

Business Development Strategy for Banana Stem Chips (Case Study of the Amanah Yogyakarta Women Farmers Group)

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Abstract. In Indonesia, banana stems are not commonly consumed. However, banana stem chips are now being developed as an innovative food product. The Amanah Women Farmers Group is a pioneer in banana stem chips in Yogyakarta, but they are not yet marketed on a large scale. In addition, the Amanah Women Farmers Group has become a training center for banana stem chip processing for Women Farmers Groups from various regions in Indonesia. This study aims to identify alternative strategies and strategic priorities that can be applied in developing the banana stem chip business of the Amanah Women Farmers Group. Data collection methods included in-depth interviews with selected informants, observation, documentation, and focus group discussions (FGD). Data were analyzed using SOAR and AHP (Analytical Hierarchy Process). The resulting strategies included value chain integration and innovation, market expansion and digitalization, strengthening collaborative networks, and optimizing human resource capacity. The priority strategy is to improve production quality and capacity through mechanization and digitalization to maintain continuity and efficiency (0.170). This strategy promotes economic efficiency while aligning with the circular economy by converting agricultural waste into valuable products to reduce the environmental burden.

1 Introduction

The zero-waste concept rejects the assumption that waste is merely a by-product with no value and cannot be avoided at the end of a product's life cycle [1]. Based on 2024 data from the National Waste Management Information System (SIPSN) (Fig 1), food waste dominates Indonesia's waste composition with a percentage of 39.31% [2]. This indicates that organic waste from consumption activities is the largest contributor to waste in Indonesia. This percentage reflects high consumption patterns and suboptimal organic waste management. Untreated food waste will decompose well and produce methane gas, which has the potential to contribute to global warming.

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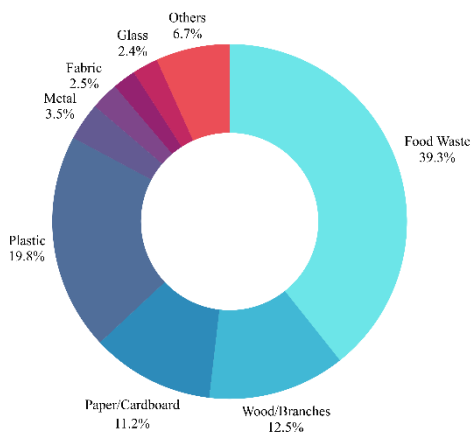


Fig 1. Waste Composition in Indonesia

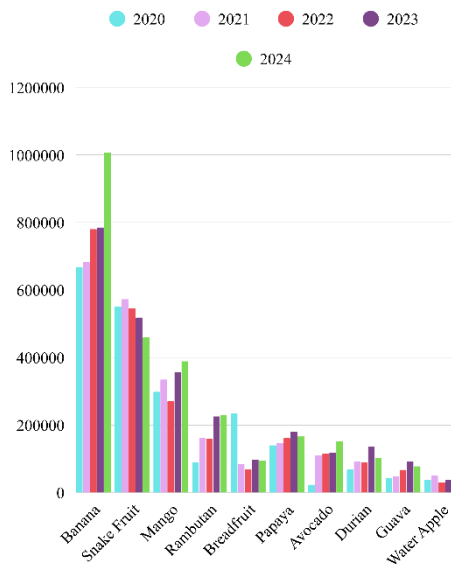


Fig 2. Fruit Production in the Special Region of Yogyakarta 2020-2024

Based on the zero waste concept, food diversification encourages the utilization of all parts of plants to reduce organic waste and increase economic value. Banana plants (*Musa* spp.) are a perfect example of zero waste plants because the entire plant biomass can be processed into valuable products. Banana plants are versatile because all plants components, including the fruit, roots, corm, stem, leaves, heart, and skin, can be utilized for various purposes. Based on data from the Central Statistics Agency of the Special Region of Yogyakarta Province (Fig 2), bananas are the fruit with the largest production in the 5-year period (2020–2024) [3].

Banana stems are a high-value commodity overseas, but in Indonesia, they are not commonly consumed. Banana stems are considered agricultural waste, so after harvest, they are simply discarded or left to rot. In addition, Indonesian culinary culture is more familiar with bananas, banana hearts, and banana leaves as food ingredients, but banana stems are rarely consumed because they are considered inedible. This is influenced by social stigma, limited nutritional knowledge, and a lack of exploration of local flavors and recipes. Banana stems chips are an innovative food product made from banana tree waste. The Amanah Women Farmers Group is a pioneer MSME that processes banana stems into banana stems chips. In addition, the Amanah Women Farmers Group is also a reference point for training in the production of banana stems chips. Currently, the production of banana stem chips is still limited, and their marketing primarily targets souvenir shops with a focus on tourists. Bantul Regency, Special Region of Yogyakarta, is a tourist destination frequently visited by both domestic and foreign tourists, offering a great opportunity for the Amanah Women Farmers Group to market their banana stem chip products.

Beyond the business aspect, the development of banana stem chips also has a significant environmental dimension. Until now, banana stems have often been agricultural waste that has not been utilized and has the potential to cause methane gas emissions if decomposed naturally. Transforming this waste into high-value food products represents a circular economy and sustainable bio-economy practice. This initiative not only creates new business opportunities but also contributes directly to reducing agricultural waste and minimizing the environmental footprint of banana cultivation. The development of this business needs to be supported by a comprehensive strategy that not only pursues commercial profits but also

internalizes sustainability principles so that its positive impacts, whether economic, social, or environmental, can be optimized and maintained in the long term.

Previous research on banana production business development strategies in Women Farmers Groups used the SWOT method, which focused on problems. In addition, a study on the economic feasibility of the banana stem chip business using the SWOT method [4]. This study used a combination of SOAR and AHP analysis. SOAR analysis focuses on the formulation and implementation of positive strategies by highlighting strengths, developing opportunities to encourage aspirations, and establishing clear outcome indicators. AHP analysis is used to determine the priority strategies for developing the banana stem chip business of the Amanah Women Farmers Group. Therefore, this study aims to formulate alternative and priority strategies for developing the right banana stem chip business for the Amanah Women Farmers Group.

2 Research Method

This study was deliberately conducted in the Amanah Women Farmers Group as a pioneer of banana stem chips located in Bantul Regency, Special Region of Yogyakarta. Data were collected through in-depth interviews with key informants, observation, and documentation. The key informants consisted of the chairperson and administrators of the Amanah Women Farmers Group, Department of Agriculture and Food Security of the Special Region of Yogyakarta Province, Indonesia; Department of Food Security and Agriculture of Bantul Regency, Indonesia; and Department of Cooperatives and SMEs of the Special Region of Yogyakarta Province, Indonesia. This study used a descriptive approach. SOAR analysis was used to identify strengths, opportunities, aspirations, and measurable results by focusing on positive aspects to generate alternative strategies. The Analytical Hierarchy Process (AHP) was used to prioritize alternative strategies through pairwise comparisons and assessments based on consistency carried out by key informants. The data analysis steps in this study were as follows:

2.1 SOAR Identification

A literature review and in-depth interviews with five key informants were conducted to examine each component of SOAR.

2.2 Formulation of Strategic Alternatives

In-depth interviews with three key informants were conducted to formulate strategic alternatives SA (Strength-Aspirations), OA (Opportunity-Aspirations), SR (Strength-Result), and OR (Opportunity-Result) using the SOAR matrix.

2.3 Determining the priority of alternatives strategies

2.3.1 The first stage was conducted using the Delphi method [5].

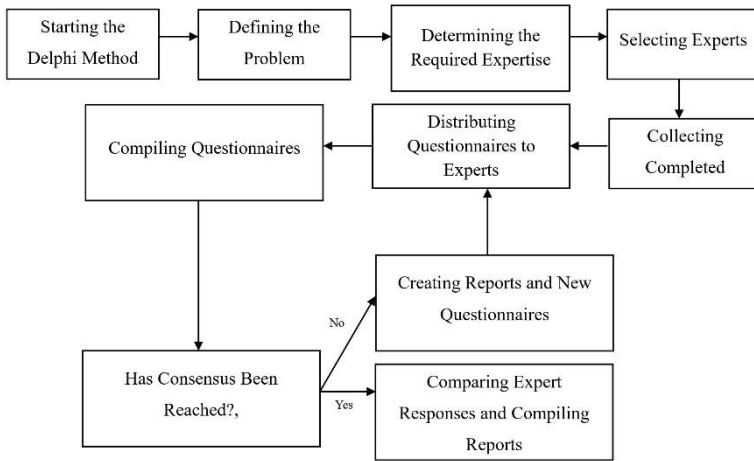


Fig 3. Delphi Method Stages [5]

2.3.2 The second stage used the Analytical Hierarchy Process (AHP).

The problem was decomposed into several clusters and was structured in a hierarchical diagram starting from the objectives, criteria, sub-criteria, and finally alternative strategies.

Weights were assigned to criteria at each hierarchical level using AHP questionnaire questions in the form of pairwise comparisons with a Saaty rating scale [6].

Table 1. Saaty Rating Scale

| Intensity of Importance $\alpha_{i,j}$ | Description |
|---|--|
| 1 | The level of importance of the two criteria is equal |
| 3 | Criterion i is slightly more important than criterion j |
| 5 | Criterion i is significantly more important than criterion j |
| 7 | Criterion i is clearly more important than criterion j |
| 9 | Criterion i is absolutely more important than criterion j |
| 2,4,6,8 | The middle value when there is doubt between two adjacent scales |
| Resiprocal $\alpha_{i,j}$ | Criterion i has a higher importance value than criterion j, so criterion j has a reciprocal value with i |

Data were analyzed using Super Decision 3.2 software. Then, the Consistency Index (CI) was calculated.

$$CI = \frac{\lambda_{\max} - n}{n - 1} \tag{1}$$

Subsequently, the Consistency Ratio (CR) was calculated.

$$CR = \frac{CI}{RI} \tag{2}$$

If the consistency ratio (CR) calculation result was greater than 10% or 0.1, then a recalculation was performed. However, if the consistency ratio was less than or equal to 10% or 0.1, then the calculation value could be said to be correct [7].

The synthesis results from each key informant were calculated using the geometric mean.

$$GM\bar{y} = \sqrt[n]{y_1 y_2 y_3 \dots y_n} \tag{3}$$

Using the geometric mean method, the geometric mean was produced, then the matrix comparison paired combined integrated [8].

3 Result

3.1 Characteristics of The Amanah Women Farmers Group

Based on Table 2, the characteristics of the 18 respondents include age, education level, length of membership in Amanah Women Farmers Group, and experience in processing banana waste. The average age of respondents is 54.56 years, indicating that most respondents were within the productive age range and therefore have greater physical strength, creativity, dynamism, and the ability to quickly absorb innovation. The average education level is 10.11 years, meaning that the majority of respondents had successfully completed junior high school.

Table 2. Characteristics of The Amanah Women Farmers Group

| No | Variable | Mean | Standard Deviation | Min | Max |
|----|--|-------|--------------------|-----|-----|
| 1 | Age (Years) | 54.56 | 14.45 | 22 | 76 |
| 2 | Education (Years) | 10.11 | 3.20 | 6 | 16 |
| 3 | Legth of time with women farmers group | 4.28 | 3.78 | 0.5 | 11 |
| 4 | Experience in processing banana waste | 3.03 | 1.92 | 0.5 | 6 |

The average length of time respondents have been members of Amanah Women Farmers Group is 4.28 years, indicating that respondents have experience and mastery of techniques for processing ripe bananas. Regarding experience in processing banana waste, particularly banana stem chips, the average experience of respondents is 3.03 years. This indicates that Amanah Women Farmers Group is committed to transforming banana waste into products with high economic value.

3.2 Strengths, Opportunities, Aspirations, and Results Analysis

3.2.1 Strengths

Product

Banana stem chips have a savory taste and crispy texture, known as Taroja Chips. Banana stem chips are packaged in standing pouches and come with complete product information. Banana stem chips are halal and P-IRT certified. Certified products are an important subfactor in strength.

Raw Material

The raw material used is banana stems because it is abundantly available in the surrounding environment of the Amanah Women Farmers Group. The smoothness of the production process is determined by the availability of raw materials in the right quantities.

Human Resources

All members of the Amanah Women Farmers Group have mastered the technique of producing banana stem chips, from sorting raw materials and processing to packaging. This is the main capital for business sustainability and larger-scale business development. This is the main capital for business sustainability and larger-scale business development. The participation of the Women Farmers Group members not only contributes to the achievement of program targets but also fosters a sense of ownership that encourages business sustainability.

Organizations

The Amanah Women Farmers Group is affiliated with several organizations, such as the Sidomulyo Village MSME, APPHP (Association for Agricultural Product Processing and Marketing), and the Srikandi Livestock Group Initiative. Organizational culture influences MSME performance.

Price

The price of banana stem chips with a net weight of 80 grams is IDR 10,000. This price is affordable because it aligns with the value received by consumers.

Production

The production process for banana stem chips is still done conventionally, but the drying process now uses a dome dryer. The Amanah Women Farmers Group not only functions as a production unit but also as a center of practical knowledge. This is evidenced by the presence of interns and groups come from various regions who come to learn about the production process of banana stem chips.

3.2.2 Opportunities

Technology

There are social media platforms, such as Instagram, WhatsApp Business, and TikTok, that can be used as promotional media. The Amanah Women Farmers Group can also utilize e-commerce to sell banana stem chips. Social media and e-commerce collectively influence the increase in SME sales volume [9].

External Support

External support comes from various stakeholders, ranging from financial institutions, the government, to MSME community associations. The Bantul Regency Food Security and Agriculture Agency facilitates special guidance for local food processing MSMEs. The Special Region of Yogyakarta Agriculture and Food Security Agency also has a special program that focuses on the implementation of a circular economy. There are Women Farmers Groups associations from the village to the regency level. Women Farmers Groups are expected to be able to take advantage of all training and coaching activities, whether sourced directly from the government or from non-governmental organizations [10].

Marketing

The Special Region of Yogyakarta Government, through its relevant agencies, organizes various exhibition events across several areas in the Special Region of Yogyakarta, such as the Bantul Expo, Gebyar Kebumian, Gunung Kidul Regional Week, and Farmers' Market. These events serve as strategic marketing tools that not only bring MSME actors and consumers together directly, but also build branding and awareness of local products among the wider community. The Yogyakarta Special Region Cooperative and SME Agency regularly holds local SME product exhibitions approximately ten times a year. In addition to marketing products, these expos also serve as a medium for promoting environmentally friendly products to raise public awareness of green campaigns [11].

3.2.3 Aspirations

Innovation

The innovations carried out by the Amanah Women Farmers Group focus on creating economic added value, utilizing unused resources, developing skills in processing local food diversifying, and creating regional specialty products. Sustainable innovation through the integration of sustainability principles can create positive social and environmental impacts, thereby increasing appreciation among consumers who care about these issues.

Sustainability

The Amanah Women Farmers Group focuses on sustainable economic empowerment by improving member's welfare through increased income and profitability. Social sustainability is emphasized in creating employment opportunities, especially for women. The implementation of mocaf innovation in collaboration with the Purwonegoro Village Women Farmers Group, not only demonstrates current economic and social benefits but also reflects the group's aspirational goals [12]. This innovation is envisioned as a replicable and scalable model for other rural women farmer groups, while fostering institutional learning through capacity building, knowledge transfer, and strengthened organizational capabilities. In the long term, this approach supports the creation of an inclusive and sustainable rural agro-processing system .

3.2.4 Results

Economy

Partnerships with supermarkets and tour operators are among the steps taken to strengthen distribution and open up new market segments. The Amanah Women Farmers Group's participation in exhibitions is not only to increase direct sales but also to strengthen consumer loyalty. Mass production of banana stem chips is a response to the increasing demand. Collectively, this strategies aim to ensure continuous and resilient income growth for the Amanah Women Farmers Group.

Skills

Intensive training in business management, marketing, and branding represents a strategic investment in human resource development that supports the business independence and adaptability of the Amanah Women Farmers Group. Enhanced managerial and marketing skills enable members to independently manage operations, respond to changing market conditions, and adjust marketing strategies in line with consumer preferences. Mastery of marketing and branding not only facilitates access to wider market segments but also strengthens the group's capacity to sustain competitiveness over time. Ultimately, these

| | | |
|--|--|--|
| <ol style="list-style-type: none"> 3. Increasing the income of Amanah Women Farmers Group members. 4. Increasing the profits of Amanah Women Farmers Group. 5. Improving the entrepreneurial skills of Amanah Women Farmers Group members. 6. Improving the skills of Amanah Women Farmers Group members in processing local food diversification. 7. Creating job opportunities, especially for women. 8. Banana stem chips become a regional flagship product. | <ol style="list-style-type: none"> 2. Developing the area as a model village for education, tourism, and training to create job opportunities (S8; A7). 3. Integrated and sustainable product development master plan (S1, S2, S3, S4, S5, S6, S7, S8; A1, A2, A3, A4, A5, A6, A7, A8). 4. Ensuring the availability of sustainable raw materials from an agribusiness perspective (S1; A2). 5. The existence of a business incubation scheme for group entrepreneurs (S1, S4, S5, S6, S8; A1, A2, A3, A4, A5, A6, A7, A8). 6. Product redesign and rebranding following market trends (aspects of productivity and product processing as well as market-oriented redesign with a green economy perspective) (S2, S7; A8). 7. Regulatory support in product development from local governments through a cross-sectoral approach (S1, S4, S5, S7, S8; A1, A2, A3, A4, A6, A7, A8). | <p>institutions, research institutions, universities, government, and other parties to develop the banana management industry (O3, O5, O8; A3, A4, A5).</p> <ol style="list-style-type: none"> 3. Optimizing digital transformation through integration across various marketing platforms (O1, O2; A3, A4). 4. Development of a group-managed financial management system (O3; A4, A5). 5. Business partnerships with other business networks or cross-sector business development schemes (O8; A3, A4, A5). 6. Actively participating in marketing and promotional events that attract the market and are conducted on an ongoing basis (O7, O8; A4, A7). |
| <p style="text-align: center;">Results (R)</p> <ol style="list-style-type: none"> 1. Product innovation in terms of taste and nutrition. 2. Actively using digital platforms to market products independently and sustainably. 3. Partner with parties that can support business continuity, such as supermarkets and tour operators. 4. Intensive training related to business management, marketing, and branding. 5. The modernization of banana stem chip packaging aims to enhance consumer appeal. 6. Contributing to exhibitions or bazaars both within and outside the Special Region of Yogyakarta. 7. Mass production of banana stem chips. 8. Formation of Amanah Women Farmers Group members who have the | <p style="text-align: center;">SR</p> <ol style="list-style-type: none"> 1. Improving the capacity of Amanah Women Farmers Group human resources in relation to improving the quality, quantity, nutrition, and safety of products (S4; R1). 2. Improving production quality and capacity through mechanization and digitalization to maintain continuity and efficiency (S1; R7). 3. Actively participating in product development schemes, product variations in line with market trends (S2; R1). 4. Promoting and establishing business partnerships through networking schemes (S5; R3). 5. Conducting training schemes in partnership (S8; R4, R8). 6. Modernizing production management with support from cooperation partners (S4; R7). | <p style="text-align: center;">OR</p> <ol style="list-style-type: none"> 1. Maximizing social media in marketing through websites and conducting live sales via TikTok, Instagram, etc. (O1, O2; R2). 2. Collaborating with other parties (designating areas as tourist destinations, creating brochures, and designating locations as internship sites) to conduct offline marketing (O4, O7; R3). 3. Encouraging the government to formulate policies regarding the development or consumption of local food (O5; R6). 4. Registering processed products as signature local processed goods (O5; R6). 5. Optimizing collaboration and partnerships in integrated supply chain management (O8; R3). 6. Implementing partnership schemes with banking and non-banking financial institutions through feasible and bankable business performance (O3; R8). |

| | | |
|--|--|--|
| ability to manage the banana stem chip business independently. | | |
|--|--|--|

3.4 Determination of Alternative Strategy Priorities

The priority alternatives for the first stage of the strategy using the Delphi method yielded the following seven priority strategy alternatives.

Tabel 4. Alternative Strategy Results

| No | Alternative Strategy | Type of Strategy |
|----|--|------------------|
| 1 | Integrated and sustainable product development master plan | SA |
| 2 | Improving the capacity of Amanah Women Farmers Group human resources in relation to improving the quality, quantity, nutrition, and safety of products | SR |
| 3 | Encouraging the government to formulate policies on the development or consumption of local food | OR |
| 4 | Maximizing social media in marketing through websites, conducting live sales via TikTok, Instagram, etc. | OR |
| 5 | Regulatory support in product development from local governments through a cross-sectoral approach | SA |
| 6 | Improving production quality and capacity through mechanization and digitalization to maintain continuity and efficiency | SR |
| 7 | Collaborating with all parties, including financial institutions, research institutions, universities, government, and other parties to develop the banana management industry | OA |

The Amanah Women Farmers Group began determining strategy priorities for developing the banana stem chip business with a literature study and discussions with key informants to identify the clusters to be implemented in the AHP hierarchical structure. The Analytical Hierarchy Process structure in this analysis consists of four levels. The first level is the purpose, which is to determine the priorities for developing strategies. The second level contains SOAR components (Strengths, Opportunities, Aspirations, and Results). The third level contains business development criteria obtained through a literature review. The criteria at the third level include innovation, networking, trust, proactivity, adaptability, and marketing ability. The fourth level contains alternative business development strategies obtained from the results of the SOAR analysis. All data entered into the Super Decision 3.2 software showed that the consistency ratio (CR) value in each pairwise comparison was less than 0.1. If the consistency ratio is less than or equal to 0.1, the calculation results are considered valid.

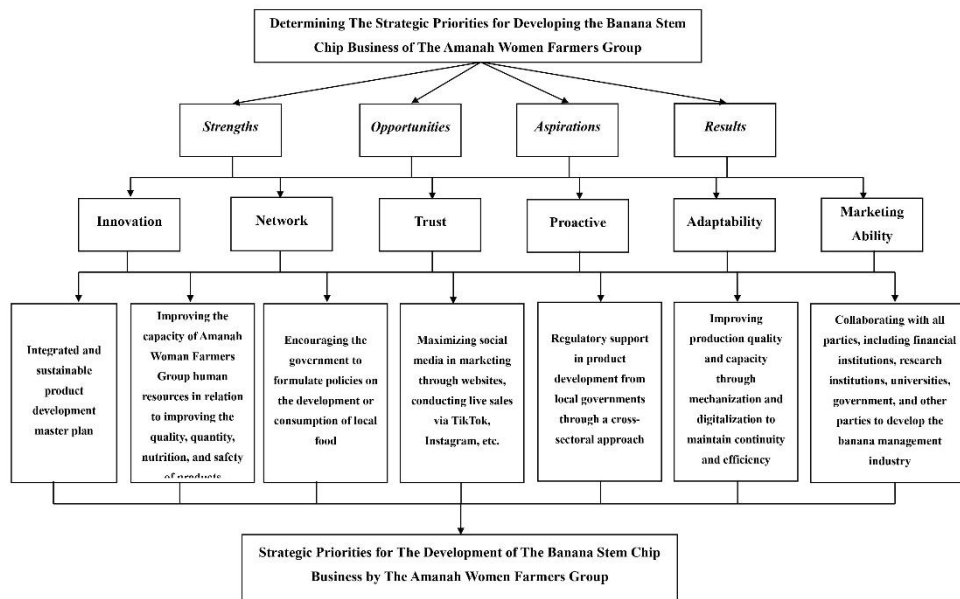


Fig 4. AHP Framework

3.4.1 SOAR Cluster Weights

Table 5. SOAR Cluster Weights

| No | Cluster | Normalized by Cluster | Limiting | Priority |
|----|----------------------|-----------------------|----------|----------|
| 1 | <i>Strengths</i> | 0.2404 | 0.0801 | 3 |
| 2 | <i>Opportunities</i> | 0.1562 | 0.0520 | 4 |
| 3 | <i>Aspirations</i> | 0.2435 | 0.0815 | 1 |
| 4 | <i>Results</i> | 0.2413 | 0.0804 | 2 |

Based on Table 5, the synthesis results indicate that aspirations are the node in the SOAR cluster with the highest priority in developing the banana stem chip business, with a value of 0.2435. The next priority order is followed by results (0.2413), strengths (0.2404), and finally opportunities (0.1562). Overall, the aspirations node contributes 0.0815 to the ultimate goal of determining the priority of the banana stem chip business development strategy for the Amanah Women Farmers Group.

The aspirations dimension in the SOAR context serves as the main actor in uniting the strengths and opportunities of the Amanah Women Farmers Group to develop the banana stem chip business. The aspirations dimension can be used to determine future targets and strengthen the motivation of the members of the Amanah Women Farmers Group. The aspiration dimension in SOAR is associated with dreams, visions, desires, or wishes to achieve personal or organizational goals and objectives. The aspiration dimension reflects that the Amanah Women Farmers Group focuses not only on economic goals, such as creating economic added value and increasing profits and income, but also on non-economic goals, namely reducing agricultural waste in the surrounding environment. Without clear aspirations, the Amanah Women Farmers Group's banana stem chip business risks stagnation or lack of development. Aspirations describe the strategic goals of the organization by considering strengths and opportunities, then explicitly stating the desires of stakeholders [13].

3.4.2 Weigh of Business Development Criteria Clusters

Tabel 6. Weight of Business Development Criteria Clusters

| No | Cluster | Normalized by Cluster | Limiting | Priority |
|----|-------------------|-----------------------|----------|----------|
| 1 | Innovation | 0.1281 | 0.0427 | 5 |
| 2 | Network | 0.1133 | 0.0378 | 6 |
| 3 | Trust | 0.2438 | 0.0813 | 1 |
| 4 | Proactive | 0.1464 | 0.0488 | 4 |
| 5 | Adaptability | 0.1695 | 0.0565 | 3 |
| 6 | Marketing Ability | 0.1819 | 0.0606 | 2 |

Table 6 shows that trust has the highest priority weight in the cluster of criteria that influence the development of banana stem chip businesses, with a value of 0.2438. The next priorities are marketing ability (0.1819), adaptability (0.16952), proactivity (0.1464), innovation (0.1281), and networking (0.1133). The trust node contributes a total of 0.0813 in determining the priority of the banana stem chip business development strategy of the Amanah Women Farmers Group. This is not in line with research [14], which states that innovation is the top priority in strategies to improve SME performance, with a value of 0.254, followed by networking as the second priority (0.188), trust, marketing ability, proactive attitude, and adaptability. This is because banana stem chips are still an uncommon product for Indonesian consumers. Trust is the key to transforming this stigma into acceptance. Products with superior quality not only trigger initial attraction but also build customer trust and loyalty. Trust can capture consumers' attention and foster a desire to purchase desired products. Customer trust significantly contributes positively to customer loyalty.

3.4.3 Weight of Alternative Strategy Cluster

Tabel 7. Weight of Alternative Strategy Cluster

| No | Cluster | Normalized by Cluster | Limiting | Priority |
|----|--|-----------------------|----------|----------|
| 1 | Integrated and sustainable product development master plan | 0.1159 | 0.0386 | 7 |
| 2 | Improving the capacity of Amanah Women Farmers Group human resources in relation to improving the quality, quantity, nutrition, and safety of products | 0.1436 | 0.0479 | 4 |
| 3 | Encouraging the government to formulate policies on the development or consumption of local food | 0.1544 | 0.0515 | 2 |
| 4 | Maximizing social media in marketing through websites, conducting live sales via TikTok, Instagram, etc. | 0.1437 | 0.0479 | 3 |
| 5 | Regulatory support in product development from local governments through a cross-sectoral approach | 0.1283 | 0.0428 | 6 |
| 6 | Improving production quality and capacity through mechanization and digitalization to maintain continuity and efficiency | 0.1704 | 0.0568 | 1 |
| 7 | Collaborating with all parties, including financial institutions, research institutions, universities, government, and other parties to develop the banana management industry | 0.1350 | 0.0450 | 5 |

Based on Table 7, improving quality and production capacity through mechanization and digitalization to maintain continuity and efficiency ranks highest in the alternative strategy cluster with a value of 0.1704. The next priority is encouraging the government to formulate policies that support the development and consumption of local food (0.1544). Another important strategy involves maximizing the use of social media for marketing through websites and live sales on platforms such as TikTok, Instagram, etc (0.1437), along with increasing the human resource capacity of the Amanah Women Farmers Group to improve product quality, quantity, nutrition, and safety (0.1436). In addition, collaboration with multiple stakeholders, including financial institutions, research institutes, universities, and government agencies is essential to develop the banana stem chip industry (0.1350), supported by cross-sectoral regulatory assistance (0.1283) and the formulation of an integrated and sustainable product development master plan (0.1159).

The conventional production process of banana stem chips results in inconsistencies in the size and thickness of the chips. Mechanization is a strategic step to improve production efficiency and ensure consistency in the taste, texture, and quality of banana stem chips. Mechanization in the Amanah Women Farmers Group banana stem chips business can be done by using cutting, drying, and frying machines. This aims to create banana stem chips that are uniform in quality, in terms of shape, taste, and crispiness. Automation can improve product quality, effectiveness, and efficiency, so that the industry is better prepared to face surges in demand and open up opportunities for aggressive and sustainable market expansion.

Meanwhile, digitization is not only related to technology, but also to preparing the Amanah Women Farmers Group to survive and thrive in an increasingly competitive business environment. Digitization help the Amanah Women Farmers Group become more responsive to market changes, enabling them to adjust their banana stem chip products to market needs. Digitalization through a website has significantly increased the visibility of the Azalea Farm Women Farmers Group, attracting visitors from outside the city and expanding its marketing reach. The combination of mechanization and digitalization not only strengthens the Amanah Women Farmers Group's operations in producing banana stem chips but also builds the product's image. The expected end result is to change the public's perception of the product from something unusual to something valuable [15].

4. Conclusion

Based on the analysis conducted, it can be concluded that the Amanah Women Farmers Group's banana stem chips business development strategy is divided into several key approaches. The main priority is improving production quality and capacity through mechanization and digitalization to ensure operational continuity and efficiency. Furthermore, this business development needs to be supported by increasing human resource capacity in aspects of product quality, quantity, nutrition, and safety, as well as optimizing digital marketing through social media platforms such as TikTok and Instagram.

External support is also considered crucial, particularly in the form of multi-stakeholder collaboration involving financial institutions, universities, government, and research institutions. In addition regulatory support from local governments to create a conducive climate for the development of local food products. Operationally, the group is advised to provide products sustainably and build brand trust through educational content on social media.

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