

PRODUCT DEVELOPMENT STRATEGY FOR FARMER GROUPS IN THE DIGITAL ERA BASED ON URBAN FARMING IN CIOMAS RAHAYU VILLAGE

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Abstract: Ciomas Rahayu Village is one of the villages located in Bogor Regency and has an area of 88,450 ha. However, 70% of the land in this village is used for residential needs, resulting in a lack of vacant land, which necessitates the implementation of the urban farming in the Farmer Groups (Poktan) and Women Farmer Groups (KWT) to utilize the remaining land productive. Ciomas Rahayu Village has 5 Poktan and 1 KWT that produce organic vegetables and organic freshwater fish. Seeing the opportunity to develop products from Poktan and KWT, this research aims to formulate an alternative product development strategy by adjusting to technological developments and describing the factors that need to be considered in implementing effective digital marketing for urban farmer-based farmer group businesses in Ciomas Rahayu Village. This research is descriptive with a qualitative approach. The sampling method used was purposive sampling. The data obtained were analyzed using SWOT analysis. The results show that the alternative strategies generated are implementing product development to increase the product's value added and quality, and implementing digital marketing to reach a wider market.

Keywords: farmer groups, urban farming, SWOT analysis, product development, value added.

Abstrak: Desa Ciomas Rahayu merupakan salah satu desa yang terletak di Kabupaten Bogor dan memiliki luas 88,450 ha. Namun 70% lahan dari desa ini digunakan untuk kebutuhan tempat tinggal sehingga mengakibatkan minimnya lahan kosong yang membuat membuat desa ini perlu mengimplementasikan konsep urban farming pada Kelompok Tani (Poktan) dan Kelompok Wanita Tani (KWT) agar dapat memanfaatkan sisa lahan yang ada agar produktif. Desa Ciomas Rahayu memiliki 5 Poktan dan 1 KWT yang menghasilkan sayuran organik dan ikan air tawar organik. Melihat adanya peluang untuk mengembangkan produk hasil dari Poktan dan KWT, maka penelitian ini bertujuan untuk mendeskripsikan alternatif strategi pengembangan produk dengan menyesuaikan perkembangan teknologi dan mendeskripsikan faktor-faktor yang perlu diperhatikan dalam menerapkan pemasaran digital yang efektif untuk usaha kelompok tani berbasis urban farming di Desa Ciomas Rahayu. Penelitian ini merupakan penelitian deskriptif dengan pendekatan kualitatif. Metode penarikan sampel dilakukan secara purposive sampling. Data yang diperoleh dianalisis dengan analisis SWOT. Hasil penelitian menunjukkan bahwa alternatif strategi yang dihasilkan adalah menerapkan pengembangan produk untuk meningkatkan nilai tambah dan kualitas produk, serta menerapkan pemasaran digital untuk menjangkau pemasaran yang lebih luas.

Kata Kunci: kelompok tani, urban farming, analisis SWOT, pengembangan produk, nilai tambah.

INTRODUCTION

Bogor Regency, as an integral part of the capital's buffer region, faces significant demographic pressure. The area is known as one of the most densely populated regions in West Java Province, with a population reaching 5,664,537 people (Ulya & Rastika, 2024). This area also has an area of 2,991.78 Km² and is divided into 40 sub-districts. Geographically, Bogor Regency is located between 6°18'0–6°47'10" South Latitude and 106°23'45"–107°13'30" East Longitude. This area also has development potential, including agricultural and tourism potential. (Kabupaten Bogor, 2024). This potential is supported by the condition of the region that has highlands and lowlands (Central Statistics Agency, 2024).

Data from the Central Statistics Agency (BPS) shows that Bogor Regency is a leading destination for domestic tourists in West Java. In 2024, 23,522,694 trips were recorded, representing an impressive 9.34% growth compared to the previous year. This large volume of visits has created a potential premium market in the hotel, restaurant, and café (HORECA) sector in the surrounding area. The massive HORECA market demands a supply of fresh, high-quality, and standardized food products. This situation opens up value-added opportunities for farmer groups to market urban farming products at a higher selling price, while ensuring that these products meet applicable quality standards and regulations.

One of the villages located in Bogor Regency is Ciomas Rahayu Village, which is in the Ciomas District, Bogor Regency, with an area of 88.450 ha bordering Bogor City. Ciomas Rahayu Village is an area with a residential zone where most residents work in Bogor City and the capital city of Jakarta. The village, which has a land area of 88.450 hectares, uses 70% of its land for residential purposes, resulting in the village being very dense so that there is no more land or natural resources utilized for productive agriculture and plantations. The proportion of land use confirms that productive natural resources for conventional agriculture are almost no longer available. One effort made to create productive land is to maximize the remaining land to be managed using the urban farming method.

Table 1. Land Utilization in Ciomas Rahayu Village

Designated Land	Land Area (ha)
Roads	14.12
Rivers	1.06
Residential	61.52
Open Land	13.3
Mixed Gardens	8.83
Health	0.18
Education	0.64
Sports	2.23
Worship	0.8
Offices	0.02
Warehouses	0.21
Services and Trade	1.09

Source: Ciomas Rahayu Village Data, 2024

Urban farming is an agricultural method carried out in urban areas by maximizing the limited land available to be used as a place grow plants and cultivate fish (Herlinda & Sari, 2021). Urban farming can be successfully implemented in urban and suburban areas, by offering opportunities to provide fresh local food products for urban and suburban communities near urban settlements. Population demonstrates the importance of urban agriculture which provides benefits for food security, economic stability and environmental preservation (Grebitus et al., 2020).

Cultivation techniques using the urban farming such as aquaponics, hydroponics, and biofloc (Pratiwi et al., 2021) have many advantages; they do not require a large area of land, they are easy to maintain, production quantity can increase and grow faster (Okuputra et al., 2022). The very dense condition of Ciomas Rahayu Village is utilized to implement urban farming for Farmer Group (Poktan) and Women Farmer Group (KWT). Ciomas Rahayu Village has 5 (five) Farmer Groups (Poktan) and 1 (one) Women Farmer Group (KWT). The Poktan and KWT of Ciomas Rahayu Village utilize existing open land potential, such as yards, mosque land, public facilities or neglected land for agricultural activities. Following is data on the farmer groups in Ciomas Rahayu Village and the types of commodities produced.

Table 2. Ciomas Rahayu Village Farmer Groups and Types of Commodiies

	Name	Types of Commodities
1	Poktan Saung Baraya	Medicinal plants Tilapia fish Catfish
2	KWT Rajawali	Water Spinach Long beans Water letuce Catfish
3	Poktan Vici	Oyster mushrooms Rice & eel using tarpaulin Hydronarcotics: tilapia, pangasius, chili
4	Poktan 13	Tilapia fish Catfish
5	Poktan Sehati Olokkejo	Medicinal plants Vegetables Biofloc freshwater cultivation: tilapia and mujair fish. Waste bank Used cooking oil charity
6	Poktan Bougenville	Vegetables: spinach, kale, caisim, pakcoi, water lettuce Chili peppers Catfish

Source: data processed, 2024

The urban farming-based Farmers Groups of Ciomas Rahayu are an integral part of efforts to improve family welfare through urban agriculture practices. Urban farming is an effective effort to improve family welfare through farmer groups and provides new economic opportunities for farmer groups. By developing urban agricultural activities, farmer groups can sell their harvest directly to the

surrounding community, or independently produce or process the harvest into fresh food, value-added processed products that are healthy. This can reduce expenses for purchasing food, increase the income of farmer groups, and directly improve their family welfare. The presence of urban farming provides opportunities for farmer groups to earn additional income, increase food security, and contribute to local economic development (Gandhy et al., 2025). Generally, Farmer Groups and Woman Farmer Groups are formed with the aim of realizing food security programs in the Ciomas Rahayu Village Area and developing microeconomics by maximizing existing resources (Bejo & Utama, 2020). The food security intended in establishment of Poktan is a preventive measure in case surrounding residents do not have side dishes to eat, which then be provided by Poktan. However, because there are not always people in need, the majority of the products resulting from Poktan are sold to the surrounding community and the nearest market. Given the current public interest in environmentally friendly and organic products, there is an open opportunity to increase sales from the Farmer Groups. To increase sales from farmer groups, product development is needed to match consumer preferences and interests, especially in the current condition where technology and information have developed rapidly.

Technology and information are currently developing very rapidly, making digital marketing one of the effective marketing methods (Indana & Beni, 2021). The advantages of digital marketing have an important role in marketing agricultural products and businesses, including urban agricultural products. Digital platforms shape the agricultural industry and the way agricultural products are marketed and sold. The utilization of digital platforms transforms traditional marketing methods into more efficient and cost-effective ways for farmers to market and sell their agricultural products. Digital platforms change the way agricultural products are bought and sold, offering new ways for farmers to connect with consumers (Okuputra et al., 2022 & Widiati et al., 2024).

Digital marketing is a marketing activity in promoting products using digital media. Digital marketing can improve marketing performance by expanding consumer reach and a larger market share. Digital marketing is an effective tool in promoting urban farming by utilizing social media, websites and e-commerce platforms to expand market reach and establish collaboration with related parties. Digital marketing it is important to introduce the urban agricultural products of Ciomas Rahayu Village to a wider market. By understanding urban agricultural product development and effective digital marketing, farmer groups can increase the competitiveness of agricultural products, improve market access, and ultimately enhance economic welfare. To realize the economic welfare of farmer groups, efforts are needed to bridge the achievement of these goals; one such effort is formulating a strategy (Gandhy & Sutanto, 2017; Wang et al., 2022).

Product development strategy is needed to innovate in order to enhance product superiority compared to competitors, this is consistent with research conducted by (Widiati et al., 2024), where product development strategy is important to win the competition for consumers and many competitors and similar products. Additionally, research conducted by (Agustini et al., 2021) which recommends that product development to adjust the products create to market demand. Research conducted by

(Gumilang et al., 2024) states the importance of digital marketing strategy for businesses to adjust to consumer behaviour. Furthermore, research conducted by (Nurchayani, 2018) show the importance of product development to open up wider market opportunities, thereby increasing product sales. Thus, based on the research result, it is important for a business, especially in the current digital era, to conduct product development to adjust products to consumer needs that can open up new market opportunities. While previous studies have underscored the significance of product development strategies for gaining a competitive edge and the critical role of digital marketing in expanding market reach, a notable research gap remains concerning strategy formulation for farmer groups in areas under extreme demographic pressure, where residential zones occupy 70% of the total land. Most prior urban farming literature has focused predominantly on technical cultivation methods or general household food security.

The novelty of this study lies in the integration of value-added product strategies with digital marketing optimization tailored for farmer groups in densely populated metropolitan buffer zones. This research goes beyond mapping urban farming potential in confined spaces by explicitly formulating how significant land constraints (70% residential) can be transformed into micro-economic opportunities through organic product differentiation and the leverage of digital platforms to bridge local producers and urban consumers.

Consequently, this study offers a strategic framework for urban farmer groups facing the loss of conventional agricultural land to maintain competitiveness and business sustainability in the digital age. Therefore, the farmer groups in Ciomas Rahayu Village recognize the importance of urban farming in facing socio-economic challenges and see an opportunity to develop products resulting from the Poktan in Ciomas Rahayu Village. Thus, the purpose of this research is to describe alternative product development strategies by adjusting to technological developments and describing the factors that need to be considered in implementing effective digital marketing for urban farming- based farmer group businesses in Ciomas Rahayu Village.

LITERATURE REVIEW

Urban Farming

The rapid development of technology and information means that all aspects are undergoing development. One sector that is also developing is agriculture. Conventional agriculture requires large area of land to produce many commodities, but currently agricultural activities can be done with limited land, maximizing limited land resources, one of which is by implementing urban farming. Urban agriculture or urban farming is the planting of crops and raising of animals with in or around urban environments. This includes various activities of production, processing, and distribution activities of food and other agricultural products (Pratiwi et al., 2021).

Another opinion regarding urban farming is that it is a cultivation activity plants or livestock in urban areas with the aim of producing food ingredients and obtaining profits from product sales (Bejo & Utama, 2020). Based on this opinion, it can be interpreted that urban farming is not just about

planting crops in the city, but is also an innovative solution by that optimal use of available space, land and existing resources, to overcome various urban challenges, from food security to environmental and social problems and provides a positive contribution to urban sustainability.

Product Development Strategy

Every organization or company must have a goal. Generally, companies aim to achieve maximum profit. Similarly, farmer groups aim to implement food security and maximize existing resources (Irawan et al., 2023). To achieve these goals, a strategy is needed that can lead the organization towards that goal. Strategy in conventional marketing is defined as a marketing method carried out directly where the buyer comes and meets directly with sellers, creating a transaction. However, considering the current prevalence of digitalization, strategy must also adjust to technological developments. Digital marketing strategy is also known as the activity of promoting a business through electronic devices digitally via social media and the internet (Indana & Beni, 2021). Thus, strategy can be defined as activities carried out to achieve business goals by maximizing possessed resources.

Product development strategy is an effort made by businesses to create effective strategies in developing its products so that they can support the growth and sustainability of the business and achieve business goals (Larasati et al., 2024). Product development strategy is also known as a systematic step taken by a company to design, develop, and launch a new product or improve existing products to increase market share, revenue, and profitability. Product development strategy also involves idea creation, concept screening, prototype development, marketing strategy, and product testing to meet ever-changing market needs and maintain competitiveness (Gandhy & Kurniawati, 2018).

SWOT Analysis

To formulate an effective strategy, an in-depth situation analysis regarding the company's condition related to business elements is needed. Situational analysis is used to find strategic suitability between external opportunities and internal strengths, as well as considering external threats and internal weaknesses. SWOT analysis is a data analysis tool used for strategic decision-making in business development, by identifying all aspects to maximize internal strengths and opportunities, and minimize external weaknesses and threats (Widiati et al., 2024).

Another opinion about SWOT analysis is that it is an analysis tool that aimed at formulating strategies by combining the company's strengths and weaknesses with the opportunities and threats the company will face (Gumilang et al., 2024). Based on this opinion, SWOT analysis is an effort to create a strategy by identifying internal factors of strengths and weaknesses, and opportunities and threats. SWOT analysis is a systematic identification of various factors to formulate a business strategy. This analysis is based on logic that can maximize strengths and opportunities while minimizing weaknesses and threats. This analysis is based on the assumption that an effective strategy will maximize strengths and opportunities while minimizing weaknesses and threats (Gandhy et al., 2024).

RESEARCH METHODOLOGY

This type of research is descriptive research with a qualitative approach aimed at describing in depth and comprehensively the product development of urban farming-based Farmer Groups products in Ciomas Rahayu Village. The sampling method used was an non-probability sampling based on the purposive sampling technique, which involves establishing specific characteristics suitable for the research problems can be answered. The respondents of this research consisted of 7 informants who are activists from the Farmer Groups and Women Farmer Group of Ciomas Rahayu Village. The criteria for the informants were active administrators who understood the conditions of the activities carried out by the Ciomas Rahayu Village farmer groups. Data collection techniques were carried out by means of observation and structured interviews to obtain data and information regarding the product development of the Ciomas Rahayu Village Farmer Groups. The researcher analyzed the data using the SWOT matrix to formulate alternative strategies by describing the internal factors consisting of strengths, weaknesses and external factors consisting of opportunities and threats. The SWOT matrix produces four possible alternative strategies: SO (*strength-opportunity*) strategy, ST (*strength-threat*) strategy, WO (*weakness-opportunity*) strategy and WT (*weakness-threat*) strategy.

RESULT AND DISCUSSION

This research uses SWOT matrix (Strengths, Weaknesses, Opportunities, Threats) analysis aimed to formulating alternative strategy by combining the strengths and weaknesses of the Poktan with the opportunities and threats faced by the Poktan. Based on the results of observations and structured interviews with the Ciomas Rahayu Village Farmer Groups, the internal and external factors of the urban farming product development of the Farmer Group are known. The results of the internal and external environmental analysis are intended to determining the factors that are constitute the strengths and weaknesses of the Poktan in facing existing opportunities and threats. The strength and weakness factors are obtained from the analysis of the Poktan's internal environment, while the opportunity and threat factors are determined from the analysis of the external environment.

1. Strength Factors for Ciomas Rahayu Village Farmer Groups

The strength factor is an internal condition that allows the farmer groups to maintain their market and business. The factors that can be used as a source of strength for the Ciomas Rahayu Village Working Group are as follows:

S1 Activity of Poktan and KWT members.

Active members tend to be more productive because they have better access to the information, technology, and resources provided by the Poktan. The age range of Poktan members is 50-70 years with background as retirees, civil servants (ASN), private sector employees, and housewives. Active participation in activities can strengthen relationships between members, fostering trust, thereby building a more productive and sustainable Poktan

S2 Optimal organizational structure of Poktan and KWT.

The simplicity and flexibility of the Poktan organizational structure make it is easy for all members to understand. The availability of human, financial and technological resources will influence the organizational structure. All members have the opportunity to participate in decision-making,

S3 Superior commodities and products produced.

The superior commodity/product of the Ciomas Rahayu Village are freshwater fish cultivation and organic vegetables. The Poktan has create value-added products, namely processed yellow spiced catfish.

2. Weakness Factors of Ciomas Rahayu Village Farmer Groups

The weakness factor is an internal condition that indicates a weakness or unfavorable factor for the Ciomas Rahayu Village farmer groups. The factors that are weaknesses for the Ciomas Rahayu Village Working Group are as follows:

W1 Product packaging is still simple and does not yet comply with product packaging standards.

W2 Does not yet have product certification.

The Ciomas Rahayu Village Poktan has not yet obtained certification for products, halal certification, or other certifications that can increase the value added or selling value of Poktan products.

W3 Limited production quantity.

Causal factors for the limited production quantity include limited land area and capital and as well as a lack of knowledge about modern cultivation.

3. Opportunity Factors for Ciomas Rahayu Village Farmer Group

The opportunity factor is a favorable condition for the progress of farmer groups in the future. This condition comes from external sources of farmer groups. Some factors that can be used as opportunities for the Ciomas Rahayu Village Poktan are as follows

O1 Developing products to increase *the added value* of products. One Poktan, the Women Farmer Group, has created a value-added product, namely processed catfish with yellow spices.

O2 Implementing digital marketing to market Poktan and KWT products

O3 Cooperation between Poktan and KWT partners.

The Poktan has the opportunity to establish cooperation with other parties such as food industry business actors, distributors, and/or financial institutions.

4. Threat Factors for Ciomas Rahayu Village Farmer Groups

The threat factor is an unfavorable situation or condition in a business. Threats are the main obstacle for farmer groups to achieve their goals. Threat analysis aims to comprehensively evaluate external

threats sources that can negatively impact the Ciomas Rahayu Village farmer groups. The factors that threaten the sustainability of the Ciomas Rahayu Village Working Groups are as follows.

T1 Wider distribution and marketing networks of competitors.

Competitors' distribution and marketing networks impact on market share, revenue and business sustainability.

T2 Limitations and ownership of land used by Poktan and KWT.

T3 Difficulty in obtaining business capital for product development.

After conducting internal and external analysis, the next step is to determine alternative strategies using the SWOT (*strength, weakness, opportunity, threat*) analysis tool. SWOT analysis is used as a tool in the form of a SWOT matrix. This matrix clearly illustrates how the opportunities and threats faced by the Ciomas Rahayu Village Poktan can be aligned with the strengths and weaknesses possessed by the Poktan. This matrix develops or determines four alternative strategies: matching between strengths and opportunities (SO Strategy), strengths and threats (ST Strategy), weaknesses with opportunities (WO Strategy) and weaknesses with threats (WT Strategy).

Table 3. Analysis with SWOT Matrix

Internal Factors	<i>Streghts (Streghts-S)</i>	
	Activity of Poktan and KWT members	Product packaging that does not yet comply with product packaging standards.
	Optimal organizational structure of Poktan and KWT.	Does not yet have a product certification.
	Superior commodities and products produced. .	Limited production quantity.
External Factors	<i>Opotunities (Opotunities-O)</i>	<i>Strategy WO</i>
Developing products to increase product value added.	Expansion of processed products and quality improvement of Poktan's superior commodities (S3, O1).	Creating product packaging that complies with standards and conducting product certification (W1/W2, O1).
Implementing digital marketing to market Poktan products.	Creating professional social media accounts for structured digital marketing (S1/S2, O2).	Conducting simple digital marketing training for Poktan and KWT members (W1, O2).
Cooperation between Poktan and KWT with potential partners.		Collaborating with partners to utilize programs that can improve product quality and quantity (W3, O3).
<i>Treaths (Treaths-T)</i>	<i>Strategy ST</i>	<i>Strategy WT</i>
Wider distribution and marketing networks of competitors.	Strengthening distribution channels by establishing partnerships with local distributors (S1/S3, T1)	Product innovation and developing product variations from commodities produced (W1, W2, W3, T1, T2).
Limitations and ownership of land used by Poktan and KWT.	Optimizing land management using modern agricultural technology (S3, T2)	Strengthening branding by creating attractive designs and complete nutritional information (W1, W2, T3).
Difficulty in obtaining capital for product development.		Collaborating with local companies to run Corporate Social Responsibility (CSR) programs (W3, T3).

Source: processed data (2024)

The alternative strategies developed through the SWOT matrix approach consist of SO, WO, ST and WT strategies. The results of the SWOT matrix analysis for farmer groups in Ciomas Rahayu Village are as follows:

1. SO strategy (Strengths-Opportunities).

The expansion strategy is implemented by processing and enhancing the quality superior organic commodities to create a competitive advantage in the market. The effort to diversity products into value added offerings, such a seasoned catfish, aligns with the findings of Widiati et al (2024), who state the product development strategies are crucial for a gaining competitive edge and winning consumers amidst numerous competitors and similar products. Furthermore, the professional use of social media as an effective marketing channel to reach consumers outside the region is supported by the theory of Indana & Beni (2021), which defines digital marketing as an effective method for business promotion through the internet and social media in the modern era. Farmer groups increase productivity by strengthening market position and contributing significantly to the food security of Ciomas Rahayu Village. The programs that Poktan can carry out are:

- 1) Processing and improving the quality of superior commodities that have high demand and good market potential.
- 2) Product development must emphasize the differentiation of organic products and establish premium prices.
- 3) By utilizing the activity of members (S1) and the existing organizational structure (S2), the Poktan must create and professionally manage social media for online marketing (O2).
- 4) Digital platforms are an effective channel for expanding the market and increasing income (O2).
- 5) Online marketing activities should not only promote products but also share educational information about sustainable urban farming.

2. WO Strategy (Weaknesses-Opportunities).

The consolidation strategy, focuses on internal improvement through various efforts to sharpen programs, optimize resource management, and improvement management to strengthen the Poktan's position before market expansion. This internal consolidation prioritizes improving product packaging standards and obtaining product certifications, such as halal or organic, to significantly enhance branding. Such an approach is highly relevant to the research of Nurcahyani (2018), which demonstrates that systematic product development can open broader market opportunities and increase sales volume. Furthermore, providing basic digital marketing training for farmer group members to adapt to current consumer behavior is supported by the views of Gumilang et al. (2024) regarding the critical importance of digital adaptation for business sustainability. The strategic programs carried out are as follows:

- 1) The Poktan participates in training and utilizes partner programs to create packaging that complies with product quality and safety standards (W1) to support branding.
- 2) The Poktan must also strive to obtain legality certifications (halal product certificate or organic product certification) (W2). Certification is not only to strengthen added value but

also to open up opportunities for greater and more formal market access and open opportunities for access to capital from financial institutions.

- 3) The Poktan conducts simple digital marketing training for Poktan and KWT members (O2). The training includes the use of general social media platforms (WhatsApp, Facebook, Instagram, TikTok) and creating attractive and educational visual content regarding the advantages of Poktan organic products and food security.
 - 4) The Poktan must be proactive in collaborating with partners (O3) who offer technical assistance programs and modern cultivation training that can improve product quality and quantity (W3).
 - 5) Collaboration with private institutions and village government can also be utilized by Poktan and KWT to gain support for market access, product marketing access, and capital access such as bazaars, exhibitions, and training.
3. ST strategy (Strengths-Threats).

The diversification strategy, implements specific actions to face existing threats by utilizing internal strengths to maintain the competitiveness and sustainability of the Poktan. To address the challenges of limited land (where 70% of the village is residential) and broad competitor distribution networks, the farmer groups (Poktan) focus on the optimization of modern agricultural technologies, such as verticulture, including hydroponics and aquaponics. This approach is strongly supported by the findings of Pratiwi et al. (2021), who state that such urban farming techniques allow for increased production quantity despite very limited land availability. Additionally, the implementation of this strategy contributes to local economic stability and urban food security, which is consistent with the theory established by Grebitus et al. (2020). The programs of the diversification strategy carried out are as follows:

- 1) Strengthening local distribution channels by establishing partnerships with local distributors (S1/S3, T1) to expand the network, reach a wider market, increase bargaining power against retailers, and gain access to larger markets.
 - 2) Optimizing land management (S3) using modern agricultural technology (T2) to maximize yields from limited land. If land is limited, planting various commodities with vertical cultivation techniques (hydroponics/aquaponics) and intercropping can be considered to maximize the yield of food diversity and efficiency.
4. WT strategy (Weaknesses-Threats).

The WT strategy, often referred to as a restructuring or consolidation strategy, focuses on minimizing Poktan weaknesses by continuously striving to fix resources, organization, capital, and various aspects to avoid threats so that better market opportunities can be seized. This restructuring is carried out through product innovation and the development of variations from existing commodities to meet unmet consumer needs and minimize the risk of loss. This step represents an implementation of the recommendations by Agustini et al. (2021), which

emphasize the need for product development to align production results with constantly changing market demands. Furthermore, strengthening branding through attractive designs and complete nutritional information is supported by the systematic framework of Gandhi & Kurniawati (2018) regarding essential product development steps to maintain business competitiveness. The programs carried out are as follows:

- 1) Product innovation and developing product variations (W1, W2, W3, T1, T2) from commodities produced to meet unmet consumer needs, to attract more consumers and reduce the risk of loss.
- 2) Strengthening branding (W1, W2) by creating attractive designs and complete nutritional information (T3).
- 3) To overcome capital difficulties (W3, T3), the Poktan can collaborate with local companies to run Corporate Social Responsibility (CSR) programs, such as financing programs offered (crowdfunding) for product development and education programs that simultaneously overcome.

CONCLUSION

Based on the results of the research that has been conducted, the alternative strategies generated are implementing a product development strategy by increasing the value added and product quality. Farmer Groups in Ciomas Rahayu Village can add product variants, improve the quality of raw materials, create attractive packaging designs, and obtain product certification from trusted institutions. Furthermore, Farmer Groups need to start implementing digital marketing to reach a wider market, by creating social media accounts and creating attractive content to attract more consumers.

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