# CIRCULAR ECONOMY BUSINESS STRATEGY OF ORGANIC FERTILIZER IN PARIKESIT FARMER GROUP

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**ABSTRACT**

**Background:** The conception of this research is the increasing importance of the implementation of the scientific field of Circular Economy (CE) in technical and operational aspects, in the specific agribusiness system of Liquid Organic Fertilizer (LOF) marketing management. Parikesit Farmer Group is one of the farmer-owned businesses that has the aim of improving the economy of farmers in Bangunsari Village, Pamarican District, Ciamis Regency, especially in agriculture. The Parikesit Farmer Group has previously been one of the pioneers of organic farming with organic rice commodities. In addition, the farmer group developed its business as a producer and distributor of LOF sales. The Parikesit Farmer Group has great potential in supporting the circular economy concept by optimizing the development of the LOF business.

**Purpose:** This research aims to identify the condition of the existing business model of the Parikesit Farmer Group by conducting BMC mapping, identifying the strengths, weaknesses, opportunities, and threats owned by the Parikesit Farmer Group, formulating business development strategies, and determining alternative priority strategies for developing the Parikesit Farmer Group's organic fertilizer business.

**Design/methodology/approach:** The methods used in this research are Business Model Canvas (BMC), SWOT analysis, and Analytical Networking Process (ANP).

**Findings/Result:** The results of the analysis of strategy formulation and SWOT analysis produce nine alternative strategies. Based on the ANP analysis, the priority that must be implemented is more education on quality organic fertilizers, it is hoped that consumers will buy more organic fertilizer products.

**Conclusion:** This research successfully mapped the business model canvas of the Parikesit Farmer Group in accordance with the nine BMC elements, namely customer segments, value propositions, channels, customer relationships, revenue streams, key activities, key resources, key partnerships, and cost structure for its business development process.

**Originality/value (State of the art):** The originality lies in its contribution to the existing literature regarding the incorporation of the BMC method, SWOT analysis, and ANP analysis in determining agribusiness development strategies.

**Keywords:** ANP, BMC, Circular economy, fertilizer, SWOT

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# INTRODUCTION

A circular economy is an economic system or model that aims to generate economic growth by maintaining the value of products, materials, and resources in the economy for as long as possible, there by minimizing social and environmental damage caused by a linear economic approach (Bocken et al. 2016; Lewandowski, 2016; Murray, 2017). The circular economy is very promising for achieving several SDGs goals, including SDGs 6 ensuring the availability and sustainable management of water and sanitation for all, SDGs 8 about encouraging sustainable, inclusive and sustainable economic growth, full and productive employment, and decent work for Overall, SDGs 11 makes cities and settlements inclusive, safe, resilient and sustainable, and SDGs 12 ensures sustainable consumption and production patterns (Suprapto, Ardhi and Apriandi, 2018; Napitupulu, Pasaribu and Sihombing, 2022; Arisman and Fatimah, 2023).

According to research released by the Intergovernmental Panel on Climate Change/IPCC (2016), the main GHG emissions from the agricultural sector are methane (CH4), with a percentage of 67%, followed by nitrous monoxide (N2O) at 30% and carbon dioxide ($CO^2$) at 3%. Low Carbon Development in the agricultural sector can be identified into several categories, namely management of rice fields and, use of organic fertilizer and biogas to absorb GHG emissions. Therefore, sustainable agriculture is an important element of the circular economy, as it focuses on increasing sustainability by preserving the resources and materials used for as long as possible. Circular agriculture is based on minimizing the demand for external inputs, closing the nutrient loop, and reducing the environmental impact of discharge and runoff (Vardy et al. 2017).

Organic farming as one of the most promising ways to reduce the negative impacts of modern agriculture has been the concern of academics, policy makers, producers, and consumers. Therefore, several supporting policies and academic studies have been conducted on this subject in recent years. Although organic farming is increasing in many countries, in some countries the opposite trend is occurring (Bahraini, 2019; Aghasafari, 2020; Wibowo, 2021). The Parikesit Farmers Group implements circular farming in two ways, namely organic farming with organic rice production and reusing wastewater in managing liquid organic fertilizer (POC). The use

of rice milling biomass waste (*dedak*) which is then mixed with other organic materials to become the raw material for liquid organic fertilizer which is specifically named Jamu Sehat Tanaman (JST), apart from increasing the economic value of the waste, also reduces the potential for pollution that it will cause, both in the form of water, soil and water pollution as well as air. The current problem faced by farmer groups is that they still have difficulties in planning business models and marketing integrated organic fertilizers so that they can become official institutions in the form of Farmer-Owned Enterprises (BUMP).

The business planning method that can be used to develop an appropriate business development strategy is the Business Model Canvas (BMC), which to date has been widely used in various business sectors. In this way, business owners will know a visual chart of important business elements so that they can provide an overview of the value of the company, products, infrastructure, customers, and finances (Müller, 2019; Pizzi, 2021). The existing initial business model will be developed with the help of the SWOT-ANP method to produce a sequence of strategic priorities needed for business development. This activity aims to implement the integrated Business Model Canvas (BMC) concept in parikesit farmer groups to support the development of an eco-friendly organic fertilizer business which also helps sustainably maintain environmental sustainability (Osterwalder and Pigneur, 2010; Osterwalder, 2013).

This study was able to determine the best strategies for the development of organic farming and fill the gaps in previous studies in four ways. First, it identifies the strengths, weaknesses, opportunities, threats, and comprehensive factors affecting organic farming (Aghasafari, 2020). Second, the interdependence between these factors is considered. Third, real-world uncertainties and the opinions of decision-makers are discussed (Azzaria et al. 2023). Finally, this research focuses on Indonesia as a country experiencing a decline in organic farmland, with a particular focus on Ciamis, West Java. To that end, a combination of BMC analysis, SWOT, and ANP methods are applied by introducing some new procedural factors for the development of organic farming. A mature business model will make it easier to implement the plans that have been made by the company, or in this case BUMP Parikesit. A good business model also helps organizations to run a business that focuses on customer problems and products that meet customer desires (Osterwalder and

Pigneur, 2010). Based on this, the problem formulation in this research is as follows: What is the current canvas business model of the Parikesit Farmers Group?. What are the strengths, weaknesses, opportunities, and threats of all elements of the canvas model?. What business development strategies can be built from the results of a SWOT analysis of all elements of the canvas model?. What is the priority order of alternative strategies for developing the organic fertilizer business for the Parikesit Farmers Group?

## METHODS

This research was conducted at the Parikesit Farmers Group, Bangunsari Village, Pamarican District, Ciamis Regency, West Java. The time for collecting and analyzing research data starts from July to September 2023. The sampling method used was purposive sampling. Purposive sampling is a sampling strategy that has ethical principles to gain access to respondents who can be observed and interviewed. The appropriate size of respondents in research is a minimum of 30 (thirty) respondents, so in this research 30 customers had purchased and applied the Parikesit Farmers Group organic fertilizer product at least once to get a value on the IFE and EFE matrix so as to produce the right business development strategy, and 7 expert respondents to prioritize the business development strategies needed by the parikesit farmer group. The determination of respondents can be seen in Table 1. Data collection in this research was carried out by direct interviews with experts and distributing questionnaires online with the Google Form feature to respondents.

Table 1. Determination of respondents

| Respondent | Number | Methods |
|---|---|---|
| Parikesit Farmers Group | 1 | BMC |
| Customer | 30 | SWOT |
| Business practitioner | 2 | ANP |
| Raw material partner | 1 | ANP |
| Stakeholders | 1 | ANP |
| Customers | 1 | ANP |
| Academics | 2 | ANP |

The research carried out is quantitative and qualitative. The primary data collected is quantitative, namely the results of questionnaires and expert interviews. This research aims to obtain data that is more comprehensive, valid, reliable and objective. Data processing begins by describing product characteristics according to the nine BMC elements. While secondary data comes from articles, books, or literature containing company profiles and structures, other data is owned by companies outside the company. Next, an analysis of internal and external factors that influence fertilizer product strategy is carried out using the IFE and EFE matrices. Calculations regarding the weight and rating of each respondent use Microsoft Excel. After that, the IE matrix is based on two key dimensions, namely the total IFE weight score on the x-axis and the total EFE weight score on the y-axis. The intersection point results will determine the position of the IE matrix cells. After determining the cell position in the IE matrix, alternative strategies can be prepared using the SWOT matrix.

The final data processing was carried out using the Analytical Network Process (ANP) method. The network structure that has been prepared will be the basis for creating questionnaires that will be distributed to experts. The validity of the questionnaire for strategy selection is seen through the consistency of each matrix, both individual and combined. The results of primary data processing begin by first checking the consistency of the weighting given by the expert. Processing of weighting consistency and data processing is carried out using Super Decision.

## RESULTS

### Respondent Characteristics

The respondents used in this research were 30 respondents. The respondents were 30 regular customers of the Prikesit Farmers Group's organic fertilizer products, namely members of the farmer group. The characteristics of the respondents studied included age, gender, commodity and farming varieties, and product use. The characteristics of these respondents is known that 30 male respondents with occupations as farmers, this is consistent with data on actual members of the parikesit farmer group, indicating that men dominate over women in terms of gender composition of the workforce. The age profile of respondents is dominated by farmers aged 21 - >40 years. This is because workers aged 21 - >40 years are the productive age group. The characteristics of rice varieties grown by farmers show that most of the rice cultivated is the ciherang variety as many as 10 respondents, this is due to the production of ciherang rice including those that are easy to market.

Organic fertilizer N-15 or JST is the dominant fertilizer purchased by respondents (33%), this is because JST products have the advantage that they can be applied to various plant needs.

## Parikesit Farmers Group Business Model

According to Braun, Schöllhammer and Rosenkranz (2021), mapping a company's business model using BMC can describe simply and comprehensively the current condition of an organization. BMC analysis is an analytical model that describes thinking about how organizations create, provide, and capture the value of a company. According to (Pollard et al. 2023), each element of BMC can be a starting point for the development of a new business model. In this research, the evaluation of 9 business model elements was carried out using SWOT analysis. Figure 1 shows the BMC results from initial mapping based on primary data from the Parikesit Farmers Group.

## Internal Factor Evaluation (IFE) Matrix

The sum of the weighted scores or values for each factor is used to determine the company's total score (Azzaria et al. 2023). The IFE matrix in this research

in Table 2. The main strength of the Parikesit Farmer Group already has offline distribution and sales business channels with eight organic fertilizer products for various crop needs. The main weakness is that the products are not yet SNI and quality certified.

## External Factor Evaluation (EFE) Matrix

The total weighted score for each variable is used to determine the company's total score (Geissdoerfer et al. 2020). The EFE matrix in this research in Table 3. The main opportunity is the development of information technology such as social media so that it can increase promotion and good relations with customers. Meanwhile, the biggest threat is that competitors have more optimal distribution channels. The IFE matrix in this research can be seen in Table 3.

The total value of the Parikesit Farmers Group on the IFE matrix is 2.717. Meanwhile, the total number of values in the EFE matrix is 2.742. From the IE matrix in Figure 2, the Parikesit Farmers Group is in cell V, namely the business has moderate internal and moderate external capabilities. The strategy commonly used by companies in this cell category is hold and maintenance.

| Key Partners | Key Activities | Value Propositions | Customer Relationships | Customer Segments |
|---|---|---|---|---|
| 1. Raw material partners: PT Bengkel Bumi Mandiri, Members of the Parikesit Farmers Group, and the Bangunsari Village Community<br>2. Operational partners: Members of the Parikesit Farmers Group, Regional Government/Related Services, Banking | 1. Prepare raw materials.<br>2. Carry out organic fertilizer management<br>3. Packaging and Labeling<br>4. Marketing the product | 1. Pioneer of Liquid Organic Fertilizer (POC) in Ciamis Regency<br>2. Quality of organic fertilizer products<br>3. Affordable product prices<br>4. The product does not have a certificate | 1. Communication via WhatsApp and through training<br>2. Make a post on Facebook | 1. Age over 17 years<br>2. Men and Women<br>3. All levels of society<br>4. Consumers with a healthy lifestyle<br>5. Consumer interest in organic fertilizer<br>6. Benefits of organic products for health |
| | **Key Resources** | | **Channels** | |
| | 1. Human resources<br>2. Physical resources (formula, machine)<br>3. Intellectual resources (Brand)<br>4. Financial resources (capital) | | 1. Directly to consumers through organic farming training<br>2. Outlet at the Parikesit Farmers Group, Bangunsari Village, Ciamis Regency | |
| **Cost Structure** | | | **Revenue Streams** | |
| 1. Fixed Cost: Cost of production premises, transportation facilities, taxes and production equipment<br>2. Variable Cost: costs for procuring raw materials, auxiliary materials, packaging and labels, transportation fuel, and visit/ training costs | | | 1. Sales of organic fertilizer products<br>2. Sales of organic rice | |

Figure 1. Initial BMC Mapping

Table 2. Parikesit Farmers Group IFE matrix

| No | Internal Strategy Factors | Weight | Rating | Score |
|----|---------------------------|--------|--------|-------|
| | Strength | | | |
| S1 | The product can be applied by aged over 17 years | 0.0609 | 3 | 0.183 |
| S2 | Already have offline business channels | 0.0776 | 4 | 0.310 |
| S3 | Provide product information to consumers of organic farming training | 0.0859 | 3 | 0.258 |
| S4 | Various organic fertilizer products for various needs | 0.0748 | 4 | 0.299 |
| S5 | Competent human resources in the fields | 0.0748 | 3 | 0.224 |
| S6 | Establish partnerships with various parties | 0.0609 | 4 | 0.244 |
| S7 | Operational costs that can be taken into account | 0.0609 | 3 | 0.183 |
| | Sum | 0.496 | | 1.701 |
| | Weakness | | | |
| W1 | Newly known in the Ciamis area of Indonesia | 0.0554 | 2 | 0.111 |
| W2 | The product has not been SNI and quality certified | 0.0748 | 1 | 0.075 |
| W3 | Not maximizing the use of e-commerce | 0.0803 | 2 | 0.161 |
| W4 | Only has one offline outlet | 0.0748 | 2 | 0.150 |
| W5 | Does not have complete customer data | 0.0776 | 2 | 0.155 |
| W6 | Insufficient facilities for tools/machines for processing various fertilizer products | 0.0831 | 3 | 0.249 |
| W7 | Not maximizing online marketing activities | 0.0582 | 2 | 0.116 |
| | Sum | 0.504 | | 1.017 |
| | Total | 1 | | 2,717 |

Table 3. EFE Matrix for Parikesit Farmer

| No | External Strategy Factors | Weight | Rating | Score |
|----|---------------------------|--------|--------|-------|
| | Opportunity | | | |
| O1 | There are still market opportunities outside Ciamis | 0.083 | 4 | 0.333 |
| O2 | Consumer interest in organic fertilizer for health with organic products | 0.068 | 3 | 0.205 |
| O3 | The development of social media supports product distribution | 0.068 | 3 | 0.205 |
| O4 | Developments in information technology such as social media can improve good relationships with customers | 0.091 | 4 | 0.364 |
| O5 | Technological developments make promotional activities easier | 0.076 | 3 | 0.227 |
| O6 | Partner channels help businesses reach customers | 0.080 | 3 | 0.239 |
| O7 | Funding from the Government/Bank related to capital | 0.102 | 3 | 0.307 |
| | Sum | 0.568 | | 1.879 |
| | Threats | | | |
| W1 | There are many competitors in the fertilizer business | 0.091 | 2 | 0.182 |
| W2 | Many consumers do not understand the quality of organic fertilizer compared to chemical fertilizer | 0.083 | 2 | 0.167 |
| W3 | Competitors have more optimal distribution channels | 0.068 | 2 | 0.136 |
| W4 | Many competitors bring in imported fertilizer | 0.087 | 2 | 0.174 |
| W5 | Availability and increase in prices of raw materials | 0.102 | 2 | 0.204 |
| | Sum | 0.432 | | 0.863 |
| | Total | 1 | | 2.742 |

Market penetration and product development strategies are strategies that can be used by the Parikesit Farmers Group. Market penetration can be done by seeking a larger market share of existing products through better marketing efforts. Product development is carried out by trying to increase sales by developing existing products or services or developing new products.

**SWOT Matrix**

Based on the results of the identification of the business model implemented by the Parikesit Farmers Group, the next stage is to carry out an analysis of the strengths, weaknesses, opportunities and threats of the nine BMC elements. SWOT identification aims to obtain strategic issues, then the strategic issues are arranged into a SWOT matrix as can be seen in Figure 3 so that alternative SO, WO, ST and WT strategies can be obtained. The resulting SWOT matrix can be seen in Figure 3. Based on the results of the strategy formulation in the SWOT matrix, several strategies can be developed, namely:

S-O (Strength-Weakness) Strategy is a strategy that focuses on strengths and opportunities to obtain alternatives by using internal strengths by taking maximum advantage of external opportunities: (1) Increasing market share outside Ciamis Regency through digital marketing. JST produced by the Parikesis group has strong product value, namely organic products that support a circular economy, so wider marketing is needed so that the wider community can reach these products. Research (Putri, Redaputri and Rinova, 2022) shows that digital marketing can help MSME businesses increase profits during the pandemic by selling products through e-commerce and social media; (2) is Control and improve the quality of organic fertilizer products. To control and improve the quality of organic fertilizer products, the following steps can be taken (Yuni E, Suamba and Sri A, 2018; Rahardjo, Hasbullah and Taqi, 2019; Kamba, Ambar and Nurhapsa, 2022; Putri, Redaputri and Rinova, 2022; Priyanto et al. 2023): selection of raw materials; production process control; quality control testing; and packaging and storage., and (3) Improve organizational management and always prioritize customer satisfaction. To improve organizational

management and prioritize customer satisfaction, there are several strategies that can be implemented by the Parikesit Farmers Group, namely implementing customer relationship management (CRM) practices to increase customer satisfaction (Schroeder, 2019).

S-T (Strength -Threats) strategy is a strategy that focuses on strengths and threats to obtain alternatives by using internal strengths with maximum external consideration: (1) Increase quality fertilizer education through the expansion of organic farming training. The strategy is based on the theory of Integrated Marketing Communication (IMC), which is a strategic concept for designing communication between brands and customers through various marketing media. In this case, implementing marketing communication with the education process of quality organic fertilizer products and supporting the circular economy. Education is carried out directly in seminars/training and also through existing social media; and (2) Improve partnerships with fixed raw material providers. The application of agribusiness partnerships is important in order to achieve product quality according to consumer needs, specialization of activities for efficiency, and a forum for government and private cooperation in the implementation of farming businesses (Aula, Nasution and Ardiantono, 2019; Saptaria et al. 2022).

**IFE Score**

| | Strong 3.0 – 4.0 | Average 2.0 – 2.99 | Weak 1.0 – 1.99 | |
|---|---|---|---|---|
| High | I Grow and Build | II Grow and Build | III Hold and Maintenance | |
| Med | IV Grow and Build | V Hold and Main-tenance | VI Harvest or Divest | EFE Score |
| Low | VII Hold and Maintenance | VII Harvest or Divest | IX Harvest or Divest | |

Figure 2. IE Matrix

W-O (Weakness-Opportunity) strategy is a strategy that focuses on exploiting external opportunities to minimize internal weaknesses: (1) Become a sponsor by promoting products at an event. Sponsorship is a form of marketing that business people can do to promote brands or products to the public. One common form of sponsorship is event sponsorship, which is a form of activity that aims to improve the company's image and make the wider community remember the name of the company's brand; (2) Implement product certification procedures. To conduct product research to improve a product so that it can obtain SNI certification and quality, the following steps can be taken: Companies should prepare several things for the purposes of SNI certification for organic fertilizer products; and (3) Increase members abilities in digital marketing. To improve the digital marketing skills of its members, an organization may consider providing an HR certification program focused on digital marketing. By combining technical and social skills, members can become effective digital marketing leaders who can collaborate well with other departments and lead their teams to achieve digital marketing goals (Braun, Schöllhammer and Rosenkranz, 2021; Sudewa and Fahreza, 2021; Hina et al. 2022).

W-T (Weakness-Threats) strategy: utilization of computerized financial systems to determine prices and advance communications. Information and Communication Technology (ICT) can provide the business sector with more efficient and effective tools for market research, communication and resource allocation. Computer-based accounting information systems can help accountants calculate more complex production costs and prepare reports when needed (Sinaga, Wahyudi and Prima, 2020; Sudewa and Fahreza, 2021). Financial Technology (FinTech) can increase the speed of money circulation thereby improving society's economy (Pratama, 2020; Hasriliandi, 2022).

**The Decision Stage**

The decision stage is the stage of determining the priority of strategies using the Analytical Network Process (ANP) method with the help of Super Decision software (Aghasafari, 2020). In this part of the analysis, it will be divided into 5 perspectives, namely: management or business practitioner (R1), business partner (R2), customer (R3), stakeholder (R3), expert or academic perspective (R4), and finally the average value of all respondents. The total number of clusters in the ANP research framework related to organic fertilizer marketing strategies is 2 clusters, with alternative business development strategy clusters as the main part of the analysis. Based on the results of the limiting matrix normalization, the weight of each alternative strategy is known which is the basis for selecting a priority alternative strategy. The selected priority alternative strategy is the alternative strategy with the highest weight. The weight results for each alternative can be seen in Table 4.

Table 4. ANP analysis results

| Description | R1 | R2 | R3 | R4 | R5 | Average |
|---|---|---|---|---|---|---|
| 1. Business development to increase profits | 0.322 | 0.427 | 0.329 | 0.329 | 0.332 | 0.348 |
| 2. Expanding Farmer Group members | 0.334 | 0.245 | 0.257 | 0.257 | 0.382 | 0.295 |
| 3. Expanding the partnership network | 0.343 | 0.328 | 0.414 | 0.414 | 0.276 | 0.355 |
| SO1: Increasing market share outside Ciamis Regency through digital marketing | 0.366 | 0.365 | 0.374 | 0.374 | 0.424 | 0.380 |
| SO2: Quality control of organic fertilizer products | 0.293 | 0.425 | 0.287 | 0.287 | 0.276 | 0.314 |
| SO3: Improved organizational management | 0.336 | 0.210 | 0.339 | 0.339 | 0.299 | 0.305 |
| ST1: Increasing quality fertilizer education through expanding organic farming training. | 0.395 | 0.710 | 0.522 | 0.522 | 0.435 | 0.517 |
| ST2: Increasing partnerships with permanent raw material providers. | 0.169 | 0.078 | 0.159 | 0.159 | 0.203 | 0.154 |
| WO1: Become a sponsor by promoting products at an event | 0.084 | 0.078 | 0.115 | 0.115 | 0.117 | 0.102 |
| WO2: Carry out product certification procedures. | 0.605 | 0.290 | 0.478 | 0.478 | 0.563 | 0.483 |
| WO3: Increase members' abilities in digital marketing. | 0.246 | 0.344 | 0.227 | 0.227 | 0.167 | 0.242 |
| WT: Utilization of computerized systems in the fields of communications and finance | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 |

If we look at the average total weight in Table 4, the quality organic fertilizer education strategy is expected to encourage consumers to buy more organic fertilizer products (ST1) is the highest alternative strategy with an average value of 51.7%, indicating that this strategy is an alternative strategy. selected priorities according to respondents' assessments. The strategy of increasing partnerships with raw material providers remains a strategy supported by the eight strategies in the SO, WO, and WT strategies. The alternative strategy with the second highest weight is the use of a computerized financial system to determine prices and communication progress (WT) of 50% and the alternative strategy with the lowest weight is the strategy of increasing partnerships with fixed raw material providers (ST2), indicating that the ST2 strategy is an alternative strategy that has less influence on business in the opinion of respondents.

## Development Business Model

The marketing reach expansion strategy is dependent on all other strategies, thus the BMC elements developed include key partnership, key activities, key resources, value propositions, customer relationships, channels and cost structure. These elements influence other elements including, customer segments and revenue streams. The development of the Parikesit Farmers Group canvas business model can be seen in Figure 4.

| Key Partners | Key Activities | Value Propositions | Customer Relationships | Customer Segments |
|---|---|---|---|---|
| 1. Raw material partners: PT Bengkel Bumi Mandiri, Members of the Parikesit Farmers Group, and the Bangunsari Village Community<br>2. Operational partners: Members of the Parikesit Farmers Group, Regional Government/ Relevant Departments, Banking<br>3. *Increasing partnerships with permanent raw material providers*<br>4. *Promotion of products by becoming a sponsor at an event* | 1. Preparation of raw materials<br>2. Management of organic fertilizer<br>3. Packaging and Labeling<br>4. Product marketing<br>5. *Carry out product certification procedures*<br><br>**Key Resources**<br>1. Human Resources<br>2. Physical Resources (formula, production equipment)<br>3. Intellectual Resources (brand)<br>4. Financial Resources (capital)<br>5. *Increase members' abilities in digital marketing* | 1. Pioneer of Liquid Organic Fertilizer (POC) products in Bangunsari Village<br>2. Quality organic fertilizer products with long shelf life<br>3. Affordable product prices<br>4. The product does not have a certificate<br>5. *Control the quality of organic fertilizer products* | 1. Communication via WhatsApp and through training<br>2. Make a post on Facebook<br>3. Improved organizational management<br>4. *Increasing quality fertilizer education through expanding organic farming training*<br><br>**Channels**<br>1. Directly to consumers through organic farming training<br>2. Outlet at the Parikesit Farmers Group, Bangunsari Village, Ciamis Regency<br>3. *Increasing market share outside Ciamis Regency through digital marketing* | 1. Age over 17 years<br>2. Men and Women<br>3. All levels of society<br>4. Customers with a healthy lifestyle<br>5. Customer interest in organic fertilizer<br>6. Benefits of organic products for health |
| **Cost Structure**<br><br>1. Fixed Cost: Cost of production premises, transportation facilities, taxes and production equipment<br>2. Variable Cost: costs for procuring raw materials, auxiliary materials, packaging and labels, transportation fuel, and visit/ training costs<br>3. *Utilization of computerized systems in the fields of communications and finance* | | **Revenue Streams**<br><br>1. Sales of organic fertilizer products<br>2. Sales of organic rice | | |

Figure 4. Development business model canvas

**Managerial Implications**

The managerial implications of this research are focused on analyzing inputs, activities, outputs, outcomes, and impacts. The company's internal and external inputs have been mapped in the business model so that it is continued with SWOT analysis. To overcome the problems faced, alternative business development strategies were analyzed through ANP analysis. The strategy implemented by the Parikesit Farmer Group will have an impact on expanding partnerships with raw material providers, farmer entrepreneurs, and customers, increasing the number of organic farmer group members, and increasing sales profits.

The farmers should improve on the strategic alternatives obtained including key activities, customer segments, and revenue streams. The farmers should increase product promotion by applying Integrated Marketing Communication (IMC) theory. The government is expected to support producers and consumers of organic fertilizers through price policies and distribution of products equivalent to chemical fertilizers.

## CONSLUSIONS AND RECOMMENDATIONS

**Conclusions**

The Parikesit Farmers Group canvas business model mapping has fulfilled nine elements, including customer segments, value propositions, channels, customer relationships, revenue streams, key activities, key resources, key partnerships, and cost-structure. (1) customer segments that are diversified and evenly distributed between male and female, aged above 17 years with an interest in organic products, (2) value proposition in the form of Liquid Organic Fertilizer (POC) products with 8 different types according to plant needs, (3) channels selling directly to farmer consumers through organic farming training, (4) customer relationships in the form of a friendly and loyal attitude through communication via WhatsApp and Facebook, (5) revenue streams from sales of organic fertilizer and organic rice products, (6) key resources consist of human, physical, intellectual and financial resources (7) key activities in the form of production activities and product marketing activities, (8) key partnerships in the form of partnership relationships with suppliers and sales partners using a general trade partnership pattern, (9) costs structure consists of fixed costs and variable costs.

The main strength factor is that the Parikesit Farmers Group already has an offline business channel with eight organic fertilizer products for various needs. The main weakness lies in the product not being SNI certified and quality. Furthermore, the main opportunity factor is the development of information technology such as social media so that it can increase promotions and good relationships with customers, while the biggest threat factor is that competitors have more optimal distribution channels. So that the total values obtained for internal factors and external factors are 2.717 and 2.742 respectively. This puts the Parikesit Farmers Group in hold and maintenance based on analysis using the IE matrix so that alternative strategies that can be implemented are market penetration and product development.

The results of the analysis of strategy formulation and SWOT analysis produce nine alternative strategies, namely (1) increasing market share outside Ciamis Regency through digital marketing; (2) Controlling the quality of organic fertilizer products; (3) Improving organizational management; (4) Increasing quality fertilizer education through the expansion of organic farming training; (5) Increasing partnerships with fixed raw material providers; (6) Product promotion by sponsoring an event; (7) Implementing product certification procedures; (8) Improving the ability of members in digital marketing; (9) utilize the system computerization of communication and finance.

Based on ANP analysis, the first priority that must be carried out is to educate more about quality organic fertilizers, through the expansion of organic farming training, it is hoped that many customers will buy Parikesit organic fertilizer products. However, to be able to educate consumers, it is necessary to carry out product certification procedures by conducting product research in the laboratory for the sake of product safety and distribution permits, so that products can be SNI and quality certification. So that customers will have more confidence in the organic fertilizer products produced by the Parikesit Farmer Group. Changes to the new BMC of the Parikesit Farmer Group, namely by adding several aspects to the nine elements that are the main focus of this research based on the crucial problems faced by the company are elements of value propositions, customer relationships, channels, key partners, key resources, and cost structure.

## Recommendations

This study contributes to identifying strategic management that serves as a valuable resource for future research, assists in the formulation of a theoretical framework, and facilitates progress in this field. In this study, there are still many obstacles in terms of data availability, especially in the flow of business income and expenses, so further research is recommended to be able to research deeper and more complete research in terms of data recording. Such as in terms of economic aspects of capital resources) and comparison of the products studied with existing product/previous products through the Break Even Point (BEP) benchmark.

**CONFLICTS OF INTEREST:** The author declares no conflict of interest.

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