

## TOURISM, ECONOMIC ACTIVITY WITH GREAT POTENTIAL BUT STILL INSUFFICIENT VALUED IN SETTLEMENTS OF THE LAGOON COMPLEX RAZIM-SINOE

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### Abstract

*Environmental quality to be the basis of all activities, including tourism, makes inseparable from the phenomenon of tourism. The variety of natural environmental quality and its aesthetic appearance, constitute basic resources for tourism today, and increasingly homogenized by the process of economic globalization. Between the environment and various forms of tourism there are complex reciprocal relations, interdependence, which are often described as a "symbiosis". The purpose of this paper is to present and characterize economic activity and tourism in the area Razim- Sinoe Lagoon Complex. Will present data on population, agriculture, industry, tourism, transport and do some actual proposals on tourism potential. For these aspects we used data from the National Institute of Statistics, Department of Statistics Tulcea Strategic Plan for Sustainable Tourism Development in the Danube Delta, developed under the auspices of Tulcea County Council; Master Plan, Danube Delta Biosphere Reserve, Danube Delta developed by National Institute for Research and Development. Data collected were placed in tables and processed to yield graphics that then we have interpreted and analyzed. Thus, after processing the data provided by the authorities, we conclude that: (i)The area study presents the following administrative-territorial structure: one city, Babadag, 10 communes with a total of 32 villages in the composition (including the common city of residence).(ii)The most important activity in terms of number of active local businesses is trade, with 50.83% of the total active units; (iii)Manufacturing attract the largest number of employees, 44.98%, is from this point of view, the most important activity. Manufacturing is followed in this trade indicator 19.37% and 10.38% of construction;(iv)The most representative activity is the fishing area is favorable for the development of such an activity, often combined with agrotourism.(v)The main categories of land use are the agricultural land (arable, pasture and hayfields, orchards and vineyards), forest vegetation surfaces, surfaces occupied by water, roads and railways construction;(vi)Sulfur forms prevalent in the Danube Delta Biosphere Reserve phytocoenosis, covering approximately 160.000 hectares, of which 100,000 ha is monodominant reed community.(vii)In Romania especially in geographical areas close to water highlights specific types of tourism, which is distinguished from other forms of tourism in areas with higher altitudes. In the Razim-Sinoe meet as a form of tourism: tourism heliotherapy, sports tourism, rural tourism, eco-tourism, scientific tourism, health tourism, tourism movement.*

**Key words:** environment, protected areas, quality, rural, sustainable

### INTRODUCTION

Tourism accounts for Tulcea especially the industry with the most important potential for growth, issue reflected in recent years by increasing the employment of labor in this sector compared to other sectors[1].

Tourism concerns, firstly, that people take trips outside their living space and work, and temporary stays in a certain destination, the destination recreation activities and facilities used for this purpose[2].

Tourism, far from protecting the environment, is a generator of its problems, being able to destroy the very resources it is dependent. Tourism must be organized and practiced so as

to use environment, but at the same time actively contribute to preserving the quality of his.

A quality environment favors the development of tourism[3].

In this context, this study aimed to analyze tourism in the Lagoon Complex Razim-Sinoe area to highlight that it has a good potential but it is still insufficiently valued.

### MATERIALS AND METHODS

For this study the tourism potential of the villages in the Razim-Sinoe we used statistical data provided by the National Statistics Institute, Tulcea County Department, and

Danube Delta National Institute for Research and Development.

The data was then processed and converted into tables, graphs and then interpreted and analyzed.

## RESULTS AND DISCUSSIONS

### Administrative definition and network of settlements

-The study area has the following administrative-territorial structure: one city, Babadag, 10 communes with a total of 32 villages in the composition (including the common city of residence).

- The average size of municipalities by number of inhabitants is 2,978, which is a value lower than the average of 3,382 people, national coverage aspect caused vast areas occupied by water.

Table 1. Population, communes and localities related to the area of study

COMMON	TOWN	POPULATION	COMMON	TOWN	POPULATION
	BABADAG	10,437			
BAIA	BAIA	3,090	SARICHOI	SARICHOI	4264
	CAMENA	610		ENISALA	1258
	CAUGAGIA	212		SABANGIA	727
	CEAMURLIA DE SUS	1,006		VISTERNA	523
				ZEBIL	1.853
CEAMURLIA DE JOS	LUNCA	1,404	VALEA NUCARILOR	VALEA NUCARILOR	1.377
	CEAMURLIA DE JOS	1,280		AGIGHIOL	1.830
				IAZURILE	1.125
JURILOVCA	JURILOVCA	3,158			
	SĂLCIOARA	1,481	CORBU	CORBU	3.559
	VIȘINA	889		VADU	640
MURIGHIOL	MURIGHIOL	1,458	ISTRIA	ISTRIA	1.272
	COLINA	147		NUNTAȘI	1.144
	DUNAVĂȚU DE JOS	703			
	DUNAVĂȚU DE SUS	225	MIHAI VITEAZU	MIHAI VITEAZU	1.755
	PLOPU	649		SINOE	1.265
	SARINASUF	527			
	UZLINA	4	SĂCELE	SĂCELE	2.025
				TRAIAN	58

Source: National Institute of Statistics, Tulcea County Council, Department of Public Works

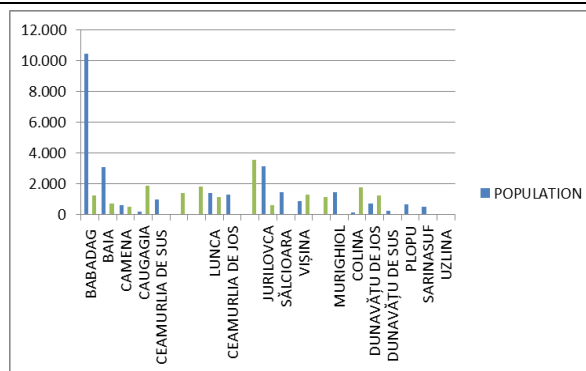


Fig.1. The evolution of population in the Razim-Sinoe  
 Source: Own calculation.

Observe as in table 1 and figure 1 that the largest number of people who have places: Sarichioi, with 4264 inhabitants, Corbu, with 3,559 inhabitants, because revolve area of economic influence of Constanta, Baia, with 3,090 inhabitants, located strategically on E87 European road, but some communes with a rich ethnic and cultural tradition, evidenced by the unity of the homeland population bud, which are made up of common people belonging to the community of Russian-Lippovan: Sarichioi and Jurilovca.

The numerical evolution of the population has decreased now because of the aging of the population and the massive migration of young people looking for a job.

The population density in the study area has a mean of 22.7 inhabitants / km<sup>2</sup>, value very low as compared to that at the regional level (79.1 inhabitants / km<sup>2</sup>) and to the national average, 90.3 inhabitants / km<sup>2</sup> registered on 1 July 2010. This is justified by the specific relief.

In terms of population distribution by types of environments, the rural population to 80%, given that this sector is comprised one city with relatively small populations.

Table 2. Distribution of population by gender and in the Razim-Sinoe 2014

Year	Razim-Sinoe sector		Romania	
	Men (%)	Ladies (%)	Men (%)	Ladies (%)
2014	48.7	51.3	47.9	52.1
Urban	48.7	51.3	47.9	52.1
Rural	50.8	49.2	49.8	50.2

Source: National Institute of Statistics, Tulcea County Council

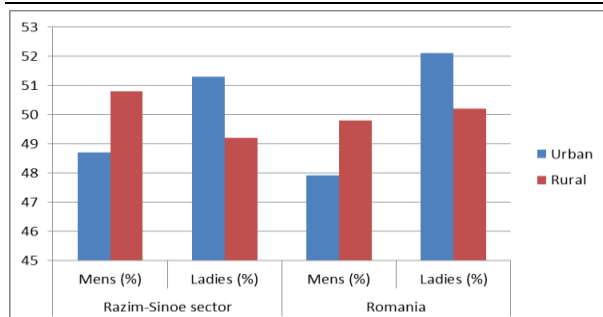


Fig. 2. Distribution of population by gender and in the Razim-Sinoe 2014  
 Source: Own calculation.

The proportions are different than the national averages: for urban areas in the country meets a rate of 52.1% women in the Razim-Sinoe, the percentage is 51.3%; there is a slight predominance of the male population in rural areas, 50.8% versus 49.8% average for the entire country, and women contain more than 49.2% in the Razim-Sinoe to the country where there is a percentage of 50.2% (Fig.2). By ethnicity, the population is fairly homogeneous. Thus, largely as a percentage of 89.9% of the population in the 2002 census are Romanian, 5.2% Lippovan Russian, Turkish 1.5%, 1.2% Russians, 1% Rroma and 1, 2% other nationalities.

Among the components that determine the evolution numerical population stands two types of population movements: the natural movement of the two phenomena that capture, birth and death rates and migratory movement.

In 2014, the sector analyzed, the birth rate was 9.7 ‰ value. At the local level is observed significant variations in birth rate from 14.7 ‰ in common Mihai Viteazu, from 5.4 ‰ in Valea Nucarilor.

The mortality rate in 2014 was in the Razim-Sinoe value of 10.8 ‰, value lower than the figure for Romania 12 ‰. Higher values of mortality over 20 ‰ settlements are recorded in Ceamurlia de Jos and Murighiol.

Places where mortality rates have values less than the country is recorded at Mihai Viteazu 9.4 ‰ and 9.2 ‰ in Corbu . In these places there was a migration of young people due to the affordability of land, which they have purchased and built their homes.

Regarding the migratory movement of the population from the Razim-Sinoe, we can say

that internal migration at regional level, while not affecting the total population, causing important changes in its structure ages and sexes of the population, so the two areas social, urban and rural, and in territorial administrative (Table 3).

Table 3. Migratory movement of the population in the Razim-Sinoe

Areas	People		Hip migration	Spore %
	Established	Left		
Razim Area	462	558	-96	-3.3‰
Sinoe Area	392	209	183	4.7‰
Babadag Area	328	378	-50	-2.5‰

Source: National Institute of Statistics, Tulcea County Council

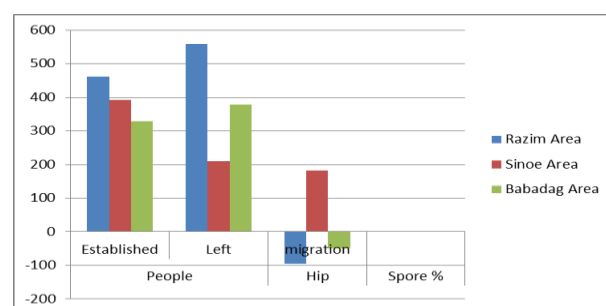


Fig.3. Distribution of migratory movement of the population in the Razim-Sinoe  
 Source: Own calculation.

The data shown in table 3 is observed that the negative balance of migration were recorded in the area Babadag, with values of -50 and in the Razim, with values of -96.

Consistent with this, meets a negative migratory growth in the area Babadag is - 2.5%, and Razim -3.3%, led to the closure of many business units generated cee needles population displacement looking for a job. Positive migration growth is registered in the Sinoe determined on tourism.

### The structure of economic activities

For spatial analysis of economic activities present in the study area was used three indicators are features for economic processes of the administrative units components (according National Institute of Statistics): the number of active local agents, defining the dominant economic profile; number of salaried employees of local businesses that causes the utilization of human resources in the economy; the turnover of the business units, indicating the level of achievement in economic activities.

Distribution activities in the number of active local business units, sales value and number of employees in the territory in 2014, resulting from the territorial level, that:

-The most important activity in terms of number of active local businesses is trade, with 50.83% of the total active units;

-Manufacturing attract the largest number of employees, 44.98%, is from this point of view, the most important activity. Manufacturing is followed in this trade indicator 19.37% and 10.38% of construction;

-In terms of economic results in 2014, the most important activity was manufacturing, followed in order by trade, construction and transport;

-In terms of productivity per employee were

the most profitable activities in trade, manufacturing and agriculture, which recorded average values over the county.

Group active in local businesses after the turnover and number of employees, the first economic sectors of activity, it highlights the economic profile of the studied territory. This is:

a)third in terms of number of active economic agents;

b)secondary in terms of turnover and number of employees;

c)in profitability, turnover per employee, the most profitable is the tertiary sector (Table 4 and Figure 4).

Table 4. Statement of local economic units active at Danube Delta Biosphere Reserve presentation of turnover and number of employees within the area, the main economic sectors of activity (2014)

Sector	Number of agents	% the total area	Number of employees	% the total area	Fiscal value (thousands RON p.c.)	% the total area	Turnover / employee (RON / employee)
Primary	357	6.67	2,944	8.98	196,643	6.2	66,795
Secondary	757	14.14	18,475	56.36	1,739,198	54.88	94,138
Tertiary	4,241	79.20	11,363	34.66	1,233,424	38.92	108,547
Total area	5,355	100	32,782	100	3,169,266	100	268,712

Source: National Institute of Statistics, Tulcea County Council

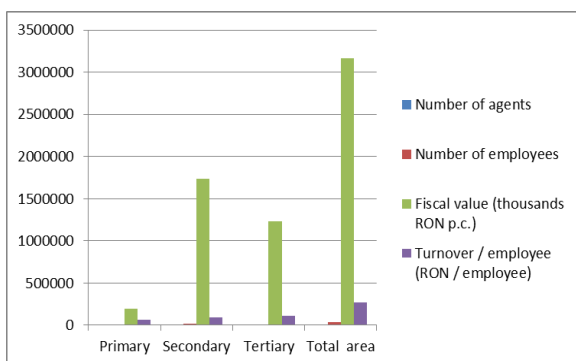


Fig. 4. The distribution of economic activity in the Danube Delta sectors Biosphere Reserve

Source: Own calculation.

In terms of diversity of economic activities of the area, as evidenced by CAEN classes, in the studied area there are over 100 specific activities with a distinct variability in space.

Analyzed the economic centers, diversity of activities is as follows: Babadag - 44, Corbu - 29 and a minimum in Istria, Ceamurlia de Jos -7 respectively.

Administrative-territorial units which have a large variety of economic activities are more likely development is not dependent on one or

a small number of activities (table 5).

Table 5. Activities on the territorial administrative units as CAEN classes

Territorial administrative unit	Total classes CAEN/ u.a.t	Territorial administrative unit	Total classes CAEN /u.a.t
Babadag	44	Ceamurlia de Jos	7
Murighiol	19	Jurilovca	23
Valea Nucarilor	19	Corbu	29
Sarichioi	24	Istria	7
Baia	25	Săcele	8
Mihai Viteazu	13		

Source: National Institute of Statistics, Tulcea County Council

Economic diversity index administrative units grouped into classes of intervals:

a)2.5-5% (based on total economic activity which includes all reference județul- total value is 278 u.a.t.) - Ceamurlia de Jos, Mihai Viteazu, Istria, Sacele-in this interval are included administrative units with low diversity;

b)units with a value of 5.1 to 10% relative to

the benchmark, are municipalities Sarichioi, Baia, Jurilovca, Murighiol Valea Nucarilor-average reflects a diversity of CAEN classes, representing possible development centers of activities;

c)10.1 to 25% -Babadag, Corbu: centers with a diversified economic activity in the territory polarizing study(figure 5).

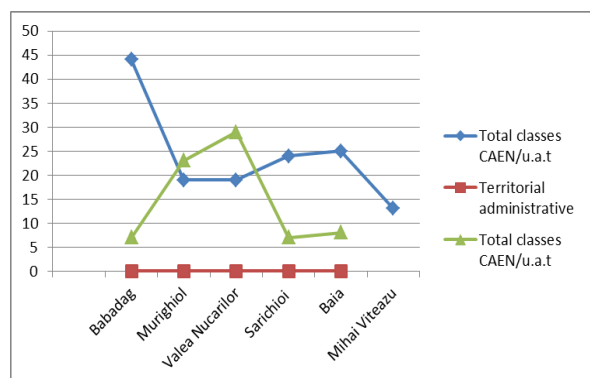


Fig.5. The distribution of economic activities on the territorial administrative units according to CAEN classes

Source: Own calculation.

The analysis group administrative units according to the main economic indicators resulted delineation of three structural zones, named after the centers of polarization of economic activities in their territory, they are: Murighiol, the Babadag and Corbu (table 6).

Table 6. Distribution of local businesses active in the 3 areas, the main sectors of activity, 2014

Area	Primary	%	Secondary	%	Tertiary	%	Total
Murighiol	23	15.33	10	6.67	117	78	150
Babadag	77	17.26	72	16.14	297	66.59	446
Corbu	18	15.25	15	12.71	85	72.03	118
Total	118		97		499		714

Source: Master Plan, Danube Delta Biosphere Reserve, developed by Danube Delta National Institute for Research and Development

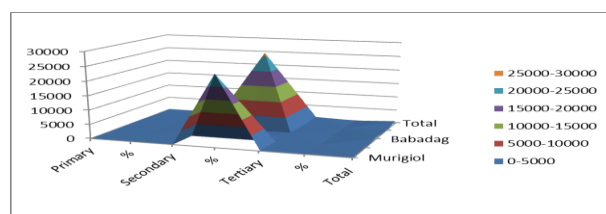


Fig. 6. Distribution of local businesses active in the main sectors of activity, 2014

Source: Own calculation.

Following the processed data in Figure 6 is observed that in Murighiol 15.33% of the activities are conducted in the primary sector,

6.67% in the secondary sector and the tertiary sector 78%.

In the area of Babadag, the percentages are different: 17.26% in the primary sector, 16.14% 66.59% in the secondary and tertiary sector.

In Corbu, the percentages are as follows: 15.25% in the primary sector, 12.71% 72.03% in the secondary and tertiary sector.

Murighiol Area, 2 administrative units: Murighiol and Valea Nucarilor is the most representative.

Babadag administrative area comprises 4 units: Baia, Ceamurlia de Jos, Sarichioi and Jurilovca is polarizing center of Razim-Sinoe region.

Area Corbu, comprises four administrative units in Constanta County: Corbu, Mihai Viteazu, Istria, Săcele. Năvodari road artery-Istria-Săcele-Mihai Viteazu, contribute to the development of economic activities in the territory area.

After distribution of active local agents and the number of employees, that Murighiol has a predominantly primary profile, a profile Babadag area primary-tertiary and secondary-tertiary in Corbu .

CAEN -represents acronym to refer to the national statistical classification of economic activities in Romania (classification of economic activities in Romania).

### Fishing

The representative activity is the fishing area is conducive to the development of such an activity, often combined with agrotourism. On the surface analyzed territory can talk about the existence of an economic activity, namely fish farming on an industrial scale, organized specially designated areas.

Fisheries can be categorized fish biology, fishing methods and areas, so there are two major profiles can then classify fisheries: of freshwater fish (predominantly) and marine fish in the marine area (often mixed profile).

Commercial fishing in inland waters are conducted in natural water basins constituting national public domain, respectively Razim-Sinoe, canals and lakes adjacent.

Fishing is done with fixed gear or mobile, using small fishing boats. The number of fishermen formally rises 414 people organized

in 12 associations of professional fishermen located at: Sarichioi, Sabangia, Dunavăț, Holbina, PopinaHolbina, Jurilovca, Iazurile, Murighiol, Plopu, Istria, Sinoe, Nuntași.

### Dynamics catches

#### a) the marine sector

By 1980, the share of fisheries in the Black Sea coast was small, representing only 8% of the total catch of marine and oceanic fisheries, being produced by a stationary fishing along the coast between Sulina and Mangalia.

Since the 80s, along with passive fishing when it took the active fishing by establishing inshore fishing fleet (vessels traler first 2 - 25m), catches have doubled.

After 1990, the decline begins by gradually reducing fishing activities, especially fishing effort, the decrease in equipping. Capturible made plummeted by half, continuing a decline from year to year.

#### b) the internal waters

Inland fish production has decreased by nearly seven times the period until 1989. After 1990, with the privatization of the fishery occurred reduce total domestic fish production from 74,000 tons in 1989 to less than 10,000 tons at the moment. A similar evolution took and inland fisheries, which decreased from 19,582 tons to 8,000 tons at present. Before 1989 the total fish production of Romania (including ocean fisheries) approaching 300,000 tons / year and we ranked 3-4 in Europe.

### Agricultural potential land use

The main categories of land use are the agricultural land (arable, pasture and hayfields, orchards and vineyards), forest vegetation surfaces, surfaces occupied by water, roads and railways, construction (table 7).

Regarding agricultural land can be seen in table 7 that the largest share is occupied by arable land at a rate of 80.4%, followed by, as a percentage of use of pastures and hayfields 16.6%, vineyards and vine nurseries 2.5% orchards and nurseries 0.5%.

Regarding the structure of land ownership, they belong to the state and private owners.

Table 7. Use of the land at Danube Delta Biosphere Reserve

The land	%
<b>The total area of Danube Delta Biosphere Reserve, of which:</b>	100
<b>Agricultural, of which:</b>	<b>41.22</b>
- arable	80.4
- pastures and hayfields	16.6
- vineyards and vine nurseries	2.5
- orchards and nurseries	0.5
<b>Forests and other forest land</b>	<b>9.5</b>
<b>Wetlands</b>	<b>49.2</b>

Source: National Institute of Statistics, Tulcea County Council

### Reed and valorization

Sulfur forms prevalent in Danube Delta Biosphere Reserve phytocoenosis, covering about 160,000 hectares, of which 100,000 ha is monodominant reed community.

Physical-geographical (relief, climate, water, soil) and the hydrobiological is a habitat very favorable development associations reed, which gives the area the Danube Delta and Razim-Sinoe as the region most representative and most extensive from Europe.

Sulfur is used in traditional rural home economics in various purposes: as a building material, fuel and animal feed (in the first vegetation).

Reed as construction material is at the right height over 2 m and a diameter greater than 10 mm. The marine area characterized by greater resistance to degradation over time, is requested as a building material.

Reeds as biomass traditionally used for grazing (cattle) when young, as an energy source by the locals in the cold. Household goods such as carpets, soft furnishings, curtains, separation walls, fences, shelves or shade greenhouses. It is also used for making weaving to protect dams banks and erosion.

Sustainable tourism takes into account the basic principles of sustainable tourism and respects people, the environment, culture and local economy of the host region.

The relationship between these three pillars is represented by a conceptual model called triangle of sustainability. Consistent with this model, society is divided into three groups named sizes:

- The human dimension: population, the elements for health, knowledge, training, culture;

- Environmental dimension: natural resources, environmental quality, biological diversity;
- The economic dimension: technology, real estate, funds.

Sustainable development aims to maintain a balance between the three primary dimensions, both locally and nationally and internationally. Recently, the three dimensions mentioned above, was added a fourth dimension to the conservation of cultural heritage and traditions of the peoples[4].

**The impact of tourism development on protected areas**

**a)The potential benefits of tourism in protected areas**

Table 8. Benefits of tourism in protected areas of the Razim Sinoe

OBJECTIVES	BENEFITS OF TOURISM	WAY POSSIBLE
ENHANCING ECONOMIC OPPORTUNITY	- increasing the number of jobs; -increased revenue; - encouraging local manufacture of goods; - generating additional revenue from local taxes	- increasing the number of visitors; -extension of the streets of your stay; - provision of adequate accommodation, site-specific, combined with providing guidance information in Danube Delta Biosphere Reserve ; - events in host regions (festivals, concerts, fairs) -Use as possible with local food and drink.
CULTURAL AND NATURAL HERITAGE PROTECTION	- biodiversity conservation; - protection, preservation and valorisation of cultural and built heritage; - improving local facilities, transportation and communications	- encouraging local communities to maintain or establish the organization of cultural festivals, traditions and events with local and even to undertake the restoration of the built heritage; - Awareness of the local population to support ecological restoration and conservation actions through sustainable use of resources
IMPROVING QUALITY OF LIFE	- Promotion of the values of the aesthetic, spiritual and of all other values that bring the welfare of the population; - increasing the level of intercultural exchanges; - encouraging local people to appreciate their culture and environment	- development of tourism facilities and services which may be of benefit to local people's living conditions; - improving communication; -Improve the educational process

Source: Danube Delta National Institute for Research and Development

Tourism in protected areas produce both benefits and costs, requiring planning and development of tourism activities in order to gain an advantage in your interest to tourists in order to improve the quality of life to anyone else on that area(table8)[5].

**b)The negative impact of tourism in protected areas**

Negative effects can be, and sometimes are the result of the presence of tourists, but many of these can be controlled and softened.

Anthropogenic negative impact on the

environment is generated from the following: the occurrence of roads and recreational vehicles;overdevelopment and overpopulation areas generated by the emergence of new guesthouses; improper storage of large quantities of waste generated by population and tourists; disturbance of wildlife; impact on habitat; destroying boats sandbars and banks; overfishing, especially of juveniles, increasing fire risk; compaction or erosion of soil damage archaeological sites; taking "souvenirs" of flora and fauna[5].

LOCAL COMMUNITY	GOVERNMENT, MINISTRY OF TOURISM	TOURIST INDUSTRY
TOURISTS	STAKEHOLDERS	GROUPS PRESSURE
VOLUNTARY SECTOR	EXPERTS, SPECIALISTS IN EDUCATION	MEDIA

Fig.7. Actors of sustainable tourism

Source:Master Plan, Danube Delta Biosphere Reserve, developed by Danube Delta National Institute for Research and Development

The institutions involved in sustainable tourism in the Danube Delta Biosphere Reserve are both individuals and the community's ability overseeing and coordinating all activity in detail. They are found in figure7 presented. Individuals must conduct a tourist activity in accordance with existing environmental conditions that do not adversely impact negatively and state institutions supervise and coordinate all this activity[6].

**Suitable forms of tourism in the sector Razim Sinoe**

In Romania especially in geographical areas close to water highlights specific types of tourism, which is distinguished from other forms of tourism in areas with higher altitudes.

In the Razim Sinoe area meet as forms of tourism: tourism heliotherapy, sports tourism, rural tourism, eco-tourism, scientific tourism, health tourism, tourism movement[8].

Heliotherapy tourism is a form of leisure tourism, which has seen great development, with increasing stress and occupational illnesses caused by the stress of modern life in large conurbations.

The resort which absorbs the largest number of tourists in this category is Portița-Perișor.

Sports tourism is a form of leisure tourism motivated by the desire to learn and practice different sports activities as a consequence of increasingly stronger sedentary urban population lives today.

The most important weight in sports tourism occupies summer water sports (rowing, water skiing), plus the desire to conquer nature walks and tours, fishing and hunting sports. This form of tourism is practicable over the whole area of water surface of the lake complex.

Rural tourism is practiced anywhere in the studied area, noting that the level of services offered varies from local to local or accommodation[8].

Ecotourism is a form of tourism in a responsible manner to areas with natural potential, in the interests of the local population and environment.

This form of tourism is part of the environmental tourism links with cultural and rural tourism, representing a growing niche market for tourism offer.

Scientific tourism, practitioners, researchers, students, being favored by the vast natural diversity within Danube Delta Biosphere Reserve[10].

Spa tourism is done by checking curative qualities of sludge silts from Murighiol indicated for the treatment of chronic rheumatism.

The geographical position of the territory, the beautiful landscape along the walking trails and the large number of tourist attractions valence aesthetic, cultural, historical and scientific itinerant make tourism / travel movement to be formade specific area[5].

For practicing tourism traffic required a number of measures: modernization of touristic routes, development of trade specific provision of accommodation and food services in the main towns on the tourist routes, increased promotional activities.

To achieve sustainable tourism is envisaged and technical equipping of a territorial public utilities: water supply and sewerage of settlements, transport networks and waste management.

**Urban technical equipping of the territory**

The development of tourism in rural areas is

fueled by the technical urban amenities here including the water supply and sewerage, waste management and transport networks.

**a)Water supply and sewerage**

Total population in the study area is 50.074 inhabitants, according to statistics from 2009. Hydro-studied area of the settlements is a problem, both in terms of water supply and sanitation in the and wastewater treatment.

The current situation of localities that have piped water supply, sewerage and wastewater treatment in the study area is presented in following table (Table 9) [7].

Table 9. Sewerage network in the Lagoon Complex Razim-Sinoe

Subzone	Locality	Water supply systems	Sewer systems	Length of water network (km)	Treatment plant capacity (m <sup>3</sup> /day)
Razim	Ceamurlia de Jos	X	running	18.6	182
	Jurilovca	x	X	31.4	1,540
	Murighiol	x	running	26.8	410
	Sarichioi	x	running	35.5	1,152
	Valea Nucarilor	x	-	13	410
Sinoe	Corbu	x	-	17.7	320
	Istria	x	-	14.8	350
	Mihai Viteazu	x	-	6.3	960
	Săcele	x	-	13.5	260
Babadag	Babadag	x	X	70	3,360
	Baia	x	X	12.8	967

Source: National Institute of Statistics, Tulcea County Council, Department of Public Works

All localities of the study area are supplied with water and wastewater sewage system exists in 3 localities and in 3 is running. In most towns water supply and sanitation centralized wastewater system is undergoing modernization and expansion to meet the quality requirements of the rules[6].

For all systems related to water supply in the area, the water source is surface water.În the Razim-Sinoe groundwater is characterized by an aquifer located at shallow depth, influenced by the relationship between hydrostatic level fluctuations Danube water levels.

The problem of wastewater collection is the great failure of settlements in the study area, with major implications for the protection of groundwater resources and surface water[10].

**b) Transport networks**



### 1)The network of roads

The analysis of data provided by the National Institute of Statistics, regarding the fitting of public roads (national roads, county roads, roads) in the study area, that road network comprises 2 routes roads, of which route European road E87 and county and village roads[6].

National roads are modernized, mostly with a good technical condition regarded as inconsistent as local roads, county and municipal why are modernized in a very small percentage, with technical condition deemed inappropriate.

Township roads, mostly not Tread ensure appropriate deployment of passenger traffic safely and as optimum comfort[10].

The existence of unsuitable roads or lack of certain disadvantages: difficult Seamless links between the various townships of joint or common; difficult access between municipalities and municipality, which makes local residents remain partially isolated from the center of residence; slow recovery of its products (milk, meat, agricultural products), reduced tourism potential in the area.

### 2)The network of railways

The area is traversed by the railway simple 804-Babadag Tulcea Medgidia with a total length of 97 km electrified. Railroad bridge linking Tulcea and Bucharest (2 daily) and Tulcea-Constanța (4 daily flights). The technical condition of the railway network is generally good. Level technical condition of facilities and lines do not allow higher speeds of 60-80km / h (on the railway network there are areas affected by natural phenomena such as floods, landslides and erosion and subsidence of railway embankments). North-south railway stations serving analyzed territory are Zebil halt, railway Babadag, Ceamurlia de Jos, Baia and MihaiViteazu[9].

### 3)Network airways

Airport proximity of Tulcea, serves and study area, as well as one of Tulcea County. It is located 17 km from Tulcea and 3 km to the town charter and operates Cataloi.Aeroportul continuously provide flight services for agriculture and health. For a better functioning were executed a series of modernization works (the airport has a

concrete runway of 2000x30 m, 7.5 m mower and a taxiway for 150x17m) [9].

### c) Waste management

In rural areas, where the amount of household waste is reduced, there are no systems for collecting household waste, waste from being disposed of rural households in areas of land in the wrong location. Waste deposited on these surfaces are animal waste (manure, scraps of plant breeding activity) and biodegradable waste in quantities less packaging, glass, paper, plastic, metals.Waste disposal situation is shown in following table (Table 10).

Table 10. Situation landfill space

Locality	Storage as pit		Storage form of platform	
	Surface (ha)	Distance from the housing (m)	Surface (ha)	Distance from the housing (m)
Jurilovca	2	500	to dismantle	-
Murighiol	-	-	2	-
Popu	-	-	1.5	-
Sarinasuf	-	-	1.5	-
Colina	-	-	0.8	-
Dunavățu de Sus	-	-	1	-
Dunavățu de Jos	-	-	0.8	-
Ceamurlia de Jos	-	-	1.2	100
Lunca	-	-	0.8	1,100
Sarichioi	0.6	40	1.5	200

Source: National Institute of Statistics, Tulcea County Council, Department of Public Works

Generally is not controlled waste disposal, storage is open, without leveling and coverage. Due to limited financial resources, landfill of waste from villages generally are not fenced, signposted and because of this expanded existing deposits on surfaces larger than the original perimeters ramps[10].

### Recommendations

At present, on an international scale, tourism is characterised by strong competition between destinations.

And development of sustainable tourism management practices are applied to all forms of tourism in any destination, including mass tourism and other tourism segments varied.

Thus, to achieve sustainable tourism in the Razim Sinoe, we recommend the following:

- To use the resources optimally environment

is a key element in tourism development, maintaining essential ecological processes, helping the conservation of natural heritage and biodiversity;

- Respect the socio-cultural authenticity of host communities to preserve their cultural heritage existing traditional values and contribute to intercultural understanding and tolerance;

- Ensure economic stability and long-lasting, providing socio-economic benefits for all participants, including stable employment, social services for the community to contribute to poverty alleviation;

Extrapolating these aspects of sustainable tourism, reveals that they are impetuous needed six apply the sector more study than any other areas, given that there is contained a mosaic of ethno-cultural, hence the need for cultural integration and the preservation of traditions; another characteristic lies in the immense biodiversity and default start action and protection programs[9].

## CONCLUSIONS

Thus, after processing the data provided by the authorities, we conclude that:

-The area study presents the following administrative-territorial structure: one city, Babadag, 10 communes with a total of 32 villages in the composition (including the common city of residence).

- The most important activity in terms of number of active local businesses is trade, with 50.83% of the total active units;

- Manufacturing attract the largest number of employees, 44.98%, is from this point of view, the most important activity. Manufacturing is followed in this trade indicator 19.37% and 10.38% of construction;

-The most representative activity is the fishing area is favorable for the development of such an activity, often combined with agrotourism.

-The main categories of land use are the agricultural land (arable, pasture and hayfields, orchards and vineyards), forest vegetation surfaces, surfaces occupied by water, roads and railways construction;

-Sulfur forms prevalent in the Danube Delta Biosphere Reserve phytocoenosis, covering

approximately 160,000 hectares, of which 100,000 ha is monodominant reed community.

- In Romania especially in geographical areas close to water highlights specific types of tourism, which is distinguished from other forms of tourism in areas with higher altitudes. In the Razim-Sinoe meet as a form of tourism: tourism heliotherapy, sports tourism, rural tourism, eco-tourism, scientific tourism, health tourism, tourism movement.

Tourism in protected areas produce both benefits and costs, requiring planning and development of tourism activities in order to gain an advantage.

Negative effects of tourism can be, and sometimes are the result of the presence of tourists, but many of these can be controlled and mitigated through constant care tourists for the environment and careful supervision by authorities in the field.

Razim Sinoe area meet as forms of tourism: tourism heliotherapy, sports tourism, rural tourism, eco-tourism, scientific tourism, health tourism, tourism movement.

Tourism development to the highest standards required a series of measures: modernization of touristic routes, development of trade specific provision of accommodation and food services in the main towns on the tourist routes, increased promotional activities.

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