

ANALYSES OF THE EVOLUTION OF ANIMAL AND VEGETAL PRODUCTION IN ROMANIA DURING 2010-2015

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Abstract

The purpose of this research is to analyse the evolution of plant and animal production in Romania during 2010-2015.

With regard to agricultural products produced in the period 2010-2015, it is noted that Romania has recorded increases in most plant products, except in the crop of maize, potatoes, vegetables and green fodder from arable land.

The positive aspect identified after analysing agricultural production in Romania is an increased production, amid flagging of cultivated areas which took place on the background of improved yields per hectare in all cultures.

Key words: vegetal production, animal production, evolution, agricultural.

INTRODUCTION

In recent decades, agriculture, as specialized human activity, started to be addressed as part of the agri-food sector and this, in its turn, as an important component of the national economy (Anghelache C., 2015; Borș, V., 2007).

In different countries or groups of countries farms, food industry enterprises and the distribution of food products are dependent on each other in the organization of the market and the increase of economic efficiency (Aprodu I.C., 2006; Găman, V., 2011).

In the meantime, these enterprises, as a result of technological modernization, establish strong links with upstream enterprises producing technical means and other production inputs (Manoleli, D., 2004; Dincu Ana-Mariana, 2014).

Farms, regardless of their type, in order to produce efficiently and competitively, must enroll in the tendencies that currently exist at the level of world agriculture, in order to promote qualitative factors among which knowledge development, management training, technical updating, application of modern technology, computerization (Popescu Agatha, 2015; Stanciu V., 2004; Stanef, M.R., 2009).

Essential component of agro-food system – the actual agricultural production - relies on a cellular structure consisting of: land tenure, family and farm (Sponte, M., 2015).

Upstream and downstream agriculture there is a distribution of materials needed for farmers, a network of processing of agricultural raw materials, a network of recovery of primary agricultural products and food, a financial network of lending and insurance and a network of specialized technical assistance (Dona I., 2000, Zahiu, L., 2005; Zahiu, L., 2006).

All these networks, together with agricultural production, form a modern and efficient agri-food system (Toma E., 2010; Zahiu et al., 2001; Zahiu et al., 2003; Zahiu et al., 2011).

MATERIAL AND METHOD

Aim of this paper is to evaluate the evolution of plant and animal production in Romania during 2010-2015, using data obtained from the: National Institute of Statistics, Ministry of Agriculture and Rural Development departments, Agency for Payments and Intervention in Agriculture, and Paying Agency for Rural Development and Fisheries (www.madr.ro; www.insse.ro).

The indicators selected for the assessments were structured as follows (Toma et al, 2009): structure of agricultural production; dynamics of main crops grown on agricultural land; the structure of the main crops cultivated agricultural land; dynamic livestock (by categories of animals); livestock structure (categories of animals); dynamic average yields on crops and animal categories.

For the assessment of the impact were used (Aprodu, 2006): qualitative research methods: comparison method; process consistency and differences.

RESULTS AND DISCUSSIONS

With regard to agricultural products produced in the period 2010-2015, it is noted that Romania has recorded increases in most plant products, except in the crop of maize, potatoes, vegetables and green fodder from arable land (Table 1).

From these crops yields have fallen amid the decrease in the special areas, while other cultures production increases have taken place especially amid increasing yields per hectare (barley in 36.3%, wheat in 40.6% and 10.5% in sunflower).

Table 1

Agricultural production and average yield for the main crops cultivated in
Romania during 2010-2015 period

	Indicators	UM	2010	2011	2012	2013	2014	2015	2015/2010 %
Cereals grains	Total production	tons	16712883	20842160	12824138	20897076	22070736	19286236	115.0
	Average production	kg/ha	3316	3989	2357	3854	4054	3529	106.4
Wheat	Total production	tons	5811810	7131590	5297748	7296373	7584814	7962421	137.0
	Average production	kg/ha	2688	3663	2652	3468	3590	3780	140.6
Barley and two-road barley	Total production	tons	1311035	1329692	986361	1542247	1712509	1623163	123.8
	Average production	kg/ha	2542	3170	2325	3111	3319	3465	136.3
Oats	Total production	tone	304462	375855	338998	373783	381626	344223	113.0
	Average production	kg/ha	1679	2028	1743	2051	2124	1997	18.9
Corn grains	Total production	tons	9042032	11717591	5953352	11305095	11988553	8984743	99.36
	Average production	kg/ha	4309	4525	2180	4488	4770	3449	80.0
Sun-flower	Total production	tons	1262926	1789326	1398203	2142087	2189309	1785763	141.4
	Average production	kg/ha	1597	1798	1310	1993	2187	1765	110.5
Potatoes	Total production	tons	3283866	4076570	2465150	3289722	3519392	2625017	79.93
	Average production	kg/ha	13354	16554	10777	15953	17527	13906	104.1
Vegetables	Total production	tons	3863617	4176298	3535316	3960990	3802494	3629613	93.94
Green fodder from arable land	Total production	tons	13016011	14033033	11525769	13045646	13883515	12720084	97.72

Source: based on INS data, available online at www.insse.ro [8]

In terms of animal production in 2011, 42,3% of the meat production was provided by the pig population (though it has been reduced by 9.9%) and 34.1% by the poultry sector (Table 2).

Table 2.

Farm animal production by agricultural products in Romania in the period 2010-
2015

	UM	2010	2011	2012	2013	2014	2015	2015/2010
Meat*	Tons live weight	1305260	1357053	1332186	1299525	1315611	1430839	109.6
- Cattle	Tons live weight	205347	211971	198510	192206	183562	199712	97.2
Share of cattle meat from total meat	%	15.7	15.6	14.9	14.7	13.9	13.9	-1.77 pp
- Pigs	Tons live weight	552734	556694	554978	546530	534724	562277	101.7
Share of pig meat from total meat	%	42.3	41.0	41.6	42.0	40.6	39.2	-3.0 pp
- Ovines and caprines	Tons live weight	99524	110034	107335	103619	107781	109607	110.1
Share of ovines and caprines meat from total meat	%	7.6	8.1	8.05	7.9	8.1	7.63	0.03 pp
- Poultry*	Tons live weight	446387	477529	470528	456632	488361	558013	125.0
Share of poultry meat from total meat	%	34.1	35.1	35.3	35.1	37.1	38.9	4.8 pp
Milk production (including calf consumpt.)	Th. hectolitres	49129	50074	48337	48728	50535	49156	100.0
Milk production (without calf consumpt.)	Th. hectolitres	44799	45872	44172	44786	46615	45385	101.3
Milk production (including calf consumpt.) – cow and buffalo	Th. hectolitres	42824	43947	42036	42593	44015	42663	99.62
Milk production (without calf consumpt.) – cow and buffalo cow	Th. hectolitres	38494	39745	37870	38651	40096	38893	101.0
Share of cow and buffalo cow milk from total milk	%	86.5	87.2	86.3	86.8	86.5	86.2	-0.3 pp
Total milk production – sheep and goat	Th. hectolitres	6305	6127	6301	6135	6520	6493	102.9
Share of sheep and goat milk from total milk	%	6.7	6.3	6.8	6.5	6.7	6.8	0.1 pp
Wool production	Tons	20457	19026	19713	20719	21817	22343	109.2
Eggs production	Million units	6199	6327	6398	6388	6636	6555	105.7
Production of extracted honey	Tons	22222	24127	23062	26678	18040	27893	125.5

Note: * Live weight of animals to be sacrificed for consumption

Source: based on INS data, available online at www.insse.ro [8]

Meat of sheep and goats, though growing by 7.6%, provided only 7.63% of regional production.

Under these conditions, inside the structure of production, poultry meat increased by 0.3 percentage points, on the background of decreasing share of cattle meat.

The orientation of the animal production is obvious if we consider that although herds of sheep, goats and poultry increased, milk production has been declining compared to the pre-adhesion period.

However, reducing the production of cows' and buffalo cows' milk, the share of sheep and goats milk production increased by 0.1 percentage points, arriving in 2015 at 6.8% of the total production of milk.

There is, however, an ineffective use of secondary production from sheep sector, wool production increasing by the year 2015.

As for honey production, there is a decrease of 14.8%, even if herds have increased by over 40%.

Regarding the production of honey and wool production, there is an increase by 5.7% and by 25.5% in 2015 compared to 2010, which shows that not all production entering the commercial channels recovery .

CONCLUSIONS

With regard to agricultural products produced in the period 2010-2015, it is noted that Romania has recorded increases in most plant products, except in the crop of maize, potatoes, vegetables and green fodder from arable land.

The positive aspect identified after analysing agricultural production in Romania is an increased production, amid flagging of cultivated areas which took place on the background of improved yields per hectare in all cultures.

Acknowledgments

The researches were carried out in the project: Increasing competitiveness of the didactical station of the University of Oradea, project number CNFIS-FDI-2016-0036.

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