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AGRICULTURAL ENTREPRENEURSHIP AMONG RURAL YOUTH IN EUROPE: A PATHWAY TO RESILIENCE IN TIMES OF CRISIS

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Abstract: Rural youth are increasingly seen as crucial actors in addressing the structural challenges that European agriculture currently faces. This study explores agricultural entrepreneurship among young people aged 15 to 30 living in rural areas as a possible route towards resilience and rural revitalisation. Drawing on harmonised microdata from Flash Eurobarometer 513, we combine a territorial comparison with an ordered logistic regression to analyse both sectoral preferences and the individual drivers of agricultural entrepreneurship. The results reveal that rural youth tend to show stronger entrepreneurial aspirations and a more pronounced interest in the agrarian sector than their peers in urban areas or towns. Gender, employment status, and national context emerge as significant determinants of their involvement in agricultural entrepreneurship. Taken together, these findings underline the importance of inclusive and place-sensitive policies capable of enabling rural youth to shape sustainable futures within their own communities.

Keywords: Rural youth; Agricultural entrepreneurship; Generational renewal; Territorial disparities

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Resumen: La juventud rural se reconoce de forma creciente como un actor clave para afrontar los desafíos estructurales que atraviesa la agricultura europea. Este estudio explora el emprendimiento agrario entre jóvenes de 15 a 30 años que viven en territorios rurales como una posible vía hacia la resiliencia y la revitalización rural. A partir de microdatos armonizados del Flash Eurobarometer 513, se combina un enfoque comparativo territorial con un modelo de regresión logística ordinal para analizar tanto las preferencias sectoriales como los factores individuales que impulsan el emprendimiento agrario. Los resultados muestran que los jóvenes rurales presentan aspiraciones emprendedoras más firmes y un mayor interés por el sector agrario que sus pares en entornos urbanos o semiurbanos. El género, la situación laboral y el contexto nacional influyen de manera significativa en la probabilidad de emprender en agricultura. En conjunto, los hallazgos subrayan la importancia de políticas inclusivas y adaptadas al territorio, capaces de ofrecer a la juventud rural los medios y las condiciones necesarias para construir futuros sostenibles dentro de sus propias comunidades.

Palabras clave: Juventud rural; Emprendimiento agrario; Relevo generacional; Desigualdades territoriales

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Highlights

- Rural youth show higher entrepreneurial intention than others
- Agriculture is a key sector for rural youth across the EU
- Gender and employment status shape engagement in agricultural entrepreneurship
- National context matters for entrepreneurship in agriculture

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1. Introduction

Entrepreneurship is increasingly recognised as a key force driving innovation and resilience in rural Europe (Shitile et al., 2025). In rural contexts marked by demographic decline and heightened exposure to external shocks, maintaining a diverse and rich business base becomes essential not only to reinforce social cohesion but also to support the capacity to cope with crises (McIntyre & Roy, 2023; Timpanaro & Foti, 2024). Within this broader perspective, agricultural entrepreneurship plays a particularly strategic role: it sustains the productive foundations of rural territories while fostering generational renewal, environmental stewardship, and the preservation of territorial identity. Young farmers, in particular, tend to show a greater willingness to adopt new technologies and pursue diversified business models, thereby

enhancing both economic viability and sustainability (Consentino et al., 2024; Coopmans et al., 2021; Sutherland, 2023).

Despite its strategic importance, the agricultural sector across the European Union (EU) continues to face long-standing structural and demographic challenges. Employment in agriculture has been shrinking steadily, and the farming population is ageing at an alarming rate. According to Eurostat (European Union, 2025), nearly one-third of EU farm managers in 2020 were aged 65 or above. This trend is even more pronounced in Southern and peripheral regions, where structural barriers hinder both succession and access to farming. Among the most critical obstacles are limited access to land and finance, inadequate training systems, and uneven institutional support (Zagata & Sutherland, 2015; Zawojska, 2010).

Over the past decades, the Common Agricultural Policy (CAP) has sought to respond to these challenges by incorporating specific instruments to promote generational renewal and support young farmers. For the 2023–2027 programming period, Member States are required to allocate at least 3% of their direct payment envelopes to young farmers through the European Agricultural Guarantee Fund (EAGF), complemented by rural development measures financed via the European Agricultural Fund for Rural Development (EAFRD). These instruments include income support, start-up grants, and investment aid. However, both their implementation and effectiveness differ considerably among countries (Coopmans et al., 2020; Sajn, 2025).

Additionally, agricultural entrepreneurship among young people has attracted growing attention as a possible driver of rural transformation. Yet, empirical research on this topic remains scarce – particularly regarding territorial variation and the influence of individual factors such as gender, education, or employment status (Cheriet et al., 2021). Moreover, agricultural entrepreneurship in rural areas is still often treated as a residual or undifferentiated category, instead of being analysed as a context-dependent process shaped by specific spatial, institutional, and cultural dynamics (Astner & Roos, 2024; Korsgaard & Tanvig, 2015). Much of the existing research approaches it either from a sectoral perspective – focusing on agriculture as an economic activity – or from a spatial one – addressing rurality. Yet, the interaction between these two dimensions remains insufficiently explored, and we still know relatively little about how individual and contextual factors intersect to shape the entrepreneurial behaviour of young people in rural settings.

This article seeks to fill that gap by providing an integrated analysis of agricultural entrepreneurship among rural youth in the European Union, combining harmonised microdata with a comparative territorial perspective. Drawing on data from Flash Eurobarometer 513: Social Entrepreneurship and Youth (European Commission, 2023), the study examines whether young people in rural areas aged 15 to 30 exhibit distinct entrepreneurial intentions, how agriculture figures within their sectoral preferences, and which individual-level factors influence their engagement in the agrarian sector. Through this approach, the paper aims to clarify under what conditions rural youth may act as agents of resilience in the face of demographic and structural change.

The novelty of this research lies in its dual focus. Conceptually, it connects the fields of agricultural and rural entrepreneurship to propose a multidimensional understanding of rural youth entrepreneurship. Empirically, it offers a cross-country analysis of agricultural entrepreneurship among rural youth across all EU Member States using harmonised microdata.

2. Theoretical Background

Agriculture across Europe is undergoing a profound and complex structural transformation. Although it no longer represents the main source of income or employment in some rural areas, the sector continues to play a vital role in shaping territorial identity and sustaining resilience (McIntyre & Roy, 2023; Timpanaro & Foti, 2024). Nonetheless, its demographic and institutional weaknesses remain a matter of concern. Between 2010 and 2020, employment in agriculture across EU Member States declined from 5.6% to 4.2%, and only 6.5% of farm managers were under 35 years of age in 2020 (European Union, 2025). These challenges are especially acute in Southern and peripheral regions, where the structure of

agriculture, characterised by small-scale holdings, does not always allow for the development of viable businesses (Zagata & Sutherland, 2015).

Several structural barriers limit the entry of young people into farming. Land remains difficult to access (due to limited availability and rising prices), access to financing is scarce, and vocational training systems are often misaligned with the practical and theoretical knowledge demanded by modern agriculture. Consequently, many young people still perceive farming as physically demanding, financially uncertain, and associated with a poor work – life balance, and therefore they do not feel motivated to enter the sector. High administrative burdens and a weak bargaining position also tend to erode the sector's appeal – especially among those with no family farming background (Borda et al., 2023; Sajn, 2025).

In response, the Common Agricultural Policy (CAP) has gradually incorporated measures to foster generational renewal. Since the 1980s, rural development programmes have included specific schemes to support young farmers, and successive CAP reforms have reinforced this priority. The 2023–2027 period marks an important milestone by explicitly defining generational renewal as one of the CAP's ten key objectives. Under the EAGF, Member States must allocate at least 3% of their direct payments to young farmers, primarily through income support and start-up grants. These are complemented by EAFRD measures providing investment aid, training, and cooperation schemes – sometimes reaching up to €100,000 in start-up packages. Yet, as Mattas et al. (2024) observed, these tools often benefit individuals already integrated into the agricultural system, which limits their capacity to attract new entrants. In addition, many of the barriers to access are outside the scope of CAP (Sajn, 2025).

Despite its growing policy relevance, agricultural entrepreneurship still occupies a relatively peripheral position within mainstream entrepreneurship research. As emphasised by Alsos et al. (2011), Condor (2019), Lans et al. (2017), Fitz-Koch et al. (2018), and Cheriet et al. (2021), most theoretical developments in entrepreneurship have been driven by studies of urban, industrial, or high-tech activities. The marginalisation of agriculture might reflect its declining share in productive systems, but this neglect lacks theoretical justification. Indeed, some of the earliest conceptualisations of entrepreneurship – by Cantillon and Say – were rooted in agrarian systems, where innovation, risk-taking, and coordination were inherently tied to farming activities (Alsos et al., 2011).

Agricultural entrepreneurship is shaped by distinctive structural and contextual characteristics. Pindado & Sánchez (2017) identified a set of defining features: biological risk, regulatory complexity, evolving land-use patterns, highly competitive markets, and strong dependence on public subsidies. Fitz-Koch et al. (2018) proposed a framework that emphasises the interplay between identity, family, and institutions. Farming identity, for instance, is often associated with stewardship and legacy, which in turn foster long-term commitment. Moreover, most farms are run by families, so family and household factors play a direct role in entrepreneurship in agriculture, while institutions – particularly the CAP – define the opportunity structure within which entrepreneurship unfolds. In particular, the interplay between formal and informal institutions directly impacts agricultural entrepreneurship.

Gender exerts a decisive influence on entrepreneurial trajectories, as a growing number of women are inheriting family farms (Fitz-Koch et al., 2018). Drawing on qualitative research with women entrepreneurs in rural Sweden, Ahl et al. (2024) illustrated how women can act as pioneers of on-farm innovation and diversification through multifunctional and value-added activities, though such findings should be interpreted within their specific national and methodological contexts. In this sense, while some studies argue that gender gaps in succession intentions appear to be narrowing (Chiswell & Lobley, 2018), women remain underrepresented in land ownership, access to credit, and decision-making roles within agricultural businesses.

Although individual factors have received growing scholarly attention, the impact of spatial context remains relatively underexplored in the literature on entrepreneurship compared to the social, economic, or institutional contexts (Pato & Teixeira, 2016). In this vein, Stathopoulou et al. (2004) argued that rural entrepreneurship cannot be understood through generic models, as it is deeply embedded in the territory. Rurality shapes both opportunities and constraints, and key factors for entrepreneurship in urban settings, such as economic rationality or profit maximisation, are not always the main drivers in rural

areas. As agricultural entrepreneurship is predominantly rural (Dias et al., 2019), the rural context shapes opportunity structures. Recent studies stress that limited access to credit, education, and transport infrastructure remains a persistent barrier to entrepreneurship (del Olmo-García et al., 2023). Clausen (2020) coined the term "liability of rurality" to describe these structural constraints – ranging from remoteness and service shortages to weak institutional support. Astner & Roos (2024) proposed three analytical perspectives: rural as given (space as neutral), rural as periphery (deficit-focused), and rural as rurality (place-based diversity and assets). The latter aligns closely with Korsgaard & Tanvig (2015), who distinguished between entrepreneurship in the rural – where rurality is incidental – and rural entrepreneurship, which is embedded and transformative.

Therefore, the rural context, understood as embedded and transformative, is particularly relevant for understanding agricultural entrepreneurship among rural youth. De Guzman et al. (2020) highlighted the importance of social networks and openness to innovation within rural communities, while Consentino et al. (2024) emphasised young people's desire to build synergies with their environment and local institutions. Family support also emerges as a critical resource: Plana-Farran & Gallizo (2021) found that strong kinship ties facilitate farm succession, and Bjarnason & Thorlindsson (2006) showed that parental expectations influence career aspirations in farming and fishing communities. In contrast, education exerts an ambivalent influence – on the one hand, it promotes innovation and sustainability awareness (Consentino et al., 2023), yet on the other hand, it may generate aspirations that distance young people from agricultural careers (Popescu, 2019).

In summary, agricultural entrepreneurship among rural youth should be seen as a multidimensional phenomenon shaped by the intersection of individual, family, institutional, and environmental dynamics (Baur et al., 2016; Pato & Teixeira, 2016; Stathopoulou et al., 2004). Limitations in social and healthcare services, housing, or digital connectivity constitute barriers that shape entrepreneurial opportunities and trajectories in rural areas (del Olmo-García et al., 2023; Mattas et al., 2024; Zagata & Sutherland, 2015). Nevertheless, agricultural entrepreneurship should be understood as a pathway to resilience: a means through which young people confront structural disadvantages, mobilise local resources, and build sustainable futures. Grounded in this theoretical framework, the study addresses three interrelated research questions:

1. Do rural youth express stronger entrepreneurial intentions than their counterparts in towns and urban areas?
2. Is agriculture a distinctively rural sector in terms of youth entrepreneurial preference?
3. Which individual-level factors influence the likelihood of rural youth engaging in agricultural entrepreneurship?

3. Methodology

This study adopts a quantitative and comparative approach to analyse territorial patterns and individual determinants of agricultural entrepreneurship among young Europeans aged 15 to 30. The central aim is to identify whether rural youth engage more actively in agricultural entrepreneurship and to understand how such engagement is influenced by individual and spatial factors.

The empirical analysis draws on individual-level data from Flash Eurobarometer 513: Social Entrepreneurship and Youth (European Commission, 2023), which is an EU-wide dataset combining information on young people's entrepreneurial intentions and their preferred sectors of activity. Conducted in October 2022 using computer-assisted web interviewing (CAWI), the survey provides nationally representative samples for each of the 27 Member States. Post-stratification weights were applied to ensure representativeness by age, gender, and regional distribution. The analysis is based on this cross-sectional dataset, which offers a harmonised snapshot of youth entrepreneurship across Europe. While longitudinal data would be preferable to capture changes over time, no comparable series currently exists for this population group.

To capture structural patterns rather than temporal dynamics, a subsample was constructed including only respondents who identified themselves as living in rural areas. Within this subsample, agricultural

entrepreneurship is defined as the combination of a declared intention to start a business and a preference for the agriculture, forestry, or fishing sector. This operationalisation makes it possible to isolate a subset of rural youth with entrepreneurial aspirations specifically oriented towards the primary sector. Although the use of self-reported settlement type may introduce a certain degree of subjectivity, it aligns with the Eurobarometer's categorical approach. Therefore, the analysis does not aim to model longitudinal change, but to uncover cross-sectional relationships between entrepreneurship and individual as well as contextual factors.

The empirical analysis unfolds in three complementary stages, consistent with the research questions formulated in the theoretical framework.

Firstly, general entrepreneurial intention is compared across rural areas, towns, and urban centres to identify territorial variation. Given the ordinal and non-normal nature of the dependent variable, the Kruskal–Wallis H test is used to detect overall differences among settlement types, followed by Dunn's post hoc test with Bonferroni correction for pairwise comparisons.

Secondly, sectoral preferences for entrepreneurship are examined by settlement type. The proportion of youth selecting each sector as their preferred field of activity is calculated, paying particular attention to agriculture, forestry, and fishing. Two-sample z-tests are applied to assess statistical differences in these preference distributions.

Thirdly, an ordered logistic regression model is estimated to identify individual-level factors associated with agricultural entrepreneurship among rural youth and the existence of cross-country differences. This modelling strategy is suitable for our ordinal dependent variable capturing four progressive stages of engagement: (0) no entrepreneurial interest; (1) interest without action; (2) active steps taken towards entrepreneurship; and (3) current self-employment in the agricultural sector. The model was estimated using maximum likelihood with robust standard errors, and results are expressed as adjusted odds ratios (aOR) with 95% confidence intervals. All statistical tests – including the Kruskal–Wallis H tests, Dunn's post-hoc comparisons, and the ordered logistic regression – were performed using individual-level data rather than aggregated indicators. In a complementary step, and to explore whether these individual-level determinants translate into broader behavioural patterns across countries, we performed a hierarchical cluster analysis (Ward's method) using country-level averages computed from the subsample of rural youth interested in agricultural entrepreneurship. All analyses were conducted using Stata version 16.1.

The selection of explanatory variables follows both theoretical and empirical considerations discussed earlier. Gender is included to account for structural inequalities, particularly given women's crucial yet often unacknowledged role in agricultural innovation and diversification (Ahl et al., 2024; Chiswell & Lobley, 2018). Age is introduced as a categorical variable to reflect life-course differences, as older youth may have completed education or acquired work experience that influences their entrepreneurial trajectory. Educational attainment serves both as a proxy for innovation capacity and as a potential constraint, given the cultural and symbolic distance that sometimes separates higher education from agricultural occupations (Consentino et al., 2023; Popa & Turek Rahnoveanu, 2021; Popescu, 2019). Employment status captures financial autonomy and labour market integration – two conditions that directly affect both entrepreneurial feasibility and risk tolerance (Coopmans et al., 2021; Pindado & Sánchez, 2017). Living arrangements are used as an indicator of family embeddedness and intergenerational proximity. Cohabiting with family members may facilitate access to land, equipment, knowledge, and emotional support – all crucial resources for farm succession and new business creation (Bjarnason & Thorlindsson, 2006; Plana-Farran & Gallizo, 2021). By contrast, independent living can signal greater autonomy but also a weaker connection to agricultural assets and traditions (Grüner & Konzett, 2024).

Finally, country-level fixed effects are incorporated to account for institutional heterogeneity across Member States. These fixed effects capture variation in CAP implementation, land tenure systems, rural development priorities, agricultural education structures, and cultural perceptions of farming (Baur et al., 2016). By including them, the model controls for national differences while isolating the role of individual-

level determinants. Nevertheless, the absence of a multilevel specification remains a limitation, since the hierarchical nature of the data (individuals nested within countries) is not explicitly modelled. Future research should therefore explore mixed-effects or multilevel models to capture cross-level interactions more accurately.

4. Results

The empirical analysis reveals notable territorial disparities in entrepreneurial intentions among young people across the European Union. As shown in Table 1, rural youth report slightly higher entrepreneurial aspirations (mean = 1.19) than their counterparts in towns (1.10) and urban centres (1.10). Although the mean differences are modest in magnitude, the Kruskal–Wallis H test confirms that they are statistically significant ($H = 32.67$, $p < 0.001$), indicating that settlement type exerts a measurable influence on the entrepreneurial outlook of young Europeans.

Tab 1. Youth entrepreneurial intention by type of settlement. Source: Own elaboration from Flash Eurobarometer 513

	Rural	Town	Urban
Mean	1.19	1.10	1.10
Standard deviation	0.94	0.84	0.87
Mode	1	1	1
Median	1	1	1
N	*6,853*	*10,348*	*7,428*
Kruskal-Wallis H test	32.67***		
Dunn´s test: Rural vs. Town	4.54***		
Dunn´s test: Rural vs. Urban	5.42***		
Dunn´s test: Town vs. Urban	1.31		

*p < 0.10; **p < 0.05; ***p < 0.01

Post hoc comparisons using Dunn's test further show that rural youth differ significantly from both town and urban respondents ($p < 0.001$), while no significant difference emerges between towns and urban centres. These results are consistent with earlier studies associating higher rural entrepreneurial intention with structural factors such as limited wage employment, stronger self-employment traditions, and the prevalence of embedded livelihood strategies (Bjarnason & Thorlindsson, 2006; Mattas et al., 2024; Pindado & Sánchez, 2017).

Sectoral preferences provide further insight into the territorial specificity of youth entrepreneurship. As displayed in Table 2, 6.72% of rural youth identify agriculture, forestry, or fishing as their preferred entrepreneurial sector, compared to 4.54% in towns and 3.35% in urban areas. These differences are statistically significant and underscore the continued relevance of agriculture in rural settings.

Although agriculture is not the most frequently selected field (commerce, hospitality, and digital services attract wider interest), it is the one that shows the sharpest territorial contrast. This pattern highlights agriculture's role as a symbolically rural activity, linked to family-based production and intergenerational continuity (Coopmans et al., 2021; Zagata & Sutherland, 2015).

Rural youth also express a growing interest in emerging sectors such as IT and e-commerce, suggesting a gradual diversification of the rural economy. Conversely, urban respondents are more drawn to knowledge-intensive and creative industries, reflecting the different opportunity structures and labour market expectations that shape entrepreneurial behaviour across space. Together, these results suggest that rural entrepreneurship today represents a combination of continuity and adaptation: while rooted in traditional sectors, it increasingly integrates innovation, digitalisation, and services.

Tab 2. Sectoral preferences by settlement type (% of youth selecting each sector). Source: own elaboration from Flash Eurobarometer 513

Sector	Rural	Town	Urban	Rural vs Town	Rural vs Urban
Agriculture /Forestry /Fishing	6.72	4.54	3.35	***	***
Manufacturing	4.63	3.96	3.51	*	***
Real estate / Construction	6.79	6.98	6.18		
Engineering / Trades	5.77	5.29	4.58		***
IT / Internet / E-commerce	10.47	11.13	12.99		***
Commerce / Trade / Retail	9.44	10.25	9.49	*	
Hospitality / Recreation	9.16	10.22	9.67	*	
Marketing / Advertising	7.23	8.06	7.96		
Financial and Insurance	5.96	5.40	5.49		
Business support / Consulting	4.04	4.47	4.67		*
Education / Research	6.98	7.53	8.15		**
Arts / Design / Culture	9.88	10.38	10.39		
Other	7.27	6.44	6.68	*	

Note: Percentages may not total 100% due to rounding and the exclusion of "Don't know / No answer" responses.

*p < 0.10; **p < 0.05; ***p < 0.01

Before turning to the multivariate analysis, Table 3 summarises the socio-demographic characteristics of the rural youth subsample. The sample is balanced by age and gender, although the largest group corresponds to young adults aged 25–30. The sample also shows a relatively high level of educational attainment, with more than one-third holding tertiary qualifications, which aligns with growing educational upgrading of young rural residents (Grüner & Konzett, 2024).

Notably, 69% of respondents report being employed and the majority do not live with their parents, either living alone or with non-family members, suggesting a degree of autonomy.

The results of the ordered logistic regression model (Table 4) confirm that both individual and contextual factors influence agricultural entrepreneurship among rural youth. Gender emerges as a particularly strong predictor: young women are substantially less likely than men to engage in agricultural entrepreneurship (aOR = 0.58, $p < 0.01$), a finding consistent with previous evidence on women's limited access to land, credit, and institutional support in farming contexts (Ahl et al., 2024; Chiswell & Lobley, 2018).

Employment status also exerts a significant positive effect: those currently employed are more likely to be engaged in agricultural entrepreneurship than those not working (aOR = 1.73, $p < 0.05$). This suggests that financial autonomy and labour market experience are enabling conditions for entrepreneurial engagement, particularly in capital-intensive sectors such as agriculture (Mattas et al., 2024; Popa & Turek Rahnoveanu, 2021).

The coefficient for tertiary education is marginally significant ($p < 0.10$), which may indicate a modest tendency for highly educated rural youth to be less involved in agriculture. However, the confidence interval is wide, and this pattern should be interpreted cautiously. This finding echoes earlier research showing that while education increases awareness of sustainability, it can also distance youth from traditional farming activities (Popa & Turek Rahnoveanu, 2021; Popescu, 2019). Other life-course variables, such as age group and living arrangement, do not show statistically significant effects.

Tab 3. Characteristics of rural youth subsample. Source: Own elaboration from Flash Eurobarometer 513

Variable	N	%	Variable	N	%
Age			*Educational attainment*		
15–17 years	78	18.18%	Left school	7	1.63%
18–24 years	167	38.93%	Secondary education	221	51.52%
25–30 years	184	42.89%	Further/adult education	49	11.42%
Gender			Tertiary education	152	35.43%
Male	242	56.41%	*Currently working*		
Female	187	43.59%	Yes	296	69.00%
Educational attainment			No	133	31.00%
Left school	7	1.63%	*Living arrangement*		
Secondary education	221	51.52%	With parents/family	164	38.23%
Further/adult education	49	11.42%	Alone	49	11.42%
Tertiary education	152	35.43%	With others	216	50.35%
Currently working			*N*	*429*	
Yes	296	69.00%			
No	133	31.00%			
Living arrangement					
With parents/family	164	38.23%			
Alone	49	11.42%			
With others	216	50.35%			
N	*429*				

Cross-country differences are also noteworthy. Compared to Belgium, young people in Austria (aOR = 3.81, $p < 0.05$) and Italy (aOR = 6.00, $p < 0.05$) are significantly more likely to engage in agricultural entrepreneurship, while Denmark also exhibits a positive and marginally significant effect (aOR = 4.13, $p < 0.10$).These variations likely reflect differences in institutional contexts, access to finance and land, and the broader social perception of farming as a viable and respected occupation (Baur et al., 2016; Sajn, 2025).

To strengthen the robustness of the econometric results, we performed a complementary country-level cluster analysis. For each country, we computed four indicators: the mean level of agricultural entrepreneurial intention, the percentage of male respondents, the percentage currently working, and the mean level of educational attainment among rural youth engaged in the agricultural sector. All variables were standardised before clustering.

Tab 4. Determinants of agricultural entrepreneurship among rural youth. Source: Own elaboration from Flash Eurobarometer 513

Variable	aOR	95% CI	Variable	aOR	95% CI
Age (ref. 15–17 years)			Denmark	4.13*	0.89 – 19.16
18–24 years	1.46	0.83 – 2.56	Estonia	1.65	0.37 – 7.40
25–30 years	1.09	0.59 – 2.00	Finland	0.88	0.19 – 4.01
Gender (ref. Male)	0.58***	0.39 – 0.86	France	0.44	0.09 – 2.16
Educational attainment (ref. Left school)			Germany	1.71	0.45 – 6.53
Secondary education	0.41	0.09 – 1.85	Greece	1.66	0.33 – 8.36
Further/adult education	0.36	0.07 – 1.77	Hungary	1.01	0.30 – 3.44
Tertiary education	0.28*	0.06 – 1.26	Ireland	2.25	0.68 – 7.47
Currently working (ref. Not working)	1.73**	1.12 – 2.65	Italy	6.00**	1.37 – 26.27
Living arrangement (ref. With parents/family)			Latvia	1.51	0.44 – 5.14
Alone	1.49	0.76 – 2.92	Lithuania	2.17	0.61 – 7.66
With others	1.13	0.72 – 1.76	Luxembourg	0.37	0.08 – 1.62
N	*429*		Malta	0.40	0.08 – 2.14
Log-likelihood	-502.39		Netherlands	2.47	0.67 – 9.08
Model p-value	<0.01		Poland	2.23	0.55 – 9.07
Country (ref. Belgium)			Portugal	2.00	0.33 – 12.28
Austria	3.81**	1.03 – 14.16	Romania	1.81	0.51 – 6.48
Bulgaria	1.28	0.29 – 5.71	Slovenia	1.52	0.45 – 5.06
Croatia	1.91	0.51 – 7.10	Slovakia	1.58	0.47 – 5.27
Cyprus	1.90	0.46 – 7.86	Spain	1.62	0.36 – 7.31
Czechia	1.57	0.35 – 6.99	Sweden	2.27	0.58 – 8.90

*p < 0.10; **p < 0.05; ***p < 0.01

Countries were grouped using a hierarchical agglomerative procedure based on Ward's minimum-variance linkage, which relies on squared Euclidean distance to minimise within-cluster heterogeneity. The number of clusters was selected by jointly considering standard stopping rules and the dendrogram. The Calinski–Harabasz pseudo-F statistic showed very similar values across alternative solutions (8.55 for two clusters, 8.00 for three clusters and 8.39 for four clusters), indicating the absence of a sharply dominant partition, while the Duda–Hart criterion likewise suggested alternative splits without a clear optimum. Visual inspection of the dendrogram (Figure 1) supports the three-cluster solution, as three well-defined branches emerge prior to the final fusion step, after which within-cluster heterogeneity increases sharply.

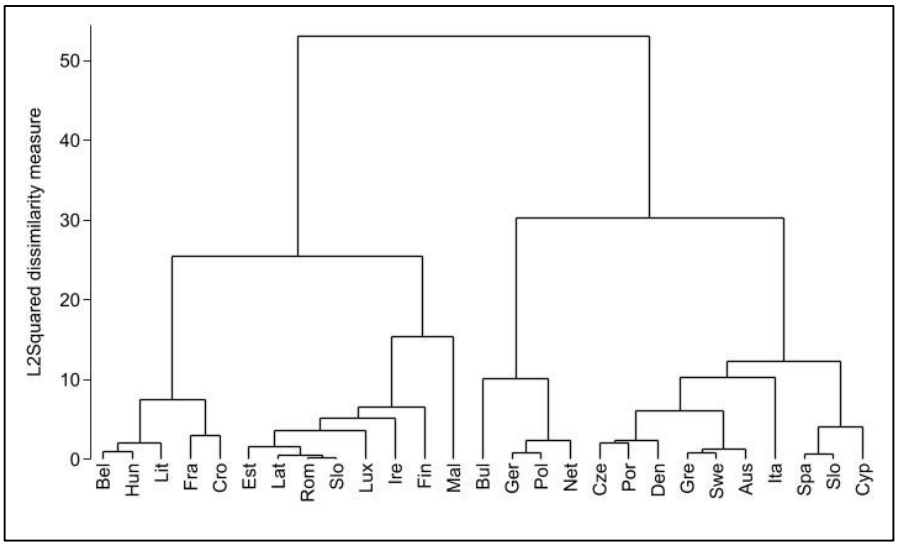


Fig 1. Dendrogram for cluster analysis. Source: own elaboration from Flash Eurobarometer 513

Note: Country names are abbreviated for readability. The dendrogram is constructed using Ward's hierarchical clustering and squared Euclidean distance.

Tab 5. Country-level cluster profiles. Source: own elaboration from Flash Eurobarometer 513

Cluster	Country	Agricultural entrepreneurship (0–3)	Male (%)	Working (%)	Education (1–4)
Cluster 1 – Low agricultural entrepreneurship	Belgium	1.17	0.60	0.60	3.15
	Estonia	1.31	0.38	0.69	2.42
	Ireland	1.47	0.42	0.84	2.90
	France	0.82	0.42	0.50	3.00
	Croatia	1.19	0.38	0.38	2.94
	Latvia	1.26	0.48	0.68	2.77
	Lithuania	1.43	0.52	0.57	2.95
	Luxembourg	1.00	0.56	0.73	2.71
	Hungary	1.07	0.52	0.59	2.93
	Malta	0.71	0.57	0.86	3.14
	Romania	1.26	0.43	0.65	2.67
	Slovakia	1.33	0.44	0.69	2.58
	Finland	1.09	0.29	0.86	2.43
Cluster 2 – Medium agricultural entrepreneurship	Bulgaria	1.30	0.80	0.70	3.50
	Germany	1.52	0.68	0.86	3.05
	Netherlands	1.67	0.78	0.94	2.83
	Poland	1.50	0.72	0.78	2.89
Cluster 3 – High agricultural entrepreneurship	Czechia	1.38	0.64	0.57	2.29
	Denmark	1.73	0.55	0.64	2.30
	Greece	1.54	0.54	0.64	2.70
	Spain	1.40	0.73	0.64	2.64
	Italy	1.92	0.50	0.50	2.91
	Cyprus	1.36	0.91	0.64	2.91
	Austria	1.71	0.64	0.70	2.80
	Portugal	1.43	0.63	0.75	2.29
	Slovenia	1.28	0.67	0.57	2.66
	Sweden	1.56	0.63	0.68	2.56

Cluster 1 includes countries showing comparatively low entrepreneurial intention, lower employment rates, and intermediate educational levels. These structural characteristics align with the regression findings, which highlight employment status as a key enabling factor. Cluster 2 comprises countries with higher employment levels among rural youth and intermediate levels of agricultural entrepreneurship. This profile reinforces the positive association between employment and entrepreneurial engagement identified in the ordered logit model. Finally, Cluster 3 contains countries characterised by the highest levels of agricultural entrepreneurial intention, above-average male representation, and relatively strong labour-market integration. This pattern mirrors the regression result that gender plays a central role in shaping agricultural entrepreneurship. Austria, Italy and Denmark fall within this group, which is consistent with the regression results: both Austria and Italy were identified as statistically significant positive outliers in the ordered logit model, while Denmark exhibited a borderline-significant effect. Their presence in Cluster 3 reinforces the view that agricultural entrepreneurship is particularly dynamic in these countries

Overall, the results suggest that agricultural entrepreneurship among rural youth is shaped by the interplay between individual characteristics and contextual conditions. Gender and employment status emerge as the most consistent individual-level determinants, while heterogeneity across countries highlights the importance of institutional frameworks and local policy design. These findings resonate with the broader literature on youth entrepreneurship. Ljubotina et al. (2019), for instance, found that the entrepreneurial intentions of young successors in family businesses are closely tied to individual characteristics such as age, gender, and work experience. In the same vein, Bednarikova et al. (2020) and Melak & Derbe (2022) pointed out that young men show higher entrepreneurial intentions than young women. The literature review on youth entrepreneurship conducted by Fubah et al. (2025) also reveals that, in some cases, education and training programmes may not be effective in fostering entrepreneurship as they do not provide adequate skills or competencies.

5. Conclusions

This study examined agricultural entrepreneurship among rural youth in the European Union, drawing on harmonised microdata from Flash Eurobarometer 513. It showed, first, that rural young people report slightly but significantly higher entrepreneurial intentions than their peers living in towns and urban areas. Second, agriculture, forestry, and fishing emerge as a distinct field of interest, with a higher share of rural respondents selecting this sector as their preferred field for starting a business. Third, the ordered logistic regression indicates that gender and employment status are systematically associated with the level of engagement in agricultural entrepreneurship among rural youth, whereas age group and living arrangements do not display statistically significant effects. Finally, the model points to cross-country variation, with some Member States showing a higher likelihood of agricultural engagement among rural youth than the reference country once individual characteristics are controlled for, a pattern further supported by a complementary hierarchical cluster analysis that groups countries into three coherent profiles. Taken together, these findings offer a nuanced picture of rural youth as a group with a somewhat stronger entrepreneurial orientation and a specific, though not dominant, interest in agriculture.

On this basis, the conclusions of the study remain intentionally modest and closely linked to the empirical evidence. The results support the view that spatial context is associated with entrepreneurial orientation: rural residence is linked to higher entrepreneurial intentions and to a stronger relative preference for agriculture as a potential field of activity. At the same time, the regression findings underline that not all rural youth are equally positioned to engage in agricultural entrepreneurship. Being male and being in employment are associated with a higher probability of involvement in agricultural entrepreneurship. These patterns suggest that the potential of rural youth to contribute to agricultural renewal is unevenly distributed and mediated by social and economic differences within the rural population itself.

Several limitations should be borne in mind when interpreting these results. First, the analysis is based on cross-sectional data and therefore captures associations rather than causal relationships; it is not possible to determine, for example, whether employment status leads to higher engagement in agricultural entrepreneurship or whether young people already oriented towards entrepreneurship are more likely to

be in work. Second, all key variables are self-reported, including the type of settlement and the indicators of entrepreneurial intention and engagement, which may introduce reporting biases. Third, the relatively small size of the rural subsample in some countries and the use of country fixed effects instead of a full multilevel specification limit the ability to explore the role of national and regional contexts in greater depth. In addition, important determinants such as family farming background, land ownership, access to credit, or specific local policy instruments are not observed in the dataset and therefore remain outside the scope of the analysis. Finally, although the study incorporated a hierarchical country-level cluster analysis to contextualise and reinforce the regression results, the small number of agricultural respondents in several countries warrants caution in interpreting these country profiles. Future work could refine this comparative dimension by integrating larger or longitudinal samples and by applying multilevel clustering approaches that better capture cross-level interactions.

Within these limits, the empirical results nonetheless offer several practical implications. The persistent gender gap in agricultural engagement among rural youth points to the need for gender-sensitive measures within the CAP and national rural development strategies, not only to improve women's access to land, finance, and training, but also to strengthen their recognition as entrepreneurs. The positive association between being in employment and agricultural engagement suggests that measures supporting gradual transitions – from wage employment to self-employment or from part-time to full-time farming – may be particularly relevant for young people who already have some labour market experience. The negative association between tertiary education and agricultural engagement, although modest, indicates that efforts to integrate agriculture and rural development more clearly into educational and career guidance systems could help reduce the perceived distance between higher education and farming careers. Finally, the observed cross-country differences suggest that national institutional and policy environments matter, even if they cannot be fully unpacked with the available data. Rather than advocating a single model, the findings point to the importance of place-based approaches that adapt support for youth agricultural entrepreneurship to the specific configurations of labour markets, education systems, and farming structures in each Member State. In a European countryside marked in many places by demographic decline and pressure on agricultural livelihoods, recognising and supporting those rural young people who are already inclined towards agricultural entrepreneurship appears as a way to strengthen the resilience of rural territories.

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Academic references

[1] Ahl, H., Berglund, K., Pettersson, K. & Tillmar, M. (2024). Women's contributions to rural development: implications for entrepreneurship policy. *International Journal of Entrepreneurial Behaviour and Research*, *30*(7), 1652–1677. DOI: 10.1108/IJEBR-11-2022-0973.

[2] Astner, H. & Roos, A. (2024). Approaching the rural – Uncovering rural context in entrepreneurship. *International Journal of Entrepreneurship and Innovation*. DOI: 10.1177/14657503241267746.

[3] Baur, I., Dobricki, M. & Lips, M. (2016). The basic motivational drivers of northern and central European farmers. *Journal of Rural Studies*, *46*, 93–101. DOI: 10.1016/j.jrurstud.2016.06.001.

[4] Bednarikova, Z., Bavorova, M. & Ponkina, E. (2020). Entrepreneurial intention of agriculture undergraduates in Russia. *Agricultural and Resource Economics: International Scientific E-Journal*, *6*(1), 5–22. DOI: 10.51599/ARE.2020.06.01.01.

[5] Bjarnason, T. & Thorlindsson, T. (2006). Should I stay or should I go? Migration expectations among youth in Icelandic fishing and farming communities. *Journal of Rural Studies*, *22*(3), 290–300. DOI: 10.1016/j.jrurstud.2005.09.004.

[6] Cheriet, F., Messeghem, K., Lagarde, V. & Elwee, G. M. (2021). Agricultural entrepreneurship: Challenges and perspectives. *Revue de l'Entrepreneuriat / Review of Entrepreneurship*, *19*(4), 13–29. DOI: 10.3917/ENTRE.194.0013.

[7] Chiswell, H. M. & Lobley, M. (2018). "It's Definitely a Good Time to Be a Farmer": Understanding the Changing Dynamics of Successor Creation in Late Modern Society. *Rural Sociology*, *83*(3), 630–653. DOI: 10.1111/RUSO.12205.

[8] Clausen, T. H. (2020). The liability of rurality and new venture viability. *Journal of Rural Studies*, *73*, 114–121. DOI: 10.1016/J.JRURSTUD.2019.12.005.

[9] Consentino, F., Peri, I., Litrico, M., Spina, D. & Vindigni, G. (2024). Mapping young farmers' choice to pursue Geographical Indication in a rural context: application of fuzzy cognitive map. *Agricultural and Food Economics*, *12*(1), 44. DOI: 10.1186/s40100-024-00340-8.

[10] Consentino, F., Vindigni, G., Spina, D., Monaco, C. & Peri, I. (2023). An Agricultural Career through the Lens of Young People. *Sustainability*, *15*(14), 11148. DOI: 10.3390/SU151411148.

[11] Coopmans, I., Dessein, J., Accatino, F., Antonioli, F., Bertolozzi-Caredio, D., Gavrilescu, C., Gradziuk, P., Manevska-Tasevska, G., Meuwissen, M., Peneva, M., Pettit, A., Urquhart, J. & Wauters, E. (2021). Understanding farm generational renewal and its influencing factors in Europe. *Journal of Rural Studies*, *86*, 398–409. DOI: 10.1016/J.JRURSTUD.2021.06.023.

[12] Coopmans, I., Dessein, J., Accatino, F., Antonioli, F., Gavrilescu, C., Gradziuk, P., Manevska-Tasevska, G., Meuwissen, M., Peneva, M., Soriano, B., Urquhart, J. & Wauters, E. (2020). Policy directions to support generational renewal in European farming systems. *EuroChoices*, *19*(2), 30–36. DOI: 10.1111/1746-692X.12282.

[13] de Guzman, M. R. T., Kim, S., Taylor, S. & Padasas, I. (2020). Rural communities as a context for entrepreneurship: Exploring perceptions of youth and business owners. *Journal of Rural Studies*, *80*, 45–52. DOI: 10.1016/J.JRURSTUD.2020.06.036.

[14] del Olmo-García, F., Domínguez-Fabián, I., Crecente-Romero, F. J. & del Val-Núñez, M. T. (2023). Determinant factors for the development of rural entrepreneurship. *Technological Forecasting and Social Change*, *191*, 122487. DOI: 10.1016/J.TECHFORE.2023.122487.

[15] Dias, C. S. L., Rodrigues, R. G. & Ferreira, J. J. (2019). What's new in the research on agricultural entrepreneurship? *Journal of Rural Studies*, *65*, 99–115. DOI: 10.1016/J.JRURSTUD.2018.11.003.

[16] Fitz-Koch, S., Nordqvist, M., Carter, S. & Hunter, E. (2018). Entrepreneurship in the agricultural sector: A literature review and future research opportunities. *Entrepreneurship: Theory and Practice*, *42*(1), 129–166. DOI: 10.1177/1042258717732958.

[17] Fubah, C. N., Kansheba, J. M., Marobhe, M. I. & Mohammadparast Tabas, A. (2025). Youth entrepreneurship: a systematic literature review of the domain and future research agenda. *Journal of Small Business and Enterprise Development*, *32*(2), 496–516. DOI: 10.1108/JSBED-07-2024-0346.

[18] Grüner, B. & Konzett, S. (2024). Engagement of new entrants in mountain farming through the lens of generativity: Lack of family farming background and its implications in Alpine Austria and Italy. *Sociologia Ruralis*, *64*(2), 325–352. DOI: 10.1111/soru.12476.

[19] Korsgaard, S. & Tanvig, H. W. (2015). Rural entrepreneurship or entrepreneurship in the rural – between place and space. *International Journal of Entrepreneurial Behaviour and Research*, *21*(1), 5–26. DOI: 10.1108/IJEBR-11-2013-0205.

[20] Ljubotina, P., Bojnec, Š. & Vadnjal, J. (2019). Macroeconomic Factors Forming Family Business Heir's Career Choice Intention. *Acta Oeconomica*, *69*(3), 425–444. DOI: 10.1556/032.2019.69.3.5.

[21] Mattas, K., Staboulis, C., Tsakiridou, E., Natos, D., Polymeros, A., Baranowski, P., Bojar, W., Rivero, O. P., Roldán, Á. O., Baldi, L. & Arfini, F. (2024). Facilitating generational renewal in rural areas by responding to young farmers' voices: Echoes from the Greek territory. *Journal of Rural Studies*, *112*, 103480. DOI: 10.1016/j.jrurstud.2024.103480.

[22] McIntyre, S. & Roy, G. (2023). Revisiting the dimensions of rural resilience: The CoVid-19 pandemic. *Journal of Rural Studies*, *103*, 103107. DOI: 10.1016/J.JRURSTUD.2023.103107.

[23] Melak, D. & Derbe, T. (2022). Analysis of determinants of youth self-employment career choices. *Journal of Small Business and Enterprise Development*, *29*(6), 886–901. DOI: 10.1108/JSBED-10-2021-0435.

[24] Pato, M. L. & Teixeira, A. A. C. (2016). Twenty Years of Rural Entrepreneurship: A Bibliometric Survey. *Sociologia Ruralis*, *56*(1), 3–28. DOI: 10.1111/SORU.12058.

[25] Pindado, E. & Sánchez, M. (2017). Researching the entrepreneurial behaviour of new and existing ventures in European agriculture. *Small Business Economics 49*(2), 421–444. DOI: 10.1007/S11187-017-9837-Y.

[26] Plana-Farran, M. & Gallizo, J. L. (2021). The Survival of Family Farms: Socioemotional Wealth (SEW) and Factors Affecting Intention to Continue the Business. *Agriculture*, *11*, 520. DOI: 10.3390/AGRICULTURE11060520.

[27] Popa, A. M. P. & Turek Rahnoveanu, A. (2021). Supporting young farmers and the sustainability of rural regions. Case study-Olt county, Romania. *Scientific Papers: Management, Economic Engineering in Agriculture & Rural Development*, *21*, 651–657.

[28] Popescu, G. C. (2019). Agricultural knowledge transfer: A case study for small farms and young farmers' beneficiaries of European funds. *Production Engineering Archives*, *25*(25), 17–20. DOI: 10.30657/PEA.2019.25.04.

[29] Shitile, T., Syrrakos, D. & Emediegwu, L. (2025). Engaging in rural spaces: A conceptual exploration of customer relationships in rural and in-the-rural entrepreneurship. *Journal of Rural Studies*, *116*, 103626. DOI: 10.1016/J.JRURSTUD.2025.103626.

[30] Stathopoulou, S., Psaltopoulos, D. & Skuras, D. (2004). Rural entrepreneurship in EuropeA research framework and agenda. *International Journal of Entrepreneurial Behavior & Research*, *10*(6), 404–425. DOI: 10.1108/13552550410564725.

[31] Sutherland, L. A. (2023). Who do we want our 'new generation' of farmers to be? The need for demographic reform in European agriculture. *Agricultural and Food Economics*, *11*(1), 1–9. DOI: 10.1186/S40100-023-00244-Z/METRICS.

[32] Timpanaro, G. & Foti, V. T. (2024). The sustainability of small-scale sheep and goat farming in a semi-arid Mediterranean environment. *Journal of Sustainable Agriculture and Environment*, *3*(3), e12111. DOI: 10.1002/SAE2.12111.

[33] Zagata, L. & Sutherland, L. A. (2015). Deconstructing the "young farmer problem in Europe": Towards a research agenda. *Journal of Rural Studies*, *38*, 39–51. DOI: 10.1016/J.JRURSTUD.2015.01.003.

Other sources

[34] European Commission (2023). *Flash Eurobaromenter FL513: Social entrepreneurship and youth*. https://europa.eu/eurobarometer/surveys/detail/2670.

[35] European Union (2025). *A look at European farms – agricultural census results*. https://ec.europa.eu/eurostat/web/products-catalogues/w/ks-01-24-024.

[36] Sajn, N. (2025). Generational renewal in EU agriculture. *European Parliament Research Briefing*. https://www.europarl.europa.eu/thinktank/es/document/EPRS_BRI(2025)772876.

[37] Zawojska, A. (2010). *How to Improve the Role of Young Farmers in the European Agricultural Economy?* https://www.europarl.europa.eu/thinktank/mt/document/IPOL-AGRI_NT(2010)438619.