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TERRITORIAL INNOVATION STRATEGIES

ABSTRACT

The design of the territorial innovation strategies is based on the local development of the patrimony, valorized as main resource. In this perspective, the rural areas can be analyzed as territories in dynamics, defined by the specific qualities, territorial resources and the existing articulation modalities between the users of resources. The utilization of the patrimony paradigm in terms of social innovation is achieved by: the "economic" revalorization of the patrimony – establishment of the systemic interdependences between the territorial economic development and the territorial mobilization, defined by the patrimony ecosystem; the "social" revalorization of the patrimony – establishment of the relational system specific to the patrimony ecosystem.

The methodology used for the design of the territorial innovation strategies consists of: analysis of primary data; quantitative and qualitative analysis of the rural inter-functionality processes and phenomena; rural inter-functionality scenarios: natural systems–human systems.

Key words: patrimony, territorial innovation.

JEL Classification: Q56, Q57.

1. INTRODUCTION

The perspective offered by the European orientations favours modernization and development in the sense of transforming the rural territories into "development" poles, interrelated with the urban poles under an equilibrium paradigm. The rural territories are perceived as "reservoirs of growth" on one condition, their reconstruction in the sense of competitiveness increase, within the limits of ecological and social sustainability.

The main assets of the rural communities are revealed by: their capacity to produce food, the quality of which being often marked by the territorial identity; the potential of the small enterprises, mainly of those putting into value the community/local resources; the capacity to respond to the society "natural and cultural leisure" needs; the socio-economic availability of the rural space; the innovation capacity in terms of local/community democracy.

If we are to design programs and strategies founded within the limits of this paradigm, we have to comply with the condition generated by the territorial approach in which agriculture and forestry are structuring activities and the environment and landscape are fundamental elements. As a theoretical and empirical consequence, the management of the natural spaces is imposed, as a strict or specific management, the alternative energy use, as this is part of the integrated approach.

2. THE CURRENT STATE OF KNOWLEDGE

The development economy was established as a branch of the economic science in the ’40s – ’50s, in the period when at world level, in the Third Countries, the political emancipation also needed economic emancipation. This was the need of the national systems to get modernized within the parameters of Western capitalism: “....underdevelopment was considered as a delay of development (Rosenstein-Rodan [1943], Rostow [1960]) explainable by the dual character of the economies of the Third World (Lewis [1954]) or by the insufficiency of economies (Nurkse [1953]); the structuralists defined it as a historical phenomenon connected with the disarticulation of the production structures (Prebisch [1950], Singer [1950], Hirschman [1964], Perroux [1964], Myrdal [1968])” (Berr, E., 2008:1).

The theoretical approaches to the development process, at the beginning of the ’80s, opened an ample liberalization process “...the neo-liberal globalization puts under question the state intervention, proclaiming the supremacy of the market in the resource allocation” (Berr,E., 2008:2). The western model continues to be used at present, sometimes under developed forms, although its materialization has not always yielded the expected results since the 1970s. At theoretical level, environmental problems appeared, which resulted in the emergence of the “sustainable development” concept. While this concept was popularized in the ’80s, with the papers of the World Commission on Environment and Development (WCED), having the Brundland Report (WCED [1987]) as a final output, the first contemporary reflections appeared at the end of the 1960s with the studies of the Club of Rome “which put into evidence the ecological consequences of the western development pattern, showing for the first time that there are natural limits to economic growth” (Berr, E., 2008:2).

At European level, the sustainable development problems started to be expressed in strategic terms in the second half of the last century. The United Nations Conference of 1972 (Stockholm) sensitized the public opinion to the indissoluble relation between life quality and environment quality for the present and future generations. The European Council meeting in Gothenburg (June 15–16, 2001) asked the EU Member States to integrate the strategic sustainable development objectives into the public policies, and to develop national sustainable development strategies. The strategic sustainable development model took over the principles of the Lisbon Strategy from 2000, and the European Council from Brussels in June 2005 re-affirmed and reviewed the key objectives of sustainable development. The annual analyses of the European strategy focused on the main dimensions of sustainable development, among which the following: climate changes and clean energy, sustainable transport, sustainable production and consumption, preservation and management of resources (Progress Report, February 29 2008, Brussels).

The rural development models, more or less derived from the national strategic orientations, started to focus on the main resources, correlated with the economic and social systems. The correlated analysis of the patrimony and environment are modalities to redefine the relations between nature and society:

"...the territory became a modality of reaction, intervention, enabling the emergence of patrimony development forms. The latter results from the closeness of players that favour the emergence of new organization modalities around the existent resources. Among these, the patrimony resource accedes to the status of territorial resource" (Landel, P.A., Senil, N., 2009: p. 2). The sustainable exploitation of the patrimony is achieved from the perspective of ecological networks "...the ecological network concept refers to the preservation of the nodal zones with a particular importance of the biotypes that present characteristics similar to the nodal ones, as well as to the rational use of the territory" (Koehler, Y., Scheure, T., Ullrich, A., 2009: p. 3).

A sustainable development strategy based on the local development of the patrimony can be designed for the rural communities investigated as territories in dynamics, defined by two attributes: "the territorial quality and innovation... the essential engines of competitiveness ... the territorial innovation being most often the carrier of the new articulation modalities existing between the users of the [local] resources" (Landel, P.A., Senil, N., 2009:4). The sustainable development strategy concentration focuses on the emergence of alternative development, as departure from/abandonment of the development pattern "in which productivity characterizes competitiveness and in which innovation is exogenous to the territory" (Landel, P.A., Senil, N., 2009:4).

3. METHODOLOGY USED

The main method used was the rural inter-functionality scenario – natural systems – human systems – (RIS), by which the heterogeneity of the rural communities and the main specific contradictions were projected. This method was chosen with the purpose to provide a scientific basis for the design of rural strategies.

The scenario design started with the patrimonial theories on development, developed at present by the French researchers; they were supported by case studies conducted in different rural areas, by the results of primary data analyses; these added to the quantitative and qualitative analyses of the rural economic, social and sociological phenomena and processes. The theoretical conditions of the practical scenario elaboration were those ensuring the quality of the "scenario as object/space of transition in which the future is an abstraction" (Wilkinson, A., 2009:6).

4. RESULTS OF THE STUDY

The rural communities investigated as given territories do not have the same trajectories and evolution because the climate, geographical, economic and social factors describe specific realities, but it is the responses that they can articulate in front of the societal changes and the structural mutations implicitly that can be projected.

4.1. Analysis of rural territories

The rural communities continue to experience a diminution in the number of inhabitants in this century as well; started as a consequence of the modernization at society level, it became permanent through the conjugated action of different factors, demographic, economic and social factors, reaching chaotic forms (Table 1).

The "deruralization" process is differently materialized according to the zonal particularities; in the demographic reductionism perspective, the decrease in number of the rural people stems from the incapacity of the rural area to reproduce its own structures and is materialized into the increase of the negative values of the "natural population increase" (Table 2).

The natural movement of the demographic capital has significant implications in the development and modernization of the economic and social structures specific to rural communities; the implementation of the development programs, of the local/ zonal strategies was also tributary to the rural area demographic reproduction pattern.

From the demographic point of view, the structure by gender maintains, at the level of the rural population, limits which enable the normal development of the specific processes from the social and economic point of view (Table 3).

The spatial distribution of the slow modifications, with relatively significant values, of the structure by genders is determined by the migration flows, by the economic capital of the rural communities and by the specificity of the values and expectations of the male population. This type of distribution should be one of the important factors in the materialization of the community development strategies.

The "ageing" process is defined by:

– territoriality: the rural population from the South-Western part of the country experienced a constant trend of "ageing", the mostly affected development regions being South-West and West (Table 4);

– gender: the feminine population experienced a more intense "ageing" rate (Table 5).

Table 1

Evolution of the rural population share

- % -

	2000	**2005**	**2010**
Macroregion 1	43.7	43.6	43.7
North-West	47.4	46.8	46.6
Center	39.6	40.1	40.6
Macroregion 2	50.2	51.3	51.6
North-East	56.5	56.6	56.7
South-East	43.2	44.5	44.8
Macroregion 3	39.6	38.8	37.8
South Muntenia	58.4	58.3	58.4
Bucharest-Ilfov	11.2	9.5	8.1
Macroregion 4	46.9	45.1	45.0
South-West Oltenia	54.6	52.4	51.8
West	37.8	36.4	36.9

Source: Own calculations based on data from "Economic and social regional benchmarks: Territorial statistics", 2011, NIS, p. 28–33; https://statistici.insse.ro.

Table 2
Evolution of the natural population increase

- ‰ -

	2000		2005		2009	
	Total	**Rural**	**Total**	**Rural**	**Total**	**Rural**
Macroregion 1	-0.7	-1.9	-1.1	-3.3	-0.8	-4.2
North-West	-1.3	-2.9	-1.7	-4.4	-1.2	-2.5
Center	-0.1	-0.7	-0.6	-1.9	-0.2	-1.2
Macroregion 2	1.3	1.2	-0.2	-1.7	-0.9	-2.7
North-East	2.5	2.8	0.7	-0.7	-0.2	-1.9
South-East	-0.5	-1.5	-1.5	-3.5	-1.8	-4.1
Macroregion 3	-2.6	-4.2	-0.3	-5.9	-1.9	-5.5
South-Muntenia	-2.3	-4.4	-3.7	-6.3	-3.4	-5.9
Bucharest-Ilfov	-3.1	-2.4	-1.8	-2.2	0.4	-0.9
Macroregion 4	-2.4	-5.2	-0.4	-8.3	-3.6	-7.5
South-West Oltenia	-2.1	-5.1	-4.5	-9.2	-4.1	-8.6
West	-2.9	-5.4	-3.5	-6.8	-2.9	-5.5

Source: https://statistic.insse.ro; Romania's Statistical Yearbook 2010, NIS.

Table 3
Evolution of the feminine rural population

- % -

	2000	**2005**	**2010**
Macroregion 1	50.1	50.1	50.1
North-West	50.2	50.3	50.3
Center	50.0	49.9	49.8
Macroregion 2	49.8	49.6	49.6
North-East	49.7	49.5	49.5
South East	49.9	49.8	49.9
Macroregion 3	50.8	50.7	50.6
South-Muntenia	50.7	50.6	50.6
Bucharest-Ilfov	51.3	51.3	51.3
Macroregion 4	50.8	50.6	50.4
South-West Oltenia	50.6	50.4	50.3
West	50.6	50.3	50.2

Source: Own calculations on the basis of data from https://statistic.insse.ro.

Table 4
Evolution of the elderly population *

- % -

	2000	**2005**	**2010**
Macroregion 1	16.6	17.0	16.9
North-West	16.7	21.3	17.3
Center	16.5	16.6	16.4
Macroregion 2	17.0	18.1	17.9
North-East	16.7	17.7	14.3
South-East	17.8	17.8	18.5
Macroregion 3	18.5	20.1	19.8
South-Muntenia	19.0	20.5	20.2
Bucharest-Ilfov	14.6	16.1	15.4
Macroregion 4	19.3	20.7	20.4
South-West Oltenia	20.2	22.1	22.9
West	14.8	22.2	22.8

**population aged 65 and over/total population*
Source: Own calculations on the basis of data from https://statistic.insse.ro.

Table 5
The evolution of the young feminine population *

- % -

	2000	2005	2010
Macroregion 1	***26.1***	***24.9***	***22.8***
North-West	***25.8***	***24.5***	***22.3***
Center	***26.4***	***25.5***	***23.4***
Macroregion 2	27.9	26.9	24.6
North-East	29.0	28.1	25.9
South-East	26.1	24.9	22.4
Macroregion 3	23.5	22.5	20.3
South Muntenia	23.6	22.5	20.4
Bucharest-Ilfov	22.8	22.1	19.5
Macroregion 4	23.3	22.4	20.0
South-West Oltenia	23.3	22.1	19.8
West	22.9	21.5	19.0

**feminine population aged 0–19 years/total feminine population*
Source: Own calculations on the basis of data from https://statistic.insse.ro.

4.2. Delimitation and characterization of the pilot zone – the rural territories, Hunedoara county

Argumentation

The pilot zone was delimited according to the *patrimonial* characteristics, as resources, that the rural territories included in this area have (the patrimony could help to the affiliation to the global economy and permits the elaboration of the projects which legitimate the existence of the territories and the building of the social networks) and taking into consideration the materialization of *the territorial innovation and environment quality* (coexistence of production systems, of the territorial modalities to reveal and put into value the specific and patrimony resources). In the territorial innovation, the innovative forms of the "institutional constructions" are of utmost importance. "The focus on territorial innovation offers the fantastic opportunity of putting into discussion the spatial principles referring to the modern territoriality. Thus, the experience of the ecological corridors with regard to the management of protected areas determines the physical size of classical areolar spaces. This is the advantage of the connectivity between the ecological zones and the zonal habitation networks" (Giraut, F., 2009:9).

Brief diagnosis

The county Hunedoara is part of the development region West, Macroregion 4, being characterized by the high share of the urban population and a considerable tourism potential. In the 2000s, this county has experienced the continuation of the deep consequences of industrial destructuring, the aggravation of the agrarian crisis – critical problems have been also present in the livestock sector – in parallel with the emergence of a frail entrepreneurship phenomenon.

Hunedoara county has an area of 7,063 km^2, accounting for 2.9% of the country's territory, with a length of 122.4 km and a width of 96 km. The agricultural area totals 280,332 hectares (39.7%), the land area under forest vegetation 340,294 hectares (48.2%) and the dwelling area 9,172 hectares.

Table 6
Evolution of the population and population density, Hunedoara county, 1930–2002

	29 December 1930	**25 January 1948**	**21 February 1956**	**15 March 1966**	**5 January 1977**	**7 January 1992**	**18 March 2002**
Population: number	313,929	306,955	381,902	474,502	514,436	547,950	485,712
Density: inhabitants/km²	45.3	43.5	54.1	67.2	72.8	77.6	68.8

Source: Romania's Statistical Yearbook, NIS, 2008.

From the administrative point of view, an obvious urbanization tendency was noticed (Table 7).

The population's social sensitivity to the macroeconomic changes was manifested through quantitative evolutions – the decrease in number is statistically significant and through qualitative transformations – essential modifications of the structures by residence areas (Table 8), by ages, by occupations.

Table 7
Evolution of the administrative organization – Hunedoara county, 1995–2008

	Towns and municipalities		**Communes – number**	**Villages – number**
	Number	**out of which municipalities**		
1995	13	5	56	458
2005	14	7	55	457
2008	14	7	55	457

Source: http://www.hunedoara.insse.ro – D.J.S. Hunedoara: County Statistics. Administrative territorial organization.

Table 8
Evolutions by residence areas – Hunedoara county, 1995–2009

	Urban population		**Rural population**		**Density – inhabitants/km²**
	Number	**%***	**Number**	**%***	
1995	415,614	76.0	130,549	24,0	77.3
2005	369,550	77.0	110,909	23,0	68.0
2009	356,654	77.0	108,085	23,0	65.8

*share of total population
Source: http://www.hunedoara.insse.ro – D.J.S. Hunedoara: County Statistics. Population.

A fundamental characteristic of Hunedoara county is the high urbanity level (77.0% of the population lives in urban centers); the high share of the urban centers is a socio-economic characteristic of the entire area this county is part of; the urban population of Macroregion 4 accounts for 54.7% of total population, while the urban population's share in the development region West is 63.1%.

The demographic processes of the decrease in the population's number are characteristic for the rural area in the first place; the rural specificity is manifested through the population's numeric diminution in the investigated areas, as a consequence of their own demographic history and of the reaction modality of the rural communities to the socio-political transition of the '90s. The rural area adjacent to the county Hunedoara has a noticeable social vulnerability: the natural increase had the highest negative value (-10.4), the nuptiality rate is the lowest (4.4‰), compared to the similar values of the rural areas from the investigated area. The decrease in the population's number was accompanied by demographic ageing, which became a characteristic process for Hunedoara county; the share of the elderly population reached 20.4% (2009).

The demographic structure by genders is quite balanced; the shares of the population categories "males" and "females" reveal a statistical reality lacking major dysfunctionalities. The demographic processes have been accompanied by qualitative socio-economic phenomena specific for the occupational and professional changes, of social status.

The significant decrease is specific to the employment in the industrial sector – from 43.5% in 1995 to 29.0% in 2008; in agriculture, the share remained relatively constant – 21.0% in 1995 and 21.5% in 2008; the occupational reorientation is statistically noticeable in the sector of services, with an increase of the share from 34.0% to 48.0% (Table 9).

Table 9
Evolution of the occupational structures – Hunedoara county, 1995–2008

	Employed population		**Population employed in agriculture, hunting forestry**		**Population employed in industry*** **		**Population employed in services **** **		**Population employed in other activities**	
	Absolute value	**%***	**Absolute value**	**%****	**Absolute value**	**%****	**Absolute value**	**%****	**Absolute value**	**%****
1995	252.2	46.2	52.5	21.0	109.8	43.5	85.8	34.0	4.1	1.5
2005	193.8	40.3	45.7	23.6	64.4	33.2	79.7	41.1	4.0	2.1
2008	192.8	41.1	41.5	21.5	55.8	29.0	92.5	48.0	3.0	1.5

*share of total population;**share of employed population;
*** extractive industry, processing industry, electric and thermal power, gas and water;
****trade, hotels and restaurants, transport, storage and communications, financial intermediations, public administration and defense, education, health and social care.
Source: http://www.hunedoara.insse.ro – D.J.S. Hunedoara: County Statistics. Civil employed population by activities of the national economy, 1995–2008.

Table 10
Evolution of the main indicators of the labour force in Macroregion 4
and in the development region West, 2005–2008

- %-

	Activity rate				**Employment rate**				**Unemployment rate**			
	2005		**2008**		**2005**		**2008**		**2005**		**2008**	
	total	**rural**	**total**	**rural**	**total**	**rural**	**total**	**rural**	**total**	**rural**	**total**	**rural**
M 4	62.9	68.5	63.8	68.1	58.5	65.2	59.7	64.5	6.6	4.3	6.1	4.7
West	60.7	64.2	62.9	64.7	56.6	60.0	59.3	60.4	6.7	6.1	5.7	6.5

Source: Romania's Statistical Yearbook, 2009, NIS.

The agricultural economic activities have a secondary position in the county's economic structure; due to the characteristics of the geographic potential, as a consequence of the industrialization policy from the period prior to the '90s, agriculture has a secondary status in the county's economic matrix. Out of the total area of the county Hunedoara, the agricultural area accounts for 39.6%; the arable land represents 28.4% of total agricultural area, the pastures represent 41.9%, the hayfields 29.3% of total agricultural area, and the areas under orchards 0.4%. The land area under forests represents 44.23% of the county area (312,382 hectares), i.e. 2.64 ha per inhabitant.

The share of the agricultural area under private ownership accounts for 81.6% of total agricultural area; the share of agricultural holdings in total private agricultural area is 96.5%. The prevalence of the crop production sector is accompanied by the permanent decrease of the main agricultural productions; the only productions that experienced an increase were in the fruit sector.

The livestock sector experienced quantitative modifications, as the number of animals decreased in all species. The diminution of the economic and financial importance of the livestock sector has deep implications not only on agriculture evolution but also on the rural structures and the functionality of the entire area.

The valoric evolution of the agricultural production reveals the distortions of the crop and livestock production sectors, essential occupational reorientations caused by the drastic decrease of the livestock sector participation to the functionality of the rural economy systems.

Table 11

Evolution of the production of agricultural commodities and services*
Hunedoara county, 2005–2008

thousand RON, current prices

	Total	Crop production	Livestock production	Agricultural services
2005	801,996	456,755	343,034	2,207
2008	984,501	617,776	365,673	1,052

*in conformity with the EUROSTAT methodology on the "economic accounts in agriculture"
Source: http://www.hunedoara.insse.ro – D.J.S. Hunedoara: County Statistics. Agriculture.

The socio-economic system of agriculture in Hunedoara is characterized by the prevalence of the 2–3 ha farms, managed by farmers over 50 years of age who generally practise subsistence farming.

Hunedoara county has a significantly tourism potential from the perspective of the natural objectives as well as of the historical, cultural and religious patrimony objectives.

4.3. The rural interfunctionality scenarios – natural resources–human resources (RIS)

The scenarios for the delimited investigated rural area that can lie at the basis of the design of interfunctionality strategies between the natural systems and the human systems are the following:

Scenario 0*: the trends remain in the present parameters, the empirical interfunctionality between the human systems and the natural systems is not taken into consideration; the rural territories are not recomposed for competitiveness increase within the limits of ecological and social sustainability.* (Annex 1)

In the case of this scenario, the rural interfunctionality strategy is linear: the rural phenomena and processes are maintained under the same limits, without any structural change. Yet, in the conditions when no new aspects of the processes are noticed, involutive processes can increase in intensity. The rural economy will continue to be dependent on agriculture, the farming activity taking place mainly on subsistence farms, with an old population; productivity will decrease and the competitiveness will continue to be a desideratum.

The non-farm economy, the tourism economy will be developed under the real potential in the area. The informal economy will develop mainly on the market of agricultural products. The residential economy will have a very low share, being a process induced only by certain social players. Environment degradation will be an ongoing process, while the monitoring and management of the ecological problems will feature dispersion and lack of efficiency.

Table 12
Scenario 0 – economic strategies

	Agrarian strategies	**Tourism strategies**	**Residential strategies**
Present	Subsistence	Reduced, inconsistent	Individual, chaotic
Future	Subsistence	Reduced, inconsistent	Individual, chaotic

Scenario 1*: The rural territories recomposition follows the logic of their own opportunities and assets for the economic and social competitiveness increase. The reconstruction of territories will be based on the rural systems defining the delimited area. Depending on the endogenous factors, the rural systems can support the emergence and development of a competitive agricultural economy, the consolidation of the tourism structures and the development of a residential economy. Each rural system can become a "growth reservoir" by promoting the cultural, tourism resources, the valorization and management of bio resources, susceptible to become competitive.* (Annex 2)

The determinative element of the scenario is the patrimony, which generates the specificity or resources, as well as their articulation into a factor generating development. The rural space is valorized as a sustainable support in which competitive agricultural and non-agricultural activities can be developed, in which the early elements of a modern rural economy take shape, characterized by activities specific to the tourism and residential economy. In the process of rural territory reconstruction, under the form of rural systems, the rural economies will develop founded *on the basic sector* – defined by the total of incomes from outside the system, as well as *on the domestic sector*, which responds to the demand for

local goods and services. The functions of the two sectors will be complementary: while the basic sector is the engine of development, the domestic sector contributes to the economic and demographic dynamism.

The tourism economy and the residential economy will be stimulated by the specific characteristics of the rural systems; "the tourism products" will be able to interfere with the residential mechanisms leading to the zonal competitiveness increase.

Table 13
Scenario l – economic strategies

	Agrarian strategies	**Tourism strategies**	**Residential strategies**
Present	Subsistence	Reduced, inconsistent	Individual, chaotic
Future	Competitiveness oriented	Coherent, at rural system level depending on the endogenous opportunities	Coherent, at rural system level depending on the endogenous opportunities

5. CONCLUSIONS

The design of the rural scenarios in terms of social innovation can be achieved through the "economic" revalorization of the patrimony (focusing on the systemic interdependencies between the territorial economic development and the territorial mobilization) and the "social" revalorization of the patrimony (focusing on the relational system specific to the patrimony ecosystem).

If we assume a continuity of the rural processes, the evolution of the rural interfunctionality will be linear. The rural economy will continue to be dependent on agriculture as activity practised mainly on subsistence farms, with an old population; productivity will decrease and competitiveness will remain a desideratum. But in the conditions when no new aspects of the processes are noticed, the involutive processes can increase in intensity. Under this scenario, no economic and social recomposition will take place for increasing competitiveness in the limits of the ecological and social sustainability.

If we reconsider the role of the patrimony in terms of valorization of the resources and their articulation into a factor generating development, the rural territories become the sustainable support for competitive agricultural and non-agricultural activities. Depending on the endogenous factors, the rural systems will be able to support the emergence and development of a competitive agricultural economy, the consolidation of the tourism structures and the development of a residential economy. In this case, each rural territory can become a "growth reservoir" through the promotion of the cultural, tourism resources, the valorization and management of bio resources, susceptible to become competitive.

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Annex 1

Scenario 0
that can lie at the basis of the projection of rural interfunctionality strategies (RIS)
– natural systems–human systems –

Parameters	**Diagnosis**	**Development – 2020**	**Indicators**
Socio-Economic			
Demography	Population decrease Population ageing	Population decrease continues. Population ageing grows in intensity. Demographic vulnerability increases.	Statistical-demographic
Human resources	Medium education and training level Young people marginalized Low diversity of job supply	Deteriorated educational facilities Reduced occupational opportunities both in the farm and non-farm sector	Statistical-demographic and economic
Gender	Unequal opportunities for women employment The promotion of rural woman is not in conformity with the legal norms.	Economic discrimination of the rural woman Increasing the socio-economic non-involvement of rural women.	Statistical-demographic economic and social
Cultural heritage	Deterioration of traditions and customs The modern lifestyle replaces the traditional pattern under inadequate forms	The traditional culture experiences an erosion process.	Ethnographical anthropological
Agriculture	Prevalence of subsistence and semi-commercial farms Low labour productivity Low utilization of production factors	Increase in importance of the subsistence farms Very low productivity Lack of competitiveness	Statistical-economic

Non-agricultural activities	Low non-agricultural diversification Very poor rural finance system. Socio-economic development projects reduced in number Unstable income obtained on informal market Low level of services in the small communities	Diminution of non-farm diversification and increase of dependence on subsistence farming Proliferation of informal market relationships	Statistical-economic
Rural tourism	Diversity of tourism opportunities Tourism facilities do not meet the standards. Lack of consistent and constant promotion and information.	Tourism supply degradation Deterioration of the relation between the tourism activity and environment quality No specific forms of local tourism will exist.	Statistical-economic
Institutions			
NGOs	Relatively significant number of NGOs Reduced cooperation between the NGOs and the public institutions	Slow development of NGOs Local support will diminish.	Statistical
Environment			
Agro-environment	Very few concerns and actions, with minimum impact	Sustained degradation from farms and farm units	Statistical
Management	Decline resulting from anthropic actions	Increase of number of harmful anthropic activities	Statistical
Biodiversity	High biodiversity level	Biodiversity degradation	Statistical
Monitoring	Environment monitoring is fragmented. Insufficient number of laboratories	Fragmented and insufficient monitoring	Statistical

Annex 2

Scenario 1
that can lie at the basis of the projection of rural interfunctionality strategies (RIS)
– natural systems–human systems –

Parameters	Diagnosis	Development – 2020	Indicators
Socio-economic			
Demography	Population decrease Population ageing	Stabilization of ageing and population decrease processes Attenuation of demographic vulnerability	Statistical-demographic
Human resources	Medium education and training level Young people marginalized Low diversity of job supply	Ensurance of educational logistics Continuous education and vocational training	Statistical-demographic and economic
Gender	Unequal opportunities for women employment The promotion of rural woman is not in conformity with the legal norms.	Attenuation of the women marginalization process and vulnerability decrease	Statistical-demographic, economic and social
Cultural heritage	Deterioration of traditions and customs The modern lifestyle replaces the traditional pattern under inadequate forms.	Cultural heritage preservation Favouring traditional agriculture	Ethnographic, anthropologic
Agriculture	Prevalence of subsistence and semi-commercial farms Low labour productivity Low utilization of production factors	Increase in the number of commercial farms Ensuring the production logistics Institutionalization and modernization of work relationships Increase of agricultural diversification and specialization in ecological products	Statistical-economic

Non-agricultural activities	Low non-agricultural diversification Very poor rural finance system Socio-economic development projects reduced in number Unstable income obtained on informal market Low level of services in the small communities	Occupational diversification increase Increase in the number of socio-economic projects at the level of rural systems	Statistical-economic
Rural tourism	Medium education and training level Young people marginalized Low diversity of job supply	Ensurance of tourism logistics Development of the tourism forms in relation to the endogenous opportunities of each rural system	Statistical-economic
Institutions			
NGOs	Relatively significant number of NGOs Reduced cooperation between the NGOs and the public institutions	The development of the non-governmental organizations phenomenon Establishment of organizational networks and social efficiency increase	Statistical
Environment			
Agro-environment	Very few concerns and actions, with minimum impact	Implementation of agro-environmental projects at farm and rural system level	Statistical
Management	Decline resulting from anthropic actions	Implementation of socially efficient management forms	Statistical
Biodiversity	High biodiversity level	Respect and encouragement of biodiversity at the level of the rural system	Statistical
Monitoring	Environment monitoring is fragmented. Insufficient number of laboratories	Increase in the number of laboratories Coherent monitoring	Statistical