

# THE CURRENT STATE AND PERSPECTIVES OF LIVESTOCK PRODUCTION DEVELOPMENT IN FAMILY FARMS IN UKRAINE

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## Abstract

The article presents the current state and role of Ukrainian family farms for agricultural production, especially for animal production. Based on statistical data the dynamic of development of family farms, changing of land plots size, type of it use as well as other indicators are overviewed. The particular importance of family farms for animal production is shown with emphasis on milk production. The dynamics of these changes are demonstrated using the number of livestock as an indicator of family farm development. Also the main actions, which need to be implemented to improve the economic and legislative environment for these farms are indicated.

*Keywords: family farms, animal husbandry, Ukraine, livestock number, gross agricultural output.*

Traditionally privately-owned family farms in Ukraine have been active in the production of agricultural products, including animal products. This results from the need for an additional source of income in the current economic situation, as well as traditional employment of the rural population in agricultural production and the availability of such skills. In the modern sense, family farms are people/families, engaged in agricultural activity to produce agricultural products both as subsistence farming and for sale [10].

Despite the considerable industrial potential of agricultural enterprises, family farms play a significant role in providing people with food. According to the State Statistics Service of Ukraine, in 2014 family farms produced agricultural products worth 112.4 billion UAH, which is 45% total national production [5, 6]. Out of this amount animal products accounted for 40.2 billion UAH, or 55% total production. (Table 1). For certain types of products family farms are the main producers. Thus, in the structure of gross agricultural output the production of potatoes, vegetables and melons by family farms accounts for 91.2%, fruits and berries - 84.4%, milk - 76.3%, livestock and poultry - 38.6%, respectively. In general in 2014 family farms produced 8.49 million ton of milk (76.2 % total production) and 1.37 million ton of meat in carcass weight, which is equivalent to 41.2 % total production.

**Table 1. Structure of gross agricultural output in 2014**  
(excluding the temporarily occupied territory of Crimea)

Indicator	All categories of enterprises		including			
			Ag. enterprises		Family farms	
	million UAH*	%	million UAH*	%	million UAH*	%
<b>Total gross agricultural output</b>	<b>251 438.6</b>	<b>100.0</b>	<b>139 058.4</b>	<b>100.0</b>	<b>112 380.2</b>	<b>100.0</b>
<b>Crop production</b>	<b>177 707.9</b>	<b>70.7</b>	<b>105 529.5</b>	<b>75.9</b>	<b>72 178.4</b>	<b>64.2</b>
including						
potatoes, vegetables and melons	46 497.3	18.5	4 083.9	2.9	42 413.4	37.7
fruits and berries	7 721.1	3.1	1 406.7	1.0	6 314.4	5.6
<b>Animal production</b>	<b>73 730.7</b>	<b>29.3</b>	<b>33 528.9</b>	<b>24.1</b>	<b>40 201.8</b>	<b>35.8</b>
including						
Raising of slaughter animals and poultry	33 871.1	13.5	20 746.2	14.9	13 124.9	11.7
Milk	28 246.1	11.2	6 584.1	4.7	21 662.0	19.3
Eggs	9 114.7	3.6	5 833.5	4.2	3 281.2	2.9
Wool	10.8	0.0	1.6	0.0	9.2	0.0
Other animal products	2 488.0	1.0	363.5	0.3	2 124.5	1.9

• UAH = Ukrainian hryvnya; 1 Euro = 26 UAH

It should be noted that agrarian sector ~~family farms~~ continuously increase their production capacity. Thus, at fixed prices of 2010, in 2014 the growth of gross agricultural production in comparison with the previous year was 2.2%. (Table 2).

**Table 2. Gross agricultural output in 2012-2014**  
(excluding the temporarily occupied territory of Crimea)

Indicators	Years			share, %
	2012	2013	2014	
<b>Gross agricultural output – Total</b> (in fixed prices of 2010), billion UAH	<b>216.6</b>	<b>246.1</b>	<b>251.4</b>	<b>100.0</b>
Agricultural enterprises	110.1	133.7	139.0	55.3
Family farms	106.5	112.4	112.4	44.7
<b>Increase/reduction of production of agricultural products comparing to previous year, %</b>	<b>-3.9</b>	<b>13.6</b>	<b>2.2</b>	
Including:				
<b>Animal production – Total</b>	<b>70.8</b>	<b>74.0</b>	<b>73.7</b>	<b>100</b>
Agricultural enterprises	29.6	32.4	33.5	45.5
Family farms	41.2	41.6	40.2	54.5
<b>Increase/reduction of production of agricultural products comparing to previous year, %</b>	<b>4.3</b>	<b>4.5</b>	<b>-0.4</b>	

It should be emphasized that despite the importance of family farms in the production of

agricultural products, recently they have been observing a reduction of production intensity. During the last five years, the share of family farms in gross agricultural production, both crops and livestock, has decreased, resulting in an increased share of agricultural enterprises. Compared to the year 2010 the share of family farms in agricultural output decreased by 5.6 percent, including crop and livestock production by 6.8% and 6.9%, respectively, leading to an increase in the share of agricultural enterprises.

It is clear that the basis for agricultural production is the availability of land resources. According to land survey records, the total area of agricultural land in Ukraine at the beginning of 2015 was 42.7 million ha, of which 32.5 million ha is arable land. In terms of property structure 38.4% of the total area of agricultural land was privately owned and used by family farms, while for the agricultural enterprises it was 49.2% and others - 1.5%. The rest, i.e. 10.9%, were reserves and lands with no assigned ownership and usage.

More than half of rural households use land plots of less than 1 hectare, 26% - from 1 to 5 hectares, while 12% of households – 5 to 10 hectares. In turn, 5% of rural households use more than 10 hectares of land. As for urban households 68% of them use land plots of less than 10 acres, and 21% - from 10 to 25 acres.

According to the results of the survey the number of households in Ukraine in 2015 is 15074 thousand. (Table 3). A total of 67% households live in urban areas, including 39% in cities (with population of 100,000 people or more) and 28% - in small towns. The average number of people per household in Ukraine fluctuated, but since 2010 it has remained at the same level and now it is 2.59 persons.

**Table 3. Dynamic of household development in Ukraine**

Indicators	Year						
	2009	2010	2011	2012	2013	2014 *	2015 *
<b>Total number of households, ths.</b>	<b>17096.8</b>	<b>17050.3</b>	<b>17022.7</b>	<b>16984.1</b>	<b>16958.7</b>	<b>16076.3</b>	<b>15073.7</b>
Households which have animals, poultries and bees, %	30.6	30.0	30.1	29.8	29.2	30.5	31.1
Number of households, which have land plots, ths.	9684.9	9430.3	9359.8	9346.7	9205.6	8847.5	8324.0
from total number, %	56.6	55.3	55.0	55.0	54.3	55.0	55.2
<b>Distribution of households according to size of land plots in use, %</b>							
10 acres and less	35.7	35.7	35.4	35.3	36.0	34.8	32
10.1–25 acres	17.4	16	16.6	17.6	17.2	18.1	19.2
25.1–50 acres	11.4	11.4	11.1	10.0	9.5	11.2	12.2
50.1–100 acres	10.2	10.5	10.6	10.5	10.4	9.3	9.6
1.1–2 ha	4.7	4.9	4.8	5.3	5.8	4.8	5.7
2.1–5 ha	9.5	9.9	10.5	9.7	10.4	11.1	10.3

5.1–10 ha	7.2	7.4	7.2	7.7	7.5	7.4	7.7
10.1 ha and more	3.9	4.2	3.8	3.9	3.5	3.3	3.3
	100.0	100.0	100.0	100.0	100.0	100.0	100
<b>Distribution of land plots according to type of use, %</b>							
subsistence	15.4	14.7	15.0	14.2	15.8	15.8	17.1
for production of food for family consumption and for sale	13.5	16.1	12.7	14.5	12.3	11.6	10.7
rent	70.2	67.6	71.3	70.2	70.8	71.7	71.4
beginner	0.9	1.6	1.0	1.1	1.1	0.9	0.8
	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* - excluding the temporarily occupied territory of Crimea and the zone of the antiterrorist operation.

As can be seen from Table 3, in Ukraine we have been observing a permanent reduction in the number of households. Only in the last 5 years their number decreased by 11.6%. At the same time a tendency has been seen for family farms to increase the size of their land plots at the expense of small (less than 10 acres) and relatively large farms (more than 1 ha). Considering the fact that the land plot of 1 ha is enough for the subsistence production of food for a family of 4 persons [2], this tendency coincides with an actual reduction of land plots, on which the agricultural products were produced for sale, from 16.1% in 2010 to 10.7% at the beginning of 2015.

A special role is played by family farms in livestock production. As of 1 January 2015 in Ukraine there were 2262.7 thousand cattle, of which 1733.5 thousand head (76.6%) were in family farms. Out of 7350.7 thousand pigs 3617.9 thousand (49.2%) were in family farms. A considerable proportion of sheep and goats were also raised on family farms - 1165.6 thousand head (85%).

A particularly important role is played by family farms in milk production. Since 2000 more than 1.2 million of family farms produce almost 80% of all Ukrainian milk (Fig. 1.) [4, 9].

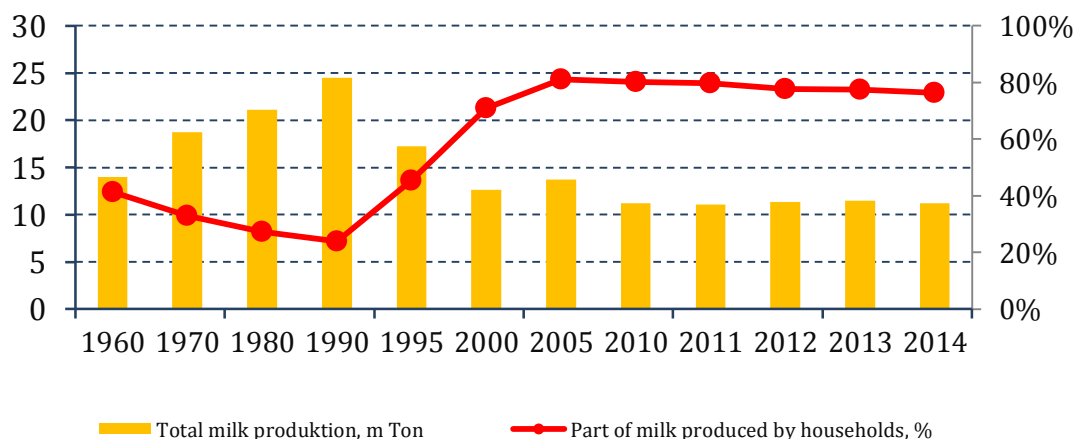


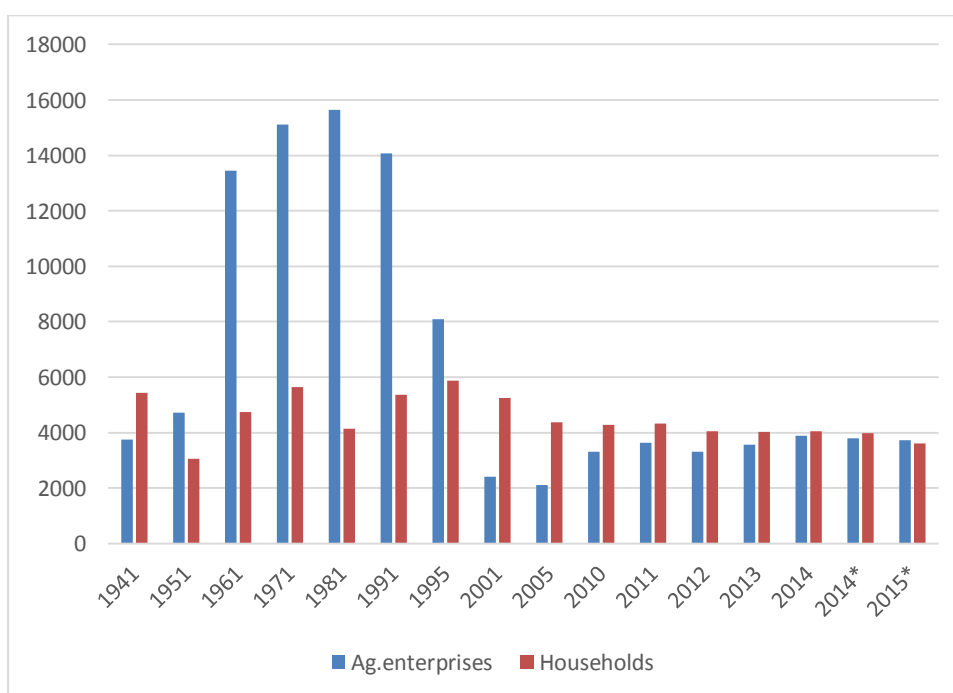
Figure 1. Role of family farms in milk production in Ukraine.

It should be noted that livestock in family farms was not exposed to a significant negative influence of agrarian reforms implemented in Ukraine. Thus the entire livestock population comparing to agricultural enterprises was more or less constant and stabilized in the last 5 years (Figs. 2, 3, 4), although it continues to decline slightly [1, 8].



**Figure 2. Number of cows (as of January 1; ths. head)**

\* - excluding the temporarily occupied territory of Crimea and the zone of the antiterrorist operation.



**Figure 3. Number of pigs (as of January 1; ths. head)**

\* - excluding the temporarily occupied territory of Crimea and the zone of the antiterrorist operation.

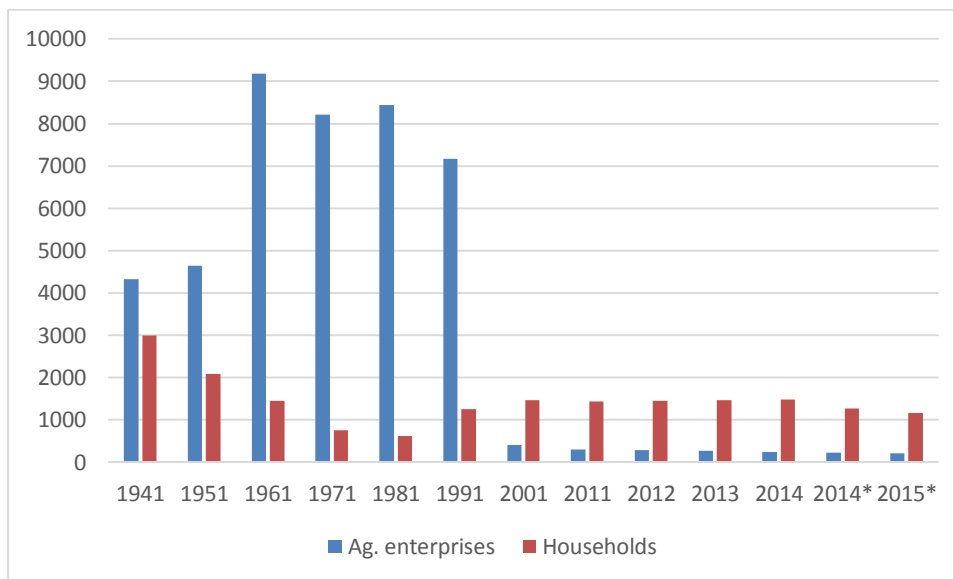


Figure 4. Number of sheep and goats (as of January 1; ths. head)

\* - excluding the temporarily occupied territory of Crimea and the zone of the antiterrorist operation.

It needs to be stressed that for family farms that are engaged in dairy cattle production the typical trends are similar to those for all other family farms, i.e. on the one hand – reduction of their number, and on the other – an increase in the number of animals per household. In particular, for the last 5 years the share of family farms with one or two cows decreased by 2.9 and 0.1%, respectively. At the same time the share of family farms with three or more cows increased (Table 4). However, it should also be mentioned here that the intensity of these changes is low.

Table 4. Distribution of family farms by number of livestock species, %

	2010		2014		Difference 2014/2010	
	Cows	Pigs	Cows	Pigs	Cows	Pigs
<b>Household without animals</b>	<b>71.8</b>	<b>67.6</b>	<b>74.2</b>	<b>67.8</b>	<b>2.4</b>	<b>0.2</b>
Family farms with animals						
1 head	21.6	12.3	18.7	12.3	-2.9	0.0
2 head	5.5	14.2	5.4	13.5	-0.1	-0.7
3 head	0.8	3.0	1.3	3.2	0.5	0.2
4 and more head	0.3	2.9	0.4	3.2	0.1	0.3

There are some reasons, which complicate the development of animal production in family farms: lower prices for produced products comparing to those for agricultural enterprises, restricted access to financial resources and insurance, changes in the rural population, disproportionate

taxation, difficulties with access to the market, limited capacity for cooperation, etc.

To support family farms in Ukraine during 2010-2012 certain financial measures were used, including compensation for cost of small-scale milking equipment (for owners of more than 3 cows), and partial compensation for maintenance of calves [3]. Moreover, regional programs were introduced in some regions [7]. However, these actions were not systemic and produced no significant effects.

### **Conclusion**

It is clear that family farms are considered not only as producers, but also as a factor both in the sustainable development of rural areas and preservation of traditions and consumer preferences. That is why the government is planning to implement a number of measures to support this segment of agricultural producers. With this aim the policy report for "Developing strategy of agriculture and rural areas in Ukraine for 2015-2020 years" was prepared, in which a separate section is devoted to the development of family farms and quality of life in rural areas. It is planned to implement two basic measures to support the development of family farms and improve legislation on cooperatives. To achieve this it is necessary to:

- legally distinguish the term "family farm" as a future model for households, which would provide certain tax benefits and rationalize pension legislation for the rural population;
- facilitate market access and regulate veterinary-sanitary standards, it is expected to develop a separate law on local agricultural markets, where only family farms can sell their products after the acquisition of a separate status;
- make changes to the legislation on cooperation to expand the circle of active participants of the cooperative movement and to involve transformed households/family farms to participate in the cooperation.

In support of these processes it is planned to make appropriate changes to the legislation of Ukraine "On Support of Agriculture", which determines the conditions of access to state support for family farms.

At present a new law "On self-regulatory organizations in agriculture" is being developed, which will facilitate mergers of family farms with other producers of agricultural goods in non-governmental organizations, with the right to obtain delegated rights from state authorities to regulate their own activities, including the participation in animal breeding activities (the Act of Ukraine "On livestock breeding"). Other laws aiming at the improvement of legal conditions for animal production have already been amended (the Act of Ukraine "On animal identification").

We also need to stress an active role of some domestic and international organizations such as Heifer and Danone, which try to help family farms to improve the quality of their products.

Implementation of the planned measures will allow to maintain and to ensure active involvement in the production of high quality products for family farms, and also will guarantee high standards of living for residents of rural areas.

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