

CARICA PAPAYA AGRIBUSINESS DEVELOPMENT STRATEGY IN WONOSOBO DISTRICT

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Abstract

Background: In Dieng, which is the border of Banjarnegara and Wonosobo, there are up to 67.000 carica papaya trees with a production capacity of over 119 in 2021, so that industrial businesses in the horticultural agricultural sector have great opportunities to develop.

Purpose: The aim of this research was to identify existing constraints from both internal and external distribution factors so that a distribution strategy could be found to increase overall sales volume.

Design/methodology/approach: The data analysis technique was Strengths, Weaknesses, Opportunities & Threats (SWOT).

Findings/results: Meanwhile, the case study methodology used ten informants as sources. The IFAS calculation result was 0.27, and the EFAS calculation result was 0.08. The main implication of the results of this research showed that the implementation of an effective distribution strategy, including licensing and infrastructure improvements, could significantly boost revenue from sales of typical food and beverages in Wonosobo.

Conclusion: Plan to grow sales volume in Wonosobo Regency's carica papaya horticultural industry, emphasizing distribution permit ownership, facility and infrastructure upgrades, and certification to guarantee client enjoyment and safety. Getting a distribution permit requires upgrading production facilities and infrastructure, which will boost consumer confidence and enable effective distribution strategies to boost sales.

Originality/value (State of the art): An effective and efficient distribution Strategy will Increase Sales of Processed Carica Fruit Products in Wonosobo.

Keywords: carica papaya, agribusiness development, development strategy, swot, distribution factors

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INTRODUCTION

The carica papaya plant, which is unique to the Dieng plateau, is one of the natural treasures of Wonosobo district. The primary ingredient in the carica syrup drink, popular in the Wonosobo district, is papaya carica. This famous snack or drink serves as a memento for visitors to the Dieng plateau. Therefore, in order to maintain the availability of this raw material, the sustainability of Carica papaya needs to be treated appropriately.

Data from the Keajar District Agriculture Service, Wonosobo Regency, in the 2016 period there were 43,000 trees with 14,000 quintals and a productivity level of 0.35%. However, there was a decrease in 2017, 12,472 quintals were produced, and productivity dropped to 0.27% and in 2021, with 67,473 trees harvested, there was an increase production 119.98 quintals, productivity 1.78% while in 2020 the harvest area was 66,662 trees, production 22,319 quintals and productivity 0.33%. And in 2019 the harvest area was 66.600 trees, production was 60.900 quintals, productivity was 0.91% (Nasiron et al. 2022).

In the period 2019 to 2021, there was instability in the continuity of the Carica papaya harvest and this resulted in a decline in the productivity of the Carica fruit processing industry. Most tourists who come to the Dieng area are very curious about the carica syrup drink which has many benefits for the digestive tract.

Previous research stated that the benefits of Dieng or karika papaya which has been processed into this drink has a high nutritional content and has benefits for improving the digestive tract so that it can maintain stomach health (Popene 1920, referenced in Hidayat, 2000).

Narrative Wonosobo government agricultural instructor, it is estimated that in 2021 the current estimate is that the number of trees that are not yet productive is 24.300 trees from a land area of approximately 115.77 Ha, of which it is estimated that only 91.800 trees will be productive. Currently, papaya carica plants are only used as tumpeng sari plants and terraced plants in areas around the Dieng plateau, Wonosobo Regency (Nasiron et al. 2022).

In the scope of distribution activities from Carica farmers to Carica syrup micro business industry players who have not made a tradeoff between cost aspects, flexibility aspects and speed of response to customers, it is necessary to choose a distribution strategy with what is happening currently, namely instability in the distribution of raw materials. Which resulted in a decline in sales of the typical papaya karika food drink. The decreasing number of sales will of course have obstacles, both internal and external, so that alternative strategic steps are needed to determine marketing channels that are expected to increase sales volumes in the future.

Expanding business development by increasing market share as widely as possible is very necessary for the sustainability of the horticultural industry (Pinanggih, 2019). Previous research stated that the factors for the decline in sales were the lack of raw materials and high prices as well as the Covid-19 pandemic.

Sales developments experienced by CV. Yuasafood Berkah Makmur experienced fluctuations from 2017 to November 2021, namely the highest sales in 2019. Namely 930,100 packs and the lowest sales in 2021, namely 289,600 packs. UD. Podangmas also experienced a similar thing. Podangmas experienced a significant decrease in bottle and cup production in 2017, amounting to 551,900 packs, in 2019 it was 430,900 packs. Revenue in 2020 reached 256,000 plastic and glass bottles and in November 2021 increased to 269,000 bottles with plastic and glass bottle variants. Then the sales experienced by PT. BAMS also experienced the same decline, namely IDR2.15 billion in 2019, amounting to display sales, affecting revenue from 2020 to 2021, which decreased by 0.45%. (Nasiron et al. 2022)

One way to learn and apply the strategic management process is to use a model so that the discussion is focused, where each model presents a process (David, 2011). Apart from that, distribution channels are known for three main components, namely intermediary, agent and facilitator (Yunarto, 2006).

The main factor in this research is creating a strategy model for effective and efficient sales distribution on expand the marketing network with the presence of ownership of a distribution permit and has a Home

Industry Food Production Certificate (SPP-IRT) as well as implementing general international standardization requirements that must be complied with by food and beverage producers in certain countries so that it can agricultural product processing business in accordance with the mandate of Law Number 20 of the Year 2008 which states that agricultural product processing business are one of the driving wheels of the country's economy.

In previous research, business expansion for the sustainability of the horticultural industry used the SWOT and AHP methods (Pinanggih et al. 2019). This research is needed to find out what factors influence the supply of raw resources for the horticulture carica papaya industry and to look for effective and efficient strategy options including improving licensing and adequate infrastructure so as to increase revenue from sales significantly. This study's methodology combines a case study with the Strengths, Weaknesses, Opportunities & Threats (SWOT) analytical method. Ten expert informants in the Carica papaya farming and Carica fruit processing industries were consulted in order to identify internal and external constraints.

The aim of this research is expected to contribute to the development of agricultural product processing business in the agricultural sector engaged in the processing of carica papaya in Wonosobo Regency which are effective in implementing future strategies.

METHODS

The Agestitani Agricultural Extension Center (BPP), Regional Technical Implementation Unit (UPTD), Food, Agriculture, and Fisheries Service, Kejajar District, Wonosobo Regency, Jln. Dieng KM. 13 Kejajar, Wonosobo, Central Java, and three carica industries in Wonosobo Regency, PT. BAMS, CV. Yuasafood, and UD. Podangmas, along with representatives of carica farmers in Wonosobo Regency, were chosen as the research sites.

The types and sources of data used in this study were primary and secondary data sources. Primary data came from interviews with the Department of Agriculture in Wonosobo Regency, informed informants, and members of carica growers' associations and carica consumers' groups. The second source of primary data was the distributed questionnaire to

the aforementioned knowledgeable sources, in addition to making field visits or observations.

The researcher conducted the interview process directly. In addition, the researcher spoke with a carica consumer and one of the informants from the management of UD. Podangmas, CV. Yuasafood, and PT. Banjarnegara Agro Mandiri Sejahtera (PT. BAMS). Meanwhile, the second interview method involved a phone call and conversation through a telephone conference. The interview dates varied, but they often lasted at least one hour and were repeated or involved more than three interviews with three different organizations within the carica industry. Direct observation of research objects took place in the Dieng mountains and the typical Dieng papaya agribusiness.

The initial method of gathering data for this study was verbal information exchanged between informants during interviews, which allowed researchers to examine informants' attitudes, beliefs, behaviors, and experiences related to social phenomena. The second method involved conducting interviews with Field Agricultural Instructors, agribusiness industry representatives, carica farmers, and carica customers while on the ground in the Dieng area, Wonosobo Regency. The researcher then distributed a questionnaire to ten (10) informants to ascertain the internal and external factors of distribution. This information was used to conduct a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, which was anticipated to yield alternate options for development strategies.

The data analysis technique was Strengths, Weaknesses, Opportunities & Threats (SWOT), which was carried out through summarizing the results of primary and secondary data, namely from IFAS and EFAS scores. This was expected to be implemented with proactive action, modifying resources and expertise, finding solutions or managing risks and weaknesses, and improving existing weaknesses or minimizing their impact to significantly boost income volumes in the agricultural product processing business.

Hypothesis 1. Does the availability of raw materials for processed carica fruit depend on the intensity of carica cultivation?

Hypothesis 2. Does increasing the amount of processed carica fruit sold require completing a food safety permit?

Hypothesis 3. Does increasing the caliber of infrastructure and facilities make sense in order to boost processed carica fruit sales volume?

Researchers could utilize framework thinking (Figure 1) to guide them through every step of the research process, from selecting study locations to obtaining data sources for case study-based qualitative research. After applying the data in accordance with theories and professional (informant) perspectives, SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was performed, producing recommendations-worthy conclusions.

RESULTS

Based on the TOWS matrix analysis (Table 1), the strategy formulation chosen focused on SO, specifically by collaborating between government agencies to obtain facilities for implementation and certification of quality assurance and food safety. This collaboration aims to develop product diversification and educate the public about safe and high-quality food. For the ST strategy, the focus is on consistently making continuous improvements by creating and

highlighting product uniqueness. The WO strategy involves creating a broad marketing network, building partnerships with larger companies that have extensive networks, and designing and implementing quality system documents. Finally, the WT strategy emphasizes consistently implementing GMP/HACCP to improve product quality and food safety, as well as establishing internal controls within the company.

In Table 2, the IFAS score for carica fruit, which is considered an opportunity due to its status as an endemic fruit, is 0.27. This indicates the variable strengths and weaknesses. Meanwhile, Table 3 shows the EFAS score of 0.08, reflecting the opportunities and threats.

According to Figure 2, the matrix indicates that the carica fruit processing industry is positioned in quadrant I (positive), suggesting that the industry is in a strong condition and has ample opportunities. The recommended strategy is to pursue a progressive approach by leveraging the company's internal strengths to capitalize on external opportunities, thereby increasing sales volume and achieving growth and sustainability for the company. The SWOT analysis of the processed carica fruit produced is as follows:

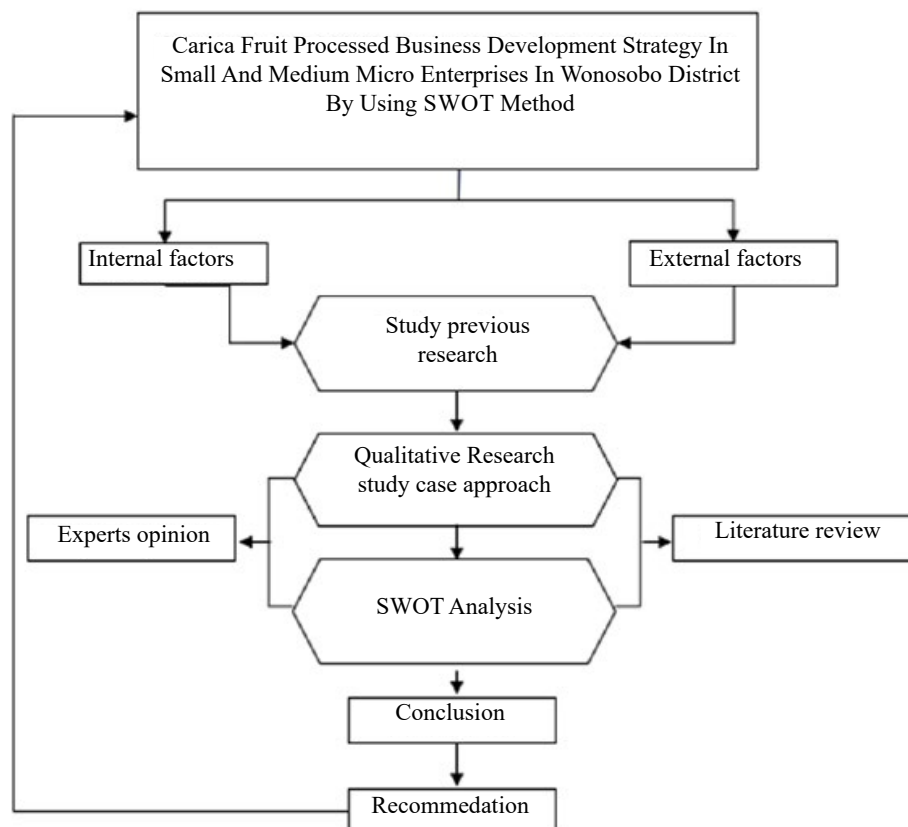


Figure 1. Research method thinking flow

Table 1. Strategy Formulation Using the TWOS Matrix

	<p>Strength (S)</p> <ol style="list-style-type: none"> 1. Has a distribution permit for SPP-IRT 2. Attractive product packaging 3. Competitive product prices 4. Providing a product return guarantee with applicable provisions 	<p>Weakness (W)</p> <ol style="list-style-type: none"> 1. Marketing is still local 2. Limited capital capabilities 3. Relatively simple process technology 4. Carica plants have not been managed intensively
<p>Opportunity (O)</p> <ol style="list-style-type: none"> 1. Availability of MPIG food safety instructors and supervisors 2. Carica papaya is a fruit that does not grow in just any climate or place 3. Demand for various sizes of processed carica fruit packaging continues to increase 4. Development of information technology to help promote processed carica fruit to the wider community. 	<p>SO Strategy</p> <ol style="list-style-type: none"> 1. Create good relationships with government agencies in order to obtain facilities for implementation and certification of quality assurance and food safety 2. Conduct market surveys to find out consumer tastes 3. Diversification of processed carica fruit products 4. Educate and promote the public about safe and quality food 	<p>WO Strategy</p> <ol style="list-style-type: none"> 1. Create a wider marketing network 2. Build partnerships with larger companies that have a wider network 3. Design and implement quality system documents 4. Implement the GMP/HACCP system
<p>Threat (T)</p> <ol style="list-style-type: none"> 1. Competition in similar products from industries that implement GMP/HACCP 2. Complexity of food safety requirements 3. There are limited food safety instructors and supervisors 4. Implementation of PPKM during uncertain pandemic conditions 	<p>ST Strategy</p> <ol style="list-style-type: none"> 1. Consistently make continuous improvements 2. Create new ideas by creating and highlighting the uniqueness of the product 	<p>WT Strategy</p> <ol style="list-style-type: none"> 1. Consistent implementation of GMP/HACCP to improve product quality and food safety 2. Implement internal company controls

Table 2. Internal Factors (Strength & Weakness)

	Strategic Factors	Significant Level	Weight	Ratings	Score
STRENGTH	Has SPP-IRT distribution permit	3	0.16	4.33	0.7
	Attractive product packaging	2.67	0.14	3.67	0.53
	Competitive Product Prices	2.33	0.12	2.67	0.33
	Providing a product return guarantee with applicable conditions	1.33	0.07	1.17	0.08
WEAKNESS	Availability of MPIG food safety instructors and supervisors	2.33	0.12	2.67	0.33
	Carica papaya is a fruit that does not grow in just any climate or place	3	0.16	4	0.64
	Demand for various sizes of carica processed food packaging continues to increase	2	0.11	1.67	0.18
	Development of Information Technology for the promotion of processed carica fruit to the wider community	2	0.11	2	0.21
		18.66	1		3.01
					1.64
					1.37
	IFAS Value				0.27

Strengths

1. Has SPP-IRT distribution permit
2. Attractive product packaging
3. Competitive product prices
4. Providing a product return guarantee with applicable conditions

Weakness

1. Marketing is still local
2. Limited capital capabilities
3. The process technology is relatively simple
4. Carica plants have not been managed intensively

Opportunities

1. Limitations of MPIG food safety instructors and supervisors
2. Carica papaya is a fruit that does not grow in just any climate or place
3. Demand for various sizes of carica processed food packaging continues to increase
4. Development of information technology to help promote processed carica fruit to the wider community

Threats

1. Competition for similar products from industries that implement GMP/HACCP
2. The complexity of ready-to-eat food safety requirements
3. Limited food safety instructors and supervisors
4. Implementation of PPKM during uncertain pandemic conditions.

Managerial Implications

The strategy for developing the carica fruit processing business currently implemented by CV. includes obtaining Home Industry Food Production Certificates (SPP-IRT), which guarantees consumer safety and comfort during shopping. Additionally, enhancing production facilities and infrastructure is essential for acquiring a distribution permit from the Food and Drug Supervisory Agency (BPOM). This improvement also aligns with the implementation of general international standardization requirements that food and beverage producers must comply with in specific countries. The next development strategy aims to further boost sales volume by focusing on these critical areas.

Table 3. Internal Factors (Strength & Weakness)

	Strategic Factors	Significant Level	Weight	Ratings	Score
Opportunities	Availability of MPIG food safety instructors and supervisors	2	0.11	3.33	0.37
	Carica papaya is a fruit that does not grow in just any climate or place	2.33	0.13	4.67	0.6
	Demand for various sizes of processed carica fruit packaging continues to increase	2	0.11	3	0.33
	Development of information technology to help promote processed carica fruit to the wider community.	2.67	0.15	3.33	0.49
Threats	Competition in similar products from industries that implement GMP/HACCP	3	0.17	3.67	0.61
	Complexity of food safety requirements	2	0.11	2.67	0.3
	Limited food safety instructors and supervisors	1.33	0.07	2.33	0.17
	Implementation of PPKM during uncertain pandemic conditions	2.67	0.15	4.33	0.64
		18	1		3.52
					1.8
					1.72
					0.08
	EFAS value				

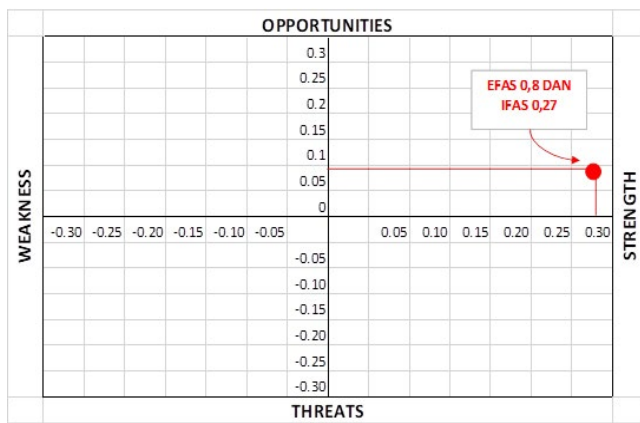


Figure 2. SWOT Quadrant Matrix

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The development strategy to increase sales volume in the horticultural plant industry of Carica papaya plants in Wonosobo Regency is to focus on the activity of owning distribution permits for ready-to-By obtaining a Home Industry Food Production Certificate (SPP-IRT) from the relevant Department and prioritizing improvements to facilities and infrastructure as the main requirement for obtaining a distribution permit from the Food and Drug Administration (BPOM) of Central Java Province and then after obtaining the permit, take care of the certification Those who implement Household Services (SPP-IRT) will guarantee consumer safety and comfort when shopping. Apart from that, improving production facilities and infrastructure is The main requirement for obtaining a distribution permit from the Food and Drug Supervisory Agency (BPOM) as well as implementing general international standardization requirements that must be complied with by food and beverage producers in certain countries, so that with the fulfillment of these permits a sense of safety and security Consumers are comfortable in shopping and consuming processed Carica fruit, So it is hoped that the results of this analysis can implement an effective and efficient distribution strategy in order to boost the sales income of food and beverage agribusiness processed horticultural plant industry in Wonosobo Regency in the future.

Recommendation

Reaping business profits is one of the main factors, but sustainability of profits will be more important (Sustainability profit), so immediate concrete steps are needed for the strategy for developing the processed

carica fruit business to increase the number of sales, apart from that, production facilities and infrastructure must also be considered as well as continued availability of raw materials, namely carica papaya. The contract farming program is one of the collaborations that needs to be carried out because this program requires both parties to mutually agree to obtain profitable and sustainable benefits. A Farmers' Cooperative that can handle farmers' harvests must be established in order to preserve price stability and the supply of raw materials for carica. This will guarantee a steady supply of carica raw materials and stop oligopolistic carica harvest collectors from controlling the market. It is hoped that the combination of carica farmers who form a cooperative institution can be a solution to the sustainability of the food and drink agribusiness made from the raw material of carica papaya.

Conflicts of Interest: The authors declare no conflict of interest.

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