most commercially attractive and export-oriented products and control the following links in the value chain [4].

There are the following main groups of producers of agricultural products in the agriculture of Ukraine: agricultural enterprises, farms, households:

- Agricultural enterprises are enterprises that operate mainly on leased land and are oriented towards commodity production; this category includes joint-stock companies and subsidiary companies, private companies controlled by an entrepreneur-owner of private assets, etc.; this category comprised about 12,000 enterprises in 2018, including small forms of economic activity, which carried out economic activities in the reported

year and they employ approximately 60 % of agricultural land value;

- Farms are a form of entrepreneurial activity of citizens who have expressed a desire to produce commodity agricultural products, to carry out their processing and realization in order to generate profit on land plots given to them as property and / or for use, including lease, for the management of a farm, commodity agricultural production, personal peasant economy, in accordance with the law; at present, this category has about 33.500 farms, which cultivate up to 10 % of the agricultural land;
- Households engaged in agricultural activity both for self-provision of food products and for the purpose of production of commodity agricultural products; this category of producers is also referred to as individual entrepreneurs who carry out their activities in the field of agriculture [17].

There are more than 200 holdings in the agricultural sector of Ukrainian economy, 100 of which have from 15 to 650 thousand hectares of land use. They produce one third of Ukrainian grain, provide 35% of its export and use 30% of agricultural land in Ukraine.

The analysis of trends and changes in the number and share of agrarian enterprises in terms of their organizational and legal form during the period from 2012 to 2017 demonstrates growth only in the form of private farms by 102 units from the level of 34035 to the level of 34137 units which amounted to 0.3%. All other organizational forms showed a decrease. The number of cooperatives fell most dramatically from 848 to 448 units, i.e. a drop by 400 units or by 47.2% [16].

A significant part of the individual sector is involved in agricultural activities and a large part of the rural population exists through family farming in Ukraine [3]. The individual sector produces more than half of the agricultural GDP, employing 78% of those employed in the agricultural sector. Individual farms are disorganized and produce low-cost and labor-intensive products: beef, milk, potatoes, vegetables and fruits. They are focused on food self-sufficiency and on supplying for the domestic food market [4].

The positive dynamics of resource supply and, accordingly, the volume of agricultural production characterize the development of farms in Ukraine. In particular, the volume of crop production in the period 2005–2017 increased 7 times and livestock almost 6 times. Among the hindering factors for the development of farms are the following: low efficiency of agricultural production; psychological barriers to entrepreneurship, lack of appropriate social status of “family farm”; insignificant investments; under-development of formal cooperative ties; insufficient level of special education; low efficiency and inconsistency of state support; incompleteness of land reform. In addition, despite the positive trend of improving agricultural production efficiency in farms, the opportunities for profitable production of basic agricultural products in small farms have not been fully realized [27].

The institutional structure of the domestic agricultural sector is characterized by the existence of historically formed independent entrepreneurship on land that has been preserved in the informal economy of private peasant households, which, under certain institutional conditions, can

transform into farm partnerships and enterprises [16].

When assessing the state of beef production in Ukraine, it should be emphasized that it is characterized by tendencies to reduce production and reduce efficiency. The negative trend of

declining cattle numbers has been going on since the 1990s. In general, the number of cattle in the period 1991-2018 decreased by 7.4 times (Table 1). The reduction occurred both in agricultural enterprises and in households.

Livestock in Ukraine at the end of the period [a thousand heads] Table 1
(formed and calculated on the basis of data [22])

Year	Farms of all categories	Including	
		Agricultural enterprises	Households
1990	24623.4	21083.3	3540.1
2000	9423,7	5037.3	4386.4
2005	6514.1	2491.8	4022.3
2010	4494.4	1526.4	2968.0
2018	3332.9	1138.1	2194.8
2018/1990 [%]	13.5	5.4	62.00
2018/2000 [%]	35.4	22.6	50.0

It should be noted that the number of cattle kept on households has suffered a slightly lower decrease as compared to agricultural enterprises. In 2018, the number of cattle in this category of farms decreased by 38.0% as compared to 1990. The sharp decline in the number of cattle in all categories of farms is due to a number of factors. Undoubtedly, one of the most significant of them is the loss of production due to its high cost, which is a consequence of outdated technologies, rising prices for input material and technical resources and services (feed, mainly grain, veterinary drugs, logistics services, energy). There was also the economic disinterest of producers to engage in cattle breeding, which is explained on the one hand by low purchase prices for them, and, on the other hand, by high retail prices for beef and veal and processed products, meat products and a low purchasing power of end users [9].

The share of households in the structure of livestock and poultry has undergone significant transformations. If in 1990, 85.6% of cattle were kept in agricultural enterprises, at the end of 2018, agricultural enterprises kept 34.1% of cattle. Thus, 66% of cattle are concentrated in households. In 2018, this category of farms provided 76.0% of beef production in Ukraine.

The share of beef in the structure of production of all types of meat decreased significantly. In the period 1990-2000, the basis of meat supply was beef, which occupied a stable share of 45.5% in the structure of production. Furthermore in 2018 it decreased to a lowest level of 15.2% or almost three times.

The beef market in Ukraine has recently been negatively affected by economic factors, which has made cattle breeding financially unprofitable and the price of the final product too high for consumers. This actually narrows the establishment of

a rational meat balance in a country where beef should account for at least 30%.

Our research results confirm similar trends in other countries. Thus, Charykova and Popova [5] noted that the analysis of beef production by categories of farms showed that it is concentrated in households. However, in recent years, these farms have seen a decline in production with a simultaneous increase in volumes in agricultural enterprises, which is a positive trend that allows the use of the latest advanced technologies.

Svynous et al. [24] note that the dominance of production of basic types of livestock products in households in Ukraine is caused by several circumstances. First, the different directions of livestock development of agricultural enterprises in the private sector in the period 1990-2009, which led to the cessation of livestock production in most farms in the corporate sector. Livestock production for most rural households is a source of cash and food.

Households have become major producers of milk and meat due to significant reductions in the agricultural production of these products. The main reason for the development of livestock production in the private sector is untimely and meager wages in collective farms, as well as the low level of pension provision for pensioners living in rural areas [20].

We fully agree with the position of the authors [25], who rightly point out that most personal farms are focused on the consumption of products grown within the household, and income is seen as a source of survival in a difficult life situation, an additional resource to overcome financial difficulties. Such an

economy is characterized not by a focus on commodity production, but on maintaining the viability of the household, while using all available resources that make it independent of the unstable external economic environment, thus helping to maintain material and social status.

The domestic market of meat products of cattle breeding functions spontaneously due to weak infrastructure, the presence of a large number of intermediary structures, the imperfection of the mechanism of market relations between commodity producers of meat products, its processors, and trade. At the same time, cattle breeding remains one of the leading, historically traditional branches of animal husbandry for Ukraine, capable in the conditions of limited material and financial resources not only to increase the production of raw materials for the meat processing industry, but also to save costs due to the unique qualities of beef [21].

This situation is the result of a number of factors that led to the decline of the industry. Today the problem of the development of beef cattle breeding and of the formation of the beef market ceases to be purely economic, organizational or technological, but acquires an acute social character and is closely related to the improvement of production relations, to the formation of a new type of employee, as well as to living standards [18].

Many members of the scientific community emphasize the importance and necessity of raising cattle in households. Kristjanson, P. et al. note that livestock is considered an important means of lifting poverty for the rural population in developing countries [10].

In a study by McDermott et al. [13] the importance of cattle for the rural population is confirmed. In particular, it is noted that 1 billion poor people worldwide depend on livestock as a source of livelihood.

Livestock play a very important economic, social and cultural role for the well-being of rural households if they contribute to increasing the income and well-being of the farming family. Livestock helps provide food, family food, family income, asset savings, soil productivity, livelihoods, transportation, agricultural traction, agricultural diversification and sustainable agricultural production, family and social employment, ritual goals and social goals [1], [14].

Livestock, as life savings can be converted into cash when needed by the family, as it is a security asset that affects access to informal loans and borrowings, as well as a source of collateral for loans. Livestock products are an important means of exchange between rural households and in sales it contributes to the development and strengthening of rural markets. Rural markets are an important element of the rural community and a significant contribution to the well-being of rural families. The social functions of livestock correspond to the symbolic values associated with each species and the use of animals to perform a number of rituals and social obligations of families and communities. In some cultures, cattle are considered sacred (in India) [2].

This rising demand for beef presents poor livestock producers with significant opportunities to increase the benefits gained from their livestock and raise income through increasing livestock sales. However, to date there have been few documented examples of smallholder

farmers being able to take advantage of these opportunities. The smallholder families in Vietnam, whose livelihood was based on small, diversified crop–livestock farms, were able to change from being traditional “cattle keepers” to becoming market-oriented “cattle producers” within a relatively short time span [23].

Establishing strong links between small producers and agri-food businesses guarantees the latter sustainable development of their businesses and rural household’s access to profitable markets [3].

The intensification of livestock production is widely advocated for so as to meet the increasing demands for livestock products and to contribute to improving the livelihoods of rural households [26].

4. Conclusions

The results of the study indicate that the transformation processes that took place in the country’s economy in the early 90’s were accompanied by the destruction of the existing economic system and the deterioration of the living environment of the population in rural areas. Under these conditions, the formation of the entrepreneurial way of management in the countryside took place.

The role of households in beef production is huge and difficult to estimate. A significant number of studies by domestic and foreign scientists confirm this. In Ukraine, for most rural households, livestock production has become a means of survival, a source of cash and food. Households provide 76% of beef production. The main problem of the beef market is the reduction of the commercial attractiveness of the livestock industry,

which leads to a reduction in the number of cattle and, consequently, to a reduction in meat production.

Research has generalized the importance of cattle and beef in providing food to households. Important areas of development of meat cattle breeding in households are its intensification and cooperation.

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