

STUDY REGARDING AGRICULTURAL PRODUCTION FROM CARAS-SEVERIN COUNTY

**IOAN BRAD, TIBERIU IANCU, REMUS GHERMAN, TABITA ADAMOV,
ANA-MARIANA DINCU**

Banat's University of Agricultural Sciences and Veterinary Medicine from Timisoara
Faculty of Farm Management
Calea Aradului, no.119, 300645, Timisoara, Romania
maridincu2004@yahoo.com

ABSTRACT

The present paper wishes to present objectively, through the medium of analyze, the situation of agricultural production from Caras-Severin County. Like all over the country, in Caras-Severin County it practices a subsistence agriculture, underperforming, for self-consumption. The lack of association and weak technological equipment, the large number of elderly farmers, does not allow the practice of an efficient and competitive agriculture. Even if Caras-Severin County is the third as largest on the country, in terms of agricultural area, this being only 396.915 ha, occupies only 13th place thanks to the relief mostly mountainous. From the data presented in this article it can be seen that the agricultural production of Caras-Severin County has registered an upward trend in the 2010-2013 period, after which its level decreased in the year 2014 due to the decrease of agricultural production animal and vegetable, but it can notice an increase of agricultural services in this year.

Keywords: agriculture, agricultural production, animal production, crop production, agricultural services

INTRODUCTION

Agriculture represents from ancient times a fundamental field of activity and continue to remain even today, while being an important supplier of raw material for industry and an outlet market for its production.

Therefore, the primary function of agriculture has been always to supply the population with food needed for nutrition, knowing that no branch of the economy could not and will not be able to fulfill a function as important for human existence in the future.

Agriculture, ensuring directly or indirectly to human the necessary food for nutrition, represents the crucial condition to achieving extended reproduction, of labor, the condition of the existence and development of human society.

The negative effects of agricultural reform have had a temporary negative impact on the level of crop and livestock production, but also negative effects on the upstream and downstream industries of agriculture.

MATERIAL AND METHOD

In this paper we have presented through analysis and comparison, the situation of agricultural production from Caras-Severin County. The issues involved in this scientific paper work are: land fund, crop production and animal production, the dynamic of average productions and livestock from Caras-Severin. The necessary data of the present study resulted from consultation with a vast statistical material of specialty.

RESULTS

Located in the south west of Romania, Caras-Severin County in terms of size is the third from the country with an area of 8,520 square kilometers, which represents 3.6% from the country's surface. Mountains occupy on the county's territory 65.4%, the hills have a small expansion, occupying 10.8%, 16.5% lowlands and plains are on last place, accounting 7.3% from the surface.

From Table 1 we can see the fund land structure on categories of use, where the largest share is held by pastures (45%) due to predominantly mountainous relief, followed by arable land with a percentage of 33%, meadow 19%, the share lowest being held by vineyards and orchards.

Table 1. The land fund by category of use at December 31 (hectares)

| Caras-Severin County | 2000 | 2005 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total area | 851976 | 851976 | 851976 | 851976 | 851976 | 851976 | 851976 |
| Agricultural area | 399694 | 398083 | 396999 | 396928 | 396917 | 396915 | 396915 |
| from which, by category of use : | | | | | | | |
| Arable | 127233 | 127313 | 129661 | 129646 | 129633 | 129628 | 129628 |
| Pastures | 182861 | 183466 | 179414 | 179358 | 179349 | 179349 | 179349 |
| Meadow | 75976 | 74796 | 76393 | 76393 | 76393 | 76392 | 76392 |
| Vineyards | 1222 | 766 | 772 | 772 | 772 | 772 | 772 |
| Orchards | 12402 | 11742 | 10759 | 10759 | 10770 | 10774 | 10774 |

Source: Statistical Summary of Caras-Severin County – 2015

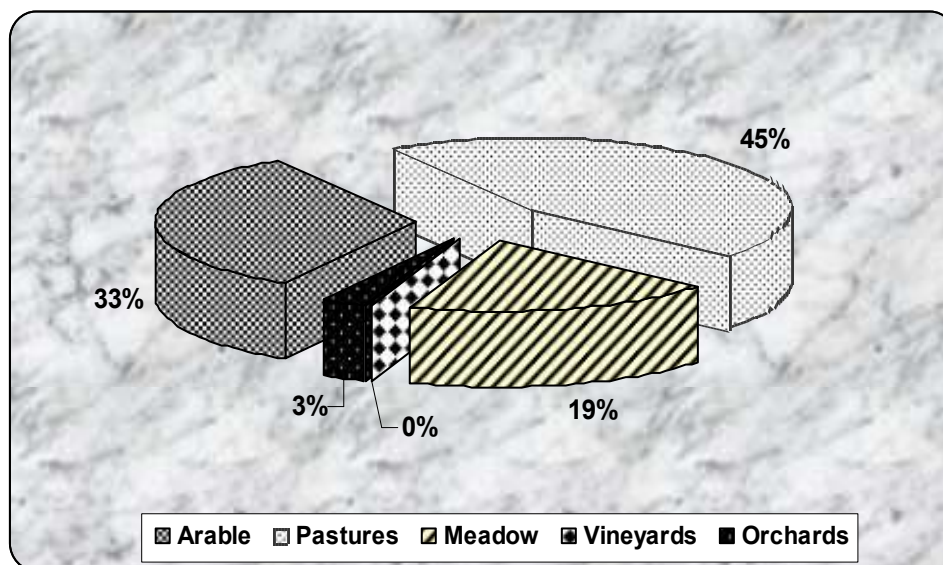


Figure 1. Agricultural area by way of use in the year 2014

Next we will analyze the evolution of agricultural production from Caras-Severin, County, where crop production predominates, followed by animal one and a very small share hold the agricultural services, as can be seen from the table below.

According to data published by the National Institute of Statistics, the structure of agriculture production value in the year 2014 has registered a significant decrease compared to the year 2013.

**Table 2. Agricultural production of goods and agricultural services
(thousands RON current prices)**

| Caras-Severin, County | Total | Vegetable | Animal | Agricultural services |
|--------------------------|---------|-----------|--------|--------------------------|
| 2001 | 560139 | 336135 | 222172 | 1832 |
| 2005 | 985274 | 621434 | 360478 | 3362 |
| 2010 | 1287922 | 782816 | 504529 | 577 |
| 2011 | 1280564 | 812535 | 467739 | 290 |
| 2012 | 1317543 | 813405 | 501902 | 2236 |
| 2013 | 1407775 | 865188 | 541604 | 983 |
| 2014 | 1098699 | 607058 | 482378 | 9263 |

Source: Statistical Summary of Caras-Severin County – 2015

Compared with the year 2013, agricultural services have increased significantly in the year 2014, also it can be seen major declines in the 2014 at crop and animal production compared to the previous year.

In a healthy agrarian economy the share of vegetable production should be at the same level with the share of animal production.

Arable land, in the year 2015, was cultivated with cereals for grains on 42,227 hectares, from which 13,143 hectares to wheat and rye, and corn for grain, on 26,231 hectares.

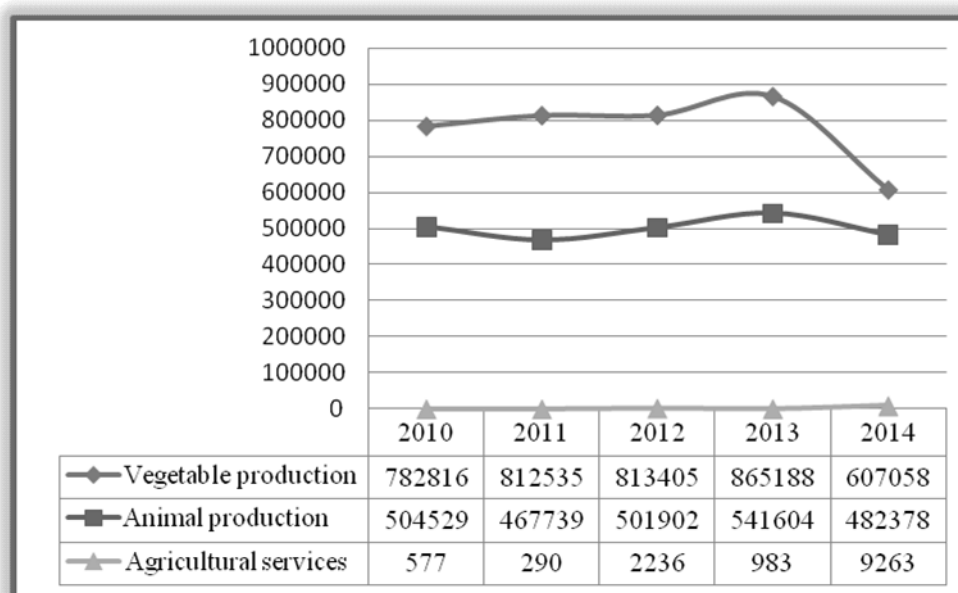


Figure 2. Evolution of agricultural production in 2010-2014 period

In the year 2015, at cereals was obtained a total production of 111,795 tons, much lower production compared to the year 2000 when total production was 160,228 tons. Compared to the year 2000, a significant increase can be observed at sunflowers, in the year 2015, where total production was 9,385 tons. At barley total production, in the year 2015 was 1,892 tons, down from total production from the year 2000, when it was 10,269 tons.

Autumn potatoes and field vegetables prevail in the population's household sector, where, in majority, are cultivated for their own consumption, but there are certain quantities routed for capitalization on the market. Cereal for grains, namely wheat and corn, represent the largest share of crops, both in population's households and agricultural trading companies.

Table 3. Agricultural vegetable production, at the main crops (tones)

| Caras-Severin County | 2000 | 2005 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Grains | 160228 | 220554 | 152623 | 182569 | 148209 | 155616 | 159170 | 111795 |
| From witch: | | | | | | | | |
| Wheat and rye | 60971 | 61417 | 38110 | 33938 | 33184 | 37906 | 46043 | 36729 |
| Barley | 10269 | 11914 | 4267 | 2276 | 1414 | 1663 | 2795 | 1892 |
| Corn | 76684 | 139006 | 104509 | 139087 | 107718 | 111076 | 104738 | 68062 |
| Sunflower | 2171 | 4129 | 6863 | 2242 | 11857 | 11517 | 8559 | 9385 |
| Potatoes | 79549 | 139165 | 105207 | 91055 | 57530 | 65580 | 61683 | 47170 |
| Vegetables | 86980 | 48917 | 37825 | 35423 | 23996 | 29234 | 28945 | 17770 |
| Grapes | 2864 | 957 | 1202 | 2401 | 4436 | 4922 | 4222 | 4213 |
| Fruits | 46968 | 60383 | 31917 | 42977 | 34420 | 38331 | 35055 | 32450 |

Source: Statistical Summary of Caras-Severin County – 2015

Next, we will analyze the dynamics of average production per hectare, during 2000-2015 period, at the main crops.

Table 4. Average production per hectare, at the main crops (kg/ha)

| Caras-Severin County | 2000 | 2005 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Wheat and rye | 2978 | - | 2721 | 3107 | 2743 | 2976 | 3310 | 2795 |
| Barley | 2861 | 2728 | 2767 | 2690 | 2594 | 2781 | 2789 | 2889 |
| Corn | 1814 | 3659 | 3417 | 4235 | 2989 | 3630 | 3854 | 2595 |
| Sunflower | 915 | 1278 | 1347 | 1662 | 1654 | 1712 | 1470 | 1294 |
| Potatoes | 14737 | 19137 | 15345 | 14065 | 9262 | 11305 | 12307 | 9618 |
| Tomatoes | 13382 | 18189 | 10682 | 11446 | 7612 | 8096 | 7705 | 8031 |
| Dehydrated onion | 11260 | 11573 | 9552 | 9725 | 7888 | 8792 | 12181 | 10000 |
| Cabbage | 18776 | 22162 | 12972 | 14774 | 13466 | 13377 | 16084 | 15067 |
| Lucerne | 24993 | 25231 | 21192 | 22453 | 19039 | 19957 | 21589 | 18436 |
| Clover | 24613 | 20898 | 19977 | 18964 | 15524 | 17669 | 16851 | 16606 |

Source: Statistical Summary of Caras-Severin County – 2015

From *Table 4* above we can see that, in Caras-Severin County the average productions in the year 2015 are much lower than those from the year 2000, except corn and sunflower that have recorded increases compared to the year 2000. At wheat and rye the average production in the year 2015 was 2,795 kg/ha, down compared to the year 2000 when the average production was 2,978 kg/ha.

In *Table 5*, we present the evolution of livestock during the 2000-2015 period, in the Caras-Severin County.

Table 5. Livestock (heads)

| Caras-Severin | 2000 | 2005 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Cattle | 56718 | 50401 | 32806 | 32118 | 37105 | 35312 | 35886 | 36793 |
| From witch: cows, buffaloes and heifers | 33659 | 35558 | 20006 | 22856 | 24448 | 24577 | 24438 | 24310 |
| Swine | 41943 | 81575 | 62326 | 57964 | 60373 | 53691 | 57077 | 46223 |
| From witch: covered sows | 3612 | 4636 | 4294 | 2911 | 3469 | 3094 | 3065 | 3757 |
| Sheep | 251967 | 200787 | 210982 | 213411 | 238240 | 299010 | 292064 | 324630 |
| From which: ewes and ewe | 173654 | 172606 | 180677 | 183723 | 204247 | 251722 | 218300 | 220473 |
| Goats | 12767 | 14721 | 14728 | 17289 | 16343 | 21792 | 22647 | 24110 |
| Horses | 17914 | 14248 | 8762 | 8383 | 9626 | 8607 | 8762 | 6597 |
| Birds | 1175153 | 1600050 | 1463014 | 1311496 | 1502154 | 1431346 | 1336281 | 1441994 |
| Bee | 25672 | 37666 | 62043 | 55898 | 55984 | 57837 | 57611 | 56707 |
| Rabbits | - | 9285 | 6726 | 7112 | 10285 | 10503 | 10019 | 7019 |

Source: Statistical Summary of Caras-Severin County – 2015

In the analyzed period, we can see that in Caras-Severin County the number of cattle in the year 2015 is down compared to the year 2000, but up compared to the year 2014. Today, in the Caras-Severin County, the number of sheep has increased from 251,967 heads in the year 2000 to 324,630 head in the year 2015.

Herds of goats are increasing in 2015 compared with previous years, and a significant decrease can be observed at the pig herds compared to the previous year.

Next, we will analyze the total livestock production for all animals existing in the County (*Table 6*).

Table 6. Agricultural animal production

| Caras-Severin County | 2000 | 2005 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Meat - total (tones live weight) | 21109 | 25311 | 23061 | 20351 | 19827 | 20208 | 21460 | 25162 |
| Beef meat (tones live weight) | 2858 | 6001 | 3127 | 3829 | 3146 | 3505 | 3073 | 3247 |
| Pork meat (tones live weight) | 9859 | 7403 | 8940 | 7925 | 8377 | 7930 | 8831 | 9273 |
| Sheep and goats meat (tones live weight) | 3238 | 3852 | 2849 | 2684 | 2666 | 2593 | 2639 | 2801 |
| Poultry meat (tones live weight) | 5090 | 8035 | 8125 | 5896 | 5618 | 6168 | 6909 | 9835 |
| Milk - total (thousand hectoliters) | 943 | 1188 | 927 | 1052 | 979 | 944 | 878 | 854 |
| Cow and buffalo milk (thousand hl) | 823 | 1031 | 750 | 856 | 770 | 739 | 695 | 673 |
| Wool total (tones) | 439 | 370 | 448 | 443 | 469 | 516 | 544 | 548 |
| Eggs - total (million pieces) | 109 | 175 | 112 | 131 | 132 | 132 | 139 | 150 |
| Honey extracted (tones) | 576 | 1003 | 849 | 1367 | 1029 | 1629 | 1014 | 1362 |

Source: <http://www.carasseverin.insse.ro/main.php?id=432>

Analyzing animal production, we can see that the largest share represents poultry and pork meat followed by the cattle meat.

At the product extracted honey, the production increase from 576 tones in the year 2000 to 1,362 tones in the year 2015.

The total animal agricultural production is increasing in recent years, but it is obtained almost entirely in the private sector.

CONCLUSIONS

In the year 2014 crop and animal production has registered major decreases compared to the year 2013, instead agricultural services increased significantly.

Livestock production represents in the year 2015, at the level of the Caras-Severin County 44%, crop production recorded a higher percentage of 55%, the difference up to 100% being represented by agricultural services.

Because of the predominantly mountainous relief, the largest share from the agricultural area of the County is owned by pastures (45%), followed by arable land with a percentage of 33%, meadows 19% and the lowest percent is held by vineyards and orchards.

REFERENCES

- BRAD I. (2007): Management și marketing, Editura Agroprint, Timișoara
 BRAD I. (2015): Managementul producției, Editura Eurostampa, Timișoara
 Breviarul statistic al județului Caraș-Severin (2001 – 2015)
<http://www.carasseverin.insse.ro/main.php?id=432>
http://www.insse.ro/cms/sites/default/files/field/publicatii/efective_de_animale_si_producti_a_animala_in_anul_2015.pdf
 INSTITUTUL NAȚIONAL DE STATISTICĂ (2016): Anularul Statistic al României