THESES OF THE Ph.D. DISSERTATION

ANDREA CSATA

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HUNGARIAN UNIVERSITY OF
AGRICULTURE AND LIFE SCIENCES

The territorial and temporal dynamics of the rural development support system in Romania – the example of Harghita County

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ANDREA CSATA

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Name of Doctoral School:	Economics and Regional Sciences
Field of Doctoral School:	Economics and Management
Head of Doctoral School:	Prof. Dr. Bujdosó Zoltán professor Hungarian University of Agriculture and Life Science Instituite of Rural Development and Sustainable Economy
Supervisor:	Prof. Dr. Gál Zoltán professor University of Pécs Faculty of Business and Economics Departament of Finance and Accounting
	Prof. Dr. Nagy Imre Professor Emeritus Hungarian University of Agriculture and Life Science

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1. BACKGROUND OF THE STUDY, OBJECTIVES

Today, being part of the European Union has become a fact of life, and as a researcher living in rural Transylvania, I find the European Union framework to be a constantly interesting topic of study, especially the way it filters through the local system (in my case, the Romanian context). Today, rural development funding is one of the most important sources of capital for peripheral regions and is just as broadly interpreted regional convergence program as cohesion policy was in the past (Goda et al 2022). However, there have been numerous definitions and proposals for rural areas as the setting of rural development (Buday-Sántha 2011, Council of Europe 1996, Kis 2011, OECD 1996, Egri et al. 2016), of which the most widely accepted is the OECD definition, which is based on population density and considers settlements with less than 150 inhabitants per km^2 to be rural settlements. Romania joined the European Union in 2007, marking the beginning of a continuous learning and regulatory process (Vincze 2008, Romanian European Institute 2006). Rural development objectives take different forms depending on the challenges of the current planning period and changes in the political framework, with an ever-expanding set of measures that, due to the nature of the planning system, are not always able to adapt to current challenges (Csata 2018). In the current period (2023–2027), we see that rural development has symbolically "reverted" to the main CAP system as part of the unified national strategic plans (Kengyel 2022).

I consider the analysis of rural development programs and frameworks in Romania to be appropriate and timely for the following reasons: the definition of rural areas and the countryside leaves room for improvement being a subject of ongoing professional debate, as the current definitions do not always correspond to the policy instruments for intervention and therefore do not achieve maximum impact. The successful implementation of development policy requires a clear definition of the target audience for development, and therefore the study and

detailed description of target areas and the identification of possible patterns can help in the formulation of development policy. Detailed process analyses related to project implementation can shed light on factors that may be key to success or failure. Due to the complexity of the area concerned, it is not possible to define a precise method for evaluating projects, which is why both qualitative and quantitative analyses are necessary. Analysis of completed EU investments often highlights shortcomings in the application system and the target area, but no systematic solution to these problems has been found. The least explored area is the afterlife of completed developments and the feedback of experiences, as the necessary systemic corrections fall slightly outside the focus of scientific research.

After reviewing the literature and policies, observing the day-to-day implementation of projects and building on empirical field experience, I sought answers to the following research question:

Can the concept of rural development used in the European Union be fully applied to Romania, and what differences might we encounter?

Moreover, based on my previous individual empirical research and field experience, I formulated the following research questions:

- What are the factors that influenced the accessing of rural development funds at the municipal level?
- Which application cycle results were most important in accessing Romanian rural development funds? Is there a connection between the Sapard program application values and those for 2007–2013? Is there a significant connection between the application values for the 2007–2013 and 2014–2020 periods?
- Did the funds drawn down have an impact on the targeted areas: infrastructure, agricultural indicators, and tourism?
- Is there a pattern in the use of rural development funds at the county level, taking into account rural development funds and real economy indicators

(e.g., GDP, unemployment trends, which regions can be considered winners or losers in terms of accessing funds)?

- What were the stumbling blocks in the implementation phases of rural development projects, and what differences can be identified between settlements?
- What impact did the funds drawn down have on the local economy? Based on my preliminary assumption, there has been strong growth, which I will verify at a selected case study site.
- How do mayors assess the conditions and impact of LEADER programs?
- What role did the County Council play as an integrating institution in rural development projects?
- What framework could improve the application process in municipalities that are unable to apply effectively?

2. HYPOTHESES OF THE THESIS

After reviewing the literature, I formulated the following hypotheses focusing on the research questions presented above:

Hypothesis 1. The results of certain rural development application cycles influenced the successful application activity in the following period in terms of the number and value of applications.

- There is a positive correlation between the number and value of applications at the county level for the SAPARD pre-accession fund and the 2007–2013 period.
- For the 2007–2013 and 2014–2020 periods, there is a positive correlation between the number and value of applications at the county level.

Hypothesis 2. Economic and social conditions and local government had a positive impact on the availability of rural development funds.

Hypothesis 3. Rural development funds had a positive impact on the local economy.

3.1. The use of rural development funds had a positive impact on the areas concerned, mainly in terms of infrastructure indicators and the agricultural and tourism sectors at county level.

3.2. In Harghita County, the impact of rural development funds on local economic development was less pronounced, while factors related to social well-being were more evident in the period 2000–2020.

Hypothesis 4. Taking into account the results of rural development projects (in terms of number and value) and other economic indicators (GDP, unemployment rate), we can identify five distinct groups among the counties.

Hypothesis 5. Intermediate integrating institutions play an important role in the sustainability of rural development funds.

5.1. Harghita County Council actively contributed to the implementation of rural development programs.

5.2. The LEADER program contributes less to the development of the local economy than to the formation and long-term maintenance of local communities in Harghita County.

3. MATERIALS AND METHODS

The geographical focus of my doctoral thesis is Romania, with a particular emphasis on Harghita County in Szeklerland, Transylvania. I chose Harghita County as my main unit of analysis not only because of my personal connection to it, but also because it is a typical rural area with all the characteristics of such regions. It is a predominantly rural area, where the rural population accounts for 59.32% of the total population. From administrative perpspective, it comprises 9 towns and 58 municipalities, consisting of 235 villages. The population is diverse, with the majority being Hungarian (85.7%), followed by Romanians (12.4%), Roma (1.8%), and Germans (0.02%). Agriculture and tourism are significant activities in the region, and attachment to the landscape is part of everyday life.

In Hargita County, the GDP per capita is €17,230, which is 72.70% of the national average, while compared to Bucharest, this ratio is 27.73% (2020). GDP structure: services 60.3%, industry 27.4%, construction 6.3%, agriculture 6% (ADR Centru, 2024).

The population of the county has a low income; more precisely, it ranks last among counties in terms of gross average income.

In the analysis, in addition to the settlement-level analysis I also conduct a county-level analysis, in accordance with the research hypotheses.

The period analyzed can be divided into three parts: 2000–2006: Romania's pre-accession period, the period of SAPARD rural development applications. The second period is 2007–2013, the analysis of the first rural development program after accession—this is the main and most important period of the analysis, as this program has been completely closed. The third period is 2014–2020, which has been officially extended to 2022 due to the Covid crisis; this phase is not yet fully completed in terms of the administration of applications.

Research methods combine primary qualitative (interviews) and quantitative (questionnaires) methods and secondary research tools.

For secondary data analysis, I used national, county, and municipal data from multiple sources. The database used is structured as follows: the county-level database contains all available statistical indicators (66 indicators) for the period 2000–2020. From the database of the National Statistical Office, I used data describing county demographic (population characteristics) and economic characteristics (GDP, number of active companies, etc.) as well as relevant data on tourism, the agricultural sector, and infrastructure (road network, water and sewage network). I obtained data on rural development resources from the website of the Rural Investment Financing Agency (http://opendata.afir.info) and the website of the Ministry of Agriculture and Rural Development. We do not know the exact year when the application was closed, only the period is known, so I

calculated the indicators for the period as well, i.e. I calculated the period average or the change within the period.

The quantitative empirical research consists of a questionnaire survey in rural settlements in Harghita County. The questionnaires were completed by mayors or persons designated by the mayor, as well as employees involved in projects. In the analysis, I only surveyed villages, so I tried to examine the entire population. The questionnaire was completed in 54 out of the total of 58 settlements. The questionnaire was completed mostly in Hungarian, and in those cases where the mayor was a native Romanian speaker, it was completed in Romanian. The survey period was between 2015 and 2022, with more than 50% of the surveys taking place in 2015–2016. Although I examined the entire population (i.e., all rural settlements in Harghita County), in many cases I was unable to find significant correlations due to the small sample size, so I focused instead on mapping the correlations and describing the patterns within the population under study. The questionnaire consisted of several sections, the first of which explored the general characteristics of the settlement and the operating conditions of the local government, including the local government's budget and willingness to pay taxes. The second part focused on examining the local economy. The third set of questions dealt with the sustainability of grant applications, attempting to explore their role in the local economy, the difficulties and benefits of the application process, and the framework for maintaining the value created. Since several municipalities did not have EU applications, the next set of questions also addressed the comparison of EU and other applications, as well as the sustainability issues of non-EU applications. One set of questions examined the role of the county council in local development.

A separate set of questions explored the operational framework of the LEADER program in the villages of Harghita County. The questionnaire used scales that carried as much information as possible, but there were also questions requesting data and open-ended questions as well.

The questionnaires were processed and correlation calculations and cluster analysis were performed using the SPSS program. Where necessary, the Z score method was used for data standardization, which essentially involves subtracting the average from the values and then dividing the difference by the standard deviation.

The questionnaire method was completed with interviews so that I could get qualitative data to uncover the background factors behind the differences. In the interviews, I asked the mayor of a municipality that stood out in the applications and in almost all indicators, a mayor who had been at the helm of the municipality for several terms and therefore had a long-term overview of the process. On the other hand, I interviewed the leaders of municipalities that had not submitted any EU applications in the previous period and had only started to apply for small-value projects in the current period. I explored the background information on the operational framework of the other side with the head of the Harghita County Rural Investment Financing Agency. In addition, I also asked a consultant who has been working with applications for twenty years at an application writing and consulting company about the implementation of applications.

4. RESULTS

The official phase of rural development in Romania began with the SAPARD pre-accession programs, which launched a project-based approach to planning and implementation and opened up opportunities for numerous investments that would have been completely unimaginable given the income levels in rural Romania (Asociatia Ecosfera V.I.C. si Agricul 2011, Csata 2012). The first half of the 2007-2013 period was marked by the development of the institutional system and the establishment of agencies. As a result, the Ministry of Agriculture and Rural Development became the main body responsible for rural development projects, with a special unit dedicated to this purpose, the General Directorate for Rural Development, which has a management role at the level of implementation of the National Rural Development Plan (AFIR 2024). At the end of the closed

period, a total of €7.4 billion was paid out to 98,444 successful applications (representing an 86% drawdown rate compared to the planned amount) (AFIR 2024). At the municipal level, this has led to very positive and general improvements in well-being, especially in terms of infrastructure. As the LEADER program could not be operated properly, a framework emerged in Romania whereby only certain measures could be chosen, and the flexible handling of bottom-up needs was not realized (Marquardt et al. 2012).

The director responsible for rural development projects stated that for the 2014–2023 period, more than 109,000 funding applications were processed, of which more than 72,000 had been selected for funding and contracts had been signed (this figure does not include projects submitted during the 2021–2022 transition period). In terms of financial implementation, this represents a total of € 9.3 billion for beneficiaries of rural investments, which is 73% of the available budget (AFIR 2024).

With regard to the analyses covering the period 2007–2013, it is clear that most of the analyses were completed at the end of the period or some time after it, as the impact of the support can only be seen and evaluated after a long period of time (Furmankiewicz et al. 2016, Caruso et al. 2015, Bonfiglio et al. 2017). Of the areas examined, LEADER is the one that appears to be well explored and provides a good analytical sample for numerous comparisons, even in Romania (Mantino et al. 2024, Olar et al. 2021, Furmankiewicz et al. 2016, Marquardt et al. 2012, Zajdel et al. 2019, Pocol et al. 2017). I would divide the determining factors into three groups: the first is agricultural conditions (Paveliuc et al. 2011), the second is the initial level of development (Szőcs, 2013, Pocol et al. 2017), and the third being the general development framework (Kusio et al. 2022). During the implementation of the projects, a number of obstacles were identified, including bureaucratic frameworks on the part of the applicant (Navarro et al. 2015, Marquardt et al. 2012) and, on the part of the affected parties, deficiencies in government capabilities, local social activity, lack of advocacy skills, lack of

capital, and lack of knowledge and expertise (Finta et al. 2023, Pálné et al. 2023, Horeczki et al 2023, Shucksmith 2012, Nemes et al. 2014). This deficient, restrictive system can also be described as a deficiency cycle (Csete et al. 2009), which at the Romanian level can be supplemented by deficiencies in the local legal framework and the lack of clarified property rights (György et al. 2022). This cycle of deficiencies can also be understood as a triple system of obstacles that interact and reinforce each other, where one factor is related to the mayor's personality (lack of conscious planning, lack of connections, etc.). On the other hand, there are deficiencies affecting society and the population, and thirdly, there are flaws in external macroeconomic and legal systems, which the municipality cannot influence but must address to some extent within its own system. These factors are interlinked in the local economy and increase or decrease the performance of the local economy and the feasibility and effectiveness of projects.

General data analysis of tender data at county level

During the Sapard period, the value of applications in Harghita County was close to the county average, with slightly fewer applications, and the county also performed below average in terms of the value of applications per capita. The ranked data show that Harghita County lags just behind the top ten counties in terms of both amounts and project values.

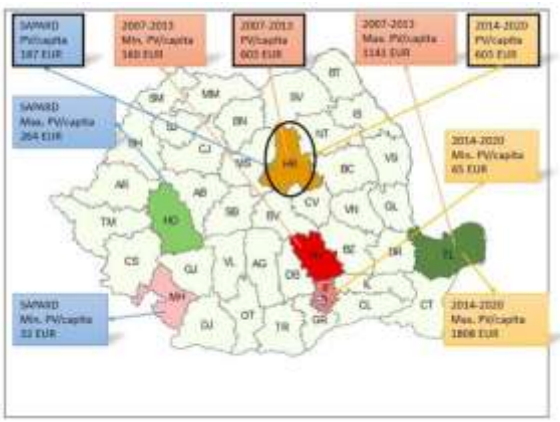


Figure 1. Maximum and minimum tender values (in euros) for different periods in the counties and in Harghita County

Source: own compilation based on AFIR data

In the 2007–2013 period, Harghita County submitted more applications than average, but the value of the applications was average, which means that the value of applications per capita was also above average. In the 2014–2020 period, Harghita County ranks in the middle, occupying 16th–17th place, as in the previous period. Compared to the best-performing counties, it lags behind only in terms of the number of applications, with the value of applications almost exactly at the average, while the average value per capita is slightly below average.

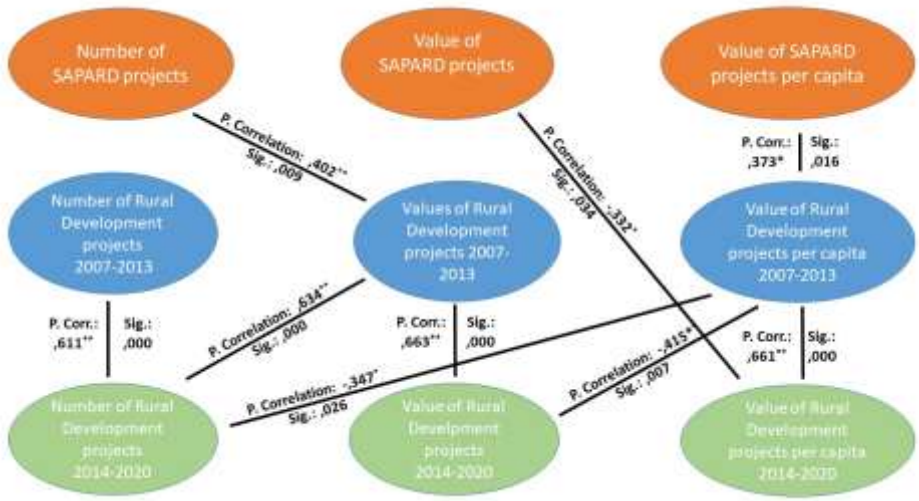
In conclusion, we can say that Harghita County only performs above average in terms of the value of applications per capita, with the value of applications being around average in all three periods and the number of applications being below average in all three periods.

Testing Hypothesis 1. The results of each rural development application cycle influenced the success of applications in the following period in terms of the number and value of applications – *tested using correlation calculations*.

When testing the first hypothesis, I examined the correlation between the number and value of SAPARD and rural development grants and the per capita values. The results show a significant relationship between the number of SAPARD applications and the value of rural development grants. The positive relationship between the number of SAPARD applications and the value of rural development grants may indicate a "learning" effect, i.e., in counties where they learned how to apply properly through many smaller applications, they also drew down large funds in the following period.

Examining the correlation between the 2007–2013 and 2014–2020 periods, I found that almost all values correlate with the previous period. There is also a correlation between the number and value of grants and the per capita value. This result shows that those counties that applied effectively for rural development funds in the previous period were also able to be effective in the following period. In other words, those who learned how to apply in the previous period and were

able to allocate the appropriate administrative capacity and resources were able to apply effectively in the following period as well.



P. Correlation= Pearson Correlation

Sig= Sig. (2-tailed)

Figure 2. Impact of rural development applications on applications for the following period

Source: own compilation based on correlation calculations.

I compared the pre-accession SAPARD applications with those for the 2014–2020 period and found that there is less correlation between the SAPARD period applications and those for the 2014–2022 period, only the value of rural development support per capita and the value of SAPARD applications show some slight correlation. This is possible because those who were able to draw down high-value applications in the first round probably have the administrative capacity and financial resources to draw down further high-value applications. We can say that the results of the previous period have a stronger influence on the results of the next period, and this correlation can be seen across two cycles.

Therefore, I consider the first hypothesis, according to which the results of certain rural development application cycles influenced the successful application

activity in the following period in terms of the number and value of applications, to be true.

Testing Hypothesis 2. Economic and social conditions, as well as the logcal government of the municipality, had a positive influence on the assessment of the availability of rural development funds, which I conducted using a *questionnaire and interviews*.

In the questionnaire, the following topics were covered: on the one hand, I asked about the financial capabilities of the municipality and the availability of its own resources. On the other hand, I mapped out the willingness to pay taxes and the indebtedness of the local government. In terms of social factors, I mainly asked about the human resource capacity and administrative capacity of the local governments. The number of plans prepared and implemented (both EU and non-EU applications) were taken into account. During the analysis the size of the populatin was also accounted for. The analysis of the data revealed that settlements with fewer than 2,500 inhabitants, which have few resources of their own and weak human and administrative capacities, are at a significant disadvantage in all types of publicly announced grant schemes. The interviews confirmed this finding and even drew attention to the fact that the mayor can play a crucial role in this system, while other positive factors include proper planning and project management capacity. Continuity over time and municipal leadership across multiple cycles may also be important for the implementation of projects and plans and for forward planning, as the planning and implementation of projects does not necessarily fit within a single government cycle.

Therefore, we can say that the second hypothesis has two outcomes:

If the municipality has more than 2,500 inhabitants, sufficient financial resources, administrative human resources capacity, and leadership, then it can positively influence the success of applications; if the opposite is true, then these factors will have a negative impact on the ability to draw down and access funds.

Testing Hypothesis 3. Rural development funds have had a positive impact on the local economy.

3.1. The drawdown of rural development funds had a positive impact on the areas concerned: This was analyzed mainly using statistical data at county level, with correlations between infrastructure indicators and the agricultural and tourism sectors. First, the results of the relationship between infrastructure indicators and rural development will be presented.

For the 2007–2013 period, there is a strong correlation between the number and value of infrastructure projects and the length of public roads, and there is also a significant correlation between changes in the sewage network and the number and value of infrastructure projects. During this period, it was possible to draw on financial resources for the development of rural settlements through complex tenders and other means, which is why the changes in the length of public roads and sewage networks were so spectacular.

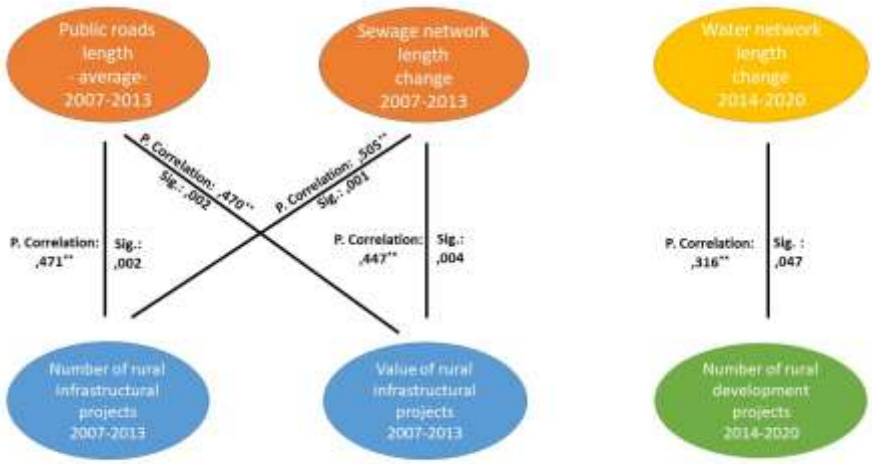


Figure 3. Correlation between infrastructure indicators and tender indicators between 2007–2013 and 2014–2020.
Source: own compilation based on correlation analysis data

In the 2014–2020 period, tenders for the expansion of infrastructure in rural settlements could be of high value, as it was possible to expand the road network, sewage network, and water network simultaneously. This opportunity explains the significant correlation between all three relevant infrastructure indicators and the value of public sector tenders for the 2014–2020 period.

In the data series for tourism tenders, there is a positive correlation between the number and value of tenders and the number of tourist accommodations, but it did not make up for the decline in accommodations. In the case of correlations between tourism indicators and applications for the 2014–2020 period, I supplemented the data for the application system for 2022 in order to eliminate the impact of COVID. In the 2014–2022 period, the results of the application correlation analysis in the field of tourism show that there is a positive correlation between the total number of applications and changes in tourist accommodation structures, as well as the number of nights spent.

In the case of agricultural subsidies, I examined the changes for all animal species, land areas, and agricultural machinery, but I only found a very strong positive correlation between changes in cattle numbers and the value of subsidies. In the previous period (2007–2013), there was a significant positive correlation between changes in cattle numbers and rural development subsidies, but in the 2014–2020 period, there was no significant relationship between cattle numbers and subsidies. This is possible because large farms were largely established in the previous period and capacities stabilized (also thanks to milk quotas), and smaller farms that ceased to exist in the meantime were replaced by newer farms. In the 2007–2013 period, there was a significant correlation between agricultural machinery, the number of agricultural tractors, and rural development subsidies. In the 2014–2020 period, tenders were also announced for the purchase of machinery for both large and small farms. At the statistical level, there is a positive significant correlation between the average number of agricultural

machines and tractors and subsidies, which can be observed for almost all relevant subsidies.

In Romania, combating drought caused by climate change has recently become a priority, with special support being given to watering systems. There is a correlation between the average value of irrigation systems and the value of grants, as well as between the value and number of grants financing watering systems.

In the 2014-2020 period, I found no correlation between the indicators for bee colonies, medicinal herb growers, and berry crops and the grant values.

3.2. In Harghita County, the impact of rural development funds on local economic development is less pronounced, while factors related to social well-being are more evident in the 2000–2020 period – *tested using the questionnaire*. To examine this, I asked whether respondents agreed with the following questions in Figure 4.

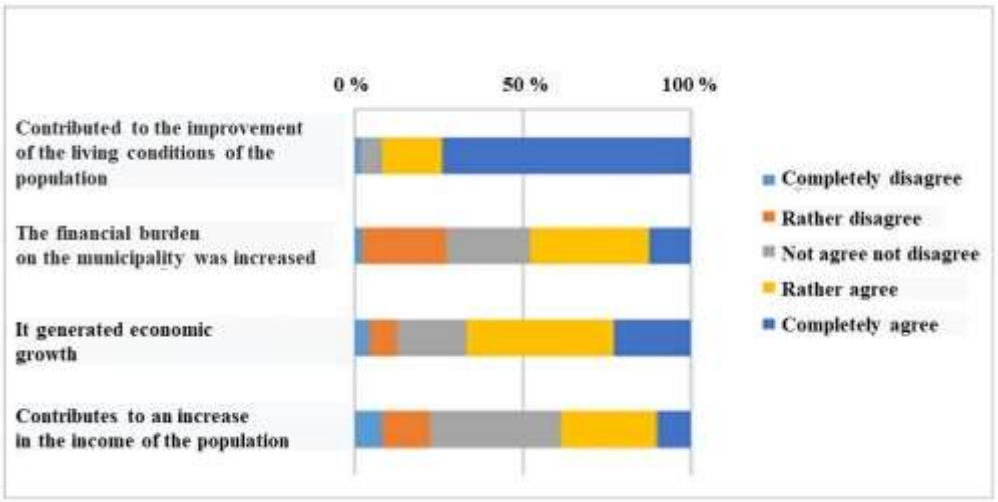


Figure 4: Distribution of responses to the question "Do you agree with the following statement?"

Source: own compilation based on the processing of the questionnaire

As shown in Figure 4 above, mayors highlighted the improvement in living conditions as the most significant impact of rural development projects. Thus, the hypothesis that the use of rural development funds by local governments had a positive effect on well-being but less of an impact on the local economy appears to be confirmed. The mayors' seemingly subjective assessment is supported by statistics, as we rank last in the county in terms of income, while infrastructure provision has increased significantly. The number of settlements with water supply increased from 26 to 51, and the number of settlements with sewage systems increased from 5 to 40 between 2000 and 2020 (ADR Centru 2024).
Therefore, I consider both statements of the third hypothesis to be true.

Testing Hypothesis 4. Considering the results (number and value) of rural development tenders and taking into account other economic indicators (GDP, unemployment rate), we can form five distinct groups among the counties. *Cluster analysis was used to examine them.*

Cluster analysis is a dimension reduction procedure that allows us to classify observations into similar groups (Sajtos-Mitev 2007). It is very important that relevant variables can be theoretically justified in the data set, as this determines the result. I used the same indicators for the three periods: tender values, number of unemployed, number of active companies, size of agricultural area, rural population, GDP per capita.

When examining the outliers, I noticed that Bucharest and Ilfov counties differ in every respect. Therefore, I removed Bucharest from the database so that it would not distort the values. I removed Ilfov County during the Sapard period because, during this period, many companies moved their headquarters to Ilfov County due to tax breaks, but in reality, they operated in Bucharest (which changed in the following period, and I took this into account). If data shows different units of measurement, standardization is necessary, in which the average is subtracted from the individual values and the difference is divided by the standard deviation

(the average of the standardized scale is 0, the standard deviation is equal to one, positive values are above the average, negative values are below the average). Standardization was also necessary in my database, so standardized values were used for all three data sets in the next phase of the analysis. The data standardization method was the Z score procedure, which essentially involves subtracting the mean from the values and then dividing the difference by the standard deviation. It is important to filter out variables with very high (above 0.9) correlation coefficients, as using the two together leads to distortions (Sajtos et al. 2007). Checking this condition showed that the data was suitable for correlation analysis. K-means cluster analysis was used, which is used when the number of clusters is specified in advance. In line with the hypothesis, I started with five clusters. In the case of cluster analysis, the number of clusters was selected according to two criteria: firstly, that the clusters formed should be easily interpretable and reflect economic reality, and secondly, that the map representation should be transparent. After several cluster analysis experiments, I saw that clusters 5 and 4 were not very relevant to reality, and the three-way division produced the expected results. After 4 iterations, three clusters emerged, which were named leading, advanced, and slow-moving counties.

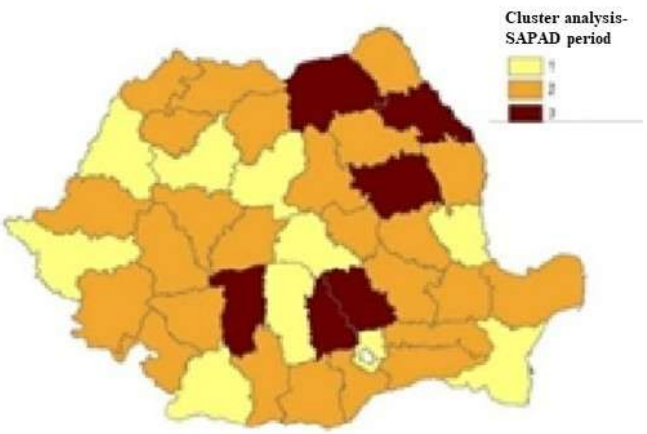


Figure 5. Results of cluster analysis for the SAPARD period

Source: own compilation based on SPSS data analysis results

During the Sapard period, the three clusters had the following characteristics:

- The members of the cluster shown in light yellow represent the "group of leading counties" which are more developed and successful in applying for funding.
- The "group of intermediate counties" is shown in orange. These are not necessarily underdeveloped counties, but rather counties that, according to the cluster analysis, are experiencing a temporary loss of their central role due to the sectoral changes caused by the transition and the transformation of spatial economic hubs (e.g., Iasi, Bihar). Due to structural change and the slowdown in industrial activity, unemployment will be high in these counties. The orange cluster includes counties that are good candidates, with an above-average rural population. The GDP per capita, the number of active companies, and the number of unemployed are all around average. We can say that these are counties with average economic performance that are good candidates.
- The dark brown color represents the group of "slow movers" or those who are falling behind: those with above-average agricultural land, but who are less effective in drawing down rural development grants.

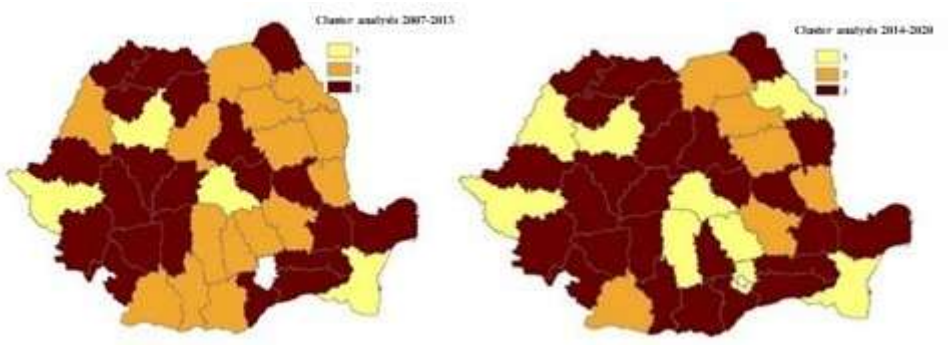


Figure 6. Results of cluster analysis for the periods 2007–2013 and 2014–2020

Source: own compilation based on SPSS data analysis results

- The "leading counties" marked in light yellow are actually developed and have strong urban centers.
- The counties marked in orange, labeled "intermediate", can be briefly described as moderately developed and good applicants.
- The "slow movers" cluster members, marked in dark brown, are economically disadvantaged counties that are not good applicants. This cluster has 14 members, including Harghita County.

The *leading counties* are characterized by the highest project value and a good number of projects, with a medium rural population and medium unemployment rate. They have the highest number of active companies, GDP per capita, and agricultural area.

Characteristics of the *progressive* counties: they are the best in terms of the number of projects, have high unemployment and rural population, and are average in terms of total project value, GDP per capita, and number of active companies.

Slowly developing counties are last in all terms. Bihar and Sibiu counties are also included in this cluster, even though economically they would not belong here; this can be explained mainly by their poor performance in tenders.

Clusters for the 2014–2020 period

1. *Leading counties* (light yellow). What is interesting about this group is that their number has increased compared to the previous cycle. This cluster includes developed counties. Looking at the counties, we can see that these were the classic regional centers, which regained their central role in the economy after the transformation and decline caused by the transitional regime change (Iași, Bihar).

2. The members of the cluster marked in orange, i.e., the *transitional counties*, perform better economically. The *advanced counties* have an above-average

number of active companies, but this does not yet raise their economic performance above average, i.e., they perform below average in terms of GDP per capita. They have above-average rural potential, as the size of the agricultural area and the rural population are also above average, but despite this, the number of rural development applications submitted is below average. The number of registered unemployed is above average here.

3. Harghita County reinforces the group of *lagging, slow-mover* counties. The group marked in brown shows below-average performance in all areas.

In conclusion, although the lagging counties received significant rural development and agricultural subsidies, they were unable to override the "direction of development", which strengthens urbanized centers and leads to rural decline. The subsidies have mainly reduced the extent of the decline or, in the best case, helped to maintain the backwardness.

Therefore, I reject the fourth hypothesis that we can form five groups.

Testing Hypothesis 5. Intermediary integrating institutions play an important role in the sustainability of rural development funds.

Hypothesis 5.1., according to which Harghita County Council actively contributed to the implementation of rural development programs, was verified by means of the *questionnaire and interviews*.

Based on the evaluation of the questionnaires, Harghita County Council contributes to the development of the settlements in Harghita County through numerous programs, tenders, and practical assistance. Respondents consider the role of the County Council to be important, and according to small settlements (with less than 2,000 inhabitants), the Harghita County Council is a very important factor in maintaining tenders and operational frameworks. The mayors surveyed consider the integrative role of the county council and its complementary function to be significant. This could be further strengthened and extended to other sectors (tourism, agriculture). At the same time, financial

contributions are also very important, especially in co-financing and bridging budgetary problems (e.g., repaying loans caused by tenders, resolving imbalances).

Local leaders, especially in small settlements, perceive the grant opportunities offered by the County Council as indispensable and effective assistance, which they consider to be simpler. Larger settlements tend to consider it important in maintaining contacts and lobbying assistance in bureaucratic systems.

Therefore, I consider Hypothesis 5.1 to be true.

5.2. The LEADER program contributes less to the development of the local economy than to the formation and long-term maintenance of local communities in Hargita County – this was also examined with the *questionnaire and interviews*.

Summarizing the research results related to LEADER, we can say that in Romania, the bottom-up condition of the LEADER program is not fully met; the program's operational framework is actually implemented within the conditions of the Rural Development Program, with double controls and checks, which makes its operation very difficult. In assessing LEADER activities in Harghita County, it is most apparent that local government leaders consider it a good idea, but feel that it is not functioning as intended. The program's spectacular results are also sabotaged by the small budget available. Local action groups consider cooperation between local offices and local governments to be the most appropriate, while civil society organizations and local economic actors are the least integrated. Cooperation plays an important role, and in settlements with fewer than 2,000 inhabitants, it can also play an important role in obtaining information and supplementing human resources for projects. More than half of those surveyed did not consider the impact of the program to be significant or noticeable, or considered its impact to be very limited. This may be possible because the programs were not adequately tailored to local needs, so what is most lacking is a better mapping of local needs and better preparation of programs.

Looking ahead, mayors are thinking primarily about infrastructure investments and tourism development, although they also recognize that what is most needed is the development of the local economy.

I consider the assumption that the LEADER program contributes less to the development of the local economy than to the formation and long-term maintenance of local communities to be true.

5. CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER SCIENTIFIC RESEARCH

The research method and the research itself can be repeated in other rural areas in Hungary by expanding the geographical focus, but also at the international level for comparison purposes, where local conditions are similar.

I recommend repeating the questionnaire in order to measure the impact of the projects and any changes, and to monitor the development of qualitative background factors.

It is advisable to measure the impact of the applications, perform cluster analysis, and calculate relevant correlations in the next period and beyond.

I recommend mapping the deeper social and economic trends in rural settlements and the impact of rapid technological change so that policy recommendations can be made for specific rural development projects.

One of the current trends is the rapid digitization and development of artificial intelligence and its far-reaching impact. It would be necessary to assess the digital divide between villages and cities in advance, then propose and implement measures to address it.

With regard to local products, short food chains, and the circular economy, I consider it necessary to map the opportunities and obstacles in rural areas and to formulate policy recommendations.

<u>Policy recommendations:</u>

When announcing calls for proposals and developing the application system, it is essential to map the status of each related sector and to consider and estimate the impacts in advance.

The systems created before accession have become obsolete, and the systems created from EU grants need to be continuously upgraded. A source of funding and a tender framework would be needed to cover these maintenance costs.

Experience is important for continuous development and effective applications, so where possible, larger, even regional applications could be announced for the cooperation of several municipalities to solve a major regional infrastructure problem, in which small and less experienced municipalities can also participate and learn and gain experience during the participation process.

Since small municipalities are unable or find it difficult to apply on their own due to staff shortages, it would be important to establish an institution (perhaps subordinate to the county council) to assist these small municipalities in the application procedures.

It is essential that the warranty conditions be presented to the contractor. Conditions must be set for contractors to prove that they have the appropriate professional and personnel resources to carry out the project.

In terms of planning, it is important that the planner has adequate local knowledge, or, if this is not the case, that they can be compelled to conduct a realistic survey of the situation. Any errors remaining in the plans should be able to be corrected in a timely and relatively simple manner, even in a registration system.

For the sake of transparency, an internal digital registration system would be required.

As the tender process is very slow, from planning to completion, and the real economic situation can greatly override the original plans, the framework for modifying tenders should be rethought and simplified.

I have a separate proposal concerning the improvement of the tender budget. It should be possible to improve and correct it, albeit at the expense of the central government to the extent of inflation.

In many cases, contractors are difficult to hold accountable after the fact, and they also have difficulty performing warranty work. I recommend creating a platform where public procurement projects, follow-up activities, and inspection activities can be rated.

Rural development tender systems lack tenders that would provide solutions for the aging population in rural areas and prevent digital exclusion. Examples include village caretaker opportunities or "half-day" retirement homes.

Helping older people catch up with digital systems through education and assistance by creating appropriate services.

Higher levels of government, such as county councils, could take a more proactive role and help local governments become more competitive applicants (this would be most helpful to smaller local governments) by providing a larger and more flexible framework for preparing applications. This could take the form of a financial framework, a tender framework, or even a separate organizational unit.

Support should also be found for real and functioning cooperation initiatives that have already been implemented in the regions, including LEADER, especially those that strengthen existing local social networks.

6. NEW SCIENTIFIC RESULTS

Longitudinal mapping of the Romanian rural development policy

One of the novelties of the dissertation is that it comprehensively examines Romanian rural development policy from the pre-accession SAPARD program to the present day. The contribution of the research lies in demonstrating that the performance of previous periods in terms of applications (number and value) had a decisive influence on the results of fund utilization in subsequent program periods.

Empirical verification of the impact of rural development funds

The scientific result of the dissertation is that it proved the positive impact of the funds drawn down on the development of municipal infrastructure, the growth of agricultural performance, and the strengthening of tourism. A novelty is the exploration of the connections between the spatial dynamics of the drawdown of rural development funds and social restructuring.

Identifying factors determining the success of applications

The research contributes to identifying the factors influencing the effectiveness of funds utilization at the municipal level. The dissertation shows that leadership skills, administrative capacity, social trust, and cooperation are fundamental determinants of the success of grant applications.

Critical evaluation of the institutional framework and the LEADER program

The novelty of the dissertation lies in its complex analysis of the limitations of the LEADER program and other institutional mechanisms. The study highlighted the obstacles arising from the program's limited financial resource value and bureaucratic nature, and explored the importance of intermediate integrating institutions, such as county councils, in ensuring sustainability.

Identifying deficiencies in sustainability and formulating policy recommendations

One of the most important scientific findings of the dissertation is that it identified two serious shortcomings in the afterlife of projects: the lack of feedback opportunities for participants (e.g. designers, contractors, inspectors) and the unavailability of additional resources necessary for sustainability. Based on these findings, the dissertation formulates targeted policy recommendations for the further development of institutional operations, supervisory authorities, intermediate integrating organizations, and the LEADER program.

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