

ANALYSIS OF THE NATURAL POTENTIAL AND OF THE AGRICULTURAL STRUCTURES IN THE RURAL AREA

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Abstract

The immediate effect of the application of the Land Law in Călărași county agriculture, the restructuring of the farm units configuration by preponderance of small individual land, reduced the positive implications of the privatization process, resulting in a less viable economic model in terms of resources and efficiency. These structures determined the intensive consume of labour force, which led to the attraction of part of the labor force in other sectors, in agriculture, representing small farmers producing for own consumption and for selling products on the rural market.

Key words: economic mechanisms, intensive development, market system, natural potential.

INTRODUCTION

Integrating the agriculture in the market system is ensured by strengthening the private system and a type of economic organization in which natural processes join with the economic mechanisms in a manner that creates an organic balance – supply and demand. For this purpose, development strategies are needed that exploit the benefits created by the dominant share of the private ownership in agriculture and ensure intensive development to achieve the competitive supply of agricultural products and on an expanded market for all types of farms, widely available on product market and factors production [1]. **The agriculture** is the main economic activity. Its base is the agricultural area of 420 780 ha, respectively, 2.9% of the country's agricultural surface, 8th largest among the counties. Of this area, 413,135 ha is arable land, respectively, 4.4% of arable land and 5th place in the top of the counties [2].

The stakeholders that could contribute to the development of the rural communities directly are the local authorities, the local companies interested in promoting activities and especially their products, thus interested in local economic development by promoting

electronic commerce, providing financial and technical assistance for adoption of innovative solutions in the private sector, teachers, students who wish to return to the community after graduation, the initiative committees established under the projects implemented in the recent years in the village (they have experience in identifying and prioritizing needs - public consultation but especially in identifying funding sources and implementation of various projects) and the investors attracted by the facilities (infrastructure, the potential of young people, spaces, possibility to connect to the gas network in the near future, the inner land available for house construction and for investments).

MATERIALS AND METHODS

For a more complex characterisation of the county, the analysis took into consideration the most important features of the social and economic sector, expressed by a set of analysis criteria. The analysis of these sectors allowed the identification of the development stage and of the resources needed to endure a sustainable development. In order to make this complex analysis with a high level of

objectivity, a set of criteria was given to each sector that highlights the problems existing within it.

RESULTS AND DISCUSSIONS

The immediate effect of the application of the Land Law in Călărași county agriculture, the restructuring of the the farm units configuration by preponderance of small individual land, reduced the positive implications of the privatization process, resulting in a less viable economic model in terms of resources and efficiency. These structures determined the intensive consume of labour force, which led to the attraction of part of the labor force in other sectors, in agriculture, representing small farmers producing for own consumption and for selling products on the rural market.

In the table 1., the evolution of cultivated surface in exploitation profile is presented, with the main crops, in the period 1995- 2012. From the data presented, it appears that the area under cultivation - total, varied, recording 410,080 ha in 1995, 392,909 ha in 2000, 414,803 ha in 2005, after which it reaches 408,548 ha in 2012. The crops cultivated areas show the same oscillations, the share of total cultivated area, assuming the culture of cereal grains, ie 275,322 ha in 1995, reaching 296,322 ha in 2000 and 270,400 ha in 2012.

The sunflower and vegetables crops that have been with the same oscillations as the bean and potato crops ranks in a descendant trend from 1151 ha in 2000, in 2012, only 391 ha were cultivated. We note that, since 2005, every year the cultivated area has increased with green fodder from 12346 ha to 21449 ha in 2012 [6].

In the table 2. the evolution of production and agricultural services and its dynamics is presented, on total branches and sectors in the period 2000-2012, expressed in thousand lei prices of period. It is thus an increasing trend of total production from 779705,9 thousand lei in 2002 to 16.884.651 thousand lei in 2005 and 2.041.731 thousand lei in 2012. Within the total production, the share is owned by the

vegetal production, followed by livestock production and agricultural services.

Table 1. Dynamics of the surfaces cultivated in exploitation profile, with the main crops, in Călărași county, for the period 1995-2012

SPECIFICA TION	UM	1995	2000	2005	2007	2012
Cultivated surface – total	Ha	410080	392909	414803	406322	408548
	%	100	95,8	101,2	99,1	99,6
Cereals for grains	Ha	275322	252587	253563	262635	270400
	%	100	91,7	92,1	95,4	98,2
Wheat and rye	Ha	119007	126112	125055	145406	161372
	%	100	106	105,1	122,2	135,6
Barley	Ha	25211	18922	27309	27289	27335
	%	100	75,1	108,3	108,2	108,4
Maize	ha	127652	105455	110672	92890	79486
	%	100	82,6	86,7	72,8	62,3
Vegetables for grains	ha	1230	2476	3216	3665	3885
	%	100	201,3	261,5	298	315,9
Sunflower	ha	57994	71117	83050	114462	66741
	%	100	122,6	143,2	197,4	115,1
Green fodder in arable land	ha	-	-	12346	20348	21449
	%	-	-	100	164,8	173,7
Potatoes	ha	1047	1151	609	453	391
	%	100	109,9	58,2	43,3	37,3
Vegetable	ha	4875	3797	4162	3776	3039
	%	100	77,9	85,4	77,5	62,3

Source: Statistical researches, County Statistic Direction, DADR Calarasi[7,8].

Regarding changing the use of land in Călărași county, as shown by the data presented in Table 3, it is noted that in 2012 compared to 2005 , the total agricultural area decreased from 426780 ha to 426 230 ha , registered decrease also by total arable land, from 415 779 ha to 414 821 ha in the same period.

In the same way is the area occupied by orchards, which decreased from 311 ha to 172 ha and that occupied with vineyards that reduced in the same period, from 5246 ha to 4965 ha.

By locality, significant changes in the arable land are registered in large communes, such as Grădiștea (from 15580 to 14752 ha ha), Borcea (from 30363 ha to 29680 ha), Jegălia (from 10 476 ha to 9992 ha), Modelu (from 9887 ha to 9438 ha) etc, while arable land increases registered in localities Budești,

Căscioarele, Ulmeni, Vasilați etc, but in a less share than the reduced surfaces [4].

Table 2. Dynamics of the agricultural production of goods and agricultural services, in Călărași county - thousand lei current prices-

Years	UM	Total	Vegetal	Animal	Agricultural services
2000	Thousand lei	779705,9	548646,7	208718,8	22340,4
	%	100,0	70,4	26,8	2,9
2005	Thousand lei	1688465,1	1218727,4	434645,9	35091,8
	%	100,0	72,2	25,7	2,1
2007	Thousand lei	1738264	1336817	364199	37248
	%	100,0	76,9	21,0	2,1
2012	Thousand lei	2041731	1514423	488767	38541
	%	100,0	74,2	23,9	1,9

Source: Statistical researches – County Direction of Statistics, DADR Călărași [7, 8],

Affected by the restructuring process in which is the entire Romanian society, the economy has the potential to revive Călărași county, based on the following strengths: agricultural potential, technical potential, water resources that can foster the development of fisheries, commercial activities, industry and tourism on the Danube and inner rivers; the geographical position on the border and crossroads of transit routes between Asia and Eastern Europe, access to the waterway.

On categories of use of agricultural land [3], it is significant the change of the way of use at category “vineyards”, where all localities increased the surfaces occupied with vineyards, some of them even five times increase, such as: Borcea, Chirnoși, Ciocănești, Cuza Vodă, Jegălia, Dorobanțu, Radovanu, Nicolae Bălcescu, Unirea etc., the only locality that reduced the surface occupied with vineyards being Al. Odobescu, from 189 ha, maintaining in crop 105 ha.

Regarding the surfaces occupied with orchards, it can be seen that more localities abolished these crops, although they had a significant number of hectares occupied with orchards, such as: Lupșanu - 26 ha, Jegălia – 25 ha, Dragalina – 17 ha, Lehliu – 27 ha, Al. Odobescu and Valea Argovei 16 ha each, etc., but the same localities increased the number of hectares occupied with pastures

and meadows, direct result of the increase of livestock in the individual farms and in agricultural associations [5].

Table 3. Structure of land, according to use

Specification	2005		2007		2012	
	ha	%	Ha	%	ha	%
Total surface of landr	508785	100,0	508785	100,0	508785	100,0
Agricultural surface	426780	83,9	426632	83,9	426230	83,8
Arable	416029	81,8	415966	81,8	414821	81,5
Pastures	5281	1,0	5235	1,0	6130	1,2
Meadows	134	0,0	134	0,0	142	0,0
Vineyards and viticultural nursery	5120	1,0	5120	1,0	4965	1,0
Orchards and trees	216	0,0	177	0,0	172	0,0
Forests and other lands with forest vegetation	22001	4,3	22001	4,3	22052	4,3
Lands occupied with constructions and yards	14634	2,9	14782	2,9	15531	3,1
Roads and railways	13158	2,6	13158	2,6	12962	2,5
Rivers and ponds	29906	5,9	29906	5,9	29723	5,8
Other surfaces ¹⁾	2306	0,5	2306	0,5	2287	0,4

¹⁾ Corresponds to category “non productive land”.

Source: Statistical researches – County Direction of Statistics, DADR Călărași [7,8]

From the total surface of 292 154 ha, 112 895 ha are exploited in associative system, 93609 ha are on lease system and 85650 ha are set up as individual farms. The land use categories, we note that, in the individual farms of the 85 650 ha, 77 646 ha are arable land, 7,750 hectares are vineyards, 198 ha are occupied by pastures and meadows and 56 ha with orchards. Within the associative farms (S.A + S.C. + A.F.), of 112895 ha, 112777 ha represent arable land and 118 ha are occupied with vineyards; within this type of farms, there are no use categories of “orchards” nor pastures or meadows. We see the same situation also within the companies created by land lease where, of 93609 ha, only 2 ha are occupied with vineyards and 5 ha with pastures, the difference of 93602 ha, representing arable land [3]. Although in most localities in the county the system of

land exploitation is made in associations and on lease, such as in localities: Cuza Vodă - 74% in association and 9% on lease, Lupșanu - 78% in association and 14% on lease, Ulmu - 95% in association, Ulmeni - 81% in association and 9% on lease etc., still there are localities in which, over 50% of the agricultural surface is exploited in individual system, such as: Căscioarele - 85%, Tămădău - 65%, Belciugatele - 60%, Fundulea - 61%, Budești - 59%, Frumușani and Nana - 58% etc [8].

CONCLUSIONS

In the conditions of the current dimensions of the individual farms in Romania, the rational exploitation of the land needs the stimulation of lease, of association and concentration of property by purchasing agricultural lands. The legislation in force gives the possibility to increase the territory dimensions of the farms and encourages the exploitation of the land directly by the owner or by the farmer.

Affected by the restructuring process in which is the entire Romanian society, the economy has the potential to revive Călărași county, based on the following strengths: agricultural potential, technical potential, water resources that can foster the development of fisheries, commercial activities, industry and tourism on the Danube and inner rivers; the geographical position on the border and crossroads of transit routes between Asia and Eastern Europe, access to the waterway.

A way to revive the rural area in the regional economic context, is the development and promotion of its specific services sector and activities based on local resources use. The potential of the rural area, largely viewed only through the existing agricultural areas and activities related to their work relies on the existence of the specific resources insufficiently exploited until now and may be an alternative and also an opportunity to diversify the rural economy, such as activities related to agriculture, with non-agriculture specific in the sector of agro-food products processing, manufacturing processing and agrotourism. In the current economic

situation, the development of this sector is based on the revival of the traditional crafts and the use of qualified labor force is refining for the socio - economic development of the rural area.

REFERENCES

- [1]*** Agency of Payments for Rural Development and Fishing Călărași
- [2]*** Analiza situației curente PND 2007-2013, Direcția Generală Dezvoltare Rurală Autoritate de Management pentru PNDR http://www.madr.ro/pages/dezvoltare_rurala/
- [3]*** Council Conclusions on a strategic framework for European cooperation in education and training ("ET 2020"), <http://www.edu.ro/index.php/articles/12044>
- [4] Iova Radu Andrei, Daniela Cretu -, „Perception of the life quality in the rural communities in Romania case study- Călărași county, Lambert Academic Publishing, Germania
- [5] Iova Radu Andrei -The analysis of the potential for the economic re-launch of Călărași county Scientific papers series management , economic engineering in agriculture and rural development vol. 11 (1) /2013 , Editura DO-MINO, București 2013
- [6]*** Regional Development Agency, Development Plan of Muntenia Region, http://www.adrmuntenia.ro/documente/1195475713_1.pdf
- [7]*** Statistical researches - County Direction of Statistics, Călărași
- [8]*** Statistical researches - DADR Călărași