

THE POTENTIALITIES AND THE AGRICULTURAL PRODUCTION ACHIEVEMENT LEVEL IN OLT COUNTY

Emil MARINESCU, Raluca NECULA

¹University of Agricultural Sciences and Veterinary Medicine Bucharest, 59 Marasti, District 1, 011464, Bucharest, Romania, Phone/Fax: +40 744 6474 10; E-mail-
ev.marinescu@yahoo.com
E-mail: raluca_nec@yahoo.com

Corresponding author: marinescu.emil22@yahoo.ro

Abstract

This paper aims at investigating the current situation of rural development perspective based on knowledge of the human factor in Olt County. The first and most important observation is the repercussions on the demographics of rural population structure and balance in Olt County where it appears on one side of its unevenness, with a trend of diminishing the employment, hence the number of employees. The analysis of agricultural density, represented by the area in hectares / capita reveals the existence of a low level of rural population pressure on agricultural space. On the structure of agricultural branches it was surprised on one hand the annual variation in levels of achievement, but on the other hand the share of services which is insignificant. All this contributes to the low attractiveness of agriculture for young people in the rural county of Olt.

Key words: *balance labor, cultivated area, land fund, livestock, population structure, the structure of agricultural production.*

INTRODUCTION

Economic and social progress in the modern world seeks rural social stability and well-being of populations, which may occur on one side through knowledge of the local rural economy sectors, and secondly to assess the level and population movements, especially the knowledge degree.

Rural population occupational form has an impact on farmers' income, purchasing power, the ability to invest them and thus the efficiency and competitiveness of agriculture. In this framework were discussed the agricultural production potentials, by a tridimensional analysis, namely: the agricultural production capacity, production and the value of the results obtained. Considered the main argument, the employment impact is differentiated on categories of activities while acting as a bridge between the business components and professional training in rural areas. However, their dimensional structure presented in this paper substantiates the necessity of

knowledge of rural development trend of this county.

MATERIALS AND METHODS

In addressing the working methodology issue we used the indicators structure method that was based on measurement techniques of the discussed phenomenon and especially its formation relations in diagnosing the phenomena and the performance. We have determined physical and value indicators (through which it was defined the report with every element of a community towards the level / volume of the entire population), indices (as ratio of two indicators), coefficients (which by the structure, balance and efficiency characterize the characteristics level variation of each group / subgroup relative to the characteristics total level) and discount rates (considered a relationship between two comparable logical and economic magnitudes).

RESULTS AND DISCUSSIONS

Nowadays, rural development perspectives of Olt County are considered uncertain, given the conditions in the last few years that have seen a steady decrease in the level of rural economic development indicators.

1. The rural population structure and balance in Olt County. The structure and dynamics population general trend of Romania, more pronounced in rural areas is a problem that will be solved if it is desired the economic development. This reason caused the need to know the demographic problems in Olt County.

Table 1. The population evolution from the Olt County rural area (January 1)

The indicator's name	M.U.	2006	2007	2008	2009	2010	2011
Total County (urban + rural)	No.	482350	477292	473128	468931	465019	460334
Total (both sexes) of which:	No.	286241	283292	281591	279688	275955	272675
percent of total population	%	59,34	59,35	59,51	59,64	59,34	59,23
% compared with 2006	%	100	98,96	98,37	97,71	96,40	95,26
Male-total (rural) of which:	No.	142182	140809	139795	138989	137156	135658
percent of total population	%	29,47	29,50	29,54	29,63	29,49	29,46
% compared with 2006	%	100	99,03	98,32	97,75	96,46	95,41
Female – total (rural) of which:	No.	144059	142483	141796	140699	138799	137017
percent of total population	%	29,86	29,85	29,96	30,00 per	29,84	29,76
% compared with 2006	%	100	98,90	98,42	97,66	96,34	95,11

Source: Processed after the data from the Statistical Yearbook of Olt County, INS, Olt County Statistics 2012 Edition[1]

In Table 1 it is shown the structure of the rural population and hence, Olt County in 2006-2011 were no changes in its downwards. Thus, during that period, the following are significant:

- The rural population is decreasing, situation given both by the actual number of inhabitants (from 286,241 people in 2006 to 272,675 in 2011) and the comparisons made (in 2011, compared to 2006, observing a decrease of -4.77%);
- The male population follows as well a decrease in the successive years and the

comparative analysis shows the following: annual changes to the total population are very small; in comparison to year 2006, there was a decrease;

- The female population falls within the same decrease, as in the male population.

Whether the report rural / urban environment can be considered balanced on the civilian population employed in agriculture and forestry in Olt County, through the data presented in

From Table 2, one can see:

- Agriculture and forestry regarding labor resources it finds a level of only 26,35% of the total. From this amount is recorded vital for both the total female labor resources and to the total working age population;
- This amount is recorded a preponderancy for women for total labour resources and the total working-age population;

Table 2. The labor force balance in agriculture, sylviculture in Olt County, at January 1, 2011

Indicators	M.U.	Effective at January 1, 2011			Media data 2010
		Total	Men	Women	
Total, of which:	Thousand persons	78.2	33.8	44,4	77.6
Percent of total labor resources	%	26.35	21,70	31,48	27,13
Percent of the total working-age population	%	26.25	21,16	32,15	25,94
Number employees of which:	Thousand persons	1.7	1.3	0.	1.9
Percent of total labor resources	%	0,57	0,83	0,28	0,66
Percent of the total working-age population	%	0,57	0,81	0,28	0,63

Processed according to the data from the Statistical Yearbook of Olt County, INS, Olt County Statistics 2012 Edition[1]

- Regarding the number of employees in agriculture and forestry, it is found that they are in a number of only 1.7 thousand people, representing 0.57% of the total.

By comparison to the total labor resources but also to the total working age population, men predominate (the percentage being 0.83% and 0.81%).

It follows that the agricultural sector of Olt county, has a downward trend of employment, hence the number of employees.

2. The territorial dimension of agricultural potential. Olt County is characterized by a high agricultural potential. He followed the quantitative aspect (which refers to the potential land resources), qualitative (related to agricultural output) and the result (of the levels achieved values).

The land and structure in Olt county cultivated areas. By nature and its specificity, the land of Olt county, is a very valuable natural resource.

Olt County which has an agricultural area of 433 903 ha, in the national context is placed in seventh place from which [1]: arable land - 6th in the country, vineyards - ranked 10th in the country, orchards - 17th the country; pastures - the 36th in the country, hayfields - 34th in the country.

The main crop groups surfaces [2], through the surface levels for the period 2006-2011 are given in Table 3 for Olt County.

-the total area under cultivation is less than the arable area, and in the last year of analysis (2011) we see a decrease with 76337 ha, which represents-19,65%;

Table 3. The cultivated areas evolution on the main crop groups in Olt county, during 2006-2011

Indicator	M.U.	2006	2007	2008	2009	2010	2011
Total cultivated area	Ha	331377	292908	331289	335050	336851	312266
	%	100	100	100	100	100	100
Cereal grains	Ha	268332	235592	257028	265378	241589	238785
	%	80,97	80,43	77,58	79,21	71,72	76,47
Grain legumes	Ha	494	191	738	1289	843	427
	%	0,15	0,07	0,22	0,38	0,25	0,13
Oil plants	Ha	41860	42547	54749	49858	71179	51452
	%	12,63	14,53	16,53	14,88	21,13	16,48
Medicinal and aromatic plants	Ha	492	107	30	107	2635	-
	%	0,15	0,04	0,01	0,03	0,78	-
Other cultures	Ha	20214	14440	18744	18418	20605	21602
	%	6.1	4.83 m	5,66	5.5	6.12	6,92

Processed according to the data from the Statistical Yearbook of Olt County, INS, Olt County Statistics 2012 Edition[1]

- The grain cereals group frames a majority surface, that although it was decreasing in the years dynamic, is predominant (is between 80.97 and 76.47%);
 - Grain legumes with the lowest percentages for this district are still considered minor crops;

- Oil crops, through the annual cultivated areas represents increasing levels, so that in 2011, the increase is 3.85% compared to 2006;

Note that through the land reform initiated in the early nineties and completed after 2000, the issue of land received new values so that most land categories were privatized in a considerable proportion [5].

Livestock and animal productions obtained. Livestock, according to data presented in Table 4, shows a steady decline, but differentiated.

Table 4. The animals number evolution in Olt County, during 2006-2011

Indic.	MU	2006	2007	2008	2009	2010	2011
Cattle -total	Heads	60938	60132	55266	45482	32981	32326
	% compared to 2006	100	98,67	90,69	74,63	54,12	53,04
Pigs -total	Heads	217559	205949	201525	188267	183570	178800
	% compared to 2006	100	94,66	92,63	86,53	84,37	82,18
Sheep -total	Heads	130238	139323	136102	131269	87002	88218
	% compared to 2006	100	106,97	104,50	100,79	66,80	67,73
Goats -total	Heads	29483	32984	34856	40025	60370	57653
	% compared to 2006	100	111,87	118,22	135,75	204,76	195,54
Horse s-total	Heads	27272	31988	32448	33657	24345	23518
	% compared to 2006	100	117,29	118,97	123,41	89,26	86,23
Poultry -total	Heads	2717271	3001245	3071596	2360901	2631385	2476882
	% compared to 2006	100	110,45	113,04	86,88	96,83	91,15
Bees	families	16859	18857	18718	18523	28398	27427
	% compared to 2006	100	111,85	111,02	109,87	168,44	162,68

Processed according to the data from the Statistical Yearbook of Olt County, INS, Olt County Statistics 2012 Edition[1]

Regarding the structure of livestock in the dynamics of the period 2006-2011, the following aspects can be highlighted:

-For cattle, pigs and sheep is recorded successive annual decreases;
 - For poultry and horses, in the first stage, there is an increase in the number, followed by a reduction. For horses that reduction in 2011 compared to 2006 is -13.77 and -8.85% for poultry;
 - In the case of the goats herds of and bees families, there is annual increases, the

amplification of them being in 2011, compared with 2006 + 95.54% and respectively 62.68%.

From here we can deduce the existence of zootechnics production capacities with the mention that the private sector is the most significant. The data presented in Table 5 shows for 2006-2011 the main livestock products, resulting the following:

Table 5. The animal production evolution in Olt County, period between 2006-2011

Name of the indicator	MU	2006	2007	2008	2009	2010	2011
Meat (slaughtered live weight)-total	Tons live weight	27285	31042	30332	28065	26579	24916
	% compared to 2006	100	113,76	111,16	102,85	97,41	91,31
Cow milk – total	Thousand hl	1436	1549	1510	1286	1013	988
	% compared to 2006	100	107,86	105,15	89,55	70,54	68,80
Sheep's milk and goat's milk – total	Thousand hl	225	252	238	231	271	269
	% compared to 2006	100	112	105,77	102,66	120,44	119,55
Wool-total	Tons	230	322	268	266	230	225
	% compared to 2006	100	140	116,52	115,65	100	97,82
Eggs-total	Million pieces	256	319	322	208	233	217
	% compared to 2006	100	124,60	125,78	81,25	91,01	84,76
Honey extracted – total	tons	778	607	541	518	769	710
	% compared to 2006	100	78,02	69,53	66,58	98,84	91,25

Processed according to the data from the Statistical Yearbook of Olt County, INS, Olt County Statistics 2012 Edition[1]

-Meat productions, cow milk, wool, eggs and honey, are increasing in the first period (2007-2008), followed by a decrease. Structurally, the largest share is held by pork followed by poultry meat;

- Sheep milk productions, has an increase, which in 2011 is 19.55% higher compared to 2006.

From all this it can be inferred that the animal production are directly related to livestock, following in general, livestock the trend.

2. - The development of agriculture, surprises on one hand, the willed trend to develop this industry, and on the other hand the limited possibilities for the agricultural products capitalization.

The Agricultural Output Value in Olt County, as a synthetic indicator, shown in Table 6,

through the values rendered for the period 2006-2011, reveals the following:

Table 6. The agricultural production structure in Olt County, during the period 2006-2011

Indicator	MU	2006	2007	2008	2009	2010	2011
The total agricultural sector value, of which:	MDL	1321319	1072806	1931732	1779899	1875620	2315761
	percent of total	100	100	100	100	100	100
vegetal	MDL	852064	549267	1322404	1174546	1348345	1756239
	percent of total	64,49	51,2	68,46	65,99	71,89	75,84
animal	MDL	465708	515864	600902	593920	523449	556960
	percent of total	35,24	48,09	31,11	33,37	27,91	24,05
agricultural services	MDL	3547	7698	8426	11433	3826	2562
	percent of total	0,27	0,71	0,43	0,64	0,2	0,11

Processed according to the data from the Statistical Yearbook of Olt County, INS, Olt County Statistics 2012 Edition[1]

- Data Values have in 2001-2004 MU of million ROL and since 2005 MU of thousands RON.

- The total value of agriculture is increasing, so that in 2011, compared to 2006, the growth is with 75.26% higher;

- The crop production is preponderant; the share to the total having variations between 51.2% and 75.84%, in the successive years there is an increasing trend;

- Although, on the overall, the animal production register an increase in absolute numbers, by comparing the years 2011/2006 with +91252 thousands lei, the variations in the years structure were between 24.05% and 48.09%;

- Agricultural services towards the agricultural sector total value, records annually the lowest levels (between 0.08% and 0.58%), but increases are evident in this period (in 2011, compared to 2006, the level is higher with + 155%).

Given the annual variations previously analyzed, it is considered necessary to know the agricultural production indices level of agricultural goods and services, which for Olt is shown in Table 7.

In the 2006-2011 period dynamics, for total county, from which the agricultural production sectors structure, it can be outlined the follows:

Table 7. Trends in the agricultural production index of agricultural goods and services in the Olt County, for the period 2006-2011

Rating level	MU	2006	2007	2008	2009	2010	2011
TOTAL	%	113.5	72.4	153.5	107.1	94.8	111.8
	%	100.0	39.6	135.2	94.4	83.5	98.5
of which:	%	109.6	51	208.6	116.8	60.0	116.2
	%	100.0	46.5	190.3	106.6	88.1	106.0
-vegetal	%	121.4	110.8	95.6	85.4	92.7	100.8
	%	100.0	91.3	48.9	70.3	76.4	51.6
The PRIVATE SECTOR, of which:							
TOTAL of which:	%	113.4	45.6	153.4	107.1	94.8	113.5
	%	100.0	40.2	135.3	94.4	51.9	100.1
-vegetal	%	102.0	32.1	209.4	117	96.4	118.7
	%	100.0	29.3	191.4	106.9	88.1	108.5
-animal	%	121.3	110.9	95.6	85.4	92.7	100.8
	%	100.0	91.4	49.0	43.7	76.4	83.1

Note:-the agricultural production Index is calculated based on the ring formula: $\text{Sum}(Q1P0/Q0P0)$;
 Processed according to the data from the Statistical Yearbook of Olt County, INS, Olt County Statistics 2012 Edition[1]

- For the county's total , the total agricultural production index varies in the years structure, the lowest level was recorded in 2007 (72.4%), and the highest in 2008 (153.5%).
- Fluctuations occur emphasized for vegetal sector (between 51.0% and 208.6%) and animal sector (85.4% and 121.4%);
- The private sector is currently considered the main property area in the agricultural production system, for which the analyzed indexes have similar levels of amplitude.

CONCLUSIONS

From the analysis, it can be outlined the following conclusions:

- 1.-Rural populations and its employment level is characterized by progressive migration flows between urban and rural population, with a trend of diminishing employment, hence the medium employees number.
2. - The land fund and the cultivated areas structure is relevant by the existence of differentiated territorial structures that can be illustrated by the following: arable land is the predominant category of use, but there is a slight downward trend, the pastures and meadows share is very low; the categories vineyards / nurseries and orchards / nurseries are considered significant. From the comparisons presented it was showed that the

total cultivated area is less than the total arable land, which the predominant is the grain cereals group.

3. Vegetal and animal productions made in the Olt County. Annual and comparative achievement levels, compared with 2006, outlines a growing trend for productions of cereal grains and oil crops, medicinal and aromatic plants, with significant variations in crop yields of grains legumes. Livestock numbers as well as productions obtained fits in a different structural decline. Animal production are directly related to livestock, which have been decreases in most products. It should be mentioned that in Olt county are few specialized livestock farms, and most animals are raised in households and used for ensuring a minimum standard of living.

4. The agricultural production value and realization index in the Olt county. It records an increasing trend, but by analyzing the agricultural branches we surprised, on one hand, the annual variation of vegetal and animal sectors achievement levels, and on the other hand , the services share, that is insignificant.

REFERENCES

- [1] INS, Olt County Statistical Yearbook, Olt County Statistics, 2012 Edition
- [2] Economy of Olt County, available at, [http://www.cjolt.ro/cjolt/servlet/portal?action=ContentAction&actEvent=showRubric&id=economie](http://www.cjolt.ro/cjolt/servlet/portal?action=ContentAction&actEvent=showRubric&id=economie;);
- [3] "Investește în oameni !", NEWSLETTER, no. 2, January 2010;
- [4] "Proactiv - de la marginal la incluziv", Project co-funded by European Social Fund through the the Sectoral Operational Programme Human Resources Development 2007-2013;
- [5] Vrabete Mihaela et al., Project "Elaborarea planului de amenajare a teritoriului județean Olt, Faza I Documentare și studii de fundamentare", project planners URBAN INCERC, SC HALCROW SRL.

