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Toward Holistic Perceptions of "Smart" Growth in Development Paradigms and Policy Agendas

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Abstract: The examination of "smart" growth in various economic and societal development areas and contexts has spread around the globe, in both scientific and policy discourse, with a recent focus on transformations concerning "smart" green growth, "smart" regional development, and green transformation, including "smart" villages. However, until recently, much confusion has existed regarding different understandings of "smartness" for different communities in different contexts. The main aims of this research are to emphasize the proliferation of perceptions of the term "smart" in different contexts of growth and development paradigms and policy agendas and to illustrate the theoretical findings with a case study concerning Lithuanian perceptions of "smart" development of rural areas. We applied a combination of qualitative and quantitative research methods in this study. The research results and the suggested policy recommendations propose that, currently, "smartness" is perceived more broadly than as a simple application of the word "smart"; i.e., it involves intelligent digital equipment or mechanisms in a particular setting. In the context of economic and political processes—at all levels, supranational, regional, and local—"smart" growth includes "green" growth, increasingly emphasizing the ambition to create holistic intelligent [eco]systems to provide better services—i.e., "smarter" and "greener" services—to the quality of life for human beings.

Keywords: smart growth; green growth; smart specialization; smart villages; regional development; rural development

Citation: Lankauskienė, R.; Gedminaitė-Raudonė, Ž. Toward Holistic Perceptions of "Smart" Growth in Development Paradigms and Policy Agendas. *Land* **2023**, *12*, 482. https://doi.org/10.3390/land12020482

Academic Editors: Barbara Wieliczko and William H Meyers

Received: 17 January 2023
Revised: 11 February 2023
Accepted: 13 February 2023
Published: 15 February 2023

1. Introduction

Until recently, the examination of "smart" growth in various development paradigms, policy areas, and contexts has spread around the globe in both scientific and policy discourse, with a recent focus on transformations concerning "smart" green growth [1–3], "smart" regional development, and green transformation [4–7], including "smart" villages [8–11]. Sometimes, a meaningful increase in the popularity of a particular term in uncommon contexts—e.g., "smart cities"—only results in the usage of an ambiguous buzzword [12]. Despite the vast amount of policy agendas and research concerning the use of the word "smart" in various growth and development discussions, until recently much confusion has existed regarding the different understandings and extent of "smartness" for different communities in different contexts, from both scientific and policy points of view. In most cases, this confusion has been caused by the origins of the term "smart" in the technological sciences [13] and by the further evolution of the term in the social sciences, including its usage in policy agendas. The proliferation of the different perceptions of the term "smart" remains insufficiently addressed in the scientific literature. Until recently, it has prevented a common understanding of research and policy agendas for science, society, and policy stakeholders in the context of various issues relating to "smart" growth and development. Therefore, the concept of "smartness" must be more deeply addressed, initially in the context of scientific research.

The main aims of this article are to emphasize the proliferation of perceptions of the term "smart" in different contexts of growth and development paradigms and policy

agendas and to illustrate the theoretical findings with a case study concerning Lithuanian perceptions of the "smart" development of rural areas.

Our guiding research questions were how the term "smart" is perceived in different contexts of development paradigms and policy agendas, and how Lithuanian perceptions comply with such perceptions in the "smart" development of rural areas.

To achieve the aims of this study, a combination of qualitative and quantitative research methods was applied. Background research was carried out by applying analysis and synthesis methods and systematization to scientific literature and relevant documents. The six-step Delphi method was applied to define Lithuanian perceptions of the term "smart" in the development of rural areas. All six stages of Delphi research were carried out in Lithuania during the period from March 2022 to September 2022.

Lithuania was selected for the case study for several reasons. Lithuania was previously recognized as a region with a long agricultural history and deep traditions of rural culture. According to data for the year 2021 provided by the World Bank (2023), the proportion of land used for agricultural purposes in Lithuania was 46.99% [14]. However, in 2021, agriculture contributed to only approximately 3.31% of Lithuania's GDP, while 25.3% came from industry and 60.74% came from the service sector. In 2021, Lithuania's rural population accounted for 31.75% of the total population, with annual growth of −0.4246%. In addition, employment in agriculture in Lithuania constituted 6.64% of the country's total employment in 2021. Therefore, "smart" solutions in Lithuania's rural areas are very important in maintaining the vitality of these areas.

Lithuania's Progress Strategy "Lithuania 2030" (Strategy 2030), which was approved in 2012, aimed to build a modern state, based on three pillars of "smartness": a smart society, a smart economy, and smart governance [15]. Broad discussions with all relevant stakeholder groups—government, science, business, and civil society. throughout the country—were carried out to develop Strategy 2030. Currently, Lithuania has applied the term "smart" to growth and development issues for a decade. Lately, following European Parliament legislation (2021) [16]. Lithuania has begun discussions concerning "smart" villages. Therefore, Lithuania is considered to be an appropriate country for demonstrating the existing proliferation of differing perceptions of the term "smart" in the contexts of growth and development. Lithuania's consideration of the concept of "smartness" has decade of history, and currently "smartness" is evolving further in Lithuania, to the regional development context.

2. Literature Review

The concepts of "smart" and "smartness" have made an impressive journey throughout different disciplines and contexts and have been the focus of many science and policy debates since the beginning of the 21st century. In North America during the first decade of the 21st century, scientific applications considered "smart growth" as the third wave of sustainability [17–19]. In early 2001, Daniels recommended "smart" regional planning to address sprawling development patterns, which called for new "smart" solutions in regional planning to deal with such issues as changes of land use in urban/suburban areas, the infrastructure of basic services, and pollution. In this context, the term "smart" growth was used to emphasize a particular approach to growth, i.e., public–private management of growth to produce the best outputs for business and government sectors and economic growth without environmental degradation, congestion, ugliness, or wasted public subsidies for sprawling developments. The model of "smart" growth was emphasized as a pattern of land use in the form of compact cities and suburbs that are surrounded by countryside; this countryside is used as open space, for farming and forestry. Such "smart growth" aimed to create a more compact environment with cheaper services, reduced land development, and enhanced attractiveness, in contrast to sprawl. For example, Maryland Smart Growth highlighted particularly important aspects of "smart" growth and development, such as the connectivity among the perceptions of defining characteristics of human quality of life, land-use patterns, transportation, loss of open space, and the costs of

public services. Thus, a very important observation was made: *"smart" growth and "smart" solutions* should be *primarily targeted* to improve human beings' quality of life in a broad holistic sense—i.e., *to develop a holistic system that smartly serves the higher quality of human beings*, not only the improvement of a particular tool/function of a machine/service used by human beings with smart equipment or a smart solution.

It was also observed that, despite the strong emphasis of "smart" growth on the rising intellectual and emotional qualities of human beings, it has been more often politically stated rather than implemented in actual solutions [18]. The policies concerning "smart" growth continue to express high ambitions for a better quality of life, but very important conclusions have been reached, i.e., that a significant change in qualitative parameters, for which "smartness" appeals in analyzed contexts, takes time. Therefore, the *successful implementation of "smart" growth might be reached in the long run*, alongside gradual changes in traditions, established "home rules" and common low-density living patterns. Therefore, the common vision of "smart" development might be closer to real implementation if a gradual approach is taken to "smart" growth in policy agendas. Such tremendous changes do not happen quickly.

Krueger and Gibbs (2008) referred to "smart" growth as a uniquely "American variant of sustainable development" (p. 1263) [19]; thereafter, considerable transformation concerning the issue swept across the whole of Europe, especially in the second decade of the 21st century. "Smart" growth gained momentum in the fields of regional development policy and research in Europe in 2010, when the European Council approved the Strategy for Europe 2020 by setting the guiding objectives for smart, sustainable, and inclusive growth. In the European context, "smart" growth emphasized the *structural reforms*, which were targeted to reach a well-balanced macroeconomic policy mix for smart, sustainable, and inclusive–cohesive growth. Starting from the established political will, the stated targets of smart growth addressed, first, regional innovation systems to strengthen the competitive advantages of regions via establishing new public–private partnerships or strengthening existing ones. Member state regions started refocusing their policy practices by developing smart specialization strategies and concentrating on their most promising competitive advantages. Thus, during the past decade, the concepts of smart, sustainable, and inclusive development, alongside its determinants, occupied the whole EU's regional and national policy agendas, as well as theoretical and empirical scientific research [20]. In Europe, a wave of "smart specialization", both in policy and scientific debate, arose from the sectoral growth paradigm, which had been applied to regional development; its logic became broadly consistent with EU Cohesion Policy [21]. The EU's "smart" growth was first intended to accelerate innovations that, with the use of smart [digital] solutions in line with a particular region's identified strengths [competitive advantages], accelerated the expected sustainable and inclusive growth. In other words, the *European perception of "smart" growth* was organized in combination with sustainable and inclusive development elements, with a special focus on developing particular *selected specialized innovation [eco]systems*, that would drive the regions toward sustainability via promoted interconnection and a knowledge exchange among people engaged in research (science), innovation (business), policy (government), and society (non-governmental structures) [7].

A constructive critique, based on actual implementation evidence, issued insufficient reasoning as to *why smart specialization strategies should be prioritized in a regional policy setting* over many forms of another diversified smart setting of both tangible and intangible capital (e.g., [22]). Too great a focus on the particular "smart" specialization of a region might lead to a great loss of the complimentary entrepreneurial potential of the region, which might lead to even "smarter" growth alternatives, compared to "smart" specialization. For instance, a huge surge in "smart" development deals not only with the expansion of digitalization and smart technologies for particular areas, such as cities [3,23–26], but also with related development solutions for entire regions and rural areas [6,27–30]. The above-discussed American "smart growth" paradigm already highlighted this surge effect two decades ago.

Most recently, the term *"smart"* appears in the contexts of economic development, scientific research, and policy agendas *in line with issues of environmental concern, bio-economy*, and the newest EU ambition set in the *European Green Deal* (2019)—i.e., *reaching climate neutrality by 2050*. The world's rising demand for smart intervention in greening economies had been referred to as an *"approaching green revolution"* [1], consisting of several crucial elements: a revolution in energy production and energy efficiency; zero waste and zero emissions; bioeconomics; recultivation; agricultural greening; sustainable mobility; and environmentally friendly construction. All of these elements require "smarter" roles to be implemented by everyone: a "combination of forward-looking policy, an active civil society, responsible consumers, innovative businesses and scientific research to bring them about"(p. XVI) [1]. To achieve green transformation, collaboration is needed among the four helixes, i.e., academia, government, business, and society; such collaboration was thoroughly investigated and validated in recent research [7]. In contrast, at the beginning of the green revolution, exceptionally smart cities were considered a brilliant solution for building green economies in Europe. Moreover, this approach was soon supported by strong arguments that European legislation defined for smart cities that were too limited to contribute to building green economies—i.e., energy efficiency and renewable energy pathways that ignored the harmonious and efficient development of smart cities in Europe [26].

In this most recent context, where *"smart" growth proceeds in line with "green" solutions*, "smart" green growth pathways often become the objects of scientific research and policy debates in the context of *smart regional and rural development* [27], and more precisely, in the context of *smart villages* [6,29]. A diverse set of rural regions results in the perception of "smart" growth, "smart" villages, and "smartness", as terms themselves in the context of rural development, even more complicated. Valuable collected scientific evidence provides a few hints to develop ongoing research and discussion concerning the issue.

"Smart" rural development was empirically measured as a smart growth policy outcome by defining the indicators for "smart growth" [27]. Research findings suggested that the application of *"smart" development concept in a rural context needs to be combined with a place-based approach* to fit the particular specifics of the rural context. Differences exist between rural regions that are close to urban areas and those that are more distanced from them; the connections with cities differ and the success of "smart" development in the regions highly depends on such differences. From a policy perspective, a place-based approach, combined with smart specialization, might generate successful strategies for regions with close connections to cities [21,27]. The rural regions that are distant from cities might have strong and unique potential for tangible and intangible resources for use in creative economies, which might provide a basis for a successful "smart" development strategy. Thus, it is very important to define precisely concrete place-based characteristics that might accelerate the potential to work toward a peripheral region's "smart" growth. In this case of *combined place-based and "smart" development* approaches, *"smartness" corresponds to finding new and unique smart solutions for using the local advantages of a rural area, including both tangible and intangible assets of a rural setting*. Here, the role of the enabler—i.e., *the leader with internal advantages—becomes crucial* in accelerating the potential development (Nieto and Brosei, 2019).

The most recent bibliometric analysis concerning "smart" villages [11] envisaged a sharp rise (fifteenfold!) in interest in the issue during the past decade. In addition, among the key findings of that analysis was that an important focus should be given to generating higher qualities of life in smart villages, based on community education and positive environmental and social changes. This provides a hint regarding the importance of particular preconditions when pursuing the guiding approach of "smartness" in development processes in rural areas [31,32].

Developing "smart" villages was considered a promising way to reach sustainable development goals [6]. Recent investigations elucidated the smart growth potential of regions of Eastern Poland, which was determined using different variables in the fields of

management, quality of life assessments, economy, society studies, natural environment consideration, and mobility assessments. It was concluded that the smart village concept can be useful in facilitating the sustainable development of rural areas. Among the key messages from these findings, an important investigation was that the crucial condition in building smart villages that contribute to sustainable development is the *endogenous resources, which need to be triggered bottom-up to achieveexogenous innovation potential*.

Another important aspect concerning "smart" villages, in light of the ongoing "smart" green revolution in rural areas, is the set of challenges facing the modern power industry [33]. Among the key challenges are insufficient awareness of the impact of energy on the environment, low public awareness of the interconnections between energy solutions and the environment, and low levels of trust in modern energy solutions. The recently collected empirical evidence concerning the modern power industry in a "smart" village context elucidated that the "smart" economy-focused "smart" village development model consists of an intelligent environment, intelligent people, and intelligent governance [33]. In other words, "smart" villages begin with a sufficient level of understanding of *the essence, the need, and the abilities and ways for smart green growth to develop in a particular rural area*.

The role of leaders within a "smart" village started to generate enthusiasm among rural development stakeholders [31]. Very early, prospective leaders "cached" the future toward the "smart" green revolution and started driving local communities to move toward a more sustainable future via "smart" solutions. The research highlighted that the leader approach and its principles are part of the concept of the "smart" village: "the LEADER has what is needed to be the main tool for driving smart villages in Europe as long as there is a policy framework in place that enables LEADER to exploit its full potential" (p. 63). The LEADER program (the acronym comes from French: liaison entre actions de développement de l'économie rurale; in English, links between actions for the development of the rural economy) is a European program that aims to involve local actors in the development of their own regions by forming local action groups (LAGs) and preparing community-led local development strategies. In short, *the crucial role in developing "smart" villages belongs to intelligent leaders who will drive the villages of rural areas into "smart" futures*. Of course, additional sources prove that tangible resources and, especially the spread of basic digitalization—i.e., Internet access—establishes the initial conditions to assist people in rural areas that are distanced from cities to become closer to progress and better able to become "smart" [28,32].

Considering the outlined recent research findings and policy agendas, it is evident that the understanding of "smart" development may differ across policy and scientific areas of concern, as well as among regions and policy levels. Therefore, in defining the perceptions of "smart" development of a particular region, it is worth taking an in-depth look at a particular case. First, an understanding of the meaning of "smart" must be clarified in a particular context, identifying the why, who, and how is able to accelerate the expected transformations toward a "smart" future. This is achieved using the Lithuanian case as an illustrative example.

3. Materials and Methods

This overall study was designed as empirical research. A combination of qualitative and quantitative research methods were applied. Background research was carried out using synthesis, analysis, and systematization of scientific literature and documents.

The six-step Delphi method was applied to define Lithuanian perceptions of the "smart" development of rural areas. The Delphi method elicits and refines group judgments. It was originally developed by the RAND corporation and was first presented in the scientific literature in 1975 [34]. The method has been modified into different versions to better serve research needs in particular circumstances [35]. In the current research, a six-step Delphi method was selected to collect data and elaborate upon the research results, as this method is appropriate [36] when "searching for consensus on definitions, especially in a particular social science field" (p. 1). In this particular case, the definitions

of "smart", "smartness", "smart" development, and "smart" village are still blurred in different analyzed contexts. Therefore, the Delphi method is appropriate to achieve the aim of this research—i.e., to illustrate the theoretical findings with empirical evidence of Lithuanian perceptions of "smart" development of rural areas.

Another reason we used the Delphi method is that it is able to mobilize [expert] assets to facilitate change in a particular field (e.g., [37]). Continuous structured communication within an expert group helps establish consensus on the meaning of "smartness" in the context of rural development, interspersed with opportunities for feedback and the revision of views, while elaborating on the consensus. In this context, the Delphi method was successfully applied in the field of recent regional development research with respect to the identification of an applicable set of indicators for sustainable livelihoods in rural areas [38], as well as rural development indicators in general [39,40] and, even more specifically, the development indicators of villages [41,42].

Therefore, the Delphi method was considered suitable for this research. To generate the answers for the guiding research questions, the following supportive research questions, specific to the Lithuanian situation, were used:

- How is the term "smart" perceived in the context of rural development, based on the Lithuanian experience?
- What are the roots of the relevance of "smartness" in the context of rural development?
- Who will drive rural areas toward prospective "smart" futures?
- What conditions are relevant in raising the demand and potential for "smart" solutions in the rural development context?

In this study, the six-step Delphi method was implemented via the following research stages:

(1) Desk research and context analysis (March–April 2022);
(2) Expert interviews at a live focus group meeting (19 May 2022);
(3) Analysis of the interview results and preparation of a survey questionnaire (May–July 2022);
(4) Implementation of the expert survey (August 2022);
(5) Analysis and generalization of the expert survey results (September 2022);
(6) Validation of the results at achieving expert consensus (online meeting, 22 September 2022).

To perform in-depth interviews for the case study concerning the perceptions of "smart" development in the context of Lithuanian rural areas, an expert group was established. A quadruple-helix innovation approach [43] was used as a first criterion to select suitable experts for the focus group with representative opinions regarding smart development from four different sectors (government, science, business, and civil society).

The stakeholder-salience model [44] was used as a second criterion for expert selection and measured the power, urgency, and legitimacy of their roles in the field of "smart" development in Lithuania, using a scale of 0 (a weak role), 1 (a moderate role), and 2 (an important role). A mix of features involving all four groups of experts provided acceptable complementary expertise in the field under research: ministry (government) representatives held higher legitimacy, while business companies held higher urgency. Power also varied among the different experts in the groups. In total, 20 experts took part in the research throughout the whole Delphi process: government experts (7), science experts (7), business experts (2), and civil society experts (4).

4. Results

4.1. Perceptions of the Term "Smart" in the Context of Rural Development

An understanding of the term "smart" in the context of the development of rural areas in Lithuania was reached by a Lithuanian expert group, focusing on:

- increasing the attractiveness of a particular rural setting;
- fostering local tangible and intangible assets-based entrepreneurship;

- creating the necessary infrastructure to ensure a high quality of life with necessary services;
- using open internal cooperation and collaboration among rural community members;
- creating and developing strong external relations with neighbors.

There were also other interesting thoughts expressed by the experts, including "being 'smart' in the countryside means 'receiving what you want' and 'achieving what you need'". This principle can reflect the needs of all actors that take part in the development of rural areas. Such a position was agreed upon by 72.7% of the experts, with disagreement by 27.3% of the experts.

More precisely, it was additionally expressed that "a 'smart' village is a socio-economic system in which the communities rely on local strengths and opportunities to increase their resilience and quality of life (progress needs to be measurable), adopt and implement innovative, system-change-oriented solutions, and ensure the widest possible participation and cooperation, using digital and other technologies in their daily activities."

Meaningful insights were made in relation to "smart" rural development and the LEADER program [45]. Lithuanian experts agreed that the "smartness" principle includes the application of LEADER principles, taking into account several aspects, including the following:

(1) local level -> multi-layered to sub-regional;
(2) technical assistance -> animation of LAGs and the involvement of research and experimental development and advisory institutions;
(3) community participation -> capacity building, creation of public goods, and representation of the public interest;
(4) platforms for networking -> creation of various cooperation/collaboration networks;
(5) integrated actions and funding -> compatibility of a "smart"village development plan with the region's smart specialization, the composite budget for the "smart" village development plan, the multi-functional role of local action groups, and community-accelerated local development;
(6) flexible and easy to use -> umbrella projects, seed capital, studies, pilots, and appropriate control rules.

During the survey, "smartness" in the context of rural development was summarized as the ability to organize the best use of local (territorial) and external resources to achieve goals in adapting quickly to the environment. "Smartness" was defined as a quality that is characteristic of human beings in particular, of social systems, and, in the age of high technologies, of tangible objects and digital systems.

The discussions in the expert group concerning the term "smart" village were finalized by formulating a commonly agreed understanding of "smart" village as follows: "'Smart' villages in Lithuania aim to find territorially wise solutions, to meet the needs and development potential of local people, for local communities to shape their long-term survival strategy, based on scientific and technological innovations."

4.2. The Roots for the Relevance of "Smartness" in the Context of Rural Development

The roots of the relevance of "martness" in the context of rural development in Lithuania are tightly related to rural development programming periods and targets, according to the Common Agricultural Policy (CAP) and LEADER program [45]. The first period dates back to the years 2007–2013 of CAP and might be titled the "past", when support for rural communities appeared in the form of local development strategies after the LEADER program, compulsorily devoted to the improvement and empowerment of community facilities (first community businesses) and other infrastructure necessary for a dignified rural life. The next period of rural communities' development, referred to by experts as "today" (2014–2020), was devoted to developing social businesses and community entrepreneurship via local development strategies. The initial discussions concerning the pathway toward "smart" villages began in Lithuanian counties in late 2019. However, "smart" village refers to the next period of CAP (2021–2027), which was full of

new "smart" options and opportunities that were provided due to the digitalization age. Therefore, the pathway toward the "smart" village concept in Lithuania consisted of several stages. First, the experience of the "past"—i.e., community entrepreneurship. Second, the ideas of "today"—i.e., established social enterprises (88 in operation) and community businesses (162 in operation). Third, the opportunities of "future"—i.e., "smart" villages.

In 2020, "smart" villages were settled in the vision of Lithuanian rural areas until 2040 [46]: "*A vision for rural areas of Lithuania up to 2040—rural regions with modern villages, operating in community partnership, as an attractive place to live and work*" (p. 8). Modern villages were considered "smart" villages if they established their development strategy. Such a "smart" strategy entails the creation of favorable conditions to live and work, using the existing territorial assets, where endogenous people and newcomers cooperate and collaborate to perform economic activities, use renewable resources to produce local products, and collaborate to sell those products to consumers. In addition, such "smart" strategies ensure the protection of biodiversity and the creation/preservation of the rich landscapes.

The most recent needs of rural communities in Lithuania, with respect to "smart" development and "smart" villages in Lithuanian rural areas, were identified during the expert discussion in the focus group meeting. Among the top issues concerning "smart" villages, the importance of creating "smart" villages' strategies was stressed. Such strategies should tightly reflect the challenges and needs of the particular region and be built on local strengths and assets. Another consensus reached by the experts concerned the guidelines on the implementation of a "smart" village concept in Lithuania, as currently this concept is differently understood among rural communities and policymakers. There are different understandings of what the "smart" village concept aims to achieve and how it corresponds to rural development issues within a particular area.

4.3. The Drivers of Rural Areas toward the Prospective "Smart" Future

During the discussion, a question was raised concerning the drivers of Lithuanian rural areas toward prospective "smart" futures. The experts first discussed actors, in general, as the overall drivers of the rural areas in Lithuania. The experts identified particular actors and rated them according to the importance of their roles in the overall rural development of Lithuania (see Figure 1).

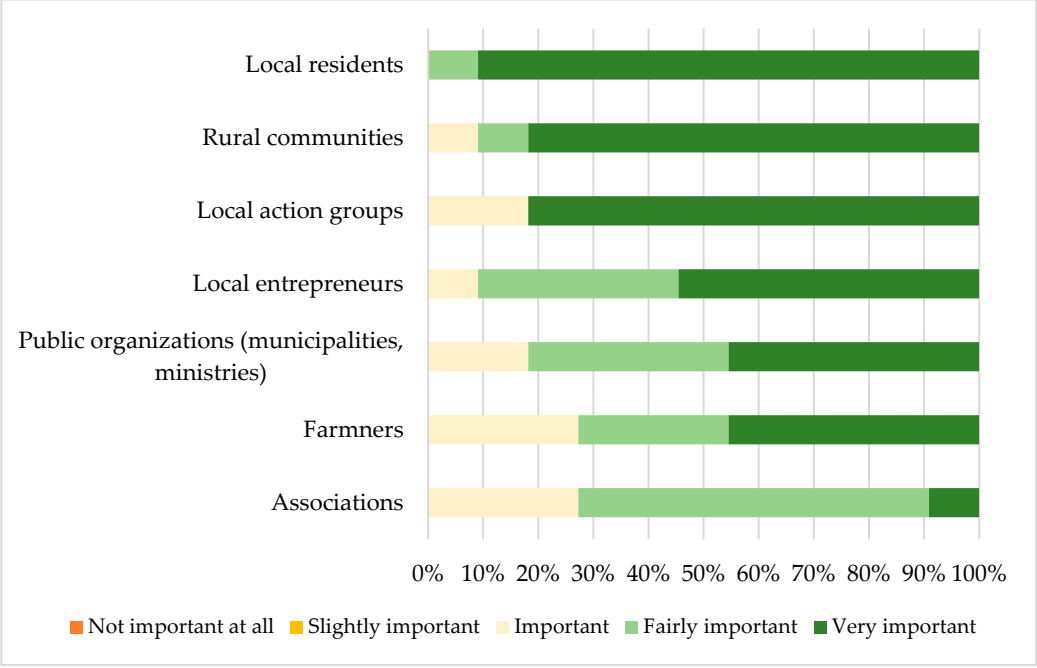

Figure 1. The importance of Lithuanian rural actors for rural development. Source: created by authors, based on research results.

The experts reached a consensus that active rural residents individually, as well as rural communities, are at the heart of the development issues for rural Lithuania. Individual leaders within rural communities are the "engines" for development and innovation in rural areas. A common expert opinion concerning local leaders and entrepreneurs as the exemplar "engines" and motivators for other rural residents was outlined.

In addition to the driving roles, the intermediary roles of rural communities and local action groups (residents and public organizations) that are responsible for rural policy implementation and coordination in Lithuania was considered very important for driving rural areas forward.

During the consensus meeting, more key players in driving Lithuania's rural areas into the prospective "smart" future were identified. It was considered that the involvement of scientists and consultants in the strategic decisions and management of change in rural areas was essential. Moreover, much might be done regarding the "smart" development of rural areas by involving youth, as well as youth organizations, country clubs, communities contributing to activities in their homeland, and townspeople with homesteads in the countryside.

4.4. The Relevant Conditions in Raising the Demand and Potential for "Smart" Solutions in the Rural Development Context

The research results elucidated the relevant conditions in raising the demand and mobilizing the potential for "smart" solutions in the rural development context in Lithuania and enabled rating them according to their relevance (see Figure 2).

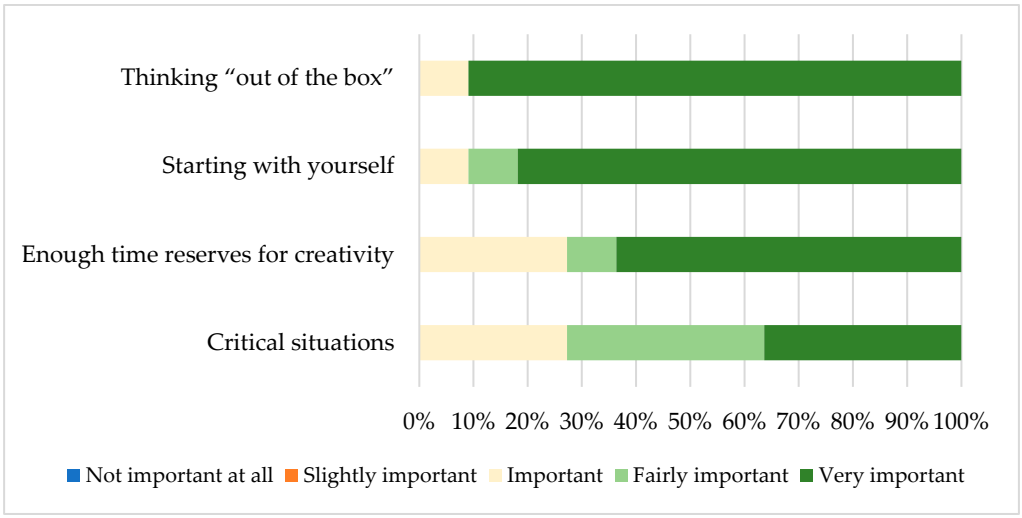

Figure 2. Preconditions for "smart" solutions in rural areas. Source: created by authors, based on research results.

The very first and crucial precondition for developing "smart" ideas concerning solutions for rural areas was identified as thinking "out of the box". This was considered necessary for introducing any innovation in a rural community, and this thinking is most often led by starting from oneself. The experts stressed the crucial aspect of this initial step: nothing would happen if one who felt that change was about to happen failed to step forward and start the initiative. At the same time, it was stressed that this step forward to do something to change the situation is necessarily the result of creativity. Moreover, creativity may happen only if there is enough time for it. Most often, initiative leaders of local communities in Lithuania act voluntarily, as the system of local action groups is composed of insufficient resources and personnel. In such conditions, local leaders should find their own spare time to start creative activities to drive their rural communities toward a smart future. This continuous volunteering often overexploits local activists and becomes

a demotivating factor for further developments. This was defined as a challenge, which should be overcome with local-action-group formation policy improvements.

One more precondition for developing "smart" solutions arose from practices in past crises. It was stressed by the experts that critical situations, such as the recent COVID-19 pandemic, opened up many new opportunities. Previously, rural communities did not realize that some challenges could be overcome by themselves in one way or another. For instance, collaborative initiatives concerning necessary services for lonely people with diseases (e.g., delivery of food and medicine) appeared in rural communities without any external acceleration or resources. This demonstrated the above-mentioned precondition of starting from ourselves. Furthermore, advancements in digitalization made distance-working a normal and effective way of organizing daily jobs. Distanced meetings and other ordinary job duties might be implemented in rural areas, leaving people free to go outside even during the restrictions of pandemic times. At the same time, the value of rural settlements increased due to the possibility of performing everyday work duties remotely. Thus, a critical situation accelerated the development of "smart" solutions in developing rural areas.

Among the other mentioned preconditions for "smart" solutions, the experts also highlighted the "smart" application of LEADER principles. However, the main focus in their discussions was the proactive local leader who is the driver of "smart" solutions. Such a leader should be sufficiently paid for everyday work and, thus, retain enough time for creativity in solving the problems of the local community creatively and intelligently.

5. Discussion

The research results suggest particular insights into a theoretical overview of recent literature and policy agendas. Recalling the American school of "smart" growth, the necessity to look at "smart" growth from a large holistic perspective was highlighted [17–19]. The findings from research concerning the understanding of the meaning of the term "smart" development of rural areas in Lithuania confirmed the American views concerning extent and depth [18]. "Smart" development was characterized by the experts as a complex system that should holistically serve the higher quality of life in the rural areas of Lithuania. First, the attractiveness of rural areas should be increased (physical environment); second, tangible and intangible assets for entrepreneurship (business and creative environment) should be accelerated; third, necessary services (social environment) should be established; fourth, collaboration and cooperation within the community (internal networking) should be encouraged; finally, external relations (external networking) should be expanded. Collectively, this defines the building of a "smart" system for rural development as a holistic system in which the environments (internal and external, physical and social) fulfill each other by interacting and intersecting (internal and external networking) to act "smarter" for a better quality of life for everyone in the area. Moreover, it might be considered that after two decades, "smart" development is no longer a unique "American" variant of sustainable development [19], as it has arrived on the European continent in different forms.

Considering "smart" development as an outcome of the sprawling issues as outlined by [17], the Lithuanian example does not yet take into account this, as the preconditions for developing "smart" solutions in rural areas have not yet met similar challenges to a similar extent. Different signs of this already appear in several forms in Lithuania in the past decade. A new "fashion" arrived in Lithuania, i.e., to move from crowded cities to suburbs or to areas that are up to one-hour in driving distance from the bigger cities. This was accepted as a "smart" way of life: people with families stayed during their free time in places surrounded by nature, i.e., in private settlements. As the necessary services were undeveloped in such areas, people went to work to obtain educations for their children and to receive basic services from nearby cities. Currently, the situation is changing, and basic services have moved to the suburbs as well as to newly established rural settlements. Another pattern was to remain living in cities in flats in multi-storied housing and to maintain a rural residence for weekends, holidays, or other spare time. Significant changes

occurred as a result of feeling "smart" freedom due to living places apart from crowded cities during the COVID-19 pandemic times. Remote work for professions who can do so has become more of a desirable phenomenon than a privilege, which is what it was considered before the pandemic. Therefore, "smart" solutions due to the digitalization established "smart" development circumstances for distanced areas. In addition, "smart" solutions appeared as ways of organizing the daily activities of people in rural areas, e.g., remote work, consumption of local food or ordering food from electronic stores, and delivery of other goods to homes. All of this provided an opportunity to operate as a "smart" system that started improving the quality of life for people in rural areas. Therefore, the research results prove that critical situations—in this case, the COVID-19 pandemic—worked as an accelerator for developing "smart" solutions in distanced regions and rural areas.

Considering the European context, the changes expected from "smart" growth as an outcome of structural reforms [21] were implemented under pressure from the EU in the form of "smart" specialization [7]. These changes implemented research that disapproved of the success of "smart" specialization in Lithuania and were in line with the findings Hassink and Gong (2019) [22], especially with respect to the rural context. The Lithuanian example refers more appropriately to the findings of Fücks (2015) [1], considering the steps of the ongoing green revolution, rather than region-specific smart specialization, as young innovators in Lithuania had not yet reached a sufficient level of trust in science, policy, business, and society; this does not augur well for developing smart specialization strategies in the region [47], despite the current formal attempts (i.e., developed strategies as documents) to do that [7].

The Lithuanian example of "smart" development of rural regions corresponds to a more generalized understanding of "smart" regional and rural development, based on the findings of Naldi et al. (2015) [27]; more precisely, it corresponds to an understanding of the concept of "smart" villages [6,29]. The research results prove that in Lithuania, the place-based approach combined with smart specialization is promising in generating successful strategies for regions with close connections to cities [21,27]. According to the research results, the Lithuanian perceptions of "smartness" better correspond to finding new and unique "smart" solutions for using local advantages of particular rural areas, focusing especially on tangible and intangible resources of particular rural areas [28,31,32]. In addition, during the research, it was continuously stressed that the role of the enabler—i.e., the leader with internal characteristics—is crucial in accelerating the potential of smart development, as was found by Nieto and Brosei (2019) [31]. At the same time, based on research results, endogenous resources that are triggered bottom-up, combined with exogenous innovation potential, provide a reasonable way forward [6,32] in "smart" development of rural regions in Lithuania.

Finally, considering "smart" and "green" growth, the research findings suggest that Lithuanian perceptions of "smart" rural development take into account the latest course of green transformation accelerated by the EU Green Deal, and appear in line with the recent findings of Budziewicz-Guźlecka and Drożdż (2022) [33]: i.e., "smart" rural development in Lithuanian rural areas rely on the "smart" village development model, consisting of an intelligent environment, intelligent people, and intelligent governance. The "smart" green development of rural areas will depend in Lithuania on a recognized understanding of the essence, the need, and the abilities and ways for "smart" green growth to develop in a particular rural area and, of course, on the leaders who will accelerate the actions of local stakeholders [31] and manage the "smart" LEADER implementation program for developing "smart" villages,. They will drive the progress in the area.

6. Conclusions

This article's research suggests that much has been accomplished in studying different aspects of "smart" growth, "smart" development, "smart" economies, "green" economies, and (overall) a smart green revolution in scientific research and policy agendas. The terms

"smart" and "smartness" are interchangeable and used in different policy and economic development contexts to describe the ongoing smart green revolution, including the context of rural development. Still, much confusion exists concerning the concepts of "smart" and "smartness" in economies and in society's science developments and policies. In particular, the terms "smart" and "smartness" are "fresh" and, therefore, unclear in the context of rural development.

The lessons learned from the American "smart" growth school are important. First, "smart" growth and "smart" solutions are primarily oriented toward develop holistic [eco]systems that smartly serve a better quality of life for human beings. Second, the successful implementation of "smart" growth is possible in the long run, as it includes the transformation of value systems and technological developments, and changes in value systems take time.

The European perception of "smart" growth is embedded in structural reforms and was realized from the beginning as a set of selected specialized innovation [eco]systems; however, the reasons for smart specialization strategies to be prioritized in a regional policy setting were insufficiently grounded until recently. Most recently, the concept of "smart" growth has been embedded in the implementation of the European Green Deal, in line with environmental concerns, the bio-economy, and energy efficiency. Again, the focus is more on specialization—i.e., greener technological solutions—the holistic understanding is missing in both science and policy agendas.

"Smart" growth, which recently corresponded with "green" solutions, especially in the EU, is more and more often found in the context of smart regional and rural development and, more precisely, in "smart" villages. Collected evidence suggests that "smart" development in a rural context needs to be combined with a place-based approach. Combined place-based and "smart" development approaches suggest that "smartness" should assist in finding new and unique smart solutions for using the local advantages of a rural area, including both the tangible and intangible assets of a rural setting. The crucial conditions in building "smart" villages that contribute to sustainable development are endogenous resources and the triggering of them bottom-up, combined with exogenous innovation potential, thereby creating holistic smart [eco]systems.

The development of "smart" villages begins with a sufficient level of understanding of the essence, the need, and the abilities and ways for "smart" green growth in a particular rural area. The responsibility for the acceleration of the potential in rural areas to build an [eco]system of "smart" villages belongs to the local enablers—i.e., the leaders from local communities or the newcomers who hold the entrepreneurial skills and knowledge in envisioning a particular village's future through "smart" development solutions. Therefore, the crucial role in developing "smart" villages belongs to intelligent leaders who will drive villages of rural areas into "smart" and green futures.

The research suggests the importance of policy advice at the local and regional levels. Lithuanian experts repetitively highlighted the need to reduce bureaucratic burdens in order to successfully start the development of "smart" villages in Lithuania. Building trust in communities will create opportunities for local initiatives to achieve their potential and take action to start developing "smart" solutions that exactly serve the need of the locals. At the same time, it is crucially important to organize the exchange of already-existing knowledge—i.e., examples of good practice with rural communities, both locally and from abroad.

At the national and supranational policy levels, Lithuanian experts stressed the importance of taking a position of implementing the "smart" village concept without cramming it into a rigidly defined framework. The generation of original and unique ideas would be encouraged, instead of repeatedly cloning contextually unsuitable projects in completely different environments. It is very important to improve the principles for the selection criteria for funding projects in the field of "smart" villages. Improvements in the project-evaluation procedure can be achieved by focusing on the impact of results, and the process, i.e., how a project is implemented by building a "smart" [eco]system involving partners,

empowering rural populations, etc. Unique projects should be prioritized, considering the impact reached for building smarter [eco]systems in villages and, thus, ensuring the "smart" growth of rural areas.

A limitation of this study is related to the use of the Lithuanian case for examining and illustrating the perceptions of "smart" development; this should be taken into consideration when using the results of this research. Nevertheless, Lithuania was previously recognized as a region with a long agricultural history and deep traditions of rural culture, and this provided a specific advantage when investigating the state of perceptions of "smart" rural development.

Future research agendas are expected to focus on the monitoring and analysis of ongoing "smart" village projects. It is important to identify whether there is a need for a creative worker/activator or a consultant/guard in rural regions to help see potential from the outside. Thus, research on the need, role, and impact of creative personnel in rural areas can help identify how regional development planning measures can be adjusted and/or improved to achieve the desired results of "smart" rural areas with the involvement of rural actors (e.g., LAGs, rural communities, farmers, and cooperatives).

Author Contributions: Conceptualization, R.L.; methodology, R.L. and Ž.G.-R.; software, R.L.; validation, R.L. and Ž.G.-R.; formal analysis, R.L. and Ž.G.-R.; investigation, R.L. and Ž.G.-R.; resources, R.L. and Ž.G.-R.; data curation, R.L. and Ž.G.-R.; writing—original draft preparation, R.L. and Ž.G.-R.; writing—review and editing, R.L. and Ž.G.-R.; visualization, R.L. and Ž.G.-R.; supervision, R.L. and Ž.G.-R.; project administration, Ž.G.-R.; funding acquisition, Ž.G.-R. All authors have read and agreed to the published version of the manuscript.

Funding: The research was funded by and conducted as part of the European Commission, Horizon 2020 project "SHERPA—Sustainable Hub to Engage into Rural Policies with Actors", grant number 862448.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Data is available under request.

Conflicts of Interest: The authors declare no conflict of interest.

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