

Article

Farming under Urban Pressure: Business Models and Success Factors of Peri-Urban Farms

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Abstract: This study aims to identify the success factors and main barriers and threats to developing peri-urban farms implementing various business models. For that purpose, a survey was conducted among a group of Polish farms located in the areas surrounding the largest Polish cities. Farms achieving economic success and implementing different business models were selected. The analyses were based on the concept of the business model developed by Osterwalder. The research shows that in recent years (due to the COVID-19 pandemic, among other things), there has been a considerable convergence in employed business solutions. The convergence process is particularly evident in the customer side of business models, i.e., customer relationships and channels. According to the respondents, the success of peri-urban farms is determined mainly by three groups of factors: (1) motivation, diligence, and creativity, (2) the high quality of products and services, and (3) the cultivation of deep bonds with customers. Thus, success comes from within the enterprise (relational capital), but the customer (service-dominant logic) is central to business model development. Farm managers indicated relatively few problems and barriers in their farms' development process. However, urban pressure (an external factor independent from farm managers) was considered the most important factor. The research enabled the presentation of the best business solutions and formulation of a few recommendations for peri-urban farming development.

Keywords: business models; peri-urban agriculture; success factors; city adjustments



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1. Introduction

Cities and peri-urban areas face challenges connected with rational economic, social, and environmental management. These require taking active measures to support sustainable development [1,2]. The overriding principle of sustainable development of urban and peri-urban areas is to guarantee the vitality and sustainability of the whole (peri-)urban system. An essential condition for this is a diverse, competitive economic basis for development and the rational management of space, the preservation of important natural and cultural values, as well as the preservation of spatial order [3].

In the context of the development of urban areas, a vital and often-overlooked sector of the economy is agriculture. In Poland, as well as in many other countries of the Global North, this sector uses over 50% of urban and peri-urban areas combined, which makes it responsible to a large extent for spatial order and the preservation of natural and cultural values [3]. Thus, the economic situation of farms and the prospect for their development represent a significant and relevant socioeconomic problem [4,5]. Scholars, urban planners, and members of local governments have recognised the significance of

peri-urban farming for the development of the whole community due to their economic, environmental, and social functions [6–8] and contribution to the sustainable development of urban agglomerations [9,10].

Urban and peri-urban areas are currently undergoing a deep socioeconomic transformation. Huge changes are seen, especially in agriculture—both on social and economic levels. It should be noted that there are conflicts among traditional farming activities and alternative economic, residential, and recreational interests within the peri-urban zone [11]. Many scholars report problems related to succession and finding workers [12,13], conflicts arising from competition for land [11,14], the reduced profitability of farms [15], as well as limited social acceptance, especially of intensive agricultural production [16].

On the other hand, it is stressed that peri-urban environment is conducive to the development of multifunctional farms that take advantage of their location close to cities [8,17,18]. These entities have adjusted their production profile, especially regarding relationships and ways of communicating with customers. Numerous studies present strategies or business models of peri-urban farms [5,19] that achieve economic success. However, Specht et al. [20] noted that such studies have been neglected in Europe, especially in Central–Eastern Europe. Little is known about urban and peri-urban farms' economic condition, development prospects, main success factors, or the effectiveness of farms' strategies under urban pressure. Scholars emphasise the need to fully understand the specificity of (peri-)urban agriculture and its changes over time and in space. They also stress that it is necessary to acquire comprehensive knowledge on socioeconomic changes, including adjustment processes in these regions of agriculture [4,21].

This study aims to identify the success factors and main barriers and threats to the development of peri-urban farms by implementing various business models. The analyses were based on the business model concept developed by Osterwalder et al. [22].

The sections below present an overview of the conditions and drivers of changes in the agriculture of peri-urban areas. Next, we describe the major business models implemented by farms and explain our approach, choice of study site, and sampling methods used. In the Results and Discussion sections, we present the major business models employed by farmers and discuss the success factors and barriers to their implementation. Finally, we provide some ending remarks and political implications.

2. Literature Review

2.1. Farming Adjustments in the Urban Shadow

Peri-urban agriculture (PUA) is faced with complex, dynamic, and interrelated changes due to climate change, increasing food demand, decreasing profitability, scarcity of natural resources, volatile input and output prices, rising energy costs, etc. [23,24]. Additionally, farmers face increasingly stringent environmental regulations, higher food quality standards, detailed animal welfare demands and volatile markets, as well as uncertainty regarding policy reforms [25]. Another significant challenge to the development of agriculture is suburbanisation processes, which result in the shrinkage of farmland and migrations of the urban population to preurban areas, among other things [26,27]. The latter challenge is particularly relevant to farms located in urban and peri-urban areas. Agriculture there is under tremendous pressure from the nonagricultural sector.

The literature often emphasizes that PUA is particularly vulnerable to economic decline processes (due to various constraints). The main threats and barriers to development include: limited access to land [4,14], high labour costs increased by the impact of an attractive urban labour market [13,28], as well as limited capacity to increase production intensity and choose the production profile (e.g., intensive livestock production) [29,30]. Furthermore, the trend towards coordinated, capital-intensive agrifood chains can create severe barriers, especially for small-scale producers and agri-processors in local and national markets [26]. These processes may prompt peri-urban farmers to abandon or sell their land to nonagricultural users, weakening agriculture's important economic, environmental, and social functions.

Faced with unpredictability, farmers have to adopt strategies that increase tolerance to uncertainty and surprise [23,24,31]. As Darnhofer et al. [25] noted, adaptability is no longer just a factor enhancing market competitiveness, but has become an essential aspect of farm survival. Similarly, Wästfelt and Zhang [32] see the main factor in developing urban and peri-urban farms in adjustment strategies such as: specialisation, niche production, multifunctionality in decision making, food chain management, the quality of food, and the embeddedness of food. Additionally, Lohrberg et al. [33] as well as van der Schans and Wiskerke [34], based on the findings of the resource-based management school, indicate that the ability to acquire and use strategic resources effectively becomes the key success factor of peri-urban farms. Scholars who deal with the issue of farms' adjustments in peri-urban areas often emphasize that their survival and development are conditioned by the development of an adequate business model [35,36].

2.2. Business Models in Urban Farming

The business model explains how value is created for the customers and how value is captured for the company and its stakeholders. In the literature, the concepts of business models to set and analyse businesses arose in the mid-1990s [35]. Based on characteristic city-adjusted farm activities and the business model method, some scholars have recently developed classifications of urban farming's business models:

1. **Differentiation in production and marketing:** Farms implementing this concept strive to be unique in a region and branch. Usually, they offer a relatively small number of products/services carefully selected and tailored to the needs of specific customer segments [5]. A common practice is to offer niche products (rare varieties of vegetables, fruit, and herbs) as well as products produced in compliance with location-based standards (regional and local products), production conditions (high standards of animal welfare and organic production certificates) and even working conditions (e.g., fair trade). In this strategy, the key to success is the knowledge and skills of farm managers [37]. They should identify an appropriate market gap and continuously create new products and services.
2. **Diversification (off- and on-farm diversification):** This model offers various products and services, including nonagricultural ones [36]. Farms produce relatively small quantities of products (mainly for the local marketplace), often concentrating on the local "small" buyer interested in a highly diverse offer. Success can be achieved thanks to many distribution channels and marketing, as well as the ability to maintain close relationships with the customer [5,38]. Knowledge of the needs of a specific customer, a high degree of mutual trust [39], and location close to the market play a huge role here [34].
3. **Experience:** This model assumes that more value added in peri-urban agriculture may result in offering various experiences rather than production itself [37]. Customers may be given a chance to participate in farm work, e.g., feeding hens, collecting eggs, grinding grain, etc. This model is implemented, e.g., by educational and demonstration farms, which offer the possibility to "follow" and participate in producing bread, forming dumplings, etc. Personal and direct contact with the customer is preferred. Although a specific element characterises it, i.e., focusing on offering experiences rather than production, this model can be treated as a variant of the diversification model (provision of services). It is particularly suitable for implementation in peri-urban areas, where demand for such services is high [35,36].
4. **Specialisation (specialisation with high-added-value products):** This model involves concentration on products with high value added and characterised by relatively high transportation costs and perishable nature (e.g., early vegetables, vegetables, and berries). The idea of this approach is to employ economies of scale using urban synergies [35]. In peri-urban areas, production often involves the implementation of solutions that can reduce production costs, e.g., using sludge (fertilizers), excess rainwater, or urban heat. In the case of this strategy, contact with customers is limited

mainly to B2B relations and modern mass channels of product distribution are used. It should be stressed, however, that this model is not well suited to be implemented in entities located close to city centres [5,35]. Nevertheless, in areas surrounding many European and global metropolises, high-value production (e.g., vegetable cultivation) has been identified as an important farm activity [40].

5. Shared economy: This model assumes engaging the community in planning and even participating in agricultural production [41]. The CSA (community-supported agriculture) concept can serve as the example of such implementation. An agricultural producer cooperates with a group of consumers who participate in the harvest and receive produce at agreed dates in exchange for appropriate payment before the production season. Another example of involving the community in agricultural production is leasing out small plots to those interested for rent (rent-a-field) or solidarity purchasing groups, i.e., groups of consumers jointly organized to buy goods directly from nearby producers following fair environmental practices and social justice [42]. In this model, trust among the sharing participants plays a considerable role [43].

The models presented above do not exhaust the complete list. Although other innovative organisational solutions and strategies exist [44], this paper focuses on the well-established business models implemented by peri-urban farms in the developed countries.

3. Materials and Methods

3.1. Study Site and Sampling

Secondary and primary data sources were used in the paper. Interviews using a questionnaire were the most important source of data. The interviews were conducted face-to-face following a structured questionnaire, often succeeded by field visits. The questionnaire contained open and closed questions, with open ones predominating. We asked about several data items, especially location, agricultural practice, marketing, customer relationship, cost structure, revenue streams, motivations for farming, success factors, barriers, and threats. The questionnaire completion time varied from 30 min to over 2 h.

The paper presents results for 20 urban and peri-urban farms located in the metropolitan areas of such Polish cities as: Warsaw, Krakow, Wroclaw, and Lublin. The sampling of the entities (farms) was purposive. The farms were selected by local experts, i.e., agricultural advisers from regional agricultural extension centres and from chambers of agriculture. The first selection criterion was the farm's location in or in the vicinity of a large city. The second criterion was the implementation of a business model focused on the local (urban) customer and achievement of economic success. Success was defined as good economic results, competitive advantage, resilience, flexibility, and positive development prospects (investment plans, having a successor, etc.). The other recommendation was that entities representing various business solutions (models) should be selected.

The survey was conducted in January 2020 using the interview questionnaire during farm visits. In addition, in November 2022, we contacted 10 entities by phone, who had expressed their willingness to maintain cooperation in the first stage of the research. As a result, the impact of the COVID-19 pandemic on farms' activity and changes in business models were also analysed. For that purpose, a survey questionnaire consisting of open questions was used.

The presented case studies only refer to commercial entities run by individuals—farmers/gardeners. Urban gardening or other social initiatives were not studied.

3.2. Data Coding and Analysing

In the study, we applied a mixed methods approach (Figure 1). The desk research method was used at the first stage of conducting analyses, allowing us to prepare the conceptual framework and present the theoretical aspects of farms' business models.

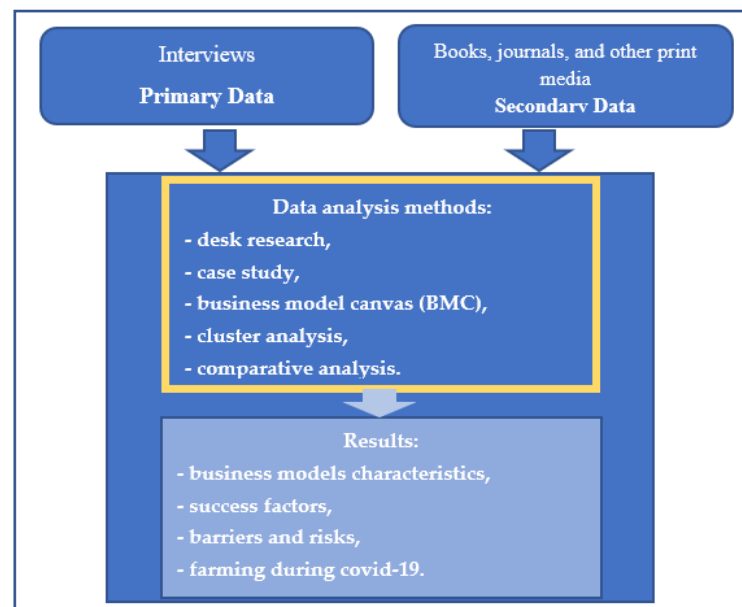


Figure 1. Conceptual framework for the analysis; source: own elaboration.

Another method used in the paper was a case study, one of the qualitative methods. This approach is often used in enterprise management studies, including urban agriculture analyses [43,45]. There are at least two reasons for applying this method to the problem analysed. Firstly, urban agricultural entities vary greatly and often develop organisational and business solutions that are difficult to describe quantitatively using the aggregation method. Secondly, since business models can be regarded as a kind of philosophy of an organisation's operation, it is advised to use a case study. Consequently, in-depth qualitative studies yield much better results.

Several methodological strategies were adopted to establish the validity and reliability of the research findings. Firstly, no "ready-made answers" were provided during the survey, and the researcher tried to distance himself from his own experiences and beliefs. Secondly, the authors were aware of the advantages and benefits, but there were also the limitations of conducting qualitative research. Thirdly, the answers were meticulously recorded during the interviews, often consulting the obtained outcomes with the respondents (respondent validation). Next, there was the conceptualization of data after the interviews using substantive coding that identified similarities in facts and in interviewers' perceptions. Similarities and differences were sought to ensure that different perspectives were represented. The results of the research were also discussed and compared with the findings of other scholars. In addition, some elements of triangulation were used. During the research conducted in 2022 (2nd round of research), some uncertainties were verified. Although there is no universally accepted terminology and criteria used to evaluate qualitative research, the used strategies can enhance the credibility of study findings.

In order to present the success factors of farms, elements of Business Model Canvas (BMC) were used. This concept describes the assumptions underlying how an organisation creates value and provides and derives benefits from it [22]. The business model proposed by Osterwalder was developed as a sum of the resources and activities a company organises and implements to deliver a specific value to a specific customer. This model is highly universal and can be used in any type of enterprise, including highly diverse peri-urban farms [46]. It consists of 9 blocks that can be divided into the customers' part and the infrastructure's part. The customer part covers customer relationships, customer segments, distribution channels, the value proposition (those products and services that solve a specific problem and create value for the customers), and revenue streams. The infrastructure section covers the architecture used for value creation, and the financial aspects highlight the connection between revenue streams and the company's cost structure [47]. This canvas

can be used as an empty framework or blueprint to fill with the main success factors that describe the implementation of farm strategies [48].

The examined farms applied various business solutions; hence, in order to systematise the success factors and sources of the main threats, they were first classified using cluster analysis. Cluster analysis is one of the statistical classification methods used to study similarity among multidimensional objects. These are the objects that are described by a considerable number of variables. Cluster analysis is used to look for similarities in diversity [49]. Based on the literature review (see Section 2), variables representing the business solutions applied in the analysed farms were identified. The farms' business models as research objects are described using eleven criteria/variables that express the essential properties of canvas visualisation blocks (Table 1).

Table 1. The variables used in cluster analysis.

	Variable	Measurement Method
X ₁	Niche and premium products (organic production, rare varieties of plants, and creating unique products)	dummy variable; 1: yes; 0: no
X ₂	High-value production (high-value crops, e.g., vegetables, greenhouses, and ornamental plants)	dummy variable; 1: yes; 0: no
X ₃	Concentration on services, including tourism and educational services (over 50% of revenue from services)	dummy variable; 1: yes; 0: no
X ₄	The number of produced products and services (all products and services that represent an important source of revenue as declared by producers were taken into account)	number
X ₅	Customer relationships (the most important/most common customer relationships as indicated by the respondents)	An ordinal variable: 1—transactional or B2B; 2—individual; 3—deep relationship, cocreation
X ₆	Prevalence of short distribution channels (over 50% of revenue from direct sales)	dummy variable; 1: yes; 0: no
X ₇	Market segmentation (the most important customer segments as indicated by respondents—according to the indicated hierarchy)	An ordinal variable: 1—mass client 2—local (urban) client 3—personalization and customization
X ₈	The number of distribution channels (farm shop, sale at farmers' markets, delivery to the customer, contracts, etc.)	number
X ₉	Key partners—the number of key partners as indicated by the respondents	number
X ₁₀	Key resources—the most important resources indicated by the respondents	1—material resources 2—nonmaterial resources (including human resources)
X ₁₁	High ratio of cost to the price	dummy variable; 1: yes; 0: no

Some variables were characterised by relatively little variability, e.g., regarding key resources (X₁₀) and key partners (X₉), or were strongly correlated., e.g., variables X₂ and X₁₁, as well as X₅ and X₇ (Kendall's tau correlation was used). Finally, seven variables were selected for further analyses: X₁, X₂, X₃, X₄, X₅, X₆, and X₈, representing the different blocks of the BMC model.

The hierarchical cluster analysis (HCA) based on the 'Complete Linkage' (furthest neighbour) method was applied in our study. "Complete Linkage" runs stepwise, with the deterministic fusions of farms defined by the lowest maximal differences. Thus, it focuses primarily on cluster homogeneity [45]. The distance between the analysed objects was measured using squared Euclidean distance.

The graphical illustration of object grouping is the dendrogram (Figure 2), which presents successive cluster linkages of increasingly higher levels. The next important step is to determine the optimal number of clusters (Figure 3). The scree plot using agglomeration schedule coefficients and clustering stages indicated stage 18 as the optimal stopping point

of clustering, resulting in 3 distinct clusters (clusters A, B, and C). However, 4 clusters were ultimately distinguished (the red line on the graph marks the final cutting point). Cluster B was divided into two subclusters, one of which (four farms) turned out to be along the lines of the “experience model” (the key feature of this model is “educational and demonstration services”) [36].

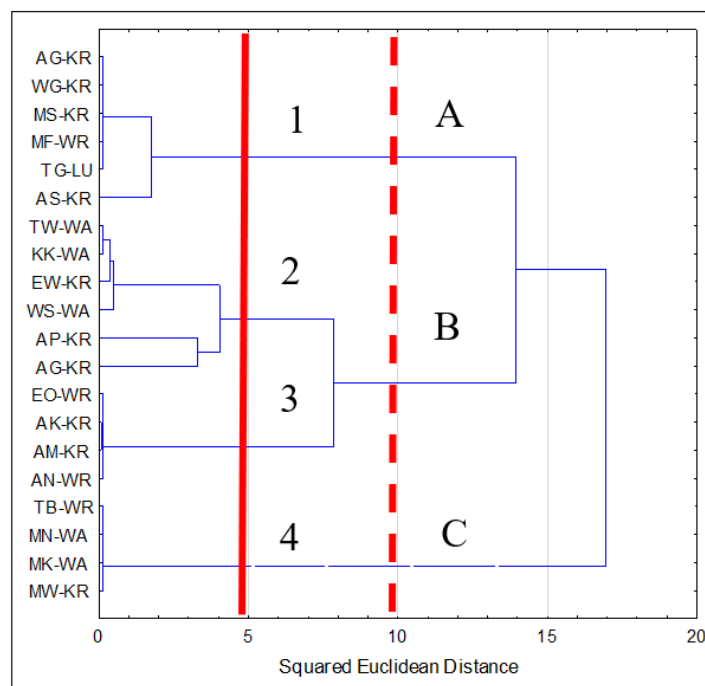


Figure 2. Dendrogram of farm grouping using the method of Complete Linkage (squared Euclidean distance). Source: own elaboration. Explanation of the Figure 2: the dashed line marks the initial cutting point, dividing the analysed farms into 3 clusters: A, B and C; the red line on the graph marks the final (optimal) cutting point, dividing the analysed farms into 4 clusters presented with numbers 1, 2, 3 and 4.

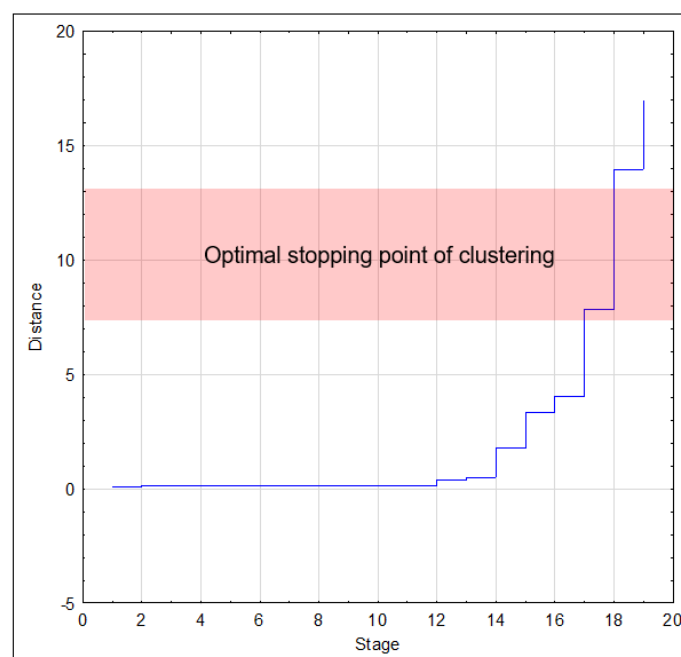


Figure 3. Scree plot for cluster analysis. Source: own elaboration.

Cluster no 1 groups six farms characterised by offering exclusive and niche products. These entities rely on relatively few distribution channels and engage in deep relationships with their customers. Because of these characteristics, their business solutions can be referred to as differentiation. Cluster no 2, comprising six farms, contains entities that apply the diversification model. An extensive range of offered products and services characterise them. Sales are conducted mostly through short distribution channels, and the farms engage in personal and deep relationships with their customers. The last cluster, no 4, consists of four farms whose business model is consistent with the concept of specialisation. These farms produce large quantities of “standard” products, which are most often sold via B2B transactions.

Thus, by classifying the farms by applied business model, it was possible to achieve the paper’s main aim, i.e., to present the success factors and main barriers to the development as well as the differences between the individual models.

4. Results

4.1. Business Models of the Examined Farms

Business models or entrepreneurial models describe the rationale of how an organisation creates, delivers, and captures value. Farm classification revealed that the farms implemented business activities characteristic of four models: diversification, differentiation, experience, and specialisation. When analysing the customer side of business models, it was noted that the entities implementing the individual models showed many similarities related to customer’s relationships and channels. In the case of the first three models, i.e., diversification, differentiation, and experience, all farm managers pointed to the importance of close and personalised customer relationships. The key here was trust and loyalty. These entities relied almost exclusively on short distribution channels, engaging in direct on-farm sales and sales at farmers’ markets. They also delivered their products to restaurants or sent them via post (especially in the case of differentiation). The farmers also promoted themselves at numerous local food fairs.

However, these groups of farms also exhibited characteristics that distinguished them. They differed in terms of value proposition and revenue streams. The entities applying the diversification model relied on a vast range of products (mainly processed ones, e.g., jam, juice, liqueur, etc.) in addition to offering accommodation, board, and other services. Consequently, their streams of revenues were markedly diversified. In contrast, the farms applying the differentiation model limited their offer to a slightly smaller number of products and services while concentrating on very high quality (e.g., organic products) and traditional processing methods. Their products were unique (e.g., lavender syrup, lavender-based cosmetics, functional food, and Asian mushrooms) and, as stressed by farm managers, mainly designed for wealthy customers valuing quality and extravagance. The revenues of such entities stemmed from high prices charged for premium products. The experience model was represented by farms offering a variety of experiences. The offer included various courses, games for children, survival camps, contact with animals, help with farm work, etc. Due to the specificity of the activities offered by these farms, school and kindergarten groups constituted their main customers. However, thanks to modern internet channels, there is a growing interest among individual customers, who did not participate in such activities, to sign up for joint courses and camps. According to one respondent (EO-WR), this channel is bound to thrive. Table 2 contains the basic characteristics of the identified business models.

Taking the infrastructure site into account, key resources are essential elements of the models. In most cases, managers of farms who applied business models adjusted to urban areas cultivated relatively small areas. They mainly relied on relational capital to create a competitive advantage, i.e., knowledge, skills, extensive networking with their environment, and effective management. Moreover, the production profile of farms was determined by the infrastructure elements, including residential and other buildings.

Table 2. Business models of the analysed farms.

Elements of Business Model Canvas	Differentiation <i>n</i> = 6	Diversification <i>n</i> = 6	Experience <i>n</i> = 4	Specialization <i>n</i> = 4
Customer site				
Value proposition	High-quality products, organic food, slow food, and niche products.	A vast range of products, including processed ones. Agri-tourism, education, and nonagricultural services.	Services in the area of education, recreation, and organisation of various events.	Vegetables and ornamental plants.
Customer relationships	Individual and personal—often friendship-based relationships.	Personal and direct contact with customers.	Personal and direct contact with customers.	Business contracts and personal.
Customer segments	Individual customers expecting high-quality and original products, public institutions, and restaurants.	Individual customers and public institutions (fairs, demonstrations, and sampling).	School groups, families with children, and individuals looking for accommodation.	Large-area shops, wholesalers, and individual buyers from the neighbourhood.
Channels	On-farm, farmers markets, fairs, and delivery to a restaurant.	Short supply chains (on-farm and local farmers markets).	On-farm.	Mass logistics and on-farm.
Revenue streams	Premium prices and unique products.	High-value processed products, Leisure, and cultural activities.	Varied offer of services.	Large-scale production.
Infrastructure site				
Key partners	Local restaurants or local chefs, public institutions, and trade associations.	Local farmers, public institutions, and associations.	Public institutions, associations, and schools.	Shop chains, suppliers' production means, and producers' organisations.
Key activities	Production, processing, and marketing of products, including organic ones.	Production, processing, and marketing of products; recreation services.	Education and recreation services.	Production of agricultural products.
Key resources	Direct sale facilities (shops and small restaurants), qualified staff, machinery, and equipment.	Direct sale facilities, employees (family), and convenient location relative to the market	Building and infrastructure for educational activity, employees (family), and convenient location.	Land, buildings and infrastructure, modern machines, and human resources.
Cost structure	Wages, fuel, water, electricity, materials (jars, bottles, etc.), leasing of equipment and machines, and services.	Wages water and electricity, fuel, and materials (jars, bottles, etc.).	Wages, materials for workshops, water and electricity, and fuel.	Wages, running expenses, leasing of equipment and machines, services, and cost reduction via specialisation.

Source: own work.

The key activities included production, especially processing, and appropriate branding. The latter is particularly vital for entities offering premium products. In the case of farms offering experiences, an important activity was seeking new channels through which they could reach customers. The key partner for entities implementing diversification and differentiation models was the local urban population; often, the same customers used the offers of these two types of farms. Farms implementing the differentiation model often cooperated with well-known chefs of top restaurants, e.g., in Krakow and Warsaw (e.g., master chefs—celebrities known from cooking shows). Moreover, in the differentiation, diversification, and experience model, public institutions, numerous local associations, and the advisory sector were all important partners. The experience model also required close cooperation with schools and other childcare organizations (school groups were the main customers).

The cost structure of the three models discussed was very similar. In the case of farms hiring employees, the highest costs were generated by wages. In addition to that, there were typical running expenses, i.e., energy, fuel, and purchase of materials that could not be produced in-house (e.g., jars, bottles, and seeds). Entities applying the differentiation model often used dedicated services or leased sophisticated machines and equipment.

The specialisation model requires a separate description. Farms that implemented it sought to take advantage of the benefits of their location close to the market, but they also faced some limitations. Their production's profile (mainly the production of vegetables and

ornamental plants) did not require the possession of large areas of land; however, finding employees and high wages posed a significant problem. Although this business model is mainly based on the economies of scale and minimisation of production costs, except for one entity that used urban infrastructure (heat and water supply), the other ones did not reduce production costs thanks to their location close to cities. These entities mostly made B2B transactions, with large-area stores and wholesalers being their main customers. A small part of their production ended up in the local market via short distribution channels; however, the share of such revenues was small (less than 5% of the revenues), albeit growing. Only one farm (ornamental nursery—MK-WA) was localised in the city and addressed its offer to consumers and local small businesses, providing garden maintenance services. According to the respondents, the presented business models enable the generation of high revenues and relatively high profits; however, as noted by one entrepreneur, the proportions between the chances and threats related to location in a peri-urban area are similar. Over the last 10 years, many threats appeared, which forced farms implementing the specialisation model to seek new business models.

4.2. Success Factors Related to the Implemented Business Models

Financial measures, such as positive net revenue and profitability, traditionally determine a farm's success. Success is also identified with the growth and development of a farm. It can manifest itself as an increase in employment, production, share in the market, etc. [19]. However, success can also be defined in nonfinancial terms as rising living standards, increasing satisfaction level, or "being your own boss" [45]. Several respondents emphasised this aspect. Three farm managers even resigned from well-paid jobs in other sectors of the economy (e.g., in international corporations) to develop their own businesses and focus on self-development. All the analysed farms achieved economic success according to the selection criteria and managers' declarations.

The respondents were asked to pinpoint the most important success factors in the history of their farming business. The question was open-ended. The respondents were asked to consider five main groups of factors, with no specific responses suggested to them. They had to evaluate the impact of the following factors on success: spatial and location factors, available resources, manager's capability, factors related to the implemented business model, and external factors. We conceptualized our data after the interviews using substantive coding that identified similarities in facts and in interviewers' perceptions. When analysing the responses, we were searching for words, phrases, and descriptions of specific situations. That allowed us to create the main categories and patterns of responses [50]. Once such categories were identified, analyses of all the questionnaires were conducted. Table 3 presents the results.

According to the interviewed farmers, the farm manager's capability was one of the most important success factors. Managers' motivation, passion, industriousness, innovation, and creativity determined the success of the analysed entities. Managers of the analysed farms often stressed that these were the characteristics/skills that allowed them to cope with many threats and continuously adapt their farms to the highly dynamic peri-urban environment. High managerial competencies of farm managers were confirmed by the numerous prizes and awards they received. For example, the analysed group included the best female farmer in Europe—laureate of the 5th edition of the European competition Women Innovations Award for Women Farmer 2018 organised by the Committee of Copacogeca's Women (European Economic and Social Committee), and the best male farmer in 2018—laureate of the international competition for the Farmer of the Year in the Baltic Sea Region organised by WWF. Moreover, the overwhelming majority of the respondents were winners of numerous awards (at national or regional levels) for manufactured products/provided services. The farms implementing the experience and differentiation models also indicated the importance of contacting numerous organisations and institutions in the agricultural environment. Good relationships with such entities can result in a larger customer base (e.g., through promotions at food fairs and other events).

Table 3. Success factors underlined in the case studies.

	In Details	Differentiation <i>n</i> = 6	Diversification <i>n</i> = 6	Experience <i>n</i> = 4	Specialisation <i>n</i> = 4
Spatial and locational factors	Proximity to the market	****	****	***	**
	Quality of the landscape and environment	**	****	*	-
	“Good” spatial policy (the protection of agricultural land)	**	*	**	*
Available resources	“Large” farm size	*	*	**	**
	A large number of employees	*	**	**	****
	Human capital (employees’/household members’ motivation and knowledge)	***	****	***	***
	Buildings and infrastructure	***	****	**	***
	Initial financial capital	*	**	-	-
Manager’s capability	Manager’s motivation, passion, industriousness, etc.	****	****	****	****
	Contacts with numerous institutions and NGOs	***	****	**	*
	Innovation and creativity	****	****	****	****
	Combining elements of different strategies/business models	*	*	-	-
Related to the implemented business model	High quality of products/services	****	****	****	****
	The minimisation of costs	-	**	-	**
	Unique offer	****	***	**	**
	A wide range of products/services	**	****	****	***
	A large number of distribution channels	****	**	****	**
	Deep (personal) relationships with customers	****	****	****	*
	Social media marketing	*	****	*	-
External factors	Increasing popularity of being close to nature, recreation, “returning to the roots,” etc.	**	****	*	-
	Increasing popularity of local products from the local farmer	**	**	***	*
	Increasing wealth of the population	***	**	**	*

**** Essential for activity, a deciding factor (75% or more indications), *** Could be a deciding factor (50–74% indications), ** Essential for activity (25–49% indications), * Not essential for activity, but an advantage (less than 25% indications); - not indicated.

Analysis of the respondents’ answers also revealed that close location to the market was one of the most important success factors. Most respondents pointed to location as a huge asset. One of the respondents (AK-KR) noted that “location near Krakow was the starting point for selecting the implemented business model.” In this group of factors, landscape attractiveness, environment quality, and local law on spatial planning were slightly less important. The attractive landscape was a significant factor only for the farms implementing the experience model. The respondents also indicated a range of success factors related to possessed resources. Of these, the most important were human resources, particularly employees’ competencies and motivation. This factor was mentioned and strongly emphasised by the respondents implementing the experience and differentiation models. In both cases, the character of produced goods and services required huge engagement in, and willingness to, work. The manager of farm EO-WR stressed that all the supervisors of activities organised for children were trained in pedagogy and had suitable competencies. In the entities implementing the specialisation model, more importance was given to the number of employees willing to work. This is because many employees needed to perform simple jobs that did not require extensive knowledge. Buildings, machines, and other infrastructure were also relatively significant for success achievement. They were mainly considered an important success factor by managers of farms implementing the experience model. Such managers also stated that they succeeded thanks to the investment of substantial financial resources accumulated through previous work off the farm.

The next group of factors concerned the nature of the implemented business models. Despite significant differences in the offers of the individual farms, the responses were quite similar. Quality of products and services was regarded as by far the most important factor. All the respondents stressed that quality was “*conditio sine qua non*.” Moreover, almost all farm managers (except for three managers implementing specialisation model) stressed the importance of deep, even friendship-based, customer relationships. Highly personalised relationships guaranteed trust and development of cooperation. In fact, two respondents, who implemented the differentiation model, reported business and personal relationships with master chefs hosting very popular (nationwide) TV cooking shows. Most of the respondents, who put the differentiation and diversification model into practice, claimed that when creating a new product/service, they knew which customer would be interested in it—“I know the tastes and preferences of my customers” (AG-KR).

The research also found that the “typical” characteristics of specific models, e.g., unique offer (the distinguishing feature of the differentiation model) and numerous distribution channels (the distinguishing feature of the diversification model) were relatively often implemented by farms pursuing other models as well. This observation relates particularly to the respondents implementing the specialisation model—they noticed that their revenues could be increased by using short distribution channels and selling sophisticated and rare products produced on a limited scale.

As far as external factors are concerned, the respondents saw their chance for growth and success in the growing popularity of spending time in nature, increasing popularity of local production and increasing wealth of the population. These were the key success factors, especially for the entities implementing the differentiation and experience models.

4.3. Barriers and Risk Factors Related to the Implemented Business Models

Like the success factors, the respondents indicated the most critical barriers and risk factors. The question concerning these factors was open-ended, with three thematic areas suggested to the respondents: impact of urbanisation, administrative and legal obstacles, and internal barriers. The procedure for specifying the groups of factors and quantifying the responses was the same as in the success factors’ case. Analysis of the respondents’ answers enabled the identification of five groups of barriers and risk factors, i.e., three suggested ones, and the risk of decreasing production profitability in agriculture and other barriers and risks (Table 4).

The often mentioned barriers and risk factors related to implementing the different models concerned the impact of urbanisation. Almost all the respondents noted huge problems with finding employees. Only the respondents implementing the experience model stressed that it was easier to find, e.g., students/apprentices willing to help during the organisation of various events in the urban zone. Apart from the general reluctance of the residents of peri-urban areas to work in agriculture, rising employment costs also constituted a significant barrier. Only a few respondents—mainly those implementing the specialisation model—pointed to conflicts with residents or poor acceptance of agriculture as a significant risk factor.

Among the internal barriers, problems with increasing the farm size and insufficient financial resources for development and further investments dominated. Limited land resources were a barrier mainly for entities relying on specialisation. However, some farmers implementing the other models also mentioned insufficient areas to develop recreation services (new buildings, sheds, playgrounds, etc.). Insufficient financial resources represented a barrier mainly to entities applying the differentiation and experience models. These models involve using new, often innovative material resources (e.g., equipment for the production of lavender oil, specialised equipment for preparing food for HoReCa, etc.). As a significant internal barrier, the respondents indicated the time intensity of model implementation, particularly diversification and experience models. The respondents noted that coordinating activities, creating new solutions and maintaining customers’ relationships (gaining trust) were seen as highly time-consuming.

Table 4. Barriers and risk factors underlined in the case studies.

	In Details	Farms' Business Models			
		Differentiation <i>n</i> = 6	Diversification <i>n</i> = 6	Experience <i>n</i> = 4	Specialisation <i>n</i> = 4
Urban pressure	Limited access to land and high prices of land, speculation on the land market	**	***	**	****
	Finding employees	****	****	**	****
	High costs of salary	**	***	****	**
	Low acceptance of agriculture/conflicts with neighbours, etc.	-	-	*	**
Internal barriers	Availability of financial resources for further investments	***	*	****	-
	Insufficient land resources	**	**	**	****
	Insufficient infrastructure of a farm (buildings, equipment, etc.)	**	-	***	*
	Time-consuming nature of the implemented business model	**	***	***	*
Low profitability of production/services	Global trend of decreasing profitability of agricultural production	-	*	-	***
	Low profitability of urban farms (in comparison do other sectors)	-	-	*	**
Administrative and legal barriers and lack of public support	Administrative and legal barriers (e.g., livestock production)	**	**	-	-
	Lack of land use plans or plans lacking agriculture protection instruments	*	**	*	***
	Lack of "special" public support for peri-urban agriculture	-	-	**	-
Other barriers	Insufficient demand for peri-urban agriculture products and services	**	-	***	-
	Lack of willingness to cooperate among local farmers	*	**	***	-
	Lack of social appreciation of local agriculture and lack of trust in the quality systems	***	**	-	-

**** Essential for activity, a deciding factor (75% or more indications), *** Could be a deciding factor (50–74% indications), ** Essential for activity (25–49% indications), * Not essential for activity, but an advantage (less than 25% indications); - not indicated. Source: own work.

Managers of the farms implementing the specialisation model indicated that a significant threat to their livelihood was the global trend of decreasing production's profitability and increasing income disparity between agriculture and other sectors of the economy. Unable to increase the scale of production, they were mostly affected by that problem; however, many of them were searching for an alternative by shortening distribution channels and increasing revenues by focusing on the sale of niche and exclusive products.

Administrative and legal barriers affected mostly livestock farmers, although none of the farms was engaged in intensive livestock production. A few farmers even resigned from keeping animals due to conflicts with their neighbours, resulting in frequent controls and animal health inspections. Farmers in relatively densely populated areas pointed to spatial planning policy as a significant development barrier. Lack of approved land use plans or preference for land use for house-building in such plans hampers the development of farms. Moreover, two farmers criticised the lack of dedicated support (higher, considering the local specificity) for farmers in peri-urban areas and the lack of public support (e.g., CAP) for certain activities, such as educational services.

Other barriers referred to the relatively small demand for urban agriculture products and services. One of the farmers (MW-KR) noted that the situation improved, but it is far from what is observed in other European countries. In his opinion, "a typical consumer" does not value local products, including those produced organically, but only the price matters.

4.4. Adaptation Measures Taken as a Response to the COVID Pandemic

The paper presents survey's results for ten farms that implemented different business models—three entities used the differentiation model, three—the diversification model, and two farms—experience and specialisation model.

The evaluation of the impact of the COVID pandemic on the functioning of the analysed farms varied greatly. On the one hand, the respondents stressed that the pandemic only slightly hindered basic agricultural production, including purchasing seeds, fertilizers, etc. Temporal problems occurred with the availability of employees—in particular foreign ones. In contrast, the distribution of products and services was disturbed significantly.

The most severe problems appeared in the farms implementing the experience model. Their basic source of income was markedly limited. Other entities providing agri-tourism services and farms cooperating with HoReCa were also affected. The respondents admitted that the demand for their products decreased significantly in the first stage of the pandemic, only to recover in the following months. As the restrictions were lifted, sales at farmers' markets returned and the direct sale even increased. Two respondents noted that the restrictions placed on the operation of restaurants increased the demand on consumers who had to prepare meals by themselves more often.

Paradoxically, the pandemic increased the revenue of some farmers, e.g., those selling ornamental plants. One of the respondents (MK-WA) noted that forced remote work and much more free time available during the pandemic provided more gardening opportunities and increased demand for ornamental plants. No significant negative changes were recorded in farms selling products under contracts (wholesale). Since demand for food is fairly inflexible, there were no significant disruptions.

The pandemic-related crisis led to a range of adaptation measures, including:

- increasing the share of direct sale of agricultural products, especially processed ones,
- embracing new areas, i.e., trading online, shipment of food products, e.g., by courier or home delivery,
- preparing educational/tourist offer for individual groups, who, as “friends”, benefited (not entirely legally) from the offer of farms even under the pandemic restrictions,
- offering accommodation, e.g., to construction companies, seasonal employees, etc. (it applied in particular to farms implementing the experience model),
- extending the offer of meals delivered to home/place of work (for construction companies working to carry out investment projects, e.g., investments in roads).

The common nominator of the adaptation measures undertaken by farms was increased direct sales of agricultural products and processed products and improved co-operation among farmers who had already cooperated in providing food. Internet sales and orders placed by phone have increased by several dozen percent. As stressed by the respondents, an essential factor was proximity to the city and high demand. Because of the crisis, it was necessary to “take a step backward initially so that a huge step forward could be taken later” (MW-KR). The respondents interviewed in the second round of the survey stated that their farms were currently stronger and more resilient, and many “temporary” adaptation measures proved effective and would be developed in the future.

5. Discussion

5.1. Convergence or Divergence among Business Models

Farm managers presented the main assumptions of their business activities emphasising that their development was gradual. Often, they were pioneers in their environments, sometimes by chance or out of necessity (e.g., due to the COVID pandemic), to identify and take advantage of the opportunities that arose. The research revealed that “simple” and homogeneous models are currently evolving into more diverse (within entities) and more demanding ones [43,51]. Most farm managers stated that their development path started with production diversification (following the concept of multifunctionality), with other activities gradually implemented over the following years. Most respondents applied elements from several business models, adjusting them to a specific group of customers.

Whereas initially, the business models were adjusted to the possessed resources (following the resource-based view—RBV), i.e., the offer was expanded and based on the existing resources, now they are evolving in accordance with customers' expectations [40,52]. This approach, i.e., "focus on customers rather than on oneself," is an element of the dynamically developing concept of Service-Dominant Logic (SDL) [53]. Our research confirmed that farm managers applied value-based models to provide their customers the highest value. This finding is in line with the latest studies presented by Wiśniewska-Paluszczyk et al. [54]. Their main areas of interest include creating new, unique products and services and adapting the value proposition to urban customer sectors [55]. This logic manifests in urban farms' engagement in cooperation projects with customers by creating alternative delivery networks, among other things [56].

The research revealed that the farms implementing differentiation, diversification and experience models applied similar business solutions. This observation refers, in particular, to the customer side of business models, i.e., customer relationships and channels. Almost all farm managers in the analysed entities focused on building solid, close customer relationships. They mainly relied on short distribution channels, including a sale at farm shops, sales at local farmers' markets and delivery of products to customers. In addition to that, participation in fairs and other events promoting local food was also very important. As noted by other scholars [4,35,45], these features characterise farms adapted to urban conditions. A slightly different approach to shaping relationships with customers was used by farmers implementing the specialisation model, which relied on B2B transactions. However, in contrast to studies presented by Pölling et al. [5] (among others), the analysed Polish farms are increasingly developing direct sales (although still on a limited scale). This is probably because they noticed that with rising employment costs and their incapability of increasing production scale (cultivation area), they could not compete (in the long run) with other "larger" players. However, these groups of entities also exhibited some characteristics that made them differ from one another. They differentiated in terms of value proposition and revenue streams. The farms applying the diversification model relied on a very wide range of products, particularly processed ones (jam, juice, liqueur, etc.) in addition to offering accommodation, board, and other services. Consequently, their revenue streams were markedly diversified. In contrast, the farms implementing the differentiation and experience models limited their offers to fewer products and services, concentrating on very high quality, which aligns with the studies presented in the literature [57].

It should be noted that while the variety of applied business solutions was increasing within analysed farms, these processes were similar in all the entities. Consequently, the process of convergence occurred. Analogous processes were also observed in other industries, driven by increasing enterprise cooperation [58].

5.2. Long-Term Success Factors of Peri-Urban Farms

The key element of the analysis was an indication of the major success factors, barriers, and risk factors connected with carrying out activity in peri-urban areas. According to the respondents, success is determined by three main factors (Figure 4). Motivation, industriousness, and creativity, as well as high quality of products and services, were the factors indicated by all the respondents irrespective of the implemented business model. While motivation and creativity (personality traits) are factors often mentioned in the literature [59–61], the second factor, i.e., the high quality of products, is a feature usually associated with the differentiation model [5,19]. In the analysed sample of farms, the necessity of ensuring the highest quality was also mentioned by farmers who produce basic products such as potatoes, carrots, etc. Producers were aware that high quality was necessary for gaining customers' trust [56]. The third success factor, i.e., deep, trust-based relationships with customers, was cited by all farm managers except for two who implemented the specialisation model. Building different actor relationships, including informal and personal relationships, and striving to increase the offered products' market values is the main success factor [38,54,62].

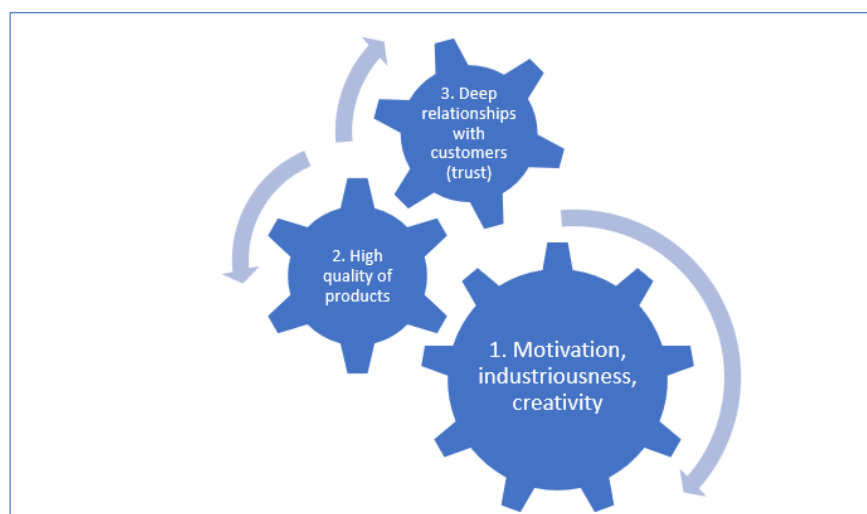


Figure 4. The three success factors of peri-urban farms. Source: own work.

Another important success factor was the location. The city, constituting a large market, allows farmers to reach a specific group of customers—those who can be called conscious customers that value the origin and quality of products and services [19,34,63]. It is also worth noting that the farmers’ perception of distance differs from von Thünen’s logic. The respondents stressed that proximity was essential for customers (rather than producers), who were more and more willing to buy from farms and did so more and more often. The possibility of visiting the farm strengthened bonds and built trust in the producer. This observation confirmed the findings presented by Wästfelt and Zhang [34].

Summarising, it should be noted that the key success factors were mostly internal factors, which were much more important than the external ones. Intangible factors, including knowledge, creativity, industriousness, etc., create value propositions. According to the farmers, success emerges from within an enterprise (mainly relational capital and personality traits), but at the centre of model creation is the customer (service-dominant logic (SDL)). Using the BMC, we found that farms were implementing various business solutions to offer, deliver and create new customer’s value based on demand [54]. A few respondents noted that customers cocreated their farms and the applied forms of interaction (visits to farms and even inspirations to create new products and services) led to a new value shared between the two parties (producer and customer). Thus, the farmers effectively applied two seemingly contradictory (in terms of the idea of value creation) business approaches—RBV and SDL [64]. According to the farm managers, neither external factors (economic situation, prices, etc.) nor material resources played a dominant part.

5.3. Main Barriers to Peri-Urban Farms

It is worth noting that the respondents gave much less attention to the barriers and risk factors than to the success factors. The number of indications of such factors (Table 4) was much smaller, and the time devoted during the interviews to discussing such elements was much shorter. Many of the barriers were eliminated by farmers by applying appropriate business solutions. Similar findings were presented, e.g., by Pölling [61]. In contrast to the success factors, most of the barriers and risk factors indicated by the farmers were external. The farmers noted: “the internal barriers can be (at least partially) eliminated, while we have no influence on the external ones.” This observation refers in particular to problems related to finding employees, high personnel costs or limited possibilities of increasing farm size. The literature often lists these barriers [4,13,65]. Moreover, it was confirmed that they mainly refer to farms implementing the specialisation model and focusing on traditional forms of cultivation, e.g., in organic systems. Generally, farms less adapted to urban areas report more barriers than others [45].

Contrary to other studies, we found that farms implementing the experience model encountered the most significant barriers in our sample. Lack of public support was a significant problem for such entities. For example, entities offering round-the-clock care for the elderly could not have received any public support [66]. In order to benefit from any public support, some of them set up foundations. Another problem was limited financial resources to invest in new farm attractions (buildings and infrastructure).

The research also confirms that a huge barrier in Central and Eastern European countries is unfamiliarity with the concept of urban agriculture [16] and unwillingness on the part of municipal authorities to support farmers [2]. In cities, few farmers' markets are dedicated to local farmers, and municipal authorities often do not recognise the need to develop such infrastructure [2]. Urban development strategies and implemented spatial policies do not include objectives or activities related to urban agriculture [67]. Several farmers stated that the popularisation of the concept of agriculture close to the consumer was relatively limited. Generally, Polish people do not value the quality of local products and show little trust in various quality assurance systems such as organic farming [68]. This problem is addressed in the literature, and cases of food-related fraud or deliberate acts of misleading consumers are very common [68–70].

One of the barriers indicated by the respondents, which is specific to post-socialist countries, was poor land use planning. Chaotic land use planning hampers the development of farms, while uncertainty about the future generates high risk [67]. Farmers are afraid of investing in their farms. Another problem specific to Poland is the lack of cooperation and only sporadic networking among urban farms [71]. Of the examined entities, only three farmers (who were local leaders) developed constant cooperation with other local farmers, selling goods produced by the cooperating entity in their own shops or delivering them to customers.

The last significant group of barriers was a lack of “special” community (Common Agricultural Policy) and national public support for peri-urban agriculture [72]. Although only a few respondents mentioned this issue, claiming they managed without such support, they still perceived it as a systemic problem. They noted that peri-urban agriculture was particularly vulnerable to recessive processes. According to them, allocating a pool of financial resources was necessary to stimulate small-scale food processing and shorten distribution channels. Similar views are presented by Wiskerke et al. [73]

5.4. The COVID-19 Pandemic: The Crisis That Made Farms Stronger

The coronavirus disease (COVID-19) pandemic affected every aspect of economic and social human activities, causing food system dysfunction [33]. However, the severity of the pandemic's impact varied depending on the region of the world, the level of market development, the population's wealth, the types of linkage in the system, and the response of the public institutions [74].

The survey studies revealed that peri-urban farms coped with the crisis caused by the COVID-19 pandemic relatively well. Their reactions were very similar regardless of the business model they applied. In the face of the unexpected pandemic, the farms instinctively formulated a response, i.e., short-term strategy for reducing the direct effects of the pandemic. Some farms started to offer their products on the internet—something that, until then, had been uncommon. In addition, farmers started to cooperate more and rely on short distribution channels on a wider scale, including product delivery. Similar practices were observed in Lisbon [75] and other cities of developed countries [76]. In fact, following a brief crisis (the first two months), most farms recorded an increase in sales. Thus, the present research confirmed the findings by Yoshida and Yagi [33] that temporary measures permanently improve farms' resilience and will contribute to their growth in the long run.

Farms implementing the experience model were hit the hardest among the analysed business models because educational services were completely restricted at the beginning of the pandemic. That event forced the reorientation of farms' operations and more

diversification of activity [77]. Before the pandemic, these farms were characterised by huge diversity and resilience; therefore, they could cope with the crisis [78].

Paradoxically, the pandemic crisis contributed to the popularisation of urban agriculture. The urban population started to realise the fragility of long supply channels. In many Global North cities, including in Poland, there was a significant increase in the production of vegetables in allotment gardens and kitchen gardens [76]. Some authors [79,80] already present initial findings confirming that the COVID-19 pandemic has resulted in higher acceptance of urban farming.

It was also an important lesson for country leaders and made them think about the issue of strengthening food security. At the same time, it was underlined that agriculture might constitute a very important actor in economic and social life [81,82].

6. Conclusions

The research covered 20 peri-urban agricultural/horticultural farms operating in or around large Polish cities. They are successful entities representing different business models: differentiation, diversification, experience, and specialisation. The farms produce and process food as well as provide services that are essential for the whole population. The described case studies enrich the map of urban and peri-urban agriculture in Europe, presenting success factors, barriers, and threats to development. In the face of numerous global challenges and specific conditions, the analysed farms, i.e., connected with urban pressure, implemented various organisational solutions and developed their own business models.

6.1. Theoretical and Empirical Findings

Our research showed that despite specific differences in business management, they rather apply relatively similar and universal business logic. Using the BMC, we found out that the farms adjusted their business activities regarding value offering, delivery, and creation to the different stakeholders based on customer expectations. Irrespective of the implemented main business model, the customer side of business models, particularly customer relationships and channels, are very similar. Almost all farm managers in the analysed entities focused on building strong and close (individual) relationships with customers. They mainly relied on short distribution channels, including sales at farm shops, sales at local farmers' markets, and the delivery of products to customers. Intangible factors, including knowledge, creativity, diligence, etc., create value proposition, but the customer is at the centre of model creation. Customers cocreate their farms and the applied forms of interaction (e.g., invitations to develop new products and services) lead to the creation of new value, which is shared between the two parties (producer and customer). Thus, the farmers effectively applied two seemingly contradictory (in terms of value creation) business approaches, i.e., resource-based and service-dominant logic.

Intangible factors, i.e., manager's capability and relational capital, were regarded as the main success factor and the basis for designing applied business models. Equally important was the high quality of products and providing services, which allowed farmers to gain customer trust and establish deep personal relationships. Location was also perceived as an essential factor as it enables the maintenance of close relationships with customers. The respondents stressed out that proximity was particularly important for the customer (rather than the producer) who was willing to buy from a farm. Thus, the research revealed that farmers' perception of distance was contrary to von Thünen's logic.

In the case of the analysed farms, the main development barriers and risks turned out to be connected to urban pressure. An attractive urban job market "pulls" potential employees out of the agricultural sector, and salary expectations are very high. When addressing barriers and threats, which the farm managers covered less extensively, they talked mainly about external threats. The problems include poor land use policy, a lack of support for peri-urban agriculture, and relatively low trust among Poles in agricultural producers. According to the respondents, cases of food-related unfair business practices in

Poland (e.g., suggesting that a product has a certificate attesting to organic production) or exposure of such cases make people quite sceptical of local and certified production.

The survey studies revealed that peri-urban farms coped with the crisis caused by the COVID-19 pandemic relatively well. In the face of the pandemic, new business solutions were sought, mostly based on modern sales channels (mainly the internet, but also “door-to-door delivery”). Some of these activities, often impulsive and intended as temporary, are implemented permanently, as well as farms’ offers being extended. Moreover, the number of their regular customers has also increased. It can be concluded that the crisis made the analysed entities stronger.

6.2. Practical Implications and Recommendations

The presented business solutions may serve as farm organisation models for other entities engaged in urban agriculture. The research confirmed the diffusion of innovations. Individual farms began to implement business solutions that were new to them but functioning in other entities. Therefore, the dissemination of research results among urban farmers may facilitate the choice of the right strategies and operational activities.

The findings should invite discussion on the role and importance of peri-urban agriculture in Polish and other cities of Central and Eastern Europe. The respondents noted lack of support on the part of municipal authorities. In Poland, urban agriculture tends to be almost entirely marginalised in urban strategies—they do not guarantee any “space” for agriculture. Moreover, the infrastructure necessary to effectively market local agricultural products is not being developed. In addition to that, there is no promotion of local products or producers. According to respondents, it is advisable to promote peri-urban agriculture, especially by increasing confidence in local producers and the quality systems they implement. The growing popularity of the concept of urban agriculture—especially after the COVID pandemic—should support creating new development strategies, including the proper place and importance of urban agriculture. We hope that the present research will help urban municipalities better understand UA and recognize the potential of urban agriculture in satisfying residents’ needs.

6.3. Limitations and Future Research

The research has several limitations. Firstly, it covers a small group of farms, and our analyses are qualitative and refer to a specific case study and its context. Secondly, the research is essentially static. Thus, it is necessary to extend the research to cover a larger population. Further research should devote more attention to the growing networking needs among farms and analyse the development of relationships between producers and consumers.

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