## ANALYSIS OF AGRICULTURAL DEVELOPMENT OF REGION WEST

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#### **Abstract**

As in the entire country in the Western Region on more than half of the region's agricultural practice subsistence agriculture, and for self underperforming. Lack of association, privately owned land fragmentation, lack of irrigation, small agricultural exploitations and poor technological equipment are some of the causes that prevent the practice of effective, competitive agriculture. There are two categories of exploitations, i.e. small area exploitations (below 20 ha), non-performing and providing only for self-consumption, and large exploitations (over 50 ha), well equipped (in general, the property of large companies) that practice high-productivity agriculture. This is the reason why the authors of the present paper analyse the present state of agricultural development of the Region West.

**Key words**: Region West, agriculture, analysis, crops, livestock, production

At national level, the Region West covers 12.80% of the agricultural area of Romania with a considerable potential of valorisation. In the Region, there are certain differences between the counties, i.e. in Arad County and Timiş County, agricultural areas are superior to those of Caras-Severin County and Hunedoara County, the former ones enjoying a great potential due to the Western Plain, while hills and mountains with huge forestry resources dominate the latter ones.

In 2011, the agricultural area covered 1,868,417 ha (i.e., 12.80% of Romania's agricultural area).

As for the use categories of the agricultural area, there are some differences between the regional and national levels. The share of the arable area of the Region West is smaller than the national mean, but within the Region, Timiş County and Arad County share more than the national mean.

The share of the grasslands is higher at regional level than at national level, Caras-Severin County and Hunedoara County sharing almost twice as much as the national mean. Within the Region, haymaking fields share more than the national level; at regional level, the largest share is that of the Hunedoara County, while Timiş County shares the smallest one.

The Region shares rather small areas cultivated with grapes, i.e. three times less than the

national level; at regional level, the largest share is that of Arad County, closely followed by Timiş County.

Both the Region West and Romania share the same areas cultivated with fruit trees. Caras-Severin County has an important potential of valorising fruit tree cultures, the share of areas covered with orchards being twice as much as the national and regional levels.

Of the total agricultural area 1,731,414.87 ha, 774,304.02 ha are agricultural exploitations without legal personality and 957,110.85 ha represent (local councils/town halls, autonomous regies, commercial companies, etc.). The mean agricultural area was 6.32 ha/exploitation, small compared to the mean area of the EU farm which is about 19 ha/farm. According to the General Agricultural Census, of the total 273,891 agricultural exploitations in the area, 71.1% are mixed exploitations (they grow crops and raise livestock), 25.3% grow crops and 3 6% raise livestock

#### MATERIAL AND METHOD

The authors of the research methods used in collecting data from various sources, processing, analysis and interpretation.

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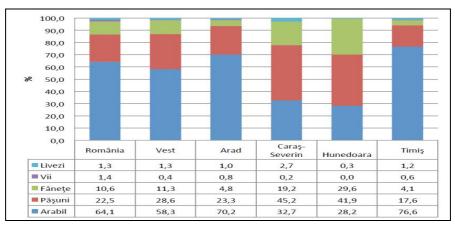


Figure 1 Agricultural areas per use categories (2011)

## RESULTS AND DISCUSSIONS

Compared with the national level, the Region West has a slightly larger share of mixed agricultural exploitations (crop growing and livestock raising) and of livestock raising exploitations, while crop growing exploitations have a slightly smaller share than that of the national level.

At regional level, Arad County shares more than the Region West and Romania as far as mixed agricultural exploitations are concerned (crop growing and livestock raising); Caras-Severin County has a slightly larger share of livestock raising exploitations than the Region and Romania; and Hunedoara County has a larger share of crop growing exploitations than the Region and Romania.

Table 1

# **Agricultural production**

Agricultural branch, of which:	2011 (thousand RON)	%
Crops	5.664.685	69.6
Livestock	2.423.474	29.8
Agricultural services	53.213	0.6
TOTAL	8.141.372	100
Private property	7.873.546	96.7

As for agricultural production in the Region West, it is mainly vegetal. Agricultural production

represents 10.64% of the total national production, while at regional level it represents

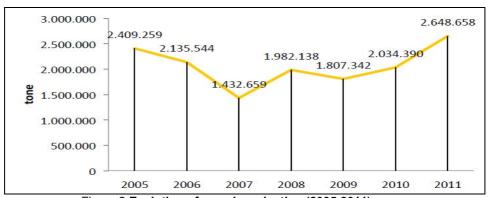


Figure 2 Evolution of cereal production (2005-2011)
County (119,986 t).

Cereals are the most cultivated crops in the Region West; according to statistics, in 2011 the Region produced 2,648,658 t, i.e. above the production of 2005, but with an obvious fragility of the cereal production. At county level, the largest production was in the Timiş County (1,416,496 t), Arad County (926,607 t), Caras-

Severin County (182,569 t), and Hunedoara. Though it does not rank among the best in cereal production (it ranged 4<sup>th</sup>), the Region West produced, in 2011, due to its high level of technological equipment, very good productivities (kg/ha), i.e. above the national mean except for maize.

Table 2

Cereal	productivity	in 2011	(kg/ha)
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County/ Development Region	Wheat	Rye	Barley and two-row barley	Oat	Maize
ARAD	3,921	2,953	3,151	2,400	4,585
CARAŞ-SEVERIN	3,107	-	2,690	2,044	4,235
HUNEDOARA	3,782	2,469	2,526	1,853	4,271
TIMIŞ	4,181	2,797	4,199	3,053	4,471
REGION WEST	4,032	2,848	3,927	2,485	4,480
ROMANIA	3,663	2,540	3,170	2,028	4,525

Legumes are crops such as peas and beans, but also potatoes, sugar beets and fodder root plants. Among them, we selected potato and sugar beets, basic foods in the country. In 2011, potato reached 366.713 t, less than in 2005, whose production was 20% larger. In the Region West, sunflower production was superior to that of 2005; starting with 2009, it has continuously increased in the Region. Sunflower production was rather modest in the West Region (114,047 t) which ranked 5<sup>th</sup> among the development regions. Mean sunflower production was 2,166 kg/ha, i.e. superior to the national mean. In the Region West, in 2011, vegetables production was above the production level of 2005, with a fluctuation of the production in most cultivated species; vegetables production decreased between 2008 and 2010, to increase again and reach 434,772 t. In the Region West, the area cultivated with grapes is 8,400 ha, of which most are in Timiş County and Arad County. Among the most important viticultural areas in the Arad County are Podgoria Aradului, the Măderat – Bocsig area, and in Timiş County, the Recaş area, Buziaş, the Sânnicolau Mare area. At regional level, Region West ranks 2<sup>nd</sup> from the point of view of grape production, with Bucuresti-Ilfov ranking 1<sup>st</sup>. Though there is an important potential of valorisation of grape culture (the Podgoria Aradului area, Arad County), Recaş, Buziaş (Timiş County), Berzovia and Moldova Nouă (Caraş-Severin County), it is not properly valorised. In 2011, fruit production in the Region West was about 126,877 t, i.e. a little above the level of 2010, but much below the level of 2005, when it was about 25% larger.

Table 3

# Fruit production in the Region West (2011)

Species	t	%
Plums	71,422	56.3
Apples	33,694	26.6
Cherries and sour cherries	5,559	4.4
Pears	3,741	2.9
Walnuts	3,816	3.0
Peaches and nectarines	4,456	3.5
Apricots and green apricots	2,249	1.8
Strawberries	817	0.6
Other fruits	1,123	0.9
TOTAL	126,878	100

The fruits most cultivated in the Region West are the plums (56.5%), the apples (29.8%), the cherries and the sour cherries (3.8%), the pears (3%), the walnuts (2.7%), the peaches and nectarines (1.5%), the apricots and green apricots (1.1%), the strawberries (0.7%), and other fruits (1.0%). Livestock raising has an important share

of Romanian agriculture and it represents one of the basic jobs in the rural area. Though the livestock are exploited effectively, there is still some increasing potential given the areas covered by grasslands and haymaking fields. In the Region in 2011, poultry, sheep, swine, and bees were the most raised animals.

Table 4

### Livestock of the Region West in 2011 (heads)

Type of livestock	Heads	Families
Poultry	5,439,543	
Sheep	1,261,277	
Swine	932,341	
Bees		168,040
Bovines	143,747	
Goats	54,928	
Horses	31,909	

Figure 9 below shows an increase of the number of livestock from 2005 to 2010 in bovines, swine, sheep, and goats, from 2,074,213

(2005) to 2,392,293 (2011) with a slight decrease in 2007, followed by a slight but constant increase until 2010.

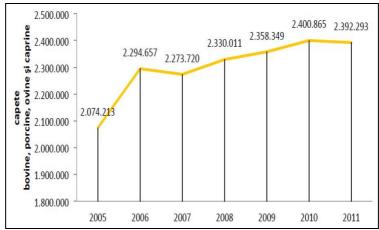


Figure 3 Livestock figures (2005-2011)

Animal production is the second branch of the agricultural production in the Region West; it reached 2,423,474 thousand RON in 2011, i.e. 11.12% of the total animal production of Romania.

Animal production in the Region West in figures is 4,194 thousand hl of milk, of which 3,554 thousand hl of cow and buffalo milk, 2,468 t of wool, 505 million eggs, 3,512 t of honey.

Table 5

# Animal production in the Region West (2011)

Type of product	t (live)	%
Beef	15,742	8.3
Pork	134,815	71.5
Mutton and goat	15,095	8.0
Poultry	22,927	12.2
TOTAL	188,620	100

# **CONCLUSIONS**

The study we have carried out on the present development of the agriculture in the Region West shows the following:

- agricultural activities are characterised by a duality of the agricultural exploitations: on the one hand, a large number of individual exploitations of small size that cover half of the agricultural area and, on the other hand, agricultural exploitations of larger size, few but

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- At regional level, there is fluctuation of annual crop productions because of the droughts and of the lack of irrigation;
- Product quality does not reach the standards in the field to make them fit for foreign markets, which determines huge imports of agricultural produce;
- Medicinal plants and technical plants, good cash crops, are not cultivated in the Region West.

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