

Preparatory Action on Smart Rural Areas in the 21st Century



Policy Analysis – Task 4.2: Assess options for future
actions

Case study: National Smart Villages Programme, Estonia

Case study report

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1 Summary

The ‘Smart Villages Programme’ is a national LEADER cooperation project that provides support and training activities to participating villages to develop a Smart Village strategy and implement innovative pilot activities in their area.

The development programme of Smart Villages is implemented by 13 Estonian Local Action Groups (LAGs). Twenty-four villages/regions from across Estonia participate in the development programme.

The expected results of the national Smart Villages Programme are:

- Each participating village prepares a Smart Village strategy – 24 villages and 24 strategies;
- Each participating village implements pilot actions in the framework of its Smart Village strategy – 24 pilot actions;
- A national Smart Villages Network will be established and linked with the international Smart Rural 21 network;
- Communication activities to introduce Smart Village strategies and results of pilot actions will be implemented to enhance public awareness and the know-how of Estonian villages, governmental institutions, etc.;
- LEADER LAGs will gain experience on how to implement the concept of Smart Villages at the local level and can, if necessary, plan follow-up activities into their Local Development Strategies (LDS) for the 2021-2027 programming period.

2 Background of the Estonian Smart Villages Programme

2.1 Context of the intervention

Table 1: Overview of the intervention

Name	Estonian Smart Villages Programme
Level of implementation	National
Period	01 January 2021 – 31 December 2022
Policy context/source of funding	LEADER national cooperation project, funded under the LEADER programme (EAFRD)
Amount of funding (EUR)	€ 251 928



2.2 Objectives

The biggest challenges in Estonian rural areas are related to ageing population and limited access to services.

Objectives of the programme:

- 1 The network of Estonian Smart Villages establishes connections with the international network of Smart Villages (Smart Rural 21).
- 2 Each participating village/region prepares a Smart Village Strategy and Action Plan to be implemented.
- 3 Each participating village/region carries out innovative pilot actions.
- 4 Through communication activities, the process of creating Smart Village strategies and success stories on pilot actions gets introduced to the general public in Estonia via regular and social media and also through international networks and partners.
- 5 The LEADER Local Action Groups gain experience on how to implement the Smart Village approach at the local level and are able to plan follow-up activities for the 2021-2027 programming period.

2.3 Understanding of the 'Smart Villages' concept

Developing a training programme, the 'Smart Villages' definition of the European Commission and the guidelines and templates provided by the Smart Rural 21 project were taken into account and the following criteria were introduced to participating villages to prepare their Smart Village strategies:

- **Coherence of strategy** – Logic of intervention, long-term vision, strengths and potential, indicators; a comprehensive and coherent Smart Village strategy has been developed; the strategy of the Smart Village clearly outlines the region's strengths, challenges, development opportunities, long-term vision, goals and action plan. The focus (one or more) of the strategy has/have been defined. Measurable indicators have been set for the activities, and the activities for monitoring and updating the strategy have been described.
- **Smartness and innovation** – The strategy of the Smart Village clearly states what kind of innovation the community implements, including the aspects of technological, digital and social innovation and the activities that are planned to achieve this innovation. Innovation is one of the most important distinguishing features of Smart Villages. The Smart Village develops new and innovative approaches, responds to local problems and challenges, and contributes to the challenges of the 21st century at the local level – green transformation, digital switchover, recovery from the Covid-19 crisis, promoting inclusive local development and democracy, as well as local capacity building. It is important to note that in addition to digital innovation, other types of innovation are also important in the context of Smart Villages, such as social innovation, technological innovation, new forms of inclusion and participation, and so on.
- **Participatory approach** – A participatory approach is a key feature of Smart Villages. The strategy of a Smart Village is based on the active participation of the community. The strategy clearly describes the process of community involvement and the inputs from local people. Involvement activities include also baseline research of community needs, SWOT analysis and strategic choices. The strategy clearly describes the role and activities of the community in implementing the strategy.
- **Cooperation** – Cooperation with various partners is clearly highlighted, and planned cooperation



activities at the local, national and, if possible, international levels are described. Cooperation and exchange of experiences with other partners and villages can make a significant contribution to the promotion of Smart Village strategies and innovative ideas. Learning from the experiences of other communities is one of the most effective ways to build local capacity. Cooperation with local municipalities and regional research and development organisations (universities, LEADER groups, development agencies, etc.) is also important.

- **Linkages with other strategic documents and actions** – Based on the focus of the strategy, the most important strategic documents and measures are presented, as well as the main sources of funding are described. In developing Smart Village strategies, communities are encouraged to seek synergies with other local (e.g. local government, LEADER LAG), regional, national (and even European) actors and strategic partners. An integrated approach and the involvement of different partners will also increase funding opportunities. Based on the strategic focus, the coherence of the strategy with other local, national and, if necessary, international strategies and measures has been described. Additionally, opportunities to finance the activities of the Smart Village strategy with support from various sources of funding are outlined.
- **Capacity building of local community** – Activities to support community learning and capacity building are clearly outlined in the Smart Village strategy, including a plan for training and outreach activities. The activities planned for capacity building are based on the vision, goals and action plan of the Smart Village strategy. In implementing the Smart Village concept, it is essential to pay attention to the development of learning opportunities and capacities in local communities, including technical skills to develop a coherent (logical/holistic) strategy and specialist support in implementing innovative activities; developing the engagement skills and capacities of the members of the steering group; developing the skills and capacities of community members.

3 Implementation of the intervention

3.1 Spatial context of implementation

The development programme of Smart Villages is implemented by 13 Estonian Local Action Groups (LAGs). Twenty-four villages/regions from across Estonia participate in the development programme.

3.2 Target groups/beneficiaries

There were different target groups involved into the various types of activities during the implementation of the national Smart Villages Programme:

Estonian national working group (steering group) on Smart Villages

- Ministry of Rural Affairs;
- Ministry of Social Affairs;
- Estonian Rural Network;
- Estonian LEADER Union;
- Estonian Village Movement;



- Association of Estonian Cities and Municipalities.

The main role of the national working group was to support the implementation of the programme, give feedback, evaluate Smart Village strategies, build linkages with their own capacity-building and dissemination activities, potential support measures.

Thirteen LEADER Local Action Groups across Estonia – Their main role was to implement the LEADER cooperation project and support local communities while preparing Smart Village strategies and implementing pilot actions. The secondary role of LAGs was to get a better understanding of the Smart Villages concept and its implementation on the local level, and use this experience to design LDS and support measures for the new programming period 2021-2027.

Twenty-four villages from the areas of participating LAGs – There are very different types of villages participating in the programme: traditional villages, groups of villages, entire municipalities, rural-urban combined areas, etc. All participating villages included into the process representatives from different sectors – local residents, businesses, village associations, local authorities, as well as vulnerable groups – elderly, youth, etc. Their main role was to participate in the programme, prepare a Smart Village strategy and implement pilot actions.

3.3 Activities implemented, methodology and/or key features of the intervention

The Smart Villages Programme is a national LEADER cooperation project that provides support and training activities to participating villages to develop a Smart Village strategy and implement innovative pilot activities in their area.

As an added value of the cooperation project, a network of Estonian Smart Villages will be created to increase the capacity and awareness of local communities about the development potential of the region. In addition, links will be established with the European Smart Villages Network Smart Rural 21 (www.smartrural21.eu).

The development programme of Smart Villages is implemented by 13 Estonian Local Action Groups. Twenty-four villages/regions from across Estonia participate in the development programme.

The year and a half-long Smart Villages Programme includes:

- Six training modules on different topics: social innovation; digitalisation; greening solutions; networking and people involvement; urban-rural cooperation; cross-border service development; local marketing and attracting people to the region; smart transport and logistics solutions; self-sufficiency and business services.
- A two-day study trip in Estonia and a five-day study trip abroad.
- Implementation of pilot activities – each village carries out at least one pilot activity set out in the strategy, receiving a grant of € 5 000. The pilot action will be selected during the preparation of the strategy.
- Mentoring support – each village gets its own mentor. A total of five working days of mentoring support has been calculated for each village. In addition, it is possible to use expert knowledge according to the needs of villages.
- Communication and information activities – sub-page of Smart Villages on the Estonian LEADER Union web and on Facebook, articles, sharing information on good practices, sharing information



with Estonian and the international community.

- Network coordination and project management – coordination of all activities and information sharing, organisational issues. Coordination of cooperation with trainers, mentors, communities, international partners.

4 Impact of the intervention in terms of key features of the Smart Village approach

4.1 General impact

The intervention is ongoing and will be finalised by December 2022.

Expected impact of the programme is:

- 1 Communities are more active in local development and local-level democracy has increased.
- 2 Local stakeholders have a better knowledge of strategic planning and how to produce innovative solutions.
- 3 Village lead groups' (groups of villagers who steer the process of Smart Village strategy) capacity and skills to involve community and other partners have improved.
- 4 The quality of life on the village level has improved due to new developments and innovative services developed in the framework of the pilot actions.
- 5 Cooperation and networking between the different villages are stronger, which enables a good basis for further cooperation activities and innovations.
- 6 Villages have improved their capacity to attract different funds to implement a Smart Village strategy.
- 7 Through communication activities, other villages have been inspired and the know-how about the Smart Villages concept has been made visible and accessible to the public.
- 8 LAGs have gained experience of the 'Smart Villages' concept implementation on local level and have prepared necessary improvements for LDS and funding mechanism for communities to support the development of innovative solutions.

4.2 Interplay of social and technological innovation (digitalisation)

Digital innovation is rather horizontal innovation for participant villages of the Estonian Smart Village Programme. Very often digital innovation is combined with other types of innovation. The main aim is to provide added value to local community which very often is related to new local services, and digital/technological innovation is the key for providing these. For example, transport system for children's hobbies, virtual community and visitors platform, food lockers, community library, distance working places development, etc. – all these services have a social innovation component and also digital and technological innovation components. Social, digital and technological innovations are often combined on local level.

5 Lessons learned from the intervention

5.1 Success factors and bottlenecks

Table 2: Main success factors of the intervention

Success factors	Short explanation
Participatory process	Participant villages organised involvement of community into the preparation of the Smart Villages strategy. Throughout the process their ability and skills to involve local community improved.
Innovative thinking	The training programme included inspirational examples from other countries and other areas of Estonia, as well as expert support.
Involving mentor support	Each village could use up to five days of mentoring support to organise village meetings, surveys, prepare the strategy, etc.
Networking with other villages	The Programme enabled networking and knowledge exchange. In the middle of the strategy development process, the villages presented their state-of-play, their strategic focuses and innovations. This enabled mutual learning about strategy preparation.

Table 3: Main bottlenecks of the intervention

Bottlenecks	Short explanation
Limited number of face-to-face meetings	Due to the COVID-19 pandemic, it was difficult to organise the process with limited face-to-face gatherings. Very often, it was necessary to use e-solutions for meetings and collection of information. It caused a situation where some people could not participate.
The 'Smart Village' concept is very new.	The concept is very new and people are not familiar with it. It is learning by doing.
Missing definition and criteria for Smart Village approach at the beginning of the process.	It was not defined very precisely what a Smart Village is; it was a rather flexible approach because there is no elaborated definition established in Estonia yet.
Level of capacity is very different in different villages	There are 24 villages/regions in the programme and there are remarkable differences in understanding, know-how, capacity to prepare and implement a Smart Village strategy.



Innovation	Sometimes it was difficult to merge innovations. In each training, it was highlighted that innovation is very important: What is new/innovative, what is planned to be done in order to implement innovative approaches? What is 'smart' for the village? These were questions often asked throughout the process repeatedly.
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5.2 Transferability

5.2.1 Key principles transferable to other thematic contexts

The programme is well transferable to different thematic and geographical contexts. It is necessary to have project funding for the programme. In Estonia, the programme was implemented as a LEADER cooperation project and it was funded under LEADER.

The programme activities that can be transferable are:

- Prepare a LEADER cooperation project and organise a call for villages to participate in the programme.
- Six training modules on different topics: social innovation; digitalisation; greening solutions; networking and people involvement; urban-rural cooperation; cross-border service development; local marketing and attracting people to the region; smart transport and logistics solutions; self-sufficiency and business services.
- A two-day study trip in the country and a five-day study trip abroad.
- Implementation of pilot activities – each village carries out at least one pilot activity set out in the strategy, receiving a grant of € 5 000. The pilot action is selected during the preparation of the strategy.
- Mentoring support – each village gets its own mentor. A total of five working days of mentoring support has been calculated for each village. In addition, it is possible to use expert knowledge according to the needs of villages.
- Communication and information activities – sub-page of Smart Villages on the national LEADER Union web and on Facebook, articles, sharing information on good practices, sharing information with the national and the international community.
- Network coordination and project management – coordination of all activities and information sharing, organisational issues. Coordination of cooperation with trainers, mentors, communities, international partners.

5.2.2 Spatial transferability

Please see above.

6 Conclusions

6.1 Scope of the intervention for supporting the Smart Village approach

The intervention supports further development of the Smart Village approach in Estonia. The Estonian CAP Strategic Plan foresees the Smart Village approach implementation under LEADER/CLLD. Therefore, the intervention provided very good experience and base to build on the next steps.

Having implemented the national programme, Estonian LAGs gained experience with the Smart Village approach. Currently, LAGs are improving their LDS for the 2021-2027 period where specific attention and new support measures will be designed for Smart Village actions.

In Estonia, the Smart Village approach refers to the following criteria/key aspects that were highlighted during the preparation process of Smart Village strategy (see section 2.3):

- **Coherence of strategy** – The strategy of the Smart Village clearly outlines the region’s strengths, challenges, development opportunities and the resulting long-term vision, goals and action plan. The focus(es) of the strategy have been defined.
- **Smartness and innovation** – The strategy of the Smart Village clearly states what kind of innovation the community implements, including the aspects of technological, digital and social innovation and the activities that are planned to achieve this innovation.
- **Participatory approach** – A participatory approach is a key feature of Smart Villages. The strategy of a Smart Village is based on the active participation of the community. The strategy clearly describes the process of community involvement and the inputs from local people.
- **Cooperation** – Cooperation with various partners is clearly highlighted and planned cooperation activities at the local, national and, if possible, international levels are described.
- **Linkages with other strategic documents and actions** – Based on the focus of the strategy, the most important strategic documents and measures are presented, as well as the main sources of funding are described. In developing Smart Village strategies, communities are encouraged to seek synergies with other local (e.g. local government, LEADER LAG), regional, national (and even European) actors and strategic partners.
- **Capacity building of local community** – Activities to support community learning and capacity building are clearly outlined in the Smart Village Strategy, including a plan for training and outreach activities.

6.2 Implications for further development of the ‘Smart Village’ concept

The intervention had the aim to test the Smart Village approach on the local level. The actors are still in the middle of the project and the process and therefore final conclusions can be drawn after the implementation of pilot actions in December 2022. So far, the implementation shows the interest and motivation of local communities to work with this method and elaborate Smart Village strategies. Some of the villages have already started to work out innovative community services including social, technological, and digital innovations.



7 References

- Estonian LEADER Union website Smart Villages sub-page <https://leaderliit.eu/arukad-kulad/>
- European Commission (2019): Pilot Project: Smart eco-social villages. Final report, p. 60. Available online: https://enrd.ec.europa.eu/news-events/news/pilot-project-smart-eco-social-villages-final-report_en

8 ANNEX: Methodological approach of the case study

8.1 Desk research

The author of this case study report is the coordinator of the above-described cooperation project, the national Smart Villages programme and the leader of the Estonian national working group of Smart Villages. All inputs for the report were collected from the project materials which are uploaded on the Estonian LEADER Union Smart Villages sub-page.

8.2 Expert interviews

As the author of this report and colleagues are implementing the cooperation project, they have meetings and discussions with representatives of Estonian Village Movement, Estonian Leader Union, mentors and trainers of Smart Villages training programme on daily basis.