

DIRECTIONS FOR EFFICIENT USE OF LAND FUND FRUIT GROWING IN THE REPUBLIC OF MOLDOVA

DIRECȚIILE UTILIZĂRII EFICIENTE A FONDULUI FUNCAR ÎN POMICULTURA REPUBLICII MOLDOVA

BARBAROȘ I.¹, BARBAROȘ Ecaterina²

e-mail: barbarosie@uasmd.md

Abstract. Results are exposed on land use efficiency in fruit growing. We propose several directions for improving land use through the establishment of productive perennial plantations in the Republic of Moldova.

Key words: land use efficiency, productivity plantations, profits, establishing plantations of apple trees.

Rezumat. Se expun rezultatele referitor la eficiența utilizării fondului funciar în pomicultură. Se propun câteva direcții de ameliorare a utilizării fondului funciar prin înființarea plantațiilor perene productive în Republica Moldova.

Cuvinte cheie: eficiența utilizării fondului funciar, productivitatea plantațiilor, profitul, înființarea plantațiilor de meri.

INTRODUCTION

Agricultural production is directly linked to the land. Land is the main and indispensable means of production. The land belongs to the natural resources used by man. A prominent American economist Paul Samuelson, in his book "Economics", said: «... the value of land is completely determined by the value of products grown on it...» (Samuelson P., 1992).

The value of land as a means of production has to be quantified, or evaluated. Net income is the criterion for economic evaluation of land, its value as a means of production. In the economic assessment of agricultural land are taken into account the differences between areas of profitability due to differences in soil quality.

The structure of agricultural land includes: arable land, virgin, fallow, natural grasslands, natural pastures, perennial fruit cultural plantings (orchards, berries, grapes etc.). A system of indicators is applied to assess the economic efficiency of land use in agriculture there: yields of major crops, agricultural production per unit land area, value of gross output, gross profit per unit of arable land etc.

Among the main reasons hampering the export of agricultural products, it is necessary to identify three main components: infrastructure, pricing and requirements for the product itself.

The first involves the lack of modern material and technical base of the collection in Moldova, processing and storage of agricultural products, the conditions for its transportation and transit in accordance with international requirements.

¹ Agrarian State University of Moldova

² Academy of Public Administration under the President of the Republic of Moldova

The second component reflects the lack of stable and long-term contracts, failure to provide the necessary product packaging, the neglect of experience managing the prices of foreign markets.

And finally, the third component - is the product itself. With its initially excellent taste Moldovan producers are not yet able to provide a guarantee for the food security of the goods, a common fact to foreign consumers look, compliance with international standards and parameters for all indicators.

MATERIAL AND METHOD

In this work were used scientific methods of research: analysis and synthesis, grouping, economic and statistical research methods.

As material of study was used data from the Ministry of Agriculture and Food Industry of the Republic of Moldova and FAO STAT MOLDOVA.

RESULTS AND DISCUSSIONS

Since 68% of all areas of fruit crops in the country are occupied by apple orchards, were studied summer and winter varieties of apple trees of the northern zone of the Republic of Moldova (table 1).

From the economic efficiency of land use were taken and investigated two measures: the yield and net income derived from the sale of fruits.

Table 1

The dynamics of productivity in apple orchards in the Northern Zone of the Republic of Moldova in 2006-2009

Varieties	Yield, t/ha				
	2006	2007	2008	2009	Average for 4 years
Summer varieties					
PRIMA	2,9	4,9	5,6	18,5	8,0
COREALOR	3,0	12,3	14,7	11,8	10,4
COREMEN	2,9	7,7	7,4	33,4	12,8
CORESTIN	2,7	7,9	8,5	34,6	13,4
Winter varieties					
IDARED	34,7	38,4	37,8	16,5	31,8
CAMPION	38,8	39,1	38,7	17,0	33,4
SUPER CHEIF	35,4	37,5	38,1	16,2	31,8
KING IONAGOLD	7,2	35,9	36,9	16,9	24,1
FIRMGOLD	16,5	5,3	35,3	12,5	17,4
Average for all the varieties across the republic	3,48	4,18	4,53	4,70	4,22

Source: Developed by the authors according to the data from Ministry of Agriculture and Food Industry of the Republic of Moldova and FAO STAT MOLDOVA

Analysis of the data in table 1 showed the following: in studied years, most yields were harvested from winter varieties of apple in specialized farms for breeding of new varieties in all years of study.

The average rate ranged from 17,4 t/ha to 33,4 t/ha in 2006-2009, and was significantly higher than the national average 4.22 t/ha.

However, not all the newly introduced varieties exceeded the recognized varieties of 31,8 t/ha.

Therefore, for the further development of horticulture in the country we suggest to grow orchards with varieties CAMPION, the average yield of which amounted to 33,4 t/ha in studied years and varieties SUPER CHEIF, the average yield of which amounted to 31.8 t/ha.

As for summer apple varieties, the yield of all three promising new introduced varieties: COREALOR, COREMEN, CORESTIN significantly exceeded the control level and ranged from 10.4 t/ha to 13.4 t/ha, and more than twice than the average national average.

Table 2

**The dynamics of yield in apple orchards in the Northern zone
of the Republic of Moldova in 2006-2009**

Varieties	Net profit, thousand lei/ ha				
	2006	2007	2008	2009	Average for 4 years
Summer varieties					
PRIMA	8,7	14,7	16,8	55,5	24,0
COREALOR	9,0	36,9	44,1	35,4	31,2
COREMEN	8,7	23,1	22,2	100,2	38,4
CORESTIN	8,1	23,7	25,5	103,8	40,2
Winter varieties					
IDARED	173,5	192,0	189,0	82,5	159,0
CAMPION	194,0	195,5	193,5	85,0	167,0
SUPER CHEIF	177,0	187,5	190,5	81,0	159,0
KING IONAGOLD	36,0	179,5	184,5	84,5	120,5
FIRMGOLD	82,5	26,5	176,5	62,5	87,0
Average for all the varieties across the republic	7,0	8,36	9,06	9,4	8,44

Source: Developed by the authors according to the data from Ministry of Agriculture and Food Industry of the Republic of Moldova and FAO STAT MOLDOVA

Analysis of the data in table 2 showed the following:

The net income for the winter newly introduced varieties also significantly was higher than its value for the summer varieties.

So it varied for winter varieties from 87.0 thousand lei/ha to 167 thousand lei/ha, and was significantly higher than the national average 8.44 thousand lei/ha. In this case, the variety of apple CAMPION and SUPER CHEIF, also exceeded the benchmark level.

For the summer apple varieties, this indicator ranged from 31.2 thousand lei/ha to 40.2 thousand lei/ha, and also exceeded the benchmark level for the varieties COREALOR, COREMEN, CORESTIN.

It should be noted that the net income for the winter varieties is higher than for summer due to a more rational relationship between the sale price and the cost of production.

Prospective objectives for price management in selected markets in Moldova, in the first place, are:

- more efficient use of production capacities of enterprises;
- promotion the production and sales for the most necessary goods for the republic;
- full development of forms and methods of marketing goods in accordance with the requirements of market economy;
- using the experience of economically developed countries in order to develop pricing policies.

In a changing environment, the role of information services becomes more important.

They are designed, to communicate qualitative information to households in a timely manner.

Farms also require periodic educational programs, where they could learn about new alternatives and possibilities.

Of course, the above conditions do not cover all the necessary conditions for the implementation of effective policies in practical activities at farms of the republic.

Life advances, and will put forward new demands in the future, new conditions.

For effective long-term development of agro-food market in the Republic of Moldova is necessary to stimulate the production and sale of goods in accordance with the requirements of a modern market economy, fully utilizing the experience of economically developed countries.

In addition, the formation of a national agro-food market in Moldova is influenced by persistent macroeconomic instability and lack of the concept of state regulation of markets and the likely understanding of how and what should be regulated.

One of the greatest problems of agricultural economy is maintaining price parity between agricultural and industrial products.

Difficulties in achieving parity in prices faced, perhaps, all of the country.

The reason is the fundamental differences in the economics of agriculture and industry.

They have very strong influence on the ratio of the rate and direction of changes in prices of industrial and agricultural products.

First, because of the seasonality of agricultural production prices for the products of this industry, as it were behind the time of the overall change in prices in the country, including in industry.

Secondly, a high degree of monopolization of industrial firms producing for the village. Farmers themselves sell their products to many buyers.

That price imbalance is one of the main reasons for the weak domestic market supply of foodstuffs and rising prices.

Thus, the objects of state regulation of prices are agricultural products and foodstuffs.

State regulation of prices for certain commodity groups with the greatest value is an important part of macroeconomic regulation.

Using the solutions to economic problems redistributive prices, the state ensures their participation in the redistribution of net income among industries and sectors of national economy, regions, countries, companies, individual groups of the population.

This is particularly important for social protection of disadvantaged groups. The state should participate in pricing directly or indirectly to protect the interests of public enterprises and other forms of property that cannot compete with foreign producers of similar products.

Thus, the necessity of state influence on the price appears as one of the areas of macroeconomic regulation and specifically manifested in the following areas of state regulation:

- maintaining market competitive environment;
- prevent monopolization;
- socio-oriented policies;
- impact on the optimal ratio of foreign trade and domestic prices.

The mechanism of state influence on the price works not only at the macroeconomic, but also the microeconomic levels.

Microeconomic measures of state influence on prices are more specific and include:

- control over natural and other monopolies;
- pricing of goods and services that have an important social significance;
- monitoring firms in a dominant position in the market;
- legal and judicial protection of contractual pricing;
- use of excise taxation of certain goods; subsidies and price subsidies;
- regulation of prices and tariffs in foreign economic activity;
- price indexation;
- organization of price statistics;
- monitoring control over prices.

Thus, in market conditions, efficient use of land resources is a complicated process that is affected by many factors.

Selecting a general orientation at the same time and approaches to pricing new and existing manufactured products, provided services to increase sales volumes, turnover, increase production, maximize profits, and strengthen the market position of the company is part of modern pricing policies.

CONCLUSIONS

1. Studies have shown the economic efficiency of growing new varieties of winter apples CAMPION, and SUPER CHEIF; as well as the feasibility of cultivation summer varieties COREALOR, COREMEN, CORESTIN.

2. Thus, we recommend continuing the introduction of new highly effective long-term plantings of apple varieties listed above. This would potentially raise the level of development of fruit growing in the country to a modern level of quality and ensure food market in the country and abroad in such a necessary and important product.

REFERENCES

1. Samuelson P., 1992 – *Tconomica*. том. II том. М.: NPO «ALGON» VNIISI, pg. 155.
2. Vodeannikov V.T., Lîsiuk A.I., et al., 2008 - *Practicum po ekonomike seliskogo hozeaisnva*. М.: KolosS, 232 s.
3. ***, 2006 -2009 - *FAO, Buletin of statistics*. <http://faostat.fao.org/faostat>.