# DIAGNOSTIC ANALYSIS ON THE PERSPECTIVES OF SUSTAINABLE DEVELOPMENT OF THE RURAL ENVIRONMENT IN THE CONTEXT OF THE IMPLEMENTATION OF THE REGIONAL DEVELOPMENT STRATEGY

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#### **Abstract**

The paper aims at a diagnostic study on the prospects of sustainable rural development in the context of implementing the regional development strategy and sustainable rural development in the context of implementing the regional development strategy 2014-2020, by using a system of specific, quantifiable and representative indicators to allow, through econometric analyses, the evaluation of the results and the projection of the evolution of the sustainable development phenomenon. The approach of sustainable development and rural development in a strategic context had, mainly, a theoretical character, the analysis being oriented towards: the delimitation of the different conceptual aspects regarding: sustainable development strategies; addressing rural development through sustainable development; regulations on sustainable development at global, European and national level, etc. In this context, the paper aimed to identify how to approach sustainable development in regional development strategies with a case study, and socioeconomic assessment of the development of the Northeast Region, the development of strategies to promote sustainable agriculture at the producer level, and the individual peasant household to the level of agricultural societies. The information used in the analysis corresponds to the database of the European Commission's Farm Accounting Information Network (RICA) and the methodology includes the min-max approach and multivariate methods, in particular the analysis of the main component and the analysis of clusters. The analyses focus on highlighting the logic of strategic intervention by capturing priorities, strategic objectives, results and impact. The analysis allowed the identification of the interconnection of strategic objectives with the sustainable development objectives established at national level and the identification of result indicators related to the strategic objectives necessary to monitor the implementation of strategies, all against the different methodologies for achieving the two evaluated strategies.

Keywords: diagnostic study, indicators, agriculture, sustainable, rural

Development as a development model that seeks to ensure a balance between economic growth, quality of life and environmental conservation in the medium and long term, so as to meet the needs of the current generation without compromising the ability to meet the needs of future generations - has represented in recent decades, the guideline that underpinned development policies, programs and strategies.

Eco-development and the economy of environmental protection have shown that sustainable development is the only solution that can give future generations a chance to live and work in a healthy natural environment because it takes into account economic, human capital, ecological and social, looking at them fairly, long-term and systemically. The orientation towards this issue has emerged against the background of the progress of human society in the last decades, such as: in most developed countries the life expectancy

has increased by more than 20 years, the mortality rate in children has decreased and the access to increased: education has consumption production of agri-food products increased; gaps have been created with developed countries in terms of income levels and access to education and services; technologies telecommunications have been developed, etc. If we look at the world, however, the issue is much more complex, because a multitude of negative trends have been identified: economic disparities between regions and the deepening of poverty in developing countries; disparities between people within the same nation, between rich and poor nations, or between the revenues of multinational companies and gross domestic product in the countries in which they operate continue to grow; ethnic and political discrimination lead to violent conflicts affecting entire regions and nations); poverty, etc. Between 2005-2019, APIA developed an information system specific to the activities it

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carries out in the direction of managing European and national funds intended to support agriculture.

However, the permanent modification and completion of European and national policies governing the agricultural field and, in the alternative, of the operational procedures, make necessary adaptations, modifications and continuous developments of this information system, so that it constantly responds to the operational needs of APIA.

Currently, there is only one set of rules governing the five EU Structural and Investment Funds (ESI Funds). These rules aim to establish a clear link with the Europe 2020 strategy to stimulate smart, sustainable and inclusive growth in the EU, to improve coordination, to ensure consistency of implementation and to make it as easy as possible for beneficiaries to access ESI funds. potentials.

Payments made and declared to the EC on the basis of declarations of expenditure in accordance with Implementing Regulation (EU) No. Commission Regulation (EU) No 908/2014 of 6 August 2014 laying down detailed rules for the application of Regulation (EU) no. Regulation (EC) No 1306/2013 of the European Parliament and of the Council as regards paying agencies and other bodies, financial management, auditing, rules on controls, securities and transparency, as subsequently amended and supplemented, for EAGF support schemes in period 01.01-31.12.2019 are listed in the table below. (El Benni N., & Finger R., 2014).

### MATERIAL AND METHOD

The aim of the research was the diagnostic analysis of the results obtained by agricultural farms and the impact of European funds in the context of integration into the European Union. It is found that, after Romania's accession to the European Union, the possibilities for the development of agricultural farms have increased, as a result of their advantage of accessing European funds, with a fairly large share of their non-reimbursement. The set of indicators was selected based on the identification and inventory of

those quantifiable elements that can capture the impact of integration. These quantifiable elements have different peculiarities at the macroeconomic level than at the microeconomic level and require classifications according to different criteria.

The theoretical support of the research focused on the study of important scientific papers in the field of economy and management, with reference to the fiscal administration and the current problems in the public finances.

### RESULTS AND DISCUSSIONS

The aim of the research was the diagnostic The results of the policies defined in the National Rural Development Program can be quantified only by comparison with the ex-ante indicators, respectively with what is expected to be obtained by its implementation. In order to present the image of the NRDP in the period 2014-2020 in Romania, it is important to highlight the comparative evolution of financial allocations during the Program, respectively the differences between the allocations from the initial version (2007-2014) and the final one (2014). We want to present the degree of absorption of funds over the entire period by comparing the financial execution with the annual allocations by axes and measures, where data were available. (Henke R., 2014).

Regarding the profitability of Romanian farms expressed by the income rate (net income relative to total inputs) it is observed that in 2014, a very dry year from a climatic point of view, the profitability was very low especially in the South-East and Central regions where only the granting of subsidies allowed to obtain a positive income rate. On the other hand, also this year the Bucharest-Ilfov region demonstrated a very high profitability. However, the situation is very different in 2019 when the Bucharest-Ilfov region obtained the lowest profitability (Brezuleanu, 2011). However, in 2019, the North-East Region also ranked first with an income rate of 83.2% without subsidies. We also can improvement in profitability, especially in the South-East and West Region (table 1).

Table 1
The evolution of the net added value per hectare and the labor productivity in the period 2014-2019
(Net present value VAN/ha)

Specification	2014		2019		2019/ 2014 (%)			
	NAV/ha	NAV/AWU	NAV/ha	NAV/AWU	NAV/ha	NAV/AWU		
South-Muntenia	379.4	1649.5	533.5	4241.5	140.6	257.1		
North-Est	532.6	1220.3	552.6	4171.6	103.8	341.9		
South-Est	293.5	1985.6	708.0	6902.0	241.3	347.6		
Center	932.4	3825.4	723.4	6624.6	77.6	173.2		
Bucharest-Ilfov	1302.0	12787.0	772.2	8533.6	59.3	66.7		
West	460.9	2457.9	774.5	11383.0	168.0	463.1		
Northwest	942.5	3050.0	797.2	4766.9	84.6	156.3		
South-West Oltenia	687.3	2126.3	1038.9	4617.4	151.2	217.2		
Total	579.8	2221.5	704.9	5449.2	121.6	245.3		

Source: FADN processing (RICA)

In 2019, the North East region registered the lowest NPV value per hectare (1038.9 euro / ha), on the first place being the West Region with much higher values (11383 euro / ha) (Table 2). Labour productivity, on the other hand, was very low in the North-East Region (4171.6 euro / AWU) and almost three times higher in the West region (11383 euro / AWU). Compared to 2007, however, there is an increase in productivity in most regions except the Bucharest-Ilfov region. In this context, the aim of this paper was to identify the approach sustainable development regional in development strategies, having as a case study the North-East Region and to evaluate implementation of strategic objectives, at regional and rural level. (El Benni N., & Finger R., 2014).

We thus aimed to identify new strategic proposals to ensure a sustainable development of rural areas, by using a system of specific, quantifiable and representative indicators that allow, through econometric analysis, evaluation of results and projection of the evolution of sustainable development.

Regarding subsidies, we would like to mention that direct payments for the vegetable sector corresponding to 2014 were made relatively late, between March and September 2015. This delay distorted the activity of farms, and the drought of 2014 affected the functionality of Romanian agriculture by introducing - new aid in the form of coupons (notified to the EC) to combat the effects of drought, which is reflected in the higher share of other subsidies in some regions. Under these conditions we can see that in 2014, in the regions affected by drought (North-East, South-West, South-Muntenia, and Bucharest Ilfov) the share of subsidies for intermediate consumption and other subsidies exceeded 40%, while in the Central and North-West regions were the majority of the market measures, respectively the complementary national payments for the animal sector. In 2019, direct payments were the majority, with shares ranging between 52.8% in the Center Region and 73.0% in the Bucharest-Ilfov Region (table 2).

Table 2

**Evolution of income rates during 2014-2019** 

	2014		20	)19	2019/ 2014 (+/-) Percentage points		
Region	The income rate (%)	The income rate without subsidies (%)	The income rate (%)	The income rate without subsidies (%)	Income rate	The income rate without subsidies	
Bucharest- Ilfov	187.6	150.8	27.4	11.6	-160.2	-139.2	
South- Muntenia	21.5	1.9	35.5	16.8	14.0	14.9	
North-Est	52.3	38.0	53.9	32.7	1.6	-5.4	
Center	12.7	-5.6	67.3	42.4	54.7	48.0	
South-Est	3.9	-15.6	81.6	54.9	77.7	70.5	
Northwest	31.2	9.5	81.3	57.2	50.1	47.8	
West	30.9	14.2	88.4	63.3	57.5	49.1	
South-West Oltenia	67.2	49.4	102.6	83.2	35.4	33.8	
Total	27.2	8.2	67.4	45.0	40.2	36.8	

Source: FADN processing (RICA)

However, the biggest challenge for Romania was the efficient use and absorption of these funds, as shown by the absorption rate (EAFRD funds - 71% committed and 44% paid by the end of 2012). However, the situation in the ADR sector is better than in the sectors financed by the Structural and Cohesion Funds, where the absorption rates for the period 2007-2012 were 12% paid and 70% contracted. Despite the initial difficulties, the absorption of these funds has accelerated significantly in recent years, and Romania has successfully provided the necessary public cofinancing. The document "CAP towards 2020:

How to respond to the challenges of the future related to food, natural resources and territories" presents the potential challenges, objectives and guidelines from the perspective of a sustainable approach to the rural environment. Knowledge transfer and innovation in agriculture, as well as risk and natural resource management, are key priorities for the common agricultural policy of the EU Member States. "Europe 2020: A European Strategy for Smart, Sustainable and Inclusive Growth" also addresses resource efficiency issues in the context of future climate challenges. (Henke R., 2014).

Sustainable development strategies aim to mobilize and focus society's efforts to achieve sustainable development, providing a framework for formulating a vision for a sustainable future, as well as a framework for the processes of negotiation, mediation, consensus and institutional capacity building. According to the European Sustainable Development Network (ESDN) in 2013, there were 26 countries with strategic planning policy instruments, of which only 23 had developed sustainable development strategies (table 3). Strategies are very different, but generally include a vision, objectives on the three dimensions and describe the implementation process. Most strategies are between 50-100 pages, with the exception of the United Kingdom (7 pages) and Germany (252 pages), and three countries have opted for different approaches, namely Slovenia, Germany and the United Kingdom. The number of targets varies from 32 in Estonia and Switzerland and 610 in Lithuania. (El Benni N., Finger R., 2014).

By creating these objectives, the 2020 Strategy aims to be compatible with the long-term development objectives of the European Union's Sustainable Development Strategy (SDS). Thus, the 2020 Strategy includes SDS objectives in terms of resource efficiency, levels set for climate and energy objectives, poverty reduction and increasing educational attainment.

Under these conditions we can see that in 2014, in the regions affected by drought (North-East, South-West, South - Muntenia, and Bucharest Ilfov) the share of subsidies for intermediate consumption and other subsidies exceeded 40%, while in the Central and North-West regions were the majority of the market measures, respectively the complementary national payments for the animal sector. In 2019, direct payments were the majority, with shares ranging between 52.8% in the Center Region and 73.0% in the Bucharest-Ilfov Region. (Table 3).

Table 3

Integrating SDS key objectives into the Europe 2020 Strategy

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Objection SDD		Initiatives					
300	Smart growth		Sustainable growth		Inclusive growth		
	A digital agenda for	An Innovation Union	Youth on the move	A resource efficient Europe	An industrial policy for	An agenda for new skills and	A European platform for combating
	Europe			оро	the era of globalization	new jobs	poverty
	1	2	3	4	5	6	7
Climate change and energy	25-75%	25-75%		Over 75%	Over 75%		
Sustainable transport	25-75%	25-75%		25-75%	25-75%		
Sustainable consumption and production	Sub 25%	Sub 25%		Over 75%	25-75%		
Conservation and management of natural resources		25-75%		Over 75%	25-75%		
Public health	25-75%	25-75%				Under 25%	25-75%
Social inclusion, demography and migration	25-75%	25-75%	25-75%			Over 75%	Over 75%
Global poverty and the challenges of sustainable development				25-75%			25-75%

Source: National Strategy for Regional Development 2014-2020, accessible online at http://www.adrmuntenia.ro/documente/strategia-nationala-dezvoltare-regionale---iulie-2013\_sndr2013.pdf

The North-East region contributed to the achievement of the objective of sustainable development by registering increases for the main indicators (Dona I., 2005). However, the measures to stimulate the business environment did not have a noticeable effect, with a contraction of the private enterprise sector amid the economic crisis and a decrease in the manufacturing sector considered a priority (Fred, 2015). Also, in the

tourism sector, although investments have been made in accommodation structures, the evolution of tourism circulation indicators reveals a decrease in the importance of the sector and a real inefficiency in promoting the Rural area region:

- Economic growth in Botoşani county, reduction in Suceava county and deepening of poverty in Vaslui county (unbalanced economic development of rural areas);

- Stimulating the business environment in rural areas on the background of attracting European funds, but there is the development of agriculture and other sectors (real estate transactions, transport, communications, etc., especially services);
- The rural environment does not have companies focused on research and innovation, the main branches remaining agriculture, services and constructions, while the industrial sector is in continuous decline, which affects the overall labour productivity at regional level.
- Tourism development (diversification of the rural economy) only in Suceava county (imbalance);
- Increasing employment (but especially in services) and reducing unemployment. the rural environment does not have companies focused on research and innovation, the main branches remaining agriculture, services and construction, while the industrial sector is constantly declining, which affects overall labor productivity at the regional level.

Table 4

Evaluation of the results of the implementation of the strategic objectives from 2014-2020

Priority	Sustainable development goal	Results	Impact
Human resources and social services Rural development	Increasing the employment rate	Increasing the employment rate by 9.5%	+
	Tale	Increasing the employment rate in rural areas by 9.1%	+
	Decreasing the unemployment rate	Decrease in the unemployment rate (15-64 years) by 23.4%	+
		Decrease in the unemployment rate (15-24 years) by 30.3%	+
Infrastructure and environment		Decrease in the unemployment rate (15-64 years) by 40.6%	+
illiastructure and environment		Decrease in the unemployment rate (15-24 years) by 23.0%	+
		Decrease in the share of long- term unemployed in the total registered unemployed by 4.7 percentage points	+

The issue of sustainable development is a global and European priority, the implementation of national sustainable development strategies being undertaken since 2000 by over 145 countries at the initiative of the United Nations (Farrell, 1957). Sustainable development involves more than the political process and requires profound changes in thinking, as well as in economic, social, consumer and production structures (Fîntîneru G, 2010). Sustainable development is a development model that seeks to ensure a balance between quality economic growth. of life environmental conservation in the medium and long term, so as to meet the needs of the current generation without compromising the ability to meet the needs of future generations. Thus, sustainable development takes into account economic, human, ecological and social capital, in conditions of equity, long-term approach and in a systemic thinking.

The conclusions drawn from this analysis allowed us to observe that for the period 2014-2020, the sustainable development objectives are partially pursued in implementation, through selective result indicators. In this context, we proposed feasible indicators according to the

previous trend of the region, for all strategic priorities 2014-2020, which can be materialized in the implementation of projects with major impact on sustainable development both at regional and rural level.

## CONCLUSIONS

During the implementation of the Regional Development Strategy 2014-2020, the sustainable development objectives are pursued directly or indirectly through four strategic priorities and their related measures. However, the objectives are partially pursued in implementation through result indicators, which is why we propose in this chapter concrete ways to monitor the process of sustainable development at regional and rural level Sustainable development is a development model that seeks to ensure a balance between growth economic, quality of life and environmental conservation in the medium and long term, so as to meet the needs of the current generation without compromising the ability to meet the needs of future generations.

The evaluation of the Regional Development Strategy 2007-2020 highlighted the following:

- it does not address all aspects of sustainable development pursued at national level,

not taking into account a series of indicators neither in the socio-economic analysis, nor in the strategic planning;

- does not propose measurable measures and especially quantifiable indicators for the proposed measures, this being based on a series of statistical indicators evaluated in the socio-economic analysis for the pre-accession period, which identifies the evolutionary trend of the period;
- separates rural priorities from other regional priorities, focusing on infrastructure development, the rural economy and human resources:
- the objectives for rural development are not detailed, being passed centrally which gives a confusing picture of the measures that were actually pursued for the development of rural areas, etc.
- integrates the objectives for the rural environment within all regional priorities, focusing on: infrastructure development, rural economy, human resources, telecommunications and innovation;
- the objectives are detailed and accompanied by result indicators for the established measures and implementation projects; proposes concrete and measurable measures (projects, time, funds, etc.), quantifiable result indicators; and so on

The different methodology for implementing the two strategies determined us to identify quantifiable outcome indicators in order to evaluate the implementation of these strategic measures at the regional level and especially for the evaluation of sustainable development at regional and rural level.

Starting from the analysis of the regional development strategies of the North-East Region, they come to improve the process of strategic development implementation of objectives, through viable solutions for monitoring sustainable development at regional and rural eliminating the oversizing tendencies monitoring indicators. . The target indicators proposed by this paper and their substantiation allow a realistic and concrete estimation of the strategic implementation and the measurement of the impact of the strategic objectives. In this context, we consider that the proposed and substantiated result indicators starting from the previous trend of the region, for all strategic priorities 2014-2020, can be much better materialized in projects with major impact on sustainable development both at regional level and rural environment.

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