

Elena SIMA

*Institute of Agricultural Economics, Romanian Academy, Bucharest
elena.sima2008@yahoo.com*

SUSTAINABLE DEVELOPMENT IN DOBRUDGEA BY PROMOTING TOURISM ACTIVITIES IN RURAL AREAS

ABSTRACT

The paper analyse the promotion and stimulation of tourism activities, as part of rural sustainable development in Dobrudgea. The methodology used is based on the quantitative data analysis regarding the tourism potential from Dobrudgea's countryside that is not known by tourists. The statistical data were completed with other information from articles and studies published in specialty journals. The investigation of relations that exist between the social and environmental factors, at local level, makes it possible to define the necessary mechanisms for the sustainable development of tourism activities that should contribute to the increase of the number of jobs and of alternative incomes by using and maintaining the local labor resources and revitalization of rural localities, as well as to the increase of Dobrudgea area attractiveness.

Keywords: sustainable development, tourism, rural areas, Dobrudgea's countryside.

JEL Classification: Q01, R10, L83.

1. INTRODUCTION

Rural areas in the European Union are currently undergoing significant economic and social changes, mostly induced by the international trade liberalization and the strengthening of the role of rural development policy. There is an increasing awareness of the need to accompany changes in rural areas by the diversification of their economic base, which seems to be the only solution for their socio-economic survival. In this context, rural tourism has been considered a means of achieving such economic and social development due to its capacity to generate local employment and stimulate external investment into the communities. (OECD, 1994)

The synergies and interrelationships between tourism, agriculture and the other sectors of economic activity are increasingly important, with many different players getting involved. Rural tourism has become a “development tool” for many communities seeking to diversify their economies due to its capacity to generate local employment, stimulate external investments into the communities and supplement traditional industries (Giannakis, 2014).

Romania has excellent conditions to develop rural tourism because 44% of the population is living in the rural area and together with the incomes coming

from agriculture, the incomes from rural and agro-tourism are welcome to any farmer and any household (Popescu, 2016).

2. STATE OF KNOWLEDGE

In the last years, tourism became one of the socio-economic sectors that experienced a major transformation, being a diverse and complex activity. Although the mass tourism remains the predominant form, preferences for other tourism forms also emerged, satisfying the need to be close to nature, to exercise outdoors, to explore and to learn new things linked to plants and animals.

Rural tourism, agro-tourism and ecotourism are alternative income gaining activities, providing opportunities for rural area development and economic and social competitiveness increase. The development of these activities largely depends on the existence and quality of tourist boarding houses, as well as on the tourism attractions (of folklore and ethnographic, historical and religious and gastronomic nature) and on the farming activities practiced on the household.

The rural tourism and agro-tourism have a motivational base, represented by: return to nature; getting familiar with folk tradition and culture; healthcare; playing sports - hunting, fishing, climbing etc.; fresh food and fruit consumption.

For Romania, rural tourism is a priority area in the revival of economic life, considering that in our country rural tourism has continuously developed, mainly after 2004, with the development of associative forms of support and creation of the legal framework regulating the activities of this sector.

From an economic perspective, tourism in general and rural tourism in particular illustrate the economic area with the highest potential in terms of international competitiveness for Romania. In other words, Romania has to benefit from it and convert the existing potential into a source of income.

At present, rural tourism is an important part of the Romanian tourism sector. We draw particular attention upon the fact that the tourism potential of rural areas in Romania is far from its effective realization, showing a poor use of natural, historical and cultural tourism resources, as well as a low use of the existing material base. As regards tourism potential, we note that our country has diverse attractions, distributed in a balanced throughout the country, such as the Carpathians, the Black Sea, the Danube Delta or areas with old cultural traditions.

3. MATERIAL AND METHOD

This paper contains an analysis and synthesis of the information on the promotion and stimulation of tourism activities as part of rural sustainable

development from Dobrudgea's countryside, which is not known by tourists. The methodology used is based on the quantitative data analysis regarding the main modalities to promote and stimulate the tourism, agro-tourism and ecotourism supported by the rural development policy. The statistical data were completed with information from articles and studies published in specialty journals, as well as from reports and governmental and non-governmental documents.

Dobrudgea's tourism patrimony is evaluated according to the normative acts, which regulate tourism organization, coordination, promotion and development (strategic importance area and priority branch of the national economy of Romania), as well as the management of tourism resources in conformity with the principles of equity, competitiveness, sustainability and sustainable development. Dobrudgea's tourism is put into value and developed on the basis of and within the annual/multiannual programs for the development of tourism destinations and products, elaborated by the Local and Central Public Administration Authority in charge of tourism and approved by Government's Decision.

The tourism patrimony elements are inscribed in the General Register of Tourism Patrimony, owned and administered by the Central Public Administration Authority in charge of tourism. The list of natural and anthropic resources is inscribed in the National Cultural Heritage of Romania and is maintained and periodically updated by the Ministry of Culture, Cults and National Patrimony of Romania.

The natural landscape and the way of "living in the countryside" are closest to the traditional image that could be preserved in Western Europe. The patrimony of the Dobrudgea's rural tourism can be approached from the experts' point of view, i.e. geographers and economists, researchers or analysts of the tourism phenomenon, who include the following in the patrimony concept: the (natural and anthropic) tourism potential, the tourism technical-material base (tourism endowments and tourist reception structures with accommodation functions), the tourism services and the general technical infrastructure.

4. RESULTS AND DISCUSSIONS

Dobrudgea is a historical and geographical province located both on the Romanian and Bulgarian territory, known in the past as "*Dacia Pontica*" or "*Scitia Minor*". From the administrative point of view, at present Dobrudgea contains two counties in Romania: Tulcea and Constanta and two counties in Bulgaria: Dobrich and Silistra.

Located in South-Eastern of Romania, between the Danube and the Black Sea, Dobrudgea's territory benefits from a diversified tourism patrimony, with natural and anthropic resources distributed on the entire area of 15,570 km², divided between the Constanta county and Tulcea county (Table 1).

Table 1
Administrative-territorial characteristics of the Dobrudgea province

		Dobrudgea	Tulcea	Constanta
Area	km ²	15,570	8,499	7,071
Population	inhabitants	968,379	244,103	724,276
Density	inhab/ km ²	62.20	28.72	102.43
Municipalities	number	4	1	3
Towns	number	13	4	9
Communes	number	104	46	58
Villages	number	322	133	189

Sources: Regional economic and social benchmarks: Territorial statistics, NIS, 2013

The most important cities are: Constanta, Medgidia, Mangalia and Tulcea. The region includes both spa resorts (Eforie Nord, Techirghiol, Saturn) and leisure resorts such as Navodari, Mamaia, Eforie Sud, Olimp, Neptun, Jupiter, Aurora, Venus, Mangalia. Numerous holiday villages can be found on the sea shore (Histria, Corbu, Agigea, Tuzla, Costinesti, 2 Mai, Vama Veche and Limanu) or in the Danube Delta (Crisan, Jurilovca, Mahmudia, Malliuc, Murighiol, Sfantu Gheorghe).

The average density (inhabitants/km²) is one of the most relevant indicators of the territorial distribution of population. The population density is conditioned both by physical-geographic and economic factors, with different distributions of the population in the territory.

The network of human settlements has distinct characteristics in the two counties, due to natural particularities. Thus, in the county Tulcea, 40.54% of its area (i.e. 3446 km²) is covered by the newest relief units, represented by the Danube Delta and the lagoon complex Razim–Sinoe, with limited dwelling possibilities. In the county Constanta, the size of the rural area is marked by the presence of Constanta municipality and by the entire network of urban localities on the southern Black Sea shore.

Dobrudgea's tourism vocation is equally conferred by its geographic position, characterized by a beautiful and diverse landscape, as well as by the cultural–historical profile of the region, with rich and various archaeological remains and historical monuments.

Another important characteristic is represented by the harmonious blending of the old and new, of tradition and modernity. This complementarity makes Dobrudgea more attractive to tourists and gives them the possibility to know and understand the history and tradition of the places they are visiting.

In Dobrudgea, *the natural tourism resource* is determined by:

– The *Danube Delta Biosphere Reserve*, with a great diversity of aquatic and terrestrial ecosystems, where there are real opportunities for ecotourism activity;

- The *Măcin Mountains National Park*, situated in the North–West of the county Tulcea, with maximum 467 m (the peak Greci–Țuțuiatul), which is fascinating through its unique geo-morphology and bio-geography;
- The *Romanian Black Sea Coast*, with its specific ecotourism potential represented by Sites of Community Interest, as: sea dunes from Agigea and sea zones from Tuzla, Costinesti, Vama Veche;
- The *Northern Dobrudgean Plateau*, with an ecotourism potential, yet totally unexplored (large forests and a rich hunting fund).

The territory of the Tulcea and Constanta, from north to south and from east to west, is characterized by an important number of natural and seminatural habitats with a vast diversity:

- aquatic habitats (freshwater habitats, saltwater habitats, marine and coastal habitats),
- terrestrial habitats (forests habitats, steppe pastures and bushes, forest-steppe habitats, moorland and peatland habitats) and
- underground habitats (cave habitats – Limanu and Dobrudgea Gorges).

At present, on the lists of the *European Ecological Network Natura 2000*, there are 64 sites in Dobrugea, out of which 31 sites are Special Protection Areas (SPA) and 33 are Sites of Community Interest (SCI) (Table 2).

Table 2
Number of Natura 2000 sites, in the year 2016

Category of Natura 2000 site	Romania	Dobrudgea	Constanța	Tulcea
Special Protection Areas (SPA)	148	31	22	9
Sites of Community Interest (SCI)	383	32	24	8

Source: Data from the <http://www.anpm.ro/natura-2000/>

The anthropic resource of the Dobrudgean tourism patrimony is enriched by the multitude of monuments and archaeological sites, of architectural ensembles and reserves, of memorial monuments and ensembles, of technical and art monuments, of museums and other elements of folk art located both in the urban and rural areas.

Thus, analysing the Dobrudgean rural space, we will find that this is the keeper and preserver of an inestimable treasure of art and architecture, with historical artifacts, vestiges and monuments, as well as of a veritable ethno-folklore heritage of unique value and purity, which “makes out of Dobrudgea a genuine *museum in open air*, with many monuments, archaeological sites and architectural assemblies that are included in the protected areas” (Ionașcu, 2011).

The *monuments and archaeological sites* of ancient times can be known by visiting the remains of human settlements established by the pre-historical, Geto-Dacian, Greek and Roman civilizations both on the territory of Constanța county (Box 1) and of Tulcea county (Box 2).

Box 1

Main archaeological sites (fortresses) in Constanta county

Tomis – Constanța
Callatis – Mangalia
Histria – Istria
Tropaeum Traiani – Adamclisi
Tropaeum Traiani Monument – Adamclisi
Axiopolis – Cernavoda
Beroe – Ostrov
Capidava – Capidava
Carsium – Hârșova
Elenistica – Albești
Sacidava – Aliman
Stratonis – Tuzla
Ulmetum – Pantelimonul de Sus

Source: <http://www.info-delta.ro/obiective-istorice-39/>*Box 2*

Main archaeological sites (fortresses) in Tulcea county

Aegyssus – Tulcea
Argamum – Jurilovca
Arrubium – Măcin
Babadag – Babadag
Dinogetia – Garvăn
Halmyris – Murighiol
Ibida – Slava Rusă
Luncavița – Luncavița
Noviodunum – Isaccea
Proslavița – Nufăru
Salsovia – Mahmudia
Troesmis – Turcoaia

Source: <http://www.info-delta.ro/obiective-istorice-39/>

The main historical objectives from the Byzantine period are the mediaeval citadel Păcuiul lui Soare from Ostrov (dating back from the 10th – 11th century), the Citadel Heracleea (Yeni-Sale) from Enisala (13th century), rebuilt by the Genovese and the rock churches from Basarabi (10th century).

The *religious tourism objectives* include worship places and cemeteries belonging to several religions and represent attractiveness elements by the significance of feasts (titular saints), age of settlements and architectural style, location. The new worship places were added to the old monasteries and churches with important religious significance from Constanța county (Box 3) and Tulcea county (Box 4).

Box 3

Main Christian–Orthodox edifices in Constanta county

Orthodox cathedral – Constanța – Constanța, 1883–1895
 The Greek Church of Metamorfozis – Constanța
 Dervent Monastery – Galița, 1923 (1990)
 Saint Mary Monastery – Techirghiol, 1928
 Saint Helen by the sea Monastery – Costinești, 1998
 Colilia Monastery – Colelia, 10th century
 Cave of Saint Apostle Andrew – Ion Corvin, 1944
 Cave of Saint Ioan Casian – Casian, 2001

Source: <http://www.resurse-ortodoxe.ro>

Box 4

Main Christian-Orthodox edifices in Tulcea county

Saint Nicholas Cathedral – Tulcea, 1865
 Saint Nicholas Church – Sulina, 1863–1868
 Niculițel Basilica Church – Niculițel, after 370 d.Hr.
 Cocoș Monastery – Niculițel, 1833
 Saon Monastery – Niculițel, 1846
 Uspenia Monastery – Slava Cercheză, 1840
 Voivodonia Monastery – Slava Cercheză, 17th century
 Celic Dere Monastery – Frecăței, 1835

Source: <http://www.resurse-ortodoxe.ro>

In the southern part of Dobrugea, in Constanta county, where Turkish and Tartar communities are living, there is a large number of mosques and Muslim places of worship (Box 5), while in Tulcea County there is a less number of Muslim places of workshop (Box 6).

Box 5

Main Muslim religious edifices in Constanta county

The Big Carol I Mosque – Constanța, 1910
 Geamia Hunkiar – Constanța, 1869
 Geamia Esmahan Sultan – Mangalia, 1520
 Geamia Mehmet Efendi – Cernavoda, 1756
 Geamia Sultan Mahmut – Hârșova, 1812
 Geamia Abdul Medgid – Medgidia, 1859–1865
 Geamia Amzacea – Amzacea, 1850-1858
 Geamia Fântâna Mare – Fântâna Mare

Source: https://ro.wikipedia.org/wiki/Categorie:Moschei_din_Rom%C3%A2nia

Box 6
Main Muslim religious edifices in Tulcea county

Mosque of Sultan Abdülaziz – Tulcea, 1865
Mosque of Ali-Gazi Paşa – Babadag, 1610
Grave of Sari Saltuk Dede – Babadag, 1297
Geamia Mestan Aga – Măcin, 1860
places of worship Yazîcî – Isaccea, 1864

Source: https://ro.wikipedia.org/wiki/Categorie:Moschei_din_Rom%C3%A2nia

Dobrudgea was one of the most multicultural parts of Romania, at least by mid 20th century. In 1930, its population consisted of Romanians (44.2%), Bulgarians (22.8%), Turks (18.5%), Tatars (2.7%), Germans (3.4%) and Greeks (less numerous). In those times, Dobrudgea was one of the most multicultural spaces of the continent, with a rich diversity of languages, religions and customs (Boia, 2007).

The many ethnical communities created an original material and spiritual culture in which we can notice the traditional houses from reed and earth from the Danube Delta.

Of great importance for the cultural tourism, we can mention the *archaeology museums* (Adamclisi, Istria), *art museums* (Limanu, Topalu), *ethnographic museums* (Enisala), *scientific and technical museums*, *memorial houses* (Panait Cerna, in Tulcea county).

The hydrotech constructions (bridges, lighthouses, the Danube – Black Sea Canal and Sulina) stand out in the landscape of the areas where they are located.

According to the above-mentioned attractive elements, Ionaşcu and Cianga in 2006 identify **two areas for the rural tourism practice** in Dobrudgea:

– A compact area located in the wet regions of the river plain, delta, lagoon complex and seashore, with prevailing piscicultural specificity, which is used for the practice of mass summer tourism, balneary, recreational, sport, business, cruise and itinerary tourism;

– A hilly and plateau area with prevailing fruit–viticulural, apicultural and agro-pastoral specificity, which use the rural tourism potential for the gastronomic, ethnographic, historical, religious and scientific tourism practice.

In the year 2004, in the National Territorial Plan, section VI Tourism, the researchers identified the rural settlements with tourism potential in Dobrudgea that cover the largest part of Dobrudgea (72%). In the case of Tulcea county, 83% of the territory is represented by natural areas of high scientific and landscape value (the Danube Delta and the lagoon complex Razim-Sinoe, the Măcin Mountains, the Danube river plain) and the cultural-historical heritage (the relics alongside the Danube, Niculiţel, Enisala, Baia centers). Constanţa county, by the balneary and cultural potential from the southern part of the Romanian coastline and the

historical, cultural and religious resources from Oltina Plateau, accounts for 59% of the remarkable tourism potential. (<http://mdrap.ro/>)

Each rural locality represents an entity with personal particularities and specific activities, which has to be identified and valorized as efficiently as possible in terms of tourism potential.

The rural settlements are of tourism interest depending on the natural environmental factors, on the historical and cultural conditions in which they evolved; putting into value the tourism attractiveness elements is strongly influenced by the access possibilities, which most often represent an important constraint.

In most villages of tourism interest, mainly in those located in zones with complex high value tourism potential, there are more than two–three potential travel motivations (villages of balneary, fishing and hunting, cultural-historical and religious, ethnographic, viticultural interest). Most rural localities have a complex tourism potential and the differences between these stem from the main attractive elements. The isolated settlements have a strictly tourism function and put into value the natural potential from their proximity.

Thus, a relatively new field of interest in the Danube Delta, tourism has good development chances due to the unique landscape of an amazing wealth and diversity. The Biosphere Reserve status of this area is also an asset. Tourism may become an important part of life and a means of empowerment. High tourist potential areas are: Matița–Bogdaproste; Mila 35 Canal – Mila 23 Village; Gorgova–Uzlina; Roșu–Puiu and Sulina–Sfântu Gheorghe, a particular attraction being Sfântu Gheorghe Arm, Sulina Arm, Razim–Sinoie Lakes and Chilia Arm (Damian and Dumitrescu, 2009).

Tourism developments are found in the perimeter of resorts, of the urban or rural localities or on isolated basis, depending on the potential resources that require their existence. The most popular tourist activities in the villages were fishing, hunting, swimming, horse riding and boating, cooking traditional meals, landscape watching and photo taking.

The tourist accommodation structures represent the most important component of the specific technical-material base, as it responds to one of the fundamental needs of tourists, i.e. rest and lodging. The Black Sea shore and the Danube Delta are destinations where the tourist accommodation capacity has been significantly enlarged. The Black Sea is the main tourist attraction in the region and Constanța county had 755 accommodation units with a capacity of 87,848 places in the year 2015. Thus, it appears that 84.36% of the total accommodation capacity of Dobrugea is located in this county; Tulcea county has 140 accommodation units with a capacity of 3,973 places (<http://www.insse.ro/>).

The types of rural tourism identified on Dobrugea's territory are the following:

- tourism for helio-marine cure on the seashore;

- recreational tourism, for fishing purpose or for nautical sports on certain lakes from the Black Sea shore or alongside the Danube river;
- eco-tourism, in the Danube Delta and the protected areas from continental Dobrudgea;
- cultural tourism in the settlements with high value historical objectives (Adamclisi, Enisala, Istria) or religious objectives (Celic Dere, Cocoș, Derwent, Saint Andrew Cave, Casian Cave, Saon, Uspenia);
- agro-tourism by putting into value the viticultural, fishery, apicultural, local agro-pastoral resources, traditional cuisine or horse riding.

In the specialty literature, *the rural settlements with tourism function from Dobrudgea* or those with tourism function besides their basic function can be classified as follows:

- tourism rural settlements for recreation and helio-marine cure: Agigea, Corbu, Tuzla, Vama Veche, 2 Mai, 23 August;
- eco-tourism rural settlements: Crișan, Caraorman, Mila 23, Maliuc, Murighiol, Mahmudia;
- cultural tourism rural settlements: Adamclisi, Enisala, Istria, Slava Cercheză;
- agro-tourism rural settlements: Jurilovca, Niculițel, Oltina, Ostrov, Sarichioi;
- multifunctional tourism rural settlements: Sfantu Gheorghe, Costinești.

In the tourism region Dobrudgea, tourism programs can be established for leveraging the tourism potential in the rural areas, throughout the year, with a higher frequency in the warm season for the tourists who come to the seashore.

The following *tourism routes* can be identified:

- Wine Way: Murfatlar, Niculițel, Ostrov;
- eco-tourism routes on the arms and canals from the Danube Delta and the Măcinului Mountain National Park;
- cultural, ecumenic, historical or scientific tourism routes;
- mixed tourism routes.

The successful and sustainable rural tourism development depends not only on the attractive scenery and facilities but also on the competitive quality services. At present, due to the favorable natural conditions, the tourism sector can develop in the rural area of Constanta and Tulcea counties and the farms can benefit from this potential, on the condition that the inhabitants of these areas get involved in tourism activities.

All these cannot be achieved in the absence of the involvement of the state, through the intervention of local authorities to implement a county development system, laying the foundations of rural tourism development in Dobrudgea. This assistance should be primarily manifested by infrastructure planning, mainly through a tax and credit system that makes it easier to implement the necessary actions.

There is a multitude of actors involved in the development of rural tourism in Dobrugea. Some of them play a more important role compared to others, but each of them brings a special contribution in tourism development.

In this context, an important role in the rural tourism development in Dobrugea is played by the Local Action Groups (LAGs), a public-private partnership with an essential role in the implementation of a local rural development strategy.

In the year 2012, there were 5 LAGs in Dobrugea, out of which 2 LAGs in Tulcea county and 3 LAGs in Constanta county (Table 3).

Table 3
The list of Local Action Groups (LAGs) and the area covered at commune level, in Tulcea and Constanta counties, in the year 2012

LAG name	LAG communes	Total area km ²	Number of Inhabitants
Tulcea county			
LAG Association <i>Delta Dunării</i>	Murighiol, Nufăru, Bestepe, Mahmudia, Valea Nucarilor, Sarichioi, Ceamurlia de Jos, Jurilovca, Mihai Viteazu	2,068.2	33,632
LAG Association <i>Valea Teișei</i>	Frecăței, Somova, Mihail Kogălniceanu	383.73	11,597
Constanta county			
LAG Association <i>Constanța Sud</i>	Chirnogeni, Agigea, Amzacea, Comana, Mereni, Pecineaga, Topraisar Town Negru Vodă	811.69	31,897
LAG Association <i>Constanța Centru</i>	Cuza Vodă, Lumina, Pantelimon, Târgușor, Nicolae Bălcescu, Siliștea, Mihail Kogălniceanu, Vulturu	780.5	34,177
LAG Association <i>Dobrogea Centrală</i>	Casimcea, Saraiu, Horia, Crucea, Seimeni, Tortoman, Saligny, Mircea Vodă, Rasova, Peștera, Ciocârlia,	1,330.92	33,516

Source: www.madr.ro

The practice and development of rural tourism in Dobrugea is facing many shortcomings, out of which:

- the population is not educated for this activity (in terms of behavior, foreign languages known, management, organization),
- rural homes were not built for the purpose of eventual tourism activities,
- lack of adequate infrastructure (telecommunications, sewerage system, water and gas supply network, heating network),

- lack of funds and strategies to develop tourism.

For a successful rural tourism activity, it is necessary to remove these negative aspects and focus on the following priorities:

- development of proper infrastructure,
- training and specialization of rural tourism service providers,
- participating in training and foreign language courses,
- creation of a material base for the rural tourism practice,
- publicity of guesthouses and agro-tourism farms,
- creating programs and funds for regional development projects,
- linkages with the national programs of local interest,
- promoting Dobrugea's area alternative tourism potential through participation in the tourism fairs, advertising campaigns, preparation of brochures.

This cannot be achieved without the contribution of the state and local authorities to implement a local development system. This assistance must primarily target infrastructure planning, with the development of a tax and credit system facilitating the implementation of the action.

As regards the *sustainable development of the tourism in Dobrugea's rural area*, the following main aspects must be taken into consideration:

- environment degradation diminution,
- conservation of the natural and anthropic resources,
- ensuring additional incomes for the people from the rural communities with tourism potential,
- creation of global alliances between several rural localities for the development of a single development policy,
- the improvement of the general infrastructure, equipment of certain model/pilot farms, boarding houses, tourism households,
- development of the national reservation system,
- establishment of local public administrations as promoters of profitable management of the tourism patrimony through the initiation of programs providing support to rural tourism.

5. CONCLUSIONS

The sustainable development of the rural region is a present and future option of the rural policy aiming at its preservation and improvement, economic competitiveness growth and improvement of the quality of life.

In Romania, rural tourism as priority sector of the Romanian tourism consists of the total tourism activities, products and services organized and developed in the rural area by the local population, in close connection with the natural environment and local people's basic activities, which put into value the tourism resources, the cultural heritage, traditions, tourism structures and local products.

As a multifunctional space, Dobrugea has been and will continue to be mainly a human *living territory* (rural settlements) and a *social space* (resting, recreation, conviviality/tolerance relations) for the local communities. At the same time, the Dobrudgean space is also an *economic space*, providing agricultural land and other resources as production and existence means.

Although at a first glance the landscape from Dobrugea is rather dull, there are natural resources and objectives in the rural areas, which could be put into value for tourism purposes. An advantage could be represented by the rustic buildings, with traditional architecture, typical for this region.

A space identity results from the topographic, landscape, historical, cultural and economic identities that have to be taken into consideration in the territory management actions for tourism purposes. The rural area development actions focus on the southern part of the seashore, the low seashore area, the localities alongside the Danube and those from the Danube Delta.

In addition to the natural landscape of the Black Sea and the Danube Delta, there are many key tourist attractions, such as a priceless treasure of architecture and art with historical monuments and relics, as well as of high value ethno-folkloric heritage. The tourism patrimony reunites the material and spiritual culture of the past and present, which makes out of Dobrugea a genuine museum in open air, with many monuments, archaeological sites and architectural assemblies included in protected areas.

In this context, the rural tourism, as alternative to the seasonal seashore tourism, does not depend to the same extent on the seasonality that characterizes the classical tourism from Dobrugea, and it can also contribute to the socio-economic development of the rural area.

At present, the specificity of the economic system and the functional typology of the Dobrudgean settlements are determined by putting into value the local resources, as well as by the level of the territorial distribution and absorption of the funding sources for investments. The protection of the rural heritage is extremely important in relation to the rural tourism development, as a modality to promote the Dobrudgean villages, with a positive effect on the attraction of tourists and with economic benefits for the local population.

REFERENCES

1. Boia, L., (2007), *România țară fără frontieră a Europei*, Editura Humanitas, București.
2. Cosma, M. R., Buzoianu, O., (2015), *Rural tourism – a chance for rural development in Romania*, <http://conferinta.academiacomerciala.ro/>.
3. Damian Nicoleta, Dumitrescu Bianca, (2009), *Sustainable development prospects for the Danube Delta rural communities*, Romanian Journal of Geography, No. 53(2), Bucharest, p. 153-163.
4. Giannakis Elias, (2014), *The role of rural tourism on the development of rural areas: the case of Cyprus*, Romanian Journal of Regional Science, Vol. 8, Issue 1, p. 38–53.
5. Ionașcu, V., (2011), *Dobrogea. Studiu de geografia turismului*, București, Editura Universitară.

6. Ionașcu, V., Ciangă, N., (2006), *The tourist regionalisation of Dobruđa*, Romanian Review of Regional Studies, vol. II, no. 3, p. 81–86.
7. NIS, (2013), *Regional economic and social benchmarks: Territorial statistics*, Bucharest.
8. OECD, (1994), *Tourism strategies and rural development*, Paris.
9. Popescu Agatha, (2016), *The position of tourist and agro-tourist guesthouses in Romania's accommodation structures*, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol. 16, Issue 1, p. 417–424.
10. <http://mdrap.ro/studii-de-fundamentare-privind-patn-sectiunea-a-vi-a-zone-cu-resurse-turistice>.
11. https://ro.wikipedia.org/wiki/Categorie:Moschei_din_Rom%C3%A2nia.
12. <http://www.info-delta.ro/obiective-istorice-39/>.
13. <http://www.anpm.ro/natura-2000/>.
14. www.madr.ro.
15. <http://www.ghidul-turistic.ro>.
16. <http://www.insse.ro/>.
17. <http://www.resurse-ortodoxe.ro>.
18. <http://www.romanianmonasteries.org>.

Mariana GRODEA

*Institute of Agricultural Economics, Romanian Academy, Bucharest
marianagrodea@yahoo.com*

REGIONAL DIFFERENCES IN MILK PROCESSING IN ROMANIA

ABSTRACT

The excessive farm fragmentation and the permanent diminution of dairy cow herds resulted in the decrease of milk quantities delivered to processing from 1.8 million tons (43.4%) in 1990 to 1.1 million tons in 2014 (24.3%). The results of the analysis reveal that the dairy plants approved for intra-community trade are distributed in almost all counties (except for the counties Mehedinți and Olt), totalling 171, the highest concentration being found in the counties Suceava (17), Constanța (14) and Mureș (12). The support to the milk sector is one of the priority directions of the new NRDP 2014–2020, by investments in the modernization of holdings and milk collection centers and distribution of finished products. As regards turnover, six of the most important companies in the dairy industry are operating in the region Center, with a cumulated turnover of 1813 million RON in the year 2014, i.e. 69% of total top 10 companies. The region Center also collected the largest milk quantity, this accounting for 37.2% of total collected milk in 2014, being the only region that constantly increased the collected milk quantity in the period 2007–2014, by 4.7%.

Key words: processing, milk collection, regions.

JEL Classification: Q10, Q13, Q19.

1. INTRODUCTION

The considerable global production, the decreasing demand worldwide and the Russian Federation embargo resulted in the decrease of dairy prices and stocks in the first quarter of the year, with considerable differences by member states and sometimes even within the same member state.

According to the latest data of the Commission, in March 2015, in the 28 member states, the average farmgate milk price was 31.57 euro per 100 kg of milk, as against 40 euro in the previous year, down by about 20%. In Romania, for instance, the price was down from about 32 euro/100 kg to 27.3 euro (-14%), the situation being even more serious in countries like Estonia, where the price was down up to 37% or Denmark, where the price decrease was above 29%. “The direct contracts with the private collectors still have a low share, which makes it difficult to redress the balance of forces in favour of milk producers. The cooperatives, which collect over 60 % of the milk from Europe, are not willing to

conclude contracts or to have control over production, announcing from the very beginning that they will collect all the milk quantity produced by their members. This largely limits the impact of measures from the Milk Package (package of measures for the support to the sector)", as shown in the Committee Report (Stanciu, 2015).

With the removal of milk quotas, a main problem also refers to the capacity of Romanian processors to face tough competition, in the context in which, in the year 2014, milk production and collection considerably increased throughout the European Union. That is why it is necessary to permanently find and develop new markets, to increase the EU market share on the world market, to allow for the fair access of EU exporters and to stimulate export growth.

The development of the dairy sector in Romania was constrained for several years by a series of factors, such as high farm fragmentation, ageing farm community, precarious management practices, limited access to high quality inputs and lack of farmers' organization. These factors have led to low farm productivity and efficiency (USDA, 2016). Thus, the average milk yield in Romania, one of the lowest in Europe (3704 liters/cow head – 2014), is an explanation for the lack of sector competitiveness.

Moreover, following the last summer drought and the limited milk processing demand, the Romanian farmers and the processing companies are confronted with strong competition from other EU member states. In the year 2016, the impact is likely to become more drastic, due to the lack of efficiency. On the other hand, we expect an increase of the share of commercial farms, as proved by the significant progress in genetics, animal feeding and farm management. Farmers' concern with the genetical improvement of herds can be noticed in the value of genetics imports. The value of genetics imports (bovine-frozen sperm) doubled in the last three years (from US \$ 553476, in 2011, to US \$ 1032504, in 2014 (USDA, 2016).

2. MATERIAL AND METHOD

In order to establish the hierarchy of the eight statistical regions of Romania from the agricultural potential point of view, a set of specific indicators has been used in the analysis of bovine farms performance in Romania; these indicators characterize in fact the development economic environment of the region. These regional indicators refer to the milk production collected by the processing dairy units and the number of collection factories approved for intra-Community trade. The data source used was the database Tempo-online – time series – NIS, National Sanitary-Veterinary and Food Safety Authority (ANSVSA) data, for the period 2007–2015.

The documentation and synthesis of the main ideas was based on the national and international specialty literature on the milk market evolution at European level (reports, studies, EUROSTAT and FAOSTAT publications), having in view

the future agricultural reform, the European agricultural trade liberalization, operation of national markets, the management of risk generated by the present climate changes and the economic-financial crisis.

3. RESULTS AND DISCUSSIONS

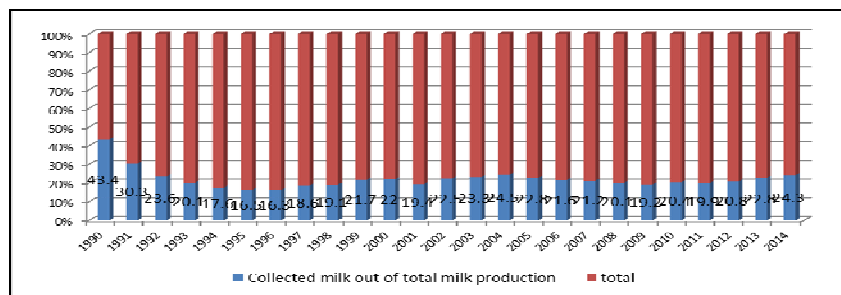
Obtaining a milk production economically competitive on the European market presupposes the design of production systems and technologies adapted to the various eco-economic-social conditions from our country. The improvement of exploitation systems is the main way by which Romania can obtain a viable and competitive production on the dairy farms (Condrea, 2009).

The strategic program of bovine raising and operation should ensure both the increase in number of dairy cow herds and their concentration on commercial farms, and mainly the increase of productivity per dairy cow, i.e. milk yield increase, increase of protein and fat percentage in milk as the safest way to increase sector competitiveness.

Milk processing by regions. The removal of milk quotas, beginning with January 1, 2014, will lead to an increased concentration of milk production on the large-sized farms and in certain regions of the EU, which will have a direct impact upon Romania. In the year 2014, in our country, there were 655541 dairy farms, out of which 84.4% (553531) had 1–2 heads and only 2042 farms (0.16%) were considered professional farms that delivered milk directly to the processing plants.

According to the data recently published by the European Commission – Milk Market Observatory, in 2014/2015, the milk quantity delivered to processing by Romania accounts for only 0.6% of total processed milk in the European Union, the average milk deliveries per producer being 13.6 tons, as against 80 tons in Poland and 255 tons as EU average. This very low amount reflects the size of the sector.

The excessive farm fragmentation and the permanent decrease of dairy cow herds led to the diminution of milk quantities delivered to processing from 1.8 million tons (43.4%) in 1990, to 1.1 million tons (24.3%) in 2014 (Figure 1).



Source: NIS – Tempo-online

Figure 1. Evolution of milk production delivered to processing (%).

After many years of continuous growth of milk industry in Romania, based on an increasing consumption demand, the global economic crisis, strongly manifested in Romania as well, after 2008, resulted in the decrease of milk production each year, as reflected in figures, by the diminution of dairy cow herds and of the collected milk quantity.

After a short revigoration in the year 2014, when production unexpectedly recovered to a level close to the period 2008–2009, in 2015, with the removal of milk quotas in the EU, the collected milk quantity in the processing units sharply decreased by 7% compared to previous year.

In the period 2007–2015, the total raw milk production collected by the processing units (from domestic production and from imports) was down by 133375 tons (-11.1%). In the investigated period, only the collected ewe and goat milk increased by 29650 tons (1.8 times), as a result of farmers' anticipating the consumers' preference for other types of dairy products. The cow and buffalo cow milk collected in the country decreased instead by 217075 tons (-19.1%) and by 33272 tons (-69.8%) respectively.

In the year 2015, cow milk had the highest share in the milk quantity collected for processing, with 95.1%, followed by ewe milk with 3.1% and goat milk with 1.7% (Table 1).

Table 1
Evolution of collected raw milk for processing

Item	2007	2008	2009	2010	2011	2012	2013	2014	2015
Cow milk	1136372	1051481	991588	903750	897348	887854	882381	996653	919297
Buffalo cow milk	4689	3538	2139	1393	963	1111	1282	1400	1417
Goat milk	4250	4026	4008	3856	3366	4677	7116	15001	16829
Ewe milk	12608	13634	13729	16406	14345	15759	18122	27280	29679
Total raw milk collected in the country	1157919	1072679	1011464	925405	916021	909401	908901	1040335	967222
Imported raw milk	43856	51707	80636	87309	82061	59267	96105	77396	101178
Total raw milk for processing	1201775	1124386	1092100	1012714	998082	968668	1005006	1117731	1068400

Source: NIS – TEMPO online

The analysis by the two origin sources, i.e. milk collected from the country and imported milk reveals, on one hand, that the share of imported raw milk increased from 3.6% in the year 2007 to 9.5% in 2015, while the share of raw milk collected from Romania constantly decreased, from 96.3% in 2007 to 90.5%. Per total, in the period 2007–2015, the analysis reveals the decrease of the raw milk quantity collected from the Romanian farms by 16.5%, while the raw milk quantity from imports increased 2.3 times.

This situation results from the fact that in Romania, the milk collection system is not well developed, and the prices offered by collectors are not

attractive for producers, so that these prefer to sell their production by themselves, through family business.

If we analyze the milk collected for processing by development regions, we find out that the greatest milk quantity was collected in the region Center, in the year 2014, this region accounting for 37.2% of total collected milk (Table 2). The region Center is also the only region that constantly increased its collected milk quantity in the period 2007–2014, this amounting to 16515 tons (4.7%).

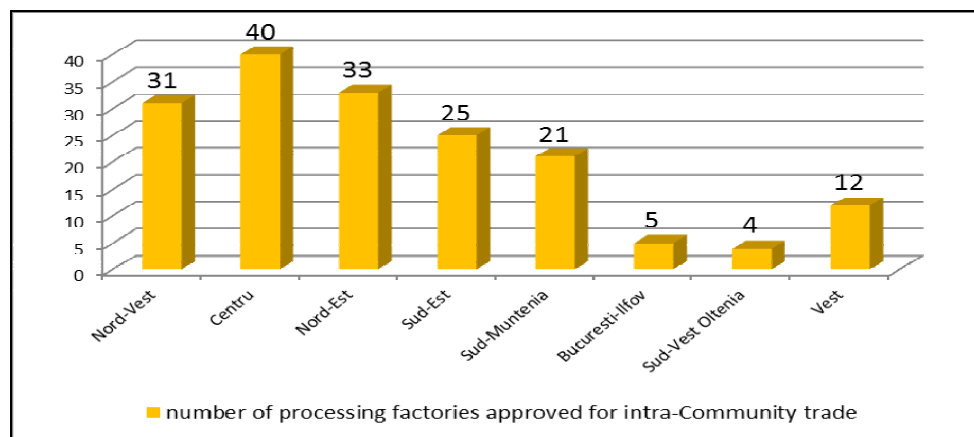
The milk processing factories approved for intra-Community trade are distributed in almost all counties (except for the counties Mehedinți and Ilt), with a total number of 171, and the highest concentration in the counties Suceava (17) from the region North–East, Constanța (14) from the region South-East and Mureș (12) from the region Center (Figure 2).

Table 2
Cow milk production collected by the processing units by development regions - %

	2007	2008	2009	2010	2011	2012	2013	2014
Total country	100	100	100	100	100	100	100	100
North–East	20.1	21.9	20.9	21.8	21.7	21.0	21.1	20.7
South–East	8.3	8.1	7.8	6.3	5.9	5.8	6.0	5.7
South–Muntenia	6.5	6.4	6.7	7.2	7.5	7.2	7.5	6.9
South–West Oltenia	c	c	c	0.9	0.7	c	c	c
West	2.4	2.6	2.7	2.9	2.7	3.2	3.0	3.8
North–West	23.2	22.6	22.7	22.3	22.2	22.1	19.5	20.7
Center	31.2	29.7	30.3	30.5	29.9	32.3	36.4	37.2
Bucharest–Ilfov	c	c	c	8.0	9.4	c	c	c

c - confidential data

Source: NIS – TEMPO-online



Source: Author's processing of ANSVSA data

Figure 2. Distribution of milk processing factories approved for intra-Community trade across regions – 2013.

The region **Center** has 40 milk processing factories approved for intra-Community trade (23.4% of total) and 307 milk collection centers approved for intra-Community trade (34% of total). In this region, more exactly in the county Alba, the largest dairy company with majority Romanian capital is located, “**Albalact SA**”, which became the dairy market leader by its turnover value (475 million RON) in 2014, thus surpassing Danone company (456 million RON), the latter having a portfolio almost fully consisting of yoghurts.

Another important company that is operating in the region Center, county Mureș, ranking 3rd by its turnover in 2014 (400 million RON), is “**Friesland Campina Romania SA**” into the ownership of the Dutch dairy group Friesland Campina, which reunited the operations on the Romanian market, through **Napolact**, **Industrializarea Laptelui Mureș** and **Friesland Campina Romania**, into a single company. In the region Center, Brașov county, there is another great company, “**Fabrica de lapte Brașov**” (**Brasov Dairy Factory**), the local producer of the brands *Olympus* and *Oly*, with a turnover of 306 million RON (on the 4th place), the production of which is 60% directed to the foreign market and 40% to the domestic market.

The company “**Delaco Distribution SA**” is also located in the county Brașov, region Center, mainly specialized in cheese production. This ranked 5th in the year 2014, with a turnover of 259 million RON. The 6th place, with a turnover of 217 million RON, is occupied by the group “**Hochland Romania SRL**”, region Center, county Mureș, market leader in cheese spread and kaschkaval, at a far distance from competitors. “**Covalact SA**” ranks 8th by its turnover (156 million RON); the company is located in the region Center, Covasna county, one of the greatest dairy producers in Romania, with more than 40-year tradition in dairy production.

The second important region as share of dairy factories and milk collection centers is **North–East** with 33 factories (19.3%) and 315 collection centers (35% of total). Here, in the county Suceava, the company “**Dorna Lactate SA**” ranked 7th in turnover terms in the year 2014 (181 million RON), which also have dairy factories throughout the region North–East, zone with tradition in this sector. La DORNA is one of the most developed brands on the dairy market in Romania, leader on the UHT milk market and even since its establishment leader on the certified organic dairy market, its products being certified in accordance with the EU standards.

The region **North–West** comes next, as regards the share of dairy factories and milk collection centers, with 31 dairy factories (18.1%) and 226 milk collection centers (25% of total).

One of the greatest dairy companies from Romania, “**Danone SA**”, has been operating in the region **Bucharest–Ilfov** since 1999, market leader on the yoghurt segment. In the year 2014, it ranked 2nd by its turnover (456 million RON), after ranking 1st in the previous year. Danone Romania is part of the Danone Group, present in 120 countries, one of the world leaders in food industry, which ranks

first in the world for fresh dairy products and on the second place in the world for bottled mineral water and baby food.

“**Simultan SRL**”, commercial company with full private capital, located in the county Timiș, region **West**, was established in the year 1994; its main activity object is the production and sale of fresh, lacto-acid dairy products and cheese under its own trade mark, “*SIM*”. In the year 2014, the company ranked 9th in top 10 as turnover (106 million RON).

“**Lactag SA**” is also among the “top 10” milk processing companies, by its turnover (72 million RON); the company is located in the country Argeș, region **South-Muntenia**, the largest dairy factory in the southern part of the country, with a 50-year tradition and with full private capital (<http://www.zf.ro/>).

The milk collection centers authorized for intra-Community trade do not operate in all the counties of Romania. Nationwide, there are 902 such centers, out of which 39% in the counties Botoșani (215) and Mureș (139).

4. CONCLUSIONS

In the conditions in which more than 90% of the Romanian milk on the market comes from small, subsistence farms (the remaining being covered by the large-sized farms), the insufficient number of milk collection centers (and of cooling tanks) further impacts the development of the Romanian dairy industry. This also as a result of the embargo imposed on Russia, when the dairy products with the Russian Federation destination were turned away at the border, which has ruined many short-term forecasts and strategies not only of the milk producers but also of the large processors. The analysts’ calculations estimate that about 30% of the European dairy production was directed to and absorbed by the Eastern European countries, which was favoured by the prices much under the domestic production prices.

The competition in the dairy sector, a stagnating market in the last year, is increasingly fierce as far as the multinationals continue their fight by aggressive promotion efforts, as well as by the diversification of their assortment range. At the same time, cheaper products enter the country through the large retailers. The place of small local processors is more and more limited, and many of them cannot face costs. Consequently, there are only 171 dairy factories that have been approved for intra-Community trade; these process only conform milk, can be identified by an "oval stamp" and are eligible both for the intra-Community trade and for third countries. Most of them belong to multinational companies, such as Danone and Friesland.

The analysis of milk collection and processing by development regions reveals that the region Center stands out, as the largest milk quantity for processing is collected here (37.2%). It is in this regions that the largest number of processing factories approved for intra-Community trade is found (40 dairy factories),

accounting for 23.4% of total. In terms of turnover, six of the most important companies in the dairy industry are operating, which cumulated 1813 million RON turnover in the year 2014, i.e. 69% of total top 10 companies.

REFERENCES

1. Alina Stanciu, (2015), Raport oficial al UE: industria laptelui are mari probleme, retailerii profită pentru a atrage client, http://www.economica.net/pericol-pe-piata-lactatelor-ce-fac-magazinele_102380.html#ixzz4Qdp3QESb.
2. Raport USDA, (2016), Industria laptelui din România este săracă și ineficientă, *Fabrica de lapte, Revista specialiștilor din industria lactatelor*, <http://www.fabricadelapte.ro/raport-usda-industria-laptelui-din-romania-este-saraca-si-ineficienta>.
3. Drăgănescu Condrea, (2009), Sisteme de exploatare a taurinelor: probleme ale maximizării eficienței biologice și mecanice, *Revista de Zootehnie* VI.1:19-33.
4. <http://www.zf.ro/zf-24/topul-celor-mai-mari-companii-din-industria-laptelui-doar-primii-trei-trec-de-400-mil-lei-anual-14461471>.