FARMING ANALYSIS AND MARKETING STRATEGY OF RED GUAVA (*Psidium guajava* L.) IN KARANGANYAR DISTRICT

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ABSTRACT

This study aimed to determine the feasibility of farming and identify internal and external factors in the marketing of red guava in Karanganyar District. The basic methods of this research are descriptive and analytical methods. The research location was chosen purposively in Karanganyar District, while the sampling of red guava farmers was done by using Snowball Sampling technique. The data analysis methods used are (1) Farming feasibility analysis by calculating NPV, IRR, Net B/C Ratio, and payback period, while (2) Marketing strategy was analyzed using IFE, EFE, Grand Strategy, and SWOT analysis. The results showed that the total cost of producing red guava was IDR 390,525,560 per hectare with benefits obtained by farmers was IDR665,129,380 per hectare. The calculation results of the feasibility of red guava farming on NPV, IRR, Net B/C Ratio, and payback period were respectively IDR 66,717,379.00 per Ha, 22.88%, 1.50, and 6 years, indicating that red guava farming in Karanganyar District is worthy. Based on the results of Grand Strategy matrix analysis, it is known that the difference between the strength and weakness factors was 1.427 and the opportunity factor with the threat was 1.829, placing red guava in quadrant I. The resulting alternative strategies were in the SO (Strengths-Opportunities) strategy.

Keywords: farming feasibility; grand strategy; marketing; red guava; SWOT.

INTRODUCTION

Agriculture is a sector that has a very important role in economic development in Indonesia (Fortunika, 2017). The agricultural sub-sector easy to develop is horticulture. Horticulture has great potential to be developed because it has an influence on improving the nutrition, income, and welfare of farmers. Horticulture is used to meet daily food needs so that the harvest is always needed by many people in general (Aluhariandu, 2016).

One of the horticultural products developed in Indonesia is red guava. Red guava (*Psidium guajava* L.) is one of fruits favored by community because of its delicious taste and aroma, high vitamin C content, and many other health benefits (Susanto, 2018). Red guava is widely known in various circles of society, both those who live in urban and rural areas. People can consume this fruit in the fresh form (as table fruit) and used it as raw material for processed food such as syrup, fruit juice, jam, and jelly. In addition, Indonesia's fertile natural conditions can support its growth.

Based on Indonesia Statistics (BPS) data in 2019, Central Java is the highest producer of red guava in Indonesia. Central Java contributed 27.62% of the production. The production of this red guava is in every District/City in Central Java. One of the areas in Central Java that produce red guava is Karanganyar District.

Karanganyar District occupies the 11th position with a total production of 19,435 quintals. From these results, it can be seen that the production of red guava in Karanganyar District is still low compared to other regions. This is because red guava has not been developed much in Karanganyar District. However, the production of red guava in Karanganyar District is able to supply the needs of red guava market in other areas, such as Sragen, Solo, Ngawi, and other areas.

The production of red guava in Karanganyar District always increased every year. It can be seen that red guava farming is growing. The factor that affects the potential to develop red guava farming is continuous demand. Based on Indonesia Statistics of Karanganyar in 2019, sub-districts that have high production in Karanganyar District are Ngargoyoso, Tawangmangu, and Jenawi Districts which contribute to the production of red guava in Karanganyar District by 72.31%, 6.24%, and 5.95%, respectively.

Karanganyar District has potential in developing farming which is used to increase community income. People in Karanganyar District continuously try to carry out marketing activities of red guava in the hope that this business can meet their daily needs. The community realizes that even though they do not have good management and high basic education, they continue to work on it. Although this business seems to run smoothly, it does not mean that it does not have a problem. Farmers in marketing red guava only rely on traders/middlemen in each village so this results in different prices between farmers. The absence of one-stop marketing makes red guava products have a low price. In addition, the large supply of red guava in various regions offered to consumers is a threat to their acceptable products. Therefore, it is necessary to formulate a marketing strategy in order to help farmers in Karanganyar District face various problems and risks. The marketing of red guava is influenced by various factors. These factors can be in the form of internal factors or external factors. These internal and external factors will be very important in order to create an appropriate and effective marketing strategy to improve the cultivation of red guava in Karanganyar District in the future.

The farm analysis activity also has an important role in the cultivation of red guava. Farmers in conducting cultivation generally do not have farming records, so it is difficult for farmers to carry out their farming analysis. The existence of farming analysis will later assist farmers in obtaining information on managing their farming in order to create increased productivity so that their profits can increase.

Karanganyar District has the potential to cultivate red guava, so its management needs to be improved to provide maximum benefits. Therefore, it is necessary to conduct research to determine whether red guava in Karanganyar District is feasible to be developed by farmers and what strategies are appropriate to be implemented. The purpose of this study was to determine the feasibility of farming and identify internal and external factors in the marketing of red guava in Karanganyar District where the right marketing strategy was identified.

MATERIALS AND METHODS

The location of the sample was determined purposively (intentionally), which is in Karanganyar District because it is one of the producers of red guava in Central Java and has the potential to be developed. The respondents involved was divided into two parts, which are for farming analysis and marketing strategies. The determination of the number of farming respondents was carried out by proportional sampling with 40 farmers chosen as respondents. The determination of the sample of red guava farmers in this study used snowball sampling technique. Snowball sampling is a sample determination technique in which at first, it has small amount but then gets bigger (Sugiyono, 2011). The determination of marketing strategy sample was based on certain informants or situations who can provide information in accordance with the research focus. This study used primary and secondary data. The data collection technique was done through observation, interview, and documentation. The analysis methods include:

1. Farming Analysis (Pasaribu, 2012)

a. Net Present Value (NPV)

Mathematically it can be formulated as follows:

$$NPV = \sum_{t=1}^n \frac{B_t - C_t}{(1+i)^n}$$

Information :

B_t is the flow of revenue (benefit) from year 1 to year n (end of project life), C_t is the flow of expenses (cost) from year 1 to the end of the project life, and I am the discount rate.

The assessment criteria are as follows:

NPV>0 : Cultivation of red guava is feasible / profitable

NPV<0 : Red guava farming is not feasible to be cultivated/loses

NPV=0 : Red guava farming is at the break-even point

b. Internal Rate of Return (IRR)

Mathematically it can be formulated as follows:

$$IRR = i_o + (i_1 - i_o) \frac{NPV_o}{(NPV_o - NPV_1)}$$

Information :

i_o is the prevailing interest rate (opportunity cost of capital),

i_1 is the comparative interest rate (comparator discount rate),

NPV_o is NPV at i_o , and NPV_1 is NPV at i_1 .

The assessment criteria are as follows:

$IRR > r$: Farming red guava is feasible/profitable

$IRR < r$: Red guava farming is not feasible to be cultivated/loses

$IRR = r$: Red guava farming is at the break-even point

c. Net B / C Ratio

Mathematically it can be formulated as follows:

$$Net\ B/C = \frac{\sum_{t=0}^n NPV\ Positif}{\sum_{t=0}^n NPV\ Negatif}$$

The assessment criteria are as follows:

$Net\ B/C > 1$: Red guava farming is feasible to cultivate / profit

$Net\ B/C < 0$: The red guava farming is not feasible to cultivate/lose

$Net\ B/C = 0$: Red guava farming is at the break-even point

d. Payback Period

Mathematically it can be formulated as follows:

Payback Period = Investment / (Net Cash / year) x 1 year

$$Payback\ Period = \frac{Investment}{Net\ Cash / Year} \times 1\ Year$$

The assessment criteria are as follows:

- The greater the Payback Period value, the longer the return on investment invested in red guava farming

- The smaller the Payback Period value, the faster the return on investment invested in red guava farming

2. Marketing Strategy (David, 2009)

The analytical method used includes analysis of internal and external factors, analysis of farming position, and analysis of alternative strategies. The identification of internal factors aimed to identify factors which become strengths and weaknesses in marketing including the product, price, distribution, promotion, finance, and management. The identification of external factors aimed to identify factors that become opportunities and threats in marketing which include marketers, consumers, government, environmental, and socio-cultural intermediaries, as well as competitors. The farming position analysis was used to determine the position of red guava farm in Karanganyar District based on Grand Strategy matrix. Grand Strategy matrix is included in the matrix used in the matching stage where the matrix was based on information from the input stage to match external opportunities and threats with internal strengths and weaknesses. An alternative marketing strategy for red guava used SWOT matrix analysis. The SWOT matrix can clearly describe how opportunities and threats from external factors faced by a business can be adjusted according to its strengths and weaknesses.

RESULTS AND DISCUSSION

Respondent Characteristics

The respondent of red guava farming in Karanganyar District has an average age of 49 years old. People who are at productive age have a high enthusiasm for developing their business because they are driven by high needs and are able to do this farming (Theresia, 2016). The level of education will affect the readiness of farmers to accept and absorb new technology and information. Education will be a factor affecting farmers' attitudes in making decisions (Muta'ali, 2019). On average, respondents had a low level of education that is, graduated from elementary school. The average farmer has been cultivating this red guava for 6 years. Farmers who have longer experience cultivating guava will understand the farming situation, conditions, and constraints so that it will be easier to manage and minimize the risk of failure. The number of farmer family members was 4 people. Each family has 2 members who were active in cultivating red guava. The limited number of family members who play an active role in red guava farming activities causes farmers to use outside labor.

Analysis of Red Guava Farming

In farming, plants can be grouped into two groups, namely annual plants and seasonal plants. Perennial plants are plants that require a long time to produce. The period of annual crop production usually reaches tens of years and can be harvested more than once (Kapantaw, 2017). Red guava is an annual plant that bears fruit throughout the year and can be harvested more than once.

The cost of producing red guava farming is divided into initial investment costs and operational costs. Investment costs are the costs incurred at the beginning of the business before the plant produces a plant with the hope that it can benefit in the next few years. Investment costs are spent to meet the facilities and infrastructure needed to develop the business. The land area used was 1 Ha.

Table 1. Analysis of initial investment cost of red guava farming

No	Description	Total Requirements	Unit Price (IDR)	Total (IDR)
Fixed cost				
1.	Land lease	1	84.000.000	84.000.000
2.	Farming Equipment			
	Hoe	8	70.000	560.000
	Sickle	5	50.000	250.000
	Spray Tool	3	350.000	1.050.000
	Scissor	12	60.000	720.000
	Diesel	1	3.500.000	3.500.000
	Rickshaw	2	500.000	1.000.000
	Total Equipment			7.080.000
	Total Fixed Costs			91.080.000
Variable Costs				
1.	Seeds	400	20.750	8.300.000
2.	Manure	185	5.000	925.000
3.	Chemical Fertilizers			
	Phonska fertilizer	4,51	5.000	22.550
	ZA fertilizer	4,51	5.000	22.550
	NPK Fertilizer	0,73	12.000	8.760
	Total Chemical Fertilizers			93.085
4.	Labor			
	Land Processing	8	52.250	418.000
	Planting	5	52.250	261.250
	Fertilization	5	52.250	261.250
	Total Workforce			940.500
	Total Variable Costs			10.219.360
	Total Initial Investment Cost			101.299.360

Source: Primary Data Analysis, 2020

The average initial investment cost for red guava farming in Karanganyar District was 101,229,360.00/ha. This initial investment cost consists of fixed costs and variable costs. The largest costs incurred were fixed costs of 91,080,000.00/Ha. Fixed costs consist of the cost of renting land and farming equipment. The biggest expense in fixed costs is in the cost of renting land because the land used to cultivate this red guava for 7 years.

Operational costs are the costs incurred while managing the farm or after the plants produce (Kusumawati, 2013). Operational costs consist of fixed costs and variable costs. Fixed costs consist of replacement costs for equipment, while variable costs consist of costs for fertilizers, pesticides, packaging, and labor. Cultivation of red guava was carried out for 7 years with different expenses each year.

Table 2. Analysis of red guava operational costs

No		Description	Cost			
			Year 1	Year 2	Year 3	Year 4
Fixed cost						
1.	Farming Equipment					
	Hoe	0	0	0	0	

Table 2. Analysis of red guava operational costs

No	Description	Cost			
		Year 1	Year 2	Year 3	Year 4
	Sickle	0	0	0	0
	Scissor	0	0	720.000	0
Variable Costs					
1.	Manure	925.000	925.000	3.400.000	3.400.000
2.	Chemical Fertilizers				
	Ponska fertilizers	562.500	1.075.000	1.075.000	1.075.000
	ZA fertilizer	500.000	975.000	975.000	975.000
	NPK fertilizers	8.700	96.000	96.000	96.000
	Total Chemical Fertilizers	1.071.200	2.146.000	2.146.000	2.146.000
3.	Wrapping	30.600	595.200	1.401.600	2.169.600
4.	Pesticide				
	Curacron	756.000	756.000	756.000	756.000
	Regent	470.400	470.400	470.400	470.400
	Antonik	218.400	218.400	218.400	218.400
	Starban	268.800	268.800	268.800	268.800
	Total Pesticides	1.713.600	1.713.600	1.713.600	1.713.600
4.	Labor				
	In-Labor				
	Fertilization	1.225.000	1.225.000	1.225.000	1.225.000
	Weeding	1.925.000	1.925.000	1.925.000	1.925.000
	Pest Control for Plant Diseases	770.000	770.000	770.000	770.000
	Harvesting	4.620.000	4.620.000	4.620.000	4.620.000
	Total In-Labor	8.540.000	8.540.000	8.540.000	8.540.000
	Outside Labor				
	Fertilization	4.900.000	4.900.000	4.900.000	4.900.000
	Weeding Plants	3.675.000	3.675.000	3.675.000	3.675.000
	Pest Control for Plant Diseases	980.000	980.000	1.470.000	1.470.000
	Harvesting	9.660.000	9.660.000	11.340.000	14.280.000
	Total Outside Labor	19.215.000	19.215.000	21.385.000	24.325.000
	Total Operating Costs	31.495.400	33.134.800	39.306.200	42.294.200

Table 2. Analysis of red guava operational costs

No		Description	Cost		
			Year 5	Year 6	Year 7
Fixed cost					
1.	Farming Equipment				
	Hoe	560.000	0		0
	Sickle	240.000	0		0
	Scissor	0	720.000		0
Variable Costs					
1.	Manure	3.400.000	3.400.000		3.400.000
2.	Chemical Fertilizers				
	Ponska fertilizers	1.075.000	1.075.000		1.075.000
	ZA fertilizer	975.000	975.000		975.000
	NPK fertilizers	96.000	96.000		96.000
	Total Chemical Fertilizers	2.146.000	2.146.000		2.146.000
3.	Wrapping	2.937.600	3.705.600		4.473.600
4.	Pesticide				
	Curacron	756.000	756.000		756.000
	Regent	470.400	470.400		470.400
	Antonik	218.400	218.400		218.400
	Starban	268.800	268.800		268.800
	Total Pesticides	1.713.600	1.713.600		1.713.600
4.	Labor				
	In-Labor				
	Fertilization	1.225.000	1.347.500		1.347.500

Table 2. Analysis of red guava operational costs

No	Description	Cost		
		Year 5	Year 6	Year 7
	Weeding	1.925.000	2.310.000	2.310.000
	Pest Control for Plant Diseases	770.000	770.000	770.000
	Harvesting	4.620.000	4.620.000	4.620.000
	Total In-Labor	8.540.000	9.047.500	9.047.500
	Outside Labor			
	Fertilization	4.900.000	5.390.000	5.390.000
	Weeding Plants	3.675.000	4.410.000	4.410.000
	Pest Control for Plant Diseases	1.960.000	1.960.000	1.960.000
	Harvesting	15.960.000	15.960.000	15.960.000
	Total Outside Labor	26.495.000	27.720.000	27.720.000
	Total Operating Costs	46.042.200	48.452.700	48.500.700

Source: Primary Data Analysis, 2020

Most of the costs incurred are for labor costs. This labor cost consists of internal labor and external labor. The workforce in the family is included in the calculation because the workforce in the family still contributes and spends energy in managing the business. In this case, the calculation of the wages for internal workers is the same as for external workers.

Financial feasibility analysis is an analysis of the eligibility criteria seen from the point of view of a business actor. The existence of this business feasibility aims to determine whether the business is financially feasible or not for the invested capital and whether or not it can contribute part of the income for the future. Project evaluation (Evapro) was carried out to determine the benchmarks of a project. The analysis used was NPV (Net Present Value), IRR (Internal Rate of Return), Net B/C Ratio, and payback period.

Table 3. Evaluation of Red Guava Farming Project Based on Market Prices in Karanganyar Regency

T	Outflow (Initial and Operating Investment Costs)	Inflow (Benefit)	Discount Factor (i)	Present Value		NPV
			$i=0,137$ $\frac{1}{1/(1+i)^t}$	PV Cost Outflow time to t	PV Inflow Benefits time to t	Net Benefit Flow time to t
0	101.299.360	0	1,00000000000000	101.299.360,000	0,0000	(101.299.360,000)
1	31.495.400	1.329.060	0,87958483595743	27.702.876,242	1.169.021,0221	(26.533.855,2203)
2	33.134.800	25.851.520	0,77366948364626	25.635.383,607	20.000.532,1299	(5.634.851,4769)
3	39.306.200	60.876.160	0,68050794585826	26.748.181,421	41.426.710,5933	14.678.529,1718
4	42.294.200	94.232.960	0,59856446992546	25.315.805,404	56.404.501,7519	31.088.696,3480
5	46.042.200	127.589.760	0,52648823108933	24.240.676,433	67.174.507,0475	42.933.830,6141
6	48.452.700	160.946.560	0,46309106437623	22.438.012,415	74.532.913,7781	52.094.901,3632
7	48.500.700	194.303.360	0,40732787789272	19.755.687,207	79.145.175,2962	59.389.488,0889
To tal	390.525.560	665.129.380		273.135.983	339.853.362	66.717.379

Source: Primary Data Analysis (2020)

Net Present Value (NPV) is cash inflows minus cash outflows. NPV is one of the criteria in calculating investment to find out whether the business is feasible or not to be carried out. Based on the table above, the NPV obtained was IDR 66,717,379.00/Ha. If the NPV is > 0, then it is feasible to cultivate red guava in Karanganyar District. This calculation was used as a consideration in cultivating red guava so that later it is known that this business will provide benefits and good prospects in the future.

IRR shows the project's ability to repay loan interest. If the IRR value is greater than or equal to the discount rate or MARR (Minimum Attractive Rate of Return), then the effort is worth the effort. The determination of IRR value was obtained by trial and error. In this calculation, positive NPV used 22% discount rate obtaining that the total value was IDR 4,983,939.06 and negative NPV used 23% discount rate, obtaining the total value of IDR -671,964.65. From the acquisition, the disc was put into the formula.

$$IRR = 0,22 + \frac{4.983.939,06}{5.610.903,71} (0,01)$$

$$= 0,2288 \text{ or } 22,88\%/\text{year}$$

Based on these calculations, the IRR value obtained was 22.88%. If the IRR value is greater than the prevailing interest rate, then the farming is feasible, and vice versa. So it can be seen that the IRR value $\geq 13\%$ discount rate meaning that the business is feasible to run.

Net B/C is the ratio between positive and negative NPV values. The positive NPV was IDR 200,185,446.00, while the negative NPV was IDR 133,468,067.00. The net B/C ratio can be obtained using the following formula

$$\begin{aligned}\text{Net B/C Ratio} &= \frac{\sum_{t=0}^n \text{NPV Positif}}{\sum_{t=0}^n \text{NPV Negatif}} \\ &= \frac{200.185.446}{133.468.067} \\ &= 1,50\end{aligned}$$

The Net B/C value obtained from this red guava farming was 1.50. This shows that each additional cost of IDR 1.00 will result in an additional benefit of IDR 1.50 for red guava farming in Karanganyar District. The resulting Net B/C value is greater than 1. Based on these indicators, it can be concluded that red guava farming is feasible to be implemented.

The payback period is the time required to pay back (return) all costs that have been incurred in the investment of red guava farming. Payback period calculation is useful to know the ability of a business to return all investment costs. In the calculation, it can be seen that the time required for farmers to return all investment costs incurred is 6.04 years.

Indicators of business eligibility criteria are if the NPV is positive ($\text{NPV} > 0$), then the IRR is greater than the prevailing bank interest rate ($\text{IRR} > \text{DR}$), and the Net B/C ratio is greater than one ($\text{Net B/C} > 1$) is feasible to run (Khotimah, 2014). So it can be concluded that red guava farming in Karanganyar District is feasible to be cultivated. This is explained by Tiara (2013), that investment feasibility analysis is used to determine production trends that will illustrate the relationship between production levels and plant age. This analysis produced a relationship between levels of production. Thus, the estimation of the amount of production per hectare per year at various plant ages can be obtained. This method assesses the benefits or investment feasibility of a project by paying attention to the time value of money so that the feasibility of a business can be determined.

Efforts that need to be done in order to increase farmers' income are the efficient use of production inputs, especially in the use of fertilizers. With the use of fertilizers and appropriate care in the cultivation of red guava, it will have an impact on the benefits obtained as expected.

Red Guava Marketing Strategy

Internal factors

Internal factor analysis was used to analyze internal factors that affect the marketing of red guava in Karanganyar District. The results of the analysis of internal factors produced strengths and weaknesses which would be used as consideration in determining the red guava marketing strategy. In this analysis, there were 6 factors, those are product, price, distribution, promotion, finance, and management.

External Factors

External factor analysis was used to analyze external factors that affect the marketing of red guava in Karanganyar District. From this analysis, it can also be used to identify and evaluate things beyond control so that later the right strategy can be found to take advantage of opportunities and avoid threats. In this analysis, there were 5 factors, those are traders, consumers, competitors, government, environment, and socio-culture.

The Internal Factor Evaluation (IFE) Matrix is a strategy formulation tool to summarize and evaluate the main strengths and weaknesses in various functional areas in a business. The EFE matrix was used to summarize opportunities and threats in a business unit. This matrix was also used as a basis for identifying and evaluating relationships among areas such as marketing, finance, production, research and development, and the operation of company management information systems (Shojaie, 2014). The External Factor Evaluation (EFE) matrix is a strategic management tool that is often used to assess current business conditions. The EFE matrix is a great tool to visualize and prioritize the opportunities and threats encountered (Ommani, 2011).

The calculation results of IFE matrix can be seen in the table above, the score for strength is 2.143, while for weakness is 0.716. It can be seen that red guava has strong strengths to minimize weakness. The difference between the strengths and weaknesses is 1.427.

Table 4. IFE (Internal factor evaluation) matriks

Internal factors		Average Weight	Rating	Score
Strength				
1	Has thick flesh, red color and sweet taste	0,129	4	0,516
2	Red guava production knows no season	0,109	4	0,436
3	Prices are relatively affordable	0,101	3	0,303
4	Have a lot of marketing networks	0,121	4	0,484
5	Own initial capital	0,101	4	0,404
Total				2,143
Weakness				
1	Farmers are less aware of making innovations from red guava	0,085	2	0,170
2	Farmers cannot determine the selling price	0,085	2	0,170
3	Lack of incessant promotional activities	0,072	1	0,072
4	Capital limitations	0,090	1	0,090
5	Poor management	0,107	2	0,214
Total		1,000		0,716
Difference between strengths and weaknesses				1,427

Source: Primary Data Analysis (2020)

Table 5. EFE (External factor evaluation) matriks

External Factors		Average Weight	Rating	Score
Opportunity				
1	The sales network helps to expand the market	0,136	4	0,544
2	Consumers come from various circles	0,108	4	0,432
3	Demand is increasing along with the increase of dengue fever epidemic	0,088	3	0,264
4	The quality of the fruit is different	0,111	3	0,333
5	The government's desire to promote guava in Karanganyar District	0,111	4	0,444
6	Natural conditions that support the cultivation of red guava	0,117	4	0,468
Total				2,485
Threat				
1	Demand decreases when it coincides with other fruit seasons	0,078	2	0,156
2	The entry of the outer red guava fruit in the guava market in Karanganyar District	0,073	2	0,146
3	Lack of government assistance in managing guava	0,077	2	0,155
4	Pest and disease attacks	0,100	2	0,200
Total		1,000		0,656
Difference between opportunity and threat				1,829

Source: Primary Data Analysis (2020)

The results of EFE matrix calculation in the table above obtained opportunities score of 2.485, while the threat is 0.656. This indicates that red guava is strong in taking advantage of existing opportunities to minimize external threats. The difference between the opportunity and threat factors is 1,829. This difference would be used later as a coordinate to determine the marketing position of red guava in Karanganyar District.

Analysis of Company Position with the Grand Strategy Matrix

Based on Figure 1, the score of the difference between strengths and weaknesses is 1.427 while the difference between opportunities and threats is 1.829. From this score, it can be seen that red guava in Karanganyar District is located in quadrant I. There needs to be a concentration on the current market (market penetration, market development) and current products (product development) is an appropriate strategy (Supratama, 2016). It is not wise for a company in quadrant I to move too far from the competitive advantage it has. This position indicates a strong and likely company. The internal strength of the company is used to seize opportunities that are outside (Amarala, 2019).

Figure 1. Results of the Grand Strategy Matrix Analysis

Analysis of Alternative Marketing Strategies with the SWOT Matrix

SWOT matrix is an important matching tool that helps farmers develop four types of strategies: SO (Strengths-Opportunities), WO (Weaknesses-Opportunities), ST (Strengths-Threats), and WT (Weaknesses-Threats). Based on the analysis of the company, it can be seen that the marketing of red guava in Karanganyar District is in quadrant I, so that in the SWOT matrix the strategy formulated was SO (Strengths-Opportunities) strategy. The final result of this analysis was the formulation of alternative strategies. Strategies were chosen by utilizing strengths and opportunities optimally and simultaneously controlling the weaknesses and threats encountered (Sopandi, 2017). There are 4 alternative strategies in marketing red guava in Karanganyar District, including:

1. Maintaining and improving the quality of red guava to maintain consumer confidence.
2. Maintaining affordable prices in order to win consumer trust.
3. Building cooperation between red guava farmers to meet market demand.
4. Promoting red guava to consumers.

CONCLUSIONS AND SUGGESTION

The feasibility of cultivating red guava based on the feasibility indicator means that this business is feasible to run. Alternative marketing strategies that can be applied by red guava farmers are to maintain and improve the quality of the fruit to maintain consumer confidence, maintain affordable prices in order to seize market position, cooperate between farmers to meet market demand, and promote to consumers. Suggestions that can be given are to maintain quality and price and the need for online and offline red guava promotion in Karanganyar District.

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