

THE CONCEPT OF SMART RURAL DEVELOPMENT ON THE EXAMPLE OF THE MUNICIPALITY OF PETROVAC NA MLAVI

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Abstract

In contemporary society, the concept of smart rural development represents a key element in transforming local communities towards a more sustainable and economically prosperous future. This concept integrates the use of advanced technologies, digitalization, and innovation to improve the quality of life in rural areas, increase the efficiency of agricultural production, and preserve natural resources. Smart rural development enables communities to adapt to the challenges of the modern era, such as demographic changes, migrations, and climate changes, offering sustainable models for economic development that are aligned with the specificities and needs of rural areas. The implementation of this concept can significantly contribute not only to increasing the attractiveness of rural areas for living and working but also to strengthening the local economy through the development of small and medium enterprises, tourism, and alternative sources of income. The realization of smart rural development requires the active participation of all community members, as well as support from national and international policies, which presents a challenge, but also an opportunity for local communities to reshape their future in accordance with the principles of sustainability and innovation. This concept has been successfully implemented in the local community of Petrovac na Mlavi.

Key words: smart rural development, local community, digitization, innovations, local economy, rural tourism, Petrovac na Mlavi.

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1. Introduction

The concept of smart development in local communities offers the opportunity to find solutions (through digitalization, new content, sustainable production, cultural heritage, and women's entrepreneurship), by building on the real current strengths and capabilities, to stimulate further development ("Pametna sela", 2022).

This way of thinking and acting allows communities (especially in underdeveloped rural areas) to devise "smart solutions" to the challenges they face (Zelenika, 2015).

The basic mode of operation is to build on one's own local strengths and capabilities in order to engage in the process of sustainable development of their local areas (Ocsko, 2019). Such an approach allows for the development and implementation of strategies aimed at improving economic, social, and natural conditions (Ocsko, 2019). This leads to the initiation of innovation, as well as new solutions provided by modern development and business conditions (Pejanović, 2023). In addition, "smart" villages benefit from various associations and collaborations with other communities, which can be based on existing initiatives and funded from various public and private sources.

The municipality of Petrovac na Mlavi is presented in the paper as an area that falls into the underdeveloped parts of the Republic of Serbia. The way in which the local community, in its own unique and innovative way, in accordance with the needs and the effort to change something and solve specific challenges, has found solutions and created new practices in accordance with its own context, is showcased.

The municipality of Petrovac na Mlavi was chosen based on the fact that it falls into the fourth group of development of local self-government units in the Republic of Serbia – namely, devastated areas, the most underdeveloped local self-government units, and thanks to innovative thinking and the so-called smart approach, it has managed to find its place in the market and gain a relatively good position on the tourist map.

The municipality of Petrovac na Mlavi is located in eastern Serbia, in the Braničevo District ("Upoznajte Petrovac", 2024). It occupies the central part of the Mlava river basin and is situated between the Gornjak mountains and the Stig plain. It covers an area of 654.9 km² and comprises 34 settlements ("Upoznajte Petrovac", 2024).

From an administrative perspective, the municipality of Petrovac na Mlavi borders the municipalities of Malo Crniće (to the north), Despotovac (to the south), Žabari and Svilajnac (to the west), and Kučevac and Žagubica (to the east) ("Upoznajte Petrovac", 2024). It is located on one of the most important traffic routes within the Braničevo District that connects Bor, Žagubica, and Petrovac on one side, with Požarevac and the Belgrade-Niš highway on the other ("Upoznajte Petrovac", 2024). Petrovac na Mlavi, as the municipal center, is located on the banks of the Mlava River and is traversed by several regional road routes ("Upoznajte Petrovac", 2024).

The municipality of Petrovac na Mlavi is characterized by a good tourist-traffic position. It is relatively close to Belgrade (about 110 km), as the capital of the Republic of Serbia and the largest center in the country. Consequently, it has good connectivity with the "Nikola Tesla" airport. It is about 50 km away from the E-75 highway, and about 200 km from Novi Sad and Niš.

The central part of the Mlava River, between the Homolje Mountains and Stig, which the municipality occupies, provides excellent conditions for the development of agriculture, especially livestock, fruit growing, and crop farming. The municipality of Petrovac na Mlavi is also known for the production of honey and bee products.

The authors use various research methods: methods of induction and deduction, analysis and synthesis, description, comparison, observation, field research, etc. (Zelenika, 2015).

2. Commitment to smart rural development

The municipality of Petrovac na Mlavi has identified agriculture and tourism as its main economic sectors. This is evident from development documents as well as actual practice.

Assessing all factors important for development in the area of the municipality of Petrovac na Mlavi has resulted in a presentation of the existing situation on the ground, the overall picture related to rural development and further steps related to identifying the municipality's shortcomings and advantages as a destination compared to potential competitors (both domestically and internationally). In this way, primary steps in planning further smart rural development concepts were defined.

The goal is set to develop on the foundations of rich local, traditional, and cultural heritage, a healthy environment, a highly characteristic and attractive ambiance, authentic gastronomy, and numerous attractive contents ("Smart village: the new EU rural development frontier", 2023).

As primary steps, the municipality of Petrovac na Mlavi has begun with the creation and adoption of necessary programme and planning documentation in which rural smart development plays a significant role in the further development of the municipality ("Program razvoja turizma opštine Petrovac na Mlavi 2021-2025", 2022). The successful implementation of these activities has created a favorable business environment, enabled the creation of new jobs and the construction of significant infrastructure facilities whose role is to enhance the accessibility of the municipality, communal equipment, the quality of the environment, and tourist content.

The vision is for Petrovac na Mlavi to be a municipality where all citizens, especially the youth, choose to live, work, invest, and start their families. It is recognizable for its developed tourism, agriculture, and favorable business environment for investment. It is ecologically conscious, with resolved communal infrastructure and a preserved ecosystem. Health and social services are developed and accessible to all citizens, and the socio-cultural life is rich and diverse.

There are numerous ways to improve the economy of less developed areas (Prodanović Stamenović, 2022).

One of the municipality's priority goals is the establishment of a quality tourist product, an increase in the number of tourists, and revenue from tourism.

In the municipality of Petrovac na Mlavi, significant activity is directed towards the development of rural tourism, as this type of tourism is characterized by sustainability (Pejanović, 2013). The municipality has an excellent basis in the form of quality accommodation in rural households, but complete development involves following market trends. Through opportunities for diversification and investment in new technological achievements, a definitely positive contribution is reflected in the development of the local community, which in this way gains opportunities to reduce risks and generate new revenues (Pejanović & Stanojević & Radović, 2024). The entire process is guided by the primary idea that what is common practice in one local community can be a completely new practice in another local community, thus innovations are viewed in their own local context and should not be limited only to the digital context.

The basic questions that the local community in Petrovac na Mlavi has set as a platform for development are why it is necessary to apply such a concept and how the change will contribute to the local community. This has certainly led to the aspiration towards a rural environment that will contain service-oriented, innovative villages with the aim of encouraging rural agriculture and living conditions.

A series of programme and planning documents have been created, serving as a platform to support further work on various projects, which also provide the opportunity to compete for investment funds both domestically and internationally.

Through a successful campaign, interaction with the diaspora was achieved (a large number of the municipality's residents are on "temporary" work abroad), and significant capital was invested in accommodation and catering capacities, as well as in promoting the municipality in Western European countries (various presentations and performances by cultural-arts societies). Additionally, a platform for cooperation and opportunities for various projects was created, contributing to social and cultural interaction, as well as strengthening the connection with the homeland. Sustainability was also achieved through the dissemination of various information and knowledge related to cultural heritage, with which the younger generations of our people abroad had less contact.

In the municipality of Petrovac na Mlavi, a digital display offered a new effective way of cooperation and information exchange with visitors, aiming at three main development ideas focused on the environment, culture, and sustainable economic development.

This way of thinking is primarily aimed at encouraging new ideas, ways of working, and strengthening community in achieving social goals. In this way, traditional business management, which has functioned sustainably through the centuries, was also utilized, specifically the arrangement of using watermills that have had multiple owners through generations and a specific model of traditional management functioning. Millers from the municipality of Petrovac na Mlavi often

joke that their month lasts up to 40 days because the system of division depends on the percentage of ownership, and the day is divided into day and night, with multiple millers having their part of the day in 24 hours, as well as a number of days when they can use the mill and produce flour with the help of nature and without the use of electrical energy. The traditional way of working and cooperation in this context is thus an example of good practice and a response to certain social challenges and market applications.

In this way, the traditional culture of the rural areas of this region has been transferred into the digital world and, in a unique way, aims to find a common language with younger generations through modern technologies, teaching them traditional values and life in harmony with nature.

As another good example that the tradition and culture of a specific area can be a good platform for development and a completely different view and expansion of the range of offerings is the inclusion of old watermills in tourist flows where a completely new way of interaction has been developed through miller "storytelling" where millers in an interesting and authentic way tell their personal stories about the mills, and using QR codes all visitors (at any time) are enabled to get such information and thereby achieve a higher quality experience of the destination itself and gain new knowledge.

Through the networking of different factors and economic branches, there has also been a revival of agricultural production, but in the old traditional way. In addition to organic vegetable production, production of famous Homolje and Kamenovo honey and other bee products, "osmak" corn has also been revived. This way, an exclusivity of flour from this old variety of corn, which was once produced and used for human consumption before being supplanted by new, more modern varieties of corn, has been achieved. This flour further increases its quality through the method of grinding in the mill using "cold" milling, which unlike the industrial method of production, largely retains the nourishing nutrients because it does not lead to so-called "burning" of the flour due to high speed of milling. If to this is added an authentic natural environment adorned with Homolje mountains, clean air, and the hospitality of the local community, we get a concept of development and life in a completely new, yet still old way of life, which was not so long ago characteristic of these areas, but also our country.

A connection between traditional gastronomy and modern methods of communication through digital marketing has also been achieved. In addition to actively managing and updating content on social networks, new adequate websites and web applications have been created.

One of the interesting ways of presenting gastro heritage and women's entrepreneurship is the involvement of Women's Associations. Thus, women from the "Association of Millers and Mill Workers," in cooperation with the local Tourist Organization, recorded short video presentations on how traditional specialties made from mill flour are prepared. Printed versions of cookbooks with QR codes leading to links with recipes have also been produced.

Innovation (which actually represents a more modern view and adaptation of something we already have, perhaps even for centuries) has arisen from the need

to solve specific challenges of the local community in the rural area of the municipality of Petrovac na Mlavi. Through cooperation and with the help of local institutions, solutions were found that can always be found in the external environment.

3. Concluding considerations

The concept of smart rural development, as demonstrated by the example of the municipality of Petrovac na Mlavi, provides local communities with new opportunities to apply innovative solutions in the fields of agriculture, tourism, and industry by relying on their own potentials (Naldi & Nilsson & Westlund & Wixe, 2015). Through the integration of traditional values such as cultural heritage and local gastronomy with modern technologies, the municipality of Petrovac na Mlavi has managed to transform its position and become a significant participant on the tourist map of Serbia.

The example of this municipality shows that digitization and innovation can successfully support economic development even in underdeveloped rural areas ("Smart rural areas – in the 21st century", 2021). Interaction with the diaspora, support for women's entrepreneurship, utilization of local resources and development of new business models have significantly contributed to the creation of new jobs and the improvement of living conditions. Petrovac na Mlavi is becoming an example of how tradition and modern technology can be combined to create a sustainable, prosperous community.

This approach confirms the importance of strategic planning in the context of rural development and emphasizes the need for continuous collaboration between local actors and the wider community to achieve common goals.

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