
A MULTIDIMENSIONAL FRAMEWORK FOR UNDERSTANDING INSTITUTIONAL SUPPORT IN RURAL ENTREPRENEURSHIP

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ABSTRACT

This study investigates institutional perspectives on rural entrepreneurship in Bosnia and Herzegovina, addressing a significant gap in research on meso-level actors in post-socialist contexts. Using a structured survey of 43 institutional representatives, including ministries, municipalities, educational institutions, and development agencies, the study identifies key enablers and barriers to rural entrepreneurship. Descriptive and multivariate statistical analyses (factor and cluster analysis) reveal heterogeneous institutional priorities, highlighting human capital, infrastructure, and product quality as critical drivers. Virtual training is seen as a viable tool for capacity building, especially in sustainable agriculture, tourism, and infrastructure. Results suggest that institutions differ in strategic orientation, ranging from holistic to pragmatic mindsets. These findings advance understanding of institutional logic in rural entrepreneurship and inform targeted policy design, digital training development, and ecosystem-level interventions aligned with community needs.

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Introduction

Rural entrepreneurship is increasingly recognized as a key driver of economic revitalization and contributes to the diversification of rural economies, helps counteract depopulation trends, and reinforces community resilience, especially in regions undergoing structural economic transitions (Fortunato, 2014; Kania et al., 2021; Masoomi, Rezaei-Maghaddam, 2024). Despite its transformative potential, rural entrepreneurship faces persistent barriers, including limited access to finance, skills, infrastructure, and institutional support mechanisms (Zaheri et al., 2025). Within this context, institutions (government bodies, local authorities, educational organizations, and development agencies) play a central role in shaping rural entrepreneurial environments. They influence regulatory frameworks, funding opportunities, knowledge transfer processes, and community engagement mechanisms (Urbano et al., 2025). The effectiveness of rural development policies largely depends on the alignment between institutional strategies and local needs (Esposti, Sotte, 2013; Aubert et al., 2025), as well as on institutions' ability to recognize and mobilize place-based assets such as cultural heritage and local identity (Vasta et al., 2019). However, existing evidence from the Western Balkans suggests that institutional responses to entrepreneurship are often fragmented, overly bureaucratic, and insufficiently aligned with the needs of rural communities (Williams, Gashi, 2022; Lica, 2024). This indicates that institutions are not merely supportive structures, but actors whose perceptions and priorities significantly shape entrepreneurial outcomes.

Bosnia and Herzegovina represents a particularly relevant empirical setting for this study due to its complex post-socialist trajectory and highly fragmented governance structure. The country operates under a multi-level administrative system characterized by overlapping competencies between state, entity, cantonal, and municipal levels, which often results in limited coordination and inconsistencies in policy implementation. In such a context, institutional actors play a disproportionately important role in shaping rural entrepreneurial ecosystems, as support mechanisms, funding opportunities, and development strategies are frequently decentralized and unevenly applied (Bubalo Živković et al., 2025). Moreover, rural areas in Bosnia and Herzegovina face persistent structural challenges, including depopulation, limited infrastructure, and constrained access to markets, further amplifying the importance of effective institutional support. These characteristics make the country a critical case for examining how institutional perceptions, priorities, and capacities influence the development of rural entrepreneurship. At the same time, Bosnia and Herzegovina reflects broader patterns observed across the Western Balkans, where post-socialist legacies, governance fragmentation, and policy-practice gaps continue to shape rural development trajectories.

For the purpose of this study, several key concepts are defined. Institutional actors refer to formal organizations involved in shaping and supporting rural entrepreneurship, including government bodies, local self-government units, educational institutions, and development agencies. These actors operate at different administrative levels and

perform roles related to policy design, implementation, funding allocation, knowledge transfer, and capacity building. Support mechanisms are the set of instruments, resources, and interventions through which institutions influence entrepreneurial development. In this study, they include financial support (e.g., grants, subsidies), educational and training initiatives (formal and non-formal learning), infrastructural conditions, regulatory and policy frameworks, and socio-cultural factors. Finally, virtual training refers to digitally delivered educational and capacity-building activities aimed at enhancing entrepreneurial knowledge and skills. This includes online courses, workshops, and training programs covering areas such as agriculture, tourism, digital services, and rural development.

While prior research has identified a broad range of enablers of rural entrepreneurship, including human capital, market access, infrastructure, and local resources (Wiggins, Proctor, 2002; Kujala et al., 2021; Mondal et al., 2024; Rudnicki et al., 2023), less attention has been paid to how these factors are interpreted and prioritized by institutional actors themselves. This represents a critical gap, as institutions act as intermediaries between policy design and local implementation, particularly in contexts characterized by governance complexity and resource constraints. Moreover, contemporary research highlights the increasing importance of place-based and sustainability-oriented approaches, where entrepreneurship is embedded in local identity and environmental stewardship (McLeod et al., 2024; Utami et al., 2023), further underscoring the need to understand how institutions conceptualize and support these processes. Further, education and training are widely acknowledged as essential components of entrepreneurial capacity building (Rawat et al., 2015; Almeida, Morais, 2025). In addition, the COVID-19 pandemic has accelerated the adoption of digital tools in entrepreneurship (Santos et al., 2023). Virtual platforms have been identified as a means to bridge geographic and institutional gaps in rural areas when tailored to local needs (Sindikis, Showkat, 2024). However, there is still limited empirical understanding of how institutional actors evaluate these educational and digital mechanisms, particularly in terms of their relevance for rural entrepreneurship development. At the same time, the existing literature has predominantly focused on the characteristics, motivations, and behaviors of rural entrepreneurs (Durrah et al., 2024; Heredia-Carroza et al., 2024; Mansingh et al., 2025), while the perspectives of institutions as key ecosystem actors remain underexplored. This gap is particularly evident in the Western Balkans, where only a limited number of studies have examined institutional roles in shaping entrepreneurial environments (Lica, 2024; Martinovska Stojcheska et al., 2024; Imangulov et al., 2024). Even less attention has been given to how institutions perceive non-formal education, experiential learning, and virtual training as instruments for rural development, despite their growing relevance in the context of digital transformation (Salemink et al., 2025).

To address these gaps, this study adopts an institutional perspective to examine how different actors perceive and prioritize support mechanisms for rural entrepreneurship in Bosnia and Herzegovina. The research is guided by the following questions:

- Which forms of support do institutional actors consider most relevant for developing rural entrepreneurship?
- How do perceptions of entrepreneurial support differ among various types of institutions (e.g., ministries, municipalities, educational institutions, development agencies)?
- To what extent do institutions value virtual training and education as tools for rural entrepreneurship development, and which topics are considered most important?

This study is theoretically grounded in institutional theory, which emphasizes the role of formal and informal structures in shaping economic behavior and organizational outcomes. Within this perspective, institutions are not merely background conditions but active agents that influence entrepreneurial activity through regulatory frameworks, normative expectations, and cognitive structures. This approach is particularly relevant in post-socialist and transitional contexts, where institutional arrangements are often characterized by fragmentation, path dependency, and evolving governance systems. In addition, the study draws on the entrepreneurial ecosystem perspective, which conceptualizes entrepreneurship as embedded within a system of interdependent actors, resources, and support mechanisms. Within this framework, institutions represent a core component that enables or constrains entrepreneurial dynamics through policy design, funding structures, and capacity-building initiatives. Finally, insights from governance theory are incorporated to account for the multi-level and often fragmented nature of institutional arrangements in Bosnia and Herzegovina. This perspective highlights issues of coordination, policy alignment, and institutional capacity, which are particularly relevant for understanding variations in how different actors perceive and prioritize support mechanisms. By integrating these complementary perspectives, the study adopts a multi-level analytical lens that allows for a more nuanced interpretation of institutional heterogeneity and its implications for rural entrepreneurship development.

Based on a survey of 43 institutional representatives, the study employs a multidimensional analytical approach combining descriptive statistics, factor analysis, group comparisons, and cluster segmentation. This approach enables understanding of institutional heterogeneity, revealing distinct strategic orientations, and implications for policy alignment. By repositioning institutions as active and differentiated agents rather than passive background structures, this research contributes to a more comprehensive understanding of rural entrepreneurial ecosystems. It advances theoretical insights into institutional logic in rural development while providing practical guidance for policymakers, NGOs, and training providers to better align support mechanisms with institutional capacities and local needs.

Materials and methods

Data collection and sample

A purposive sampling strategy was employed, targeting institutions directly involved in rural entrepreneurship support. The data for this study were collected through

a structured questionnaire distributed electronically, via emails to key stakeholders, including representatives of government ministries, development agencies, local municipalities, business support organizations, and educational institutions in Bosnia and Herzegovina. The data were collected in March and April 2024. A total of 43 institutional representatives participated in the study. Although the sample size is relatively modest, it reflects a specialized population of institutional actors that is inherently limited and difficult to access within a single national context. The sample included respondents from various sectors: government bodies (40%), local self-government units (25%), development agencies (20%), and academic or educational institutions (15%). The sample included 20 male and 23 female participants. In terms of age distribution, the majority (23 out of 43) were in the 36–55 age group. Regarding educational background, the majority (24 out of 43) held higher education degrees (faculty level).

Instrument design

The structure of the questionnaire was informed by existing literature on rural entrepreneurship and institutional support (e.g., Kujala et al., 2021; Mondal et al., 2024), ensuring content validity. The internal consistency of the instrument was assessed using Cronbach's alpha, with values exceeding the acceptable threshold of 0.70. The questionnaire was designed to capture both demographic information and evaluative responses across multiple thematic domains relevant to entrepreneurial development in rural areas. The first section of the instrument collected basic demographic information. The core of the questionnaire consisted of a series of grouped items organized into nine thematic categories, each reflecting a different dimension of entrepreneurial support or challenge. Respondents were asked to evaluate the relative importance of each factor on a five-point Likert-type scale (from 1 = least influential to 5 = most influential). The thematic categories included:

- *Education-related factors*, such as studying entrepreneurship in formal education, informal learning, and internships.
- *Financial support mechanisms*, including grants, guarantee funds, tax incentives, and subsidized loans.
- *Institutional cooperation and partnerships*, such as collaboration with suppliers, customers, state institutions, and professional associations.
- *Public policies and regulatory conditions*, including ease of business registration, corruption, property rights, and tax relief.
- *Market strategy and product quality*, including workforce qualifications, product standards, marketing, and market awareness.
- *Socio-cultural barriers*, such as gender and age biases, environmental concerns, and rural quality of life.

- *Natural, cultural, and infrastructural resources*, including local traditions, tourist potential, and infrastructure availability.
- *Personal attributes of entrepreneurs*, such as resilience, prior experience, family support, and risk tolerance.
- *Training needs and virtual education topics*, which assessed respondents' perceptions of priority areas for capacity-building.

Data analysis

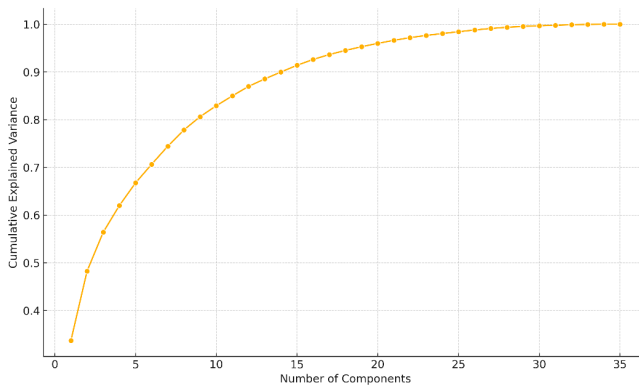
The collected data were analyzed using a combination of descriptive and inferential statistical techniques, aimed at uncovering patterns in institutional perceptions of rural entrepreneurship. All data were first screened for completeness and consistency. After the cleaning process, the responses were coded and entered into statistical software for analysis (SPSS Statistics software). Descriptive statistics were used to summarize the overall importance of various barriers and enablers, allowing for the identification of the most and least influential factors as perceived by the institutional respondents. Given the exploratory nature of the study and the absence of a predefined factor structure, exploratory factor analysis (EFA) was considered more appropriate than confirmatory techniques. The aim was to identify underlying patterns in institutional perceptions rather than to test an established theoretical model. Factor retention was guided by multiple criteria, including eigenvalues greater than 1, inspection of the scree plot, and interpretability of the factor solution. Only variables with factor loadings of $\geq |0.40|$ were retained for interpretation. Factor extraction was performed using principal component analysis with varimax rotation. To examine whether perceptions differed across institutional types, analysis of variance (ANOVA) was applied for normally distributed data, while Kruskal-Wallis tests were used as non-parametric alternatives when normality assumptions were not met. Finally, cluster analysis was employed to segment respondents into homogeneous groups based on their response patterns. This allowed for the identification of typologies among institutional stakeholders and provided insight into shared perceptions and strategic orientations.

Results

The descriptive analysis revealed that institutional representatives place the greatest importance on personal competencies, product quality, and basic infrastructure as key enablers of rural entrepreneurship. Among all rated factors, the highest mean score was attributed to personal attributes of entrepreneurs, such as persistence, goal orientation, and willingness to work hard (mean=4.51, SD=0.80). This was followed by product and service quality (mean=4.44, SD=0.73), production of healthy food (mean=4.35, SD=0.90), and communal infrastructure as a prerequisite for rural development (mean=4.30, SD=1.06). In contrast, lower average scores were typically observed for factors such as intangible cultural values and promotional activities, indicating that while these are recognized as relevant, they are perceived as less central in shaping rural entrepreneurial ecosystems.

To identify underlying dimensions in institutional perceptions of rural entrepreneurship, an exploratory factor analysis (EFA) was conducted using principal component analysis with standardization. Prior to extraction, the dataset was screened for completeness, and only numerical responses were included. The results indicated that the first several components explained a substantial portion of the variance. As shown in *Figure 1*, the first five to seven components accounted for a significant cumulative variance before the curve plateaued, suggesting this range captures the most meaningful factor structure. Based on these results, the next analytical steps focused on interpreting these retained components by examining factor loadings and grouping conceptually related items. This allowed the identification of key latent dimensions.

Figure 1. Cumulative explained variance by principal components



Source: Authors

To explore the structure of institutional perceptions, five latent components were extracted (*Table 1*). The first factor was characterized by high negative loadings from items related to entrepreneurial education and knowledge transfer, suggesting that Factor 1 represents an *Entrepreneurial Skills and Training* dimension, reflecting the perceived importance of education-related enablers. The second factor reflects a *Skepticism Toward Non-Formal Education*, capturing reservations about the effectiveness or presence of such training formats in the rural context. Factor 3 *Limited Role of Cultural Assets* reflects a perception among some institutional actors that while cultural heritage may enrich rural identity, it is not seen as a core driver of entrepreneurship. Factor 4 *Preference for Practical Learning* contrasts negative views toward formal entrepreneurship education with more favorable attitudes toward practical learning opportunities, such as internships or volunteering. Factor 5 *Limited Trust in R&D Support* reflects ambivalence or limited confidence in institutional mechanisms for translating innovation into rural entrepreneurship support.

To investigate whether institutional affiliation influences the perceived importance of different factors in rural entrepreneurship, a series of Kruskal–Wallis tests were conducted. The sample was segmented into four institutional types: government bodies,

local self-government units, development agencies, and educational institutions. The analysis identified two statistically significant differences in perceptions (*Figure 2* and *3*).

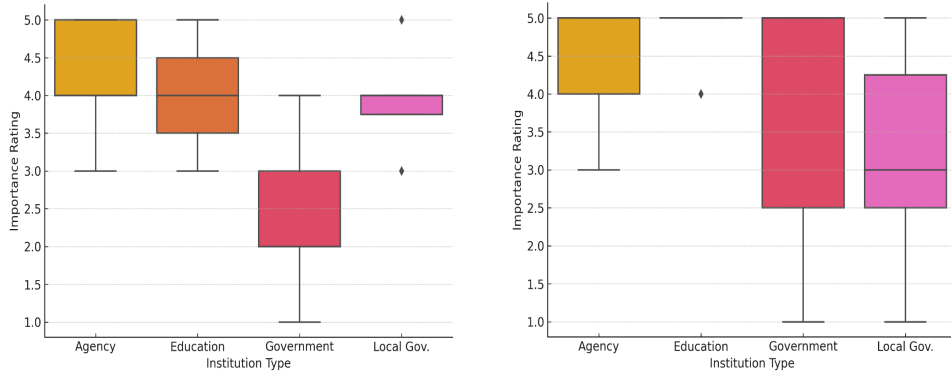
Table 1. Summary of retained factors from exploratory analysis

Factor	Label	Key items	Interpretation
Factor 1	Entrepreneurial Skills and Training	Studying entrepreneurship, practical experience, knowledge transfer, business incubators	Highlights the importance of education, applied learning, and infrastructure for skills development.
Factor 2	Skepticism Toward Non-Formal Education	Informal education, studying entrepreneurship	Reflects critical views on the effectiveness or accessibility of non-formal learning.
Factor 3	Limited Role of Cultural Assets	Intangible tourist values (traditions, customs, hospitality)	Suggests skepticism about the role of cultural heritage in fostering entrepreneurship.
Factor 4	Preference for Practical Learning	Practical training, formal education (negative), volunteering	Emphasizes hands-on learning over classroom-based approaches.
Factor 5	Limited Trust in R&D Support	Knowledge transfer from R&D	Indicates modest belief in the value of research-based support mechanisms.

Source: Authors

There was a notable divergence in how institutions assessed the value of intangible tourist resources, such as local traditions, hospitality, cultural customs, and folklore ($H=13.20, p=0.004$). Educational institutions and development agencies tended to rate these cultural elements as more influential in fostering rural entrepreneurship, likely due to their closer engagement with community-level narratives and place-based identity. In contrast, representatives from ministries and local governments rated these factors as less impactful. This suggests that cultural assets, while less emphasized in national policy frameworks, are seen by some actors as important vehicles for tourism-related entrepreneurship and local branding. Second, significant differences emerged in perceptions of financial benefits, specifically *fiscal incentives such as reduced taxes and levies* ($H=7.93, p=0.048$). Government institutions tended to view these incentives as highly relevant policy tools for encouraging entrepreneurial activity, while respondents from educational institutions and agencies placed slightly less emphasis on their direct impact. This may reflect a difference in institutional proximity to policy implementation.

To identify underlying patterns in how institutional stakeholders perceive the enablers and barriers of rural entrepreneurship, a cluster analysis was conducted using the K-means algorithm. The aim was to segment respondents into groups based on similar response patterns, offering deeper insight into shared institutional mindsets. A silhouette analysis was performed to determine the optimal number of clusters. The analysis indicated that a solution with two or three clusters provided the best structure, with the highest silhouette values observed at these points.

Figure 2. Perception of intangible tourist values **Figure 3.** Perception of financial incentives

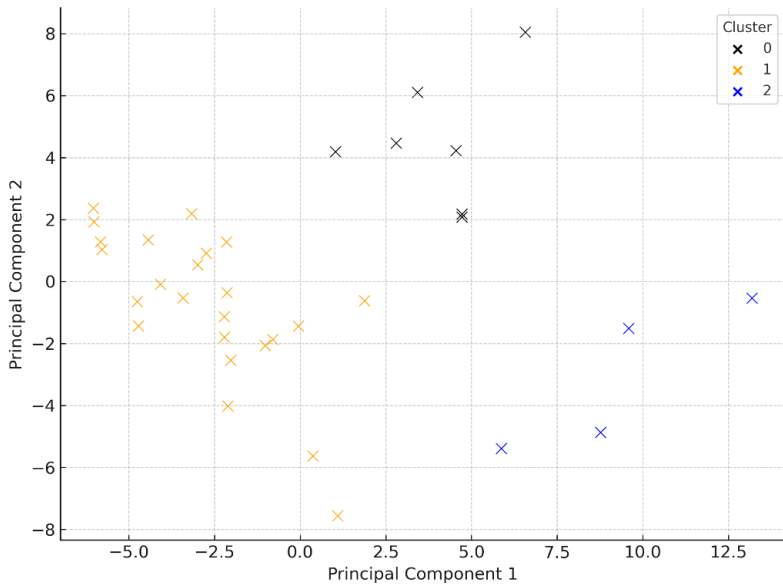
Source: Authors

Based on these results, a three-cluster solution was selected for further interpretation. Preliminary profiling of the clusters revealed meaningful distinctions in perception patterns (Figure 4):

- Cluster 1 stands out as the most engaged and supportive group, consistently assigning high importance to a wide range of entrepreneurship enablers. These institutions strongly value both formal education (mean=4.12) and informal learning opportunities (4.04), indicating a belief that structured training plays a central role in preparing rural entrepreneurs. They also place exceptional emphasis on practical experience through internships and volunteering (4.62). Furthermore, they rate highly the importance of knowledge transfer from research and development institutions (4.25), pointing to a systemic, infrastructure-based view of support. This cluster represents institutions that adopt a comprehensive, long-term perspective on entrepreneurship, embracing both human capital development and structural support mechanisms.
- Institutions in Cluster 2 adopt a more moderate and selective stance. While they acknowledge the relevance of formal education (3.50) and informal training (3.25), their support is tempered, suggesting a view that these inputs are useful but not transformative on their own. Notably, they show a lower emphasis on experiential learning (2.75) and knowledge transfer from R&D (2.50), possibly due to concerns about accessibility, quality, or local applicability of such resources. Cluster 2 likely represents institutions that operate under resource constraints or policy limitations, and therefore prioritize more immediate, tangible forms of support over broader structural interventions.
- Cluster 0 is characterized by a pragmatic yet somewhat skeptical approach to entrepreneurship development. These institutions rate experiential learning relatively high (3.71), suggesting they recognize the value of hands-on experience. Their scores for formal education (2.43) and informal learning

(2.71) are among the lowest, hinting at doubts about the effectiveness or relevance of existing educational models in rural settings. This cluster may include local government actors or smaller agencies.

Figure 4. Clustered institutional perceptions of entrepreneurship enablers (PCA projection)



Source: Authors

In addition to evaluating structural and institutional enablers of rural entrepreneurship, the questionnaire asked institutional representatives to assess the relevance of various training topics for virtual delivery. The results reveal strong institutional support for training focused on sustainable and practical topics. The highest-rated area was *Production of healthy food* (4.35), underscoring the alignment between rural entrepreneurship and the growing demand for health-conscious, locally produced goods. This was followed closely by *Communal infrastructure as a prerequisite for rural development* (4.30), indicating the importance of educating stakeholders about foundational services and facilities that support entrepreneurial growth. These responses point to a clear institutional preference for training programs that are not only relevant to rural economies but also actionable and directly linked to place-based identity and tourism potential.

Discussions

Consistent with previous research (Khlystova et al., 2022; Radosavljević et al., 2022), this study confirms the foundational importance of human capital, particularly the role of personal entrepreneurial attributes such as resilience, goal orientation, and willingness to work hard. These qualities received the highest overall rating

(mean=4.51), underscoring their perceived universality in fostering successful entrepreneurial ventures in rural settings. Unlike studies conducted in more urbanized or economically diverse rural areas (Li et al., 2019; Dziekański, Prus, 2020), this research reveals a slightly different prioritization. While access to finance was rated highly, themes closely aligned with place-based development and local identity, as seen in studies on sustainable rural entrepreneurship (Soleymani et al., 2021; Shao et al., 2024; Rajsinghot et al., 2024). These results may reflect Bosnia and Herzegovina's transitional economic environment.

A particularly noteworthy contrast with broader European findings is the relatively low prioritization of intangible cultural values, such as local traditions and hospitality (Knapik, Król, 2023; Shakya, Vagnarelli, 2024). This finding can be interpreted through several complementary perspectives. First, it may reflect a policy gap, whereby cultural assets are insufficiently integrated into formal rural development and entrepreneurship strategies. In such contexts, institutional frameworks tend to prioritize measurable economic outputs, such as employment, infrastructure, and financial incentives, while the potential of cultural heritage as a driver of entrepreneurship, particularly in tourism, is underutilized. Second, the relatively low valuation of cultural assets may be linked to measurement challenges. Intangible elements such as traditions, customs, and local identity are inherently difficult to quantify and evaluate in terms of immediate economic returns, which may lead institutional actors to perceive them as less impactful compared to more tangible resources. Third, this pattern may reflect an institutional bias toward structural and policy-driven mechanisms. Actors operating within administrative and governance systems often emphasize formal instruments, such as regulations, funding schemes, and infrastructure, over softer, place-based assets that require more integrated and long-term approaches. This aligns with institutional theory, which suggests that organizational priorities are shaped by dominant norms, performance metrics, and accountability structures. These findings directly support the study's first expectation, which anticipated that institutional actors would differ in how they prioritize support mechanisms based on their roles and organizational mandates.

The exploratory factor analysis supported the multidimensional nature of institutional perceptions, revealing latent structures such as Entrepreneurial Skills and Training, Limited Role of Cultural Assets, and Limited Trust in R&D Support. The emergence of a factor reflecting skepticism toward non-formal education and cultural heritage deviates from findings in Western European contexts, where lifelong learning and cultural branding are often emphasized (Bosworth et al., 2016). This divergence may be attributed to lower systemic support for non-formal education, or a gap between policy discourse and implementation at the local level. On the other hand, ministries and municipal representatives placed higher importance on financial incentives, possibly reflecting their operational focus on policy instruments and regulatory levers. The observed differences between institutional types support the expectation that governmental and non-governmental actors emphasize different forms of support, reflecting their distinct mandates and operational frameworks.

The cluster analysis deepened this understanding, revealing three dominant institutional mindsets: (1) a holistic and development-oriented cluster valuing education and applied learning; (2) a policy-driven cluster prioritizing financial tools and governance; and (3) a pragmatic, cautious cluster that supports experiential knowledge but remains reserved about broader educational or structural enablers. These findings echo prior segmentation in rural policy perception studies (Brida et al., 2010; Korsgaard et al., 2015), reinforcing the need for tailored policy approaches that acknowledge institutional diversity. In line with the study's expectations, perceptions of virtual training were not uniform across institutions, suggesting differences in capacity and strategic orientation toward digital tools. These findings support the study's third expectation, which anticipated variation in how institutions perceive virtual training. The results indicate that while virtual training is broadly recognized as relevant, its perceived importance varies depending on institutional capacity, orientation, and engagement with digital tools. These align with recent findings by Lounge et al. (2025) and Tang et al. (2022), who emphasize the growing institutional recognition of e-learning as a tool for rural entrepreneurial empowerment in the post-pandemic landscape.

Conclusions

This study offers an in-depth examination of institutional perceptions regarding the drivers and constraints of rural entrepreneurship in Bosnia and Herzegovina, with particular attention to the tourism and agricultural sectors. By engaging a diverse sample of institutional actors, the research captured the multi-dimensional nature of entrepreneurial ecosystems in rural environments. The results underscore the central role of individual competencies, such as persistence and work ethic, alongside systemic enablers like communal infrastructure, product quality, and educational support. Factor and cluster analyses revealed nuanced typologies in how institutions conceptualize entrepreneurial support, distinguishing between development-oriented, policy-driven, and pragmatic mindsets. Moreover, the analysis of preferences for virtual training highlighted a growing institutional appetite for applied, digitally delivered education focused on practical skills and local development strategies.

Theoretical and Practical Implications

Theoretically, this study enriches the literature on rural entrepreneurship by validating the significance of institutional heterogeneity in shaping support mechanisms and policy emphasis. While prior research has often highlighted entrepreneurs themselves, this work shifts the focus to meso-level actors. The identification of distinct factor structures, such as *Entrepreneurial Skills and Training* and *Limited Role of Cultural Assets* provides conceptual clarity on how institutions prioritize different domains of rural entrepreneurial activity. The cluster analysis also supports emerging frameworks that call for segmentation-based rural policy, recognizing that institutional actors do not operate with a unified logic but are influenced by their organizational mandates, resource capacities, and proximity to local communities.

From a practical standpoint, the findings of this study provide valuable guidance for a wide range of stakeholders. First, the results can inform the design of targeted training and education programs. Institutions clearly prioritized virtual training topics related to food production, infrastructure, and craft registration. This suggests that training providers and NGOs should invest in developing modular, low-barrier e-learning platforms that offer pragmatic, locally tailored knowledge. Second, the study highlights the need for institution-specific policy communication and engagement strategies. Government institutions demonstrated a stronger preference for fiscal instruments and institutional frameworks, while educational bodies and development agencies emphasized community-based, cultural, and human capital dimensions. Third, development initiatives often fail when assuming homogeneity among institutional actors. Instead, collaboration frameworks should explicitly recognize and accommodate diverse operational logics. For example, holistic institutions (Cluster 1) may be ideal partners for pilot projects that integrate education, tourism, and community involvement, while policy-driven institutions (Cluster 2) may better support initiatives requiring regulatory backing or financing schemes.

Limitations and Directions for Future Research

While this study provides valuable insights, several limitations should be acknowledged. First, the sample is geographically restricted to Bosnia and Herzegovina, which may limit the generalizability of the findings to other national contexts with differing institutional maturity or rural entrepreneurship traditions. Second, the study relies on self-reported perceptions, which can introduce bias or inconsistencies depending on individual respondent knowledge or engagement. Future research could address these limitations in several ways. Comparative studies across countries or regions could reveal how institutional roles and priorities shift across governance systems. Longitudinal research could track how institutional perceptions evolve in response to interventions or external shocks, such as digital transitions or climate events. Additionally, triangulating institutional data with perspectives from rural entrepreneurs themselves could provide a fuller picture of alignment or disconnect between policy intent and lived entrepreneurial experience. Finally, this study relates to the relatively small sample size (N=43), which may constrain the robustness and generalizability of the findings. While these methods were employed to explore underlying patterns in institutional perceptions, the results should be interpreted with caution, as smaller samples may affect the stability of factor structures and cluster solutions. However, it is important to note that the study focuses on institutional stakeholders, a specific and relatively limited population that is difficult to access, especially within a single national context. In this regard, the sample provides valuable exploratory insights into institutional heterogeneity, even if it does not allow for broad generalization.

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Conflict of interests

The authors declare no conflict of interest.

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