

# Development of Coffee (*Coffea sp.*) Farming in Suka Village, Karo District

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## ABSTRACT

Karo coffee is a leading commodity in Karo Regency which has the potential to be developed because it can improve the welfare of farmers. Research objectives analyse internal factors and external factors that influence the development of coffee plant farming (*Coffea, sp*) in Suka village and formulate alternatives in developing coffee plant farming in Suka village, Karo Regency. The data analysis method used is SWOT analysis.

The results of the study are the Internal Factors of strength, namely natural resources, coffee taste, human resources, coffee harvest time, farmer groups, and transportation access. The dominant force affecting the development of coffee farming in the research area is human resources. Internal factors of weakness are coffee plant seeds, coffee marketing, coffee farmer partnerships, coffee processing, and coffee plant maintenance. The most dominant weakness is the maintenance of coffee plants. Opportunity external factors are: location of coffee cultivation, demand for coffee, profit of coffee farming and quality of coffee beans. The most dominant opportunity is the demand for coffee. External threat factors are: coffee farming competition, climate change, coffee pests and diseases and coffee prices. The most dominant threat is competition in coffee farming. The development of coffee farming in the research area is in quadrant I. The focus of development that must be carried out is to maximize internal strengths and take advantage of existing opportunities.

**Keywords:** [Development, coffee plant]

## INTRODUCTION

There are two types of coffee plants that are most widely cultivated in Indonesia, namely Arabica and Robusta. Arabica is coffee with a larger fruit size, most delicious and withstands harsh weather.<sup>[1,2]</sup> Robusta has higher caffeine and can be developed in an environment where arabica will not grow.<sup>[3]</sup> Karo coffee is a leading commodity in Karo, Regency which has the potential to be developed because it can improve the welfare of farmers. Some of the obstacles faced are the inability to increase farming productivity, technical and management constraints faced by farmers to meet company standards and international markets. This is because farmers do not have technical knowledge, practical experience about post-harvest processing of coffee. In order for post-harvest processing to increase, it is necessary to provide assistance and training to farmers who have an important role in determining the quality of the coffee beans produced.<sup>[4]</sup>

Coffee is one of the main agricultural commodities in Indonesia, the coffee industry has a great ability to absorb labor. A farmer has an interest in increasing income. Farmers must maximize their production and they also have an interest so that production costs can be kept as low as possible by taking into account the current market conditions. So this can be called an efficient and profitable farming. Therefore, efforts are needed to develop coffee farming in all regions of Indonesia that have coffee growers. Based on the

description above, the authors are interested in conducting research on the Strategy for the Development of Coffee Plantation Farming in Suka Village, Karo Regency

## LITERATURE REVIEW

Coffee (*Coffea sp.*) is a plant originating from the African continent that grows in forests with various types. The name *Coffea* is taken from a city name in the country of Abyssinia or Ethiopia, namely the city of Coffa. In the history of this city is known as the first coffee center in the world. The types of coffee that are widely cultivated in Indonesia are robusta and arabica, although previously Liberika coffee was planted in Indonesia, but now it is difficult to find these types of plants.<sup>[5]</sup>

Management of coffee plants affects the plants and the environment around the coffee plants. Management carried out on coffee plants is seeding, planting, fertilizing, pruning coffee plants, pruning shade plants and controlling pests and plant diseases.<sup>[6]</sup> In order to obtain the maximum yield of Arabica coffee, the process of planting, maintaining, and good harvesting is endeavoured. Increasing coffee production depends on cultivation techniques, soil fertility, harvest management and climatic conditions.<sup>[7,8]</sup> There are various techniques in coffee cultivation including seeding, fertilizing, maintenance, pest and disease control, weed control, harvesting, and postharvest. The growth of coffee plants is highly dependent on the quality of the seeds used by farmers at the start of planting. Therefore, planting media and fertilizers are important factors that must be considered in order to obtain quality coffee seeds which in the future can produce coffee plants with maximum production.<sup>[9]</sup>

The fluctuations in the value of exports of coffee in international trade can not be separated from the competitive and comparative advantage which are deeply affected each other.<sup>[10]</sup> Fluctuation of coffee export quantity in several major exporting countries for the last fifteen years is expected to support a country position in

facing the competition with their major exporters. The number of fluctuating exports is due to supply and demand factors.<sup>[11,12]</sup>

Agricultural development is also one of the efforts in developing the rural economy because most of the population lives in rural areas and their livelihood is largely dependent on the agricultural sector, either directly or indirectly. The agricultural development strategy with a farming and agro-industry perspective shows the direction that development is a very important effort to achieve several goals. Attracting and encouraging the emergence of new industries in the agricultural sector, creating a strong, efficient and flexible economic structure, creating added value, increasing foreign exchange earnings, creating jobs, and improving income distribution.<sup>[13]</sup>

The problem with this Robusta coffee research is from upstream (on farm) to downstream (off farm). On the on-farm side, the level of coffee productivity in Indonesia is still low, this is because 95% of coffee is community plantations which generally do not use superior seeds, cultivation techniques are still simple, it is late in rejuvenating plants, the lack of supporting facilities and infrastructure results in low quality coffee.<sup>[14]</sup>

SWOT analysis is a systematic identification of various factors to formulate corporate strategy, this analysis is based on logic that maximizes strengths and opportunities, but can simultaneously minimize weaknesses and threats.<sup>[15]</sup> This analysis identifies internal and external influences and characterizes strengths, weaknesses, opportunities and threats.<sup>[16]</sup>

This analysis is based on the assumption that an effective strategy maximizes the existing strengths and opportunities and minimizes the weaknesses and threats. When applied accurately, this simple assumption has a huge impact on the design of a successful strategy and analysis of the business environment that provides the

information needed to identify opportunities and threats that exist within the company.<sup>[17]</sup>

## METHODS

This research was conducted in Suka Village, Karo Regency. This research will be carried out from October 2022 to May 2023. Parameters Observed

a. Internal factors and external factors on coffee farming in Suka Village, Karo Regency.

b. Development of coffee farming in Suka Village, Karo Regency.

The population in this study were coffee farmers in Suka Village, Karo Regency. Sampling farmers with the Taro Yamane equation formula as follows:

$$n = \frac{N}{Nd^2 + 1}$$

Where:

n = Sample

N=Population

d=Precision (100%)

The data used in this study include primary data and secondary data. Primary data was obtained through interviews and filling out questionnaires by respondents. Secondary data collected is land physical resource data, human resource data, and man-made resource data. The data was obtained from agencies such as BPS and the office of the head of the village of Suka, Karo Regency. Methods of data collection by means of a survey.

The data analysis method used in explaining problem identification is descriptive analysis, namely the SWOT matrix. This matrix clearly describes how the external opportunities and threats faced are adjusted to the needs of the strengths and weaknesses possessed. SWOT matrix analysis is a continuation of the internal-external situation analysis, where internal factors in the form of factors of strengths and weaknesses are combined with external factors in the form of factors of opportunities and threats, this combination will produce several alternative strategies

(alternative strategies). Both factors (internal and external) must be considered in the SWOT analysis. SWOT analysis compares external factors which are opportunities and threats with internal factors which are strengths and weaknesses.

## RESULT

### Internal Factor Analysis

#### 1. State of Natural Resources

The condition of natural resources in Suka Village, Tiga Panah District, includes soil fertility, climate, topography and altitude. The soil in Suka Village is volcanic soil, most of which have a high fertility level. The types of soil in the Arabica coffee growing area in Suka Village include Andosol, Latosol, and Podzolic. In addition to the results of the analysis of the physical properties of the soil, a soil chemical analysis was also carried out, it can be seen that the soil in the Arabica coffee planting area in Suka Village has high chemical fertility

#### 2. Coffee Taste

In terms of taste, Arabica coffee is known for its complex taste, ranging from fruit, spices, caramel, and also a touch of other flavours. Arabica coffee is a type of coffee that is quite difficult to grow because it can only be grown at high altitudes with cool weather. The taste of Arabica coffee also depends on the height of the plant. The higher the land, the more levels of compounds contained in the fruit. The higher the coffee plantation, the richer the sour, aromatic and rich taste. The climate and soil conditions as well as the geographical location of Karo Regency, especially Suka Village, as well as the height above sea level are very suitable for the growth requirements of Arabica coffee plants, to be able to produce quality Arabica coffee with a distinctive taste.

#### 3. Human Resources

In order to increase Human Resources (HR), farmers form farmer groups, in order to gain technical knowledge about the ins and outs

of the coffee business starting from cultivation techniques, post-harvest processing, marketing, and protection of Intellectual Property. Within the Farmer Groups, they can exchange information and also receive guidance from the related SKPD (Regional Work Unit) and other parties. The availability of manpower as well as efforts to continuously improve Human Resources are expected to be able to realize high production and good quality Arabica coffee in a sustainable manner, and in turn be able to lift the local community's economy.

#### **4. Coffee Harvest Period**

Coffee cultivation, if done intensively, will produce results in less than five years. Coffee arabica at the age of 3 years - 4 years. After the fruit is ripe, you can start the harvesting process manually, which is picking the fruit from the tree directly. Initial harvest, usually cannot produce in large quantities. But coffee plants continue to bear fruit until they reach peak production at the age of 7 – 9 years. One harvest period generally lasts between 4 – 5 months.

#### **5. Farmer Groups**

Farmer groups play a role in the success of coffee farming in Suka village. The farmer group in the village is the Poktan Aglonema farmer group whose members are women in Suka village. In this group, the commodities cultivated are corn, vegetables and other crops (including coffee). In its activities there are also savings and loan activities within group members. The next farmer group is the Poktan Paya Paku farmer group. In farmer groups, the members are men. In this group, the problems that occur in farming in the village are often discussed. Not apart from the problem of coffee plants.

#### **6. Transportation Access**

Transportation access in suka village area can already be visited by vehicle. There is already one public transportation from Kabanjahe to Suka Village every day with

3-4 round trip intervals. In general, the transportation route in Suka Village is good. The condition of the access road to Suka village has been paved. With good access, it can help the development of coffee farming.

#### **7. Coffee Plant Seeds**

The Arabica coffee variety in Tanah Karo that is generally known by the community is Ateng. The recommended superior varieties that have started to be planted by many farmers are Sigarar Utang, Andungsari 1, Kornasti, Gayo 1 and Gayo 2, all of which are growing well in Karo Land.

#### **8. Coffee Marketing**

The Arabica coffee produced by the farmers are purchased by collectors at unstable prices, sometimes the coffee prices do not even match the labour wages. The eruption of Mount Sinabung in 2010 which was followed by a series of eruptions to date has also had an impact on increasing the enthusiasm of farmers to plant Arabica coffee again. This is because coffee is the most resistant plant to the impact of the eruption compared to other plants.

#### **9. Coffee Farmer Partnership**

The Protection of Geographical Indications is a community institution that represents the Tanah Karo coffee community, known as the Tanah Karo Arabica Coffee Protection Society (MPIG-KATK). MPIG-KATK is a forum for Tanah Karo Arabica Coffee agribusiness actors (Suka Village) who have united their vision and mission to increase production as well as improve and maintain the quality of Tanah Karo Arabica Coffee in order to obtain recognition and protection of intellectual property rights in the form of Geographical Indications.

#### **10. Coffee Processing**

Coffee processing can be done with the wet method and the dry method. Wet processing is more commonly used for Arabica coffee and dry processing is generally used for Robusta coffee processing. In the wet method, before the seeds are dried or

fermented, it is necessary to separate the seeds from the flesh and skin of the fruit. Wet processing on average can produce better quality coffee beans compared to dry processing of coffee cherries. Wet processing produces coffee with a very distinctive taste, stronger aroma, dark colour with slightly curved coffee physique and higher acidity.

## 11. Maintenance of Coffee Plants

Fertilizers are very useful for producing healthy crop conditions, increasing plant resistance to the environment and attacks by plant-disturbing organisms, increasing the quantity and quality of crop production, and reducing fluctuations in production after the main harvest. Pruning coffee plants aims to keep coffee plantations productive and sustainable. Pest control by using traps has begun to be carried out by many farmers. The natural enemy used for control in Tanah Karo is the *Beuveria bassiana* mushroom.

## Results of Internal Factor Analysis of Coffee Farming

**Table 1. Determination of Internal Factor Score for Farming Development Coffee Plants in Suka Village**

No	Parameter	Average Result Score	Total Rating	Respondents
1	Natural resources	4	Strength	30
2	Coffee flavor	3	Strength	30
3	Human Resources	4	Strength	30
4	Coffee harvest time	4	Strength	30
5	Farmers	4	Strength	30
6	Transportation access	3	Strength	30
7	Coffee plant seeds	3	Weakness	30
8	Coffee marketing	3	Weakness	30
9	Coffee farmer partnership	3	Weakness	30
10	Coffee processing	3	Weakness	30
11	Maintenance of coffee plants	4	Weakness	30

## External Factor Analysis

### 1. Location of Coffee Cultivation

The geographical location of Tanah Karo makes it easy to find this one commodity regarding coffee plants. Coffee grown on volcanic soil has a special aroma and taste. Many types of Arabica coffee are grown in Tanah Karo, especially in the Berastagi area. This coffee grows well and has quality coffee beans, this Arabica coffee plant is suitable for planting in highland areas such as Berastagi.

### 2. Request Coffee

To meet local and export demand for coffee, the main thing to focus on is increasing and creating the best quality coffee beans that are favoured by the market. If you want a higher selling price, then the processing of green beans into specialty coffee needs to be done carefully and carefully. Not only in terms of quantity, an increase in coffee production should also be accompanied by an increase in coffee quality which should continue to be encouraged through an

educational process for coffee supply chain players, especially farmers.

### 3. Advantages of Coffee Plant Farming

The sales results are reduced by the costs incurred during production. The result of this reduction is a profit or profit that can be received by farmers. This profit is also the main goal of farmers carrying out their farming activities.

### 4. Quality of Coffee Beans

The Indonesian government's efforts to increase the competitiveness of domestic coffee have been by establishing a national standardization system since 1975 through the Decree of the Minister of Trade No. 266/KP/X/76. Based on these standards, the quality of coffee beans is divided into qualities 1, 2, 3 and 4, this applies to both dry and wet processing.

### 5. Competition in Coffee Farming

Karo Regency is one of the coffee producing regions in North Sumatra. This is

because in terms of the environment which really supports the growth of coffee. In order to remain competitive in the increasingly fierce trading market, each country must have superior trading commodities.

### 6. Climate Change

Climate change can affect the growth of this plant significantly. That climate change can disrupt growth and reduce coffee production and quality. Soil and climatic conditions in the highlands of Tanah Karo are suitable for growing Arabica coffee, because they meet most of the necessary requirements. Arabica coffee requires the following climatic conditions: optimum height between 800-

1,500 meters above sea level, average air temperature between 16-22 °C average rainfall between 1,000-1,500 mm.

### 7. Pests and Diseases of Coffee Plants

To control pests and diseases of coffee plants, the control of plant-disturbing organisms (OPT) is carried out.

### 8. Coffee Prices

The selling price of Arabica coffee beans in 2018 is around IDR 73,000/kg or the equivalent of USD 5.21/kg. Consumers are willing to buy at high prices because Arabica coffee from Tanah Karo has good quality and has a distinctive taste.

## Results of External Factor Analysis of Coffee Farming

Table 2. Determination of External Factor Score for Farming Development Coffee Plants in Suka Village

No	Parameter	Average Result Score	Total Rating	Respondents
1	Location of Coffee Cultivation	3	Opportunity	30
2	Coffee Request	4	Opportunity	30
3	Advantages of Coffee Farming	4	Opportunity	30
4	Coffee Bean Quality	3	Opportunity	30
5	Coffee Farming Competition	3	Threat	30
6	Climate change	4	Threat	30
7	Coffee Pests and Diseases	3	Threat	30
8	Coffee Prices	3	Threat	30

## DISCUSSION

### Internal and External Factor Evaluation Matrix

Table 3. IFAS Farming Development Table Coffee Plants in Suka Village

No	Internal Factor	Weight	Average Score	Weighted Score
<b>Strength</b>				
1	Natural resources	0.25	4	1.00
2	Coffee flavor	0.05	3	0.15
3	Human Resources	0.25	4	1.00
4	Coffee harvest time	0.10	4	0.40
5	Farmers	0.25	4	1.00
6	Transportation access	0.10	3	0.30
Total Strength Score		<b>1.00</b>		<b>3.85</b>
<b>Weakness</b>				
1	Coffee plant seeds	0.10	3	0.30
2	Coffee marketing	0.10	3	0.30
3	Coffee farmer partnership	0.10	3	0.30
4	Coffee processing	0.30	3	0.90
5	Maintenance of coffee plants	0.40	4	1.60
Total Weakness Score		<b>1.00</b>		<b>3.40</b>
<b>Difference in Strength-Weakness Score</b>				<b>0.45</b>
<b>Total Strength + Weakness Score</b>		<b>2.00</b>		

The table 3 shows that the difference in the total score of strengths and weaknesses is 0.45 or positive ( $x \geq 0$ ), which means that the strength aspect is greater than the weakness aspect in the development of coffee farming in the study area, then the most dominant

strength factor is natural resources, group farming and human resources with a value of 0.25 while the most dominant weakness factor is the maintenance of coffee plants with a value of 0.40.

**Table 4. Farming Development EFAS Table Coffee Plants in Suka Village**

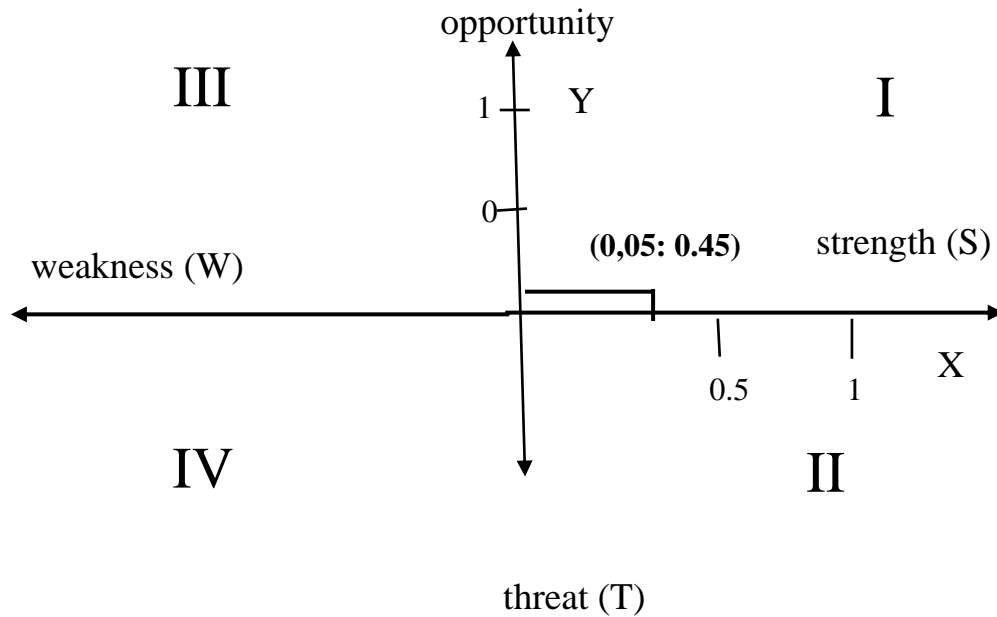
No	External Factor	Weight	Average Score	Weighted Score
<b>Opportunity</b>				
1	Location of Coffee Cultivation	0.40	3	1.20
2	Coffee Request	0.40	4	1.60
3	Advantages of Coffee Farming	0.05	4	0.20
4	Coffee Bean Quality	0.15	3	0.45
	Total Odds Score	<b>1.0</b>		<b>3.45</b>
<b>Threat</b>				
1	Coffee Farming Competition	0.15	3	0.45
2	Climate change	0.40	4	1.60
3	Coffee Pests and Diseases	0.30	3	0.90
4	Coffee Prices	0.15	3	0.45
	Total Threat Score	<b>1.0</b>		<b>3.40</b>
<b>Opportunity-Threat Score Difference</b>				<b>0.05</b>
<b>Total Opportunity + Threat Score</b>		<b>2.00</b>		

Table 4 shows that the difference in the total score of opportunities and threats is 0.05 or positive ( $x \geq 0$ ), which means that the opportunity aspect is greater than the threat aspect in the development of coffee farming in the study area, then the most dominant opportunity factor is the location of coffee cultivation and demand for coffee with a value of 0.40 while the most dominant weakness factor is climate change with a value of 0.4.

The strategy for increasing the development of coffee farming is carried out by creating a SWOT matrix. The SWOT matrix is built based on internal factors (strengths and weaknesses) and external factors (opportunities and threats). After calculating the weight of each internal and external factor, it is then analyzed using the position matrix to see the position of the coffee farming development strategy in the study area. Based on table 3 and table 4, it is obtained that the value of  $Y > 0$  is 0.05 and the value of  $X > 0.45$ . The position of the coordinate points can be seen in the following Cartesian coordinates:

**Strategy Determination with SWOT Matrix**

- **Strategy Determination with SWOT Matrix**



**Figure 6. SWOT Quadrant Strategy for Coffee Farming Development in Suka Village**

There are 4 (four) alternative types of coffee farming development strategies in the study area, namely: S-O Strategy, W-O Strategy, S-T Strategy, W-T Strategy can be seen in table 5.

**Table 5. Determination of Farming Development Strategy Coffee Plants in Suka Village**

<b>Internal</b>	<b>Strength (S)</b> 1. Natural resources 2. The taste of coffee 3. Human resources 4. Coffee harvest period 5. Farmer groups 6. Access to transportation	<b>Strengths (S)</b> 1. Natural resources 2. The taste of coffee 3. Human resources 4. Coffee harvest period 5. Farmer groups 6. Access to transportation
<b>External</b>		
<b>Opportunity (O)</b> 1. Location of Coffee Cultivation 2. Request Coffee 3. Advantages of Coffee Farming 4. Quality of Coffee Beans	<b>S.O</b> 1. Utilizing existing natural resources at the location of coffee cultivation, so that it can meet the demand for coffee (S1, O1, O2) 2. Maintaining the taste of coffee to support the quality of coffee beans in demand for coffee in the market (S2, O4, O2) 3. Utilizing human resources and farmer groups in finding information on coffee demand so that it can increase the profits of coffee farming (S3,S5,O2,O3)	<b>W.O</b> 1. Increase the use of superior varieties of seeds and maintenance of coffee plants to increase production of good quality coffee so that coffee farming benefits and can meet market demand (W1, W5, O4, O2) 2. Increasing farmer partnerships and coffee marketing to be able to meet coffee demand and increase profits in coffee farming (W3, W2, O2, O3) 3. Improve maintenance of coffee plants and coffee processing to meet coffee demand (W5, W4, O2)
<b>Threat (T)</b> 1. Coffee Farming Competition 2. Climate Change 3. Coffee Pests and Diseases 4. Coffee Prices	<b>S.T</b> 1. Utilizing human resources and farmer groups by increasing training to increase information and insight on pests and diseases, climate change, far-ming competition and coffee prices. (S3, S5,T1,T2,T3,T4) 2. Maintaining the taste of coffee that comes from karo land so that it can compete in farming and coffee prices (S2, T1, T4)	<b>W.T</b> 1. Improving the marketing chain by increasing coffee farmer partnerships so that they can overcome competition in coffee farming. (W2, W3, T1) 2. Improving coffee plant maintenance so that it can overcome climate change and coffee plant pests (W5, T2, T3)

### S-O strategy

The strategies implemented for the development of coffee farming by utilizing existing strengths and opportunities are as follows:

- Utilizing existing natural resources at the location of coffee cultivation, so that it can meet the demand for coffee in the domestic and international markets
- Maintaining the taste of ground karo coffee to support the quality of coffee beans in demand for coffee in the market
- Utilizing human resources and farmer groups in finding information on coffee demand so that it can increase the profits of coffee farming.

This strategy needs to be carried out because the management of natural resources and human resources is a must so that the development of coffee farming can be realized, by utilizing the quality of natural resources, utilizing the availability of human resources and optimizing farmer groups so that they can help farmers in farming coffee plants both in the timely

coffee harvest so that the demand for coffee in the market can be controlled properly, as well as the taste of coffee and the quality of coffee beans from karo soil can be maintained.

### W-O strategy

The strategies implemented for the development of coffee farming in the research area by minimizing weaknesses to take advantage of existing opportunities are as follows:

- Increasing the use of superior varieties of seeds and maintenance of coffee plants to increase production of good quality coffee so that coffee farming benefits and can meet market demand.
- Improving farmer partnerships and coffee marketing to be able to meet coffee demand and increase profits in coffee farming
- Improving maintenance of coffee plants and coffee processing to meet coffee demand.

This strategy needs to be carried out because in general, by increasing the use of



superior varieties of coffee plants and carrying out intensive maintenance, coffee plant production increases so that coffee farming can increase profits and meet coffee demand in the domestic (domestic) and international (foreign) markets. Increasing farmer partnerships from upstream to downstream in coffee farming can also involve coffee marketing and coffee processing to help meet demand for coffee with quality coffee beans which are characteristic of Arabica coffee from karo soil.

### **S-T Strategy**

The strategies for developing coffee farming in the research area by looking at strengths to minimize threats are as follows:

- Utilizing human resources and farmer groups by increasing training to increase information and knowledge about pests and diseases, climate change, farming competition and coffee prices.
- Maintaining the taste of coffee that comes from karo land so that it can keep up with competition in coffee farming and prices.

This strategy is necessary because with the long coffee harvest every year and natural resources, it can be assumed that climate change in coffee cultivation can be overcome. At this time where there is significant climate change in the karo land area, it makes farmers experience difficulties in coffee farming that can be overcome

### **W-T Strategy**

The strategies for developing coffee farming in the research area by minimizing weaknesses and threats are as follows:

- Improving the marketing chain by increasing coffee farmer partnerships so that they can overcome coffee farming competition.
- Improving coffee plant maintenance so that it can overcome climate change and coffee plant pests

In general, the length of the marketing chain is due to a lack of partnerships, partnerships

with farmers are limited to collecting traders so that organic farmers can only accept prices set by collecting traders. This means that if farmers have a wide partnership network, they can reduce coffee prices and can also see coffee marketing. More wider, this is also inseparable from the role of farmer groups who have networks in coffee marketing

### **CONCLUSION**

Based on the results and discussion conducted, it can be concluded as follows:

1. Internal factors of coffee farming development strategy in the research area:

a. Internal factors of strength are natural resources, coffee taste, human resources, coffee harvest time, farmer groups, and transportation access. The dominant force affecting the development of coffee farming in the research area is human resources.

b. Internal factors of weakness are coffee plant seeds, coffee marketing, coffee farmer partnerships, coffee processing, and coffee plant maintenance. The most dominant weakness is the maintenance of coffee plants.

2. External factors of the strategy for developing coffee farming in the research area:

a. Opportunity external factors, namely: location of coffee cultivation, demand for coffee, profit of coffee farming and quality of coffee beans. The most dominant opportunity is the demand for coffee.

b. External threat factors, namely: coffee farming competition, climate change, coffee pests and diseases and coffee prices. The most dominant threat is competition in coffee farming.

3. The strategy for developing coffee farming in the research area is in quadrant I. The focus of the strategy that must be carried out is to maximize internal strengths and take advantage of existing opportunities. The dominant strategy in the development of coffee plant farming includes: utilizing natural and human

resources to increase farmer production so that it can meet market demand can be controlled properly, as well as the taste of coffee and the quality of coffee beans from karo soil can be maintained.

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