

ASSESSING THE QUALITY OF THE LOCAL DEVELOPMENT STRATEGIES IN ROMANIA, EVIDENCE FROM 2014-2020 PROGRAMMING PERIOD

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Abstract

The LEADER Program has become an important part of the EU Rural Development policy since 1990. The program aims to offer solutions that are adapted to the needs of the rural communities and territories. The objective of the present work is to assess how the Local Development Strategies (LDS), created by the Romanian Local Action Groups (LAGs) between 2014 and 2020, respond to those needs. The study was conducted in the Nord-West Development Region of Romania, using quantitative and qualitative data from 31 LAGs. Two main types of data were used. The first set contains key rural development indicators - as defined and used by EU - and information from their own SWOT analysis, and are used to find out the needs, while the second set contains the objectives assumed by LAGs. A principal Component Analysis was performed in order to identify the factors that determine the quality of the Local Development Strategies. The results show that the Local Action Groups have not used a unitary methodology for selecting the indicators. More often than not, they chose to use irrelevant indicators that were not covered in official data and in the established methodologies of the European Union. A positive correlation was identified between the local characteristics (territory and population) and the budget allocation. However the strategies fail to address and respond to the needs and opportunities from the priorities that deal with knowledge transfer and innovation (P1) and the shift towards a low carbon and climate resilient economy (P5).

Key words: Local Action Group, Principal Component Analysis, needs, objectives, budget

INTRODUCTION

LEADER (acronym from the French initiative "Liaison Entre Actions de Développement de l'Économie Rurale") is a local development method which has been used for 20 years to engage local actors in the design and delivery of strategies, decision-making and resource allocation for the development of their rural areas, to reduce differences between rural and urban territories as well as to meet the basic needs of the population [9, 20]. The program was first implemented between 1991 and 1994, under the Common Agricultural Policy reform as a bottom-up Rural Development alternative, and it was followed by a second edition, LEADER II, that lasted from 1994 until 1999. The next stage of the program was LEADER+, the programming period being the years 2000-2006. An important element of this edition was its popularisation in all EU rural areas and the encouragement of local leaders to work out their own development strategies [17]. During the 2007-2013 programming period, LEADER

has grown to become a mainstream methodological approach to EU rural development [9] and become a part of the programs financed from the European Agricultural Fund for Rural Development [17]. In the 2014-2020 programming period, the LEADER approach has been extended under the broader term Community-Led Local Development and has been implemented by around 2 800 Local Action Groups (LAGs), covering 61% of the rural population in the EU [9].

The LEADER approach has proven its effectiveness in promoting the development of rural areas by fully taking into account the multi-sectoral needs for endogenous rural development through its bottom-up approach. [12]. The program encourages the participation of different representative stakeholders in the creation of the Local Action Groups (LAGs) and their Local Development Strategies (LDS) [10]. The strategies should identify the problems and opportunities of the rural areas in

order to prioritize future investments using CAP funding [25].

„In the present programming period (2014-2020) LEADER committed to follow the six important EU rural development priorities [12]:

P1:fostering knowledge transfer and innovation in agriculture, forestry and rural areas;

P2:enhancing farm viability and competitiveness of all types of agriculture in all regions and promoting innovative farm technologies and the sustainable management of forests;

P3:promoting food chain organization, including processing and marketing of agricultural products, animal welfare and risk management in agriculture;

P4:restoring, preserving and enhancing ecosystems related to agriculture and forestry;

P5:promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sectors;

P6:promoting social inclusion, poverty reduction and economic development.”

Researches underlining the development of Local Action Groups are insufficient and fragmented, and are generally focused on the results of the program [21] on the new type (bottom-up) governance they promote, or on the stakeholders satisfaction [8]. Authors like [3, 20, 21], presented in their works the economic impact that LAGs had in their territories. They showed positive results regarding job creation and economic development. Meanwhile the studies focused on governance and partnerships pointed out a strong influence of local elites and public sector in decision-making process, contrary to the bottom-up approach of LEADER [16, 23, 7]. In former communist states like Poland [28] and Romania [19] was discovered some level of distrust between the stakeholders. However, the assessment of the LEADER program should not only be focused on the implementation of the Local Development Strategies [17] but also on processes that govern their creation.

As illustrated in Table 1 Romania had a larger share of rural territory compared to EU-28, but

also bigger challenges. Here the LEADER Program was implemented starting with the year 2007. In the first programming period there were 163 LAGs but their number has increased in the last funding cycle to 239, with a total public value of 563.5 million euro (2014-2020). [19] showed that in the period 2007-2013 in Romania, the local actors found it extremely difficult to create LDSs on their own. This is not only due to lack of experience, but also due to lack of initiative. They preferred to choose from a list of default measures. That was contrary to the LEADER principles, where innovation and bottom-up approach should underlie portrait the local needs [19]. Without that it risks transforming the strategies into miniature copies of the National Rural Development Program.

Table 1. Main rural development indicators in Romania and EU-28 (2014)

Indicator	Romania	EU-28
Percent of rural territory (%)	59.8	52
GDP (PPS) / capita in rural areas (EU-28 = 100)	33.9	72.8
People at risk of poverty or social exclusion in rural areas (% from total)	54.8	27.3
Young/old population ratio (population 0-14 y.o. / population 65+ y.o.) in rural areas	98.1	80.7
Labour productivity in agriculture (EURO / Annual Work Unit)	4,744	15,627

Source: CAP Context Indicators, 2014. https://ec.europa.eu/info/food-farming-fisheries/farming/facts-and-figures/performance-agricultural-policy/cap-indicators/context-indicators_en, Accessed on 21.01.2020.

LAGs need to find a balance among the different objectives of the rural development policy and to translate this balance into the funding of projects [27]. The present paper aimed to assess the quality of the Local Development Strategies created by the Local Action Groups. In order to determine this aspect it was necessary to answer some crucial questions. What indicators were used to create the strategies? Do the strategies accurately reflect the realities of their territories? To which extend the LAGs objectives respond to

the needs and opportunities identified in the strategies? Have the local action groups provided the tools and resources necessary to meet the objectives?

MATERIALS AND METHODS

The research was conducted on 31 Local Action Groups (13% in the Romanian total) from the Nord-West Development Region of Romania (Fig. 1) that corresponds to the second level of the European Nomenclature of Territorial Units for Statistics. The region has a total surface of about 34,000 km², representing 14% of the total country area. A characteristic feature of the region is a high cultural and ethnic diversity. The Local Action Groups territories (Fig. 1.) cover all types of relief, from mountains to hills and plains. They have somewhat homogeneous features in terms of economic, social and cultural environment. In 2014, compared to the previous programming period (2007-2013), the number of LAGs had grown from 25 to 31, and had both a higher average size (804 km² in 2007 to 881 km² in 2014) and population (37,644 in 2007 to 39,247 in 2014). The LAGs, as part of the measure M19 Support for local development through LEADER, had a total budget of over 72 million euro, most of it as part of Component A (51 million).



Fig. 1. The LAGs territory in the North-West Romanian Development Region (2014 -2020).
Source: [26].

Data collection

Quantitative and qualitative data related to the beginning of the 2014-2020 LEADER edition in Romania were collected from official

sources and publications such as: National Institute of Statistics, Eurostat, Local Development Strategies (LDS) and other documents of Local Action Groups (LAG). The difficulties that appeared in the collection process highlighted the many problems that LAGs still confront regarding the lack of transparency and organization. Most of the LDSs presented facts about their territory but have not offered sources for the cited data and, in some cases, not even the data itself.

Two main types of data were collected. The first set contains key rural development indicators defined by European Commission [13, 14] and information from their own SWOT analysis, and are used to find out the needs and potential of the LAGs territories. In 2014, in order to lay down rules for the application of the common monitoring and evaluation framework of the common agricultural policy, the European Commission defined and adopted 45 CAP indicators [15]. The Context Indicators were divided in three main sections: socio-economic, sectorial and environment indicators. However, in Romania most of them cannot be found at local level, being available only at county or regional levels. Data such weak points, strengths and opportunities were divided in categories based on their correspondence to the rural development priorities as defined by the EU. This approach was chosen based on the results of a focus group in which 5 LEADER researchers and experts participated. Another reason for the method was the principle that the SWOT analysis should be used in order to justify the measures selected by LAGs in their strategies, as mentioned in [12] of the European Parliament and of the Council from 17 December 2013, on support for rural development by the European Agricultural Fund For Rural Development.

The second set, the budget allocated for each rural development priority, reflects the response of the LAG to those needs and opportunities. Similar methods were used in other studies regarding LEADER. In Greece [2] ranked the LAGs according to indicators that represent the budgets per measure in the related intervention area in order to discover the characteristics of the most integrated and

effective strategies. [27] showed with a similar approach that the Andalusian LAGs have not presented any clear specialisation pattern, but supported a wide range of small and medium-size projects across the different axes.

However, the method presents some limitations. For better results the findings should be correlated with an investigation of the roles the stakeholders and LAGs employees played in creating the LDSs.

Methods for data analysis

A number of 46 variables (Table 2) were collected and analysed using the Statistical Package for the Social Sciences (SPSS 11.0). A Principal Component Analysis (PCA) was conducted in order to identify the factors that determine the quality of the Local Development Strategies (LDSs) of the Local Action Groups in the North West Development Region of Romania. A similar approach was used by [27] to examine the relationship between variety in the LDSs and employment safeguarding for the programming period 2007–2013 in Andalusia, Spain.

Principal Component Analysis method is based on the theory that in a population the information can be dispersed for variables and factors that explain the most important part of the total variability [1]. However, the factors cannot represent all the information inherent in the items. Consequently, there is a trade-off between simplicity and accuracy. This trade-off has to be addressed in any principal components analysis when deciding how many factors should be extracted from the data [22]. In this case the principal components were selected using the computed eigenvalues, and the interpretation was performed using a varimax matrix.

RESULTS AND DISCUSSIONS

In 2014 a Local Action Group had on average an area of 88,123.7 ha and a population of 39,247 persons (Table 2). In terms of age structure it had a lower ratio of population with ages between 15 and 64 (61.82%), compared to EU-28 (in rural area: 65.5%) and to national

level (rural area: 66.3%), meaning a smaller population of working age. In the same time the percent of the older population it is higher than both EU-28 and national level.

On average a LAG had a third (31.33%) of its territory covered by arable lands, followed by meadows (29.9%) and forests (28.8%). Out of its total territory 61.8% is covered by HNV area and 15.4% by Natura 2000 Sites of Community Importance (SCI).

The Local Action Groups had in average a low employment rate (15.88%), and a high proportion of firms active in tertiary sector (67.99%).

Regarding the budget allocations, most LAGs preferred to focus on measures from Priority 6 - Promoting social inclusion, poverty reduction and economic development in rural areas, which on average got more than half of the budget (55.62%),. On the other side, almost none of the LAGs had budget allocations on Priority 5 - Promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy. Therefore, because of the lack of data in order to perform the Principal Component Analysis the priority P5 was excluded from research.

The Principal Component Analysis

The factorial analysis depicted fourteen principal components (PC) that together explain 87.16% of the variance. Out of those, the first ten accounted for 71.5% of the variance, a satisfactory level as shown in other studies [27].

PCI. The link between the LAGs territorial characteristics and their Local Development Strategy (LDS)

The territorial characteristics of the LAGs explained an important part of the variance. There was a strong positive correlation between the percentage of natural areas (Forests; Meadows; HNV areas and Natura 2000 SCI areas) and the weak points identified in priority P4 - Restoring, preserving and enhancing ecosystems related to agriculture and forestry, meaning that they took into consideration the needs of those territories.

Table 2. Descriptive statistics of the main LAGs characteristics

Variable	Mean	St. Dev.	Min	Max	MU
Area	88,123.7	37,235.4	27,656	161,414	HA
Population	39,247.1	188,51.3	11,891	92,558	Number
Density	46.1	16.5	22.6	99.9	Pop./Km ²
Population in rural areas	91.3	9.7	75.9	100	% total
Population in urban areas	8.7	9.7	0.0	24.1	% total
Population under 15	16.3	3.8	10.0	23.0	% total
Population between 15-64	61.8	5.6	50.0	71.0	% total
Population over 64	21.9	5.7	11.3	35.0	% total
Romani Population	4.7	1.8	0.0	8.7	% total
Forest area	28.8	13	8.3	53.9	% total
Natural areas	4.3	1.7	1.5	8.1	% total
Artificial areas	4.4	1.8	1.7	8.8	% total
Arable Land	31.3	17.2	3.8	63.7	% total
Meadows	29.9	9.1	13.1	45.8	% total
Permanent Crops	1.4	1.2	0.1	4.3	% total
Natura 2000 SCI	15.4	15.8	0.0	66.8	% total
HNV areas	61.6	34.1	0.0	100.0	% total
Unemployment	4.3	1.6	1.9	8.5	% population between 16 and 64
Employees	15.9	5.1	7.0	26.0	% population between 16 and 64
Firms Primary Sector	6.9	7.6	0.0	31.5	% total
Firms Secondary Sector	25.2	13.5	0.0	65.2	% total
Firms Tertiary Sector	67.9	14.4	31.4	92.5	% total
No. Of Firms Per 1,000 Pop.	6.7	6.1	2.3	36.3	Firms/1,000 pop.
Overnight Stays	23,258.4	21,325.8	6.0	79,094.0	Number
Accommodation Units	445.5	437.1	14.0	1,623.0	Number
Traditional Products	1.1	3.1	0.0	15.0	Number
P1_Budget	3.2	4.9	0.0	18.3	% total
P2_Budget	13.4	10.6	0.0	48.1	% total
P3_Budget	7.7	9.5	0.0	44.0	% total
P4_Budget	0.4	1.1	0.0	4.8	% total
P6_Budget	55.6	11.7	30.2	77.3	% total
WeakPointsP1	10.6	8.8	0.0	35.4	% total
WeakPointsP2	12.3	8.1	0.0	33.3	% total
WeakPointsP3	11.4	6.4	0.0	23.7	% total
WeakPointsP4	4.2	4.9	0.0	15.4	% total
WeakPointsP6	59.2	12.4	34.8	92.6	% total
StrenghtsP1	5.9	5.6	0.0	18.2	% total
StrenghtsP2	18.2	6.6	7.1	31.3	% total
StrenghtsP3	4.9	4.3	0.0	17.6	% total
StrenghtsP4	8.8	4.4	0.0	17.6	% total
StrenghtsP6	58.4	11.1	34.4	78.6	% total
OpportunitiesP1	7.3	8.7	0.0	37.5	% total
OpportunitiesP2	7.5	5.6	0.0	20.0	% total
OpportunitiesP3	15.8	9.4	0.0	36.0	% total
OpportunitiesP4	2.8	4.1	0.0	16.7	% total
OpportunitiesP6	63.7	12.8	37.5	90.0	% total

Source: Local Development Strategies of Local Action Groups and the National Institute of Statistics.

The LAGs with more natural areas also had better results in touristic activities (Overnight Stays, Number of accommodation units) and less weak points identified in the priority P6 - Promoting social inclusion, poverty reduction and economic development in rural areas,

hinting that those they have a better economic situation. However the same thing cannot be said about the LAGs with a higher ratio of arable land and permanent crops, which usually have more weak points identified in priority P6.

Table 3. Descriptive Statistics for the first three components PC1, PC2, PC3

PC	Eigen Values	% variance explained	% variance accumulated	Indicators and correlation with the PCs (The most discriminant variables above ± 0.3)
PC1	6.056	13.168	13.168	Arable Land (%): -0.911 Artificial Areas (%): -0.824 Forrest (%): 0.822 Meadows (%): 0.811 Accommodation Units (no): 0.751 HNV area (%): 0.749 Overnight Stays (no): 0.650 Natura 2000 SCI (%): 0.571 Weak Points identified in priority P4 (%): 0.365 Permanent Crops (%): -0.477 Weak Points identified in priority P6 (%): -0.416
PC2	4.767	10.363	23.531	Rural Population (%): -0.883 Urban Population (%): 0.883 Population (no): 0.751 Area (ha): 0.680 Priority P2 Budget (%): -0.619 Employees (% out of pop. between age 15 and 64): 0.592 Priority P6 Budget (%): 0.579 Weak Points identified in priority P4 (%): 0.414 Priority P4 Budget (%): 0.307 Opportunities identified in priority P2 (%): -0.412
PC3	3.638	7.909	31.44	Firms in secondary sector (%): 0.876 Weak Points identified in priority P1 (%): 0.807 Firms in tertiary sector (%): -0.778 Permanent Crops (%): 0.556 Priority P1 Budget (%): 0.538 Weak Points identified in priority P2 (%): -0.393 Density (Pop./Km ²): 0.346.

Source: Extraction Method Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization

PC2. Rural/peri-urban influence on economic development

The LAGs with a higher proportion of weak points identified in priority P4 also had higher budget allocations on the same priority, meaning that they tried to provide the means to respond to their needs. The elements identified in P4 are positive correlated with P6, suggesting a synergy between those two priorities.

The budget allocated to priority P6 is positive correlated to the percent of urban population, the opposite being true for the percent of rural population. A similar situation was reported by [5] who showed that LEADER projects favoured those territories where a business

framework is already well established, at the expense of the areas less developed.

The LAGs that identified more opportunities in priority P2 have also allocated a higher budget to measures from the same priority (Table 3).

PC3. Factors that explain budget allocation for priority P1

A positive correlation was found between the weak points identified in priority P1 and the budget of the measures from the same priority, meaning, once again, that the LAGs tried to offer the tools to respond to the needs of their territories.

Interestingly, the budget of P1 is positive correlated to the share of companies activating in the secondary sector, but negative

correlation was found with the share of firms from the tertiary sector.

PC4. Correlation between the age structure and the opportunities

As expected, the LAGs that have a higher share active population have identified more opportunities in priority P1 - fostering knowledge transfer and innovation in agriculture, forestry, and rural areas, the opposite situation being true for the Local Action Groups with an older population. This suggests a focus of the LAGs on the potential of their human resources. (Table 4)

PC5. Territorial characteristics and opportunities/strengths identified

The LAGs with a higher proportion of strengths in priority P1 had allocated less money to measures from P1. Surprisingly the same was true for the LAGs with more opportunities identified in the first priority.

In the LAGs that were more densely populated more strengths and opportunities were identified in priority P6 - Promoting social inclusion, poverty reduction and economic development in rural areas.

PC6. The relations between the components of the SWOT analysis and the traditional products

Table 4. Descriptive Statistics PC4 to PC6

PC	Eigen Values	% variance explained	% variance accumulated	Indicators and correlation with the PCs (The most discriminant variables above ±0.3)
PC4	3.247	7.059	38.499	Population Over 64y.o. (%): 0.842 Population with age between 16 and 64 (%): -0.824 Unemployment (% out of pop. between age 15 and 64): 0.709 Opportunities identified in priority P4 (%): 0.676 Opportunities identified in priority P1 (%): -0.449
PC5	3.112	6.765	45.265	Area (ha): 0.680 Priority P1 Budget (%): -0.357 Strengths identified in priority P6 (%): -0.736 Opportunities identified in priority P1 (%): 0.702 Opportunities identified in priority P6 (%): -0.597 Density (Pop./Km ²): -0.303
PC6	2.678	5.822	51.087	Opportunities identified in priority P6 (%): 0.321 Traditional Products (no): 0.894 Priority P4 Budget (%): 0.634 Weak Points identified in priority P2 (%): 0.616 Weak Points identified in priority P6 (%): -0.372 Strengths identified in priority P3 (%): -0.340 Strengths identified in priority P2 (%): -0.361

Source: Extraction Method Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization

Contrary to expectations there is a negative correlation between the number of products that were certified as traditional and the strengths identified in priority P3 (that deals with quality schemes), suggesting that only some the LAGs have seen the potential of those products.

The strengths identified in the priorities P3 and P2 (enhancing farm viability and competitiveness of all types of agriculture in all regions and promoting innovative farm technologies and the sustainable management of forests) were, as expected, negative

correlated to the weak points identified in priority P2.

PC7. Correlation between age structure and economic development (Table 5)

PC7 shows the correlation between the age structure and economic development. LAGs with a younger population and a higher number of firms per 1,000 inhabitants had a higher number of tourists as well.

PC8. The links between the natural areas and the opportunities

The percentage of Natural Areas presented a strong and positive correlation with the opportunities identified in priority P3. The

result suggests that the LAGs have seen the potential to link those areas to concepts like short supply chains or even local brands. In the same time a negative correlation was found with opportunities from P6.

This indicates that LAGs try to focus the resources from this priority in areas that already have some level of economic development.

PC9. Factors that explain the challenges identified in the priority P6

LAGs with more tourism related activities have also reported more needs in priority P6, which suggests that they have a good understanding of the environment in which they work. As expected, fewer problems were identified in the territories with a higher employment rate (Table 6).

Table 5. Descriptive Statistics PC7 and PC8

PC	Eigen Values	% variance explained	% variance accumulated	Indicators and correlation with the PCs (The most discriminant variables above ± 0.3)
PC7	2.482	5.396	56.483	Overnight Stays (no): 0.469 Population Over 64 y.o. (%): -0.340 Nuber of firms/1,000 inhabitants (no): 0.848 Density (pop./Km ²): 0.715 Population under 15 y.o. (%): 0.382
PC8	2.482	5.396	61.878	Opportunities identified in priority P6 (%): -0.469 Opportunities identified in priority P3 (%): 0.882 Natural Areas (%): 0.755

Source: Extraction Method Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization.

PC10. Aspects that influence the budget allocations for priority P3

Surprisingly a negative correlation was found between the budget of the priority P3 - Promoting food chain organisation, including processing and marketing of agricultural products, animal welfare and risk management in agriculture and the budget of the priority P2 - enhancing farm viability and competitiveness of all types of agriculture.

Another interesting aspect is that the LAGs have opted to invest in priority P3, even after they reported a high number of strengths regarding the same priority (Table 6).

Discussions

The results portrayed several important aspects regarding the quality of the Rural Development Strategies made by the Local Action Groups in the Nord West region of Romania.

During the creation of the strategies, the LAGs have not used a unitary methodology for

selecting the most relevant indicators. More often than not, they chosed to use irrelevant indicators that were not covered in official data and in the established methodologies from [13, 14].

This situation can be explained, on one hand, by a weak administrative and organizational capacity of Romanian institutions and their inability to offer relevant data at municipalities level. On the other hand, as [19] pointed out, LAGs found it extremely difficult to create strategies on their own.

This is not only due to lack of experience, but also due to lack of initiative. Some of the strategies have not presented sources for the data used. More worrying are the cases where only the conclusion is mentioned, but not the data itself. The lack of organization and experience in their many forms seems to be a more widely spread problem, as pointed out by [23] in Andalusia and [10] in Spain.

Table 6. Descriptive Statistics PC9 and PC10

PC	Eigen Values	% variance explained	% variance accumulated	Indicators and correlation with the PCs (The most discriminant variables above ± 0.3)
PC9	2.35	6.109	66.987	Accommodation Units (no): -0.329 Overnight Stays (no): -0.338 Employees: 0.356 Population with age between 16 and 64 (%): -0.331 Weak Points identified in priority P3 (%): 0.856 Population under 15y.o. (%): 0.599 Weak Points identified in priority P6 (%): -0.508
PC10	2.085	4.534	71.521	Priority P2 Budget (%): -0.385 Priority P6 Budget (%): 0.389 Natural Areas (%): 0.322 Priority P3 Budget (%): 0.899 Strengths identified in Priority P3 (%): 0.619

Source: Extraction Method Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization.

A positive correlation was identified between the local characteristics (territory and population) and the way in which the budget allocations were made. Although Romania had a higher percentage of rural territories than the EU-28 average, it also faced bigger problems. The percent of people at risk of poverty or social exclusion in rural areas was two times the average of EU-28 and the gross domestic product per capita was considerably smaller. This situation could explain the Local Action Groups focus on measures from the priority P6 that deals with poverty reduction and economic development, allocating, in average, more than half of the total budget. However, some authors [16, 23, 7] have expressed concerns about this matter, suggesting that the local authorities tried to use their power and influence in order to obtain more funds and measures for themselves. The focus on P6 was more evident in urban areas. In Andalusia, Spain, [5] also reported that LEADER projects favoured those territories where a business framework was already well established, at the expense of the areas less developed. Another interesting situation was presented by Rodriguez et al., in 2019 in the same Spanish region. Their results showed that most of LAGs that spent high amounts of money on the big project within Axis 3 (that dealt with poverty reduction and job creation) did not achieve good results in terms of employment safeguarding.

A positive result was the fact that some of the LAGs correctly identified the problems and opportunities that the large territories of natural

areas (forests; meadows; HNV and Natura 2000 SCI) come along with, and they offered within their strategies the financial support needed to address them. The results also suggested a synergy between the priorities P4 and P6, probably based on the touristic potential of the natural areas. The findings also point towards the fact that the more rural LAGs attempted to rejuvenate their territories using the measures from the priority P2, especially 'Installation of young farmers'. The budget allocated to this priority is also correlated the amount of identified opportunities. These results suggests that the LAGs focused on the main features of their territories and selected measures and instruments that best respond to them.

The results show that the priority P1 - Fostering knowledge transfer and innovation in agriculture, forestry, and rural areas is underfunded. Some LAGs that identified more weak points in this priority have allocated a higher budget, but most of them failed to offer the resources needed to address the problems and to capitalize on the existing opportunities. Also, the P1 elements present no substantial synergy with other priorities. This represents a serious matter as the innovation and knowledge transfer plays a key role for in the development of rural areas, especially in terms of diversification, competitiveness and governance. [11, 24]. A similar result was reported by [4]. They showed that the expenditure levels on knowledge transfer and

innovation are extremely low in Romania and Bulgaria compared to other EU members.

One of the most important priorities of the EU is promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sector [15]. In the North-West Development Region of Romania, [6] reported a favourable attitude from the population toward renewable energy. However the study shows that only two LAGs had measures the priority P5, although around half of them pointed out in the strategies weak points and opportunities corresponding to this priority. This situation is probably a combination of several factors, like the lack of initiative [19] and information of the stakeholders, and a low demand from the private sector.

Most of the Local Action Groups identified opportunities in Priority P3, especially regarding the need for cooperation between producers, short supply chains and quality schemes. In 2014 on their territories existed 33 products that were certified as traditional, 11% from national total [18].

However the budget of this priority was not correlated with the budget of P2, suggesting a lack of synergy between the measures of the two priorities.

CONCLUSIONS

In the 2014-2020 Programming Period the importance of the LEADER Program has increased in Romanian, and became an important rural development tool in the Nord-West Developing Region of Romania.

The present paper showed that Local Action Groups still retain some of the problems from the last edition (2007-2013) regarding lack of organisation and experience, as previous research pointed out [19]. The results show that the Local Action Groups have not applied the methodology established by the EU Commission, focusing instead on less relevant indicators.

LAGs need to find a balance among the different objectives of the rural development policy and to translate this balance into the funding of projects (Rodriguez et al., 2019). In this case a positive correlation was found

between the needs, opportunities and the budget. A common feature is the fact the LAGs preferred to offer a high budget to measures from the priority P6 in order to combat poverty and to promote job creation. On the other hand, almost none of the LAGs have allocated resources for the priority P5. A few measures were also reported in Priority P1 that deals with knowledge transfer and innovation, a crucial aspect for a sustainable rural development.

This research pointed out the most important problems, as well as the most positive results in making a local development strategy. As the new version LEADER Program is closing in, its findings are more relevant than ever. However, in order to obtain a complete picture, more research is still necessary, especially focused on the roles that the partners and employees of the LAGs played in creating the strategies and in their implementation.

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REFERENCES

- [1]Abdi, H., William, L., 2011, Principal component analysis. Wiley Interdisciplinary Reviews Computational Statistics, 2, 433-459.
- [2]Arabatzis, G., Aggelopoulos, S., Tsiantikoudis, S., 2010, Rural development and LEADER + in Greece: Evaluation of local action groups. Journal of Food, Agriculture and Environment. 8.
- [3]Arroyo, F. M., Lopez, H. S., Blanco J. L. Y., 2015, Are local action groups, under LEADER approach, a good way to support resilience in rural areas?, Ager-Revista De Estudios Sobre Despoblacion Y Desarrollo Rural, Vol 18, pag. 39-63.
- [4]Bonfiglio, A., Camaioni, B., Coderoni, S., Esposti, R., Pagliacci, F., Sotte, F., 2017, Are rural regions prioritizing knowledge transfer and innovation? Evidence from Rural Development Policy expenditure across the EU space. Journal of Rural Studies 53, 78-87.
- [5]Canete, J. A., Navarro F., Cejudo E., 2018, Territorially unequal rural development: the cases of the LEADER Initiative and the PRODER Programme in Andalusia (Spain), European Planning Studies, Vol. 26, 726-744.
- [6]Chiciudean, G.O., Harun, R., Arion, F. H., Chiciudean, D. I., Oroian, C. F., Muresan, I. C., A Critical Approach on Sustainable Renewable Energy

Sources in Rural Area: Evidence from North-West Region of Romania, *Energies*, Vol. 11, Issue: 9.

[7]Chmielinski, P, Faccilongo, N, Fiore, M, La Sala, P, 2018, Design and implementation of the Local Development Strategy: a case study of Polish and Italian Local Action Groups in 2007-2013, *Studies In Agricultural Economics*, Vol. 120, 25-31.

[8]Dax, T., Oedl-Wieser, T., 2016, Rural innovation activities as a means for changing development perspectives - An assessment of more than two decades of promoting LEADER initiatives across the European Union, *Studies In Agricultural Economics*, Vol. 118, 30-37.

[9]ENRD Europa, 2020, <http://enrd.ec.europa.eu/>, Accessed on 21.01.2020.

[10]Esparcia, J., Escribano, J., Serrano, J.J., 2015, From development to power relations and territorial governance: Increasing the leadership role of LEADER Local Action Groups in Spain, *Journal Of Rural Studies*, 29-42

[11]Esparcia, J., 2014, Innovative and networks in rural areas. An analysis from European innovative projects. *Journal of Rural Studies* 34, 1-14.

[12]EU, 2013, Regulation (EU) No 1305/2013 of The European Parliament and of The Council of 17 december 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005, (2013), *Official Journal of the European Union*.

[13]EU, 2014a, Regulation (EU) No 808/2014 of 17 July 2014 laying down rules for the application of Regulation (EU) No 1305/2013 of the European Parliament and of the Council on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)

[14]EU, 2014b, Regulation (EU) No 834/2014 of 22 July 2014 laying down rules for the application of the common monitoring and evaluation framework of the common agricultural policy.

[15]EU, 2020, <https://ec.europa.eu/>, Accessed on 21.01.2020.

[16]Falkowski, J., 2013, Political accountability and governance in rural areas: Some evidence from the Pilot Programme LEADER plus in Poland, *Journal of Rural Studies*, Vol. 32, 70-79.

[17]Hoffmann, R., Hoffmann, N., 2018, The Leader Programme As An Impulse For New Projects In Rural Areas, *Quaestiones Geographicae*: 141-150.

[18]MARD, 20220, <https://www.madr.ro/>, Accessed on 21.01.2020.

[19]Marquardt, D., Mollers, J., Buchenrieder, G., 2012, Social Networks and Rural Development: LEADER in Romania, *Sociologia Ruralis*, Vol. 52, 398-431.

[20]Masot, A. N., Alonso, G. C., 2017, 25 years of The LEADER Initiative as european rural development policy: the case of Extremadura (SW Spain), *European Countryside*, Vol. 9, 302-316.

[21]Mietule, I., Zvaigzne, A., 2015, Assessment Of The Strategy Of The Local Action Group "Partnership Of Rezekne District Communities, 7th International Scientific Conference Rural Development 2015:

Towards The Transfer Of Knowledge, Innovations And Social Progress, Book series: Rural Development.

[22]Mooi, E., Sarstedt, M., 2011, A Concise Guide to Market Research. Springer-Verlag Berlin Heidelberg: 1 – 308;

[23]Navarro, F., Cejudo, E., Maroto, J., 2016, Participation of disadvantaged groups and governance in the LEADER and PRODER programmes in Andalusia, Spain, *Studies In Agricultural Economics*, Vol. 118, 47-54.

[24]Navarro, F., Labianca, M., Cejudo, E., De Rubertis, S., Salento, A., Maroto, J., Belliggiano, A., 2018, Interpretations of innovation in rural development. The cases of LEADER projects in Lecce (Italy) and Granada (Spain) in 2007-2013 Period, *European Countryside*, Vol.10, 1st Ed., 107-126.

[25]Nedelcu, A., Tataru, A., Subic, J., Kuzman, B., 2015, The local action group, local development model based on community. Case study-LGA "Land of vineyards and wine" Vrancea. *Procedia Economics and Finance*: 706-715.

[26]RNDR, 2020, <https://www.rndr.ro/>, Accessed on 21.01.2020

[27]Rodriguez, M., Sanchez, L.M., Cejudo, E., Camacho, J.A., 2019, Variety in local development strategies and employ-ment: LEADER programme in Andalusia. *Agricultural Economics – Czech*, 65: 43-50.

[28]Zajda, K., 2014, Problems of functioning of Polish local action groups from the perspective of the social capital concept, *Eastern European Countryside*, Vol. 20, 73-97.

