Empowering the **FUT**ure through innovative Smart Solutions for r**URAL** areas

Policies and governance mechanisms for community-led innovation in rural Spain

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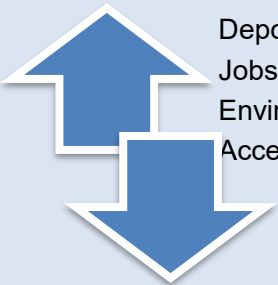
FUTURAL Case Study in Spain

The **FUTURAL Pilot** is situated in **Durnagaldea, Basque country**. This region gathers 13 municipalities, and it is **full of contrasts** between quite **populated urban** areas, with a high degree of industrial, urban and infrastructural occupation, and **large sparsely populated rural areas**. The region's economy has been based on **metallurgical** and **automotive** industries, but in recent years employment in the services sector has reached the same level as the industrial employment due to the **tourism** industry.

The Pilot area faces several interconnected obstacles linked to negative **demographic trends**, low **economic and job opportunities,** limited **access to services** including challenging **connectivity and physical infrastructure**, **environmental degradation** and **climate change** impacts. In FUTURAL, two community-led innovations are being piloted to address these challenges in this Pilot area:

- A **crowd-sensing platform** tool to monitor the structural health of **bridges** using AI-based methods for early warning.
- An **accessibility analysis platform** which evaluates the rural area accessibility to infrastructure, health and social services.

Public policies could unlock transition of this rural area through leveraging its **proximity to urban centres**, developing **rural and green tourism**, promoting **economic diversification** and **digitalisation**.

Policy challenges:

Depopulation, Ageing

Jobs, Economic Diversification

Environmental Sustainability & Climate Change

Access to Services, Infrastructure, Connectivity

Policy opportunities:

Proximity to urban areas

Rural & green tourism

Economic diversification

Digitalisation

Rural areas and innovation in Spain

In Spain, rural land surface equals to **approximately 3/4** of the country surface but it hosts only around 13% of the country population (Rural Observatory, 2021). The country is considered a **moderate innovator,** with above EU average indicators of broadband penetration, digital skills and internet take-up.

Table 1. Rural Areas in Spain. Source: FUTURAL Policy Analysis (2025).

	Rural Population	Rural Surface (Close to City)	Rural Surface (Remote)	Rural Surface (Total)
Spain	**13.1%**	33.5%	39.7%	**73.2%**
EU27	**25.8%**	34.2%	41.5%	**75.7%**

Table 2. Digital Economy and Society Index (DESI) in Spain. Source: FUTURAL Policy Analysis (2025).

DESI Index			
Broadband penetration	Basic digital skills	Above basic digital skills	Internet take up
Spain	142.2	66.2%	38.6%	96.4%
EU27	122	55.6%	27.3%	93.1%

Governance framework for enhanced community-led rural innovation

Spain became a decentralised state in 1978. The country is composed of **three levels** of governments (state, regions, local) and all levels enjoy autonomy in the management of their interests and duties (Art. 137, Spanish Constitution). Since its inception, the **17 Autonomous Communities** (regions) were left with large freedom to adopt their own model in terms of policy competences and fiscal autonomy. This led to an **asymmetrical decentralised system** in terms of regional functioning, where only the parliamentary structure is kept the same. However, although the role of regions was strengthened in recent decades, their capacity to impact national legislation is more limited than in other federal states.

At local level, two important legislative frameworks are the **Local Government Law** (Ley Reguladora de las Bases del Régimen Local, 1985), which clarifies competence areas and duties of local governmens. Despite this law does not have special provisions for rural areas, it can be used to benefit them indirectly. In fact. It allows Autonomous Communities to establish special regimes for small municipalities. Another relevant piece of legislation is the **Law on Local Finances** (Ley Reguladora de Haciendas Locales, 1988). This law intends to enhance the financial autonomy of local governments by adjusting responsibilities and distribution of powers across administrative levels (and hence their possibility to access new sources of revenues).

Table 3 Institutional and Administrative Frameworks in Belgium. Source: FUTURAL Policy Analysis (2025).

Institutional and Administrative Framwework	
Institutional Framework	Decentralised (regional) state
EU Entrance	1999
Administrative Levels	**3 Levels** (*State, regions, local*)
Power distribution across Levels	Autonomous communities have essential duties in policy making & implementation
Competence Level on Relevant Policy Areas	
CAP, Rural Development (incl. LEADER)	Regions
Regional Development (incl. CLLD)	State, Regions
Digital Policies	State, Regions
Social Policy/ Social Innovation	State, Regions
Local Government	
No. Local Units	**8131** municipalities
Local Government	Defined by each Autonomous Community

Competencies	
Local Government Autonomy Index	High

Policy framework for enhanced community-led rural innovation

In Spain, both the **CAP and Cohesion Policy** can be used to support community-led innovations in rural areas. In the national CAP Strategic Plan, the **LEADER programme** covers approximately half of the country's rural population, and its overall budget equals twice the minimum allocation of EAFRD funds.

Over the 2021-2027 period, Spain included planned to support **Smart Villages** through dedicated and targeted interventions in its CAP Strategic Plan. Smart Villages do not have an official definition, nor it is clear what the CAP Strategic Plan considers as a 'village' or 'rural area'. Overall, only the Autonomous Community of **Galicia** was ambitious enough to define targets (no. of strategies supported, budget) for Smart Villages.

At national level, there are no national policies tailored specifically to community-led rural innovation, but opportunities to target community initiatives are more broadly included in sectoral policies (e.g. on digital innovation, rural development or social policies). Among these, the **National Strategy Against Demographic Change** includes measures for rural revitalization.

Table 4 Policy framework for community-led rural innovation (Spain). Source: FUTURAL Policy Analysis (2025).

Common Agricultural Policy- National Strategic Plan (2021-2027 period)	
LEADER	• Population Coverage: 55.21% of rural population, 22.33 mln people • Local Development Strategies: 263 • Preparatory Actions/projects: 163 • Budget: € 516.65 mln (10% of EAFRD)

Smart Villages	• Dedicated interventions
	  o Non-productive investments in basic services in rural areas (6872)
	  o Specific intervention title for Galicia region: Digitization. Smart villages (GAL6872_06).
	• Other interventions
	  o Investment aid for agricultural diversification (6864, INVEST);
	  o Cooperation for the structuring of the territory (7163, COOP):
	  o Aid for investments in agricultural infrastructure to promote competitiveness (6843.2, INVEST)
	• R40. Smart transition of the rural economy: 16 Smart Villages strategies by 2026 (this target refers only to the Autonomous Region of Galicia, no other regions defined by KPI for this indicator).
	• Budget: Total N/A, but EUR 750 per operation.

Selected	• R1: 1,165,582 people benefitting from advice, training, knowledge exchange or

Indicators (PMEF result and outputs indicators)	participating in EIP Operational Groups •R3: 3.23% Farms support for digital agricultural technology •R39: 58,699 Rural business developed (incl. bioeconomy •O1: 851 EIP operational group projects •O23: 904 Supported off-farm non-productive investment operations or units •O24: 1,422 Supported off-farm productive investment operations or units •O27: 86 Rural businesses receiving support for start-up
Cohesion Policy (2021-2027 period)	
CLLD	National Pluri-regional OP aims to support supra-municipal actions to counter **depopulation** and strengthen innovative and entrepreneurial activities based on **local economic development in marginal areas** (RSO5.2). Regional OPs include more dedicated interventions[1].
National ERDF Operational Programme	Financial Support to **5G** and **Cloud Edge Computing Infrastructure Services** in rural areas; digitalization of public services and SMEs; **Nature Based solutions**, **green infrastructure** and **biodiversity** conservation for climate adaptation (National Pluri-regional OP, RSO1.1, 2.4, 2.7).
Other Relevant National Policies	
Digital and Innovation	Regional and National Smart Specialisation Strategies - Strategy for the Digitalisation of the Agri-Food and Forestry Sector and the Rural Environment - Plan Espana Digital 2025
Social Policies	Comprehensive plan to promote the social economy 2024-2025 – Climate Change and Energy Transition Law - Estrategia de Movilidad Segura, Sostenible y Conectada 2030
Rural, Local Development	130 Plan against the Demographic Challenge – General Guidelines of the National Strategy against the Demographic Challenge - National Food Strategy

Good practice

With approximately 100 inhabitants, the Orexa energy community is a small village in the Gipuzkoa province (**Basque country, Spain**). Located in a mountainous area, this community decided to develop its legal energy community to achieve energy autonomy. Today, 70% of the energy is produced locally and the most vulnerable households are the priorities to benefit from economic energy savings. This project did not benefit from LEADER or other funds, but it relies on the determination of citizens and the local mayor.

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[1] A few examples: Extremadura planned interventions for 'Pueblos inteligentes' in tourism, mobility, government, environment and energy efficiency (RSO1.2).