

Cassia vera development strategy in the Kerinci Regency

Endy Effran* and Suandi

Doctoral Study Program in Economics, Postgraduate University of Jambi, Jl. H. A Manaf, Telanaipura, Jambi 36122, Indonesia

Received 30 November 2022; received in revised form 03 August 2023; accepted 29 September 2023

ABSTRACT

The present study aim to identify alternative strategy that can be applied in developing cassia vera farming in Kerinci Regency, Jambi Province, Indonesia. Research materials was sourced from primary and secondary data. Data collection techniques include observation, in-person interviews, and in-depth interviews. The study covers areas that have the potential for Cassia vera plantations in the administrative area of the Kerinci Regency where the sub-districts of Batang Merangin, Gunung Raya, and Kayu Aro were chosen as the research locations as these are centres of cassia vera production in Kerinci Regency. Data analyses was followed in a descriptive method and SWOT analyses. The results showed that the development of cassia vera in Kerinci Regency uses the expand strategy which is a combination of strength and opportunity factors, with alternative approaches that can be applied, namely maintaining the quality of cassia vera retaining the global advantage of Indonesia in the export of the commodity. The Kerinci Regency Government is also expected to focus on developing cassia vera plantation crops considering that it has very good prospects, through support the policies by programs and helping for area expansion, productivity improvement, and quality improvement.

Keywords: Cassia vera, Development strategy, Export, Spices.

Introduction

Cinnamon includes group of plant species belonging to family *Cinnamomum*. In Indonesia, the commodity is commonly known as Cassia vera. This plant is also known as the oldest spice plant and an herbal medicinal plant whose content is useful as an antioxidant (Pranati et al., 2020). As reported by FAO (Food and Agriculture Organisation), Indonesia is the largest producer of the cassia vera commodity in the world (Habib, 2020).

The world cassia vera production in 2019 was 242,635 tonnes. As per Fig (1) Indonesia produces cassia vera is reaching 37 percent of the total world cassia vera production, China shares 34 per cent production, Vietnam produces 17 per cent production, Sri Lanka is of 10 per cent production and Madagascar only about 2 per cent (FAO, 2019).

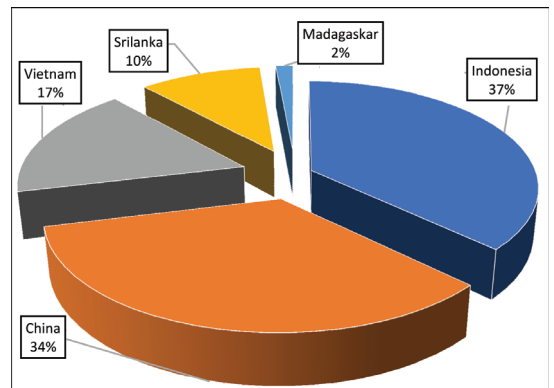


Figure 1. Cassia vera Production in the World during 2019

Indonesia continued to be the largest cassia vera producer globally, with a harvested area of 116,176 hectares and a total production of 89,657 tonnes. As a country that has the largest plantation in the world, Indonesia has a huge opportunity to market Cassia vera in the world need.

* Author for correspondences: Phone: 9387813940, Email : endy_effran@unja.ac.id

This spice plant can grow well in tropical climates and fertile soils. One of the Indonesia's largest cassiavera producing areas and the quality of Cassiavera that has been recognized worldwide comes from Jambi Province, namely Kerinci Regency, near about 80 per cent of its production comes from this area (Disbunnak Kabupaten Kerinci, 2019 and Kementerian Perindustrian RI, 2008). In general, the role of cassiavera in the regional economy of the Kerinci Regency is evident with potential of major player in the regional exports. On a macro basis, cassiavera is one of the leading commodities that can play a role in the economy of the Kerinci Regency area (Jaya et al., 2009).

The cassiavera production in Kerinci Regency continues to increase steadily with slight fluctuations (Table 1), (Disbun Provinsi Jambi, 2019).

Based on 2019 production data, there is a trend in developing a moderate increase in production as compared previous year (Table 1), 53,925 tonnes or 59 per cent of Indonesia's total cassiavera production. (Badan Pusat Statistik Republik Indonesia, 2019). Farmers capacity can be increased by focusing on effective and optimal resource management in order to achieve production. Farmers must be able to distribute efficient and appropriate input resources in order to maximize output results. All production aspects must be considered, including feed area, labor usage, capital

invested, quantity of staple crops owned, and age of plants ready to harvest. To improve the farming system, farming methods and agricultural institutions can be upgraded.

Materials and Methods

The object of this research is the owner/farmer who directly cultivates the Cassiavera commodity and has been harvesting it at the time of the study. The research location was in Kerinci Regency by selecting three sub-districts: Gunung Raya, Batang Merangin, and Kayu Aro Districts. The selection of this location was purposive, considering that the three sub-districts are known to have large cassiavera production compared to other sub-districts (Disbunnak Kerinci Regency, 2019).

Research data is collected from primary and secondary data. Primary data were taken using observation, direct interviews, and in-depth interviews). Methods of collecting information through interviews were collected in a structured manner from selected research samples (respondents) using instruments or questionnaires. Data collection through questionnaires through a technique carried out by giving respondents a set of questions to answer, both open and closed questions. This primary data is used to collect information about the factors that influence the production of Cassiavera. Then the sampling of the SWOT analysis is determined intentionally with the assumption that the respondent is aware about

Table. 1. Development of Cassiavera commodity production in Kerinci Regency 2010-2019.

Year	Area (Ha)			Production (Tons)	Productivity (Kg/Ha)	
	TBM	TM	TR			
2010	16,619	23,982	343	40,944	53.515	2,231
2011	16.597	24,019	346	40,962	53.623	2,233
2012	16.597	24,004	361	40,962	52,980	2,207
2013	16.597	23,903	361	40,861	52,980	2,216
2014	16.534	23,868	361	40,763	53,031	2,222
2015	16,403	23,999	360	40,762	53,249	2,219
2016	16,403	23,999	360	40,762	53,249	2,219
2017	16,168	24,121	398	40.687	53.531	2,219
2018	16.061	24,173	403	40,637	53,662	2,220
2019	15,937	24,317	378	40,632	53.925	2,218

TBM: Immature; TM : Mature; TR : Damaged. Source: Jambi Province Plantation Department 2020.

cassiavera farming. The respondents consist of academics, bureaucracy, Cassiavera farmers, and traders. Meanwhile, secondary data is obtained from reports from related agencies/agencies, journals, and other reports related to the research topic. This secondary data shows information about superior regional commodities in Kerinci Regency.

Answering the research objectives used a strategy development method through SWOT analysis. According to Rangkuti (2013), the systematic identification of various factors to formulate a development strategy. This analysis is based on the logic that can maximize strengths and opportunities, but at the same time minimize weaknesses and threats. The strategic decision-making process is always related to developing of the company's mission, strategic objectives, and policies. Thus strategic planning must analyse the company's strategic factors (strengths, weaknesses, opportunities, and threats) under current conditions, this is called situation analysis. The most popular model for situation analysis is the SWOT analysis. In determining the position of the SWOT matrix, what can be used IFAS (Internal strategic factors analysis summary) to tabulate the formulation of internal strategic factors in terms of the strengths and weaknesses of a company and the EFAS (External strategic factors analysis summary) in the formulation of external strategic factors in terms of threats and opportunities that a company has encountered. According to Herry (2018), the SWOT matrix can clearly describe various opportunities and threats that come from outside the company's environment with strengths and weaknesses of the company.

Results and Discussion

As a leading commodity, cassiavera is expected to be able to support the life of grower and make a significant contribution to regional economic growth. In view of the inherent problems associated with harvesting and post harvesting losses in the selected sub-districts, these studies were planned

to gather accurate and requisite information, is the basis for conducting empirical studies as above for developing and sustaining cassiavera farming, to realize family welfare, and encourage regional economic growth.

Increasing the capacity of farmers can be done through efforts to allocate their resources efficiently and optimally in achieving production. Then the farming system can be improved by improving farming patterns that are run and improving farming institutions. The problems faced in developing cassiavera farming is not only limited to production but other issues such as price, where the price will affect farm income. The cost of cassiavera in the Kerinci Regency is determined by collectors and exporters, so farmers cannot decide on the best price. Then the existence of the downstream industry is still minimal, so the resulting production is still in the form of raw material products.

Given these problems, it is necessary to research the strategy of developing cassiavera in the Kerinci Regency using a SWOT analysis tool. Through SWOT analysis, it can be seen the potential for cassiavera development in Kerinci Regency. This SWOT analysis is carried out by identifying both the internal and external environment. Based on the analysis of the internal and external environment, the strengths, weaknesses, opportunities, and threats that affect the development of cassiavera farming in the Kerinci Regency can be identified.

The results of the analysis were obtained from respondents who were chosen deliberately with the consideration that the respondents were quite understanding and knowledgeable about cassiavera farming, namely the bureaucracy (government), academics, entrepreneurs (traders), and farmers. Then formulate or determine SWOT keywords and provide a list of questions or questionnaires to predetermined respondents.

IFAS Matrix Analysis

Farming internal factors can be controlled so that

Table 2. IFAS Matrix Cassiavera Development Strategy in Kerinci Regency

No	Strategic Factor	Weight	Rating	Score
Strength				
1	Stable price (Tend to rising)	0.1	4	0.4
2	Boost the economy	0.07	3	0.21
3	Suitability of llimatic, land, and geography conditions	0.1	5	0.5
4	Potential commodity	0.07	4	0.28
5	High economic value	0.07	3	0.21
6	Impact multiplier	0.07	4	0.28
	Amount	0.48		1.88
Weakness				
1	Government policies are less supportive	0.07	2	0.14
2	Cultivation techniques not good	0.07	2	0.14
3	Cassiavera quality still Low	0.1	2.5	0.25
4	Product form is still traditional	0.1	2	0.2
5	Downstream industry is still minimal	0.1	2	0.2
6	Minimal access to production roads	0.07	2	0.14
	Amount	0.52		1.07
	Total S+T			2.95

existing weaknesses will be evaluated and corrected and their strengths will be maximized. (Kumar, Reddy and Ratnakar 2019). In describing the internal factors of cassiavera development, the IFAS (Internal Factor Analyst Strategic) matrix will be used. IFAS matrix is used to determine impact of internal factors in cassiavera farming. In Table 2, the IFAS matrix of the cassiavera development strategy in the Kerinci Regency, which is calculated based on the value of the weight, rating and score generated.

Based on Table 2 above, it can be seen that the IFAS matrix shows that the score of the strength strategy factor is more dominant than the weakness strategy factor with a total score of approx. 1.88 and the total weakness score is 1.07. Thus the strength strategy factor is more important than the weakness strategy factor, then the result of the internal factor weighted score is 2.95. This can be interpreted that the cassiavera commodity in Kerinci Regency has a strong enough position for development.

EFAS Matrix Analysis

The external environment also plays no less important role than the internal environment for a company’s success. The external environment consists of opportunities and threats; the opportunity for cassiavera development is an opportunity for

farming to make a profit. Meanwhile, threats are challenges that will affect the outcome of Cassiavera in the future. The EFAS matrix is used to determine how significant the role of external factors in cassiavera farming is. In Table 4, the EFAS matrix of the cassiavera development strategy in the Kerinci Regency, which is calculated based on the value of the weight, rating, and score generated.

The EFAS matrix shows that the opportunity strategy factor is more dominant than the threat strategy factor. This can be proven by the value of the opportunity score being more significant than the threat score (2.2 > 0.84). In Table 3 it can be seen that the total weighted value of opportunities and threats for cassiavera development in Kerinci Regency is 3.04 with an indication that cassiavera development in Kerinci Regency has a reasonably strong chance.

Cassiavera Development Strategy in the Kerinci Regency

The strategy is obtained from the identification of internal and external factors. The IFAS and EFAS matrix scores are known. The score will be used to determine the position of the cassiavera development strategy in the Kerinci Regency; the weighted value is obtained from the strength and weakness factors between the weighted value of the

Table 3. EFAS Matrix Cassiavera Development Strategy in Kerinci Regency

No	Strategic Factor	Weight	Rating	Score
Opportunity				
1	High selling power	0.1	4	0.39
2	Future investment	0.1	4	0.39
3	Export raw material	0.1	5	0.48
4	Processed product development	0.1	4	0.39
5	Domestic and foreign market demand	0.1	5	0.48
	Amount	0.5		2.2
Threat				
1	Land conversion to other commodities	0.1	1.5	0.15
2	Crop safety	0.06	2	0.13
3	Land availability	0.06	2	0.13
4	Competitors	0.1	1.5	0.15
5	Dependence on foreign markets	0.1	1.5	0.15
6	Cassiavera developments in other countries	0.1	1.5	0.15
	Amount	0.52		0.84
	Total O+T			3.04

opportunity factor and the weighted value of the threat factor. The difference between the weighted values of internal and external factors, the result of the difference in the weighted values are used as the coordinates of the Cartesian SWOT diagram, in detail can be seen in the following figure.

Based on the SWOT diagram above, the weighted value is resulting from the SW difference and the weighted value resulting from the OT difference shows that, the condition of cassiavera farming in

Kerinci Regency has been effective. Some of the indicators are: (1) The score of the internal strategic factor of strength is 0.81 higher than the score of the strategic factor of weakness (2) The score of the external strategic factor of opportunity is higher than the external strategic factor of threat, which is 1.36. From the results of this difference in weighted values, it can be seen that the development of cassiavera in the Kerinci Regency is more strongly influenced by external factors than internal factors.

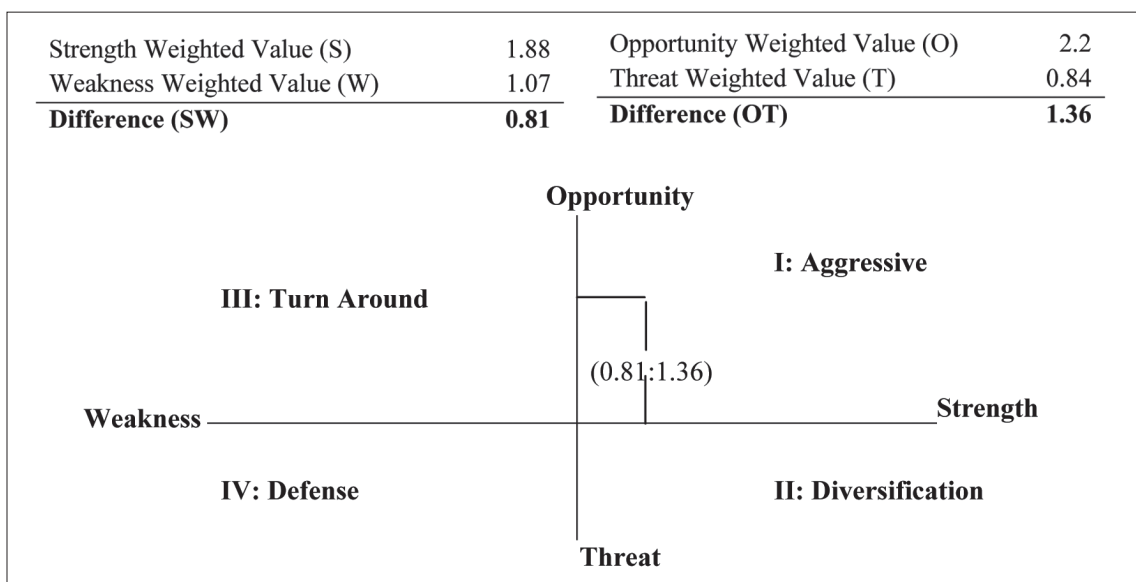


Figure 2. SWOT Analysis Diagram

Alternative strategies for developing cassiavera in Kerinci Regency were obtained from determining strategic positioning through the IFAS and EFAS matrices. The results obtained, it shows that the position of the cassiavera development strategy in Kerinci Regency is in quadrant I (0.81; 1.36) and is an SO strategy. According to Rangkuti, (2015) and Soetriono et al., (2019) Quadrant I is a quadrant with a very favourable situation; in this quadrant the company has strengths and opportunities that must be utilized as well as possible. The strategy that must be applied in quadrant I to support an aggressive growth policy (growth-oriented method).

Conclusion

Based on the results, the strategy for developing cassiavera lies in the Hold and Maintain position. Hold and Maintain can be seen from the strength and opportunities owned factors. The strength factor is a factor that must be maintained while the opportunity factor is a factor that must be maintained. Based on the internal and external factors obtained, it is necessary to maintain the quality of cassiavera to keep the superiority of cassiavera as an Indonesian export commodity due to high market demand. The Kerinci Regency Government is also expected to focus on developing cassiavera plantation crops considering that it has very good prospects, through support the policies by programs and helping for area expansion, productivity improvement, and quality improvement.

Reference

- Badan Pusat Statistik Republik Indonesia. 2019. Produksi Perkebunan Menurut Jenis Tanaman Di Indonesia. <https://bps.go.id>
- Disbun Provinsi Jambi. 2019. Laporan Tahunan Perkebunan Provinsi Jambi Tahun 2019. Jambi.
- Disbunnak Kab. Kerinci. 2019. Statistik Perkebunan Kabupaten Kerinci Tahun 2019.
- Food and Agriculture Organization. 2019. Crops and Livestock Products. ed. FAO. <https://www.fao.org>
- Habib, Tomyzul. 2020. "Negara Penghasil Kayu Manis Terbesar Di Dunia." <https://akurat.co/indonesia-nomor-1-ini-5-negara-penghasil-kayu-manis-terbesar-di-dunia>.
- Hery. 2018. Manajemen Strategik. Gramedia Widiasarana Indonesia. Jakarta.
- Jaya, Askar et al. 2009. "Dampak Pengembangan Komoditas Kayu Manis Rakyat Terhadap Perekonomian" Forum Pascasarjana 32(1): 67-79.
- Kementerian Perindustrian RI. 2008. Indonesia Eksportir Utama Kayu Manis. Kementerian Perindustrian RI. Jakarta. <https://kemenperin.go.id/artikel/1992/>
- Kumar, S.N., P.G. Reddy, and R. Ratnakar. 2019. "SWOT Analysis of Public Agricultural Extension Service Providers in Andhra Pradesh, India." Int. J. Curr. Microbiol. App. Sci. 8(1): 3216-3222
- Pranati, T., A., Rajasekar and S., Rajeshkumar. 2020. "Anti Inflammatory and Cytotoxic Effect of Clove and Cinnamon Herbal Formulation." Plant cell biotechnology and molecular biology 21(29-30): 69-77
- Rangkuti, Freddy. 2013. SWOT - Balanced Scorecard. Gramedia Pustaka Utama. Jakarta. Jakarta.
- Soetriono, Soetriono et al. 2019. "Strategy and Policy for Strengthening the Agricultural Cooperative Business in East Java, Indonesia." Journal of Socioeconomics and Development 2(1): 12.