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Rural Area Resilience during the COVID-19 Pandemic as Exemplified by Urban–Rural Communes in Poland

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Abstract: The purpose of the paper is to characterize the outcomes of the COVID-19 pandemic for farms and resilience activities performed by farmers in response to the economic crisis caused by the COVID-19 pandemic in the context of building rural area resilience. Research was carried out in all 87 urban-rural communes in Poland and focused on special determinants of rural resilience such as connections between small cities and rural areas, as well as the location of the territorial unit (peripheral versus non-peripheral). The purpose of the survey was to poll local government representatives on the outcomes of the COVID-19 pandemic for farms and identify resilience activities performed by farmers in response to the economic crisis caused by the COVID-19 pandemic. Empirical research was performed from September to October 2021. The results emphasize the significance of the diversification of farms and networks for strategies for coping with the COVID-19 crisis. The research revealed processes wherein farms adapted, even if to a small extent, to crisis conditions. The COVID-19 pandemic brought new challenges, at the same time stimulating innovative responses in communities and businesses in rural areas. This study also confirms the role of ITC solutions in the process of adaptation to the crisis and implies a need to strengthen local links between the rural area and the city, especially those relevant to peripheral areas. Local government authorities play a crucial role in this process.

Keywords: commune resilience; rural area resilience; COVID-19; peripheral regions; local government; farm resilience



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1. Introduction

The concept of resilience has its origins in natural sciences such as physics, mathematics and ecology [1]. Nonetheless, it has attracted increasing attention from researchers dealing with social sciences, who noticed its possibilities and the need to develop it further, taking into account the connections between the natural and social dimensions [2]. Today, the idea of resilience is widely discussed, both in the context of a targeted social development process and as a field of research [3,4].

From the perspective of economic sciences, the concept of resilience has many interpretations. Approaches to its measurement are also diverse [5,6]. Martin and Sunley indicate three ways of interpreting the concept of resilience: resilience as a "bounce back" from shocks, resilience as the "ability to absorb" shocks and resilience as a "positive adaptability" in anticipation of, or in response to, shocks ([7], pp. 5–6). According to those authors, resilience means the ability of a given economy to withstand or overcome market, competitive or environmental shocks along its development path by making adaptive changes in its economic structures and social and institutional solutions, as required, so as to maintain or reinstate the previous development path or to transition to a new, sustainable path with a more productive and fair use of physical, human and environmental resources ([8] by Martin, Sunley 2020, p. 75).

The concept of resilience as the capacity to adapt in response to shocks is related to complex adaptive system (CAS) theory and evolutionary theory [7]. In an analysis of the

notion of resilience based on evolutionary principles, one must take into consideration that resilience is a dynamic process and that history matters in shaping development paths. This has important implications for both industrial policy and developmental strategies. They should take into account that dynamic, complex systems need to be projected from a multi-layer and multi-actor perspective ([9], p. 8, and [10]). Institutions and actors as subjects of socio-economic systems must support adaptation. This is also essential not only to support adaptation but also for the long-term ability to develop new growth paths [11].

Taking into account the role of multiple actors in development processes and the links and relationships between them leads to the recognition of the vital role of social capital in development processes, including its role in building the resilience of systems representing different levels, including local and regional.

Different spatial dimensions of resilience can be identified. Local communities and individual decision-making pathways are embedded in nested hierarchies of scales. There exist close scalar interconnections between the community and the regional, national and global levels. The implementation of pathways of resilience can only find its most direct expression at the level of the individual/household/farm and the community, as it is only at the most local level that outcomes of policies and decisions are experienced ([12], p. 1219).

Economic sciences analyze i.a. notions of local or regional resilience in the area of regional and local development, relating this area to the appropriate spatial scale of development processes [6]. In such a view, it must be recognized that development processes at the regional and micro-regional level are characterized by cause-and-effect relationships, where the development of a region is the result of interrelated processes and transformations taking place within it, and the local system functions and develops as an integral part of the region [13]. At the same time, it should be noted that regional resilience is a generic term frequently pitched at the overall level of a regional economy, yet resilience will necessarily vary between, and even within, sectors within any given region. An evolutionary perspective is especially helpful in focusing attention on the adaptability and adaptive capacity of sectors and clusters as key components of resilient spatial units ([9], p. 12).

Local and regional resilience is related to the communities living in a given territory. The term 'community resilience' can therefore be defined. Community resilience describes the collective ability of a neighborhood or geographically defined area to deal with stressors and efficiently resume the rhythms of daily life through cooperation following shocks ([14], by Aldrich 2012). Community resilience identifies a community's ability to utilize its current resources in order to adapt to an adversity or sudden disturbance, and eventually to be able to absorb the disturbance, return to routine and even perform better in comparison with the pre-disturbance situation [15].

Community resilience indicates the capability of people and communities to retain optimal performance in the event of various natural and anthropogenic crises [16] in such a way that businesses, infrastructures, and citizens suffer the least damage and casualties and maintain the capacity to recover from damages, adapt and redevelop [17]. Community resilience includes five dimensions interacting with each other: environmental, infrastructural, institutional, public health and well-being, social and economic dimensions [18].

Key criteria of economic resilience to pandemics are economic sustainability and available resources, such as allocated budget, agriculture and food security. Agriculture, food security and financial resources are the most frequently used factors related to economic resilience in the reviewed literature [19].

Key resilience factors discussed in the economic context include the stability of economic growth, the distribution of income in the population and the stability of social systems in terms of inducing innovation and technological development [2]. A key component of community resilience is its resources. Among these, social capital is of particular importance as it strongly influences resilience at the community level [14,20]. In the case of rural resilience, the category of 'rural amenities' should be also indicated.

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Currently, resilience is considered one of the key determinants of economic growth and its constantly increasing relevance is attributed to its integration with the targets of the "2030 Agenda for Sustainable Development" [3,21]. In this context, resilience, both in its social and ecological aspects, is an important sustainable development and resource use criterion, considering the dependence of human and social welfare on the biosphere and its properties [2].

Recently, the debate on resilience has shifted perspective from the national, "top-down" institutional level to a "bottom-up", local, commune-level approach [15,22]. This is largely due to the evolution of the "think globally, act locally" principle towards increased pressure on response to environmental and economic threats in individual cities, towns and villages (cf. [23,24]). According to this trend, resilience is an issue more and more often discussed in reference to community development in rural areas, as well as regional growth [4,25–30].

The subject of resilience, including rural area resilience, came to the fore in the face of the crisis caused by the COVID-19 pandemic (COVID-19 crisis). Despite a wealth of literature, there are still numerous research gaps concerning the situation of farmers and farms in the pandemic, as well as the demand for relevant conclusions in the context of politics and planning in the event of future pandemics [31]. As stressed by Suleimany et. al. [19], existing research has mainly focused on resilience to threats such as natural disasters, climate change impacts and socio-economic difficulties. However, resilience to pandemics, specifically before the COVID-19 outbreaks, has been relatively understudied. Due to the specific nature of pandemic-type crises (non-economic in nature, but with socio-economic consequences), the search for resiliency approaches suitable for this type of event is particularly important, as there are limited transferable resiliency solutions to typical crises of an economic nature, such as the Great Recession of 2008.

This article is an attempt to take a stance in the debate. Its purpose is to characterize the outcomes of the COVID-19 pandemic for farms and resilience activities performed by farmers in response to the economic crisis caused by the COVID-19 pandemic in the context of building rural area resilience. Research was carried out in territorial units on the rural commune level and focused on special determinants of rural resilience such as connections between small cities and rural areas, as well as the location of the territorial unit (peripheral versus non-peripheral).

2. Nature of Rural Resilience

Rural resilience can be defined as a rural area's ability to adapt to changing external circumstances so as to maintain a satisfactory living standard, as well as its ability to recover, if necessary. Rural resilience indicates how well the rural area can balance its ecosystemic, economic and cultural functions, i.e., its capability to address economic, ecological and cultural vulnerabilities [15]. Thus, studies on resilience require a multidimensional and holistic approach, one that takes into account environmental protection (including agricultural production) and social and economic life [32–34]. They should also acknowledge that ecological, economic and cultural systems are becoming increasingly complex and that interactions between them are growing in terms of scale and intensity [32]. In the context of global climate challenges, community resilience must allow for complex interactions of multiple climate change dimensions. On the other hand, it is noteworthy that sustainable management contributes to more sustainable and resilient communities through processes such as relationship-building, participation, inclusion, resource mobilization and creating space for knowledge-sharing [33,35].

Jerzy Banski, considering the specificity of rural areas, sees their features as including open landscape, low population density, predominance of people connected with farming and forestry, traditional life style (close to nature) and customs, extensive connection with farming and forestry, traditional lifestyle (close to nature) and customs, extensive land use (mainly agricultural and forestry), sparse buildings and dispersed settlements and the inhabitants' sense of living in the countryside ([36], p. 41). The above conditions imply both possibilities and limitations for the resilience of rural areas. On the one hand, it should be

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taken into account that typical problems of rural areas, especially peripheral ones, such as insufficient level of infrastructure development and difficulties in its development (including ICT infrastructure, which is crucial for resilience), demographic problems (including depopulation, low population density), difficulty in accessing public and market services, long distances and communication difficulties, reduce the attractiveness of rural areas as places for developing entrepreneurship (including non-agricultural) and places of life. These conditions make it necessary to provide support to vulnerable social groups, e.g., older people, who, given the specific nature of these areas, may be subject to particular exclusion. Attention should also be paid to the low openness of traditional communities to external innovations.

On the other hand, we must remember the natural and cultural richness of rural areas creates opportunities for implementing new development paths based on the innovative use of rural amenities. It is also worth emphasizing the strong social bonds existing in rural communities compared to urban communities and the developed social capital, which in the historical development process formed the basis for overcoming various types of shocks.

Resilience can be defined from the perspective of rural communities. In this context, it is interpreted as the community's ability to use its current resources in order to adapt to adversity or unexpected disruptions and, eventually, absorb these disruptions, return to routine or even perform better than in the circumstances before the disruption [15]. Resilience may also be perceived as a balance between economic, environmental and social needs of rural communities. Accordingly, sustainable and economically, socially and environmentally resilient rural communities must develop strong multifunctional characteristics [37].

Multifunctionality is both the foundation and the prerequisite of resilience. In light of the above, it must be noted that rural communities with a sufficient development level of economic, social and environmental capital may be perceived as "resilient" and well-equipped to face the challenges of the world which is quickly becoming globalized. Rural systems with a diverse economy where non-agricultural functions are being developed and which have managed to maintain a high quality of the natural environment, cooperation and involvement of democratic stakeholders, as well as the development of knowledge of rural residents, will generally be considered highly multifunctional [37–39].

Rural resilience consists of the capacity for resistance, adaptation and transformation. Promoting multifunctional transformation, exercising bottom-up planning and enhancing social capital are proposed to improve rural resilience [40]. It should be also noted that a key component of rural community resilience is co-existence as it provides a range of important resources that is not solely reliant on a single organization. The rural anchor network encompasses groups from within and beyond the rural development sphere (e.g., employers, local press, agricultural support organizations, housing providers, social enterprises and local agricultural markets). By working closely together, these groups are able to create strong community links and allow that community to positively respond to ongoing social change [20].

3. Determinants of Rural Area Resilience

Resilience is determined by a number of both endogenous and exogenous factors in relation to the local system. In the literature, rural community resilience is held to depend on the interaction and relationships between entities and resources on many scales, on the development of digital competences; researchers also argue that the bottom-down approach to growth policy, inspired by local communities, may bring the expected results in increased resilience [4]. Of significance among endogenous factors is social capital [28,41–44].

Resilience studies require a systematic approach that takes into account the fact that communities are not uniform entities. Instead, they comprise households, individuals and stakeholder groups, each of them having their own resilience paths. Local communities

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and individual decision-making paths are set in embedded hierarchies of scales, with close scalar connections between the community and the regional, national and global levels [12].

An important place in the discussion on resilience determinants is occupied by economic structure, with diverse structures playing a vital role in building resilience, although some researchers claim that this concept is beset by limitations (e.g., [3]) or argue that region-specific or competition-related factors are at least equally significant [45]. The diversity argument is related to the demand for developing entrepreneurship and ensuring a varied structure of economic activity of an export-oriented economy [39,46–48].

Entrepreneurial ecosystems and their role in explaining local systems' resistance to economic shocks offer a promising direction for resilience studies concerning local systems. D. Iacobucci and F. Perugini found that entrepreneurial ecosystems play a relevant role in explaining the resilience of local systems to economic shocks and that this role is more salient than entrepreneurial rates [49]. Other findings indicate that the community entrepreneurship model allows peripheral communities to activate mechanisms required to boost socio-economic resilience [44]. Tourism is an industry with a potentially multidimensional impact on local community resilience (e.g., [18,33]). The results of ongoing research indicate further potential to develop tourism after COVID-19 in Poland. They indicate the change in tourism demand is already being observed and will continue to deepen. This will consist in shifting the demand from mass tourism to more individualized tourism (e.g., with the use of small guesthouses, agrotouristic farms, small holiday villages and campsites), and at the same time more local and regional. At the same time, Polish small towns and their local surroundings have, although usually underused so far, many tourist advantages (cultural, natural, historical, social, infrastructural, etc.), including those matching the new form of tourism demand (e.g., short distance, easy access, low prices, individualization of own activities) ([50], p. 130).

An important determinant of rural area resilience is the availability of ICT (*information and communications technology*) [4]. Results show that regions which possess technologically consistent (not only varied) knowledge bases display adaptive resilience. Local economies tend to demonstrate greater adaptive resilience if they implement innovation in sectors with the highest growth capabilities [51].

Increased use and access to ICT may prove beneficial to small farmers and agricultural communities thanks to easily available information about food and agriculture, better access to financial services, other risk management tools and the creation of new business opportunities in rural areas [52]. Findings indicate that intelligent technology can prove a valuable resource, increasing the resilience of agricultural systems and supporting social inclusion, and that it may improve the effectiveness of social marketing systems [52]. As for small farmers, providing access to information and ensuring communication capabilities in crisis is also crucial [31].

An important determinant for the local economy is the unique character of a given territorial unit. Parameters such as the territorial unit's status, size, spatial structure and location are recognized as factors determining its resilience capabilities [28].

The subject of small cities' potential role in the development of their surrounding areas has been discussed in the literature. Interactions between farmers and urban communities are seen as vital for maintaining rural population and services, strengthening the local economy and the natural environment and thus contributing to building local resilience potential [43]. At the same time, selected findings reveal a complex pattern of production-related linkages in the region [53].

The results reported in studies on the significance of cities for rural area development are varied, and their evaluation often proves challenging. The following functions of small cities are discussed: (1) they are demand/sales markets for farm produce from rural areas; (2) they constitute goods and services manufacturing and distribution centers for rural areas; (3) they become centers for growth and consolidation of non-agricultural economic activity and employment in rural areas through the development of small and medium-sized enterprises or relocation of small and medium enterprises or large enterprise branches;

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(4) they attract rural migration from surrounding areas by demand for non-agricultural labor, thus decreasing pressure on larger urban centers; (5) they perform natural resource management functions to address the needs of growing rural and urban population [54].

The literature emphasizes an overall low level of local connections [55]. Higher small and medium-sized city potential is relevant only in areas where employment in agriculture is above the national average and, generally, bigger cities, which generate the greatest multiplier effects in all areas [56]. Moreover, it has been noticed that tourist cities or cities located in close proximity to metropolitan areas are less integrated [57].

The role of small and medium-sized cities as providers of goods and services to their rural areas is shaped by two main factors. These include rural population income level and purchase power and local business development capability to satisfy this demand and the demand from the downtown urban population. Considering the above, an effective rural development strategy is to strengthen the links between the urban center and its surroundings, which stimulates both the growth of agriculture and non-agricultural activity [58].

Another determinant of local resilience is the "central versus peripheral" location of the territorial unit. Research conducted by the authors of this study shows that urban–rural communes located peripherally in Eastern Poland were affected by the COVID-19 crisis to a greater extent than communes in other parts of Poland. Overall, a lower level of pro-resilience activity in peripheral communities can be determined by a more severe crisis in peripherally located communes due to their lower development potential and generally lower social capital [28].

4. Agriculture during the COVID-19 Crisis

The shock of the COVID-19 pandemic caused by the SARS-CoV-2 virus had its source outside the economy [28]. The socio-economic life in many countries was subjected to various limitations and restrictions, leading to negative economic and social outcomes with signs of an impending economic crisis. In Poland, the state of epidemic was introduced on 20th March 2020, lifted on 15 May 2022 and replaced by the state of epidemic emergency on 16 May 2022. At that time, borders were closed in response to the threat, international travel restrictions were imposed, business bankruptcies peaked, production and commerce indicators plummeted and tourism was nearly brought to a standstill [59].

The pandemic affected farmers in many ways. In the economic aspect, it manifested itself by, e.g., the drop in raw material prices, new competition in markets, the rise in the cost of hired labor and farming input shortages, lower income security and a production surplus. In the social dimension, insufficient availability of seasonal labor and lack of face-to-face interaction between farmers were noticeable. Finally, in terms of institutional reality, farmers had to face transport restrictions, sudden changes in access to markets, new labor regulations or international instability [60]. The impact of the pandemic also depended on its phase. It was different at the beginning due to the abrupt lockdown and varied in the long-term perspective [61].

Key direct consequences of the COVID-19 pandemic for agricultural production included a decline in farmers' income in the face of changing food supply and demand, a shortage of basic farming inputs (including labor) and challenges pertaining to distribution strategies and channels [52,62].

Findings concerning the impact of the pandemic on farms are inconclusive, and determining the type of farms which demonstrated resilience in the context of the pandemic has proved elusive. Consequently, some authors claim it is more reasonable to take a relational, rather than structural, approach to resilience studies and shift focus to relations—material, social or mental. The relational approach requires attention to factors such as creativity, mental agility, skill improvement or flexible resource management [63].

In particular, results of studies on farm resilience have shown that the pandemic had a moderate impact on the majority of those farms that were not affected, e.g., by worker availability issues [64,65]. This limited impact of the COVID-19 pandemic on the farms'

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production activities was caused by low exposure or the agile activation of agricultural systems' capacities in combination with a favorable institutional environment [66]. Moreover, farms with greater involvement in value-added activities proved more resilient than other farms [64].

Meanwhile, more specialized and intensive farms that used other market channels than direct ones were more likely to experience the negative impacts of the pandemic and more vulnerable to the shocks that disrupted regional and global supply chains [67,68].

Generally, the results of the research on farm resilience stress the significance of a broadly defined farm diversification (products, market, income stream) in coping with the COVID-19 crisis [31,69–71]. Findings included the importance of long-term diversification strategies (the implementation of which started ca. 15 years ago) for farms' improved economic performance [72]. Farmers who increased the use of online sales and marketing in the first year of the pandemic had larger farms and greater on-farm crop and livestock diversity, which boosted their resilience to pandemic-related shocks [67].

It was also reported that pre-pandemic (both internal and external) conditions of farming operations played a significant role in farmers' resilience [73]. Resilience capacity was based on existing connections between farmers and within the value chain, with already existing connectedness and diversity contributing significantly to the ability to cope better with the effects of the COVID-19 crisis [66]. Resilience capacity was also attributed to relationships between farms and their local agroecosystems [63].

According to a comprehensive approach, key resilience capabilities in the face of the challenges of the COVID-19 crisis included reconnecting with local food production, networking, door-to-door deliveries, providing support for small producers (short supply chains), on-farm multifunctionality, support measures for producer associations and direct cooperation with salesmen [73], as well as adaptive strategies including sales and marketing reorganization [62], where seeking direct-to-customer sales opportunities was an important direction [74].

The COVID-19 crisis brought onerous conditions for both the food and farming sector and business while creating new opportunities for business owners in terms of specialization and consolidations of already diversified strategies [72]. Many farms were forced to implement innovation quickly and take action in order to survive constant disruptions. These included changes in farming procedures, on-farm work organization, adaptation to the requirements of climate policy and cooperation with local and regional partners in the supply chain and community members in order to ensure the survival of local businesses [75]. Challenges presented by the COVID-19 crisis opened opportunities for agritourism and revealed its share in building community resilience [69].

5. Materials and Methods

The theoretical foundation of this study employed analytical and synthetic methods, as well as the results of empirical research. The latter was carried out with regard to all 87 urban–rural commune units in Poland which have (or had, during the research) their seat in a small city (with up to 20,000 inhabitants, according to the Polish Central Statistical Office, as of 31 December 2020) with district rights. The selection of urban–rural communes for the study was conditioned by the intention to capture the role of small towns in the processes of local development taking into account their links with the surrounding rural areas. Of a total of 87 interviews, one was incomplete; however, as its filled-in portion was substantially correct, it was decided that it would be included in the study.

The survey used in this study was based on a structured questionnaire, which contained 10 extensive semi-open questions. In the semi-open questions, respondents were able to provide, for example, examples or to elaborate on the answer indicated in the survey questionnaire. The respondents were surveyed in a computer-assisted telephone interview (CATI)/a computer-assisted web interview (CAWI) or a mixed-mode (CATI + CAWI) interview. They included individuals in managerial positions: mayor/deputy mayor/secretary (in some cases). The purpose of the survey was to poll local government representatives

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on the outcomes of the COVID-19 pandemic for farms and identify resilience activities performed by farmers in response to the economic crisis caused by the COVID-19 pandemic.

The results of the survey were presented by means of basic descriptive statistical tools, including comparative analysis of communes situated in peripheral regions (20 units in Eastern Poland Macroregion: Lubelskie, Podlaskie, Podkarpackie, Warmińsko-Mazurskie and Świętokrzyskie province) and the remaining communes—67 units (Figure 1).

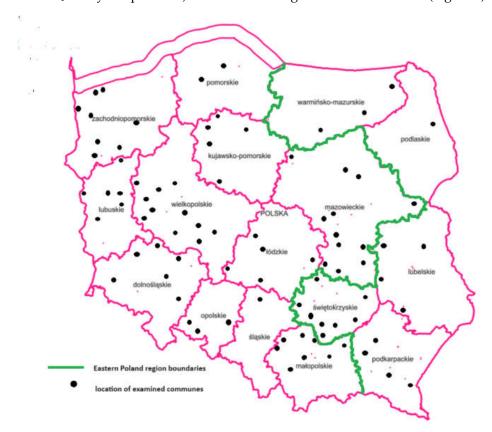


Figure 1. Location of the examined communes in Poland. Source: own elaboration based on State Border Register: https://www.geoportal.gov.pl/pl/dane/panstwowy-rejestr-granic-prg/ (accessed on 30 April 2024).

The peripherality of Eastern Poland's regions reveals itself both in the spatial dimension defined by its location in the eastern part of the country and the European Union and in other dimensions, including economic and social ones. These provinces belong at the same time among the least developed regions of the European Union, fulfilling the criterion of low-income regions, so-called lagging regions [76,77]. In this study, peripheral municipalities are defined as those located in the Eastern Poland Macroregion.

Because the empirical part was a study/description of the entire population, the analyses did not employ statistical inference methods, instead relying on descriptive statistics. Calculations were performed in the Statistica 13.3 software (TIBCO Software Inc. (2017). Statistica (data analysis software system), version 13, https://www.tibco.com/contact-us (accessed on 30 April 2024)).

Empirical research was performed from September to October 2021 by the company ASM Centrum Badań i Analiz Rynku Sp. z o.o as part of research project PB4/2020: "Rezyliencja gmin miejsko-wiejskich w Polsce. Operacjonalizacja, pomiar, diagnoza mechanizmów adaptacyjnych" ["Resilience of urban-rural communes in Poland. Operationalization, measurement, diagnosis of adaptive mechanisms"] financed by the University Staff Development Fund (at John Paul II University of Applied Sciences in Biała Podlaska).

6. Results

6.1. Agriculture Sector in Poland

Agriculture in Poland is an important sector from the point of view of ensuring food security and jobs for the rural population. Taking into account the sector's contribution to gross value added (current prices) it should be noted that the value is steadily increasing. In 2024, the added value generated in Polish agriculture accounted for 3.7% of the added value of agriculture in the EU as a whole. In this respect, Poland ranked eighth among the member states [78]. The share in gross value added (current prices) of agriculture, forestry, hunting and fishing in Poland was 3.2% in 2022. At the same time, the share of the population working in the sector was 8.4%. The average area of private farms exceeding1 ha of agricultural land is 10.6 ha [79].

Poland is an important producer of many agricultural products in the EU. In terms of the scale of production of selected agricultural products, Poland ranks as follows: oats, apples—first; rye—second; wheat, potatoes, sugar beet, rape and turnip rape, tobacco, cows' milk—third; livestock: cattle—fifth; pigs—sixth [79].

After Poland joined the European Union in 2004 and was covered by Common Agriculture Policy (CAP) tools, modernization and restructuring processes followed, and export successes and support under the CAP had a positive impact on income levels in agriculture. The value added in agriculture in 2023 was EUR 22.1 billion [78].

The CAP 2023-27 entered into force on 1 January 2023. Support for farmers and rural stakeholders across the 27 EU countries is based on the CAP 2023-27 legal framework and the choices detailed in the CAP Strategic Plans. The approved Plans are designed to make a significant contribution to the ambitions of the European Green Deal, Farm to Fork Strategy and Biodiversity Strategy [80].

6.2. Characteristics of the Agriculture Sector in Selected Urban-Rural Communes

Urban–rural communes (an urban–rural commune is a unit with one city/town and the rural area which makes up the remaining part of the commune, Territorial Unit Identifier and Name System (TERC) https://eteryt.stat.gov.pl/eTeryt/rejestr_teryt/ogolna_charakterystyka_systemow_rejestru/ogolna_charakterystyka_systemow_rejestru.aspx?contrast=default (accessed on 15 October 2023)), which are the focus of the present study, should be perceived as unique entities: on the one hand, they may face limited growth opportunities due to their lower institutional efficiency in comparison to cities; on the other hand, they display greater growth potential than rural communes. For some urban–rural communes, the peripheral location in Eastern Poland provides a problematic background for growth determinants [28,81,82].

In the first part of the present study, we characterized local (commune-level) food and agricultural sectors and their relevant phenomena and processes as seen from the perspective of local government representatives. The condition and types of connections between cities (seats of the local government) and the rural areas in urban–rural communes were also taken into account.

The position of the municipality as the basic unit of the territorial self-government in Poland is regulated by the Act on Municipal Self-Government. It stipulates that the municipality is to be understood as a self-governing community and the relevant territory. A gmina's sphere of action includes all public matters of local importance not reserved by law for other entities. The municipality performs public tasks in its own name and on its own responsibility and has legal personality, and its independence is subject to judicial protection.

The mayor (mayor, town mayor) is the executive body of the municipality. The mayor manages the current affairs of the municipality and represents it externally. The tasks of the mayor include in particular the preparation of development programs in accordance with the provisions of the principles of development policy. To this end, the municipality may develop a municipal development strategy [83]. The responsibilities of the mayor, which are formulated in this way, require him/her to be familiar with local development policy

issues and to diagnose and monitor local spatial, economic and social conditions, which are the starting point for local development policy.

Only in a third of all surveyed communes did the respondents confirm that agriculture, because of its good condition, constitutes a stable source of income for commune inhabitants. Far more respondents (43.0%) saw the potential of local farming as the basis for the development of food and agricultural processing and a well-developed food and agricultural processing sector (38.4%). In a fifth of the surveyed communes, farmland merging processes were visible, together with a rising number of farms with an area exceeding 100 ha. It should also be emphasized that representatives of the local government perceived local producers as demonstrating a high level of eco-awareness (Table 1).

Table 1. Selected characteristics of the food and agriculture sector in communes by peripheral and non-peripheral location *.

Economic Status		N	Total	Peripheral	Non-Peripheral
due to its good condition, agriculture is a stable source of income for commune residents		86	29	6	23
		100	33.72	31.58	34.33
the commune has well-developed resources of raw materials for		86	37	13	24
food and agricultural processing	%	100	43.02	68.42	35.82
an increase in the number of large farms of area in excess of 100ha		85	17	2	15
is noticeable in the commune	%	100	20.00	11.11	22.39
the farmland merging process in noticeable in the commune		86	18	5	13
		100	20.93	26.32	19.40
high ecological awareness of the local producers prevails		85	47	10	37
		100	55.29	52.63	56.06
the commune has a well-developed food and agricultural processing sector		86	33	11	22
		100	38.37	57.89	32.84
the city, the seat of the local government, is an important market for		86	44	12	32
agricultural producers from the rural area	%	100	51.16	63.16	47.76
the city, the seat of the local government, is the main/dominant	Quantity	86	51	16	35
labor market for residents from the rural area	%	100	59.30	84.21	52.24
the rural area is frequently the preferred leisure and recreation area		86	43	11	32
for the residents of the city—the seat of the local government	%	100	50.00	57.89	47.76

^{*} The number of indications in the table refers to the respondents who confirmed that the phenomenon or process is observed in the commune; the others replied that the phenomenon or process is not observed in the commune. Source: based on the authors' own research.

At least half of the respondents perceived selected bilateral relationships between the rural area and the city. The most important ones pertained to the city's role as the main labor market for rural population (nearly 60% of responses). In addition, cities were also mentioned as markets for agricultural producers and rural areas as leisure and recreation areas for urban residents (according to half of the respondents, respectively).

A comparison between the characteristics of peripheral and non-peripheral communes allows us to notice that communes located in peripheral areas were more likely to have well-developed agricultural capabilities enabling the growth of processing operations and an already developed processing sector. This was accompanied by a more frequent arable land merging process and a less rapid increase in the number of farms with an area of more than 100 ha.

According to local government representatives, peripherally located communes displayed more intensive relations with cities which functioned as local labor markets (84%)

as well as markets for farm produce (63%). In peripheral communes, urban dwellers were more likely to pursue leisure activities than those in other communes (57.9%).

6.3. Outcomes of the COVID-19 Crisis

Generally, as reported by representatives of local authorities, the inhabitants of the communes analyzed in this study did not experience unequivocally adverse or severe impacts of the economic crisis caused by the COVID-19 pandemic. The majority of economies proved their resilience, defined as their ability to survive and overcome the shocks ([8], by Martin, Sunley, p. 75); moreover, most communities successfully adapted to sudden disruptions and came back to normal or even performed better than before the disruptor [15].

The COVID-19 crisis caused 87.21% of analyzed territorial units to stagnate, at worst, or positively influenced the socio-economic development process. In particular, in more than half (53.49%) of the surveyed units, the outcome of the socio-economic development process was positive; in 33.72% cases, it led to stagnation, and in 12.79%, it was negative.

As for the location of territorial units, it should be noted that the representatives of communes located in peripheral regions reported more severe effects of the COVID-19 crisis on the socio-economic development process than in other communes. More than half of the units categorized as peripherally located communes (57.89%) reported stagnation (36.84%) or negative characteristics of the local socio-economic development process (21.05%). In other communes, stagnation was reported in 32.84% of cases, and a negative outcome in 10.45%.

In the group of communes whose representatives perceived negative outcomes of the COVID-19 crisis, the majority (81.8%) included units that reported a good condition of the agricultural sector, which was a stable source of income for the inhabitants of the commune. In addition, over half of those territorial units were described as having a well-developed food and farming sector (54.6%). In this group of communes, with regard to peripherally situated units, the city served particularly significant functions of sales market and labor market for the rural area, whereas the rural area offered leisure and recreation for urban dwellers (Table 2).

In communes that reported stagnation or a positive impact of the crisis, the agricultural sector was less frequently—in one-fourth of the communes—described as being in good condition and generating a proper income for the residents. A well-developed farming sector was also less frequently accompanied by well-developed farming and food processing. Peripherally located communes stood out with regard to extensive food and farming processing infrastructure. Moreover, similarly to the group of territorial units that described the local developmental processes as negative, the scale and scope of connections between rural and urban areas were greater in peripherally located communes.

In comparison with communes that reported a positive impact of the COVID-19 crisis or stagnation, territorial units in which the outcomes were seen as negative were more often characterized by strong connections to the city, which was an important sales or labor market (for 63.4% of communes). At the same time, it should be emphasized that those communes were less likely to serve as an attractive leisure and recreation area for city dwellers.

In addition to the aforementioned characteristics, communes that exhibited resilience in crisis conditions, which meant, at worst, a stagnation in the development process, were marked by a higher percentage of territorial units with an increasing number of large farms (21.3%) and higher reported eco-awareness among local producers (56.8%). Almost half of them displayed some properties which made them attractive places of leisure and recreation.

The results of our study on urban–rural communes and their response to the COVID-19 crisis indicate that the agricultural sector did not provide a stable source of income, particularly in peripheral communes, which were more strongly affected due to their location.

Table 2. Selected characteristics of the food and agriculture sector in the analyzed communes by the outcome of the COVID-19 crisis and peripheral vs. non-peripheral location *.

Economic Status	11:1	N	V. Positive and Mostly Positive, Stagnation			Mostly Negative and V. Negative		
Economic Status	Unit –		Total	Peripheral	Non- Peripheral	Total	Peripheral	Non- Peripheral
due to its good condition, agriculture is a stable source of income for commune residents	Quantity	86	20	3	17	9	3	6
	%	100	26.67	20.00	28.33	81.82	75.00	85.71
the commune has well-developed resources of raw materials for food and agricultural processing	Quantity	86	32	11	21	5	2	3
	%	100	42.67	73.33	35.00	45.45	50.00	42.86
an increase in the number of large farms of area in excess of 100ha is noticeable in the commune	Quantity	85	16	2	14	1	0	1
	%	100	21.33	13.33	23.33	10.00	0	14.29
the farmland merging process in noticeable in the commune	Quantity	86	16	4	12	2	1	1
	%	100	21.33	26.67	20.00	18.18	25.00	14.29
high ecological awareness of the local producers prevails	Quantity	85	42	8	34	5	2	3
	%	100	56.76	53.33	57.63	45.45	50.00	42.86
the commune has a well-developed food and agricultural processing sector	Quantity	86	27	9	18	6	2	4
	%	100	36.00	60.00	30.00	54.55	50.00	57.14
the city, the seat of the local government, is an important market for agricultural producers from the rural area	Quantity	86	37	7	28	7	3	4
	%	100	49.33	63.64	46.67	63.64	75.00	57.14
the city, the seat of the local government,	Quantity	86	44	13	31	7	3	4
is the main/dominant labor market for residents from the rural area	%	100	17.58	86.67	51.67	63.64	75.00	57.14
the rural area is frequently the preferred leisure and recreation area for the	Quantity	86	39	9	30	4	2	2
residents of the city—the seat of the local government	%	100	52.00	60.00	50.00	36.36	50.00	28.57

^{*} The number of indications in the table refers to the respondents who confirmed that the phenomenon or process is observed in the commune; the others replied that the phenomenon or process is not observed in the commune. Source: based on the authors' own research.

The opinions expressed by local government representatives imply that the communes whose economies are to a greater extent based on agriculture, with a developed agribusiness sector, were hit more severely by the crisis. They had not developed a sufficient number of jobs, exhibiting stronger local ties with cities, which served as important sales and labor markets. They had fewer resources, amenities or facilities which would determine their leisure appeal. The agricultural sector in those units was subject to less intensive agricultural farm area structure transformation processes; there was also a lower level of eco-awareness among agricultural producers.

At the same time, specialization in agricultural production and tourism related to the use of local amenities was associated with a less severe impact of the crisis. This observation is in line with references found in the literature concerning the role of local amenities in the development of business in more poorly developed and/or rural areas. According to this line of reasoning, rural development strategies should focus on amenities as a basis of local economic diversification and, at the same time, as fostering "smart specialization" [84,85]. The presence and growth of the network of interconnected rural area resources of various types, including natural amenities such as land or water, as well as man-made amenities including recreational or social ones brings positive results for their development [86].

The highest percentage of communes that reported stagnation or positive impact of the socio-economic development process during the COVID-19 crisis was found for

territorial units specializing in farm production (crop production and animal husbandry, 100% each, respectively) and tourism/recreation (reported for 89.5% of units surveyed). Other surveys of mayors in Polish small towns show the long-term development of touristic services provided in their town for the benefit of the inhabitants of mainly the regional surroundings, especially from nearby large cities, but also from other parts of the country and neighboring countries [50]. Negative impacts on development processes were reported most often for communes that relied on services, including commercial services, and less often for communes with well-developed industry and construction (Table 3).

Table 3. Production specialization	* in analyzed communes b	by COVID-19 crisis outcome ($N = 86$).
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Commune's Specialization	Unit	V. Positive and Mostly Positive, Stagnation	Mostly Negative and V. Negative		
1.* 1 (Quantity	17	2		
leisure and tourism	%	89.47	10.53		
commorco	Quantity	17	4		
commerce	%	80.95	19.05		
other services	Quantity	4	2		
	%	66.67	33.33		
: dt	Quantity	9	2		
industry -	%	81.82	18.18		
	Quantity	5	1		
construction -	%	83.33	16.67		
	Quantity	2	0		
animal husbandry	%	100.00	0.00		
aron production	Quantity	21	0		
crop production	%	100.00	0.00		
Total	Total Quantity 75		11		

^{*} Respondents indicated one answer from the seven available choices based on their own assessment/knowledge of the development of local economic sectors. Source: based on the authors' own research.

The results suggest that agricultural production, by supporting resilience, functions as a buffer in the socio-economic fabric of rural areas. One should also note the need for diversification aimed at the improvement of the sector's income performance.

The COVID-19 pandemic had a profoundly negative influence on agriculture and vulnerable population groups [87]. One also needs to consider the context in which rural areas develop, which is inextricably linked to the subject of common welfare and depends on the security of farmers' living environment, and farmers are a vulnerable group in many communities (cf. [17]). At the same time, in the non-agricultural sector rural economies with a higher self-employment level, a well-developed network of small and micro-businesses of limited solvency and cash reserves were also worse suited to survive economic disruptions caused by the COVID-19 pandemic [88].

6.4. Adaptive Measures Taken by Farmers in Response to the COVID-19 Crisis

Although its effects were less severely felt in territorial units in which agricultural production played a major role, the economic crisis caused by COVID-19 became an impulse to implement adaptive measures in the agricultural sector. This was clearly visible in the more extensive use of available ITC solutions in the day-to-day running of the farm and searching for new growth possibilities, as well as taking steps enabling the technological development of the farm to improve communication with the environment. Local government representatives only in 11.6% of territorial units noticed that the farmers

accepted the crisis situation and were willing to adjust to it by taking appropriate steps (Table 4).

Table 4. Adaptive measures taken by farmers in the face of the COVID-19 crisis as perceived by the local government in communes selected in this study by commune location in peripheral and other regions *.

	Adaptive Measures	Unit	N	Total	Peripheral	Non- Peripheral
_	growth of remote interactions with administration -	Quantity	86	27	5	22
	growth of remote interactions with administration	%	100	31.40	26.32	32.84
	finding more leads by means of IT tools more often	Quantity	86	13	4	9
		%	100	15.12	21.05	13.43
	development of remote interactions with goods and service suppliers and recipients	Quantity	86	12	3	9
		%	100	13.95	15.79	13.43
_	implementation of remote communication technologies -	Quantity	85	11	2	9
		%	100	12.94	11.11	13.43
	acknowledgment of the necessity to adapt to the situation and take appropriate action	Quantity	86	10	4	6
_		%	100	11.63	21.05	8.96
	development of non-agricultural operations outside the farm	Quantity	86	7	5	2
		%	100	8.14	26.32	2.99
	using selected agriculture-related services remotely	Quantity	86	6	0	6
		%	100	6.98	0.00	8.96
	farming equipment rental	Quantity	86	5	3	2
	ianning equipment terms	%	100	5.81	15.79	2.99
	common sales	Quantity	86	5	1	4
	continon sales –		100	5.81	5.26	5.97
development of non-agricultural operations in remote form		Quantity	86	1	1	0
		%	100	1.16	5.26	0.00
development of non-agricultural operations in on-site form		Quantity	85	-	-	-
		%	100	-	-	-

^{*} The number of indications in the table refers to the respondents who confirmed that the mentioned type of adaptation measures was observed in the commune; the others did not perceive the given type of adaptation measures. Source: based on the authors' own research.

First of all, local government representatives noticed various forms of remote interactions between farmers and the administration. The growth of remote forms of interaction was mentioned by one-third of the territorial units surveyed. Activities such as finding new leads and developing remote interactions with goods and service suppliers and recipients were less intensive since they were noticed for 15.2% and 14.0% of respondents, respectively. Farmers' investment in communication technology was reported only in 13.0% of territorial units. No development of remote provision of non-agricultural services, e.g., advisory services, was identified.

To a lesser extent, the crisis impacted the growth of farming operations in terms of, e.g., diversification through the growth of remote or on-site non-agricultural activity or economic activity conducted independently of farming. Examples of more intense cooperation between local agricultural producers in terms of sharing agricultural equipment or organizing joint sales were also manifested to a small extent.

Analyzing adaptive measures while taking into account the location of the farm in a peripheral or non-peripheral commune, we may notice that farmers in peripheral

communes displayed relatively greater activity in adjustment to the economic crisis. In peripheral communes, the need to find more leads by means of IT tools, conduct non-agricultural operations outside the farm or rent agricultural equipment was more often articulated. Respondents also claimed that farmers in peripheral communes were more likely to accept the need to adapt to the new situation. In non-peripheral communes, the growth of remote interactions between farmers and local government was reported slightly more often.

Therefore, our findings corroborate the economic diversification postulate commonly expressed in literature on rural development concepts and recommendations for local government to look for new, non-agricultural directions for development in the context of the necessity to build resilience in those areas.

Supporting farmers in the diversification of their production systems while simultaneously reducing the dependence on the providers and entities in the supply chain may boost their resistance to future disruptions [68]. It would be necessary to implement a policy supporting family-run farms during the period of crisis to continue to derive benefits that they offer to society and promote sustainable livelihood [69].

7. Conclusions

The present research revealed processes wherein farms adapted, even if to a small extent, to crisis conditions. The COVID-19 pandemic brought new challenges, at the same time stimulating innovative responses in communities and businesses in rural areas [88–90]. The analyses show the resilience and adaptive responses of rural businesses, supported by embedded rural capital and unique characteristics of rural businesses [91]. The results emphasize the significance of the diversification of farms and networks for strategies for coping with the COVID-19 crisis [92]. The results are in line with the conclusions of other studies indicating that entrepreneurial orientation (as a farmer psychological characteristic), membership in farmer organizations and the nature of farmer–buyer relationships are determinants that affect farm resilience [93]. Innovation capabilities in the agricultural sector were supported by solidarity purchasing groups, advisory services, local media and Internet resources enabling both local and external connectedness [71].

Our study also confirms the role of ITC solutions in the process of adaptation to the crisis. Therefore, limited digital connectivity in rural areas affects their resilience [89,94]). Consequently, it is important to develop information technologies not only for communication purposes but also with a view to using them in crisis management, while taking steps to strengthen social capital [28]. Information technologies can be effectively applied by local governments to establish bilateral relations in the face of the crisis caused by the COVID-19 pandemic [95]).

Another conclusion drawn from our study implies a need to strengthen local links between the rural area and the city, especially those relevant to peripheral areas. We emphasize the necessity of taking steps to integrate urban and rural populations in urban–rural communes so as to create a shared space with which they could identify, reinforcing both and thus enhancing social capital [28]. Rural area inhabitants are often disproportionately affected by crises, and this is caused by communication and socio-economic gaps in comparison to city inhabitants and justifies the need to strengthen connections between urban and rural areas in development policies [96]. At the same time, we propose that supralocal connections should be forged to improve rural resilience, in particular with regard to peripheral areas. Building community assets has potential limitations where deeply rooted challenges, structural hindrances or multi-level restrictions exist. Without economic restructuring or larger investments, including external ones, there is a risk that the areas left behind will become marginalized [20] or, according to the growth path dependence concept, "locked in" [27].

Similar research results, implying a strengthening of rural-urban linkages connected with benefits for the agricultural sector, were obtained in [43]. This study suggests that robust levels of ongoing engagement between farmers and town communities are important

in maintaining rural populations and services along with both a strong local economy and environment. Research results provide a rationale for designing local development policies, which should take into account the mutual benefits of strengthening the relationship between the town and the surrounding rural area. This is particularly true in peripheral areas with relatively low levels of urbanization.

Resilience and growth are interdependent characteristics of a community. Growth opens up opportunities, but it is resilience that guarantees that they remain open in extreme circumstances [97]. In line with the endogenous growth concept, i.e., the pursuit of self-reliant growth in urban and rural areas, the key function in the process is performed by institutions facilitating innovations aimed at diversifying production operations and access to markets. The effectiveness of local initiatives relies on the agreement between local actors as to the strategy and goals, as well as on the local communities' participation in growth initiative management and control [98]. For local policies, it is important to support the diversification and growth of a vibrant, locally managed business network and the local potential in terms of growth which strengthens the community [99].

It is important to initiate and intensify collaboration between local communities, between government and public institutions cooperating closely with various rural business, economic and local entities to support business resilience [90]. Local government authorities play a crucial role in this process [100,101]. Those entities are currently faced with challenges that can be addressed by reinforcing the resilience potential of developing areas. Local government involvement, fostering and developing local leadership, which may cooperate with the local business community to overcome any tensions, is the key to building resilience in the local dimension [99,102].

The discussion on resilience should also take into account the need to approach this process in a holistic, comprehensive way by simultaneously developing economic, social and environmental capital. From a more detailed perspective, we may identify five integrated aspects of community resilience to the pandemic: institutional, social, economic, infrastructural and demographic. Also, it must be noted that issues pertaining to agriculture and food security are of greater significance in rural than urban communities [19]. Any diversification of the rural economic network by the development of entrepreneurship, in terms of both the diversification of farming operations and activities not directly related to farming, should take into account the role of various rural resilience dimensions, i.e., economic, social and environmental, in supporting rural area and business resilience [99].

According to our study, specialization in agricultural production and tourism related to the use of local amenities was associated with a less severe impact of the crisis. These results are consistent with others which indicate that in terms of economic structure, reliance on agriculture was beneficial [103]. So, the agricultural sector is an important part of the economy of rural areas from an economic perspective, and local rural development policies must take into account the specific problems of its development in relation to local and supralocal conditions.

The agriculture sector acts as a buffer against shocks to the local economy but is an insufficient resilience factor in units where it is the dominant function of the economy. It should also be noted that as a result of the crisis, communes with a developed agricultural production function were not severely affected by it, but also in the case of non-agricultural specializations, the negative effects of the crisis were not widespread. The results of this research therefore lead to a confirmation of the postulate formulated in the literature on the need to strengthen of multifunctionality of rural economies. The conditions of peripherality additionally require the provision of external support realized through neo-endogenous development policies.

These research results are in line with those of a European farming system study [66] in terms of the failure to see signs of adaptation associated with the development of new pathways. Actors in the farming systems and the enabling environment generally focused on the immediate issues and gave little real consideration to long-term implications and challenges. Hence, adaptive or transformative capacities were much less on display than

coping capacities [66]. In line with Martin and Sunley's [8] definition, they mainly concern adaptation to crisis conditions, while also involving the introduction of various types of new solutions (innovations) in the current way of doing business.

The present study had some limitations. First of all, the article presents a narrow focus on local resilience and the role of the agricultural sector in resilience, in the context of the location of a territorial unit in a peripheral region and the impact of small towns. It is therefore difficult to carry out an in-depth discussion of the results of the study. Another problem is that access to the literature on this subject in languages other than English was problematic. Numerous reports and studies presenting research outcomes from different countries were prepared in local languages.

Another limitation of the study was a shortage of sources on community resilience in post-pandemic conditions and actual research results on the interdependencies between rural towns and the agriculture sector. Future research must provide a broader wealth of knowledge on this subject.

In the face of the shortage of comprehensive research on the issue of resilience, as well as the inconsistency of the results obtained so far, this nationwide full study conducted on a sample of small towns is an important voice in the discussion on the determinants of local resilience. The results of this research can be generalized for Poland. The need for similar studies abroad in other peripheral regions to enrich the theory and practice of regional development can be postulated.

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References

- 1. Robinson, G.M.; Carson, D.A. Resilient Communities: Transitions, Pathways and Resourcefulness. *Geogr. J.* **2016**, *182*, 114–122. [CrossRef]
- 2. Adger, W.N. Social and Ecological Resilience: Are They Related? Prog. Hum. Geogr. 2000, 24, 347–364. [CrossRef]
- 3. Cochrane, L.; Cafer, A. Does Diversification Enhance Community Resilience? A Critical Perspective. *Resilience* **2018**, *6*, 129–143. [CrossRef]
- Roberts, E.; Anderson, B.A.; Skerratt, S.; Farrington, J. A Review of the Rural-Digital Policy Agenda from a Community Resilience Perspective. J. Rural Stud. 2017, 54, 372–385. [CrossRef]
- 5. Simmie, J.; Martin, R. The Economic Resilience of Regions: Towards an Evolutionary Approach. *Camb. J. Reg. Econ. Soc.* **2010**, *3*, 27–43. [CrossRef]
- 6. Faulkner, J.-P.; Murphy, E.; Scott, M. Developing a Holistic 'Vulnerability-Resilience' Model for Local and Regional Development. *Eur. Plan. Stud.* **2020**, *28*, 2330–2347. [CrossRef]
- 7. Martin, R.; Sunley, P. On the Notion of Regional Economic Resilience: Conceptualisation and Explanation. Revised Version. *Submitt. J. Econ. Geogr.* **2014**, *15*, 1–42.

8. Martin, R.; Gardiner, B.; Pike, A.; Sunley, P. Economic Shocks and the Differential Resilience of Places. In *Regional Studies Policy Impact Books*; Taylor & Francis: Abingdon, UK, 2021; Volume 3:2, pp. 73–85.

- 9. Dawley, S.; Pike, A.; Tomaney, J. Towards the Resilient Region? Local Econ. 2010, 25, 650–667. [CrossRef]
- 10. Reggiani, A.; De Graaff, T.; Nijkamp, P. Resilience: An Evolutionary Approach to Spatial Economic Systems. *Netw. Spat. Econ.* **2002**, *2*, 211–229. [CrossRef]
- 11. Boschma, R. Towards an Evolutionary Perspective on Regional Resilience. In *Evolutionary Economic Geography: Theoretical and Empirical Progress*, 1st ed.; Kogler, D., Ed.; Routledge: Oxford, UK, 2015.
- 12. Wilson, G.A. Community Resilience, Globalization, and Transitional Pathways of Decision-Making. *Geoforum* **2012**, 43, 1218–1231. [CrossRef]
- 13. Szewczuk, A. Rozwój Lokalny i Regionalny—Główne Determinanty. In *Rozwój Lokalny i Regionalny. Teoria i Praktyka;* Wydawnictwo C.H. Beck: Warszawa, Poland, 2011.
- 14. Aldrich, D.P.; Meyer, M.A. Social Capital and Community Resilience. Am. Behav. Sci. 2015, 59, 254–269. [CrossRef]
- 15. Rapaport, C.; Hornik-Lurie, T.; Cohen, O.; Lahad, M.; Leykin, D.; Aharonson-Daniel, L. The Relationship between Community Type and Community Resilience. *Int. J. Disaster Risk Reduct.* **2018**, *31*, 470–477. [CrossRef]
- 16. Sharifi, A. A Critical Review of Selected Tools for Assessing Community Resilience. Ecol. Indic. 2016, 69, 629–647. [CrossRef]
- 17. Moraci, F.; Errigo, M.F.; Fazia, C.; Campisi, T.; Castelli, F. Cities under Pressure: Strategies and Tools to Face Climate Change and Pandemic. *Sustainability* **2020**, *12*, 7743. [CrossRef]
- 18. Cheshmehzangi, A. The City in Need: Urban Resilience and City Management in Disruptive Disease Outbreak Events; Springer: Singapore, 2020.
- 19. Suleimany, M.; Mokhtarzadeh, S.; Sharifi, A. Community Resilience to Pandemics: An Assessment Framework Developed Based on the Review of COVID-19 Literature. *Int. J. Disaster Risk Reduct.* **2022**, *80*, 103248. [CrossRef] [PubMed]
- 20. McAreavey, R. Finding Rural Community Resilience: Understanding the Role of Anchor Institutions. *J. Rural Stud.* **2022**, *96*, 227–236. [CrossRef]
- 21. Reyers, B.; Moore, M.-L.; Haider, L.J.; Schlüter, M. The Contributions of Resilience to Reshaping Sustainable Development. *Nat. Sustain.* **2022**, *5*, 657–664. [CrossRef]
- 22. Shaw, K.; Maythorne, L. Managing for Local Resilience: Towards a Strategic Approach. *Public Policy Adm.* **2013**, 28, 43–65. [CrossRef]
- 23. Barr, S.; Devine-Wright, P. Resilient Communities: Sustainabilities in Transition. Local Environ. 2012, 17, 525–532. [CrossRef]
- 24. Lyon, C. Place Systems and Social Resilience: A Framework for Understanding Place in Social Adaptation, Resilience, and Transformation. *Soc. Nat. Resour.* **2014**, 27, 1009–1023. [CrossRef]
- 25. Błąd, M. Rural Resilience Jako Nowa Koncepcja Rozwoju Wsi. Wieś I Rol. 2022, 194, 7–39. [CrossRef] [PubMed]
- Dacko, A.; Dacko, M. Studia Nad Rozwojem Obszarów Wiejskich—Od Paradygmatu Wzrostu Do Rezyliencji. WIR 2018, 49–64.
 [CrossRef] [PubMed]
- 27. Guzal-Dec, D. Local development in peripheral rural areas. Concept. Chall. 2018, 11, 53–73.
- 28. Guzal-Dec, D.J.; Zwolińska-Ligaj, M.A. How to Deal with Crisis? Place Attachment as a Factor of Resilience of Urban–Rural Communes in Poland during the COVID-19 Pandemic. *Sustainability* **2023**, *15*, 6222. [CrossRef]
- 29. Heijman, W.; Hagelaar, G.; van der Heide, M. Rural Resilience as a New Development Concept. In *EU Bioeconomy Economics and Policies: Volume II*; Dries, L., Heijman, W., Jongeneel, R., Purnhagen, K., Wesseler, J., Eds.; Springer International Publishing: Cham, Switzerland, 2019; pp. 195–211. ISBN 978-3-030-28642-2.
- 30. Palekiene, O.; Simanaviciene, Z.; Bruneckiene, J. The Application of Resilience Concept in the Regional Development Context. *Procedia Soc. Behav. Sci.* **2015**, 213, 179–184. [CrossRef]
- 31. Marsden, A.R.; Zander, K.K.; Lassa, J.A. Smallholder Farming during COVID-19: A Systematic Review Concerning Impacts, Adaptations, Barriers, Policy, and Planning for Future Pandemics. *Land* **2023**, *12*, 404. [CrossRef]
- 32. Benitez-Aurioles, B. Territorial Impact of COVID-19 on Tourism. An Opportunity for Rural Development in Spain. *J. Depopulat. Rural. Dev. Stud.* **2022**, *35*, 99–130. [CrossRef]
- 33. Fazey, I.; Carmen, E.; Chapin, F.S.; Ross, H.; Rao-Williams, J.; Lyon, C.; Connon, I.L.C.; Searle, B.A.; Knox, K. Community Resilience for a 1.5 °C World. *Curr. Opin. Environ. Sustain.* **2018**, *31*, 30–40. [CrossRef]
- 34. Franc-Dąbrowska, J.; Drejerska, N. Resilience in the Food Sector—Environmental, Social and Economic Perspectives in Crisis Situations. *Int. Food Agribus. Manag. Rev.* **2022**, 25, 757–770. [CrossRef]
- 35. King, C.A. Community Resilience and Contemporary Agri-Ecological Systems: Reconnecting People and Food, and People with People. *Syst. Res. Behav. Sci.* **2008**, 25, 111–124. [CrossRef]
- 36. Banski, J. Wieś w Badaniach Geograficznych—Ewolucja Badań i Przegląd Koncepcji Obszaru Wiejskiego. In *Wieś Jako Przedmiot Badań Naukowych na Początku XXI Wieku*; Halamska, M., Ed.; Wydawnictwo Naukowe Scholar: Warsaw, Poland, 2011.
- 37. Wilson, G. Multifunctional 'Quality' and Rural Community Resilience. Trans. Inst. Br. Geogr. 2010, 35, 364–381. [CrossRef]
- 38. Adamowicz, M.; Zwolińska-Ligaj, M. Koncepcja Wielofunkcyjności Jako Element Zrównoważonego Rozwoju Obszarów Wiejskich. Zesz. Nauk. SGGW Polityki Eur. Finans. I Mark. 2009, 2, 11–38.
- 39. Zwolińska-Ligaj, M. Integracja Funkcji Gospodarczych i Środowiskowych Na Obszarach Przyrodniczo Cennych Województwa Lubelskiego: Perspektywa Przedsiębiorstw; Wydawnictwo Państwowej Szkoły Wyższej im. Papieża Jana Pawła II: Biała Podlaska, Poland, 2015; ISBN 83-64881-16-7.

- 40. Li, Y. A Systematic Review of Rural Resilience. China Agric. Econ. Rev. 2023, 15, 66–77. [CrossRef]
- 41. Aldrich, D.P. The Importance of Social Capital in Building Community Resilience. In *Rethinking Resilience, Adaptation and Transformation in a Time of Change*; Yan, W., Galloway, W., Eds.; Springer International Publishing: Cham, Switzerland, 2017; pp. 357–364, ISBN 978-3-319-50171-0.
- 42. Carmen, E.; Fazey, I.; Ross, H.; Bedinger, M.; Smith, F.M.; Prager, K.; McClymont, K.; Morrison, D. Building Community Resilience in a Context of Climate Change: The Role of Social Capital. *Ambio* **2022**, *51*, 1371–1387. [CrossRef]
- 43. McManus, P.; Walmsley, J.; Argent, N.; Baum, S.; Bourke, L.; Martin, J.; Pritchard, B.; Sorensen, T. Rural Community and Rural Resilience: What Is Important to Farmers in Keeping Their Country Towns Alive? *J. Rural Stud.* **2012**, *28*, 20–29. [CrossRef]
- 44. Morrison, C.; Ramsey, E.; Bond, D. The Role of Social Entrepreneurs in Developing Community Resilience in Remote Areas. *J. Enterprising Communities People Places Glob. Econ.* **2017**, *11*, 95–112. [CrossRef]
- 45. Martin, R.; Gardiner, P.; Sunley, P.; Tyler, P. How Regions React to Recessions: Resilience and the Role of Economic Structure. *Reg. Stud.* **2016**, *50*, 561–585. [CrossRef]
- 46. Lapuh, L. Socio-Economic Characteristics of Resilient Localities—Experiences from Slovenia. *Reg. Stud. Reg. Sci.* **2018**, *5*, 149–156. [CrossRef]
- 47. Qu, M.; Zollet, S. Neo-Endogenous Revitalisation: Enhancing Community Resilience through Art Tourism and Rural Entrepreneurship. *J. Rural Stud.* **2023**, *97*, 105–114. [CrossRef]
- 48. Steiner, A.; Atterton, J. The Contribution of Rural Businesses to Community Resilience. Local Econ. 2014, 29, 228–244. [CrossRef]
- 49. Iacobucci, D.; Perugini, F. Entrepreneurial Ecosystems and Economic Resilience at Local Level. *Entrep. Reg. Dev.* **2021**, *33*, 689–716. [CrossRef]
- Sztando, A. Will Small Towns Benefit? Expected COVID-19 Pandemic-Induced Changes in Supralocal Relationships of Polish Small Towns and Planned Responses in the Supralocal Perspective of Their Local Development Strategic Governance. Pr. Nauk. Uniw. Ekon. We Wrocławiu 2020, 64, 118–147.
- 51. Rocchetta, S.; Mina, A. Technological Coherence and the Adaptive Resilience of Regional Economies. *Reg. Stud.* **2019**, *53*, 1421–1434. [CrossRef]
- 52. Lioutas, E.D.; Charatsari, C. Enhancing the Ability of Agriculture to Cope with Major Crises or Disasters: What the Experience of COVID-19 Teaches Us. *Agric. Syst.* **2021**, *187*, 103023. [CrossRef]
- 53. Pangbourne, K.; Roberts, D. Small Towns and Agriculture: Understanding the Spatial Pattern of Farm Linkages. *Eur. Plan. Stud.* **2015**, 23, 494–508. [CrossRef]
- 54. Tacoli, C. Why Small Towns Matter; International Institute for Environment and Development: London, UK, 2017; pp. 12–33.
- 55. Courtney, P.; Mayfield, L.; Tranter, R.; Jones, P.; Errington, A. Small Towns as 'Sub-Poles' in English Rural Development: Investigating Rural–Urban Linkages Using Sub-Regional Social Accounting Matrices. *Geoforum* **2007**, *38*, 1219–1232. [CrossRef]
- 56. Mayfield, L.; Courtney, P.; Tranter, R.; Jones, P.; Ford, S.; Agarwal, S.; McGeorge, A.; Schmitt, B.; Jobard, M.; Lepicier, D.; et al. *The Role of Small and Medium-Sized Towns in Rural Development*; Project Report; University of Reading: Reading, UK, 2005.
- 57. Heffner, K.; Solga, B. Small Towns as Local Economic Centres in Rural Areas. Bull. Geography. Socio-Econ. Ser. 2006, 6, 77–87.
- 58. Satterthwaite, D.; Tacoli, C. *The Role of Small and Intermediate Urban Centres in Regional and Rural Development;* The Urban Part of Rural Development; International Institute for Environment and Development: London, UK, 2003.
- 59. Adamowicz, M. Polityka antypandemiczna i polityka antykryzysowa w czasie pandemii COVID-19 w polsce. *Econ. Reg. Stud.* **2023**, *16*, 538–566. [CrossRef]
- 60. Menon, A.; Schmidt-Vogt, D. Effects of the COVID-19 Pandemic on Farmers and Their Responses: A Study of Three Farming Systems in Kerala, South India. *Land* **2022**, *11*, 144. [CrossRef]
- 61. Matthews, A. EU Food System Strengths and Vulnerabilities during COVID-19. EuroChoices 2020, 19, 4–12. [CrossRef]
- 62. Schreiber, K.; Soubry, B.; Dove-McFalls, C.; MacDonald, G.K. Diverse Adaptation Strategies Helped Local Food Producers Cope with Initial Challenges of the COVID-19 Pandemic: Lessons from Québec, Canada. *J. Rural Stud.* **2022**, *90*, 124–133. [CrossRef] [PubMed]
- 63. Darnhofer, I. Farm Resilience in the Face of the Unexpected: Lessons from the COVID-19 Pandemic. *Agric. Hum. Values* **2020**, 37, 605–606. [CrossRef] [PubMed]
- 64. Guedegbe, T.; Adelaja, A.; George, J. Resilience, Endogenous Policy Responses to COVID-19, and Their Impacts on Farm Performance. *World Dev.* **2023**, *168*, 106254. [CrossRef] [PubMed]
- 65. Perrin, A.; Martin, G. Resilience of French Organic Dairy Cattle Farms and Supply Chains to the COVID-19 Pandemic. *Agric. Syst.* **2021**, *190*, 103082. [CrossRef] [PubMed]
- 66. Meuwissen, M.P.M.; Feindt, P.H.; Slijper, T.; Spiegel, A.; Finger, R.; de Mey, Y.; Paas, W.; Termeer, K.J.A.M.; Poortvliet, P.M.; Peneva, M.; et al. Impact of COVID-19 on Farming Systems in Europe through the Lens of Resilience Thinking. *Agric. Syst.* **2021**, 191, 103152. [CrossRef] [PubMed]
- 67. Durant, J.L.; Asprooth, L.; Galt, R.E.; Schmulevich, S.P.; Manser, G.M.; Pinzón, N. Farm Resilience during the COVID-19 Pandemic: The Case of California Direct Market Farmers. *Agric. Syst.* **2023**, *204*, 103532. [CrossRef] [PubMed]
- 68. Helfenstein, J.; Bürgi, M.; Debonne, N.; Dimopoulos, T.; Diogo, V.; Dramstad, W.; Edlinger, A.; Garcia-Martin, M.; Hernik, J.; Kizos, T.; et al. Farmer Surveys in Europe Suggest That Specialized, Intensive Farms Were More Likely to Perceive Negative Impacts from COVID-19. *Agron. Sustain. Dev.* 2022, 42, 84. [CrossRef] [PubMed]

69. Brune, S.; Knollenberg, W.; Vilá, O. Agritourism Resilience during the COVID-19 Crisis. *Ann. Tour. Res.* **2023**, *99*, 103538. [CrossRef] [PubMed]

- 70. Ebel, R.; Ahmed, S.; Warne, T.; Moxley, A.; Grimberg, I.; Jarchow, M.; Menalled, F.D. Perceptions and Responses of Diversified Farm Producers in the Northern Great Plains to the Early Stage of the COVID-19 Pandemic. *Front. Sustain. Food Syst.* **2022**, *6*, 668335. [CrossRef]
- 71. Mastronardi, L.; Cavallo, A.; Romagnoli, L. How Did Italian Diversified Farms Tackle COVID-19 Pandemic First Wave Challenges? *Socio-Econ. Plan. Sci.* **2022**, *82*, 101096. [CrossRef]
- 72. Zanetti, B.; Verrascina, M.; Licciardo, F.; Gargano, G. Agritourism and Farms Diversification in Italy: What Have We Learnt from COVID-19? *Land* **2022**, *11*, 1215. [CrossRef]
- 73. Grigorescu, I.; Popovici, E.-A.; Damian, N.; Dumitraşcu, M.; Sima, M.; Mitrică, B.; Mocanu, I. The Resilience of Sub-Urban Small Farming in Bucharest Metropolitan Area in Response to the COVID-19 Pandemic. *Land Use Policy* **2022**, *122*, 106351. [CrossRef]
- 74. Dudek, M.; Śpiewak, R. Looking Forward to When It Is Over: Reactions and Short-Term Coping Micro-Strategies of Polish Fruit and Vegetable Farmers during the COVID-19 Pandemic. *Eur. Countrys.* **2022**, *14*, 770–789. [CrossRef]
- 75. Florick, L.; Park, C. A Pilot Study Exploring the Impacts of COVID-19 on Small-Scale Direct Marketing Farmers in Northwest Arkansas and Their Responses to the Pandemic. *J. Agric. Food Syst. Community Dev.* **2022**, *12*, 47–61. [CrossRef]
- 76. European Commission. *Competitiveness in Low-Income and Low-Growth Regions. The Lagging Regions Report;* European Commission: Brussells, Belgium, 2017.
- 77. Zwolińska-Ligaj, M. Kształtowanie Lokalnych Systemów Innowacji Jako Sposób Realizacji Koncepcji Inteligentnego Rozwoju Na Przykładzie Regionów Peryferyjnych; Wydawnictwo Państwowej Szkoły Wyższej im. Papieża Jana Pawła II: Biała Podlaska, Poland, 2018.
- 78. 20 Years in the EU of Polish Agriculture. Macroeconomic Perspective. Selected Facts. 2024. Available online: https://www.ifp.org.pl/20-lat-polskiego-rolnictwa-w-ue-perspektywa-makroekonomiczna-wybrane-fakty/ (accessed on 30 April 2024).
- 79. Statistics Poland. Statistical Yearbook of Agriculture; Statistics Poland: Warsaw, Poland, 2023.
- 80. The Common Agricultural Policy at a Glance. Available online: https://agriculture.ec.europa.eu/common-agricultural-policy/cap-overview/cap-glance_en (accessed on 1 May 2024).
- 81. Jaszczak, A.; Vaznoniene, G.; Kristianova, K.; Atkociuniene, V. Social and Spatial Relation Between Small Towns and Villages in Peripheral Regions: Evidence from Lithuania, Poland and Slovakia. *Eur. Countrys.* **2021**, *13*, 242–266. [CrossRef]
- 82. Marks-Bielska, R.; Lizińska, W.; Babuchowska, K.; Wojarska, M. *Sprawność Instytucjonalna vs. Lokalny Rozwój Gospodarczy–Czynniki Kształtujące i Interakcje*; Uniwersytet Warmińsko-Mazurski w Olsztynie: Olsztyn, Poland, 2017.
- 83. Ustawa z Dnia 8 Marca 1990 r. o Samorządzie Gminnym, Dz. U. 1990 Nr 16 Poz. 95. Available online: https://nicre.co.uk/media/3fcf35ls/nicre-state-of-rural-enterprise-report-no-1-january-2022-the-effects-of-the-covid-19-pandemic-on-rural-businesses-experiences-and-resilience.pdf?_hstc=105933084.4b44870ec4a577029c49e44b73bd3bee.1711065600209.1711065600210.1711065600211.1&_hssc=105933084.1.1711065600212&_hsfp=892594048 (accessed on 1 May 2024).
- 84. Naldi, L.; Nilsson, P.; Westlund, H.; Wixe, S. Amenities and New Firm Formation in Rural Areas. *J. Rural Stud.* **2021**, *85*, 32–42. [CrossRef]
- 85. Naldi, L.; Nilsson, P.; Westlund, H.; Wixe, S. What Is Smart Rural Development? J. Rural Stud. 2015, 40, 90–101. [CrossRef]
- 86. Markeson, B.; Deller, S. Growth of rural us non-farm proprietors with a focus on amenities. *Rev. Urban Reg. Dev. Stud.* **2012**, 24, 83–105. [CrossRef]
- 87. Štreimikienė, D.; Baležentis, T.; Volkov, A.; Ribašauskienė, E.; Žičkienė, A. Negative Effects of COVID-19 Pandemic on Agriculture: Systematic Literature Review in the Frameworks of Vulnerability, Resilience and Risks Involved. *Econ. Res. -Ekon. Istraživanja* 2022, 35, 529–545. [CrossRef]
- 88. Phillipson, J.; Gorton, M.; Turner, R.; Shucksmith, M.; Aitken-McDermott, K.; Areal, F.; Cowie, P.; Hubbard, C.; Maioli, S.; McAreavey, R.; et al. The COVID-19 Pandemic and Its Implications for Rural Economies. *Sustainability* **2020**, *12*, 3973. [CrossRef]
- 89. Maclaren, A.S.; Philip, L.J. Geographies of the Rural and the COVID-19 Pandemic. In *COVID-19 and Similar Futures: Pandemic Geographies*; Andrews, G.J., Crooks, V.A., Pearce, J.R., Messina, J.P., Eds.; Springer International Publishing: Cham, Switzerland, 2021; pp. 267–273, ISBN 978-3-030-70179-6.
- 90. NICRE. The Effects of the COVID-19 Pandemic on Rural Businesses: Experiences and Resilience, Report No.1; NICRE: Newcastle, UK, 2021.
- 91. Ngo, C.N. Foundations of Rural Resiliency: America during the COVID-19 Pandemic. *J. Rural Stud.* **2022**, *96*, 305–315. [CrossRef] [PubMed]
- 92. Mastronardi, L.; Cavallo, A.; Romagnoli, L. Diversified Farms Facing the COVID-19 Pandemic: First Signals from Italian Case Studies. *Sustainability* **2020**, *12*, 5709. [CrossRef]
- 93. Kangogo, D.; Dentoni, D.; Bijman, J. Determinants of Farm Resilience to Climate Change: The Role of Farmer Entrepreneurship and Value Chain Collaborations. *Sustainability* **2020**, *12*, 868. [CrossRef]
- 94. Morris, J.; Morris, W.; Bowen, R. Implications of the Digital Divide on Rural SME Resilience. *J. Rural Stud.* **2022**, *89*, 369–377. [CrossRef]
- 95. da Silva, S.M. Building Trust, Resilient Regions, and Educational Narratives: Municipalities Dealing with COVID-19 in Border Regions of Portugal. *Eur. Educ. Res. J.* **2021**, *20*, 636–666. [CrossRef]

96. Sukhwani, V.; Shaw, R. Urban–Rural Linkages and Their Implication to Human Security in Pandemic Time. In *Global Pandemic* and Human Security: Technology and Development Perspective; Shaw, R., Gurtoo, A., Eds.; Springer Nature Singapore; Singapore, 2022; pp. 147–163, ISBN 978-981-16-5074-1.

- 97. Mujjuni, F.; Betts, T.; To, L.S.; Blanchard, R.E. Resilience a Means to Development: A Resilience Assessment Framework and a Catalogue of Indicators. *Renew. Sustain. Energy Rev.* **2021**, *152*, 111684. [CrossRef]
- 98. Vázquez-Barquero, A.; Rodríguez-Cohard, J.C. Endogenous Development and Institutions: Challenges for Local Development Initiatives. *Environ. Plan. C Gov. Policy* **2016**, *34*, 1135–1153. [CrossRef]
- 99. McIntyre, S.; Roy, G. Revisiting the Dimensions of Rural Resilience: The COVID-19 Pandemic. *J. Rural Stud.* **2023**, 103, 103107. [CrossRef]
- 100. Guzal-Dec, D. Samorząd Gminny w Kreowaniu Zrównoważonego Rozwoju Obszarów Przyrodniczo Cennych Województwa Lubelskiego; Wydawnictwo Państwowej Szkoły Wyższej im. Papieża Jana Pawła II: Biała Podlaska, Poland, 2015.
- 101. Zwolińska-Ligaj, M. Samorząd gminy jako kreator lokalnych relacji—Kontekst lokalnej innowacyjności. *Econ. Reg. Stud.* **2019**, 12, 387–400. [CrossRef]
- 102. Horeczki, R.; Kovács, I.P. Chapter 13: Governance Challenges of Resilient Local Development in Peripheral Regions. In *Resilience* and Regional Development; Edward Elgar Publishing: Cheltenham, UK, 2023; pp. 279–299, ISBN 978-1-03-531405-8.
- 103. Hennebry, B. The Determinants of Economic Resilience in Rural Regions. An Examination of the Portuguese Case. *Misc. Geogr.* **2020**, 24, 24–29. [CrossRef]

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