

**INVESTIGATION OF THE SITUATION OF THE COMMUNES FROM
MOUNTAIN AREA OF MARAMURES COUNTY. DYNAMICS OF
AGRICULTURAL ACTIVITY FROM RURAL MOUNTAIN AREA**

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Abstract: The mountainous area of Maramures occupies 67% from the county's total, and its importance is reflected socio-economically in the county's economy. Most of this mountain area is rural, being represented by 43 communes. The purpose of this research is to investigate the situation of the communes from mountain area of Maramures County and the dynamics of the agricultural activity carried out in the mountain rural area.

Key words: Maramureș mountain area, agricultural activity, evolution

INTRODUCTION

The modern administrative land is created from three countries and two areas: Maramures Country, Lapus Country, Chioar Country, Codru Area and Baia Mare-Baia Sprie Area. Apart from these five areas, the country of Maramures is the largest, covering almost half from the total area of the administrative land. The oldest archaeological evidence attests the presence of man in these places since the Upper Paleolithic and Neolithic. The Thracian community from the Bronze Age (attested in Sighet, Calinesti or Sapanta) developed the brilliant Suciul de Sus culture and created a veritable wood civilization. The mountainous area from rural area of Maramures County is 298,332 ha and represents 67%, a municipality, 8 towns and 43 communes being included in this mountain area.

Both the built space and the one used for daily activity exploit the natural qualities of the area in a special way: the settlements occupy a vast area, generally being made up of households scattered along the main street and surrounded by orchards, gardens and even forests. The mixed forests are important local and regional resources, the wood being characteristic of the area even today: the settlements from Maramures use wood as a construction material.

The existential concern is channeled in two directions:

- one of subsistence by exploiting local agricultural resources, and
- the second way obtaining added value by providing work to third parties, small workshops, as employees within the limits of some processing sectors, in the administrative, medical, educational, trade and tourism sectors.

MATERIALS AND METHODS

The purpose of this research is to investigate the situation of the communes from mountain area of Maramures County and the dynamics of the agricultural activity carried out in the mountain rural area. Various sources of information and the case study method were used to achieve the proposed objective.

RESEARCH RESULTS

The mountain area of Maramures County includes no more than 52 UATs, of which one municipality, 8 cities and 43 communes.

Table 1.

The situation of the communes from mountain area of Maramures County

No.	Locality	Surface-Total ha	No.	Locality	Surface-Total ha
1	Bârsana	7314	23	Oncești	2065
2	Băiuț	11350	24	Petrova	4205
3	Bistra	13229	25	Poienile de Sub Munte	29336
4	Bocicioiu Mare	2402	26	Poienile Izei	1607
5	Bogdan Vodă	3385	27	Remeți	6832
6	Boiu Mare	5954	28	Repedea	11370
7	Botiza	7480	29	Rona de Jos	2273
8	Budești	8526	30	Rona de Sus	6830
9	Călinești	6612	31	Rozavlea	4323
10	Câmpulung la Tisa	3348	32	Ruscova	4099
11	Cernești	9604	33	Săcel	7989
12	Cicârlău	7500	34	Săpânța	13917
13	Coroieni	6693	35	Sărăsău	1952
14	Cușșeni	8956	36	Șieu	2118
15	Desești	14416	37	Șisești	9002
16	Giulești	8280	38	Strâmtura	9157
17	Groșii Țibleșului	12340	39	Suciu de Sus	11469
18	Ieud	7580	40	Vadu Izei	1685
19	Lăpuș	8655	41	Valea Chioarului	7908
20	Leordina	2994	42	Vima Mică	7655
21	Moisei	11263	43	Vișeu de Jos	5586
22	Ocna Șugatag	8520			
	TOTAL ha			327779	

Source: data obtained from Maramures County Directorate of Statistics in October 2022 [13]

Investigating the situation of the communes from mountain area of Maramures County

The communes from mountainous area of Maramures County are located in the valleys along the county or communal roads, namely: Iza Valey along the Iza River and at the foot of the Rodnei and Tibles Mountains, with the respective communes Oncești, Barsana, Stramtura, Rozlea, Sieu, Botiza, Poienile Izei, Ieud, Bogdan Voda, Sacel. Here we also have two towns that were transformed from communes in 2004, namely Dragomirești and Salistea de Sus. In these communes at the date of the last census there were a number of 8697 mountain households. In these communes the poverty rate is on average 42.57%, the depth of poverty (consumption deficit) is on average 13.2% and the severity of poverty is on average 6.08%. In recent years, tourism and agritourism have been developed in these communes, because the active population is away working abroad and with the money they have earned, they have built guesthouses. Agricultural activities are in decline, the number of animals is decreasing and agricultural lands, especially hayfields, are unworked due to lack of labor.

The Vișeu Valley along the Vișeu River and at the foot of the Maramures Mountains, we have the communes with their villages such as: Bistra, Petrova, Leordina, Vișeu de jos, Moisei and also at the foot of the Maramures Mountains but in the Ruscova Valley we have the Poienile de Sub Munte, Repedea and Ruscova communes. Also in this area the active population is away to work abroad, here the degree of poverty is on average 42.97%, the depth of poverty (consumption deficit) is on average 13.8% and the severity of poverty is on average 6.47%. Thus, in Valea Izei, agriculture is in decline as the pastures are not grazed to their capacity, the livestock numbers are getting smaller and smaller, the

hayfields remain uncut due to the lack of labor who are away to work abroad. In Viseu Valey, chaotic construction was done without respecting the minimum of traditional architecture, there being no restrictions on building.

At the foot of the Gutai Mountains on the Mara and Cosau rivers are located the Desesti, Giulesti, Budesti and Ocna Sugatag communes with their villages, here the poverty rate is on average 40.39%, the depth of poverty (consumption deficit) is on average 12.35% and the severity of poverty is on average 5.7%. Here also we have a decline in agriculture, the number of animals is decreasing and the pastures, not being grazed to the maximum and not being mowed, are in a state of severe degradation. This area has the highest tourist potential, as traditional customs are preserved here, the folk costume specific to the area is worn on holidays, tourism is in permanent development. The Ocna Sugatag commune is considered a tourist resort with a saltwater treatment base.

Another area is on the Lapus River Valley at the foot of the Tibles Mountains and the Lapus Mountains where we have the communes of Baiut, Cernesti, Cupseni, Coroieni, Grosii Tiblesului, Lapus, Sisesti, Suci de Sus, Vima Mica and Valea Chioarului. Here the degree of poverty is on average 38.39%, the depth of poverty (consumption deficit) is on average 11.96% and the severity of poverty is on average 4.92%. This area is a bit more developed, there were many mining operations until 2004 that led to the development of the area. In the center of this area is the town of Targu Lapus. As in other areas, agriculture is in decline, the tourism infrastructure being poorly developed, although there are important tourist attractions such as Cheile Lapusului, places of worship, Rohia Monastery, etc.

The dynamics of agricultural activity carried out in the rural mountain area

Farming, as a central element of the community agrarian structure, can be analyzed considering certain economic performance indicators. We chose the number of holdings and their size, and from the data presented in table 2, their increasing trend emerges, during the analyzed period.

Table 2.
The evolution of agricultural holdings from mountainous rural area of Maramures, 2018 – 2021

Specification	2018		2019		2020		2021	
	Number	Surface	Number	Surface	Number	Surface	Number	Surface
Total rural holdings from mountain area of Maramures County	22510	74034,5	22259	73920,14	22294	74792,96	22314	74729,49
Holdings under 10 ha	21829	55828,36	21550	55136,27	21559	55271,08	21582	55024,66
under 1 ha	2949	1664,81	2941	1660,41	2938	1665,47	2952	1670,88
1-2 ha	7391	10695,12	7249	10508,93	7291	10576,35	7429	10757,81
2-5 ha	8952	27614,48	8865	27385,87	8811	27257,91	8710	26927,36
5-10 ha	2537	15853,95	2495	15581,06	2519	15771,35	2491	15668,61
Holdings between 10 and 100 ha	681	18206,14	709	18783,87	735	19521,88	732	19704,83
10-20 ha	481	8119,45	500	8362,76	503	8389,19	498	8372,36
20-50 ha	152	6585,51	160	6825,44	185	7604,66	181	7503,3
50-100 ha	48	3501,18	49	3595,67	47	3528,03	53	3829,17

Source: processing information after www.insse.ro[14]

Another positive aspect noted is the small but constant increase in the number of large-scale holdings, probably contributing to this aspect are the surface subsidies and financing from community funds. As negative aspects it should be mentioned: the existence of many small agricultural holdings, with areas divided into many plots for the exploitation of which the production costs exceed many times the value of the obtained production.

Considering the structure of holdings with a legal character from the analyzed area, the situation is presented in detail for the period 2015-2021 in table 3. Thus, it is found the increase in the number of foreign persons who requested APIA support, the increase in the number of family businesses from 33 to 530, obviously and of the exploited surface, the increase in the number of individual enterprises from 311 to 402. In the case of these

increases, the subsidies and financing of agricultural activity, especially through the sub-measure destined to young farmers, are the stimulating elements. Decreases, both in terms of number and exploited area, were registered in the case of legal entities, individuals, and authorized persons.

Table 3.

The structure of holdings according to the legal status of the rural mountain area of Maramures

Year	Foreign people		Family businesses		Individual enterprises		Legal persons		Individuals		Authorized persons	
	No. farmers	Surface (ha)	No. farmers	Surface (ha)	No. farmers	Surface (ha)	No. farmers	Surface (ha)	No. farmers	Surface (ha)	No. farmers	Surface (ha)
2015	1	2,62	33	172,5	311	1609,9	270	4893,36	20891	62922	2255	7687,23
2018	2	6,39	117	473,45	447	2485,67	200	3584,35	20489	59993,2	1132	6682,27
2019	2	6,44	364	1288,4	432	2527,68	172	3520,03	20273	57935,3	899	5796,4
2020	2	6,44	523	1802,25	405	2431,52	167	3691,13	20227	60193,9	854	5883,58
2021	4	9,64	530	1846,43	402	2600,19	166	3522,65	20306	57198,39	790	5746,39

Source: processing information after APIA Maramures[11]

Regarding the cultivated area, it decreased during the analyzed period from 65501 hectares to 56370 hectares. (table 4, fig.1) In the group of cereals, the largest share is held by corn, the second place is occupied by potato, and the third place is wheat and rye. The high proportion of corn is explained through the fact that is the main product in animal feed. The surface cultivated with wheat, as a rule, is established by the needs of the bakery, and the one with barley by the quantities contracted with the breweries and those of concentrated fodder.

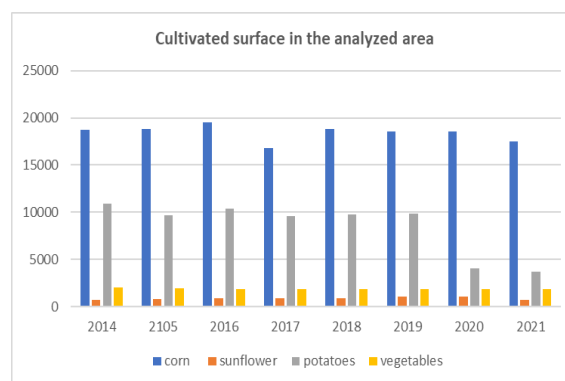


Figure 1. Cultivated surface in the analyzed area

Table 4.

The area cultivated with the main crops in Maramureş County, hectares

Maramures County	2014	2015	2016	2017	2018	2018	2020	2021
TOTAL	65501	65794	67652	63652	66888	66404	59491	56370
Cereals for grains, from which:	26957	27663	28783	26062	28857	27977	26460	24051
Wheat and rye	2745	2988	3021	3090	3608	3103	3044	2997
Barley and millet	525	600	631	660	700	742	558	526
Corn kernels	18734	18786	19525	16786	18810	18514	18516	17511
Sunflower	728	757	852	850	853	1020	1022	740
Potatoes	10887	9688	10348	9559	9751	9853	4002	3712
vegetables	2060	1894	1878	1862	1873	1878	1852	1851

Source: Own processing according to the Database Tempo online, AGR108A[12]

One of the oldest and most important agricultural activities is animal breeding, which is favored by the landforms and favorable climatic conditions. (table 5, fig.2) The brand of Maramures County is "Bruna de Maramures" bull breed, which brought the county fame and the development of the livestock sector. Following the centralization of information, reductions are noted in the number of animals raised, with the exception of sheep.

Table 5.

Livestock dynamics in Maramures County								
Maramures County	2014	2015	2016	2017	2018	2018	2020	2021
Cattle, totally	81072	83503	81912	79510	76557	74219	73393	68400
of which: cows, buffaloes and heifers	58685	58773	58262	57309	54356	52856	52480	49521
Swine, totally	98516	84402	81562	74962	74831	65374	68767	68365
of which: gilts	6127	4827	5209	5377	5465	5635	5225	5205
Sheep, totally	175284	176193	188942	191141	194525	196428	196265	198997
of which: sheep and goats	149482	153780	161783	161564	166167	167541	168106	169733
Goats	24475	24895	25684	26180	26392	28274	28676	28414

Source: Own processing according to the Database Tempo online, AGR108A[12]

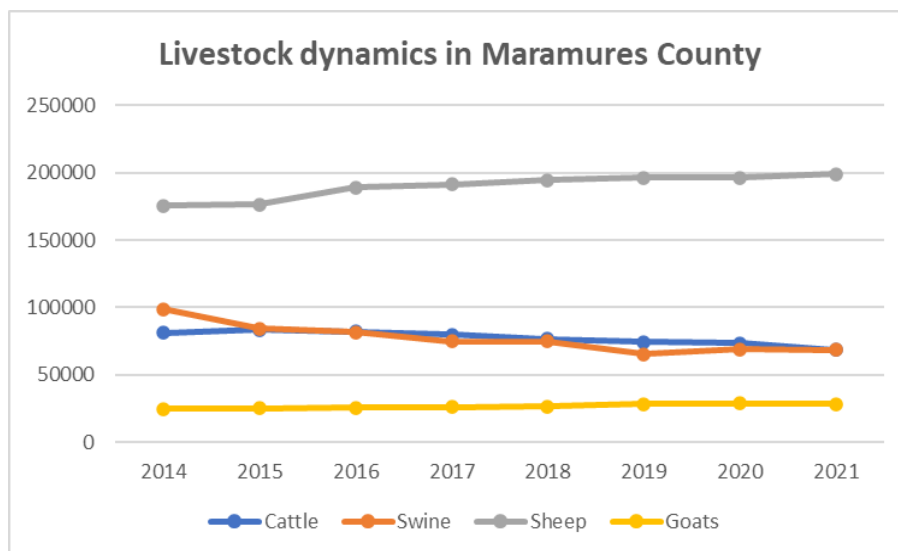


Figure 2. Livestock dynamics in Maramures County

Table 6.

The park of tractors and main agricultural machines in the agriculture of Maramures County, Number

Categories of tractors and agricultural machinery	2014	2015	2016	2017	2018	2019	2020	2021
Physical agricultural tractors	6511	8842	8842	9778	10326	10365	10838	11083
Tractor plows	4659	5132	5132	6092	6067	6082	6253	5997
Mechanical cultivators	116	192	220	340	313	313	337	317
Mechanical seed drills	708	817	865	1016	1038	1032	1060	1069
Self-propelled combines for grain harvesting	221	314	314	325	327	327	322	319
Self-propelled combines for harvesting fodder	20	6	6	7	20	20	24	25
Potato harvesters and machines	-	230	255	334	356	362	354	428
Balers for straw and hay	388	426	508	702	747	747	885	964

Source: Own processing according to the Database Tempo online, AGR108A[12]

High-performance agriculture is one of the possibilities of ensuring sustainable development. The performance in agriculture is supported, among others, by the park of tractors and agricultural machines, a situation presented for the Maramures area in table 6.

Regarding the activities conducted in associative forms, according to the records held at the Directorate for Agriculture and Rural Development Maramures, there are 20 cooperatives and 1 group of producers. Their scope of activity includes the following sectors: agriculture, animal husbandry, vegetables, fruit growing. (table 7)

Table 7.

Producer groups and agricultural cooperatives from the mountainous area of Maramures County				
No.	NAME OF THE COOPERATIVE	The year of establishment	Social headquarters	Object of activity / CAEN code
1.	Dumbrava Giulești Agricultural Cooperative	2009	Giulești	150: Activities in mixed farms (vegetable culture combined with animal husbandry)
2.	Valea Lazului-Berbești Agricultural Cooperative	2010	Berbești	150: Activities in mixed farms (vegetable culture combined with animal husbandry)
3.	Dumbrava -Berbești Agricultural Cooperative	2010	Berbești	150: Activities in mixed farms (vegetable culture combined with animal husbandry)
4.	Zelena Zemnia Agricultural Cooperative	2012	Repedea	150: Activities in mixed farms (vegetable culture combined with animal husbandry)
5.	Agricultural Cooperative Pro Sapienia Maramureș	2012	Sapanta	150: Activities in mixed farms (vegetable culture combined with animal husbandry)
6.	Agricultural Cooperative Agro Suci	2014	Cetatele	150: Activities in mixed farms (vegetable culture combined with animal husbandry)
7.	Agricultural Cooperative Viseu-Tisa Maramures	2015	Valea Viseului	150: Activities in mixed farms (vegetable culture combined with animal husbandry)
8.	Rugas Riji Agricultural Cooperative	2016	Poienile de sub Munte	150: Activities in mixed farms (vegetable culture combined with animal husbandry)
9.	Viseu Valey Agricultural Cooperative	2017	Valea Vișeului	145: Breeding of sheep and goats
10.	Berbești Farm Agricultural Cooperative	2017	Berbești	150: Activities in mixed farms (vegetable culture combined with animal husbandry)
11.	Ocna Sugatag Farm Agricultural Cooperative	2017	Ocna Șugatag	150: Activities in mixed farms (vegetable culture combined with animal husbandry)
12.	Feresti Slaughterhouse Agricultural Cooperative	2018	Giulesti	1011: Meat processing and preservation
13.	Fermierul Morosan Agricultural Cooperative	2018	Cernesti	0113: Cultivation of vegetables and melons, roots and tubers
14.	Tarina Viseu Agricultural Cooperative	2018	Vișeu de Jos	150: Activities in mixed farms (vegetable culture combined with animal husbandry)
15.	Hortigrup Fruco Agricultural Cooperative	2019	Varai	4631 - Wholesale of fruits and vegetables
16.	Lapus Valey Agricultural Cooperative	2019	Suci de Jos	4623 Wholesale trade of live animals
17.	Agrimaracreativ Agricultural Cooperative	2019	Fănațe	0124 - Cultivation of seed and stone fruits
18.	Biolact Maramureș Agricultural Cooperative	2019	Șurdești	0141 - Breeding of dairy cattle
19.	Agroplant Prislop Agricultural Cooperative	2020	Prislop	4631 - Wholesale trade of fruits and vegetables
20.	Marmatia Turism Agricultural Cooperative	2020	Strâmtura	0150 - Activities in mixed farms
Producer Group Name				
	The year of establishment	Social headquarters	Object of activity / CAEN code	
1.	Hortigrup Fruco Agricultural Cooperative	2019	Vărai	Pomiculture

Source: Ministry of Finance; National Trade Register Office [15]

Analyzing the mountainous rural area of Maramures, a number of negative aspects should be mentioned: [1,2,7,8]

- massive job losses from mountain area, especially in the countryside;
- the definitive abandonment of rural activities (agricultural and non-agricultural) by the youth of the mountain area and the massive migration to western countries or to urban areas;
- reduced access to professional training for young mountain farmers;
- the non-existence of professional schools specifically for mountain activities and a very small number of specialized school groups;
- poor information of farmers regarding access to funds;
- the existence of a large number of poorly modernized farms.

On the other hand, the mountain area presents a series of assets, [9,10] which must be exploited and developed in a sustainable way, [4,5,6] so as to ensure the needs of the present without compromising the chances of future generations:

- extraordinary natural landscapes;
- unpolluted air;
- unpolluted drinking water;
- agro-food "mountain products";
- unique places for spending free time;

- berries, mushrooms, medicinal plants;
- meadows of high natural value.

All the advantages could be used, using partnerships,[3] so as to sustain the development of local communities from the analyzed area.

CONCLUSIONS

Agriculture plays a special role in the economy of the county, viewed under the following aspects:

- it occupies about 65% of the county's area and over 50% of the county's population with the prospect of increasing it through the migration of people from the urban to the rural environment.

- provides more than 40% of the cereals needed to feed the population and, in significant percentages (almost fully), the need for potatoes for consumption, the need for fruit and the need for meat, milk and other animal products.

The territory of Maramures County has a favorable natural offer for the development of agriculture, as an economic function with a complex profile, focusing on the following main branches:

- the development of animal husbandry and animal production,
- the development of the production of cereals and technical plants,
- the development of fruit growing.

Corresponding to the development of the three basic branches specific to the agriculture of Maramures County, the industry of processing animal products (milk, meat, skins), technical plants (in fiber) and fruits is also developing. The agriculture of Maramures County is still in the process of transition from the state and cooperative economy to the free market economy, based on private property and individual initiative.

This agricultural potential is not properly exploited because 30% of the surface remains uncultivated, for multiple reasons:

- lack of adequate equipment with agricultural machinery and equipment; the delay in equipping and modernizing holdings due to non-access to European funds and non-use of received subsidies for the purpose for which they were intended.

- the premature aging of the population and the lack of labor force.

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