STUDY ON AGRICULTURE COUNTY TIMIŞ

STUDIU PRIVIND AGRICULTURA JUDEȚULUI TIMIŞ

A. SÎRBULESCU[1], CLAUDIA SÎRBULESCU[2]

[1]Agency for Payments and Intervention for Agriculture Timis;
[2] Banat's University of Agricultural Sciences and Veterinary Medicine Timişoara, Agricultural Management Faculty, Timisoara, Romania
sirbulescuclaudia@yahoo.com

Abstract: *Agriculture is an irreplaceable life support for the existence and progress of human society. Agriculture is dominant in the economy by natural and human resources available (land and labor), although has gone through significant restructuring of ownership and operating system. Taking into account the functions, food and social, agriculture has a key role in national economic system, so for a balanced development of agriculture and social needs financial support. Vital source of life, agriculture, while the expression domain of human activity. Timis agriculture is characterized by a very strong dual exploitation of agricultural land: on the one hand large mass of farms that own and operate small areas of dull, and on the other hand, a relatively small number of agricultural holdings large, but uses almost half the agricultural area of the county. Timis county remains the most important agricultural country, so that the surface area and volume of production.*

Key words: *agriculture, performance in agriculture, agricultural producers, agricultural area, crop production.*

INTRODUCTION

Economic and social progress in the contemporary world is closely correlated with the development of agriculture, with its ability to meet basic food requirements of the population and those of industry raw material commodities. All countries meet economic and social importance of agriculture as the sole source to satisfy people's basic needs without which there can be no social peace and normal development.

MATERIALS AND METHODS

Documenting the work consisted in using data from publications, statistics, legislation and some authors, in association with research that formed the basis of their analysis, ideas raised in the paper.

RESULTS AND DISCUTIONS

Romanian agriculture in the post-1989 changes occurred less spectacular than in other branches, and these are mainly the structure and output. However, in this area have been some major changes in the structure of ownership and employment, and export-import relations.

Home link for European agricultural structures are farms and they have a dual role in the countryside, namely agricultural production centers and residential facilities for the family farmer.

Agricultural area of Timis County is 80.8% of the total area of the county. Reported national Timis assigned 4.7% of total agricultural land and 5.7% of the arable land.

Performance in agriculture is low and more unstable. Agricultural production was and is influenced by the structure of cultivated areas, the physical production structure and prices. Agricultural production has experienced a setback experienced increased with decreasing cultivated areas, livestock and raw materials in food industries.

Our country is strong in agriculture production structure predominating extensive in area under cereals and other crops production goods and exploiting weak ground. Romanian agriculture explanation that can not speak about intensive production structure that is time intensive industries and cultures, livestock farms where intensive methods of production practiced have lost this character, and if livestock type greenhouses and industrial activity fell, they have failed or are still difficult market.

Cultivated area of Timis county, represent 47.7% of the total cultivated area in West Region (12.1% of the total has grown in Romania) and 5.8% of national total.

Areas planted varies from year to year, the trend is downward in most cultures (Table 1.)

Table 1

Crop areas in Timis county, crop during 1990-2010

-Ha-

Culture	Years						Differences (+/-) 2010/1990
	1990	1995	2000	2005	2007	2010	
Cereal grains, of which:	307622	394614	298160	343855	280291	283103	**-24519**
Wheat and rye	119276	164416	95214	133221	139008	128054	**8778**
Barley	55060	68459	42411	45085	23043	24773	**-30287**
Corn	123336	140310	141300	143955	101609	116888	**-6448**
Potatoes	9359	8828	9162	10853	12268	-	-
Sugar beet	11342	6824	739	1098	20	-	-
Oil plants, of which:	63197	47188	47377	47016	62689	-	-
Sunflower	26954	42406	35099	41537	3353	-	-
Vegetables	10787	11464	12990	12359	12926	-	-
Total area cultivated	**535690**	**526204**	**407537**	**450720**	**3933231**	**370833**	**-164857**

Source: Statistical Yearbook of Timis county data for 2010, Department of Statistics Timis, 2012

At EU level, in 2010, there is a reduction in both the areas under cultivation and the production and crop yields in some agricultural commodities.

Table 2

Basic yield crops in 2010

	The area under cultivation (mii hectares)			Production (mii tones)			Yield (Kg / ha)		
	EU	Romania	Timiş	EU	Romania	Timiş	EU	Romania	Timiş
Wheat	25356,4	1994,4	128,1	138747,9	5587,5	373,6	5472	2802	2918
Corn	8240,2	2243,7	116,8	57843,9	9101,4	521,8	7020	4056	4464
Sunflower	3769,8	810,8	34,5	6848,1	1264,7	54,6	1817	1560	1579
Potatoes	2043,2	246,8	7,1	6259,7	3303,6	115,4	30637	13386	16194,2

Source: Press release 64 of March 31, 2011, Crop production for main crops in 2010, INS calculations based on data from Statistical Yearbook of Timis County, 2012

In terms of area under wheat, Romania was in 2010, fourth among member states of wheat growing and the production is ranked seventh, due to efficiency, which represented about half (51.2 %) the average yield of the European Union.

Romania was the first in area under maize, the European Union and the production ranked second after France due to a lower yield. Actually made by Romania corn yield is lower than the other Member States (Table 2).

Regarding yields Timis County, they are higher than Romania, 4.1% for wheat, 10% to 20.9% maize and potatoes.

Table 3

Production of main agricultural products per capita

	Unit of measure	2005		2007		2010	
		Romania	Timiş	Romania	Timiş	Romania	Timiş
Cereal grains	kg	894,6	1962,5	362,8	1174,5	779,8	1446,5
Wheat	kg	339,5	712	141,4	606,6	271,2	549,6
Rye	kg	2,3	0,7	1,0	0,85	1,6	0,14
Corn	kg	480,4	996,0	178,9	445,8	421,9	767,7
Sunflower	kg	62,0	106,4	25,4	57,1	58,9	80,3
Sugar beet	kg	33,7	509,0	34,8	0,5	39,1	-
Potatoes	kg	172,9	206,1	172,4	271,3	153,2	169,8
Vegetables	kg	167,7	229,1	144,7	262,1	180,3	170,2
Fruit	kg	76,2	45,8	50,4	53,1	66,2	50,2
Meat	kg	69,7	68,9	69,8	131,7	60,9	131,9
Milk	l	280,3	198,6	283,5	205,2	229,2	171,2
Wool	kg	0,9	1,4	1,0	1,6	1,0	1,9
Eggs	pieces	338	288	303	262	289	248

Source: Statistical Yearbook of Timis county data for 2010, Department of Statistics Timis, 2012; Romanian Statistical Yearbook, INS, 1996, 2011

Number of tractors and agricultural machinery in Romania has dropped in the early transition period, and then began to rise, but gradually. Fleet of tractors and harvesters for grain production was most affected. Currently, the number of tractors is only 40% of 1989 levels, while at the

combine is at 77%. On the other hand, the number of tractors has increased slightly and loading of arable land per tractor improved. However, the current fleet of agricultural machinery is largely overcome, and this leads to large losses of harvest and harvest does not resolve long campaigns.

Level of existing mechanical equipment in agriculture is unable to provide work in the periods under optimal culture technology.

Equipping agriculture with tractors and agricultural machinery in Timis County in Romania as otherwise, in the period 2002-2010, has remained relatively constant, reflecting the stagnation of modernization and huge differences from most EU Member States. Park of tractors increased in 2010 to 10,453 from 9,018 in 2000 (Table 4). This is relevant - because most households do not work mechanized land. Large agricultural units have modern tractors and ensure a high level of mechanization of the work.

Table 4

Fleet of tractors and agricultural machinery main agricultural Timis

- Pieces-

Years	Tractors physical	Tractor plows	Mechanical drills	Self-propelled combine harvester: cereal straw, corn and feed
1990	7388	3765	2296	3653
2000	9018	6970	4365	2065
2005	10183	8368	5444	1484
2010	10453	8431	5448	1424
Differences (+/-) 2010/1990	**3065**	**4666**	**3152**	**-2229**

Source: Statistical Yearbook of Timis county data for 2010, Department of Statistics Timis, 2012

Table 5

Crop production, the main crops

-Tones-

Years	Grains	which:			Potatoes	Sugar bee	Sunflower	Grapes	Fruits
		Wheat and rye	Barley	Corn					
1990	910161	409919	181140	299324	74390	221511	43501	12586	29605
2000	654094	244822	99564	285267	93529	7243	36060	13173	27181
2005	1292947	469726	127698	656229	135777	33538	70082	1577	30201
2007	783249	405771	55498	297280	180903	340	38059	16424	35375
2010	983183	373680	60686	521823	-	-	54625	13654	34173
Differences (+/-) 2010/1990	**73022**	**-36239**	**-120454**	**222499**	-	-	**11124**	**1068**	**4568**

Source: Statistical Yearbook of Timis county data for 2010, Department of Statistics Timis, 2012

Predominant character of the grain crop production is a specific aspect of agriculture because the areas occupied by higher grain weight in all areas. Annual production is of the climatic oscillations, changing employment areas in some cultures, lack of resources for farmers. The production of vegetables and legumes provide own resources necessary during the season, but is deficient in low season periods requiring additional imports. Potato production in the last period satisfies the consumer needs, providing the market with affordable products. There is an increased production of sunflower producers due to collaboration with oil factories.

Table 6

Average yield per hectare, the main crops in 2010

-kg/ha-

Culture	**Total**		**of which: with majority private**	
	Timiş	**West Region**	**Timiş**	**West Region**
Wheat	**2919**	**2993**	2921	2994
Barley	**2450**	**2463**	2452	2465
Oatmeal	**1383**	**2029**	1383	2029
Grains	**4464**	**4557**	4495	4572
Shelling,	**1500**	**1500**	1500	1500
Beans	**1048**	**580**	1048	580
Potatoes - total	**15317**	**12122**	15317	12111
Autumn Potatoes	**17138**	**12123**	17138	12111
Sugar beet	**-**	**44859**	-	43899
Sunflower	**1580**	**1549**	1580	1549
Soya beans	**1819**	**1739**	1819	1739
Tomatoes	**9934**	**13608**	9937	13530
Dry onions	**9237**	**10381**	9239	10369
Cabbage	**17969**	**18415**	17965	18352
Watermelons and melons	**19774**	**21770**	19774	21770

Source: Statistical Yearbook of Timis county data for 2010, Department of Statistics Timis, 2012

The analyzes in various studies have shown that Timis cover their domestic consumption of all agricultural products, except sugar beet where deficiencies are of national and attitude do not come from sugar beet growers (Table 5). In Timis county agricultural production in systems of associative type is 0 (zero). This means that there Timis county associations established under Law 36/1991. The reason is that farmers' cooperative

structures Banat did not agree with the former still unpleasant taste of communist production cooperatives.

In 2007, amid a drought year were affected by all cultures. In Romania there was 1542 kg per hectare for wheat, the lowest average production per hectare in the EU in Timis County in 2008 was recorded in wheat 3549 kg per hectare and in 2010 production fell to 2919 kg per hectare.

Table 7

Agricultural production of agricultural goods and services in Timis

- Thousands of current prices-

Years	Total		Plant		Animal		Agricultural services	
	Timiş	West Region	Timiş	West Region	Timiş	West Region	Timiş	West Region
2001	1199932	3168261	884242	21692667	306611	982217	9079	16777
2005	1711445	4282415	1195743	3139890	490741	1651774	24961	36577
2007	2260450	5498776	1493279	3599389	730458	1843030	36713	56348
2010	3532090	7881804	2562624	5338921	929902	2493619	39564	49264
Differences (+/-) 2010/2001	**2332158**	**4713543**	**1678382**	**-16353746**	**623291**	**1511402**	**30485**	**32487**

Source: Statistical Yearbook of Timis county data for 2010, Department of Statistics Timis, 2012, Romanian Statistical Yearbook, INS, 2007-2011.

During 2001 - 2008, Crop production in tones had a fluctuating evolution, marked by a recovery after 2003 in all types of plants. Plant production of Timis County represents 43.5% of total production in the West Region and 6.1% of the national average. Western region has 14.1% of total vegetable production in Romania. Agriculture from Timis County, as in the whole country in 2010 was on hand nature. Thus, wheat production bakeries in the county was lower than in 2008, but higher than in 2009 (when it was severely affected by drought), reaching 408,000 tons. The average yield on the 127,000 hectares sown with wheat amounts to 3150 kg / ha, so Timis has provided bread.

Year 2010 was very good for corn and sunflower, thanks to rains that have brought quantities of water of 80-100 liters / sq m, compared to 40-50 liters / m, as is usual. The 135,000 hectares of corn were naturally irrigated, so it will reach a total of 590,000 tons, with an average of 4350 kg/ha. Despite fairly good agricultural production, Potential County is far from true value to be exploited. Livestock farming is an important branch of

Timis, featuring special tradition in raising pigs and cattle. In the pastures of the north and north-eastern county is growing and sheep. Their growth is less able than the other, because the surfaces are not provided by natural pastures. During 1990-2005 there was a decrease of livestock in all species. However since 2002, trends began to reverse. Since 2004 there has been a major livestock growth over 2003. Herds of cattle are raised in late 2004 to 62,768 head, 307,820 pigs in and 369,733 sheep and goats at the end.

Table 8

Livestock (at end) in Timis County

-ends -

Years	Cattle		Swine		Sheep		Goat
	Total	of which: cows buffaloes and heifers	**Total**	of which: breeding sow	**Total**	of which: sheep and sheep	
1990	**192400**	65700	**1394100**	92700	**593600**	348800	22069
2000	**62647**	34433	**318680**	25528	**338425**	235458	1289
2005	**57478**	35855	**361820**	46881	**417103**	345795	6539
2007	**61642**	36561	**579010**	76738	**522289**	345155	18308
2009	**48033**	29964	**588533**	65199	**527894**	414209	16275
2010	**37974**	25949	**550038**	60839	**549799**	434371	15630
Differences (+/-) 2010/1990	**-154426**	**-39751**	**-844062**	**-31861**	**-43801**	**85571**	**-6439**

Source: Statistical Yearbook of Timis county data for 2010, Department of Statistics Timis, 2012

Table 9

Number of animals per 100 hectares

-ends-

	1990		2005		2010		Differences (+/-) 2010/1990	
	Romania	Timiş	Romania	Timiş	Romania	Timiş	Romania	Timiş
Cattle	38	34,4,	20,9	8,2	14,6	5,8	-23,4	-28,6
Swine	127,3	269,6	73,7	15,5	59,3	106,2	-68	-163,4
Sheep and goats	106,3	104,8	60,7	9,7	70,5	87,0	-35,8	-17,8

Source: Own calculations based on Statistical Summary of Timis, 2011, Statistical Yearbook of Romania, INS, 2006, 2011

Timis County Livestock plays an important role in the total number Western Regions as follows: 26.1% in cattle, pigs 47.5%, 39.9% in sheep,

goats 40%, 26.7% in horses , 26.8% and 21.8% of birds and bees national total: 2% in cattle, pigs 5.4%, 5.5% of sheep, goats 2.4%, 2.1% horses, birds 2.4%, 2.7% in bees.

Table 10

Animal agricultural production in 2010

	Total		which: private majority ownership	
	Timiş	West Region	**Timiş**	West Region
Meat - Total (tonnes live weight)	**89653**	174185	**89609**	174043
Beef (tonnes live weight)	**1861**	12880	**1837**	12819
Pork (tonnes live weight)	**78812**	124420	**78809**	12437
Meat of sheep and goats (tonnes live weight)	**6770**	14922	**6756**	14899
Poultry meat (tonnes live weight)	**2199**	21910	**2197**	21907
Milk - Total (thousands hl)	**1164**	4095	**1161**	4076
Cow and buffalo (thousands hl	**907**	3482	**904**	3463
Wool-Total (tons)	**1355**	3054	**1352**	3050
Eggs - total (million pieces)	**169**	516	**169**	516
Honey extracted (tonnes)	**414**	2790	**414**	2790

Source: Regional Directorate of Statistics Timis, 2009-2011

The evolution of long-term cattle was determined by a number of adverse factors, but also favorable. Among the unfavorable factors are: destruction units profile, massive cuts of bovine, lack of accommodation capacity, lack of feed required and of the favor: setting up private companies specialized small and medium sized foreign investments, increasing average milk production and average weight at slaughter. And pig development was influenced by adverse factors (of the big issues of growth and fattening of pigs, cutting massive imports) and favorable (foreign investments, establishment of private companies). Beekeeping, an ancient occupation of our people, is favored by a rich honey production. Timis County falls in the third organic beekeeping, specific conditions of the Tisza Plain. Thus, in the county there is a good honey production.

CONCLUSION

Timis county is the most important agricultural country, so that the surface area and volume of production results. 40 percent of utilized agricultural area in Region West (including Timis, Arad, Caras-Severin and Hunedoara) is Timis, the county has more than 78,000 farms, totaling 660,000 hectares.

Agricultural land is not, however, less, but increased by almost 30,000 hectares, has been changed since the use of large areas of pasture and hay. As the main crops, Timis has 6.2 percent of the country's agricultural area cultivated with wheat and 6 percent of the corn. Over 50 percent of the total area cultivated with wheat and corn in Region V West is in Timis County.

In agriculture Timis county 158,000 people work, this represents 2.21 percent of those dealing with agricultural activities at national level.

Livestock provide interesting data in terms of species of animals in this part of the country. Timis has a large share of total livestock of sheep, seven percent, 78.46 percent more than in 2003. Also increased pig, with 112.66 percent, Timis County came to have 12 percent of those registered at the national level. And regarding beekeeping is signaling a significant increase compared to 2003, the number of bee families being 83.32 percent higher, representing three percent of the national total.

Instead, the signal decreases in cattle and horses. Herds of cattle fell by 37 percent, the overall situation, mainly by competition in the European market, where there is much more powerful race, which does not weigh so much cost. Horses fell by 61 percent, while the horses began to be used less and less in agriculture, where the latest technologies appear.

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