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THE EVOLUTION OF AGRICULTURAL PRODUCTIONS IN BUZĂU COUNTY DURING THE PERIOD 1999-2010

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Abstract

Agriculture is an important sector of economic activity of the County, we observe in this respect, the special quality of the arable land. This is why it is necessary the knowledge not only of the agricultural productions, but also of the value of agricultural production, which we have analyzed in this paper. One of the main issues is that the level of crop productions is due to climate conditions for the period 1999-2010, but in great measure to the level of the existing technical-material endowment at the level of farms. For the animal production we observed that it has had a descending trend in this period, for the main categories of animals.

Keywords: *Agriculture, crop production, animal production; value of the agricultural production sector; agricultural services.*

INTRODUCTION

Buzău County territory holds a share of 2,7% in the total agricultural area of the country, as well as 2.3% of the total population. The land potential of the County is framed on the three forms of relief, namely: plain (where arable land predominate), hill (the vineyards and fruit plantations are the specific branches) and mountains (where cattle breeding is based on large expanses of pastures and meadows). Regarding the crops structure, we can enumerate the following: cereals (wheat, rye, barley, oat, maize, sorghum); technical crops (sugar beet, flax, rapeseed, sunflower); vegetables (peppers, cucumbers, onions, cauliflower, pumpkin, beans, peas, carrot, dill, parsley, parsnips, radishes, tomatoes, lettuce, spinach, celery, garlic, cabbage, Eggplant); fruits (apricots, cherries, walnuts, apples, quinces, pears, plums, cherry trees, shrubs (blueberries, blackberries, raspberries, wild strawberries); vineyards (such as those from Breaza, Merei, Zorești, Pietroasa, Cernătești, Râmnicu Sărat, Zărnești, Rușetu). Also you can add branches of animal sciences, such as raising cattle, pigs, sheep and poultry [1].

MATERIAL AND METHODS

We have gathered data from the Statistical Yearbook of Buzau County and processed them with the indicators below.

In their evolution, the indicators can be evaluated by different methods. We describe below the method for indices with fixed base and chained base, and annual growth rate.

Annual growth rate [2] = $r_{1999-2010} = \sqrt[12]{\prod (p_1/p_0)} - 1$; in which:

$R_{1999-2010}$ = annual growth rate; $\prod p_1/p_0$ = indicators of chained growth

RESULTS AND DISCUSSION

The cultivated areas and the average productions obtained per hectare determined the oscillations of vegetal productions in the considered period.

Thus, the total production in 2010 to the wheat, barley and camp vegetables exceeded with 101,7%, 358,5% and respectively 68,8% those obtained at the beginning of the period. On the

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other hand, for maize, potato, sunflower the accomplishments of the last year had smaller values with 19,6%, 24.4% and respectively 37.7% compared with the reference year 1999.

Table 1 The evolution of vegetal productions for the main crops in Buzau County during the period 1999-2010.

Culture	UM	1999	2000	2005	2008	2009	2010
Wheat and Rye	to	127052	128691	136761	292241	201877	256263
	%	100.0	101.3	107.6	230.0	158.9	201.7
Barley	to	9921	8606	10926	23795	23309	45485
	%	100.0	53.9	110.1	239.8	234.9	458.5
Corn	to	480846	241904	467927	168681	159572	386569
	%	100.0	50.3	97.3	35.1	33.2	50.0
Sunflower	to	67506	45055	59864	51938	51171	42084
	%	100.0	66.7	88.7	47.8	75.8	62.3
Potato	to	20935	15184	17604	14392	17733	15831
	%	100.0	72.5	(4.1)	68.7	52.6	75.6
Field vegetables	to	63422	54285	111260	112097	106433	107037
	%	100.0	53.2	175.4	176.7	167.8	168.8

Source: Statistical Yearbook of the Buzau County, 2004,2007, 2011 CSD Buzau[3]

Vegetable productions made in the private sector have had also an increasing trend.

Thus, the limits of these weights were of 83,3% to 99,1%, for wheat and rye; 44,8-99,1% at barley; 96,7-99, 7% for maize; 84,4 to 98,6% for sunflower; 99,2% – 100% for potatoes and 94,9– 99.9% for field vegetables. The analysis of accomplishments for fruit-growing sector is presented in table 2.

Table 2 Total production of the fruits species and grapes in agricultural individual farms , in the Buzău County I during the period 1999-2010

Category	UM	1999	2000	2005	2008	2009	2010	Compared to 1999 (%)	Annual growth rate (%)
Fruits Total of which:	t	25894	29286	70041	44310	50862	88837	343.1	11.78
Plum	t	12487	15066	42460	25927	34586	60477	484.3	15.42 refined
Apples	t	6045	7485	19625	9585	6685	18341	303.4	10.62
Pears	t	1931	1705	1967	1372	1800	2679	138.7	3.02
Peaches	t	247	356	521	773	779	844	341.7	11.82
Grapes	t	49314	69007	19682	81403	76457	38019	77.1	-2.0

Source: Statistical Yearbook of the Buzau County, 2004,2007, 2011 CSD Buzau[3]

From the data presented above we see that, for the total fruit production sector, production have permanently increased , so that at the end of the period the total fruit production was more than 243% higher as compared with 1999, with variations between species from 38.7% to 384,3.

In terms of production of grapes was very fluctuating and in the year 2010 , it was with 22,9% lower compared with the reference year 1999.

The vegetal productions level was due to climate conditions of the years, but in great measure of the extent of the existing technical-material endowment at the level of farms.

Table 3. The evolution of agricultural livestock productions at the main species in Buzau County during the period 1999-2010.

Animal product	UM	1999	2000	2005	2008	2009	2010
Meat of bovine animals	To. live weight	33100	35300	9448	9169	6297	5312
	%	100.0	106.6	28.5	17.2	11.8	9.9
Pig meat	To. live weight.	13400	11600	12495	11146	10565	11688
	%	100.0	86.6	57.9	83.2	49.0	54.2
Chicken meat	To. live weight.	8323	10531	20150	19959	16682	5622
	%	100.0	126.5	242.1	239.8	200.4	41.9
Milk from cow and buffalo	Thousand hl	1108	1192	1637	1335	1254	1113
	%	100.0	107.6	147.7	120.5	113.2	139.5
Eggs	Mil PCs.	154	139	222	251	245	198
	%	100.0	90.3	144.2	163.0	159.1	128.6
Extracted honey	To.	294	366	457	409	467	387
	%	100.0	124.5	155.4	139.1	158.8	131.6

Source: Statistical Yearbook of Romania, INS, 2011[4]; Statistical Yearbook of Buzău County, CSD, 2011[3]

The data in table 3 shows that the product of meat, bovine and swine, production had a descending trend, being lower in 2010 with 84% and respectively 12.8%. Chicken meat had a very significant growth until 2009, because in 2010 production was less with 32.6% compared with 1999. Milk product, in 2005 the production has increased by more than 47%, after which the trend was down; and in 2010 topped lightly the one in 1999. The eggs and honey productions have achieved maximum in 2008 and 2009, so that in 2010 they will be higher with 31.6% and respectively 28.6% compared to those realized in 1999.

Productions made in the private sector have set very high shares as follows:

- meat of bovine animals, from 98.4% up to 100%;
- the meat of swine, from 98.2% to 99.9%;
- the chicken meat and eggs – 100%;
- the milk of cow, from 97.5% up to 100%;
- the honey extracted from 97.6% up to 99.5%.

For the County, the level of the agriculture situation summary is output by the structure of the value of production of agricultural frame. In table 4, are presented comparative structures for vegetal, animal and agricultural services, in the dynamic of 2001-2010, where it can be highlighted the following issues:

Table 4 The structure of the value of agricultural production in the private sector in Buzau County, for the period 2001-2010

Agricultural branches	Forms of ownership	Um	2001	2005	2008	2009	2010
Total	Total	mil lei	734.8	1219.86	1745.7	1466.4	1839.1
		%	100.0	166.0	237.6	199.6	250.3
	Private property	mil lei	714.40	1175.70	1700.20	1430.10	1796.10
		%	100.0	164.6	238.0	200.2	251.4
Vegetal	Total	mil lei	478.00	725.50	1191.40	872.40	1358.00
		%	100.0	151.8	249.2	182.5	284.1
	Private property	mil lei	461.30	685.50	1147.60	838.50	1315.80
		%	100.0	148.6	248.8	181.8	285.2

Agricultural branches	Forms of ownership	Um	2001	2005	2008	2009	2010
Animal	Total	mil lei	244.90	486.50	548.20	585.40	472.60
		%	100.0	198.7	223.8	239.0	193.0
	Private property	mil lei	244.40	485.80	547.60	584.30	472.60
		%	100.0	198.8	224.1	239.1	193.4
Agricultural services	Total	mil lei	11.80	7.70	6.10	8.60	8.50
		%	100.0	40.6	32.1	72.9	72.0
	Private property	mil lei	5.4	4.40	4.90	7.30	7.70
		%	100.0	50.6	56.3	52.1	88.5

Source: Statistical Yearbook of the Buzău County 2011; CSD Buzău [3].

The value of production in the agricultural sector that was obtained in the private sector grew up in 2010 with 151,4% compared to the reference year 2001, representing percentages between 97,2%- 97,7% compared to the total value of the branch.

In the vegetal sector, the production value in private, was greater with 185,3% , registering between 96,5 and 96,6% from total amount obtained in vegetal production.

The value of livestock production made in private was higher in 2010 with 93,3%, with shares between 99,8-99,9% of the total value of the animal products obtained.

The amount of the production part of the agricultural services in the private farming has been lower in the year 2010 with 11.7% compared with 2001, achieving shares between 56,5-89.8% compared to the total value of agricultural services obtained.

Table 5. The annual evolution of the value of agricultural production in Buzau County, for the period 2001-2010

Structure	UM	2001	2005	2007	2008	2009	2010
TOTAL	mil lei	734.88	1219.86	1154.46	1745.77	1466.4	1839.2
	%compared to the year 2001	100	165.9	157.1	237.5	199.5	250.3
Vegetal	mil lei	478.1	725.58	644.44	1191.47	872.4	1358
	%compared to the year 2001	100	151.7	134.7	249.2	182.5	284.0
Animal	mil lei	244.94	486.55	502.96	548.2	585.4	472.6
	%compared to the year 2001	100	198.6	205.3	223.8	239.0	192.9
Agricultural services	mil lei	11.85	7.74	7.05	6.1	5.3	5.3
	%compared to the year 2001	100	65.2	59.4	51.4	45.1	44.6

Source: Statistical Yearbook of Romania, INS, 2011[4] ; Statistical Yearbook of Buzău County , CSD, 2011[3]

From table 5 stands out that the total value of agricultural production obtained in Buzau County was higher in 2010 with 150,3% as compared with the reference year.

The higher contribution is due to vegetal production, whose value increased in the same period by 184%. A substantial increase has been achieved at the animal production, on which the amount has increased to 35,5%.

In terms of agricultural services, it emphasize a lower value of production by 28,3% compared with 2001.

CONCLUSIONS

From the analysis of the evolution of the main agricultural productions of the Buzău County in the period 1999-2010, we observe a number of relevant issues which may constitute prerequisites for the activity for the next period:

- The total achieved productions were higher at the end of the period for wheat, barley and field vegetable; at the same time, maize, sunflower and potato yields were lower than in 1999.

- Note the character of fluctuating productions from all cultures caused by yields per hectare and occupied areas.
- In the sector of fruit growing, notice a significant increase in production of fruit species at the end of the considered period, while a decrease in the production of grapes. And in this sector we see a oscillatory character during the period.
- The analysis of livestock production in the period 1999-2010 shows that the beef and poultry production was lower in 2010 with 84% and 12.8%; until 2009, the increases were significant, so that by 2010 production dropped to 32.6% compared to the beginning of the period.
- Milk production has increased by 47 percent in 2005, after which the trend was downwards, so that in 2010 will exceed with little the one in 1999.
- The eggs and honey, the biggest productions were made in 2008 and 2009, and in 2010 they have overrun by 28, 6% and 31.6% those obtained in 1999.
- An important indicator, is that of agricultural production value obtained in the private sector, which has seen a rise in 2010 with 151,4%, representing 97,2-97,7% of the total value of the branch.
- Within the framework of vegetal production, the private production value increased by 185,3% in 2010, with shares of 96.5-96,6% from total amount obtained in crop production.
- The value of livestock production in the private sector was more with 93,3% in 2010, resulting shares between 99,8-99,9% as compared with the total amount achieved in animal production.
- The output of the private sector of agricultural services had a lower value with 11.7% in 2010, 56,5-89.8% of the total value of services obtained.

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