

Development Strategy of Kintamani Specialty Arabica Coffee Agro-Industry in Ulian Village, Kintamani, Bangli Regency

Ni Wayan Eka Manik Astini^{*1}; I Gusti Bagus Udayana³; Ni Made Ayu Gemuh Rasa Astiti⁴; Yohanes Parlindungan Situmeang¹; Gusti Agus Maha Putra Sanjaya⁴; Ni Made Ayu Suardani Singapurwa²

¹ Master of Agricultural Science, Postgraduate Faculty, Warmadewa University, Denpasar, Bali, Indonesia.

² Food Technology and Agriculture Product, Faculty of Agriculture, Warmadewa University, Denpasar, Bali, Indonesia

³ Agrotechnology, Faculty of Agriculture, Warmadewa University, Denpasar, Bali, Indonesia

⁴ Animal Husbandry, Faculty of Agriculture, Warmadewa University, Denpasar, Bali, Indonesia

* Corresponding author: ekamanik26@gmail.com

Abstract

Kintamani specialty Arabica coffee is a commodity that has a fairly high selling price. Bangli Regency is one of the regions in Bali Province that has good potential in developing the cultivation of Kintamani specialty Arabica coffee. This research aims to analyze and formulate the best strategy for developing Kintamani Specialty Arabica Coffee in Bangli Regency. The research methods used were internal factor evaluation (IFE) and external factor evaluation (EFE), internal-external matrix (IE), SWOT analysis, and SWOT analysis. The research results show that there are 32 internal factors and 55 external factors that make up the composition. IE analysis is in quadrant 1, with a progressive strategy recommendation. SWOT analysis shows that the strength factor has the highest weight of 0.412 with a consistency ratio of 0.035. The alternative strategies that have been formed are developing cultivation technology, carrying out continuous improvement in developing human resource skills for coffee farmers and production, carrying out continuous improvement in developing new products, creating a production timeline, analyzing and preparing forecasting marketing strategies, creating production SOPs to achieve product certification, increasing quantity, and quality of cultivation locations, increasing the number and quality of relationships with supply and marketing elements, increasing the number of promotional channels, and exercising control over production and marketing systems. This research concludes that the strategic priorities that must be carried out are progressive to developing government institutions, carrying out continuous improvement in developing human resource skills for Kintamani specialty Arabica coffee farmers and production, and analyzing and preparing forecasting marketing strategies.

Keyword: *Kintamani specialty Arabica coffee, SWOT analysis, Institutional, Marketing.*

1. Introduction

The coffee commodity is one of Indonesia's non-oil and gas exports which contributes to increasing the country's foreign exchange, therefore there is a need for policies and strategies for developing coffee in Indonesia so that it remains competitive [1]. In addition to being a source of foreign exchange earnings, coffee production is also a source of income for 14.116 million farmers in the plantation subsector in Indonesia [2]. According to data from the Directorate General of Plantation in 2022, the area under coffee cultivation in Indonesia reached 1.2 million ha, consisting of 958 thousand ha (77.77%) of robusta coffee and 251 thousand ha (22.23%) of arabica coffee. Indonesia's total coffee production in 2022 reached 748 thousand tons consisting of 601 thousand tons of robusta coffee production (78.37%) and 147 thousand tons of arabica coffee (21.63%). Indonesia's geographical location is ideal for the microclimate for coffee growth and production. Abundant biological resources are supported by specific geographical conditions

and optimal agroecosystems as well as local wisdom owned by its citizens. Indonesia produces specialty coffee products that have a distinctive taste and aroma and are in demand worldwide [3, 4]. Kintamani arabica coffee is a type of coffee that has a high selling value in the world market.

The production of arabica coffee yields in Kintamani is not uniform, some farmers get low yields and some other farmers get production results that are not maximized. This is due to the application and understanding of coffee farmers about cultivation techniques (Good Agricultural). Good and correct practices have not been maximally mastered [5]. The characteristics of Kintamani specialty arabica coffee are arabica coffee grown in the Kintamani highlands with an altitude above 900 masl, on the slopes of the Batur volcano where the soil and climate are very favorable for coffee plants. Kintamani specialty arabica coffee beans have a quality of 1 with a physical defect value of less than 5 per 30 grams according to the Indonesian National Standard (SNI) and Standard Coffee of America (SCAA) standards, namely: Maximum bean moisture content of 12%, Coffee beans are grayish green, Coffee bean size is 16 mm in diameter or larger. The taste of the medium roast degree of Kintamani specialty arabica coffee shows relatively homogeneous roast results, and the aroma of ground coffee seems sweet, there is a slight aroma of spices, and sometimes the taste of fruit, especially squeezed oranges. In Kintamani, apart from the center of the arabica coffee plantation, agro-industries that process coffee beans into coffee have also begun to grow [3].

Arabica coffee farming is the most prominent farming in the metropolitan area, Arabica coffee production is a commodity exported to several countries, such as the United States, Korea, Taiwan, and several countries in the Middle East. Grade 1-2 coffee is exported in the form of OC coffee, while grade 3-4 is processed into ground coffee for the local market [6]. As an Arabica coffee export commodity, Ulian Village, Kintamani District already has an IG (Geographical Indication) certificate which can be used as a guarantee of product quality to consumers of these commodities [7], this strengthens the income of [6], that to gain the trust of consumers, especially abroad, marketed products must have advantages over the same products in the international market.

Kintamani has an Arabica coffee plantation area of 5,656 ha and production of 2134, 48 tons in 2017 [1]. Kintamani arabica coffee production is marketed to the international market, so demand is not only influenced by the domestic market but also influenced by international market demand [8, 9]. The development of coffee farming in Ulian Village, Kintamani District, Bangli Regency has enormous potential because it is strongly supported by land that is still very wide to be able to open coffee plantations on a large scale. The plantation sector in Ulian Village has the potential to be developed because the natural resources and creativity of the local community in agriculture are enough to contribute to improving community welfare and supporting regional development [10].

Ulian Village is one of the centers of Kintamani arabica coffee production and the largest population to obtain geographical indication certification. Arabica coffee is an important source of income for farmers because Arabica coffee production is higher than other plantation crops. This means that arabica coffee is guaranteed in terms of price and a clear market, which is associated with the geographical indication certification of arabica coffee. The potential taste quality of Arabica coffee from Kintamani is quite good because the size of the seeds is large, and the aroma of coffee is citrus-flavored and not too bitter. In terms of facilities and infrastructure, the constraints faced by the government and the community are that there is no research center for coffee commodities. Human resources that are still minimal and low in the field of marketing and processing of agricultural products are also an obstacle that can hinder the development of coffee production in Bangli Regency. Therefore, researchers are interested in conducting research in Ulian Village, which has land in the highlands and has good potential to develop specialty Arabica coffee plants.

2. Materials and Methods

2.1. Time and Place of Research

This research was conducted in October 2023 and was carried out in the Arabica Coffee industry business, in Ulian village, Kintamani sub-district, Bali Regency. The location selection was done purposively with the consideration that coffee farmers experience problems of not optimal production capacity, limited capital, information, and knowledge for business development and simple production equipment. The altitude of the research site is ± 1281.5 meters above sea level, with an average temperature of $17^{\circ}\text{C} - 20^{\circ}\text{C}$ with 96% humidity.

2.2. Methods, Sources, and Types of Data

The methods used to collect data in this study are as follows: The types of data used in this study are primary data and secondary data.

1. Primary Data

Primary data is data obtained directly from respondents through several activities, namely; (a) Interviews in this study were equipped with a questionnaire, which is a list of questions to obtain answers from respondents covering data related to the thesis topic. The interviews were conducted with seven stakeholders consisting of five coffee farmers who have the potential to develop Kintamani Arabica Coffee, the Head of the Bangli Regency Agriculture, Plantation and Perhutanan Office, the Head of the Bangli Regency Industry and Trade Office. The interview is an activity aimed at finding material (information or opinions) through oral questions and answers with anyone needed in research activities. In collecting data in this study, a questionnaire will be used. (b) Observation is direct observation of the object under study to collect primary data with stakeholders. Data collection methods with observation and qualitative approaches contribute to research in natural settings to explain the process of social interaction and phenomena that occur [11].

2. Secondary Data

Secondary data is data in the form of general and specific literature obtained from various agencies related to Arabica coffee cultivation and websites related to research materials. Secondary data collection is data collected indirectly from research sites that are already available so that it can be collected by directly collecting data (documentation) related to the results of research relevant to the research [12]. In this study, secondary data were obtained from the Central Statistics Agency and related agency data and documentation such as data collection techniques to support existing secondary data and serve as an effort to recall the process of research activities carried out in the field and become one of the data completeness tools that aim to support information that has been obtained in the field.

2.3. Identification of Internal and External Factors

Factor identification is done by identifying possible influencing factors based on related literature for each aspect and facts in the field. Identification is carried out with a listing and checking system for each influencing factor, namely the identification of plant cultivation and processing of Kintamani arabica coffee with specific factors in each group in Ulian village, Kintamani sub-district, Bangli Regency. The method used refers to [13] in identifying internal and external factors.

2.4. Evaluation of Internal and External Factors

Evaluation of internal and external factors is carried out to assess the influence of certain factors on the objectives of the Arabica Coffee industry. Evaluation of factors is carried out to assess the size of the influence of certain factors related to product launch goals. The value generated from this factor evaluation describes the condition of the business internally and externally [13]. This evaluation activity is known as Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE). Evaluation of internal and external factors is carried out on respondents in Ulian village, Kintamani sub-district, Bangli Regency who are involved in the running of the

Arabica Coffee business process Evaluators are people who are directly (internal) and indirectly (external) involved in the Kintamani specialty arabica coffee business process.

Identification of these factors can create the effectiveness of strategies carried out by businesses so far can be known and business development can be formulated by determining strategies that can take advantage of existing internal and external factors. The stages in filling out the IFE matrix [13] are as follows:

1. List internal factors (strengths and weaknesses)
2. Give weights ranging from 0-1 (not important-very important) for each factor. The weight given is the significance of the factor to the success of the goal (the total number of weights must be 1). Determining the weight is done by paired comparison with a scale; 1 = horizontal factors are less important than vertical; 2 = horizontal factors are as important as vertical factors; 3 = horizontal factors are more important than vertical factors.
3. The weight of each variable is obtained by determining the value of each variable against the total value with equation 3 as follows:

$$\alpha_i = \frac{X_i}{\sum_{i=1}^n X_i}$$

Keterangan:

α = bobot variabel ke-i

X= nilai variabel ke-i

i = 1,2,3,n

n = Jumlah data

4. Ratings of 1 to 4 were assigned to each factor (1=very weak, 2=weak, 3=strong, 4=very strong). Ratings on individual data were determined using frequency distributions. Each individual's data is then grouped into group data whose main ranking is determined by mode.
5. The steps for evaluating external factors are the same as those for evaluating internal factors, the difference being that at the final stage, the total weight score is 4.0, indicating that the business strategy has a good response to opportunities and threats. A total weight score of 1.0 indicates that the company's strategy does not take advantage of opportunities or avoid threats.

2.5. Internal-External (IE) Matrix Analysis

This stage is a business positioning with a matrix called the IE matrix. The filling of this matrix is done by plotting the results of internal and external evaluations [14]. The total weighted average IFE is the x-axis and the total EFE score is the y-axis. The identification results of the company's strengths, weaknesses, opportunities, and threats are used to formulate alternative Strategies using the SWOT matrix [13].

		TOTAL SKOR EFE IFE		
		0 LOW	1 MEDIUM	2 HIGH 3
TOTAL SKOR IFE EFE	WEAK 1	I. Grow & Nurture	II. Grow & Nurture	III. Maintain & Nurture
	AVERAGE 2	IV. Grow & Nurture	V. Maintain & Nurture	VI. Harvest or Divest
	STRONG 3	VII. Maintain & Nurture	VIII. Harvest or Divest	IX. Harvest or Divest

Figure 1. Matriks internal-eksternal

2.6. Institutional Analysis

Institutional analysis is carried out with qualitative descriptive analysis to describe or describe the object of research through the data obtained, which will then be described systematically and in detail and then compiled into an easy-to-understand format. Qualitative research data analysis activities are carried out interactively and take place continuously until completion [15].

There are several steps of systematic activities in qualitative research, namely as follows:

1. Data/information collection is an activity used to collect data in the field, both from the results of interviews conducted based on the interview guide that has been prepared to obtain information related to existing institutions and their role in the development of coffee agribusiness.
2. Reducing data, in this case, the researcher will simplify the information/data obtained in the field during the research process.
3. The presentation of data is done descriptively and aims to facilitate researchers in conclusions. The presentation of data is adjusted to the main issues raised in the study.
4. Concluding, in this case, the data that has been collected is then reviewed by the researcher. The results are compared with the theory that has been put forward in the theoretical study. Furthermore, based on the results of the comparison of data obtained in the field with theoretical studies, a conclusion is drawn about the role of farmer institutions in the development of Kintamani Arabica Coffee farming in Bangli Regency.

2.7. SWOT Analysis

The SWOT matrix is an analytical tool used to compile the strategic factors of the Arabica Coffee industry in Bangli Regency. The SWOT matrix illustrates how opportunities and threats can be combined with business strengths and weaknesses. This strategy formulation produces four alternative strategies, namely the strategy of adjusting strengths and opportunities (S-O strategy), weaknesses and opportunities (W-O strategy), strengths and threats (S-T strategy), and the strategy of adjusting weaknesses and threats (W-T strategy). The data from the matrix tabulation shows that five alternative Strategies were taken to plan the development of the Arabica Coffee industry in Bangli Regency by taking into account several important aspects such as natural resources, human resources, and institutions.

Table 1. Matrik SWOT

	Strengths (S) Determine the internal strength factors	Weakness (W) Determine the internal weakness factors
Opportunity (O) Determine the external opportunity factors	S-O strategy Use strengths to take advantage of opportunities	W-O Strategy Overcome weaknesses by taking advantage of opportunities
Threat (T) Determine the external threat factors	S-T strategy Use strengths to avoid threats	W-T Strategy Minimize weaknesses and avoid threats

3. Results and Discussion

3.1. Identification of Internal and External Factors

Factor identification aims to determine the constituent factors in the agro-industry, where the identification of internal factors can be used to see the strengths and weaknesses possessed. Identification of external factors is used to see the opportunities and threats that the agro-industry has so that it can describe the existing conditions. Identification of internal and external factors is carried out using FGDs with relevant stakeholders. The results of the identification of internal and external factors can be seen in Appendix 2 and are summarized in Table 2. for internal factors and in Table 3. for external factors.

Table 2. Internal factors of Kintamani specialty arabica coffee agro-industry

Internal Strategy Factors	Weight	Rating	Score
Power			
Profession as a farmer for generations	0.1	3	0.3
Facilities and infrastructure are good	0.5	3	1.5
The government provides integrated training and direct assistance	0.3	3	0.9
Local government policy	0.1	3	0.3
Technology development through research by universities	0.2	3	0.6
Product quality is guaranteed	0.8	4	3.2
Customer cooperation in product development	0.1	3	0.3
Product differentiation	0.2	3	0.6
Availability of good raw material sources	0.8	4	3.2
Cheap and abundant labor	0.2	4	0.8
Strategic partners in product innovation development (research institutes, universities, government)	0.2	3	0.6
Financial strength	0.4	3	1.2
Group-like membership program	0.9	4	3.6
TOTAL	4.8	43	17.1
Weakness			
The marketing system has not been implemented effectively	0.5	2	1
Maintenance management is a traditional	0.8	1	0.8
Cost structure does not meet financial targets (investment, depreciation)	0.4	2	0.8
Small economies of scale	0.8	1	0.8
No agreements/contracts with suppliers, distributors, labor in business cooperation	0.1	2	0.2
Slow absorption of product innovation	0.6	2	1.2
No labor SOPs	0.4	2	0.8
Low product control	0.3	2	0.6
No production scheduling	0.8	2	1.6
No production process SOP	0.2	2	0.4
Limited product variants	0.9	1	0.9
Quality of marketing personnel	0.4	2	0.8
Promotion and execution media in the company are not integrated	0.5	1	0.5
No sales planning and evaluation activities	0.8	2	1.6
Product SOPs that are not yet available	0.3	2	0.6
The company's marketing system is not yet integrated	0.3	2	0.6
Limited market capacity	0.6	1	0.6
Limited value of the product	0.4	1	0.4
Limited consumer segment population	0.2	2	0.4
Amount	9.3	32	14.6
Strength			Skor
Hereditary coffee farming profession			0.12
Facilities and infrastructure are good			0.13
The government provides integrated training and direct assistance			0.20
Local government policy			0.16
Technology development through research by universities			0.23
Product quality is guaranteed			0.20
Customer cooperation in product development			0.17
Product differentiation			0.14
Availability of good raw material sources			0.26
Cheap and abundant labor			0.19
Strategic partners in product innovation development (research institutes, universities, government)			0.24
Financial strength			0.11
Group-like membership program			0.18
Weakness			Skor
The marketing system has not been implemented effectively			0.03

Maintenance management is a traditional	0.05
Cost structure does not meet financial targets (investment, and depreciation)	0.05
Small economies of scale	0.02
No agreements/contracts with suppliers, distributors, and labor in business cooperation	0.02
Slow absorption of product innovation	0.04
No labor SOPs	0.04
Low product control	0.06
No production scheduling	0.05
No production process SOP	0.04
Limited product variants	0.05
Quality of marketing personnel	0.05
Promotion and execution media in the company are not integrated	0.04
No sales planning and evaluation activities	0.06
Product SOPs that are not yet available	0.03
The company's marketing system is not yet integrated	0.06
Limited market capacity	0.03
Limited value of the product	0.03
Limited consumer segment population	0.03
Amount	3.05

The identification of internal and external factors found that there were 32 internal factors and 55 external factors. Internal factors are composed of 13 strengths and 19 weaknesses, while external factors are composed of 40 opportunities and 15 threats. The internal factors of the Kintamani specialty arabica coffee agroindustry in Bangli Regency obtained a value of 3.05 which can be seen in Table 2, while the external factors with a value of 3.02 which can be seen in Table 3.

The next stage is to prioritize factors that are key factors in developing the Kintamani specialty arabica coffee agroindustry in Bangli Regency. The results of factor prioritization in Table 4. are internal key factors in developing the Kintamani specialty arabica coffee agro-industry in Bangli Regency. Table 4 shows that the key factor of agroindustry strength is the availability of good related agencies with a score of 0.26 which is the first priority factor, this is in accordance with the opinion of [16] which states that the availability of related agencies such as the agriculture office, industry and trade office, banks, research institutions, academics, and stakeholders is very important in the coffee industry because: Agricultural Service: Facilitates coffee farmers with resources, training, and technology to improve production and quality of coffee beans, Industry and Trade Office: Encourages market development, regulates coffee trade, and ensures compliance with international trade regulations, Banks: Provide access to finance to coffee farmers and businesses in the industry, including financing for investment and working capital, Research Institutions and Academia: Conduct research on best practices in coffee cultivation, processing, and marketing, and provide technical knowledge and education to stakeholders, Stakeholders: Includes farmers, producers, traders, consumers, and non-governmental organizations that play a role in supporting the growth and sustainability of the coffee industry. The key factor for agroindustry weakness is low product control which is the priority with a score of 0.06, according to [17] which explains that one of the things that needs attention in achieving the target market opportunity is growing consumer satisfaction with product use value, because nowadays people's demands for product quality are getting higher, so companies are required to be able to provide their products with better quality. Therefore, producers must always try to maintain and protect the quality of the products produced.

The results of factor prioritization are in the Table. 5 are external key factors in developing the Kintamani specialty arabica coffee agro-industry in Bangli Regency. In table 5.4. It can be seen that the existence of government policies that support agro-industry development is the priority opportunity factor with a score of 0.21. The existence of government policies that support agro-industry development will greatly affect the sustainability and speed of development of the specialty Kintamani arabica coffee agro-industry in Bangli Regency, where the government, as a regulatory and policy-making institution, is a key actor who plays a role in carrying out control

and supervision [18]. The key threat factor in the table. 5 is Networking competition with a value of 0.04. The threat of competition in networking in coffee companies covers various aspects that must be considered by industry players. Some of the threats that coffee companies may face in networking competition include: Inability to Expand Network: Coffee companies may face difficulties in expanding their networks, both in terms of product distribution and access to resources and potential partners, Dependence on Third Parties: Depending on third parties, such as distributors or agents, may result in risks related to quality, cost, and control over the distribution network, Loss of Consumer Engagement: Competition within the network may result in loss of consumer engagement if there is no effective marketing strategy or social network to maintain their interest and loyalty, Innovation and Technology: Coffee companies must adapt quickly to innovation and technology in network competition to maintain competitive advantage and operational efficiency, Price Competition: Competition in the network can drive down the price of coffee products, threatening the profitability of the company if it is unable to compete effectively.

Table 3. External factors of Kintamani specialty arabica coffee agro-industry

External factor strategy	Weight	Rating	Score
Opportunity			
Potential for Institutional Development	0.3	1	0.3
Market expansion potential	0.3	2	0.6
Utilization of cooperatives and KUR	0.1	2	0.2
The potential of processed products	0.3	2	0.6
Domestic tourist growth	0.6	2	1.2
Development of increasingly diverse product diversification	0.3	1	0.3
Market expansion through online media	0.2	2	0.4
The existence of government policies that support agro-industry development	0.3	1	0.3
Making integrated agro-tourism	0.2	1	0.2
Potential for cooperation and development of new partner channels	0.5	2	1
Potential to integrate channels (retail partners/communication media)	0.2	1	0.2
Potential for increased sales margins	0.5	1	0.5
Potential for integrative cooperation programs	0.5	1	0.5
Development of machinery and equipment	0.5	2	1
Potential for system and technology development	0.5	1	0.5
Potential development of marketing systems and techniques	0.5	1	0.5
Technological developments in raw material efficiency	0.5	1	0.5
Development of increasingly ergonomic work systems	0.1	1	0.1
Advances in promotion and marketing	0.2	2	0.4
Potential collaboration with fruit & vegetable business partners in increasing sales	0.5	1	0.5
Potential communication media for business partners to reach customers	0.5	2	1
Amount			10.8
Threat			
Limited budget	0.4	1	0.4
Availability of fertilizer	0.3	2	0.6
Declining interest in becoming a beekeeper	0.2	1	0.2
Competitors follow the concept	0.2	1	0.2
Selling prices and margins are threatened by competitors	0.2	2	0.4
Competitors who imitate similar products	0.3	2	0.6
Open market	0.4	2	0.8
Competitors copying revenue strategy	0.3	2	0.6
Promotional communication media threatened with irrelevance to current customer behavior	0.2	1	0.2
Channels threatened by competitors	0.6	1	0.6
Competitor's company concept, sales force, and communication media are equally good	0.2	2	0.4

Competitors cooperate with third parties (banks and restaurants, gift shops, medical centers)	0.3	2	0.6
Potential product unavailability and continuity	0.1	1	0.1
Competitors have customer relationship programs	0.4	2	0.8
Expensive costs in research and development	0.1	1	0.1
Amount			6.6

Opportunities				Skor
Potential for Institutional Development				0.19
Market expansion potential				0.08
Utilization of cooperatives and KUR				0.08
Potential for processed products				0.10
Population growth of Bali Province				0.04
Demand growth of Bali Province				0.04
Indonesian population growth				0.04
Domestic tourist growth				0.04
Segment area of Bali Province				0.08
Customer convenience and service				0.08
Customer coaching				0.08
The population in the marketing area continues to grow				0.08
Development of increasingly diverse product diversification				0.13
Market expansion through online media				0.07
The existence of government policies that support agro-industry development				0.21
Making integrated agro-tourism				0.07
Potential for cooperation and development of new partner channels				0.04
Potential to integrate channels (retail partners/communication media)				0.03
Potential to improve channel efficiency and effectiveness				0.08
Potential to increase sales margins				0.04
Potential for activity programs with customer communities				0.03
Focused on providing specialized, specific, and unique products				0.06
Potential to increase the number of customers with promotional programs				0.11
Potential for integrative cooperation programs				0.03
Development of machinery and equipment				0.03
Develop business process and production process SOP				0.03
Potential for system and technology development				0.06
Potential development of marketing systems and techniques				0.09
More efficient and optimal processing technology				0.04
Technological developments in raw material efficiency				0.06
Development of increasingly ergonomic work systems				0.06
Advances in promotion and marketing				0.07
Physical and supporting development potential				0.16
Potential development of substitute raw materials				0.06
Potential for cooperation in the field of research and service				0.03
Potential collaboration with partners in increasing sales				0.03
Potential for business partner communication media to reach customers				0.03
Potential for community building				0.09
Increased efficiency of operational costs (employee salaries, and operational costs).				0.04
Additional investment from outside parties				0.04

Threat				Score
Limited budget				0.01
Limited fertilizer				0.04
Declining interest in becoming a coffee farmer				0.02
Competitors follow the concept				0.02
Selling price and margin threatened by competitors				0.04
Competitors who imitate similar products				0.02
Open market				0.04
Competitors copying revenue strategy				0.02

Promotional communication media threatened with irrelevance to current customer behavior	0.01
Channels threatened by competitors	0.01
Competitor's company concept, sales force, and communication media are equally good	0.03
Competitors cooperate with third parties (banks and restaurants, souvenir centers, trade centers)	0.02
Potential product unavailability and continuity	0.01
Competitors have customer relationship programs	0.02
Expensive costs in research and development	0.01
Total	3.02

Prioritization of factors aims to identify key factors in developing the Kintamani specialty arabica coffee agro-industry in Bangli Regency. This determination was made through FGDs with stakeholders. The results of priority factor processing can be seen in Tables 4 and 5.

Table 4. Prioritization of Internal factors of Kintamani specialty arabica coffee agro-industry

Strength	Score	Priority
Readiness of related agencies	0.26	1
Strategic partners in product innovation development (research institutes, universities, government)	0.24	2
Technology development through research by universities	0.23	3
The government provides integrated training and direct assistance	0.2	4
Product quality is guaranteed	0.2	5
Weakness		
Low product control	0.06	1
Lack of sales planning and evaluation activities	0.06	2
The company's marketing system is not integrated	0.06	3
Cost structure does not meet financial targets (investment, and depreciation)	0.05	4
Maintenance management is a traditional	0.05	5

Table 5. Prioritization of external factors of Kintamani specialty arabica coffee agro-industry

Opportunities	Score	Priority
Potential for Institutional Development (The existence of government policies that support agro-industry development)	0.21	1
Potential for increased cultivation	0.19	2
Physical and supporting development potential	0.16	3
Development of increasingly diverse product diversification	0.13	4
Potential to increase the number of customers with promotional programs	0.11	5
Threat		
Networking competition	0.04	1
Selling prices and margins threatened by competitors	0.04	2
Open market	0.04	3
Competitor's company concept, sales force, and communication media are equally good	0.03	4
Declining interest in becoming a coffee farmer	0.02	5

The internal external matrix is a description of the condition of the Kintamani specialty arabica coffee agro-industry in Bangli Regency. This matrix can show the appropriate strategy for its development. This matrix is obtained through the processed results of the identification of internal and external factors. The IE matrix can be seen in Figure 2.

		IFE		
		High (4-3)	Medium (2,99 – 2)	Low (1,99 – 1)
EFE	High (4-3)	I	II	III
	Medium (2,99 – 2)	IV	V	VI
	Low (1,99 – 1)	VII	VIII	IX

Figure 2. Kintamani specialty arabica coffee agro-industry IE matrix

3.2. Development Strategy

The results of the EFE analysis with a value of 3.02 and IFE with a value of 3.05 are combined in the IE matrix which can be seen in Figure 1 and the results show that the condition of the Kintamani specialty arabica coffee agroindustry in Bangli Regency is in quadrant 1. Quadrant 1 shows that Bangli Regency is a strong and opportunity area in the development of Kintamani specialty arabica coffee. Therefore, the Strategic recommendation given is progressive, which means that the company is in good condition so that it is very likely to expand, enlarge growth, and achieve maximum progress [19]. Furthermore, [20, 21] states that your progressive strategy is a strategy that has a high fighting spirit and always wants to get maximum results. In this strategy, agro-industry focuses on using the company's internal strengths to pursue external opportunities as hard as possible.

The results of the external and internal environmental factors that form the internal and external matrix, then a SWOT matrix is compiled (Figure 3.), from the matrix several alternative Strategies are produced on the key resource elements as follows: S-O Strategy (Strengths-Opportunities) namely Developing Bangli district government institutions, conducting continuous improvement in the development of human resource skills of coffee farmers and production, conducting continuous improvement in the development of new products, S-T Strategy (Strengths-Threats) namely Increasing the quantity and quality of arabica coffee, increasing the number and quality of relationships with supply and marketing elements, increasing the number of promotional channels, W-O Strategy (Weaknesses-Opportunities), namely Creating a production timeline, analyzing and forecasting marketing Strategies, making production SOPs to achieve product certification, W-T Strategy (weaknesses-Threats), namely Controlling production and marketing systems, designing Strategies to increase the interest of millennial coffee farmers.

Table 6. Weight of SWOT analysis results of factor elements

		Strengths (S)	Weakness (W)
		<ol style="list-style-type: none"> 1. Readiness of related agencies. 2. Strategic partners in product innovation development (research institutes, universities, government). 3. Technology development through research by the University. 4. The government provides integrated training and direct assistance. 5. Product quality is guaranteed. 	<ol style="list-style-type: none"> 1. Low product control. 2. Lack of sales planning and evaluation activities. 3. The company's marketing system has not been integrated. 4. Cost structure does not meet financial targets (investment, and depreciation). 5. Maintenance management is traditional.
Internal	Eksternal		

Opportunity (O)	Strategy S-O	Strategy W-O
<ol style="list-style-type: none"> 1. Potential for Institutional Development through government policies that support agro-industrial development 2. Potential to increase coffee production 3. Potential for physical and supporting development 4. Development of increasingly diverse product diversification 5. Potential to increase the number of customers with promotional programs 	<ol style="list-style-type: none"> 1. Develop government-level institutions. 2. Conduct continuous improvement in the skill development of coffee farmers' human resources and production. 3. Conduct continuous improvement in the development of new products. 	<ol style="list-style-type: none"> 1. Create a production timeline 2. Analyse and develop a marketing forecasting strategy 3. Create production SOP to achieve product certification.
Threat (T)	Strategy S-T	Strategy W-T
<ol style="list-style-type: none"> 1. The government's favoritism towards farmer groups has disappeared. 2. Selling prices and margins are threatened by competitors. 3. Open market. 4. Competitor's company concept, sales force, and communication media are equally good. 5. Declining interest in becoming a bee coffee farmer. 	<ol style="list-style-type: none"> 1. Increase the quantity and quality of arabica coffee 2. Increase the number and quality of relationships with supply and marketing elements. 3. Increase the number of promotional channels. 	<ol style="list-style-type: none"> 1. Control the production and marketing system. 2. Designing a strategy to increase the interest of millennial coffee farmers.

Figure 3 SWOT Matrix of Kintamani specialty arabica coffee agroindustry SWOT Analysis of Strategies. The next stage is to evaluate the results of the SWOT analysis where the aim in this research stage is to get priority strategies that can increase the productivity of the Kintamani specialty arabica coffee agro-industry. the results of alternative strategy priorities can be seen in Table 7.

Table 7. Weight and priority of alternative strategies for developing Kintamani specialty Arabica coffee

Strategy Alternative	Weight	Priority
Develop government-level institutions	0.160	1
Conduct continuous improvement in the skill development of coffee farmers' human resources and production.	0.151	2
Analyzing and forecasting marketing strategies	0.146	3
Conduct continuous improvement in new product development.	0.135	4
Create a production timeline	0.120	5
Create production SOPs to achieve product certification.	0.076	6
Increase the number of promotional channels.	0.065	7
Increase the number and quality of relationships with supply and marketing elements.	0.048	8
Increase the quantity and quality of cultivation locations.	0.035	9
Controlling the production and marketing system.	0.034	10
Designed Strategies to increase the interest of millennial coffee farmers.	0.031	11

Developing government-level institutions is the highest priority alternative strategy with a weight value of 0.160. Institutional development at the government level is very important. This follows the opinion of [15] which states that on various sides of the various problems faced by farmers, the main task of the government is to be able to create community empowerment, based on farmer institutions, so that they can try to be able to obtain the expected income in meeting their needs and welfare, as well as how the creation of the desired human resources can continue to take place in dynamic interactions which in turn can be a force in the implementation of

development. in the implementation of development. The second alternative strategy is to conduct continuous improvement in the development of coffee farmers' human resource skills and production with a value of 0.151. This strategy focuses on the ability of coffee farmers as producers of Arabica coffee and processors into products. Continued improvement of skills can be done continuously through the training process by changing the participants' thinking patterns that must be emphasized in the form of a desire to learn, ready to learn, and reasons to keep learning. So that then evaluation and monitoring are carried out.

Based on the SWOT analysis, and the calculation of the total IFAS and EFAS scores, the position of Kintamani Specialty Arabica Coffee is located in quadrant I. Kintamani Specialty Arabica Coffee is located in quadrant I because the two weighted value differences are positive and positive, namely $X = 1.59$ and $Y = 2.43$. Visually it can be seen in Figure 3 below.

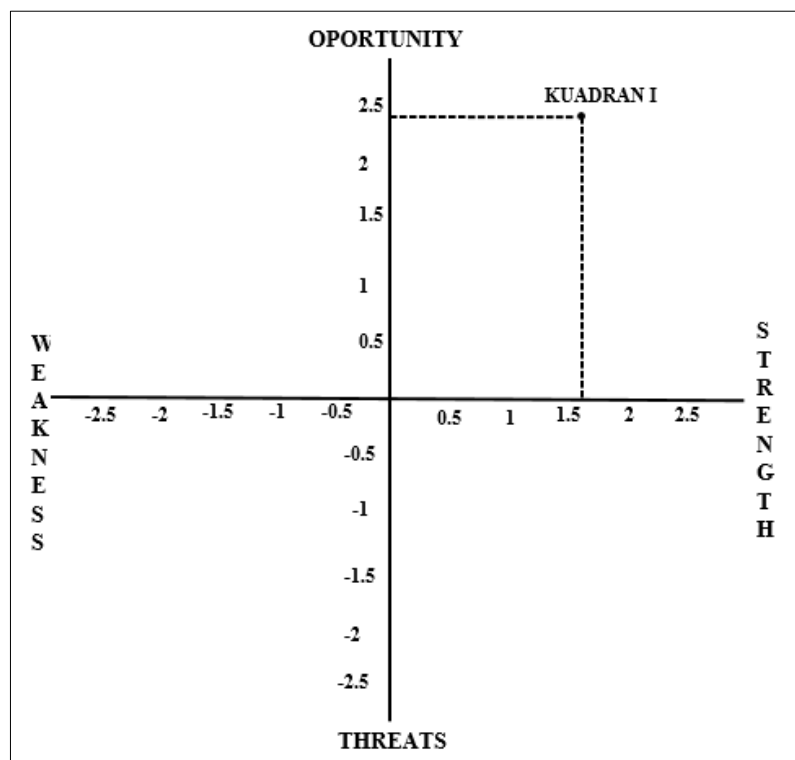


Figure 3. Position of Kintamani Specialty Arabica Coffee in the SWOT Matrix

Following the SWOT matrix picture above, Kintamani Coffee should use a market development strategy. In quadrant I (position on the path of strengths and opportunities) means that Kintamani Coffee has a strong competitive position, and is in an industry with opportunities.

4. Conclusion

This research concludes that there are strategic priorities that must be carried out progressively by developing institutions, conducting continuous improvement in the development of human resource skills of coffee farmers and production, and analyzing and forecasting marketing strategies.

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