

IMPLEMENTATION OF COMMUNITY – LED LOCAL DEVELOPMENT STRATEGIES - EVIDENCE FROM SOUTHERN BULGARIA

Mariyana SHISHKOVA

Agricultural University-Plovdiv, 12 Mendeleev Boulevard, Plovdiv, Bulgaria, Phone: +35932654453, Mobile: +359897 68 55 01, email: mariyana.shishkova@gmail.com

Corresponding author: mariyana.shishkova@gmail.com

Abstract

The LEADER approach/ Community Led - Local Development (CLLD) is one of the most effective tools for rural development at EU level. It enables empowerment of the population, involving all stakeholders in the decision-making process. The built trust and the growing role of the Local Action Groups (LAGs), through which the approach is applied, are a prerequisite for LEADER/ CLLD to become a key instrument for tackling the challenges facing the rural areas of Bulgaria. The aim of the study is, based on the analysis of the main factors influencing the results of the implementation of integrated strategies, to outline the opportunities for increasing the number of supported initiatives, as well as to formulate recommendations in the respective field. The study encompasses 34 LAGs operating on the territory of Southern Bulgaria. The results of the regression analysis reveal the following main factors determining the number of supported initiatives under the local development strategies: the experience of the LAGs, the type of strategy (single-fund or multi-fund support) and the ongoing communication with relevant government agencies.

Key words: Community Led - Local Development, LEADER approach, LAGs, entrepreneurship, rural development

INTRODUCTION

According to the EC, over the past 20 years, from LEADER to CLLD, the approach has helped rural communities to consider the long-term potential of their area, proving to be an effective tool in delivering development policies [3]. The latter is determined by its key characteristics, including capacity building at the local level and on this basis the development of various forms of social capital [13, 17, 18]. Although the main challenges facing the rural population are similar at EU level, each region is characterized by specific needs and opportunities [10]. In this regard, according to Nardole, Sisto and Lopolito (2010) LEADER is concerned with finding innovative solutions to problems by identifying and engaging in the best way endogenous resources [7, 13]. On this account some authors consider it as “a social vehicle to strengthen participation, to foster local governance and even to structure a new social order to changing power relation in rural areas” [15]. Local action groups (LAGs) play a key role in the approach implementation. Furmankiewicz et al. (2016) emphasize that

the interaction of representatives of the public, private and non-governmental sectors has an important impact on the processes of this (neo) endogenous and place-based development [5]. The aim of the study is based on the analysis of the main factors influencing the results achieved by the LAGs within the integrated strategies, to outline the opportunities for improving their activities and increasing the number of supported initiatives, as well as to make policy recommendations. The article is structured as follows: First, the materials and methods are presented. Second, the application of CLLD in Bulgaria for the current programming period is reviewed and analysed. Third, a multiple linear regression model is developed and the key factors that have a positive impact on the number of supported initiatives under the community-led local development strategy, are identified. On this basis some conclusions and recommendations are formulated.

MATERIALS AND METHODS

The following methods for collecting, processing and analysing data are applied in

the study: document analysis, in-depth interviews with key experts in the field and regression analysis.

Table 1. Variables definition and summary statistics

	Variable definition	Mean	Standard Deviation	Minimum	Maximum
Supported initiatives	Number of contracts signed	5.79	1.28	0.00	28.00
Financial resources	Strategy budget	4,883,369.74	2,414,531.88	399,646.51	11,865,164.44
D=1 Multi-fund Strategy	If the strategy is multi-funded D=1, otherwise D=0	0.59	0.50	0.00	1.00
Experience	Number of years the approach has been applied by the LAG	7.41	3.54	2.00	13.00
Number of municipalities	Number of municipalities whose territory is covered by the LAG / Strategy	1.76	0.78	1.00	3.00
Team	Number of LAG employees	3.79	0.84	2.00	6.00
Communication with GA	Number of official letters / emails to and from representatives of government agencies	189.50	76.03	100.00	407.00

Source: Own research.

The study covers 34 LAGs operating on the territory of Southern Bulgaria. The latter account for 53% of the total number of relevant organisations in the country during the current programming period. The research period is 2016 - 2019.

The following sources of information are used in the study: the database of the Bulgarian Registry Agency [1]; reports, documents and other publications on the official websites of the LAGs. In addition, three experts with a significant experience in the approach implementation were interviewed. The initial research period coincides with the beginning of CLLD's main activities in the country.

The variables were selected based on the theory and results of previous studies [9, 12]. According to Kraner (2014) and Moore et al. (2003) the capacity of non-governmental organizations to support the target group is highly dependent on the material resources they possess, such as financial and human capital [8, 12]. On this basis, the dependent variable of the model is the number of "Supported initiatives", and the explanatory variables are as follows: "Financial resources", "Experience" of the LAG in the implementation of the approach; "Number of municipalities" and the "Team" of the LAG. In the course of the study, the document

analysis and interviews revealed that there is a certain delay in the approval of the projects by the Payment Agency under the RDP, which significantly affects the results achieved by the organisations when the strategy is funded only under the EAFRD and it is not multi-funded. Regarding the measures financed by other funds, no such difficulties are identified. Thus, a dichotomous variable is included in the model to reflect the difference between the two distinct groups.

The definition of the variables and the characteristics of the data set are presented in tabular form (Table 1). According to the relevant data, the average number of the supported initiatives within the study period is 5.79. The mean budget of the strategy amounts to BGN 4,883,369.74 with a deviation from these average values of BGN 2,414,531.88. The organization with the longest experience has worked in the field for 13 years. It is important to emphasize that the latter was founded as a result of the implementation of one of the pilot projects carried out in the country during the pre-accession period. This LAG is a good example of the consistency of the activities undertaken to address the challenges of rural areas, the development of local potential and, accordingly, social capital in all its forms.

Several organisations were registered in 2017 and have only a few years of experience in implementing the local development strategy. However, some of them have achieved good results. The average number of people working for the LAG is 3.79 with a minimum of two and a maximum of six employees. The variable revealing the official communication between the LAG and the representatives of government agencies – in this case the Managing Authorities of the RDP and the Operational programmes, State Fund “Agriculture”, Ministry of Finance and others, is of common interest, as the latter could be considered as a measure of the level of the linking social capital. The reports of the LAGs for the implementation of the strategy include detailed information regarding this indicator and the actions taken by each of the parties. The following tests are applied to the model: (1) Regression Specification Error Test (RESET test); (2) tests for fulfilment of the Classical Linear Regression Model assumptions, including Jarque-Bera Normality Test, Breusch-Pagan test for detecting heteroscedasticity and Durbin-Watson test for autocorrelation [2, 6].

RESULTS AND DISCUSSIONS

During the current programming period, a total of 64 local action groups operate on the territory of the country, which is nearly 55% more compared to the previous period [11]. According to the CLLD department the total budget for multi-fund financing of the implementation of the approach amounts to EUR 304 million, and during the preparatory actions 100 projects were applied, covering 180 municipalities or 74,433 km² and 2.3 million population [16]. Regarding the implementation of the CLLD strategy, the approved 64 LAGs include 115 municipalities, 53,796 km² and 1,646,588 people, which in turn, according to NSI and Eurostat data [4, 14] is 24% of the total population of the country and 74.49% of that of rural areas for 2019. There are significant differences in the budget of community - led local development strategies for the period

under review: from BGN 2,604,000 to BGN 12,843,064. The latter predetermines the inclusion of a corresponding independent variable in the proposed model.

The sub-measure concerning the cooperation among the LAGs and of serious importance for the development of the bridging and linking social capital was not implemented in its full capacity during the study period - preparatory activities were carried out and only few projects for internal territorial cooperation were supported. Therefore, this measure is not thoroughly examined in the present research. The latter is a prerequisite for further examination of the results achieved in the area and their possible inclusion in the model.

The multiple linear regression model (Equation 1) reveals the impact of the available financial resources for socio-economic development, key characteristics of the organisation and communication with government agencies on the results achieved by the LAG within the Strategy, measured by the number of supported initiatives.

The data from the correlation matrix show that all explanatory variables are positively correlated with the number of projects (Table 2). On the other hand, there is an inverse relationship between the experience and the strategy budget. It is possible that some of the LAGs, based on the experience and knowledge gained from the previous period, have focused mainly on the RDP measures, compared to the newly established organizations, which aimed to attract more financial resources.

Regarding the model, a specification test is applied first (Ramsey's RESET test). The predicted values of the dependent variable are calculated and raised to the second and third degree. The values obtained are included as regressors in an extended model. The formulated null hypothesis states H0: "The additional variables in the extended model are not statistically significant." According to alternative hypothesis H1: "The additional variables in the extended model are statistically significant."

$$\text{Supported Initiatives} = \beta_1 + \beta_2 \text{ Financial Resources} + \beta_3 \text{ Strategy type} + \beta_4 \text{ Experience} + \beta_5 \text{ Number of municipalities} + \beta_6 \text{ Team} + \beta_7 \text{ Communication with Government Agencies} + u_i \dots \dots \dots (\text{Equation 1})$$

Table 2. Correlation matrix

	Supported initiatives	Financial resources	D=1 Multi-fund Strategy	Experience	Number of municipalities	Team	Communication with GA
Supported initiatives	1.0000						
Financial resources	0.5763	1.0000					
D=1 Multi-fund Strategy	0.6002	0.6875	1.0000				
Experience	0.1220	-0.1425	-0.3122	1.0000			
Number of municipalities	0.1469	0.0472	-0.0229	0.1018	1.0000		
Team	0.1176	0.3715	0.1520	0.2316	0.2459	1.0000	
Communication with GA	0.5243	0.4913	0.3580	-0.0171	-0.1357	0.0771	1.0000

Source: Own research.

The critical value of the F-distribution, at significance level $\alpha = 0.05$ and degrees of freedom $df_1 = 2$ and $df_2 = 26$, is 3.37. In this case, $F=3.06$ is less than 3.37 (F_{crit}), which means that the null hypothesis cannot be rejected. On this basis, it can be stated that the model is well-specified.

Regrading Jarque–Bera test of normality, the following null hypothesis was formulated: "The stochastic term of the model is a normally distributed random variable, where $S = 0$ and $K = 3$ ". According to the alternative hypothesis: "The probability distribution of the stochastic term differs significantly from the normal". The calculated JB test statistic = 1.51 is less than the critical value $\chi^2_{crit} = 5.99$ [$\alpha = 0.05$; $df = 2$]. Thus, null hypothesis cannot be rejected and the disturbance term is normally distributed.

In the model there is a weak to a moderate correlation ($|r| < 0.7$) between the variables. In addition, the coefficient of determination does not accept high values.

The results of the Breusch-Pagan test reveal that the CLRM assumption for homoscedasticity of the error term is not violated for this model: Sig. F = 0.18 is greater than $\alpha = 0.05$ and null hypothesis for constant variance of u_i cannot be rejected.

A Durbin-Watson test for serial independence of the disturbances was performed. According

to null hypothesis H_0 "There is no statistically significant autocorrelation of the error terms". Alternative hypotheses are respectively: H_{1a} "There is a positive first-order autocorrelation" and H_{1b} "There is a negative first-order autocorrelation". The estimated d value is 1.91. The lower critical value $dL = 1.079$ and the upper $dU = 1.891$ (the number of regressors is 6 and the number of observations $N = 34$). Thus, $dU < d < 4-dU$, which means that H_0 is valid and there is no autocorrelation.

The results of the model evaluation are presented in Table 3. The estimated coefficient of the dichotomous variable, indicating the type of strategy, as well as the coefficients of the explanatory variables "Experience" and "Communication with government agencies" are statistically significant and with the expected positive sign.

Therefore, the multi-fund strategy has a positive impact on supporting a larger number of projects. The experience of the LAG in the application of the approach also has a favourable effect on the number of projects supported. In addition, the results reveal that better communication with representatives of relevant government agencies helps LAGs to expand the number initiatives under the integrated local development strategy. One

possible reason is that enhanced communication leads to timely resolution of identified problems.

Table 3. Influence of variables on the number of supported initiatives

	<i>Coefficients</i>	<i>SE</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	-10.0633	5.0048	-2.0108	0.0544
Resources				
Financial resources	0.0000	0.0000	1.0012	0.3256
Strategy type (D=1 Multi-fund)	7.4314	2.5961	2.8625	0.0080
Characteristics of the organisation				
Experience	0.6981	0.2809	2.4848	0.0195
Number of municipalities	1.9169	1.2022	1.5946	0.1225
Team	-1.5773	1.2433	-1.2687	0.2154
Communication linkages				
Communication with GA	0.0294	0.0139	2.1142	0.0439
y= Supported initiatives				
R Square=0.62; F=7.15				

Source: Own research.

As mentioned above, the budget of the strategies varies widely, and greater financial resources should have a positive impact on the number of projects supported. In this case, the estimated coefficient of the respective variable is statistically insignificant, but with the expected positive sign. The latter could be explained by the fact that there is a certain delay in the approval of project proposals and the conclusion of the contracts under the RDP. During the study period no such delays were found for measures under the Operational programmes. In this regard, it is possible that funds have been allocated for a smaller number, but larger initiatives.

The estimated coefficient of the variable "Number of municipalities" is also statistically insignificant, but the sign corresponds to the predicted positive relationship. The larger number of municipalities covering a coherent and

homogeneous territory, on the one hand, should expand the number of potential business initiatives and, on the other hand, provide greater opportunities for inclusion in the team of local people with the necessary knowledge, experience and administrative capacity.

However, the survey reveals that several LAGs covering the territory of one municipality have supported a large number of initiatives. Two of these rural municipalities are located in the Plovdiv region near the district centre and are characterized by highly developed industry, business activity and level of social capital.

The estimated coefficient of the variable concerning the number of employees in the LAG team is statistically insignificant and with a negative sign. The data show that the largest number of contracts are concluded with beneficiaries of organizations with fewer employees. These LAGs are located near to the large administrative centres, which in turn provides opportunities for recruitment of highly qualified staff.

In conclusion, it can be pointed out that the number of supported initiatives depends on: (1) the type of strategy - the financing of the strategy by several funds is a prerequisite for supporting a larger number of projects; (2) the experience of the LAG and (3) the communication with the government agencies, which are responsible for the implementation of the respective activities. Although no statistical support has been found on the positive impact of financial resources on the number of beneficiaries reached, according to the theory this impact should not be underestimated.

CONCLUSIONS

Based on the results of the study the following conclusions and recommendations could be highlighted:

- The main factors influencing the results of the application of the community-led local development strategy by the LAGs, operating on the territory of Southern Bulgaria, are: (1) implementation of a multi-fund strategy; (2) the experience of the organization in the

respective field and (3) the communication with the institutions.

- In order to support a larger number of initiatives and reach more beneficiaries, it is recommended to diversify the sources of funding for the local development strategy. The latter will reduce the organization's dependence on a single donor and avoid possible problems arising from delays in project approval and contracting with beneficiaries, as identified in the study.

- In order to achieve sustainable results on the territory of the LAG, it is important to ensure a sequence of actions over a longer period of time (within several programming periods), which will help to expand the accumulated capacity at the local level, the number of initiatives and cooperation among the three sectors.

- It is recommended to maintain regular communication with the representatives of the Government agencies managing the respective programme, as the latter will allow increasing the level of linking social capital.

ACKNOWLEDGEMENTS

This work was supported by the Bulgarian Ministry of Education and Science under the National Research Program "Young scientists and postdoctoral students" approved by DCM # 577/17.08.2018.

REFERENCES

- [1]Bulgarian Registry Agency, n.d., <https://www.registryagency.bg>, Accessed on 01.08.2020.
- [2]Chipeva, S., Boshnakov V., 2015, Introduction to Econometrics, Publishing Complex-UNWE, Sofia, Bulgaria.
- [3]European Commission, 2014, Community-Led Local Development, Cohesion Policy, March 2014. https://ec.europa.eu/regional_policy/sources/docgener/informat/2014/community_en.pdf. Accessed on 01.08.2020.
- [4]Eurostat database, n.d., Statistics on rural areas in the EU. https://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_on_rural_areas_in_the_EU. Accessed on 02.08.2020.
- [5]Furmankiewicz, M., Janc, K., Macken-Walsh, A., 2016, The impact of EU governance and rural development policy on the development of the third sector in rural Poland: A nation-wide analysis. *Journal of Rural Studies* 43 (2016), pp.225-234.
- [6]Gujarati, D., 2004, Basic Econometrics. New York: McGraw-Hill, 4th Edition.
- [7]Koutsouris, A., Zarokosta E., 2020, Supporting bottom - up innovative initiatives throughout the spiral of innovations: Lessons from rural Greece. *Journal of Rural Studies* 73 (2020), pp. 176-185.
- [8]Kraner, M., 2014, Friends or Foes?:Examining Social Capital of International NGOs and Food Security Programs, Dissertations and Theses, Portland State University.
- [9]Kraner, M., Kinsella, D., 2012, NGOs in the Transnational Development Network. Exploring Relational Resources in the Promotion of Food Security, Presented at the annual meeting of the International Studies Association, 31 March – 4 April 2012, San Diego.
- [10]Menconi, E. M., Artemi, S., Borghi P., Grohmann, D., 2018, Role of Local Action Groups in Improving the Sense of Belonging of Local Communities with their Territories. *MDPI. Sustainability*.
- [11]Ministry of Agriculture, Food and Forestry of the Republic of Bulgaria, n.d., <https://www.mzh.government.bg/bg/politiki-i-programi/programi-za-finansirane/programa-za-razvitie-na-selskite-rayoni/vomr/>. Accessed on 01.08.2020.
- [12]Moore, S., Eng, E., Daniel, M., 2003, International NGOs and the role of network centrality in humanitarian aid operations: A case study of coordination during the 2000, Mozambique Floods, *Disasters*, Vol.27(4), 305–318.
- [13]Nardone, G., Sisto, R., Lopolito, A., 2010, Social Capital in the LEADER Initiative: a methodological approach. *Journal of Rural Studies* (2010), pp. 63-72.
- [14]National Statistical Institute, n.d, Population by districts, municipalities, place of residence and sex. <https://www.nsi.bg/>. Accessed on 02.08.2020.
- [15]Papadopoulou, E., Hasanagas, N., Harvey, D., 2011, Analysis of rural development policy networks in Greece: Is LEADER really different. *Land Use Policy* 28 (2011), pp. 663-673.
- [16]RDP Monitoring Committee 2014-2020, 2019, Materials and stenographic minutes of the meetings of the Monitoring Committee of the RDP 2014-2020, Presentation on CLLD progress by the CLLD Department, January 2020, <https://www.mzh.government.bg/>. Accessed on 03.08.2020.
- [17]Shucksmith, M., 2000, Endogenous development, social capital and social inclusion: perspectives from LEADER in the UK, *Sociologia Ruralis* 40(20), 208-218.
- [18]Sisto, R., Lopolito, A., van Vliet, M., 2018, Stakeholder participation in planning rural development strategies: Using backcasting to support Local Action Groups in complying with CLLD requirements. *Land Use Policy* 70 (2018), pp.442-450.