Title: Smart Communities 2.0 – How to be smart in the countryside? SKHU/1902/4.1/027

Introducing the context

The global trends that have shaped our world today have brought new challenges to all communities, regardless of the size, geographical location, or position within the settlement hierarchy. This is especially true for rural towns and small settlements at the level of local society and economy, as well as at the level of individuals. In both the international and domestic literature, research on "smartness" has so far focused on big cities. Smartness was primarily linked to size, minimum population, urban functions, and the existence of a massive "hard," i.e., physical infrastructure. The main goal of "getting smart" was accordingly focused on efficiency and technology.

Examining the policy connections, we can state that although the topic appeared in the policy of the European Union only in 2016 in the framework of the EU Action for Smart Villages, the thematic work of the European Network for Rural Development (ENRD) has long included complex development priorities and technological elements.

Smart village and smart region programs have been running for 10-15 years in several European countries (in the region of Milan-Turin in northern Italy (Morandi, Rolando, Di Vita 2016), or in Germany the Fraunhofer Digitale Dörfer program). It should be noted that most research and demonstration projects on smart villages and regions are located in India (e.g. India Smart Villages) and Africa (e.g. E4SV Smart Villages, IEEE Smart Village program). In the Central and Eastern European region, relatively little attention has been paid to the issue so far, which is why we are addressing this issue.

A Smart Communities 2.0 - How to be smart in the countryside? project was prepared on the basis of the experiences, results, lessons learned and the needs of the target group of the pre-project successfully completed in April 2019, code SKHU / 1601 / 4.1 / 210 Smart Communities - Virtual Education and Research and Development and Innovation Network in the Slovakian - Hungarian border region.

Both projects are implemented within the framework of the Interreg V-A Slovakia-Hungary Cooperation Program.

As part of the "Smart Communities" project, we sought to answer the question of whether "smartness" is really the privilege of cities. According to our approach, it is also possible for small rural settlements to become smart settlements, in which case developments should be based on "soft", endogenous development factors and the development of smart communities should be supported instead of (and in addition to) smart infrastructures and technological systems. The project consortium consisted of higher education institutions, academic research institutes, grammar schools and NGOs. The project was led by the Salgótarján-based ITA (Interindustria Knowledge Centre Foundation). The pre-project ("Smart Communities") demonstrated that "smartness" is not just a privilege of cities and that it is indeed possible to "become smarter" in small rural areas based on local conditions and actors, the activities were welcomed with great pleasure by the local actors and they participated in large numbers, actively in them.

The Smart Communities 2.0 project now aims to answer the "How" question, i.e. to provide disadvantaged municipalities with products, services and good practices that can help them become "smart" based on the experience of the previous project, providing a kind of guidance for development.

Based on the results of the successful pre-project, two main groups of activities are planned: the Smart Village cross-border services (*Smart Database and related one-stop Helpdesk service - information database programs, institutional information, fees, marketing, technical assistance and verified application database, consulting*) and the Smart Village knowledge transfer.

The eight-member consortium of "Smart Communities" has been adapted to the wide range of surveys and studies in the target area and to the diverse series of events on both sides of the border. In the follow-up, in the "Smart Communities 2.0" project, the consortium leader Interindustria Knowledge Center Foundation chose the two partner higher education institutions (Eötvös Loránd University and Košice University of Technology), focusing on deeper, scientifically based research activities, as in these professional workshops have been conducting territorial / regional research for many years in relation to the topic of the project.

Introducing the tool

Objectives

The concept of the project is to create and test a developed package of products and services that combines local specificities and global trends.

The main goal is to support the smartness of rural settlements, including the development of "smart" communities and the implementation of knowledge transfer, through the development of specific cross-border services.

The target area of the project can be characterized as the 'periphery of the periphery' and, despite previous traditional rural development interventions, with deteriorating economic and social indicators at both county and micro-regional levels (eg GDP, unemployment, employment, migration, shrinking communities, inefficient use of natural resources, level of education, added value).

The overall objective of the project is to make a significant contribution to the increase of intellectual capital in the disadvantaged border region of southern Slovakia and northern Hungary by establishing and disseminating innovative cooperation structures resulting in the practical application of social innovation.

Approach / implementation stages / budget

Project budget: 178 692 EUR
Project start and planned completion: 1 October 2020 - 31 January 2022

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In addition, the Smart Database and Helpdesk, as a one-stop shop, make all relevant and up-to-date information available in one place, connecting villages with relevant opportunities as well as competent advisors.

Based on the developed services, knowledge transfer to villages is implemented, the target groups of which are local communities: local institutions - decision-makers, civic and economic organizations – are the target group for Smart Village pilot courses and Smart Academies (international conferences), while the local population - old and young – are the target group for the trainings of the Mobile ICT Center, the study trips of the Local Bloom Movement and the Local Development Hackathon competition.

As a final step to measure and compare the development of villages, a new motivational service will be developed and introduced in the form of the Smart Village Award, which is based on the Smart Village Indicator System developed and tested jointly by the Slovak-Hungarian partners.

Planned content of each activity:

• Catalog of Good Practices: Lists many examples of 'smart' development opportunities for villages, especially in rural Europe. The catalog (handbook) detailing good practices can motivate the settlements in the target area, setting an example for future developments.
• Smart Village Compass: This handbook provides an opportunity for villages to assess where they stand in the area of 'smart' developments, where they have gaps and opportunities for development. It shows then step by step how the necessary projects can be implemented (with the help of methods, tools, resources) in the given settlement.
• Smart Database: There is a collection of different internet access opportunities for municipalities (of villages) in order to better connect to the flow of information, while also pointing out what tools and activities villages can use to be 'smart'. A user guide for potential users is also created for the database.

• Helpdesk: A one-stop shop that helps professionals of the target area through an e-mail contact point in questions related to the Smart Database. In addition, it connects villages with relevant opportunities and competent advisors.
• Smart Village pilot courses: Within the framework of one-day trainings, the stakeholders of the settlements of the target area can get acquainted with the content of the documents and services prepared in the project, as well as receive information about the latest results of smart trends.
• Smart Academies: The international conference series will continue with the participation of researchers and practitioners following the tradition of the pre-project. During the implementation period of the Smart Communities 2.0 project, the conference will be held twice, first in Legén, Hungary, and then in Košice, Slovakia.
• Mobile ICT center trainings: During the one-day trainings, the use of smart devices and the processing possibilities of the information available on the Internet will be presented in the settlements of the target area. The mobile nature of the trainings is given by the fact that we bring both the trainings and the ICT tools to the participants. The target groups of the trainings are the elderly and disadvantaged young people.
• Regional Bloom Movement: 4-4 study tours will be organized for rural children's communities in the project area on the Slovakian and Hungarian sides. Through these study tours, children can gain insight into 'smart' developments and programs at companies/businesses of the area, in the areas of corporate governance, manufacturing or even logistics.
• Territorial Development Hackathon: An innovative one-day brainstorming competition based on the use of IT tools and knowledge for primary and secondary school students in the area.
• Smart Village Indicator System: A Slovak-Hungarian indicator system will be developed to measure the 'smart' nature of villages. The indicator system provides the methodological background for the Smart Village Award.
• Smart Village Award: At the end of the project, a new motivational service will be developed and introduced to measure and compare the development of villages, which will encourage rural settlements - in the form of an award - to implement 'smart' developments.

The coordinator is an organization with experience and an extensive network of contacts in the target area of the project (Interindustria Knowledge Center Foundation) that functions as a bridge towards the local settlements, while the consortium partner higher education institutions ensure the necessary knowledge and capacities on both sides of the border. The target area of the project is Nógrád county, Banska Bystrica and Kosice region.

Impact

Expected results of the project among border communities:

- generating higher added value through knowledge transfer provided by expert external actors;
- a change in the way of thinking of the local people about the right question: "What can I do for my community / village?";
- increasing the skills and openness of local people (older and younger generations) by bringing ICT closer to them and to disadvantaged groups;
- strengthening entrepreneurship and raising awareness of alternative employment opportunities in order to prevent emigration from cross-border target regions;
- increasing the international visibility of the target area and broadening of opportunities for cooperation;
- locally provided, personalized and efficient cross-border services for the sustainable "smartening" of small settlements;
- easy to adapt (immediately applicable) good practices.

Main medium-term effects for disadvantaged target groups:

- growth in employment and employability, both qualitatively and quantitatively,
- developed environment for sustainable employment (teleworking),
- positive change of attitude, strengthened awareness and lifestyle,
- innovative "smart" interventions for cross-border development,
- increased networking and internationalization, community development.

For the target groups, rural settlements, the impact, benefits and efficient use of the results of the project are guaranteed by the principle of economies of scale and the balanced geographical and sectoral composition of the consortium on both sides of the border. All planned activities on both sides of the border must be implemented jointly and in a coordinated manner, while all services and products will be available in the entire border area, both in Slovak and Hungarian. As the results of the pre-project show that the effects of the project

activities are evenly distributed between the two countries, our goal for the current project is to maintain cross-border cooperation.

Golden Rules

The target area is a homogeneous unit in terms of geography, economy, social, historical and cultural aspects and environmental characteristics. This area could be most effectively developed through joint interventions.

A cross-border approach is particularly needed, as actions at national / regional / local level alone would only further increase regional disparities and inequalities, which are clearly not objectives at either political or project level.

The project contributes to the achievement of rehabilitation, catching-up potential and increased resilience through short-term measurable indicators (cross-border services and products) and medium-term project results, which are of key importance in this Slovak-Hungarian border area.

Go further: (list)

http://smartcommunities.eu/projektek/smart-communities-2-0

https://www.skhu.eu/funded-projects/smart-communities-2-0-how-to-be-smart-in-the-countryside