



# **Preparatory Action – Smart Rural Areas in the 21<sup>st</sup> Century**

## **Executive Summary**

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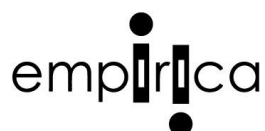
## Executive Summary of the 1<sup>st</sup> Preparatory Action on Smart Rural Areas in the 21<sup>st</sup> Century (Smart Rural 21 project)

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Innovatiesteunpunt    
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## Executive Summary

### 1. INTRODUCTION

Smart Villages is a relatively new concept that was launched by the European Commission – and supported by the European Parliament - through the EU Action for Smart Villages in 2017. In the same year, the European Network for Rural Development (ENRD) Contact Point launched its Thematic Working Group on Smart Villages to facilitate exchange among stakeholders about the new concept. Between 2018 and 2019, the Pilot Project on Smart Eco-social Villages – coordinated by DG AGRI - was launched with the aim of providing a comprehensive definition for Smart Villages (see below) and identifying relevant good practices and case studies.

#### Smart Villages Definition

Smart villages are communities in rural areas that use innovative solutions to improve their resilience, building on local strengths and opportunities. They rely on a participatory approach to develop and implement their strategy to improve their economic, social and/or environmental conditions, in particular by mobilising solutions offered by digital technologies. Smart villages benefit from cooperation and alliances with other communities and actors in rural and urban areas. The initiation and the implementation of smart village strategies may build on existing initiatives and can be funded by a variety of public and private sources.

*Source: Pilot project: Smart eco-social villages, Ecorys Final Report, European Commission, 2019.*

**The 1<sup>st</sup> and 2<sup>nd</sup> Preparatory Actions on Smart Rural Areas in the 21<sup>st</sup> Century** (commonly called Smart Rural 21 and Smart Rural 27 projects respectively), coordinated and supported by the European Commission (DG AGRI) have aimed to **operationalise the Smart Villages definition** and promote the uptake of the Smart Villages concept across the EU at both local (rural community) and policymaking (regional and national) levels.

Several local communities have been drawn to the concept and started to actively work to apply it in their local contexts. **Member States and regional authorities are increasingly considering how to best support Smart Villages through the Common Agricultural Policy, Cohesion Policy and beyond.** The Smart Villages concept is now widely accepted and promoted as a key community-led local territorial development instrument for improving the resilience and sustainability of rural areas in Europe through innovation. The increased importance of the Smart Villages concept is reflected for instance in the fact that one of the main conclusions of the Rural Pact Conference (15-16 June 2022) was that **Smart Villages is the right tool that can contribute to achieving the Long-Term Vision for Rural Areas** of the EU in the years to come.

While the Smart Villages concept advanced considerably over the past years, there is still a long road ahead to develop fully effective Smart Villages policies. **Member States and regional authorities need to commit to support local communities** to become smart villages through the European Agricultural Fund for Rural Development, and other EU funds (in particular the Cohesion Policy

funds). **Rural communities’ capacities need to be strengthened** to be able to embark on the journey of smart local development. Know-how and (technological, including digital, and social) innovations are needed to find the right smart solutions that are suited to the needs of diverse rural areas.

## 2. THE OBJECTIVES OF THE SMART RURAL 21 PROJECT

The Smart Rural 21 project **supported 21 villages across Europe** to meet 21<sup>st</sup> century challenges and seize opportunities through **developing and implementing smart village strategies**. Furthermore, the Smart Rural 21 project engaged almost 200 so called “Come Along! villages” that had an interest in the Smart Villages approach and were willing to follow the Smart Rural process by their own efforts. The Smart Rural 21 project set four general and a series of specific objectives (see below). The project supported villages in developing smart village strategies and implementing smart solutions and promoted the outcomes widely through six operational Work Packages:

1. Communication & awareness-raising on the project and the concept of Smart Villages;
2. The Smart Rural 21 Online Platform to share relevant information ([www.smartrural21.eu](http://www.smartrural21.eu));
3. Selection of participant (pilot) villages;
4. Technical assistance for 21 villages for piloting smart village strategy development and implementation;
5. Monitoring of the process of strategy development and implementation (especially from a stakeholder engagement point of view);
6. Conclusions and recommendations.

How the general and specific objectives were to be achieved through the work carried out within the work packages is presented in the table below.

**Table 1: Project objectives & work packages**

General Objectives	Specific Objectives	Work Packages
GO1. Provide targeted technical assistance by putting in place facilities needed to promote the implementation of smart villages & testing the approach	1.1 <b>Identify, inspire and select villages</b> that are suitable for demonstrating the smart village development path	WP3: Selection of villages
	1.2 <b>Build capacity and test suitable governance</b> mechanisms by developing guidance and providing assistance at the local level to the selected villages	WP4: Guidance and technical support WP2: online platform
	1.3 Develop the <b>building blocks of smart village strategies and test</b> their implementation in at least two demonstration pilot sites	WP4: Guidance and technical support WP2: online platform
	1.4 <b>Monitor the development</b> of the transformation into smart villages and implementing smart village strategies	WP5: Monitoring & analysis

General Objectives	Specific Objectives	Work Packages
GO2. Analyse the approach towards establishing and implementing smart village strategies & draw lessons learnt	2.1 <b>Analyse the development</b> of the transformation into smart villages and implementation of the smart village strategies	WP4: Guidance and technical support WP5: Monitoring & analysis
	2.2 <b>Draw conclusions</b> concerning lessons learnt and the applicability and adaptability of the general concept under different circumstances	WP6: Conclusions & Recommendations
	2.3 <b>Develop guidance</b> to encourage the update of the smart village concept	WP6: Conclusions & Recommendations
GO3. Ensure cooperation and exchange of knowledge and experience among villages and raise awareness of the smart village concept	3.1 Undertake actions to inspire the development and implementation of <b>smart villages in other parts of Europe</b>	WP1: Communication and awareness raising
	3.2 Undertake actions to facilitate the <b>sharing of experience</b> about the outcomes of the process	WP2: Online Platform
	3.3 Undertake actions to <b>disseminate information and raise awareness</b> of the smart village concept based on real-life local experiences and increase its visibility in EU Member States	WP4: Guidance and technical support WP6: Conclusions & Recommendations
GO4. Contribute to the targeting of Common Agricultural Policy (CAP) and Cohesion Policy interventions that promote smart villages and sustainable rural areas	4.1 <b>Review existing practices of promoting smart villages</b> in several EU Member States and assess options for future actions	WP1: Communication and awareness raising WP2: Online Platform
	4.2 <b>Develop recommendations</b> for preparing the ground for covering smart villages in the future CAP and Cohesion Policy	WP6: Conclusions & Recommendations

### 3. WHAT HAS BEEN LEARNT THROUGH WORKING WITH VILLAGES?

The project has been **closely and directly working with the selected villages**, and many "Come Along! Villages". The project followed and supported the villages on their smart journey, **always with a focus on the specific needs of the village**. The project aimed at:

- engaging rural communities, not leaving interested villages behind;
- making the process inspiring for local people;
- building trust with the local communities through showing that the project is for them and "not they are for the project".



The development of **smart village strategies** was a basic requirement of the project in line with the definition on Smart Villages provided by the Smart Eco-social Villages Pilot Project (see above). Smart village strategies – that follow a **holistic local vision** for development, address crucial rural challenges and build on the assets & opportunities of local communities – are seen as the foundations of the Smart Villages concept. It means that villages need to be encouraged to work towards a **shared vision and goals** that make the most of 'smart' opportunities (such a digitalisation) and address the most urgent issues (such as climate change, depopulation, lack of services) of the 21<sup>st</sup> Century.

The **strategy development process was challenging** for participant rural communities. Local communities often see this as a burden due to its time-consuming nature, capacity to engage stakeholders in the process and the technical expertise needed for designing a strategy (including smart actions). However, most of the participant villages – even the most sceptical ones - have acknowledged that the strategy has largely helped structure and put in order their ideas, formulate a long-term vision, bring community members together around common goals as well as communicate about the village approach externally.

**Smart village strategies remain important tools in the Smart Villages process.** It is, however, important that these should be useful means for the benefit of the local communities and community leaders and should be kept simple in terms of administrative rules & procedures to reduce administrative burden (and increase the usefulness) for local communities.

**The Smart Rural 21 project supported a wide range of smart actions** through technical expert support in participant villages such as training in programming for youth (Alsunga - Latvia), youth engagement (Mukařov - Czechia), planning of the rehabilitation of the old buildings and sites or new ones for community centres (Ansó - Spain, Raudanmaa - Finland, Šentviška Gora Plateau - Slovenia, Virtsu - Estonia), planning of the rehabilitation of the old wine cellar hill (Uppony - Hungary), training of farmers in organic production (Babina Greda - Croatia), support for planning (e-)health and (e-)care services (Cumeeira/ Penela - Portugal, Dingle - Ireland, Sollstedt - Germany), using smart farming solutions (Kythera - Greece), planning smart and sustainable mobility solutions (Ostana - Italy), developing energy community (Stanz im Mürztal), developing community App (Torup - Denmark), and building of 'Earthship' model (Tomaszyn - Poland).

Furthermore, it provided support for the real-world testing of strategies in three villages:

- **Stanz (Austria):** The Smart Rural 21 project contributed through technical expertise (in blockchain technology, renewable energy community building and relevant legal aspects) towards the planning of the infrastructure and the organisational framework of the Renewable Energy Community, combining social innovation (stakeholder engagement and local currency) and technological development based on blockchain technology and local token system.
- **Tomaszyn (Poland):** The Smart Rural 21 project contributed to experimenting with various sustainable and smart agricultural production methods (supported through small-scale specialist workshops and expert advice), as well as exploring the possibility for eco-building construction. Based

on the support, Tomaszyn is planning to develop a Regenerative Plan for the village including a landscape plan, an animal regenerative grazing plan, the localisation of agro-forest, crop and field regenerative production plan and an educational path.

- **Ferraria de São João - Penela (Portugal):** A series of actions (workshops for volunteers and local shepherds and food producers) were supported to ensure innovative goat and forest management practices to prevent forest fires also including the use of digital technologies (feasibility study for improving a new version of the digital platform: FarmReal), as well as improving community action in ecological design and the quality of tourism activities.

The project has shown that while the **thematic interests and needs of rural communities are highly diverse**, there are also some commonalities in the interest for smart actions. This gives scope for exchange of experience among villages. At the same time, the support provided by technical assistance projects, like Smart Rural 21, **always has to be adapted to the needs of the communities**. For instance, stakeholder engagement is harder to expect in lagging behind communities – e.g. those impacted by depopulation, brain-drain and lack of services – but these communities should not be left behind.

Capacity, however, is hard to “build” from the outside. Specialist (external) expertise can be provided, but without capacity at the local level to build on the new opportunities and newly obtained knowledge for the benefit of the whole community, the external expertise will not be enough. **Therefore, technical assistance projects should focus on identifying and nurturing the “seeds” where they still exist.**

“Seeds” are those people, ideas and initiatives that can bring change over time to the whole local community. Some communities are strong, and not only have few “seeds” but many already growing plants. However, often there are no “seeds” left in rural areas at all or those that are left are not strong enough to survive; or even if they are, many of them are yielding lonely plants (sometimes even killing other plants around them). However, there are areas with a lot of potential. Sometimes, these local “seeds” arrive from the outside, but when they are strengthened, they can bring new life to the whole area and community.

**The key role of projects like Smart Rural 21, is to find these seeds and support them to grow in every possible way they can.** It is not easy to identify the right initiatives and communities worth of support. Making the wrong choices (that sometimes even lead to failure) is the inherent nature of pilot projects. It is important to learn the lessons from these and share them widely. Through the vision and strong engagement, the Smart Rural 21 project aimed to support local people and initiatives nourishing the local seeds that can bring new life to rural communities.

**Innovation is at the heart of the Smart Villages** concept. Innovation is not just “happening”, it is most often triggered by a challenge (such as the depopulation of rural communities, loss of services or climate change). Innovation in the Smart Villages context is expected to trigger a change in response to challenges and consequently, have an impact on the local rural society and territory. **New technologies and digitalisation are crucial opportunities of our century, however, without the involvement and impact on the**

**community they will not lead to change.** In this context, Smart Villages often happen at the interface of technological/ digital and social innovation.

There are also communities that achieve change – e.g. reverse the depopulation trends - through people and initiatives without necessarily involving digital or other technological innovation. **New practices that bring considerable positive change to the local rural community and area can be seen as important social innovations** that Smart Villages should support, although it is much harder to grasp and define innovation in such contexts. The challenge lies in the fact that what might be new in one area/community, might not be new or innovative in another.

Therefore, **every community needs to pave its own smart journey.** At the same time, new ideas can be gained from other territories, and their smart journey can be inspiration for others. This is why exchange of experience among rural communities – that the Smart Rural 21 project has largely supported through Smart Village Academy events, online smart cafés and face-to-face cross-visits – are so important.

#### 4. WHAT HAS BEEN LEARNT ABOUT SMART VILLAGES SUPPORT?

The Smart Rural 21 project **aimed to map and draw conclusions concerning Smart Villages support frameworks and policies.** Firstly, the project mapped the policy framework (the Common Agricultural Policy, Cohesion Policy and other knowledge and initiatives in each Member State). Secondly, it developed a policy overview paper and a series of Smart Villages policy case studies. Thirdly, it showcased the approaches of some of the more advanced countries through presenting these approaches at regional workshops in Poland (Tomarzyn), Austria (Stanz), Denmark (Torup) as well as an online workshop with focus on Italy.

While several policies, programmes, measures and projects were supported Smart Village(-like) initiatives in the past, **the institutionalisation of Smart Villages support frameworks in Member States is at an early stage.** The Common Agricultural Policy (CAP) also encourages – and is expected to support smart village through cooperation interventions. At the same time, the EU has largely delegated the ‘power’ on programme design and spending of funding to Member States, and the CAP delivery model allows greater flexibility to design interventions according to the Member States’ needs. At the same there has been no strong obligations for the Member States to set up supportive Smart Village policy frameworks.

The Member State analysis of the Smart Rural 21 project (carried out before the CAP Strategic Plans were approved) showed that:

- **In most Member States, LEADER is likely to be the key instrument for implementing Smart Villages** (e.g. in Austria, Wallonia, Estonia, Germany, Ireland, Italy, Latvia, Lithuania, Poland, Slovakia). Other, less commonly mentioned interventions include the cooperation – including EIP-AGRI - and/or basic services measures (e.g. Finland, Germany).
- While there have been uncertainties on how to programme Smart Villages under the CAP or beyond in most Member States, **there are also some frontrunner countries** – with a relatively clear vision and approach– such as Poland, Finland, Austria, and Czechia.

- **Supporting digital solutions for innovation in local communities is a key feature of Smart Villages in a number of countries** (e.g. Finland, Germany, where digitalisation is an important component of Smart Villages).
- **Many National Rural Networks (NRNs) followed closely the Smart Villages developments**, were part of the ENRD's Thematic Working Group on Smart Villages and/or shared information about Smart Villages on their websites, at events and through other communication channels. In some countries, more specific/ targeted Smart Villages activities took place (e.g. Smart Countryside group in Czechia; Smart Villages training in Estonia; Smart Villages call for projects in Poland; the Añora Declaration - Digitalisation and Intelligent Rural Territories in Spain; Smart Villages thematic working group in Sweden).
- **In some of the Member States support is available for Smart Villages(-type) initiatives through other than CAP funds and programmes**, these vary widely: e.g. Flemish Land Agency support for projects in villages or neighbourhood with rural character & climate projects, Digital Wallonia initiatives in Wallonia, strategy for digitalisation and agriculture in Bulgaria, 'Village of the Year' competition in Denmark, national broadband strategies in Finland, Small Towns of Tomorrow and New Places – New Links programmes in France, 'Digitale Dörfer' - Digital Villages project funded by the Ministry of the Interior and Sports of the Federal State of Rhineland-Palatinate; Digital Village Programme in Hungary; National Strategy for Inner Areas in Italy; Innovation Agenda for Agriculture in Portugal. Other (than CAP) EU funds are also in some cases plan to support Smart Villages (e.g. Smart specific objectives implemented in the Regional Development Strategy of Czechia supported by the Ministry of Regional Development).

There are relevant and specific interventions in the future CAP Strategic Plans that can potentially support Smart Villages in the future. There is so far less evidence for other types of EU policies and funds specifically targeting Smart Villages, although several individual interventions are relevant. The detailed policy analysis is subject to further elaboration under the Smart Rural 27 project.

There are several different pathways to support Smart Villages – including technical & capacity-building support for strategy development:

- **Strengthening capacity:** It is important to strengthen the capacity and governance in local communities that can take diverse forms from trusted elected leaders through visionary local individuals or NGOs self-organised community groups – especially through supporting and motivating those individuals and organisations who have the interest and drive to make a change.
- **Cooperation of communities:** Collaboration among rural communities in the local, regional, national and European contexts should be supported, especially through peer-to-peer learning among communities.
- **Long-term vision:** Local communities need to be encouraged and supported to develop longer term, holistic plans or strategies, that can help define the direction for their future-looking development, and help communicate about the village towards regional, national and European policymakers. In this context, linkages with other local (e.g. LEADER Local Development Strategies) and regional strategies should be established.

- **Financial and technical support** is needed through the CAP but also through Cohesion Policy, national/regional and other policies to support the relevant smart interventions included in the strategy, from larger infrastructural projects to softer capacity-building ones, in a wide range of thematic areas (such as broadband and mobility infrastructure, basic services, climate actions, energy, rural businesses, community-building platforms and community centres, etc.). Multiple funding – including the European Agricultural Fund for Rural Development, European Regional Development Fund, European Social Fund+, private investments, community investments and financial instruments – are crucial to realise holistic integrated approaches. **Rural communities should be rewarded** – e.g. through additional scores in evaluation of their project applications – **for having more integrated approaches to local development**; policies, programmes and measures should be used in a connected way to support Smart Villages approaches in rural communities, with particular focus on experimentation and piloting. Furthermore, support is required at the local level to better understand the EU's institutional and funding system, while the system needs to better adapt to local needs and use well-tested methods more widely (such as LEADER).
- **Local level capacity-building:** The process of strategy development and implementation can be animated and supported through **local-level capacity building**, including support for networking. LEADER / CLLD Local Action Groups are one of the most suited stakeholders to animate such a process, and they have many years of proven ability to engage local communities in rural development policies. Another key mechanism is rural networking, supported by the National Rural Networks (future CAP Networks) and other umbrella organisations at the national and European levels.

## 5. CONCLUSIONS & NEXT STEPS

The **main focus of the Smart Rural 21 project has been on directly supporting rural communities in developing smart village strategies and implementing smart actions**. Through close working with the communities, and understanding the diversity of community contexts, many lessons have been learnt, also summarised in the [Guidebook on How to Become a Smart Village](#) (translated into all EU languages).

**These lessons should inform future activities in support of Smart Villages**, including that of the 2<sup>nd</sup> Preparatory Action on Smart Rural Areas in the 21<sup>st</sup> Century (Smart Rural 27 project).

**As far as the Smart Villages policy work and support framework are concerned, there is still a lot of work ahead**. During the 2021-2027 period, the CAP and other policies (especially Cohesion Policy) interventions will need to be reviewed and closely monitored. Information needs to be shared about the experience of various Smart Villages support schemes. **The planning for the post-2027 policy cycle should start now** to ensure an effective Smart Villages policy framework in the future based on the experience accumulated during this period. The Smart Villages concept is also fully aligned with the Long-term Vision

for Rural Areas and the Rural Pact, which can give new opportunities and further impetus for an emerging support system.

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