

ANALYSIS OF SOCIAL ECONOMIC PROFILE OF RURAL AREA IN CĂLĂRAȘI COUNTY, ROMANIA

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Abstract

Rural areas in Romania are affected by the significant lack of infrastructure and its deficiencies that have a deep impact both on the economic development and quality of life. According to the latest statistics, 42% of Romania population lives in villages. In the south of the country, 58% of the total population lives in the countryside, being the highest percentage compared to the other regions. Starting from this state of facts, in this study, we set out to make an x-ray of the social-economic profile of the rural environment in Călărași county by analyzing the structure and evolution of the number of agricultural companies, the cultivated area, the associative forms from the county, the labor resources employed in agriculture, but also the transport, education and health infrastructure. The analysis of the rural profile of Călărași county aims to formulate solutions and proposals in creating concrete conditions regarding the functionality of a socio-economic environment favorable to the consolidation of a sustainable and multifunctional development of the rural space. As research methods, we collected and descriptively analyzed statistical data, studied technical documents and specialized bibliography, and to analyze the state of the county's rural environment, we proceeded to develop a SWOT analysis. The overall analysis of the components of the rural area reveals that the prospects for the development of rural communities are affected by the economic, social and infrastructural backwardness of the rural area of Călărași County, but at the same time it has considerable advantages, as presented in the SWOT analysis, whose capitalization will have a significant impact on the future economic and social development of the rural area of the county.

Key words: analysis, rural area, poverty reduction, rural population, regional development

INTRODUCTION

The evolution and economic viability of rural areas are supported by the Common Agricultural Policy by financing actions to develop this economic-social space [1]. Being the second pillar of the common agricultural policy (CAP) that supports the income and market measures provided for in the first pillar, rural development aims to strengthen the concept of economic-social and environmental sustainability of rural areas [4, 5].

As a component of the CAP, the European Union's rural development policy has evolved from a policy dealing with the problems of the agricultural sector, to a multi-role policy dealing with the various challenges of the rural area. [4, 5, 7]. Thus, the primary role of rural development policies is to solve the problems faced by rural areas and to capitalize on their potential [11]. Currently the rural

development policy of the E.U. reflects to a greater extent the needs of EU citizens paying special attention to the environment, food safety and quality. The concept of “rural” defines the entire space in which villages or communes are located, the interdependence relationships created between them, the resident human communities and the related geographic, demographic, ecological and socio-cultural particularities [3, 9, 10].

In Romania, the rural area includes the administrative-economic units of the “commune” type, defined in Article 5 of Law 2/1968, as follows: “the commune is the territorial administrative unit that includes the rural population united by common interests and traditions. A commune consists of one or more villages depending on the economic, social, cultural, geographical and demographic conditions. The organization of the commune ensures the economic,

administrative, cultural and social development of rural localities” [18, 13].

Among all the states of the European Union, in 2021, Romania (with 3,757 thousand) had the largest share of the rural population, followed by Poland (3,703 thousand) and Spain (3,542 thousand), according to information published in Eurostat [5, 6].

Agriculture acted as an occupational buffer against the social-economic effects of the transition, by absorbing the labor force released by urban industries, indicating a decrease in labor productivity per worker and suggesting a masked unemployment, increasing in rural areas [4, 8]. Being a sector with considerable economic potential, which traditionally occupies an important place in the Romanian economy, agriculture is, at the same time, an important factor in ensuring social stability and preserving the ecological balance, in ensuring food for the population but and the need for raw materials for the food industry and beyond. Regarding the South Muntenia Region, in which Călărași County is located, in the period 2020-2021, it ranked second, in terms of the evolution of the rural population, in first place being the North-East Region, with a weight of 56.85% of the rural population [12].

The 50 communes in the studied area present differences in terms of demographic, economic and infrastructure aspects, which makes the process of identifying all the existing problems in this area particularly difficult, and more than that, establishing the ways to solve them, from this that is why we decided to focus on their common characteristics.

In this context, I conducted the present study, the purpose of which is to highlight the social-economic profile of the rural area in Călărași County, by analyzing some indicators related to the evolution and structure of agricultural companies, cultivated areas, the associative forms in the county agriculture and the labor resources employed in agriculture, but also transport, educational and health infrastructure to formulate solutions and proposals that lead to the sustainable and multifunctional development of the rural area in Călărași county.

MATERIALS AND METHODS

As research methods, we collected and descriptively analyzed statistical data, studied technical documents and specialized bibliography, and to analyze the state of the county's rural environment, we proceeded to develop a SWOT analysis.

In order to achieve the objectives of the research, to determine the indicators regarding the evolution of the rural population, the agricultural sector in the county, development of the technical-social infrastructure, we studied the following sources of information: a series of scientific publications with reference to the researched subject, data from the County Statistics Office Călărași and the County Agricultural Directorate [14, 15], from the National Institute of Statistics [12], as well as consulting the specialized literature. The data were collected, processed and interpreted in the form of descriptive, statistical and SWOT analysis, then to be transformed into conclusions and recommendations regarding the level of development of the rural area in Călărași county. Research tools included: analysis, synthesis, deduction, comparison method. This study covers the period 2013-2021.

RESULTS AND DISCUSSIONS

Călărași county has an area of 5,087 km², being the third largest in South Muntenia Region, after Argeș (6,822 km²) and Teleorman (5,788 km²) counties, occupying 14.8% of the total area of the region (34,467 km²) [15].

Regarding the territorial administrative organization, the county includes 2 municipalities (Călărași and Oltenița), 3 cities (Budești, Fundulea and Lehliu Gară), 50 communes and 160 villages. The county residence is the municipality of the same name - Călărași, which at the level of the South-Muntenia region, Călărași municipality represents the fourth largest municipality [3, 9].

The geographical position of the county on the border with Bulgaria and the existence of

the 2 ports on the Danube offer a special competitive advantage. Another advantage for the development of the county is given by the strategic location of the county, the municipality of Călărași, 100 km away from Bucharest and Constanța [15].

The main natural wealth is agricultural land (approx. 84% of the county area) [14]. By comparison between the counties of the region, Călărași county (20.4%) occupies the second place with the most extensive arable surface, after Teleorman (23.10%) [12]. The county agriculture is characterized by a preponderance of the vegetable sector, mainly oriented towards the cultivation of cereals, grains, oil plants and fodder plants [14].

Table 1. Distribution of lands on categories of use, in Călărași county, in 2021

	Category	ha	%
1	Total land	508,785	100
2	Agricultural	425,798	83.7
	<i>of which :</i>		
	2.1 arable	410,506	96.41
	2.2.vineyards and wine nurseries	4,395	1.032
	2.3.trees and tree nurseries	207	0.049
	2.4.pastures	10,482	2.461
	2.5.meadows	208	0.049
3	Non-agricultural	82,987	16.31
4	degraded and unproductive lands	2,425	2.922

Source: INS - AGR101B - Surface of land according to use, in Calarasi county [12].

The soils in the area are characterized by high fertility, being made up of different types of chernozems and alluvial soils, which allow the practice of a profitable, highly efficient agriculture, especially for cereal crops, but also for other crops in the vegetable sector, as shown in Table 1, 83.7% of the surface total of the county, being owned by agricultural land, of which 96.41% is arable [12].

The localities in Călărași county that have the largest share of arable land in the total area of the land fund are those in the north and west of the county, such as: Ștefan Vodă (93.71%), Independența (92.78%), Dragoș Vodă (92, 67%), Ulmeni (91.21%) and Dragalina (90.54%). At the opposite pole are the following localities: Unirea (61.12%), Căscioarele (63.55%) [14].

The data taken from the County Directorate of Statistics show (Table 2), the fact that the approximately 600 companies active in the agricultural sector in Călărași county, before the COVID crisis, reported a historical turnover of 2.2 billion lei annually and an unprecedented profit [15].

The pandemic and the severe drought of 2020 caused the business to decrease in 2021 by almost 1.1 billion lei (approx. 62%), to 1.8 billion lei, lower than in 2015, representing only 59.59 % of turnover in the vegetable sector, in 2015.

Table 2. Evolution of number of companies and turnover, in Călărași county

Categories of private entrepreneurs	Year						2021/2015 %
	2015	2016	2017	2018	2019	2021	
	UM: Number						
Companies field Agriculture, forestry and fishing -no	533	545	576	578	569	559	104.8
Turnover at sector level	thousand lei	thousand lei	thousand lei	thousand lei	thousand lei	thousand lei	%
Vegetal	1,674,467	1,700,128	1,953,476	2,198,047	2,195,742	997,803	58.59
Animal	650,596	659,725	694,997	621,200	745,236	737,775	113.39
Agricultural services	74,456	71,850	45,966	60,735	83,745	61,812	83.02

Source: Data processing - County Directorate of Statistics - Călărași [15].

Although Călărași County stands out for its large share of rural structures: 50 communes

and 160 villages, the rural population has decreased in recent years due to demographic

aging and migration. Thus, the rural population at the county level in 2021 was 115,780 inhabitants, with 68,921 fewer inhabitants than in 2019 (184,701 inhabitants) [15]. The average size of a commune in 2021 was 2,315.6 inhabitants/community, with a 37% decrease compared to 2019 (3,648 inhabitants), and the average size of a village in Călărași was 724 inhabitants in 2021 /village, with a 21% decrease compared to 2019 (914 inhabitants) [15].

On 1st July 2021, the population by domicile of Călărași county was 305,391 inhabitants, representing 1.4% of the country population, with a density of 60.0 inhabitants/km², a low density compared to other counties in the country [12]. Within the county, a high density is found in the communes of Gălbinași (189.7 inhabitants/km²), Ștefan cel Mare (141.2 inhabitants/km²) and Curcani (101.8 inhabitants/km²). The lowest population density is found in rural localities such as Gurbanesti (15.7 inhabitants/km²), Ulmu (19.3 inhabitants/km²), Dichiseni (19.5 inhabitants/km²) and Frasinet (19.6 inhabitants/km²) [12]. Almost 42% of the county's population lives in the countryside [13]. According to INS data, we note a reduction of approximately 33 percent in the number of people employed in agriculture in 2021 (1,681 thousand people), compared to 2013 (2,501 thousand people) at the national level [13], an aspect that was also reflected in the share of the population employed in agriculture at the level of the analyzed county. In the county, we also see a significant share of the vegetable sector (72.5%), mainly oriented towards the cultivation of grains, oilseeds and fodder plants [14]. The total cultivated area, in 2021, was 406.7 thousand hectares, lower by 0.3 thousand hectares, respectively -0.01% than in the previous year [15].

From the information presented in Table 3, it is noted that the largest arable area is cultivated with wheat, followed by corn, sunflower, rapeseed and barley, without significant changes during the analyzed period. The productions obtained in wheat, barley, corn, sunflower, soybeans place

Călărași county in the category of large producing counties of the country.

Table 3. Surfaces cultivated with main crops in Călărași county (ha)

Crop/Year	2017	2019	2021
Wheat	127,196	121,515	127,714
barley	27,241	27,612	24,784
Maize	91,840	126,766	119,527
sunflower	37,354	38,126	35,367
Rapeseed	68,150	38,749	31,164

Source: County Directorate of Statistics - Călărași [15].

In 2021, higher productions were obtained than in the previous year for grains for grains, legumes for grains, oil plants, potatoes, melons, except for the production of vegetables. Regarding the associative environment, according to the data provided (Table 4) by the Călărași County Agricultural Directorate, at the level of 2021, agricultural activity was also carried out within the associative forms found in 8.35% of the organizational forms present in the county.

Table 4. Associative forms in Călărași county

Organisation type in agriculture	No
family associations	537
Cooperatives	38
Producers groups	11
Other associative forms	4
Companies base don Law 31/1990	509
agricultural companies bases on Law 36/1991	45
Farmers	6,458

Source: Călărași County Agricultural Directorate [14].

Regarding the way to carry out its activity, the form of association is influenced by the low individual possibilities of capitalization of their own family household, which does not allow it to secure all the means necessary to carry out its activities. Through association, especially if the associations have certain material means, it is possible to act in the sense of annihilating the unwanted effects of the lack of capital. [4, 5]. The concentration of production in agricultural companies of optimal size, as well as the diversification and specialization of agricultural production are closely related to the development of

association and cooperation relations along the technological flows of production of agricultural raw materials, but also regarding the processing and valorization of agricultural products.

In developing the profile of the rural area of the county, special significance is given to the particularities of the transport, health, social and educational infrastructure, on whose current state depends the level and capacity of social-economic development of Călărași county. As presented in Table 5, the analysis of the transport infrastructure highlights the need for its expansion, development and modernization, given that only 47.2% of the total public roads have been modernized by 2021, the share in this sense being held of national roads, respectively, 498 km out of a total of 501 km.

Table 5. Transport infrastructure of Călărași county, in 2021

Length of railways - total	km	188
- with normal gauge	km	188
of which railways : electrified	km	147
- in % compared to tota lines	%	78,2
Density of lines at 1,000 kmp territory		36.9
Length of public roads – total of which:	Km	1,347
modernized	km.	636
- in % compared to total	%	47,2
wth slight road covers	km.	311
- in % compared to total modernized	%	23.1
of total public roads		
national roads	km	501
- modernized	Km	498
- with slight road covers	Km	3
county and commune roads	Km	846
- modernized	Km	138
- with slight road covers	Km	308
Density of public roads per 100 km ² territory		26.5

Source: Călărași County Agricultural Directorate [15].

The water supply network serves approximately 66.98% of the total urban population and approximately 62.3% of the total rural population [15].

Compared to the other counties in the South Muntenia region, Călărași recorded a good situation regarding water supply, as it had the longest drinking water distribution network in

the countryside and the largest number of rural localities connected to the water distribution networks drinking water in 2021 [13]. The water supply network serves approximately 62.3% of the total rural population, being present in all villages in 28 communes, partially in 20 communes and missing in 2 communes (Independenta and Vasilați) [15]. The rural sewerage network exists only in 6 localities, the extension works being carried out on government programs or non-reimbursable funds (e.g. O.G. 7/2006: municipalities Ștefan cel Mare, Vlad Țepes, Ulmu; P.N.D.R. – Measure 3.2.2. – Unirea commune, H.G. 904/2007 – Mânăstirea and Cuza Vodă communes) [10].

The population connected to sewage services is 8,600 inhabitants, representing only 4.5% of the total population [15].

The collection and evacuation of rainwater is carried out by means of ditches/street gutters generally located along the communication routes. At the level of 2021, only 9 rural localities benefited from the natural gas distribution network, but in the rural area of Călărași county there is no centralized system of thermal energy supply [15].

Regarding the accessibility of the population to the electricity network, 95.4% of the homes in rural areas were connected to the electricity network. The localities with over 10% of homes not connected to the grid are Cuza Vodă and Șoldanu [15].

The health infrastructure in the rural area of Călărași county, with a considerable impact on the quality of life, requires expansion and modernization measures to cover the needs of the entire population. The number of health facilities is insufficient, compared to the number of rural localities in the county, and the level of equipment is among the lowest at the national level. Also, the number of doctors serving the rural population is low (2,169 people/doctor in rural areas, compared to 418 patients/doctor in urban areas) [15]. Under these conditions, it can be considered that there is a reduced accessibility of rural residents to health services, there are localities with difficult access to primary medical assistance.

A final aspect analyzed is related to the educational infrastructure, which includes a number of 95 educational units, respectively, 11 kindergartens and crèches, 66 primary and secondary school units, and 17 high school and post-high school education units (Table 6).

Călărași county faces the problem of the insufficiency of school units in the rural environment, which causes high costs for continuing studies and implicitly a significantly higher dropout rate compared to the urban area.

Table 6. Situation of education units in Călărași county

Categories of school units	Total	property form		Location	
		Public	Private	Urban	Rural
Creches	1	1	0	1	
kindergartens	10	9	1	8	2
school units in pre-university education, of which:	85	84	1	31	54
primary and secondary education schools (including special education), of which:	66	67	1	17	50
Schools in primary and secondary education	66	65	1	16	50
Schools in special primary and secondary education	1	1	0	1	
School units in secondary cycle 2 education	17	17	0	13	4
High schools - secondary cycle 2 education	17	17	0	13	4
theoretical highschools and colleges	5	5	0	0	0
Technical profile Highschools	4	4	0	0	0
Resources profile schools	6	6	0	0	0
Services profile schools	2	2	0	0	0
Schools in post high school and foremen education	1	1	0	1	0
Post highschools	1	1	0	1	0
Total	96	94	2	40	56

Source: County Directorate of Statistics - Călărași [15].

The problems of the educational system in the rural environment have direct consequences on the economic-social situation, the need to

increase the level of accessibility to the educational system for children in the rural environment being obvious.

The fact that there is a real concern of the Călărași County management for the development of the social infrastructure in the rural environment is supported by the conclusion of the Regional Pact for Employment and Social Inclusion, but still, social services are insufficiently diversified and do not cover the needs of the various disadvantaged categories. In rural areas, there is no local public transport managed by local councils, the only type of transport being that of pupils.

The identification of the material and human resources available to the rural environment of Călărași county, as well as its natural and economic potential, allowed the realization of a SWOT analysis, the conclusions of which will be the starting point for the elaboration of development proposals for the sustainable and efficient exploitation of the county's rural space.

Through the SWOT analysis, I outlined four directions that we consider priority in the implementation of the strategy for the development and exploitation of the rural space of the county, namely:

1. The infrastructure requires continuous improvement, therefore the investments must be made according to certain economic criteria so as to produce the greatest beneficial effects.

2. The economic life of the rural area must be revived and developed in all its fields: agriculture, animal husbandry, industry, trade and forestry. The local authorities will have to invest in revitalizing the economic life of the communes, this must be the number one priority, because it produces the greatest effects.

3. Creating conditions for the population's access to culture, health and education services is directly related to increasing the quality of life of the rural population.

4. Active participation of the population in the process of rural development by elaborating and implementing local development strategies and strengthening the identity of the communes [2, 9].

Table 7. SWOT analysis of the rural area in Călărași county

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Large size of the arable surface; 2. Good soil quality, does not require agro-ameliorative measures; 3. High agricultural potential (vegetable, fish and zootechnical); 4. Tradition in applied research in agriculture at Fundulea National Agricultural Research Institute; 5. High level of agricultural production; 6. Proximity to Bucharest in order to sell agricultural products 7. Access to the Danube, port on the Danube and border with Bulgaria. 8. Increasing the share of ecological agriculture in the total cultivated area. 	<ol style="list-style-type: none"> 1. The existence of an aging human capital; 2. Poor qualification and professional training of the active population in the rural area; 3. Practicing a semi-subsistence agriculture caused by the excessive fragmentation of agricultural land; 4. The low level of association of agricultural producers; 5. The low degree of diversification of the rural economy; 6. The limited processing and storage capacity of agricultural and livestock products 7. The high degree of wear and tear of the agricultural machinery fleet. 8. Low degree of access to European funds in the period 2017-2020.
Opportunities	Threats
<ol style="list-style-type: none"> 1. European Union strategy for the Danube region; 2. Promotion of the strategies of the National Rural Development Program 2021-2027; 3. Funding opportunities through national funding programs to encourage associative forms in agriculture; 4. National legislation regarding fiscal facilities for associative forms in agriculture; 5. The absorption capacity of the common market for traditional agro-food products; 6. Proximity to Bucharest and Constanța, important markets for agri-food products; 7. Valorization of renewable energy resources from agriculture; 8. Accessing funds in the period 2021-2027 for the development of infrastructure in the countryside. 	<ol style="list-style-type: none"> 1. Climate changes that directly influence agricultural production; 2. The downward trend of the young population; 3. The high frequency of dry periods not compensated by an adequate volume of irrigation; 4. Insufficiency of material resources; 5. The uncontrolled expansion of the urban space; 6. The constantly changing national legislation; 7. The competition exercised by the products introduced on the market from import; 8. The difficult implementation of major and long-term investment projects due to the continuous depreciation of the national currency.

Source: Elaborated by authors.

CONCLUSIONS

The rural development strategy is the main tool used to blur existing social and economic disparities between regions, the gaps determined by the different degree of endowment with natural, human and financial resources of rural communities. In this sense, the development of rural communities can be described as a territorial development approach, including economic, social, cultural, political aspects, by favoring endogenous development, mobilizing the human and financial means that compete for it and ensuring their convergence

The reviving of rural communities can be done by practicing efficient agriculture, which means, equally, a better life for farmers and the village world, food security for all

citizens, more legitimacy and competitiveness between the states of the European Union.

In the elaboration of proposals for the development of the communes in the rural space of Călărași county, the creation of a stable and diversified social-economic area, which has the capacity to ensure the general prosperity of the population and the sustainable development of the communes, must be specially pursued. Thus, the development model of the communes, on which to support their development strategy, could be built around four directions that have in mind the provision and protection of the human factor, the technical equipment and the preservation of the heritage existing in the commune, respectively: the development infrastructure and ensuring the population's access to the infrastructure, the diversification

and development of economic activities, the improvement of the quality of life, the involvement of the population in the development process of the commune. The county under study has real development possibilities based on natural, economic and human resources. The revitalization of the rural area and the sustainable development of the communes must take into account the creation of a balance between the requirement to preserve the rural area from an economic, ecological and socio-human aspect, as well as the possibility of increasing the quality of rural life, in all aspects. The rural environment must modernize, respond to the European demands of civilization, but at the same time it must promote the traditions and culture specific to the area. In conclusion, the rural area of Călărași county has considerable advantages, the proper exploitation of which will have a significant impact on future economic and social development. In an economic sense, sustainable rural development is significant by adopting the latest innovations from other European countries through the vertical and horizontal integration of farm activities and the formation of rural clusters, the promotion of farms that emphasize low ecological impact and sustainable energy generation, the promotion of modern farm management techniques to increase added value in agriculture by promoting innovation through collaboration between universities, public and private entities.

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