A Strategic Approach to Agribusiness System Development for Accelerating Saba Banana Production

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Abstract Saba banana, a widely recognized banana variety, is extensively cultivated in many countries worldwide, especially in Southeast Asia. This research is important because banana production in the study area is very low, only 5.45 tons/ha/year, compared to actual production which can reach 10-30 tons/ha/year. The purpose of this study was to propose an effective strategy to accelerate banana productivity in the study area, thus motivating farmers to expand their agricultural activities. A SWOT approach has been carried out in this research to assess the current condition of banana production and identify the main factors that influence its growth. Descriptive statistics and cluster analysis were used to classify banana farmers/producers into different groups. The SWOT analysis revealed that the limited access to information regarding cultivation techniques and suboptimal marketing systems hindered development opportunities. To effectively tackle these issues, it is essential to devise appropriate strategies and implement them accordingly. The research shows that the key factor influencing productivity growth is immediately improving the very low technical capabilities of farmers by revitalizing group activities that focus on improving production cultivation techniques and emphasizing marketing aspects. This comprehensive approach will contribute to the overall growth and success of banana production in the region.

Keywords Banana, Business Development, Accelerating Strategy

1. Introduction

The cultivation of Pisang Kepok, also known as Saba bananas, is widespread throughout numerous countries globally. Bananas exhibit a notable carbohydrate content ranging from 20.3 to 29.3 grams per 100 grams. Additionally, they contain essential mineral salts, including potassium (0.6-0.8 milligrams per 100 grams), magnesium (24-30 milligrams per 100 grams), phosphorus (16-29 milligrams per 100 grams), and potassium (264-387 milligrams per 100 grams) [1]. Like rice, wheat, and corn, bananas are often regarded as one of the foremost staple foods globally [2,3,4]. The starch content in bananas can be processed into banana flour and used as an alternative food resource or for other industrial purposes [5]. Bananas have been developed as a strategic export commodity. This commodity is a primary income source in Uganda, Kenya, and other African countries [6].

Saba bananas have been widely known and popular in Indonesia and many other countries, especially in Southeast Asia, for a long time. Its presence can be found in all corners of the country, especially in rural areas. Saba bananas are preferred because of their dense texture, high starch content, and versatility in various industries, including the food industry [7]. Demand for bananas, including Saba bananas, tends to increase because the average annual per capita consumption level is relatively high and stable, namely 7.54 kg/capita/year 2016 then 30 kg/capita/year 2021 [8,9]. The latest food balance data show a trend of increasing banana consumption in Indonesia, mainly driven by increased consumption in the food industry. Considering that Saba bananas are suitable for use as industrial raw materials, this shows an increase in demand, especially for Saba bananas.

The analysis of data from the Food Balance Sheet reveals some noteworthy observations [10]. Recent studies have demonstrated an upward trend in banana consumption rates within the Indonesian population. Domestic household banana consumption in 2020-2021 increased from 1.79 million tonnes to 2.39 million tonnes, an increase of 33.81%. Meanwhile, exports in the same period increased from 0.17 million tons to 0.20 million tons, an increase of 17.65%, so that overall demand for banana commodities in the form of consumption and exports increased by 37.0%. Several destination countries for banana exports include Malaysia, China, Japan, United Arab Emirates, Kuwait, Saudi Arabia, and Singapore [11].

Considering that Saba bananas are suitable for use as industrial raw materials, this has led to an increase in demand, especially for Saba bananas.

Given that Saba bananas can function as raw materials for industry, this situation is a reflection of the increased demand for Saba bananas themselves [12].

The cultivation of Saba bananas is generally simple and is commonly practiced by rural households. They are often planted around houses and mixed with other plants [13]. The cultivation practices for Saba bananas are relatively uncomplicated, with minimal treatment after planting. Weed control and applying fertilizers are only carried out when necessary, and other cultivation techniques, such as pruning, are seldom applied.

The main areas of banana cultivation in Indonesia are located in the provinces of Lampung, West Java, and East Java. However, it should be noted that the province of Kalimantan also contributes to the overall national banana production, which is around 4% of all output [9]. However, it is important to note that the province of Kalimantan holds considerable potential for commodity growth, mostly because of the abundant land availability in the area. A significant decline in production of 5.13% (Table 1) in banana cultivation in Kalimantan occurred in the last half decade. This decline is in contrast to the stagnant growth rate of national banana production, only increasing by 0.31%. The decline in output primarily transpired within

Kalimantan

three provinces: West Kalimantan, Central Kalimantan, and South Kalimantan. In contrast, it should be noted that there were significant gains in banana output observed in East Kalimantan and North Kalimantan. An overview of the banana production levels in Kalimantan is presented in Table 1.

Considering the growing demand for bananas, efforts to accelerate production must be implemented. The most effective approach to achieving it is through monoculture cultivation and applying appropriate cultivation techniques, which can lead to simultaneous increases in production and productivity [14]. The government has been promoting and establishing a monoculture system on appropriate land parcels in conjunction with pertinent agencies. Expanding banana farming outside of Java is particularly viable due to the availability of land for business expansion. One of the areas where monoculture banana farming is being developed outside of Java is in several regions within Seruyan Regency, Central Kalimantan Province.

The government initiated implementing the monoculture system for Saba banana farming in Seruyan Regency, Central Kalimantan Province. This initiative aimed to optimize the utilization of unused land held by residents. The implementation of this strategy has resulted in the significant development of Saba banana production in Seruyan Regency, positioning it as a prominent hub within Central Kalimantan Province. The Saba banana products originating from this specific location have successfully penetrated markets beyond the province, specifically the market in Banjarmasin City, located in the South Kalimantan Province. Nevertheless, notwithstanding the market's growth, there has been a lack of commensurate progress in production.

Recent trends indicate a decline in Saba banana production in Seruyan Regency. The decrease in production is attributed to the limited growth of the monoculture banana farming area and reduced productivity, resulting in lower average banana bunch yields [15]. The notable price disparity between farm gate and consumer prices may also contribute. The current circumstances have resulted in stagnation inside the company system, impacting the overall productivity endeavors.

267.4

%)

-5.13

| | Year | | | | | |
|--------------------|-------|------|-------|------|-------|-----------|
| Province | 2015 | 2016 | 2017 | 2018 | 2019 | Growth (9 |
| West Kalimantan | 144.7 | 72.8 | 59.8 | 46.5 | 46.9 | -27.00 |
| Central Kalimantan | 27.2 | 41.8 | 38.6 | 26.2 | 26.7 | -5.04 |
| South Kalimantan | 79.5 | 81.6 | 79.4 | 81.4 | 62.8 | -4.73 |
| East Kalimantan | 72.1 | 79.3 | 102.6 | 98.3 | 103.8 | 9.43 |
| North Kalimantan | 12.1 | 19.9 | 12.9 | 26.5 | 27.1 | 18.90 |

293.2

278.8

295.5

335.7

Table 1. Kalimantan Banana Production 2015-2019 (000 tons)

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Furthermore, farmers' enthusiasm for engaging in agricultural activities is generally driven by the rewards they receive, which should be considered adequate and higher when compared to alternative business opportunities [16]. In the specific context of Saba banana agriculture in the Seruyan Regency, providing sufficient incentives can motivate farmers to augment output levels. This may be achieved through two primary means: firstly, by expanding the cultivation areas, which remains a viable option, and second, by implementing cultivation technical improvements to increase overall productivity. Several factors, including internal factors under farmers' control and external factors beyond their control, influence this condition [17,18]. Furthermore, the on-farm and off-farm performance also influences the excitement for agricultural businesses. It is important to thoroughly examine the Saba banana agribusiness system in Seruyan Regency to foster entrepreneurial enthusiasm and facilitate enhanced productivity. 10

The primary aim of this study is to examine the internal and external factors that impact the banana business system in Seruyan Regency. Evaluating internal and external factors is crucial in determining the direction and priority of development initiatives. The findings of this study will serve as valuable insights to enhance the business passion of banana farmers, leading to increased production of bananas in the region.

2. Methods

The present study was conducted at the primary hub of banana production in Seruyan Regency, Central Kalimantan Province. The data and information were collected through primary and secondary data collection methods. Primary data were collected through direct interviews with traders and selected banana farmers using questionnaires, while secondary data were obtained from relevant publications and agency reports.

The selection of respondent farmers was carried out using multi-stage random sampling. Three groups of banana farmers were randomly chosen, and from each selected group, six farmers were randomly selected as respondents. The trader samples were selected through snowball sampling based on the interviews with the respondent farmers.

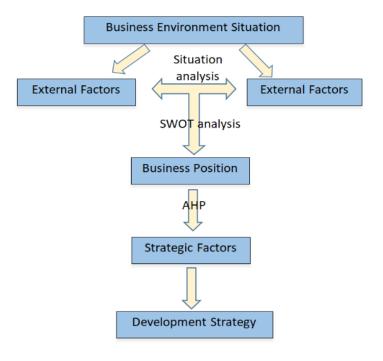


Figure 1. The Method to Formulate Development Strategies

The research applied several analytical approaches, such as examining the company environment scenario and utilizing SWOT analysis [19], moreover, the application of AHP to formulate development strategies for the business is shown in Figure 1. Analyzing the business environment involves evaluating external and internal factors [20]. The analysis encompassed many external factors: physical (geo-spatial), technical, economic, social, legal, and market. The internal determinants examined encompassed the performance of farmers and farmer groups in both on-farm and off-farm endeavors, encompassing areas such as productivity, financing, marketing, group dynamics, and group activities [21,22]. These factors were assessed using an interval scale with criteria described in Table 2.

| Table 2 | . SWC | T Criteria |
|---------|-------|------------|
| | | |

| Score | External Factors | Internal Factors |
|-------|----------------------|------------------|
| -2 | Serious Threat | Very Weak |
| -1 | Moderate Threat | Weak |
| D | Neutral | Neutral |
| 1 | Moderate Opportunity | Strong |
| 2 | High Opportunity | Very Strong |

The SWOT analysis was performed by giving relative weights to the assessed components and aspects. The weighted ratings were utilized as a benchmark for formulating alternative solutions for organizing the banana agribusiness system in Seruyan Regency [23]. The proposed approach to the agribusiness system structure emphasizes enhancing efficiency at the level of producer farmers. This strategy also considers the potential for integration across different levels of the supply chain through the idea of integrated supply chain management. Overall, the research employed data collection methods, analysis techniques, and strategic considerations to gain insights into the Saba banana agribusiness system and develop appropriate strategies for its enhancement in Seruyan Regency.

3. Results and Discussion

The study respondents were 87.01% men and 12.99% women, with the level of formal education relatively low (70.07% at an elementary level, 27.57% at a secondary level, and the rest at a higher level). According to the respondents' age, all of them are working age, and meanwhile, most of them manage 2 - 5 hectares (94.99%) with a level productivity of bananas around 5.45 tons/ha. The average productivity in the research area is only 5.45 tons/ha/year, which is very low compared to the actual productivity that can reach 10-30 tons/ha/year. In 2012-13, Madhya Pradesh had the highest output level at 66.0 tons per hectare, while Gujarat followed closely behind with a productivity of 64.09 tons per hectare [1].

The investigation findings, as presented in Table 3,

suggest a need for enhancements in the banana agribusiness system in the Seruyan Regency to position itself as a prominent banana-producing hub outside the geographical confines of Java. When comparing the banana farm businesses in the Philippines, characterized by an average farm size of approximately 50 hectares and the implementation of advanced production technology and well-organized marketing systems [24], it becomes evident that the farms in Seruyan Regency are significantly smaller, typically spanning less than 2 hectares. Furthermore, the cultivation technology and market structure in Seruyan Regency need improvement.

Table 3. SWOT analysis of Saba banana business

| External factors | | | | |
|---|--|---------------------|---------------|---------------------|
| No | Attributes - Aspect | Score (S) | Weight (W) | S x W |
| A | Physic (Geo-spatial) | <mark>0</mark> .86 | 0.17 | 0.15 |
| В | Technic | <mark>-1</mark> .13 | 0.17 | -0.19 |
| C | Economic | <mark>-0</mark> .62 | 0.17 | <mark>-0</mark> .11 |
| D | Social | 1.23 | 0.17 | 0 .21 |
| E | Legal | <mark>0</mark> .16 | 0.17 | <mark>0</mark> .03 |
| F | Market | <mark>-0</mark> .11 | 0.17 | -0.02 |
| Averaş | ge score of External factors* | <mark>0</mark> .07 | | |
| Weighted <mark>Score of External Factors</mark> | | | 1.02 | <mark>0</mark> .07 |
| Intern | al factors | | | |
| No | Attribute - Aspect | Score (S) | Weight (W) | S x W |
| A. | On Farm: Production | 0.13 | 0.20 | <mark>0</mark> ,03 |
| в | On Farm: Financing | <mark>-0</mark> .45 | 0.20 | <mark>-0</mark> .09 |
| С | Marketing | -0.28 | 0.20 | 0.06 |
| D | On Group: Dynamics | -0,62 | 0.20 | -0.12 |
| E On Group: Activities | | <mark>-1</mark> ,40 | 0.20 | <mark>-0</mark> .28 |
| Averaş | Average score of Internal factors* | | | |
| Weigh Factor | ted <mark>Score of Internal</mark> 's | | 1.00 | -0.52 |

Despite the prevailing economic deceleration resulting from the global COVID-19 epidemic, the discernible effects on the advancement of the saba banana sector within the region have been inconsequential. The primary reason for this can be attributed to the assistance rendered by local governmental bodies via pertinent organizations, which has effectively alleviated the impacts of the pandemic. As a result, there are still development opportunities, albeit on a smaller scale. However, it is important to address the fundamental weaknesses within the farming community and their groups.

The findings above underscore the imperative of directing attention towards augmenting different facets of

the banana agribusiness system in the Seruyan Regency. Enhancements in the scale of farms, advancements in cultivation techniques, and modifications in market organization are imperative for the sustained expansion and prosperity of the agricultural sector. Furthermore, it is imperative to prioritize enhancing farmers' resilience and capacities by identifying and rectifying any existing shortcomings and offering essential support to augment their productivity and competitiveness within the market.

The analysis of external factors reveals that the overall situation does not provide significant opportunities or pose major threats to the Saba banana industry, as indicated by the low average external factor score of 0.07, as shown in Figure 2. This suggests that external factors do not strongly influence the industry's prospects.

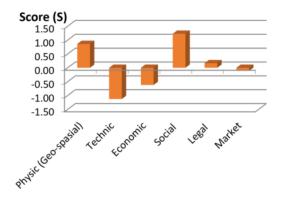


Figure 2. External Factor Situation Analysis

Regarding the physical aspect, there are opportunities for developing the banana industry, with an average score of 0.86. The availability of suitable land and the region's reputation as a center for banana production present favorable conditions for growth. Additionally, the proximity of the production location to local market centers provides easy access, further supporting the industry's potential. However, challenges exist regarding transportation infrastructure, particularly at the farming level, threaten the industry's development.

Conversely, the technological dimension presents substantial challenges to the industry, as indicated by an average score of -1.13. The absence of progress in marketing networks and the banana processing sectors poses a significant peril. Moreover, it is imperative to enhance farmers' production skills and the domains of harvest and post-harvest activities. The issue of limited access to information on cultivation and post-harvest technology is a matter of concern, particularly when comparing it to the commercial conditions in the Philippines.

These findings highlight the need for strategic interventions to address the technical challenges faced by the saba banana industry in Seruyan Regency. Efforts should be directed towards improving production techniques, enhancing harvest and post-harvest practices, and disseminating knowledge and information on cultivation and post-harvest technology. Additionally, the development of marketing networks and processing industries should be prioritized to exploit the opportunities present in the physical aspect. The saba banana industry can achieve sustainable growth and overcome external threats by addressing these challenges and leveraging available opportunities.

The Saba banana sector is confronted with a potential risk in its economic dimension, as evidenced by an average score of -0.62. The principal factor contributing to this threat is the adverse regional economic growth caused by the Covid-19 outbreak. Nevertheless, it is anticipated that this circumstance will be transitory and potentially evolve into a favorable prospect once the issue of Covid-19 is effectively resolved. The demand for bananas and banana-derived industrial goods exhibits a consistent level of stability, with a discernible inclination towards an upward trajectory in consumption rates. Hence, with the amelioration of economic circumstances, the saba banana business can effectively leverage these favorable circumstances.

The social dimension of the banana industry offers significant prospects for its growth and advancement, as indicated by an average score of 1.23. The banana industry is widely recognized and highly esteemed within the local community, occupying a significant role in the social fabric. The development of monocultures for this particular commodity has witnessed a significant surge. However, producing banana crops in small-scale private gardens and residential areas remains scarce. Social acceptability and involvement foster a favorable atmosphere for the growth and advancement of the Saba banana sector.

Concerning the legal dimension, the impact on corporate development potential is somewhat constrained, exhibiting an average score of 0.16. The local government has implemented various forms of support and regulatory measures to foster the growth of the banana commodity industry, albeit with some inconsistencies. Nevertheless, assistance has not been supported by enough information and direction about acquiring financial resources. Furthermore, the absence of adequate support in market knowledge poses a substantial challenge to the progress and growth of the banana business. The restricted availability of market information impeded the farmers' capacity to market their products and investigate prospective opportunities efficiently. To surmount these obstacles, it is imperative to effectively tackle the economic ramifications of the Covid-19 pandemic and reinstate economic vitality within the region.

Additionally, efforts should be made to improve market access by providing farmers with relevant market information and facilitating access to financial resources. Enhancing the legal framework and providing continuous support from the local government will also contribute to the sustainable development of the Saba banana industry.

The market aspect poses significant threats to the saba banana industry, as indicated by an average score of -0.11. While the market is not yet saturated, and price transmission appears attractive for business development, the monopsonistic market structure presents a major challenge [25]. This structure gives traders a dominant position in determining prices, resulting in low bargaining power for farmers. The pricing of saba bananas is controlled mainly by traders, which can negatively impact farmers' profitability and economic sustainability. Furthermore, there is a considerable price difference between producers and end consumers, indicating inefficiencies in the trading chain of this commodity. This price disparity hinders business development and suggests that there may be issues related to market inefficiencies, lack of transparency, and inadequate distribution channels.

Consequently, improving farmers' bargaining position within the market structure is essential to mitigate these market-related threats. It can be achieved through initiatives such as forming farmer cooperatives or associations to negotiate prices and enhance their market power collectively. Additionally, efforts should be made to promote fair and transparent pricing mechanisms, improve market information dissemination, and explore opportunities for direct marketing channels that can reduce the price gap between producers and consumers. By addressing these market challenges, the saba banana industry in Seruyan Regency can achieve greater profitability, increased efficiency, and a more sustainable business environment for farmers.

The internal factor analysis reveals a weak position in the overall performance of farmers and farmer groups. Although individual farmers show satisfactory performance in production, some areas require improvement. The average score of 0.13 indicates that

farmers have made progress in the technical application of production. However, several challenges need to be addressed. Figure 3 shows the internal factors of the Saba banana business.

Firstly, using varied seedlings obtained from sources other than seed halls raises concerns about the productivity and quality of the banana crops. It is important to ensure the use of certified seedlings from reliable sources to enhance productivity. Fertilization practices also need improvement. Currently, farmers rely on their discretion rather than following recommended fertilization practices. The implementation of appropriate fertilization procedures, by following recommended practices, can significantly improve the growth and productivity of banana plants. In addition, the lack of regulation regarding the density of banana stands inside a clump may impact the overall production of banana bunches. Establishing a maximum number of banana stands per clump, such as five stands, can help regulate the density and optimize production.

Pre-harvest and harvesting practices are carried out by farmers themselves, which may lead to variations in timing and techniques. Providing guidance and training to farmers on proper pre-harvest and harvesting methods would be beneficial to ensure optimal yield and quality. Post-harvest treatment, specifically the decomposition of banana bunches into banana comb, is also handled by farmers. It is important to ensure proper post-harvest practices, including handling, storage, and transportation, to minimize losses and maintain the quality of the harvested bananas. Overall, addressing these technical aspects of banana production through training, access to improved seedlings, and guidance on recommended practices can contribute to increased productivity and efficiency in the banana agribusiness system in Seruyan Regency.

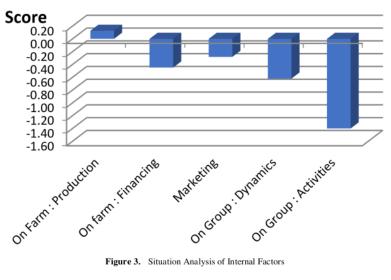


Figure 3. Situation Analysis of Internal Factors

The prevailing sales mechanism within the banana agribusiness sector in Seruyan Regency operates on a unitweight basis, irrespective of the dimensions of the bananas. Farmers are presented with two alternatives for selling their agricultural produce: vending their harvests directly at their farm's entrance, where local traders converge to procure bananas, or transporting their yields to nearby village dealers. The determination of banana prices per kilogram rests exclusively in the hands of traders, resulting in a limited ability for farmers to negotiate. The primary contributing factor can be attributed to a monopsonistic market structure, which restricts competition and limits farmers' access to market information and pricing [26].

Another weakness in the internal factors is the financing aspect of banana farming, with an average score of -0.45. Although there was some initial assistance from the local government during the early stages of monoculture banana farming, subsequent assistance has not been provided. The lack of available funds for business development hinders the progress of farmers in improving their farming practices and increasing their production, such as by adopting tissue culture biotechnology [27,28]. It is crucial to enhance market access and pricing transparency for the farmers to tackle these issues effectively. Efforts can be made to establish mechanisms that allow farmers to be more active in determining prices and reduce their dependence on individual traders. It can be done by establishing farmer cooperatives or associations that collectively negotiate prices and market their produce.

Furthermore, providing financial assistance and access to funding options for farmers can effectively boost their business management capacities and encourage investment in advanced farming practices. It is recommended that local government entities and pertinent organizations contemplate the provision of continuous financial aid, training initiatives, and advisory services to farmers. This approach aims to enhance their aptitude in financial management and foster sustainable expansion of their agricultural enterprises. By effectively tackling market access, price, and finance deficiencies, the saba banana agribusiness system in Seruyan Regency has the potential to enhance efficiency and facilitate the prosperity of farmers engaged in banana cultivation.

The primary source of financing for banana production in Seruyan Regency predominantly relies on the growers themselves. While certain farmers have secured business credit funding from financial or banking organizations, many depend on their resources. However, it is worth noting that some farmers may also receive additional funds from village traders. This reliance on traders for financial support weakens farmers' bargaining position when selling their crops.

In marketing and sales, there are weaknesses, with an average score of -0.28. Farmers commonly use a passive strategy while seeking buyers and depend on dealers to initiate contact with them. The efficacy of post-harvest treatments is constrained by the absence of appropriate

sorting and grading procedures for decomposing banana bunches based on size. The sales process predominantly relies on the passive approach of awaiting the arrival of traders, with farmers exhibiting less proactivity in directly presenting their products to potential purchasers or village markets. The determination of banana prices is primarily influenced by village traders, leading to suboptimal pricing outcomes for farmers. The farmers' capacity to negotiate more favorable rates is further constrained by their reliance on village traders for their company's sustainability.

Furthermore, it is important to enhance farmers' access to financial resources and develop their financial management skills to improve the funding and marketing components. It may be done by working with financial institutions and educating farmers on how to get loans and other forms of financial assistance. Additionally, farmers should be encouraged to explore alternative marketing channels, such as participating in local markets or establishing direct relationships with buyers, to have more control over pricing and sales. Moreover, introducing proper post-harvest handling practices, including sorting and grading by size, can help improve the marketability of the bananas and potentially fetch better prices. It may require training and support from agricultural extension services or relevant agencies to educate farmers on effective post-harvest techniques and marketing strategies.

By effectively resolving the identified inadequacies in financing and marketing, farmers involved in the Saba banana agribusiness system can enhance their market position, augment their profitability, and establish the long-term viability of their enterprises. The state of farmer organizations involved in the banana industry in Seruyan Regency falls short of anticipated outcomes. The group dynamics exhibit a lack of strength, as shown by an average score of -0.62. The primary focus of farmer groups lies in their organizational structure, yet there is a shortage of explicit task descriptions for group managers and few occurrences of group meetings. The clarity of the group's activity plan is lacking, and group members' participation level during meetings is comparatively low. In general, the efficacy of farmer groups can be deemed suboptimal.

The absence of collective engagement represents a notable drawback in the advancement of banana cultivation within the region, as indicated by an average score of -1.40. Although the group initially offered technical guidance on cultivation, harvest, and post-harvest procedures, there appears to be a shortage of continuous support in this domain. The group has not proactively pursued market prospects or assumed responsibility for selling its members' products. However, local merchants operating within the hamlet facilitate the acquisition of market demand and pricing data. The vulnerability is exacerbated by the absence of proactive measures to pursue market prospects, establish marketing channels, and coordinate with other farmer groups.

Moreover, it is essential to fortify the farmer groups and increase their contribution to the advancement of banana cultivation to address these constraints. It may be accomplished by offering administrators and members of the group training and capacity-building programs that strongly emphasize cooperation and active involvement. Group meetings should be conducted regularly to facilitate knowledge exchange, decision-making, and planning of collective activities. Additionally, farmer groups should be encouraged to actively seek market information and explore marketing opportunities. It can involve establishing partnerships with buyers and local markets or even considering collective marketing initiatives where the group can negotiate prices and sell their products collectively. Coordination and collaboration with other farmer groups can also be beneficial for sharing experiences and best practices and collectively addressing common challenges.

By strengthening the dynamics and activities of farmer groups, the banana agribusiness system in Seruyan Regency can benefit from improved information sharing, better access to resources, enhanced bargaining power, and increased collaboration among farmers. The SWOT analysis conducted for the banana agribusiness system in Seruyan Regency reveals several important findings. The analysis elucidates the interplay of several internal and external factors that influence the business, as depicted in Figure 4.

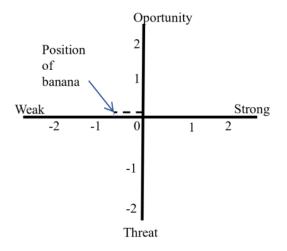


Figure 4. SWOT mapping of the banana business

Based on the examination of the strengths aspects, it is observed that individual farmers demonstrate satisfactory performance in the production aspect, indicating a certain level of competence. The region also benefits from favorable conditions for banana cultivation, including available and suitable land. Moreover, the local community's familiarity with the banana business and the region's reputation as a center of banana production provide a solid foundation for development. However, weaknesses in the system also need to be addressed. The performance of farmer groups is lacking, with weak dynamics and low participation in meetings. It indicates a need for improvement in group functioning.

In the present context, it is imperative to prioritize examining external issues, with specific attention directed toward those that present substantial risks, particularly within technical considerations. The system can better overcome its challenges by targeting these areas for improvement, such as enhancing technical practices and addressing the lack of marketing networks and processing industries. Enhancing the overall efficacy and competitiveness of the banana agribusiness system in Seruyan Regency can be achieved through strategic interventions in external factors. An alternative strategy to accelerate the development of the Saba banana business is to address the identified weaknesses while leveraging available opportunities. The following steps can be taken: Individual Farmer Improvement: 1)

- a) Enhance technical practices, such as managing the population per banana clump, following
- the population per banana clump, following recommended fertilization schedules, and implementing regular treatments.
- b) Ensure the use of high-quality and uniform seedlings to improve productivity.
- Promote the adoption of current best practices among farmers by providing training opportunities and forums for knowledge exchange.
- Group Revitalization:

2)

- Restructure the farmer group by appointing a dedicated manager responsible for marketing activities.
- b) Develop clear work plans and consistently implement them to direct group activities.
- c) Align the vision and goals of farmers and village traders regarding the importance of the banana business.
- d) Build the capacity of group managers in technical aspects of banana cultivation.
- e) Improve the group's access to financial resources through guidance on funding opportunities.
- f) Foster collaboration with village traders, integrating them into the group as marketing managers and providing them with additional incentives when needed.
- g) Establish effective communication channels to share harvest readiness information, market needs, and prices among group members.
- h) Coordinate with similar farmer groups and explore opportunities for horizontal integration at the producer level in the medium term.

By implementing these strategies, individual farmers can improve their cultivation practices and increase productivity, while the revitalized farmer group can enhance marketing efforts, access financial resources, and foster collaboration. This comprehensive approach will help address weaknesses and seize opportunities, leading to

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accelerated growth and success in the Saba banana business. 2) The system coordinator, such as the local government, can implement proactive measures to enhance controllable technological, market, and legal factors to enhance the range of possibilities. The following measures can be implemented:

- 1) Dissemination of Technical Information:
 - a) Conduct awareness campaigns and training programs to educate farmers about improved cultivation techniques, including information on breeding plants.
 - Provide access to resources and expertise for farmers to acquire superior seedlings from reliable nursery gardens.
- 2) Improvement of Market Conditions:
 - a) Develop and enforce regulations that facilitate the banana business, particularly in marketing. It involves promoting fair pricing, reducing market barriers, and enhancing market transparency.
 - Establish channels for farmers to access market information, including prices, demand trends, and consumer preferences.
 - c) Encourage partnerships between farmers and local businesses, fostering local banana-based industrial development that can create additional market opportunities.
- 3) Streamlining Legal Framework:
 - a) Introduce supportive policies and regulations that ease access to business development funds for banana farming.
 - b) Simplify administrative procedures and reduce farmers' bureaucratic hurdles when seeking financial assistance.

The system coordinator can establish a conducive environment for the Saba banana company by implementing several measures, including enhancing technical expertise, facilitating market access, and improving the legal framework. The measures above will enhance the prospects available to farmers, foster the expansion of the business, and make a valuable contribution to the holistic advancement of the banana sector.

4. Conclusions

The downturn in the banana industry within the Seruyan Regency production center can be attributed chiefly to internal weaknesses and limited external opportunities. However, there are actionable strategies to address these challenges:

 Individual farmers can improve their cultivation practices by implementing more disciplined techniques and using superior seedlings. It will enhance productivity and quality.

- Revitalizing farmer groups is crucial, with a focus on both technical and marketing activities. It includes appointing dedicated managers, creating work plans, improving technical skills, and integrating village traders into group management roles for marketing purposes.
- 3) Vertical integration at the farmer level is recommended by incorporating village traders into the group structure, ensuring effective marketing coordination. Additionally, exploring horizontal integration by coordinating and merging similar groups can lead to stronger collective bargaining power.
- 4) Increasing opportunities can be achieved by disseminating technical information to farmers, facilitating the ease of doing business through local regulations, and promoting the growth of local banana-based industries. These actions can stimulate market demand and create new avenues for growth.

By identifying and mitigating internal vulnerabilities and strategically utilizing existing opportunities, the Saba banana industry in Seruyan Regency has the potential to undergo a revitalization process and provide a foundation for long-term and sustainable development. The cooperation of farmers, the local government, and relevant stakeholders will be essential to implementing these plans and ensuring the long-term viability of the banana industry in the area. Based on the research and findings drawn from the study, it is recommended that the following measures be taken to expedite the business growth of saba banana cultivation in the Seruyan District:

-) Technical Guidance: Relevant agencies and agricultural institutions must provide farmers with continuous and planned technical guidance. It can include training programs, workshops, and demonstrations on improved cultivation techniques, fertilization practices, pest and disease management, and post-harvest handling. Regular technical support will help farmers enhance their skills and improve productivity.
- 2) The local administration should actively facilitate the socialization of vision about the significance of banana cultivation for farmers and village traders. It can be achieved through awareness campaigns, seminars, and workshops organized by the government in collaboration with related institutions. The aim is to emphasize the potential and economic benefits of the saba banana business, fostering a shared understanding and commitment among all stakeholders.
- 3) Regularly monitoring and evaluating the progress and effects of the implemented strategies are crucial aspects of effective monitoring and evaluation. In coordination with relevant institutions, the local government should establish a monitoring system to track the performance of individual farmers, farmer

groups, and the overall banana farming sector. Regular assessments play a crucial role in identifying areas that require improvement, evaluating the effectiveness of interventions, and making required adjustments to ensure the success of business growth endeavors.

Implementing this research can yield several benefits for the Saba banana company in the Seruyan District. These benefits include the acquisition of advanced technical knowledge, the facilitation of improved collaboration among stakeholders, and the establishment of a comprehensive monitoring system. This initiative is expected to significantly contribute to the sustainable development and expansion of the banana sector, enhancing farmers' socio-economic well-being and fostering economic prosperity within the region.

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