

UDC 631.14: 636.4

© 2015

**V.K. Zbarsky,**

**Doctor of Economic Sciences**

**National University of Life and Environmental Sciences of Ukraine**

## **Production efficiency of pork in agricultural factories of Lviv area**

**Objective.** To highlight the peculiarities of the organization of pig production in agricultural enterprises and to determine the possibilities of increasing its efficiency. **Methods.** Methods of analogy and comparison, induction and deduction, analysis and synthesis were used to clarify the concept of "production efficiency". Methods of theoretical generalization and monographic are used for in-depth study of peculiarities of pig production development, determination of reserves for improvement of industry work on the example of certain enterprises of Lviv region. **Results** The state of economic development of the pig breeding industry in the region of Lviv region is grounded and ways of increasing its economic efficiency are determined. **Conclusions** The development of pig breeding in agricultural enterprises in Ukraine as a whole and in Lviv region in particular is characterized by instability and a turning point from loss-making to low profitability due to a number of technological and economic factors.

*Key words: pig breeding, market, agricultural enterprise, consumption, state regulation, economic efficiency, investments.*

The growth of economic efficiency, every fourth pound of pork on the domestic production of pork is a priority task for nursing food markets - the foreign agrarian policy of Ukraine. However, taking into account production. The importance of the industry for the domestic economy, analysis of recent research and publications. Its actual state during recent years. The study of the problem of economic efficiency corresponds to the available resource potential of the functioning of agricultural subsurface. In the meat balance pork occupies 2nd enterprises, in particular, the production efficiency of the poultry and one of the key positions of pork, devoted to the work of VG. Andriychuk, in the food independence of the state. Pro-P.S. Berezivsky, VI Boyka, B.V. Daniliv, the effectiveness of its production remains O.V. Mazurenko, IV Okhrimenko, SM With a very low level, the industry provides the internal market, VP Rybalka, IV Swinoua, MP These needs are only 76%, due to this lavra, VS Topiha, O.A. Shusta and others. However, there are still insufficiently researched innovational and technological, organizational and economic levers for increasing the efficiency of pork production, improving state regulation, determining reserves for improving the sector's competitiveness. The purpose of the research is to highlight the peculiarities of the organization of production of pig products in agricultural enterprises and to determine the possibilities of increasing its efficiency. **Research methods.** The methods of analogy and comparison, induction and deduction, analysis and synthesis were used to clarify the concept of "production efficiency". The methods of theoretical generalization and mono-graphic are used for in-depth study of the peculiarities of the development of sou- rity, the definition of reserves for improvement of the industry on the example of certain enterprises of Lviv region. **Research results.** The economic efficiency of pork production in agricultural enterprises of Ukraine for 2010-2013 has not increased, the change in the profitability of production in this period is due to relatively higher growth in 2013, the prices of sales of pork compared with the cost, respectively, production turned out To the minimum level of economic efficiency that does not correspond to potential opportunities. The main trends in the dynamics of indicators of economic efficiency of pork production in agricultural enterprises of Ukraine and Lviv region, in particular, are shown in Table. 1. It should be noted that in 2013, the average annual heads of pigs that were kept on holdings were produced by 40 kg of live weight more than the average in Ukraine. However, the higher level of productivity of pig production in Lviv region did not ensure the profitability of pork production for most enterprises. This is due to an increase in the cost of production due to an increase in the cost of attracted material resources, in particular forage. Lastly, the decline in the grain yield that took place in 2013 has been affected. The agricultural enterprises received only 31 UAH of profit for each sold centner of pork. Despite the increase in

the productivity of pigs, the low profitability of the functioning of enterprises that produce pork is due to cost factors.

#### 1. Economic efficiency of pork production in agricultural enterprises over the years \*

According to the level of pork production in agricultural enterprises, the Lviv region ranks 8th in Ukraine. By analyzing the economic efficiency of enterprises in the Lviv region that produce pork, it should be noted that in 2012 there was an increase in the loss of production. Lviv region belongs to areas where pig breeding is a defective industry. However, in 2013, pig breeding for Lviv region was profitable. In the period when, in general, agricultural enterprises in Ukraine had a minimum level of profitability in the range of 0.2%, the enterprises of the Lviv region in 2013 received a profit of 7.3% of the full cost. This means that the company receives 7.3 kopecks for each hryvnia to invest in the production of funds. Profits During 2010-2013, economic efficiency in terms of profitability of production decreased by 3.5 percentage points, and the profitability of sales by 1. This was due to a sharp increase in production cost, which in 2013 amounted to 1583.4 UAH, which For 33,7 UAH more than the average for Ukraine. If in 2012 for every head of sold pigs agricultural enterprises of Lviv region received 164.7 UAH of damages, then in 2013 - 140.3 UAH of profit. By examining the ratio of produced pigmeat in 2013 to the number of average annual pigs, it can be concluded that the enterprises of the oblast produce 84 kg of meat more than the average in Ukraine. However, the higher productivity of pig breeding in the region did not ensure the profitability of sales of meat for most enterprises, since in this situation the decisive influence on the growth of the cost price is associated with an increase in the cost of attracted material resources, in particular forage, due to the lower level The grain yield that was in 2012-2013. The higher rates of efficiency of pig fattening in the region are due to the use of balanced feed, the optimum conditions for the maintenance and fattening of hybrid young animals with higher Doses of growth rate. These factors considerably influence the growth of technological indicators of productivity of pig production, which results in cost savings for every centner of growth and creates preconditions for the growth of the economic efficiency of pork production. An effective indicator of the efficiency of using feed, the cost of which in the structure of the full cost takes more than half, is the conversion of feed. The conversion of the feed shows the amount of feed in feed units or in jules of energy consumed per kilogram of gain of live weight, obtained on picking or fattening. Accordingly, the lower the cost of feed per 1 kg of gain, the more rational and balanced is the feeding technology, which, undoubtedly, greatly affects the reduction of the production cost of pork as a result of the cost savings for the corporation. For 1990-2013, the cost of feed per 1 kg of growth in agricultural enterprises in Ukraine decreased from 9.85 to 4.62 cu, or more than twice (figure). Analyzing the data shown in the figure, the dynamics of the rate of payment for feed, it is worth noting that in the enterprises of the Lviv region, on average, 1 kg of cattle spent on the production of pork in live weight, ensures the receipt of 4, 42 UAH sales revenue, which is 50% more than in Ukraine in general. This situation is conditioned by lower feed costs for pig breeding and higher realization prices that are characteristic of the region, taking into account the methodology for determining the rate of payment for Korean as the ratio of the cost of sold pork to the amount of spent forage.

The dynamics of payment for feed at enterprises producing pork from Ukraine and Lviv region, UAH / kg kg \* - total; - Lviv \* Source: Agriculture of Ukraine in 2013. Stat Save - K .: State Statistics Committee of Ukraine. - 402 s.

In the Lviv region, almost 100 farms are breeding and raising pigs, and only 10 of them hold 1000 goals. and more. The largest producers of pork are Halychyna Zaev, LLC Barkom, FG "Eden", in addition, 7 farms in the region hold 1000 to 3000 goals. Pigs The agricultural enterprises hold 38.6% of the livestock population of the Lviv region. In 2012 their share in the production of pork amounted to 47.1%, and in sales - 43.5%. Indicators of economic efficiency of pork production in agricultural enterprises of the Lviv region vary considerably: the full cost of 1 ts of pork from 1.22 to 1.93 thousand UAH, and prices corresponding to 1.31 to 1.75 thousand UAH. LLC "Lemberg-Agro" (26.34%), which is due to a relatively low level of production costs, high productivity of pigs and selling prices, has been reached for the highest level of profitability among the investigated enterprises. The largest enterprise of the region, Galichina Zakhid Ltd., in 2012, suffered losses in the amount of 1 ts of sold pork in the amount of 180 UAH. For an in-depth assessment of the economic efficiency of pig production, we used the relative economic indicators of the DEA method. The named method contributed to the determination of technical efficiency (TE), allotatory efficiency (AE) and the coefficient of overall economic efficiency as the product of the two previous ones. In order to take into account the price

factor in determining the economic efficiency of pork sales, the efficiency of sales, taking into account the selling price (ES), has been calculated. Accordingly, the coefficient of economic efficiency adjusted for the price of implementation (EZ) is defined as the product of the coefficient of overall economic efficiency by the DEA method and the sales efficiency coefficient. As a result of the analysis, it was determined that the highest coefficient of economic efficiency of production and sales of pig meat was achieved among the subjects of state-subsidization of the enterprise "Lemberg-Agro" of the Zhydachiv district. The potential for growth of economic efficiency, taking into account the improvement of allocation of the attracted resources and the price policy of the enterprise, makes 17,7%. The high value of this indicator is observed at Galichina Zakhid Ltd., which is the largest producer of pork in the region. Excluding the price factor, the DEA economic efficiency ratio in two enterprises is close to one. The lowest level of relative economic efficiency is defined in the societies Stenyatynske, T.G. Shevchenko "and PAF" White Stok ", where the coefficient did not exceed the fourth part of the level reached by the enterprise - the leader of the investigated group. The level of economic efficiency of pork production is largely shaped in the realm of realization, because the market, because of supply, demand and price, determines how expedient it is from the economic point of view to produce a particular type of product. One of the main factors affecting the economic efficiency of the real-level of economic efficiency of 25% of the pork business is the price. The value of these impressions. Average and high profitability in Ukraine and the Lviv region based on the bases-in the range of 15-40% reach less than 15% by the state distribution channels varies within the limits of donations, which operate on the basis of a resource of 1,500-3,000 UAH per 1 ton (Table 2). Innovative for the Ukrainian market. The high resource intensity of each third technology, which forms a high level of eco-kilogram of produced and sold pork meat at significantly lower costs, results in a loss-making effect of about 60% and low resource efficiency.

2. average prices for pork by the main directions of its sale by agricultural enterprises, UAH / t\*

### **Conclusions**

The development of the pig breeding industry in agricultural enterprises in Ukraine, in particular, in the Lviv region, is characterized in particular by the volatility and a turning point from loss-making to low profitability, due to a number of technological and economic factors. The high resource availability of pork leads to a loss-making and low level of economic efficiency of 25% of enterprises. Average and high profitability within the limits of 15-40% reach less than 15% of the farms operating on the basis of resource-saving innovative technologies for the Ukrainian market, which form a high level of economic effect at significantly lower costs of attracted resources. The given data will give an opportunity to take a critical look at the state of development of the pig breeding industry from the position of substantiation of ways to increase the efficiency of production of its products in view of the realities of the present. Therefore, it is necessary to consolidate the priority of the industry among other issues related to the development of the agricultural sector of the country at the regional and national levels.

### **Bibliography**

1. Grishova I.Ya. Strengthening the financial composition of the economic security of the enterprise / I.U. Grishova, T.S. Shabatura // Accounting and finance. - 2013. - No. 1 (59). - P. 99-104.
2. State Program of Activation of the Economy for 2013 - 2014 - [Electric. Resource]. - Access mode: [http://www.kmu.gov.ua/control/uk/publish/article?Art\\_id=246812864&cat-id=246812855](http://www.kmu.gov.ua/control/uk/publish/article?Art_id=246812864&cat-id=246812855).
3. Certificate on Adaptation of Agriculture of Ukraine to WTO Requirements [Elektr. Resource] - Accessibility: <http://www.me.gov.ua/control/uk/publish/article?Artid=188046&catid=38231>.
4. Law of Ukraine "On Amending Certain Legislative Acts of Ukraine on Food Products" / BBP of Ukraine № 1602-VII of July 22, 2014.
5. Innovative activity in the agrarian sector: the institutional aspect: the monograph / P.T. Sableuk [and others]; NSC "Institute of agrar. Economy". - K.: NSC IAE, 2010. - 704 p.
6. Kryukova IO Strategy of innovative development of priority branches of agrarian production [Electr. Resource] / I.O. Kryukova V.O. Sometimes // Economy: Realities of Time. - 2013. - No. 4 (9). - 133-141. - Access mode: <http://economics.opu.ua/files/archive/2013/No.4/133-141.pdf>
7. Official website of the Verkhovna Rada. - [Electr. Resource]. - Mode of access: [http://w1.c1.rada.gov.ua/pls/zweb2/webproc4\\_1?pf3511=45633](http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=45633).

8. The Strategy of Ukraine's Innovation Development for 2009-2018 and for the period up to 2039. State Agency for Investment and Development of Ukraine [Elektr. Resource] .- Access mode: <http://www.in.gov.ua/>.

9. Strategy of innovative development of Ukraine for 2010-2020 in the context of globalization challenges [Elektr. Resource]. - Access mode: [www.pir.dp.ua/uploads/StrategizInnovRazvitiya](http://www.pir.dp.ua/uploads/StrategizInnovRazvitiya).

10. Strategy for the development of the agrarian sector of the Ukrainian economy for the period up to 2020 [Elektr. Resource]. - Mode of access: <http://minagro.gov.ua/ru/node/7644>.

11. Cooper W.W., Seiford L., Tone K. (1999): Data Envelopment Analysis: A comprehensive text with models, applications, reference and DEA-solver software, Kluwer Academic Publishers, Boston / Dordrecht / London.

12. Determinants and implications of the growing scale of livestock farms in four fast-growing developing countries. Research Report No. 157. Washington, DC, International Food Policy Research Institute / Delgado, Narrod and Tiongco (2008). Delgado C., Narrod C. & Tiongco. - M., 2008.

13. Farrell M.J. (1957): The measurement of productive efficiency, Journal of the Royal Statistical Society, Series A, 120. - P. 253-281.

14. Fiona Boal. Competition from Eastern Europe and Beyond - New Players in the Global Pork Industry Advances in Pork Production. - 2006. - V 17. - P. 49, 49- 64.  
Released on 10/23/2014.