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FORMULATION OF ARABICA COFFEE FARMING BUSINESS DEVELOPMENT STRATEGY IN ENREKANG DISTRICT USING SWOT ANALYSIS

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Abstract

Enrekang Regency is one of the famous Arabica coffee-producing areas because it has a topography and climate that are suitable for the growth of coffee plants. Despite having suitable land for coffee cultivation, most coffee farmers still face several problems both internally and externally. Therefore, research is needed to determine the strategy for developing Arabica coffee farming businesses in Enrekang Regency by examining the analysis of internal and external factors. This research is a descriptive study using a qualitative approach. Respondents in this study were coffee farmers and traders, determined intentionally. Data collection used in the study included observation, interviews, and documentation. The data obtained were analyzed using SWOT analysis. Based on the results of the study, it shows that the strategy applied to coffee farming is in quadrant one, namely Aggressive (growth-oriented strategy), or is in a dynamic growth position, or is in a strength-opportunity strategy position (using strengths to take advantage of opportunities in decision making). This shows that there is an opportunity to develop Arabica coffee farming, in addition to having greater strengths compared to its weaknesses, it also has greater opportunities compared to its threats.

Keywords: Arabica coffee, Development strategy, External factors, Internal factors, SWOT analysis.

1. INTRODUCTION

One of the main plantation commodities with export value, and has long been the main driver of the Indonesian economy, is coffee. Coffee provides jobs, income for the community, and foreign exchange (Ariyanti et al., 2019; A. Fatoni, 2022; Santi et al., 2022). After Brazil, Vietnam, and Colombia, Indonesia is the fourth-largest coffee producer and one of the largest coffee suppliers in the world. Around 67% of the coffee produced is exported, while the remaining 33% is used for domestic consumption. Indonesia is the fourth-largest coffee-producing country in the world after Brazil, Vietnam, and Colombia. Of the total production, around 67% of the coffee is exported while the rest (33%) is to meet domestic needs.

Coffee consumption in Indonesia has increased significantly in many studies, up to 44% in the ten years from 2008 to 2019 (Sihombing et al., 2023). According to the Indonesian Coffee Exporters and Industry Association (AEKI), the domestic coffee consumption level based on the LPEM UI survey results in 1989 reached 500 grams/capita/year. Coffee entrepreneurs estimate that coffee consumption in Indonesia has reached 800 grams/capita/year. https://www.aeki-aice.org/industri-kopi/. This increase is an indication of a change in consumer behavior because coffee consumption is increasingly becoming a part of everyday life. This increase is also accompanied by an increase in domestic coffee production, so that Indonesia is ranked 4th as a coffee producer in the world (ICO 2021).

One of the producers of Arabica coffee is Enrekang Regency, coffee from this area is widely known and has even been exported abroad at a fairly high price. Maiwa, Bungin, Enrekang, Baraka, Buntu Batu, Anggeraja, Malua, Alla, Curio, Masalle, and Baroko Districts are some of the coffee-producing locations in Enrekang Regency (BPS Enrekang Regency, 2020). According to the Central Statistics Agency (BPS) of South Sulawesi Province, Enrekang Regency has an area of 3,005.88 km² in 2020 and an altitude of 3000 m above sea level. These conditions indicate that Enrekang Regency is very suitable for plantation crops such as coffee. Despite having suitable land for coffee cultivation, most coffee farmers still face several challenges, including limited capital, lack of innovation in product packaging and marketing networks, lack of information about coffee cultivation and post-harvest technology for farmer groups, lack of farmers who have the knowledge and skills to process coffee correctly and appropriately according to standard operating procedures, and the low percentage of added value enjoyed by farmers.

Previous studies on strategies for developing Arabica coffee farming businesses have been widely conducted, including (A. Fatoni, 2022); (Zakaria et al., 2017); (Hasriani, 2023); (Puspitasari et al., 2022); (Siadari et al., 2020); (Alam & Cawer, 2020). The study describes the internal and external factors farmers face in developing their coffee farming businesses. The common problem farmers encounter is in coffee productivity, both in coffee beans and processed coffee, due to the low quality of coffee. In its development, problems were found both in the internal and external environments. To achieve business improvement, the basic thing that needs to be done is to identify internal and external factors with the SWOT analysis tool, so that Arabica coffee farming businesses can determine a strategy in developing their businesses and can survive in a competitive environment (Najib & Ihsan, Pratiwi, 2024); (Najib, Haq, et al., 2024). Seeing the condition of these problems, it is necessary to study the development of coffee in Enrekang Regency, with the hope of increasing productivity, so that it can provide results and contribute to improving farmer welfare. Therefore, research is needed on strategies for developing Arabica coffee farming businesses in Enrekang Regency by examining internal and external factors.

2. RESEARCH METHOD

The research location was carried out in Benteng Alla Utara Village, Baroko District, Enrekang Regency, South Sulawesi Province. The research period was three months starting from August to October 2024.

Both primary and secondary data are used in this investigation. Questionnaires were used to interview respondents and collect primary data. Respondents were heads of farmer groups, coffee growers, collectors, and consumers. Finding responders with the use of purposive sampling. Purposive sampling, according to Sugiyono (2011), is a technique that selects respondents as samples based on unique traits that are pertinent to the study's goals. Analyzing qualitative data helps identify the company's external environment, which includes opportunities and dangers, as well as its internal environment, which includes strengths and weaknesses. The SWOT analysis methodology, which stands for Strengths, Weaknesses, Opportunities, and Threats, is the qualitative method employed in this study's data analysis. To address the issues in this study, SWOT analysis is employed (Rangkuti (2016).

Three phases of strategy formulation—the input, matching, and decision stages—are analyzed to identify the best strategic approach. The IFE and EFE matrices are compiled in the input stage, the SWOT matrix is compiled in the matching stage, and the QSP matrix is compiled in the decision stage. The company's internal and external surroundings are analyzed at the input stage. The company's strengths and weaknesses are ascertained via internal analysis, while its opportunities and risks are ascertained through an external environmental study. The IFAS (Internal Strategic Factor Analysis Summary) and EFAS (External Strategic Factor Analysis Summary) matrices are updated with the analysis's findings. Matching opportunities and threats with strengths and weaknesses is the next step. The SWOT matrix is an analytical tool used in the matching stage. (Najib et al, 2024).

Based on one's strengths and weaknesses, the SWOT matrix may effectively explain the external opportunities and dangers encountered. The SWOT matrix is another analytical tool designed to explain the current or potential state of affairs for the firm. There are four cells of potential other tactics that might be created:

a. The SO (Strengths-Opportunities) approach makes use of all available strengths to maximize opportunities.
b. ST (Strength-Threats) strategy, which uses existing strengths to overcome threats.
c. WO (Weakness-Opportunities) strategy, which utilizes existing opportunities by minimizing existing weaknesses.
d. WT (Weakness-Threats) strategy, which is a defensive activity that seeks to minimize existing weaknesses and avoid threats.

The final stage or decision stage, at this stage, several strategies obtained from the decision stage will be analyzed using the QSP matrix.

3. RESULTS AND DISCUSSION

3.1. IFAS (*Internal Strategic Factor Analysis Summary)*

The identification of internal factors in Arabica coffee farming in Benteng Alla Utara Village, Baroko District, and Enrekang Regency is as follows:

Strength

a) Potential of supporting natural resources

Natural resources such as land, soil fertility, and geographical conditions support the growth and development of Arabica coffee in Benteng Alla Utara Village, Baroko District, Enrekang Regency.

b) Own land

Because the farmers own the land, coffee farmers are free to manage it, from land processing, planting, maintenance, and harvesting, all of which are managed and regulated by the farmers.

c) Availability of labor

Arabica coffee farming requires labor during harvest. On average, workers are obtained from around the residence or close to the farming location, so it is not difficult for farmers if they want to get help from labor.

d) Production facilities are easy to obtain

Production facilities in the form of seeds are easy to obtain and are provided by the government in the form of subsidized seed and fertilizer assistance. The tools and materials needed by coffee farmers are easy to obtain from shops or stalls.

Weaknesses

a) Limited capital

It is difficult to obtain capital when needed by coffee farmers, so farmers depend heavily on traders who provide capital assistance. This is what makes farmers weak in the "bargaining position".

b) Difficulty in obtaining superior seeds

In Benteng Alla Utara Village, farmers generally use their seeds or buy them in stores, even though the success of developing Arabica coffee comes from superior quality seeds/seedlings that come from certified seed gardens and seed certification.

c) Arabica coffee plants are old

Most of the Arabica coffee plants owned by farmers are old, on average over 10 years old, so their productivity has also started to decline. Farmers have not rejuvenated or replanted new seedlings.

d) Weak coordination between members of farmer groups

Ineffective communication, poor planning, or a lack of consensus can all be signs of poor coordination in a coffee farmer organization. This may affect several areas, including coffee product cultivation, post-harvest handling, and marketing.

3.2. The IFAS Matrix

Internal and external factors can be identified based on respondent data and information processing. These factors are then entered into the external strategy factor matrix (EFAS) and the internal strategy factor matrix (IFAS) to evaluate and determine the best alternative strategy for growing coffee farming. The following table displays the IFAS matrix for coffee farming in Benteng Alla Utara Village, Baroko District, Enrekang Regency:

Table 1. Internal Factor Analysis in Arabica Coffee Farming in Benteng Alla Utara Village, Baroko District, Enrekang Regency

Number	Internal Strategy Factors	Weight	Rating	Weight x Rating
A	**Strength**			
1	Potential of supporting natural resources	0,14	4	0,56
2	Own land	0,20	4	0,80
3	Availability of labor	0,14	3	0,42
4	Production facilities are easy to obtain	0,12	2	0,24
	Amount A	**0,60**	**12**	**1,88**
B	**Weakness**			
1	Limited capital	0,13	4	0,52
2	Difficulty in obtaining superior seeds	0,13	4	0,52
3	Arabica coffee plants are old	0,08	3	0,24
4	Weak coordination between members of the farmer groups	0,06	2	0,12
	Amount B	**0,40**	**13**	**1,40**
	Amount A + B	**1**	**25**	**3,28**

Source: Processed Data, 2025

The results of the internal factor analysis in Table 1 show that the internal factor indicator is self-owned land, so that farmers have the freedom to cultivate their land. This is a strength in the development of future coffee farming strategies, with the highest score of 0.80. However, weak coordination in coffee farmer groups can mean no agreement, poor planning, or ineffective communication among group members, with a score of 0.12, which can have an impact on various aspects, such as cultivation, post-harvest, to marketing of coffee products. The results of the IFAS strengths and weaknesses matrix obtained a total weighted value of 3.28, which indicates that Arabica coffee farming in using strengths and overcoming weaknesses is classified as strong.

3.3. EFAS (*External Strategic Factor Analysis Summary)*

Opportunities

a) Increasing need and demand for coffee

The culture of drinking coffee is currently trending with the emergence of various shops or cafes that serve coffee as a culinary, so the demand for coffee, both coffee beans and processed ground coffee, is increasing.

b) The increasingly rapid development of information technology

The development of information technology, especially the use of digital platforms to support the marketing of coffee commodities, opens up opportunities for entrepreneurs and coffee lovers.

c) Good cooperative relationship with traders

Good cooperation or relationship between farmers and coffee traders needs to be maintained so that farmers' coffee production can be distributed at a selling price agreed upon by both parties.

d) Establishment of cooperation with the Department of Agriculture

Assistance and support from the Department of Agriculture in terms of assisting in the form of machinery, fertilizer, seeds, and training on nurseries, planting, and fertilization.

Threats

a) Coffee price fluctuation

Coffee price fluctuation is the rise and fall of coffee prices, which are influenced by various factors such as market demand, supply, weather conditions, and government policies. Coffee prices can rise due to high demand or limited supply, while prices can fall due to excessive supply or low demand.

b) Impact of climate change

The influence of seasonal changes also affects the growth of Arabica coffee plants because rising temperatures, irregular rainfall, and sudden changes in temperature are not good for the growth of Arabica coffee plants and pollination of Arabica coffee. The presence of extreme seasonal changes during the production period will affect the productivity of Arabica coffee plants.

c) Land conversion

Many farmers who abandon their coffee plantations or fields switch to cultivating horticultural crops such as shallots, which can be harvested in a short time compared to coffee plants.

d) Threats of pest and disease attacks

One of the obstacles that farmers fear most is pest and disease attacks because they can ruin the harvest. The types of pests that often attack coffee plants are stem borers, black ants, and diseases caused by nematodes. This condition affects the level of pest and disease attacks on coffee plants, which also has an impact on coffee production.

3.4. The EFAS Matrix

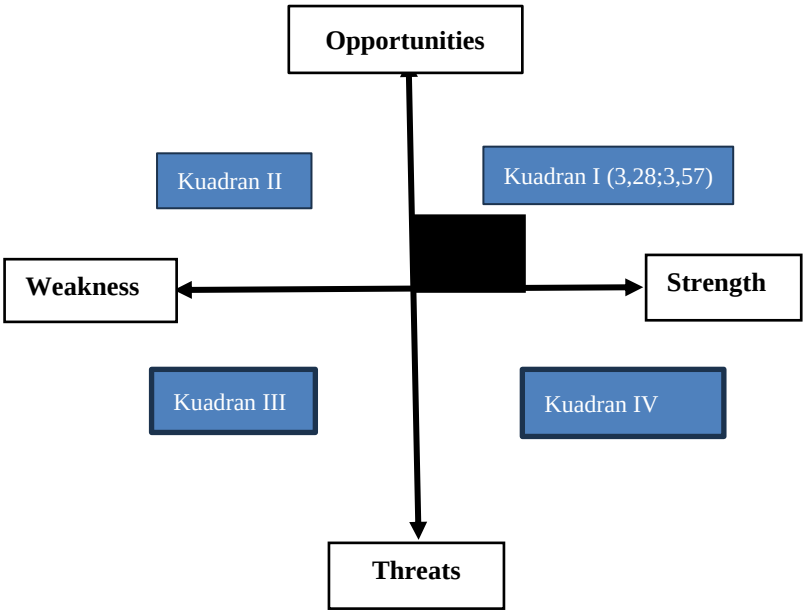
The EFAS matrix on coffee farming in Benteng Alla Utara Village, Baroko District, Enrekang Regency can be seen in the following table.

Table 2. External Factor Analysis on Arabica Coffee Farming in Benteng Alla Utara Village, Baroko District, Enrekang Regency

Number	External Strategy Factors	Weight	Rating	Weight x Rating
A	**Opportunities**			
1	Increasing need and demand for coffee	0,18	4	0,72
2	The increasingly rapid development of information technology	0,20	4	0,80
3	Good cooperative relationship with traders	0,15	4	0,60
4	Establishment of cooperation with the Department of Agriculture	0,16	3	0,48
	Amount A	**0,69**	**15**	**2,60**
B	**Threats**			
1	Coffee price fluctuation	0,12	4	0,48
2	Impact of climate change	0,05	3	0,15
3	Land conversion	0,04	3	0,12
4	Threats of pest and disease attacks	0,10	3	0,30
	Amount B	**0,31**	**13**	**0,97**
	Amount A + B	**1**	**28**	**3,57**

Source: Processed Data, 2025

The results of the external factor analysis in Table 2 show that the external factor indicator, namely the increasingly rapid development of information technology, obtained a score of 0.80, so that it has the opportunity to utilize information technology in marketing Arabica coffee products that can support increased coffee sales. In addition, the factor that threatens the sustainability of Arabica coffee farming is land conversion, with a score of 0.12, where farmers are starting to switch to horticultural crops such as shallots, which have a fast harvest period, so that they can cover the daily needs of farmer families. The results of the EFAS opportunity and threat matrix obtained a total weighted score of **3.57**. This shows that Arabica coffee farming can take advantage of opportunities and overcome relatively strong threats. The results of the IFAS and EFAS research were then entered into a matrix with four indicator elements as follows



3. 5. SWOT Matrix

The SWOT matrix is a matching tool used to compile strategic factors of a business. The IFE and EFE matrix analysis that has been carried out is then compiled into a SWOT matrix to formulate a strategy based on the internal and external factors that have been identified. The formulation of a strategy using the SWOT matrix consists of four (4) combinations of factors, consisting of the Strength-Opportunity (S-O) strategy, Strength-Threat (S-T) strategy, Weakness-Opportunity (W-O) strategy, and Weakness-Threat (W-T) in Table 3 as follows:

Table 3. SWOT Analysis Matrix of Arabica Coffee Farming Development Strategy in Benteng Alla Utara Village, Baroko District, Enrekang Regency, South Sulawesi Province in 2025

Internal Factors	**Strengths (S)**	**Weaknesses (W)**
External Factors	1. Potential of supporting natural resources 2. Own land 3. Availability of labor 4. Production facilities are easy to obtain	1. Limited capital 2. Difficulty in obtaining superior seeds 3. Arabica coffee plants are old 4. Weak coordination between members of the farmer groups
Opportunities (O)	**S-O Strategies** 1. Establish cooperation with the agricultural	**W-O Strategies** 1. Strengthen coordination in farmer groups to easily

1. Increasing need and demand for coffee 2. The increasingly rapid development of information technology 3. Good cooperative relationship with traders 4. Establishment of cooperation with the Department of Agriculture	service in exploring the potential of natural resources and utilizing available manpower (S1, S3, O4) 2. The increasing demand and need for coffee can be met by providing production facilities and skilled workers (S3, S4, O1) 3. The development of information technology makes it easier for farmers to manage their land for maximum production and assistance from the agricultural service in the form of extension and other production facilities. (S2, O2, S4, O4). 4. The increasing demand and need for coffee can be met by utilizing natural resources, labor, and production facilities that are available and easily obtained, and supplemented with assistance from the local agricultural service. (S1, S3, S4, O1, O4).	obtain assistance for production facilities from the local agricultural service. (W4, O4). 2. Using superior seeds and replacing old plants, and strengthening capital to meet the increasing demand for coffee. (W1, W2, W3, O1). 3. Replacing old coffee plants by planting superior seeds can be achieved by using information technology and establishing cooperation with the agricultural service in providing production facilities. (W2, W3, 02, O4). 4. Capital assistance to farmers can be obtained by establishing cooperation with coffee traders. (W1, O3).
Threats (T)	**S-T Strategies**	**W-T Strategies**
1. Coffee price fluctuation	1. Provide production facilities and	1. Improve services by increasing digital use

2. Impact of climate change 3. Land conversion 4. Threats of pest and disease attacks	infrastructure so that the resulting productivity increases, so that farmers do not easily switch to other crops. (S4, T3). 2. Maximize the use of land and the potential of natural resources available to prevent pest and disease attacks, minimize the impact of climate change and land conversion (S1, S2, T2, T3, T4). 3. Increase the use of production facilities to obtain good quality coffee productivity so that coffee prices can compete in the market. (S4, T1).	through social media so as not to compete with other similar businesses. (W1, W3, T2). 2. Increase farmers' access to capital and strengthen farmer group coordination and cooperation in overcoming various problems in coffee plants, such as uncertain selling prices, changes in weather and climate, pest and disease attacks, and land conversion. (W1, W4, T1, T2, T3, T4).

Source: Processed Data, 2025

Based on Table 3, the SWOT matrix can identify several appropriate strategies to develop Arabica coffee farming in Benteng Alla Village, Baroko District, Enrekang Regency. Several alternatives can be formulated as follows:

a. SO Strategy

The SO strategy is to create a strategy that uses strengths to take advantage of opportunities. The strategy is;

- Establish cooperation with the agricultural service in exploring the potential of natural resources and utilizing available manpower.
- The increasing demand and need for coffee can be met by providing production facilities and skilled workers.
- The development of information technology makes it easier for farmers to manage their land for maximum production and assistance from the agricultural service in the form of extension and other production facilities.

- The increasing demand and need for coffee can be met by utilizing natural resources, labor, and production facilities that are available and easily obtained, and supplemented with assistance from the local agricultural service.

b. WO Strategy

The WO strategy is to create a strategy that minimizes weaknesses to take advantage of opportunities. The strategies are:

- Strengthen coordination in farmer groups to easily obtain assistance for production facilities from the local agricultural service.
- Using superior seeds and replacing old plants, and strengthening capital to meet the increasing demand for coffee.
- Replacing old coffee plants by planting superior seeds can be achieved by using information technology and establishing cooperation with the agricultural service in providing production facilities.
- Capital assistance to farmers can be obtained by establishing cooperation with coffee traders.

c. ST Strategy

The ST strategy is to create a strategy that uses power to overcome threats. The strategies are;

- Provide production facilities and infrastructure so that the resulting productivity increases, so that farmers do not easily switch to other crops.
- Maximize the use of land and the potential of natural resources available to prevent pest and disease attacks, minimize the impact of climate change, and land conversion.
- Increase the use of production facilities to obtain good quality coffee productivity so that coffee prices can compete in the market.

d. WT Strategy

The WT strategy is to create a strategy that minimizes weaknesses and avoids threats. These strategies are:

- Improve services by increasing digital use through social media so as not to compete with other similar businesses.
- Increase farmers' access to capital and strengthen farmer group coordination and cooperation in overcoming various problems in coffee plants, such as uncertain selling prices, changes in weather and climate, pest and disease attacks, and land conversion.

4. CONCLUSION

Based on the research that has been conducted, the following conclusions can be drawn: The factors that are the strengths in the strategy for developing Arabica coffee farming in Benteng Alla Utara Village, Baroko District, Enrekang Regency are: Potential supporting natural resources, self-owned land, availability of labor, easy to obtain production facilities. The indicators that are weaknesses are: limited capital, difficulty in obtaining superior seeds, old Arabica coffee plants, and weak coordination between members of farmer groups. All of these indicators are from the IFAS (Internal Factor Analysis Summary) matrix table. The indicators that are opportunities for Arabica coffee farming in Benteng Alla Utara Village are: increasing needs and demands for coffee, increasingly rapid development of information technology, good cooperative relations with traders, cooperation with the Department of Agriculture. Meanwhile, the indicators that are threats are: coffee price fluctuations, the impact of climate change, land conversion, the threat of pests and diseases. This indicator is from the EFAS (External Factor Analysis Summary) matrix table. The condition of Arabica coffee farming is in the first quadrant, which shows that Arabica coffee farming is in a very profitable condition because it has quite promising strengths and opportunities in supporting the strategies implemented. The strategy that needs to be improved is the downstreaming of coffee farming by increasing the capacity of Arabica coffee farmers through technical skills to improve the quality of coffee-based processed products, so that they can increase the added value of coffee-based products by empowering members and farmer groups.

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