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ORGANIC AGRICULTURE AND URBAN DEVELOPMENT IN THE WEST REGION OF ROMANIA (BANAT)

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Abstract: *Organic agriculture has registered sustained growth in Romania over the last decade, while cities in the West Region are undergoing large investments in urban green infrastructure. This paper examines the relationship between the expansion of organic farming and urban development trends in the West Region (Arad, Timiș, Hunedoara, Caraș-Severin counties), with a focus on the potential synergies between peri-urban organic production and urban green infrastructure projects. The analysis is based on official statistical data and institutional sources regarding organic agriculture area and operators, regional funding allocated to green infrastructure through the West Regional Programme 2021-2027, and examples of urban regeneration projects. Results indicate an uneven but positive evolution of organic farming across the region, led by Arad and Hunedoara counties, alongside substantial public investment in urban green space, exemplified by post-industrial regeneration in Reșița and green infrastructure calls exceeding EUR 39 million. The findings suggest that explicit integration of peri-urban organic agriculture into urban development strategies could strengthen both the regional organic sector and the sustainability of West Region cities.*

Key words: *organic agriculture, urban development, West Region, Banat, green infrastructure, peri-urban agriculture*

• Introduction

Organic agriculture is widely recognised as a key component of sustainable rural and regional development and holds a central place in current EU agricultural policy. By restricting the use of synthetic inputs such as mineral fertilisers and chemical pesticides, organic systems help maintain soil fertility and water quality and support farmland biodiversity.

In Romania, the area under organic management has continued to increase: in 2024 it exceeded 780,000 hectares, roughly 6% of the country's agricultural area and 160% more than in 2013. The number of registered organic operators has grown as well, from approximately 13,000 operators farming about 600,000 hectares in 2022 to almost 14,000 operators and close to 700,000 hectares in 2023.

Romanian cities are also changing, especially those with an industrial legacy. Many have shifted their priorities towards sustainable development and the expansion of urban green infrastructure. Peri-urban agriculture, i.e. farming carried out at the interface between urban and rural areas, has received increasing attention in the literature, since it can strengthen local food security, help preserve cultural landscapes, contribute to climate change mitigation and make cities more resilient.

The West Region, comprising Arad, Timiș, Hunedoara and Caraș-Severin counties, stands out both for its economic dynamism and for the diversity of its agricultural and natural landscapes, which range from the fertile Banat Plain to the mountain areas of Caraș-Severin and Hunedoara. Urban development in the West Region is backed by EUR 1.18 billion in European funding through the West Regional Programme 2021–2027.

Although both organic farming and urban green infrastructure are developing across the West Region, they are usually addressed as separate policy domains. This paper therefore analyses how organic agriculture and urban green infrastructure have evolved in the region and identifies where peri-urban organic production could connect with, and contribute to, urban development strategies.

• Material and method

The study follows a descriptive and analytical approach based on official statistics and institutional documents concerning organic agriculture and urban development in the West Region:

- national data on the area under organic farming and on the number of registered operators, from reports and official communications of the Ministry of Agriculture and Rural Development (MADR), 2013–2024;
- regional data on the share of agricultural land under organic farming, from a recent study of agri-environmental indicators in Arad, Timiș, Hunedoara and Caraș-Severin counties;
- official communications of the West Regional Development Agency (ADR Vest) on the West Regional Programme 2021–2027;
- documents published by the Municipality of Reșița on its urban regeneration strategy.

The data were analysed descriptively and comparatively in order to outline three aspects: (i) the evolution of organic agriculture at national level and across the West Region; (ii) the scale of public investment in urban green infrastructure; and (iii) the ways in which peri-urban agriculture, as discussed in the literature, could link organic production with urban development strategies.

• Results and discussions

At national level, the area under organic farming has followed a steady upward trend over the past decade (Table 1, Fig. 1).

Table 1. *Evolution of organic agriculture area and operators in Romania, 2013–2024 (processed after MADR*

Year	Organic area (ha)	Registered operators	Share of agricultural land
2013	~300,000	n/a	2.3%
2022	~600,000	~13,000	4.6%
2023	~700,000	~14,000	5.4%
2024	>780,000	~14,000	6.0%

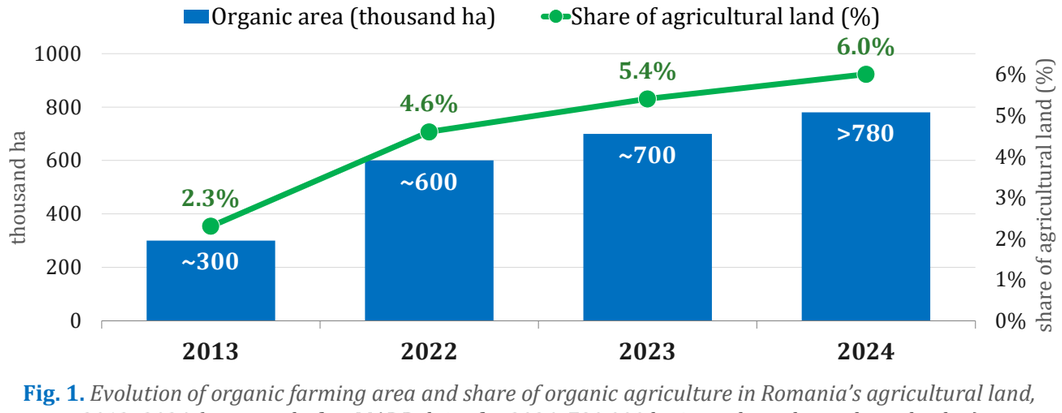


Fig. 1. *Evolution of organic farming area and share of organic agriculture in Romania's agricultural land, 2013–2024 (processed after MADR data; for 2024, 780,000 ha is used as a lower-bound value)*

The West Region follows the national trend, with the share of agricultural land under organic farming increasing from 2.8% in 2015 to over 6% in 2024 (Table 2). Progress, however, varies considerably between counties. Arad and Hunedoara recorded the largest increases in organic area, partly owing to farmers' access to agri-environment and organic farming support measures. Caraș-Severin, although it is the third-largest county in Romania by total area, faces quite different conditions: mountainous relief, land fragmentation and an ageing farm structure continue to limit the development of competitive farming systems.

Table 2. *Main regional findings and their implications (authors' synthesis)*

Territorial unit / topic	Finding reported in the paper	Implication for planning
West Region	Share increased from 2.8% (2015) to over 6% (2024).	Connect peri-urban producers with urban markets and green-space projects.
Arad and Hunedoara	Identified as the counties with the largest expansion.	Targeted support and local short food supply chains.
Caraș-Severin	Mountainous relief, fragmented land and ageing farming structure constrain development.	Prioritise small-scale, extensive, organic-oriented models, possibly combined with agritourism.

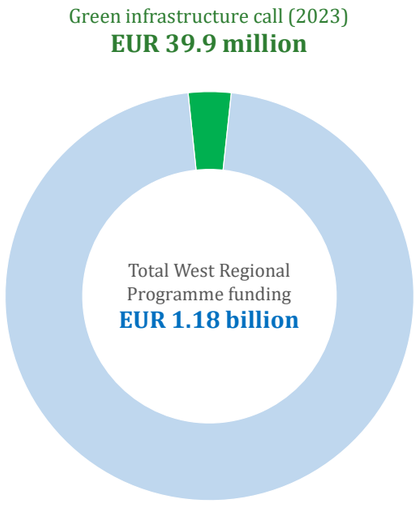


Fig. 2. *Green infrastructure call within the West Regional Programme 2021–2027 (processed after ADR Vest data)*

The West Regional Programme 2021–2027 is the main funding instrument for sustainable urban development in the region. Its total allocation amounts to EUR 1.18 billion, including the green infrastructure call launched in 2023 with a budget of about EUR 39.9 million (Fig. 2). Municipalities have used these funds for a variety of projects, from establishing new green spaces on degraded land to restoring existing parks.

In Reșița, these investments are part of a wider urban transition. The regeneration of the former Mociur industrial platform, the redevelopment of Tricolorului Park and of the Govândari district, together with the city's Green Bonds Framework, reflect a sustained effort, supported by national and European funds, to reposition this post-industrial city as a "green city".

Peri-urban agriculture, practised at the boundary between urban and rural areas, offers a practical link between the expansion of organic farming in the counties of the region and the green infrastructure projects under way in its cities (Fig. 3). From a landscape architecture perspective, such areas can also function as multifunctional green spaces in the urban fringe, combining food production with recreation, environmental education and agritourism.

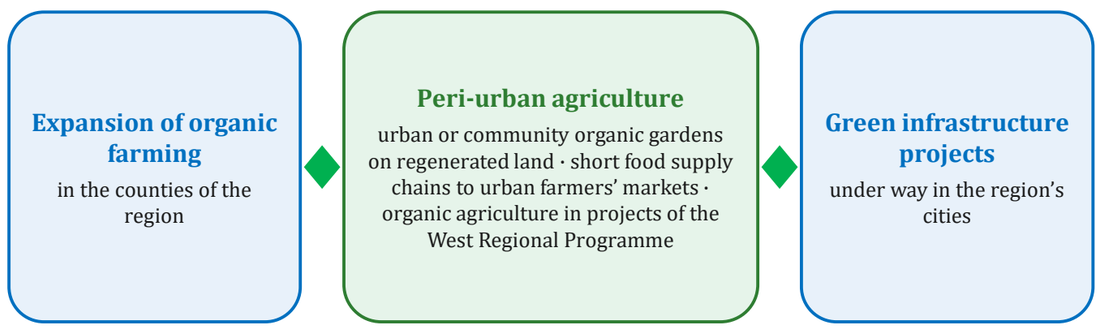


Fig. 3. *Peri-urban agriculture as a practical link between the expansion of organic farming and urban green infrastructure projects (authors' synthesis)*

• Conclusions

- Organic farming is expanding at both national and regional level, and public investment in urban green infrastructure is increasing, mainly through the West Regional Programme 2021–2027.
- The expansion is uneven: Arad and Hunedoara stand out, while in Caraș-Severin the mountainous relief and fragmented land structure remain obstacles; here, small-scale, extensive and organic-oriented models, combined with agritourism, appear more appropriate.
- Cities such as Reșița show that the region can attract considerable funding for green infrastructure, yet organic agriculture and urban green development are still planned largely as separate policy areas.
- Regional and local strategies should give organic farming a clearer place in urban green infrastructure projects, through urban and community organic gardens, stronger short food supply chains and better coordination of European funding.
- Further research based on primary data, such as surveys of producers and local authorities, is needed to assess the feasibility of these approaches.