



FARM FRAGMENTATION, RURAL DEVELOPMENT, GENERATIONAL RENEWAL AND DIGITAL READINESS IN ROMANIA

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Abstract: *This paper explores the relationship between farm fragmentation, rural development, generational renewal, and digital readiness in Romanian agriculture under the Common Agricultural Policy 2023–2027. The analysis combines Romanian Agricultural Structural Survey data, CAP Strategic Plan information, evidence on LEADER and young farmer support, and recent literature on agricultural modernization. The findings confirm that Romania continues to display a deeply polarized farm structure, marked by a very high number of small holdings, weak consolidation, and limited capacity for technological upgrading. Digital readiness remains especially important because it conditions both farm competitiveness and the effective use of CAP instruments.*

• Introduction

The 2023–2027 Common Agricultural Policy introduced a more flexible delivery model through CAP Strategic Plans, allowing Member States to adapt interventions to national conditions. Romania illustrates this structural dependency clearly. It has a large agricultural area and an important role in EU food production, but faces extreme farm fragmentation, demographic imbalance, uneven territorial development, and slower modernization than many Western Member States. In 2023, Romania recorded 2.859 million agricultural holdings using 12.55 million ha of agricultural land, with an average size of 4.39 ha. Holdings below 1 ha represented 53.6% of all farms.

• Results and discussions

Rural development measures, LEADER initiatives, and young farmer support create modernization opportunities, but their impact is limited by administrative barriers, demographic aging, low productivity, and uneven access to innovation. Digital readiness remains low, as only a minority of farms use precision agriculture tools, GPS guidance, or farm management software. Although the Romanian CAP Strategic Plan provides complementary payments for young farmers, demographic pressure — with almost 60% of farm managers older than 55 — limits their structural impact. LEADER groups show positive local engagement but still face difficulties in proving measurable economic outcomes.

• **Material and method** The analysis uses a comparative descriptive approach to assess Romanian agriculture within the wider European policy context. It relies on ASA 2023 data, CAP Strategic Plan summaries, and recent policy analyses on rural development, demographic renewal, and digital transition. The paper examines Romanian CAP allocations, focusing on direct payments, rural development interventions, LEADER, and young farmer support. For digital readiness, it uses Eurostat data and recent literature on precision agriculture adoption in Romania.

• Conclusions

- Successful modernization in Romania requires stronger institutions, better-targeted support, improved advisory services, and closer links between direct payments, rural development, and structural transformation.
- Generational renewal also depends on better rural services, infrastructure, and quality of life, not only financial incentives.
- Digital transition requires broadband access, affordable tools, and tailored training.

Figure 1. Key structural indicators of Romanian agriculture (ASA 2023)

Indicator	Value	EU Comparison
Total agricultural holdings	2.859 million	Largest number in the EU
Total UAA	12.55 million ha	Among the largest UAA in the EU
Average holding size	4.39 ha	EU avg. ~17 ha
Holdings < 1 ha	53.6% of total	Very high fragmentation
Holdings > 50 ha	0,9% / 54% UAA	Dual structure

A coordinated strategy linking farm consolidation, local development, demographic renewal, and digital governance is essential for CAP 2023–2027 resources to generate lasting change in Romanian agriculture.