

## ***SUMMARY***

*Context and importance of the research: presentation of the relationship between educational capital and rural development in the north-east region of romania, and the relevance of the research.*

Rural development is a relevant topic in the face of economic, social, and ecological challenges such as youth migration and climate change. Regions like North-East Romania, which face risks, can benefit from cultural diversity and agricultural heritage. Educational capital is essential for forming a skilled workforce, enhancing professional skills, and promoting community cohesion.

Education—formal, non-formal, and informal—significantly contributes to the growth of human capital, influencing entrepreneurship and economic development in rural areas. Training programs tailored to local needs, such as those in sustainable agriculture, provide valuable opportunities (Essomba et al., 2020). Informal education strengthens social ties and community identity.

Our research will analyze the relationship between educational capital and rural development, considering challenges such as youth migration and the decline of agricultural jobs. We will highlight the importance of education in transforming communities into models of sustainability based on local values and innovation. Additionally, reconfiguring education to include improved access and innovative strategies that support vocational and entrepreneurial education in collaboration with local stakeholders will be necessary (Johnson et al., 2022).

Through a collaborative approach, we aim to create an educational framework that addresses the challenges of the North-East region, contributing to the formation of resilient rural communities. The results of the research will have a significant impact both in the academic environment and in local policy, thereby improving the lives of communities in the region.

*Objectives and hypotheses of the research*

Our research analyzes the relationship between educational capital and rural development in the North-East region of Romania, characterized by a predominantly agricultural economy and youth migration to urban areas. We aim to identify how formal, non-formal, and informal education contribute to the development of human capital and innovation in agriculture and other emerging sectors. The main objective is to propose sustainable development strategies tailored to the region's specifics, evaluating the impact of various forms of education on entrepreneurial initiatives and local development

Tabelul 0.1/ Table 0.1

Tabelul obiectivelor și ipotezelor temei de cercetare  
Table of research objectives and hypotheses

Chapter	Specific objective	Chapter hypothesis	Hypothesis demonstration	Methodology used
Chapter I: Theoretical Perspectives and Bibliometric Analysis of the Interdependence Between Education and Rural Development	Identify and analyze the fundamental theories about educational capital and rural development.	Educational capital is essential for the sustainable development of rural areas by stimulating social and economic progress.	1.1–1.5, bibliometric analysis.	Bibliometric analysis and literature review.
Chapter II: Theoretical Foundation of the Relationship Between Educational Capital and Rural Development	Define the concept of educational capital and investigate its relationship with rural development.	The lack of quality education limits sustainable rural development.	2.1–2.5. Demonstration through case studies and theoretical examples.	Theoretical analysis, case studies, and empirical examples.
Chapter III: Evaluation of Rural Development Priorities Using the AHP Method	Apply the AHP method to prioritize rural development strategies based on education.	The AHP method allows for the identification of strategic priorities, rural education	3.1–3.4. Demonstration through practical application of AHP in the case study.	Hierarchical analysis using the AHP method, data collection, and surveys.
Chapter IV: Rural Development Through Education: Results of the SWOT Analysis and Strategic Directions for the North-East Region	Assess the educational situation in rural North-East through SWOT analysis	Investments in education and continuous training can reduce economic and social disparity.	4.1–4.4. Demonstration through SWOT analysis and interpretation of results.	SWOT analysis, expert interviews, and qualitative analysis.

Source: own elaboration

The table highlights the objectives of each research chapter and correlates the hypotheses with the methodology used, clarifying the relationship between educational capital and rural development in Romania's North-East region. The research will address the following essential aspects:

1. Impact of education on the labor market: investigating how educational capital contributes to reducing unemployment and stimulating rural entrepreneurship through empirical data and case studies.
2. Access to quality education: assessing gaps in educational infrastructure through a SWOT analysis.
3. Effectiveness of educational strategies: proposing innovative solutions tailored to the rural context, including comparative studies.
4. Resource prioritization via AHP method: using the Analytic Hierarchy Process (AHP) method to evaluate investments in education.

Through these dimensions, the research will provide valuable insights for developing sustainable policies and strategies for the North-East region of Romania.

*Research methodology* - The research methodology outlines the set of methods and techniques used to explore and analyze the relationship between educational capital and rural development in Romania's North-East region. This multidimensional methodological approach combines complementary quantitative and qualitative methods to ensure a thorough and nuanced understanding of the research topic. This combination enables not only rigorous data collection but also contextualized interpretation, providing a comprehensive view of how educational capital influences the development of rural communities.

*Bibliometric analysis* - The bibliometric analysis is fundamental to establishing a theoretical framework for our research on the relationship between education and rural development. This method enables us to evaluate existing scientific literature, identify relevant studies, and reveal research gaps. By gathering data from Google Scholar, we developed a comprehensive overview of educational capital and rural development. Correlating these findings with the realities of Romania's North-East region helps us formulate targeted strategies for the sustainable development of rural communities. Thus, bibliometric analysis serves as a critical tool in guiding the research, supporting initiatives that meet the needs of these communities.

*AHP (Analytic Hierarchy Process) method* - We employed the AHP method to evaluate and prioritize criteria for education-based rural development, structured across three levels: main objective (sustainable rural development), evaluation criteria (education, infrastructure, and human resources), and sub-criteria (education access and vocational training). Data for the AHP analysis was collected via questionnaires distributed to experts, who assessed the criteria through pairwise comparisons, with consistency verified using the Consistency Ratio (CR). This approach enabled us to calculate priority vectors and establish a hierarchy of criteria. The results contribute to identifying strategic priorities for educational investments in rural areas, providing a solid foundation for policy decisions and supporting improved living conditions and educational opportunities.

*SWOT analysis questionnaire* - The questionnaire was the primary tool for SWOT analysis, evaluating internal and external factors impacting educational capital and rural development in the North-East region. Structured into four sections — Strengths (educational infrastructure), Weaknesses (limited access to education), Opportunities (EU funding), and Threats (youth migration) — it was distributed to stakeholders, including experts and local authorities. The analysis provided insights for developing relevant educational strategies and effective policies for rural community development.

Through bibliometric analysis, the AHP method, and SWOT analysis, we created a rigorous framework for investigating the relationship between educational capital and rural development. These methods allowed us to identify relevant studies,

establish strategic priorities, and highlight the strengths and weaknesses of rural education, thus contributing to the formulation of strategies tailored to the specific context of Romania's North-East region.

#### *Summary of thesis chapters*

The thesis examines the link between education and rural development, emphasizing the role of educational capital in sustainable growth. Against the backdrop of global economic and social challenges, education emerges as essential for innovation and poverty reduction. This study uses analytical methods like AHP (Analytic Hierarchy Process) and SWOT analysis to evaluate the opportunities and challenges within Romania's North-East region, aiming to develop strategies that enhance the quality of life and socio-economic conditions in rural communities.

The first chapter, "Theoretical Perspectives and Bibliometric Analysis of the Interdependence Between Education and Rural Development," provides the theoretical foundation necessary to understand the education-development relationship. It introduces key concepts of educational capital and rural development, highlighting their relevance. This chapter examines the impact of educational investment on individual skills, social cohesion, economic growth, and environmental sustainability. Exploring theories of human, social, and cultural capital, it underlines the importance of training, social networks, and cultural values for community development. Bibliometric analysis identifies influential works and authors in the field, outlining research trends and knowledge gaps, laying the groundwork for assessing the role of education in sustainable rural development and informing strategies tailored to Romania's rural communities.

The second chapter, "Theoretical Foundation of the Relationship Between Educational Capital and Rural Development," delves into the positive influence of education on the economic, social, and cultural aspects of rural areas. It shows how a robust educational system not only improves individual skills but also strengthens community cohesion. Through relevant theoretical models, this chapter discusses how educational capital fosters human capital formation, innovation, and rural entrepreneurship. Additionally, it explores rural development dimensions, including income diversification and community cohesion. Illustrative case studies demonstrate education's impact on rural development, offering real examples of both successes and challenges in implementing educational initiatives. The discussions in this chapter deepen understanding of the complex relationship between education and rural development, guiding well-grounded strategies for sustainable community growth. This holistic approach enhances the theoretical framework, providing practical directions for beneficial interventions in rural areas.

The third chapter, "Evaluating Rural Development Priorities through the AHP (Analytic Hierarchy Process)," presents the AHP method as a vital analytical tool for prioritizing rural development needs. It explains the step-by-step application of AHP for organizing complex decisions related to rural development. By breaking

down issues into criteria and sub-criteria, this method facilitates identifying the essential elements influencing strategic decisions. The chapter applies this method to Romania's North-East region, demonstrating how effective priorities can be set by gathering expert data and performing pairwise comparisons. This process helps clarify rural community needs and optimize resource allocation, supporting sustainable development. This chapter contributes valuable tools and frameworks for decision-makers, enhancing education policy design to meet regional needs. AHP highlights the importance of evidence-based decision-making, encouraging collaborative educational initiatives that help rural communities adapt to modern challenges and promote inclusive, sustainable development.

The final chapter, "Rural Development Through Education: SWOT Analysis Results and Strategic Directions for the North-East Region," uses SWOT analysis to assess internal and external factors influencing education-led rural development in this Romanian region. The analysis identifies strengths, such as educational infrastructure and teacher quality, and weaknesses, like limited education accessibility. It also examines opportunities, such as EU funding, and threats, like youth migration. Based on these evaluations, the chapter proposes strategic directions, including developing educational programs tailored to local needs and improving access to vocational training. These recommendations provide practical guidance for local stakeholders, supporting the sustainable development of rural communities. This chapter aligns with the thesis's main objective of improving rural quality of life through effective education, emphasizing the need for active collaboration among stakeholders for an integrated, sustainable development process.

Overall, the thesis highlights the interconnection between education and rural development, underscoring the importance of educational capital in achieving sustainable growth. The theoretical and bibliometric analysis in the first chapter establishes the foundation, while case studies in subsequent chapters identify challenges and opportunities in Romania's rural landscape. The AHP method assists in prioritizing initiatives, and the SWOT analysis provides a strategic framework for local stakeholders, advocating an integrated approach to rural education.

The chapters are interconnected, forming a logical narrative. A clear outline of relationships between chapters facilitates understanding, enhancing the clarity of the thesis and reinforcing its argument. This structure demonstrates the study's relevance to the fields of education and rural development, underscoring the importance of targeted strategies for regional growth.