

COMPARATIVE EFFICIENCY OF DIFFERENT LEGAL FORMS ON THE EXAMPLE OF AGRO-INDUSTRIAL COMPLEX OF BELARUS

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Abstract

Agriculture of Belarus is dominated by state large-scale farms (an average circa 5,500 ha per farm), which account for about 75% of production, the share of small (about 100 hectares per farm) private farms is about 1% of production. Small (about 1 hectare) private unincorporated household farms produce about 24% of agricultural output. State for many years has been relying on development of large agricultural organizations. At the same time, small private enterprises continue to develop and demonstrate a more effective work compared to public corporations. The article analyzes effectiveness of various organizational and legal forms of organization of agricultural production, the main factors, which are hampering development of small and medium agribusinesses.

Key words: Efficiency, agriculture, Belarus

INTRODUCTION

For more than decade agriculture in Belarus has been developing dynamically. A necessary safety reserves have been set up. Occupying 0.15% of the global area and accounting of 0.17% of population, the country produces 6% of world output of flax; 2.8% - potatoes; 1% milk; 0.6% of sugar beet; 0.3% of meat; 0.24% of grain. Stable growth of gross agricultural production is ensured: in 2013 compared to 2005 production increased by more than 48%. This corresponds to general growth rate of the Belarusian economy and share of agricultural output in GDP has remained at 8.2-8.5%.

Agriculture is represented by:

- Public sector (large agricultural organizations);

and private – setting up legal entities (private (peasant) farms (PPF)) and unincorporated (personal subsidiary plots). The state is gradually moving away from strict regulation of activities of agricultural organizations. Foreign trade legislation has been liberalized aiming to access the WTO. Only a few elements of control system applied in the early stages of transition have survived. Importance of economic methods of regulation of agro-industrial complex is enhanced.

STATE AND MAIN TRENDS IN DEVELOPING ENTERPRISES OF DIFFERENT FORMS OF OWNERSHIP IN AGRO-INDUSTRIAL COMPLEX OF BELARUS

Targeting large commodity production is one of the factors of sustainable development policies implemented by the government. About 75% of gross agricultural output is provided by entities of this group. Over the past 10 years the proportion of households in this category increased by 14%. In 2013 compared to 2005 large-scale agricultural enterprises provided growth by 72% whereas agricultural production increased by 48%.

World practice shows that large enterprises are most receptive to innovation. They are able to accumulate necessary resources for implementation of modern technical and technological solutions, production and marketing. Reduction of costs per unit of output is achieved at the expense of scale and specialization of functions performers. Such enterprises are in a better position to attract highly qualified personnel in the field of technology, personnel management and financial flows and marketing.

Economic and legal basis of land relations adopted in the country, based on state ownership of agricultural land, contribute to the process of enlargement of enterprises and controlled improvement of zonal specialization of production. Since it is the owner - the state, which pursues common economic interests that eventually, takes decision to change the land-use area of entities to improve the efficiency of their operation. As a consequence, an average size of large state-owned enterprises is 5,500 hectares, meanwhile levels of natural fertility of the Belarusian land has been elevated 5 times.

The country achieved annual production of 9.2 million tons of grain; 6.9 million tons of potatoes; 1.5 million tons of vegetables; 4.8 million tons of sugar beets, 52 thousand tons of flax fiber, 630.4 thousand tons of fruits and berries, 6.8 million tons of milk, 1,557 thousand tons of livestock and poultry. It is worth noting that development is intensive. For example, productivity of cows in large state-owned enterprises saw a double increase from 2,154 kg in 2000 to 4,507 kg in 2013.

During 2005-2013 the country had exported agricultural products worth 24.6 billion U.S. Dollars, including 5.8 billion USD in 2013 with a foreign trade surplus of 1.6 billion US Dollars.

Active modernization of logistics of agricultural production is effected by upgrading machinery and tractors, construction, reconstruction and technical re-equipment of production facilities.

Along with dynamic development over the past ten years, state-owned large farms experience serious problems.

The most important is **low efficiency of agricultural production**. The branch works profitably, the number of unprofitable enterprises decreased from 16% in 2004 to 5.4% in 2012. However, with general positive trend during the last decade in 2013 the decline in efficiency of agricultural production and observed. It endangers execution of parameters stipulated by the State Program of Sustainable Development.

The second one is **large debts**. As of 01 January 2014 financial liabilities of agricultural organizations reached 6 billion Euros and increased by early 2013 by 41.4 percent. Overdue financial liabilities amounted to 0.6 billion Euros up by 76.8 percent.

Less favorable climatic conditions and short growing season of plants compared with many countries of the European region, higher costs for construction and maintenance of fixed assets in livestock breeding, dearness of material resources, deterioration of material and technical base in rural areas, lack of personnel, local monopoly of intermediaries and processors, administrative barriers that dictate prices for agricultural products and preventing creation of conditions for fair competition don't work in favor of the Belarusian agricultural producer and require priority in finding solutions at present stage.

Another problem is **the losses incurred by business entities as a result of unequal cross-sectoral exchange of goods**, even with state support are not fully compensated. In 2013 solely agriculture spent about 0.4 billion euros for increase of prices for used input resources, of which only 33% was compensated by an increase in purchase prices.

In Belarus, together with large organizations agricultural products are made by various forms of household entities: personal subsidiary plots of rural population; urban households; citizens involved in collective gardening as part of gardening associations and suburban cooperatives and many others. Materials of the state statistical agencies referred all of them as private households. There are about one million personal subsidiary plots.

This branch of economy retains its importance in ensuring food safety of population and maintaining food security of the state. There is a tendency to reduce the number of households. In 2013 the total sown area in households decreased by 24.6 thousand hectares (5%), the population of cattle - 27.2 thousand (16.5%), including cows - 20.7 thousand (15.8%), pigs - 413 thousand (46.8%). Households produced agricultural products worth 23.8 trillion Rubles or 22.6% of total production in the country (in 2011 - 27.8%). In 2013 population produced 499.3 thousand tons of milk, 1,170.4 million eggs and sold livestock and poultry in live weight - 167.3 thousand tons or 84.7, 100.5 and 97.5% respectively to the previous year. This process is caused by rising of real incomes, development of large-scale

production and migration of rural population to cities and large towns. This trend is typical for countries with developed market economies, where long ago production at home acquired the amateur nature and is not focused on commodity production.

Studies have shown low levels of procurement and marketability of agricultural products in individual farms. According to official statistics it is about 1% for potatoes, 2.1% for vegetables, 24% fruits and berries and 42% for milk. The nature of consumer activity of private farms explains this situation, only a small number of farms exhibit entrepreneurial activity and are ready to market large part of their products, most sell a small part of the surplus. Activity of population differs a lot depending on the area, say, in the Stolin and Pinsk districts it exceeds 25%, while in the Bragin and Slavgorod it is 6%.

On average in the country - 10%, i.e. of 1 million personal subsidiary plots about 100 thousand turned into active households, which, along with the peasants' farms and large agricultural enterprises manufacture and sell agricultural products. These peasants' farms can easily be assumed a reserve for further development of officially registered farmers. However, it should be noted that the country did not create conditions for transition from personal subsidiary plots to another legal form of organization; as a consequence, there are personal subsidiary plots with a turnover of 200,000-300,000 US Dollars and peasants' farms with turnover of approximately 200,000 US Dollars.

It is possible to speak about similarity of personal subsidiary plots with peasants' farms only with reservations. Firstly, keeping a personal subsidiary plot is a form of non-commercial activity whereas farming is an entrepreneurial activity. Secondly, private farm initially has physical limitations of the area and outbuildings usually formed during many years of rural life experience. When taking up the livestock, significant restrictions are imposed by location of premises and barns for cattle in close proximity to residential areas.

Farms in Belarus do not develop as active as entrepreneurs in general. They appeared later than the first businesses, and ways to strengthen them in the past decades have been much less than that of entrepreneurs, not related to land. Only in 1991 a law was passed that regulated operation of farms. Practice of creation and developing farmers' movement in the country is quite ambiguous. Their growth in the early 90-s was gradually replaced with a fall in the 2000-s: in 1990 there were 84 farms. As of 01 January 2014 there were 2,436 farms in Belarus.

In the system of agricultural production farms have the highest rates of growth of agricultural production, gradually increasing their share in agricultural output. So, for 2011 growth of agricultural production to the previous year exceeded 47%, including in crop – 55%, whereas in livestock - only 1% in 2012, respectively - 4.9, 4.3 and 9.5%.

In 2012 farms, having 1.6% of agricultural land, produced 1.5% of agricultural production in the country, including grains - 1.4%, potatoes - 3.9, vegetables - 13.3%.

Among organizations engaged in agricultural activities for the period 1995 to 2011 the proportion of farms in potato production has increased from 3.4 to 17.8%, vegetables - from 2.6 to 39.5%.

Main field of activity is crop farming, which accounts for over 80% of the total agricultural output.

In a competitive market level of profitability of large scale, especially organized on an industrial basis, agricultural production is superior to almost any private farms, to say nothing about personal subsidiary plots. It had been proved by experience of other countries. That is why farmers who often begin in the traditional agriculture of Belarus branches cannot compete with large agricultural organizations and get liquidated. At the same time private farms and personal subsidiary plots prosper provided at the beginning they specialize in grain and cattle, and then switched to crops and animals, as state-owned enterprises and agricultural cooperatives are reluctant to deal with these.

EVALUATION OF EFFICIENCY OF PERFORMANCE BY TYPES OF FARMS

Statistical data released in official publications, is not sufficient to fully evaluate performance of private enterprises (private farms and personal subsidiary plots), as official statistics do not publish information on the value of fixed assets, available technology, the main economic indicators. Private farms use simplified book-keeping, not sufficient for a complete analysis whereas personal subsidiary plots practically keep no records. Therefore, evaluation of the effectiveness of resource potential will be incomplete.

One of the most important indicators of resource potential use is production per unit of land. The greatest success in terms of effectiveness of land use is achieved by private farms and private households, as evidenced by the productivity of vegetables, potatoes and cereals (Fig. 1-3). The opposite situation is observed in the use of resource potential in livestock dominated by large enterprises using modern production technology (Fig. 4).

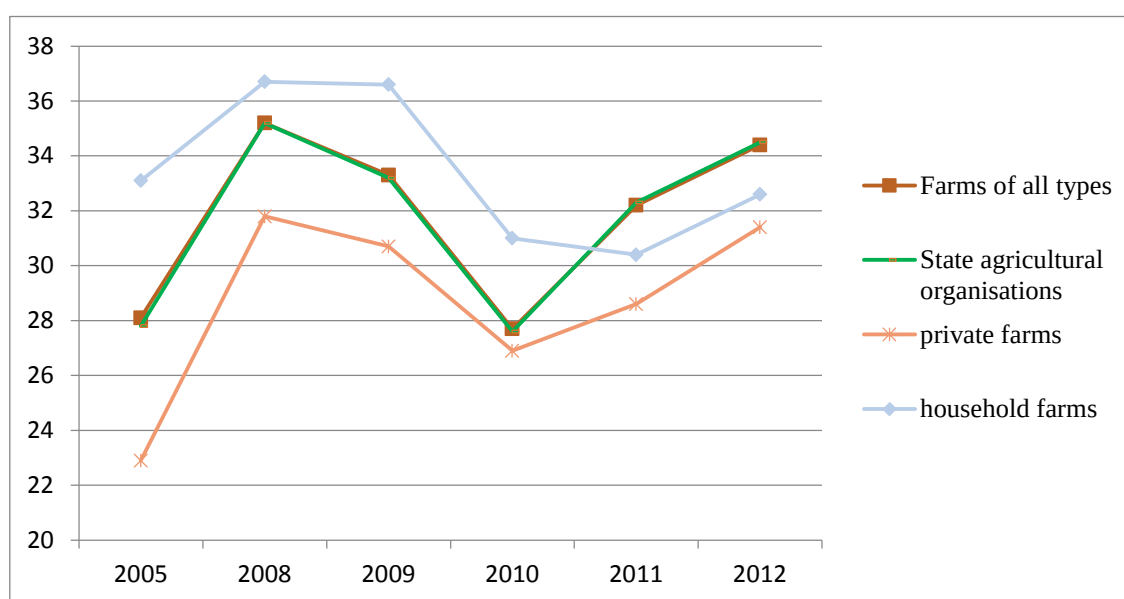


Figure 1. Dynamics of grain yield in farms of different categories, centner per ha

Source: Own construction on the basis of National Statistical Committee of the Republic of Belarus data



Figure 2. Dynamics of potato yield in farms of different categories, centner per ha

Source: Own construction on the basis of National Statistical Committee of the Republic of Belarus data

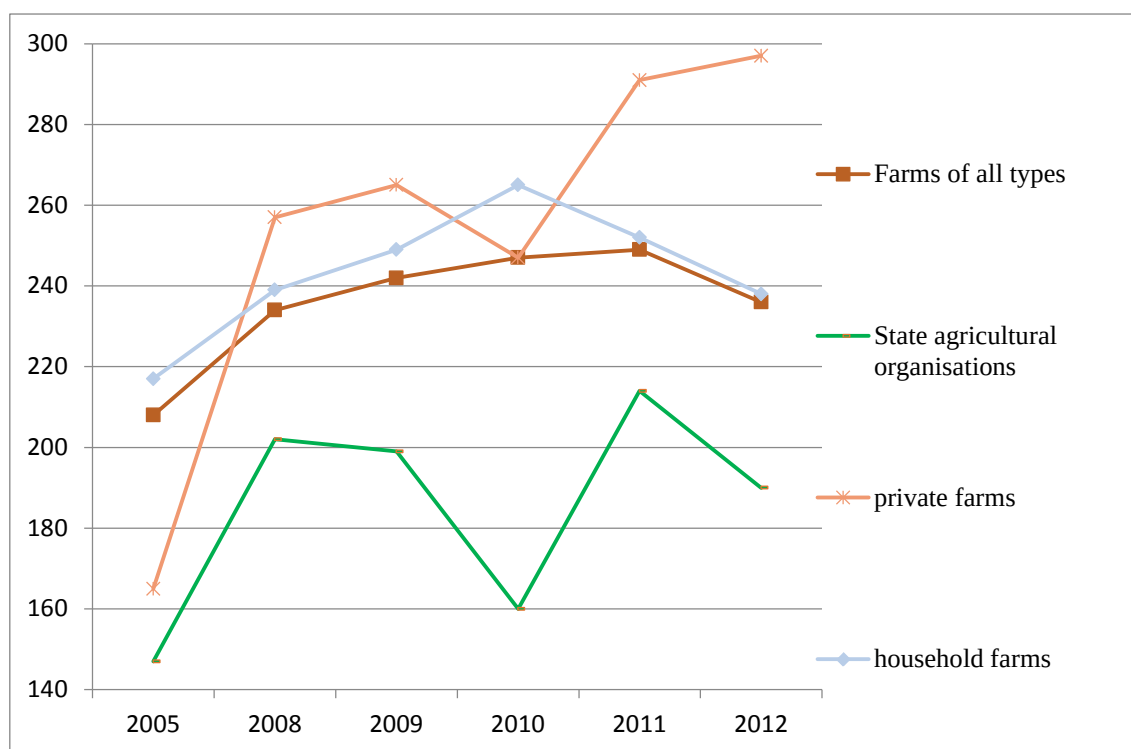


Figure 3. Dynamics of vegetable yield in farms of different categories, centner per ha

Source: Own construction on the basis of National Statistical Committee of the Republic of Belarus data



Figure 4. Dynamics of average yield of milk per cow in farms of different categories (annual average in kg) Source: Own construction on the basis of National Statistical Committee of the Republic of Belarus data

Casting a glance on the whole dynamics of agricultural production (Figure 5), it becomes evident that private households produce 3 times more output per 100 hectares of agricultural land than large state-owned enterprises. This is due both to the intensity of farming and specialization in higher-yielding products (vegetables, fruits and berries, culinary plants etc.).

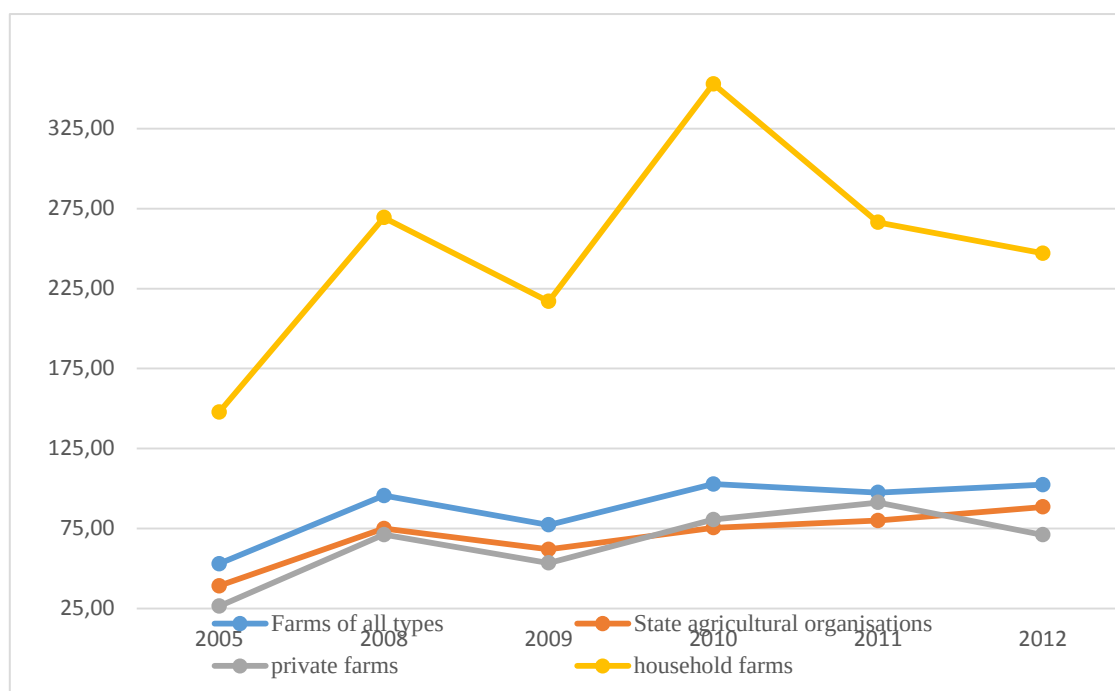


Figure 5: Динамика производства продукции сельского хозяйства на 100 га с/х угодий, тыс евро Source: Own construction based on the Republic of Belarus National Statistical Committee and NBRB data

To characterize financial performance of the branch a large number of indicators is applied, which creates methodological difficulties for their use. Differences in the application of indicators create difficulties to each participant of market in choosing relations, which are most suitable to its needs for information about the real state of affairs. For example, a head of the farm profits is interested in the amount of profit, its structure, factors affecting its value. Director of a large company to greater extent is interested in production capacity, growth rate to the previous period, currency component of revenue. Owner of a personal subsidiary plot would like to know about the amount of revenue received, cost minimization. Tax authorities have their own scorecard, which in addition to the above, includes non-operating income and expenses, income from sales of fixed assets. In general, all participants of market relations assume that key performance indicators are the revenue and profitability. However, in calculations related to personal subsidiary plot there is no assessment of their labor both heads and members of their families, it is difficult to allocate income to support a family and the costs of farming, that in addition to the absence of a clear, systematic basis is enough to create obstacles for objective analysis of their effectiveness. Therefore, it is worth making a focus on one member of private ownership – private farms and compare effectiveness of functioning of this form of farming with major government organizations.

Table 1. Main Financial Indicators in Agriculture by Groups

Indicator	2009	2010	2011	2012
Profit, loss (-) generated from marketing of products, commodities, works, services in thousand Euros				
Agriculture	-2.1	-29.1	586.7	845.8
Agricultural organizations	-14,571.8	-48,834.8	559,454.3	820,805.8
per 1 organization	-8.9	-30.3	357.7	536.5
per 100 ha or agricultural land	-0.2	-0.6	7.3	10.8
Peasants' (private) farms	12,496.8	19,748.7	27,271.3	24,952.6
per 1 organization	6.2	9.3	11.7	10.2
per 100 ha or agricultural land	11.5	17.1	21.4	18.0
Net profit, loss (-), in thousand Euros				
Agriculture	322,064	352,218.7	695,603.6	889,366.2
Agricultural organizations	310,644.3	332,515.6	669,976.6	866,340.5
per 1 organization	189.5	206.1	428.4	566.2
per 100 ha or agricultural land	4.1	4.3	8.7	11.4
Peasants' (private) farms	11,419.73	19,703.08	25,627.013	23,025.706
per 1 organization	5.7	9.3	11.0	9.5
per 100 ha or agricultural land	10.5	17.1	20.1	16.6
Number of loss-generating companies, pieces				
Agricultural organizations	64	73	40	56
% of agricultural organizations	3.9	4.5	2.6	3.7
Peasants' (private) farms	93	76	98	125
% peasants' (private) farms	4.6	3.6	4.2	5.1

Source: own work based on the Republic of Belarus National Statistical Committee and NBRB data

Private (peasants') farms have an order of magnitude higher efficiency (Table 1). So, in 2009 and 2010, these categories of farms gained from sales of products, while large-scale farms have generated losses. Even during years that have been more favorable for agriculture of Belarus (2011 and 2012) earnings per 100 hectares of agricultural land were 2-3 times higher in private farms than those of the large state-owned enterprises. Large state-owned agricultural enterprises have a higher "net profit", which takes into account non-operating income and expenses, payments to the budget, allocations from profit to various funds, repayment of loans. For organizations this figure due to the high level of state support is significantly higher than the profit from sales, whereas for private farms it is lower than profit from sales, due to the lack or low level of state support. But in spite of this net profit from sales per 100 hectares of agricultural land are 2-3 times higher for private farms compared with state-owned ones.

This explains higher number of unprofitable farms. Not having sufficient level of public support 2-3% of farmers goes out of business annually. At the same time losses of the state enterprises are blanked by state support and only systematically unprofitable enterprises are reorganized through take-overs by cost-effective, resulting in appearance of agricultural holdings. Thus, if the trend of integration of private farms goes along evolutionary way - small farmers went bankrupt, out of business, the state agricultural enterprises become larger through involvement of administrative methods, without the consent of management and employees of more successful enterprises.

Profitability (Table 2) is one of the most important general indicators of production and economic efficiency. It combines the profit (income) and expenses over a certain period of time. This figure is also significantly higher for private farms, it should be noted and relative stability of its value (+ -3%), whereas for the state-owned enterprises the index value rose during the analyzed period.

Table 2. Dynamics of profitability, %

	2009	2010	2011	2012
Profitability of marketed products, commodities, works and services				
Large state-owned agricultural organizations	-0.5	-1.3	15.4	19.3
Peasants' (private) farms	32.9	29.5	36	33.3
Profitability of sales				
Large state-owned agricultural organizations	-0.4	-1.2	12	14.6
Peasants' (private) farms	19.2	20.5	24.7	22.7

Source: own work based on the Republic of Belarus National Statistical Committee data

CONCLUSIONS

Thus, in our view, small and medium forms of private agribusiness in Belarus have a competitive advantage over public corporations. They are more flexible both to natural and economic disasters and adapt quickly to market changes. However, at the same time in high-tech branches, such as, for example, milk production, or in branches that require a large initial investment, which strongly influenced by the scale of production (cereals, pig breeding) large state-owned enterprises have significant advantages. Moreover, since private enterprises are more competitive in selecting channels for sales of products compared with large enterprises, so they can sell it at higher prices. The effect of "small scale" can be reduced by developing regional specialization, cooperation of agricultural producers, but for this purpose it is necessary to conduct a large-scale improvement of economic literacy of manufacturers of agricultural products.

Farming in developed countries and is a kind of "depreciation cushion" for economy of agro-industrial complex and society. Busting a small farmer is a private affair of the farmer and his family, his place

would always be taken by a new farmer. At the same time, ruining a large holding company is a problem of national importance: affects hundreds and sometimes thousands of families; and to create efficiently functioning enterprise years of hard work would be required, after its elimination a niche is created in the foodstuffs market, which is often replaced by imports rather than own production (what was seen in the former Soviet Union countries after the collapse of the Soviet Union, when a huge number of farms collapsed).

At this stage of development of private farming, more than ever, government support is required. In our opinion, today it is important to know the evaluation of the role of farmers on the spot, prospects of development, measures to support existing farms, as well as to promote and create new ones. With due attention peasants' farms can significantly increase their participation in ensuring food security of the country and expand export potential of agribusiness.

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