GĄDNO – The Role of Urban-Rural Cooperation in Becoming a Smart Village

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Abstract:

Purpose: The purpose of this text is to present an insignificant part of the field research (2021-2022), about the reality of a small border village (Gądno), located in the West Pomeranian Voivodship, which (without knowing it) has partly and unconsciously joined the smart village path, implementing only some assumptions of the smart village concept and leaving others without attention.

Design/Methodology/Approach: The manuscript presents a small part of field study activity of the Szczecin University stuff and students; research is based on an explanatory case study method, questionaries, and the desk-research method. The text is organized as follows: in the first part, a general picture of the actual state of agricultural land is outlined; then the literature review underlining the concept of partnerships and modern village organization is presented. In the next section, the methodology stressing the case study method has been placed. Then, there is a description of the village Gądno as a research results section followed by the discussion section. At the end of the work, the conclusion and practical implications are provided.

Findings: The results of the case study contribute in the cognitive sense to the role of urban-rural smart village concept. There is proposed Gądno-village profile that combines information and communication technologies, social infrastructure and local and regional institutions which are dynamizing its economic, social, environmental, and cultural development. As well the role of trust between residents and the person who is the leader and village head is emphasized. Also there is mentioned, that Gądno-village is missing the need for cooperation and inclusion in the EU structures of smart villages.

Practical Implications: List of the essential benefits of implementing the smart villages concept that Gądno may realize from the urban-rural cooperation, which can provide this village in the structure of EU smart villages. Each point is accompanied by the indicator whether Gądno currently utilizes or not a similar approach.

Originality/Value: The results contribute in the cognitive sense to the smart village concept; shows an example of small village which (without knowing it) has partly and unconsciously joined the smart village path. They also show the importance of socio-economic and spatial research in discovering the hidden, socio-cultural advantages of a village, that is not depopulated and has no problem with unemployment. The obtained results may be of interest to representatives of the public sector, as well as private entities seeking cooperation with local and regional authorities in the realm of smart village development.

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1. Introduction

Demographic change in Europe is increasingly becoming a major policy challenge. Predominantly rural regions currently account for 28% of Europe’s population. However, over the past decades, a shrinking population has become the normal trajectory for many rural regions as agriculture has been restructured and population and employment have become increasingly concentrated in urban centers (Espon, 2017).

By 2050, the population of Europe’s urban regions is projected to increase by 24.1 million persons and will provide a home to almost half of the EU-28 population (Eurostat, 2016). By contrast, the population of predominantly rural regions is projected to fall by 7.9 million. Recently, rural areas have been affected by the phenomenon of village shrinkage (Espon, 2017).

Large-scale urbanization has been happening autonomously (IRMiR, 2021); it has been actively advocated for by individuals, collective powers, and states since the 19th century (Dudek et al., 2016). Cities are now the main centers for technology development, innovation, education, commerce, administration, transportation, medical care, human resources, etc.

Further development of cities is discussed within the idea of smart cities, however, the smartness as such also refers to the rural areas (Gerli et al., 2022). At the same time, large-scale urbanization changed the lifestyle of people and very often, individuals with an urban lifestyle are choosing to live outside of cities. For this, they often choose green and ecologically clean areas. Living in rural areas, they maintain employment in urban companies and organizations and continue to live in accordance with the urban lifestyle (Gawrońska-Nowak, 2021).

According to the definition presented by European Network for Rural Development (Cork 1.0, 1997; ADE et al., 2023), smart villages are communities in rural areas that apply innovative solutions to improve their resilience, taking advantage of local strengths and opportunities. They are based on a participatory approach to develop and implement their strategy to improve their economic, social, or environmental
conditions, in particular mobilizing 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 implementation of smart village strategies are based on existing initiatives and can be funded by a variety of public and private sources (ENRD, 2023; ADE et al., 2023).

An important role in the implementation of the concept of smart villages refers to solutions to improve the quality of life, underinvestment, ageing society, village shrinkage, increasing the quality of services and safety, respect for the local environment, insufficient job opportunities, and digital divide. What can be underlined in particular is the importance of not associating this concept with issues such as digitization of villages, providing ready-made solutions to existing social problems related to the above challenges, and repetition of existing solutions (Boba, 2020; ADE et al., 2023).

The true foundation of a smart village is (not just the territorial community of people registered in a given village, but also) the local community that lives in the village and that identifies with its place of residence and that acts in agreement with neighbors. Another key aspect is trust in the local (village) government and local leaders that they care for the common good of the place and thus (in small steps) improve the quality of life in the village which, thanks to cooperation, step by step, becomes a smart village.

The aim of the smart village concept is to focus (Cork 2.0, 2016) on energy, vision, and commitment of local people towards local action. The examples of projects and initiatives identified so far clearly show that smart villages start with local people organizing themselves around a common problem or shared vision to implement some form of ‘action plan’ to achieve a specific goal (Cork 2.0, 2016). Ideas of smart villages refer in concept to the ideas of smart cities. The question under discussion is how these two dimensions are interconnected (Kusio, 2022, Table 1).

The objective of this paper is to show the role of local people partnership and partners from urban centers in local development concepts of rural areas in order to find the potential for future cooperation.

2. Literature Review

Some researchers and proponents of urbanization argue that more than 99% of humans might live in cities by the end of this century and that the valuing and planning of rural areas should focus on urban needs (Adamashvili et al., 2020; Sardaro et al., 2021). Some even regard rural areas as places that are suitable exclusively for growing crops and keeping livestock (Daniels, 2001; European Commission, 2017; Guzal-Dec, 2018). Alternatively, it can be proposed that the urban lifestyle will replace the rural lifestyle, especially in the case of traditionally small villages located within the influence of large metropolises, and will become
widespread in all forms of urban and small rural human settlements. Residents of urban places, in search of a healthy lifestyle and green and less urbanized areas, will choose villages as their places of residence; villages, where living conditions will be suitable enough to lead an urban lifestyle.

The concept of smart villages, in the European Union, arises in reference to cohesion and strengthening rural development, while in other highly developed countries, intelligent rural development is related to spatial planning and relies on actions that suppress the spontaneous growth of cities (urban sprawl) (Daniels, 2001).

Within the European Union documentary (European Commission, 2017), the smart villages concept refers to rural areas and communities that want to base their development on their strengths and resources. Traditional and new networks and services in smart villages are strengthened by the means of digital technologies, telecommunications, innovation, and better use of knowledge, for the benefit of residents and enterprises (Guzal-Dec, 2018).

Smart villages are communities located in rural areas using innovative solutions in different spheres of economic activity to improve their socio-economic well-being, building on local assets and opportunities (Boba, 2020). Smart villages is also a term used to describe a new concept in EU policymaking based on the functioning of traditional and new networks and services enhanced by digital, telecommunication, innovation, and better use of knowledge, for the benefit of citizens and businesses (Boba, 2020).

The genesis of the smart villages concept should be associated in particular with the signing of the Cork 2.0 Declaration in 2016 (Cork 2.0, 2016), the main objective of which was to answer the question: What may be done in order to make the inhabitants of rural areas live better against the background of the ongoing structural changes in the economies of countries and regions?

Solving such a problem requires focusing primarily on the following questions (Boba, 2020): a) How to effectively combine financial resources from different funds? b) How to implement different actions and exploit emerging synergies? c) How to use technology to stimulate rural development?

Solutions to the above questions have started to be developed in 2019–2020 as part of the concept formulation at the level of EU member states. The EU member states are encouraged to develop strategies and interventions as a part of the implementation of the smart villages concept, presenting proposed answers and solutions to the problems present in rural areas.

In this kind of strategies (Kalinowski et al., 2021), among the specific features and determinants of the development of rural areas, which drive the implementation of
the smart villages concept (Guzal-Dec, 2018), the ones worth mentioning are (Foray, et al., 2009; Da Rosa Pires et al., 2014; Teräs et al., 2015):

a) the spatial distance, relatively less developed transport and communication network, lack of the network cooperation, scientific and research organizations and institutions, limitations in building a creative economy;

b) insufficient number of enterprises and farms, including entities which are introducing innovations, insufficient number of organizations responsible for intermediation in the exchange of the new knowledge and its adaptation to local conditions;

c) difficulties in initiating the innovative projects and raising funds for the development of innovation.

3. Methodology

Creative problem solving directed research towards heuristic methods; therefore, towards the totality of methods and rules of conduct for making the most appropriate decisions in complex situations that require the analysis of available information, as well as the prediction of future phenomena (Armstrong, 2001). Heuristic methods are based on creative thinking and logical combinations and can be found in the field of logic: it is it is the ability to find new facts and connections between them, as well as to detect truths in this way (Cieślak, 2008, p. 201).

This text presents only selected fragments of very detailed field studies titled: space use and space regeneration of rural settlements, conducted in 2020-2021 by the Szczecin University staff and students of Spatial Management (Pirveli et al., 2021). Therefore, here are discussed only the methods directly related to the content in the article and not all tools used during the field research.

The research questions identified in the introductory part of this paper are directly related to village Gądno development and the participation of local and urban partners in this development. For the creation of Gądno’s profile, Desk Research was used (Smith, 2008). This method is based on the analysis of the available data sources, including in particular their compilation, mutual verification, and processing (BIOSTAT).

The Desk Research method does not have a specific timeframe – the acquisition and exploration of data was performed during the entire research project due to the fact that the documents are often being updated and combined with the materials obtained during the remaining stages of the study.

Outlining a brief historical profile of the village Gądno was needed to understand the residents’ attitude towards the place. A smart village is, above all, the willingness to cooperate and bottom-up building (Nardone et al., 2010; Konecny, 2019; ENRD, 2022) of a development strategy for "one's own place", as well as local and urban-
rural partnership. Desk research was used to present a brief historical outline of the village. Because Gądno is a traditionally small village that:

a) since the early Middle Ages has always been a small rural place and this place (paraphrasing Lefebvre, 1967) has developed its own law,

b) from the mid-20th century to the present day it has undergone three fundamental political, systemic, socio-cultural and economic transformations, which undermined trust in the ruling bureaucracy,

c) it was planned and built by residents with different cultural roots than the current residents from villages scattered in the east, who should feel a bond with each other and with the place; it is not easy, especially in the context of the unstable past few decades.

It is very important to stress that current residents themselves create the foundations and rules for cooperation and sharing common space.

While building the profile of Gądno, the research team conducted in-depth interviews with residents, local NGOs, other entrepreneurs, and visited local and regional governments. The aim of the conversations was to obtain answers from the "other" side about troubling issues (such as changing the route of the road from Gądno to Moryn; the usefulness of the new community center and the gym under the cloud for the residents; what the respondent - a person or a company or an office - can do for Gądno; what infrastructural changes are necessary in the near future; whether there is a need for public transport and whether there is a lack of grocery stores for the village residents; the quality and usage of wifi in the village; the sufficiency and origin of the finances from which numerous local events are financed, etc.).

A case study can be an exclusive research method as well as one of the research methods for making observations and indicating regularities in the occurring and observed processes (Yin, 2018). A particular recommendation to use the case study method is the existence of a need for an in-depth description of social phenomenon (Yin, 2018).

The presentation and explanation of a social phenomenon, which includes facts and events and has an idiographic approach (Lachiewicz and Matejun, 2010), entitles us, among others, to apply the case study method, which, unlike the theoretical approach, is based mainly on empirical data (Matejun, 2011).

4. Results and Discussion

The village of Gądno (Guhden - German-language name from the period before World War II) is located on Lake Morzyckie in the Moryń commune, West Pomeranian Voivodeship (GPS 14.421667, 52.855278). Gądno, originally a fishing settlement, was founded in the early Middle Ages. Moryn and Gądno are located on
opposite sides in the narrowest part of Lake Morzycko. In the past, fishermen traveled this distance in boats. Currently, there is great potential for launching water transport between the beach in Gądno and the restaurant and hotel in Moryń, which is located in the former fishing harbor.

In the year 1464, Gądno was a family seat of the Teutonic family from the castle in Moryń. Since then, this small village has changed several owners, including the von Schöning family from 1608; the von Papstein family from 1765; Friedrich von Mühlheim from 1800 (who, around 1830, built an impressive residence: palace, farm buildings, and a park). At that time, there were also brickworks in Gądno; the von Globig family from Saxony in the second half of the 19th century. The von Rohr family owned it until 1945.

During the war, the village did not suffer significant damage; however, just after the war, it was devastated and plundered. The new settlers, four families, found the village plundered and the remains of a once thriving family village. For them, restoring former stability likely meant recreating the past of those whose nation had caused the war devastation of their homeland and displacement from their small homelands in the east.

This was more natural for them, even if not necessarily approved by the then socialist authorities, influenced by Soviet ideology, which aimed to build a socialist homeland of people without class differences, emphasizing the domination of workers and kolkhoz farmers. The equivalent of collective farms in these areas were PGR/SAF, i.e., State Agricultural Farms.

The first Polish settlers, repatriates from Wolin (villages Czersko and Czerniawka), arrived in the village in 1946; they each received 4 hectares of land from the government. Between 1946-50, a State Agricultural Farm operated in the plundered village with only 4 members of PGR; later, PGR was moved to a neighboring village, leaving a recreation resort (ośrodek wypoczynkowy) for State Agricultural Workers in Gądno. Currently the complex in an attractive location is fenced and devastated; since the 1990s, it has changed several owners; respondents could not indicate who the current owner was.

Gądno has never been a large village. According to the National Census of Population and Housing the population in the village in 2011 was 95 people. Nowadays with a total area of 24.7081 ha and 123 inhabitants (status: 2021; 2.9% of the Moryń commune's inhabitants), it is not affected by unemployment. Also, the demographic structure does not indicate a problem with aging or depopulation.

Rural demographic dependency ratios are as follows: number of inhabitants - 123 = 100%; including: in pre-working age (<18 years) - 22.9%, in working age (18-59/64 years) - 56.8%, in post-working age (59+/64+) - 20.3%. Demographic rates of this
village are definitely higher than the corresponding indicators of other villages, or for the voivodeship and Poland as a whole.

Village residents also have better housing conditions than residents of other agricultural areas in the region or country. According to 2022 data, the average usable area of a real estate put into use is 146.50 m² (much larger for the West Pomeranian Voivodeship and in Poland). Moreover, the village is supplied with water and partly with sewage. The Energy Station in Mieszkowice provides ongoing maintenance of energy infrastructure for village residents.

The owners of individual family farms have a closed irrigation system and use rainwater to water their plants. During the period of field research, there was no complete sewage system in the village; some households had septic tanks; however, they did not indicate any problem due to the fact that the village has not been connected to the general drainage system. Everyone was aware that establishing a sewage system was included in the development strategy plan.

No major road or railway passes through Gądno. The nearest railway station is in the village of Witnica. Gądno can be reached by bike and car using the local (municipal) road, which connects this place, from the east, to national road No. 31 and on the west (road leading to the state border with Germany) - to provincial road No. 125.

The village is within a maximum two-hour drive by car to both Polish large cities (Szczecin, Poznań) and the European metropolis of Berlin. Hence, the town attracts a sufficient number of visitors who want to spend short or longer holidays here, as well as seasonal workers who, for financial reasons, prefer to rent accommodation in Gądno and work in a company on the German or Polish side (Kostrzyn-Słubice Special Economic Zone).

For visitors, apart from the campsites, there is a thriving private recreation center in Gądno (they have their e-profile on various appropriate websites). It’s also possible to rent guest rooms from other villagers. Regarding food, one can cook their own by buying fresh products from farmers, including fish, or use the cafes and restaurants in Moryń (distance is 2 km).

On the one hand, the lack of busy communication arteries, and on the other hand, the lack of industrial plants here, ensures Gądno and the entire Moryn commune are ecologically clean; the permissible values for sulfur dioxide, nitrogen dioxide, and PM10 are not exceeded. Only the value of benzo(a)pyrene exceeds the permissible standards (SRGM, 2016-2022).

On the ecologically clean area of this small village, there is 1 building (Palace from 1840) registered in the Register of Monuments of the National Heritage Institute (NID, 2023) and 14 forms of nature protection (1 - Natura 2000 area, 10 - Natural

The president of the association is the village head of Gądno (Mrs. Katarzyna Kupczyk); she combines her activity in the village government and the association and cooperates with local and regional partners; as a result, numerous events are organized here for residents and tourists. These include meetings during free time and those resulting from the calendar of local holidays, concerts and performances by invited actors and musicians, cross-border events for adults and children, meetings on the beach, and more importantly - an annual bicycle rally (titled "On the trail of Mr. Samochodzik"), which has become a regional tourist product.

The village has an aura of mystery. Together with the manor park, the ruins of a classicist palace from the 18th century, and the forms of protected nature, the mystery of this place is related to legends, scattered and hidden in the village greenery. Some of these legends are associated with specific places in the village - at these points, there are graphically decorated descriptions telling about the enchanted princess Almanda, the Seven Brothers, the mysterious rising of the cross on the church tower, the Clay Farmer, etc.

Villagers, visitors, and participants of the mass sports event highly appreciate both the village landscape and the accompanying attractions. Many of them also mention observing the sunset from the lake shore or enjoying the silence and the opportunity to contemplate nature as an advantage of the place.

As part of the operational objective "infrastructure" (SRGM, 2016-2022 pp. 37-43), it is planned to create a local (urban-rural) functional area Moryń - Gądno - Przyjezierze. This is of great importance for Gądno; it will allow - on the one hand - to increase the tourist potential and development opportunities for the small village; on the other hand - it will create the opportunity to implement road, pedestrian, and bicycle investments important for residents and also for tourists.

Construction, reconstruction, modernization, and renovation of pedestrian, and bicycle investments on the Moryń - Gądno section will improve traffic safety, expand the lake's protection zone, and acquire new recreational areas by the bay.

5. Conclusion

There is no single “right” model for urban–rural partnerships (Konecny, 2019; Nardone et al., 2010; ENRD, 2022). The EU provides various platforms for information exchange (METREX, EUROCITIES) and instruments to support the establishment of urban–rural partnerships (ZIT, RLKS), but the responsibility for setting up such partnerships lies with the local and regional actors.
They need to identify the relevant thematic issues, learn about the principles of cooperation, and establish the organizational and decision-making structures to bring the partnership to life. Urban–rural partnerships cannot replace national spatial planning regulations, but they can complement each other and coordinate specific sectorial policies (Jacuniak-Suda et al., 2014; CEC, 1999; Kawka, 2013; Halamska and Stanny, 2021; Artmann et al., 2012).

In the case of Gądno, there is an existing local partnership. Both residents and rural and regional governments cooperate with each other. At the initiative of the village council and the Association for the Development of the Village of Gądno, cooperation with non-regional cultural centers is developing. However, what is missing is the awareness of the need for cooperation and inclusion in the EU structures of smart villages.

Below is a list of the essential benefits of implementing the smart villages concept that Gądno may realize as a result of cooperation in the structure of EU smart villages. Each point is accompanied by "+" (yes) or "-" (no) in brackets, indicating whether Gądno currently utilizes a similar approach. This essential benefits of implementing the smart villages concept are as follows:

✓ increasing the integration of the local community (+);
✓ encouraging young people to undertake project activities at the local level (+/–);
✓ increasing the involvement of older people in local activities (+);
✓ development of public-private partnerships (+/–);
✓ increasing human, material, and financial resources (+/–);
✓ developing social capital (+/–);
✓ reducing risks through diversification of project activities (–);
✓ improvement of the effectiveness of implemented projects, e.g., due to cost reduction (+/–);
✓ strengthening market position/competitiveness of local rural area (–);
✓ diversification of stakeholders of implemented projects (–);
✓ development of scientific and research cooperation (–);
✓ acceleration of socio-economic development e.g., through tourism (+);
✓ acceleration of knowledge and technology transfer (–).

References:


Gawrońska-Nowak, B. 2021. Jak definiować granice miejskich obszarów funkcjonalnych? Społeczne i ekonomiczne zyski i straty procesów urbanizacji w Polsce. (How to
define the boundaries of urban functional areas? Social and economic gains and losses of urbanization processes in Poland.). IRMiR. Warszawa-Kraków.


