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Arabica Coffee Business Development Strategy Analysis in Nagori Silimakuta Barat, Pamatang Silimahuta District, Simalungun Regency

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Abstract

The purpose of this study was to explain internal factors (strengths and weaknesses) and external factors (opportunities and threats) Arabica coffee farming and formulate a strategy for developing Arabica coffee farming in Nagori Silimakuta Barat, Pamatang Siimahuta District, Simalungun Regency. The analytical method used is descriptive analysis. Respondents were taken using purposive sampling method, namely as many as 30 farmers. Based on the results of the study, it can be concluded that Arabica coffee farming is located in Quadrant IV, namely the Turn Around Strategy is a very profitable situation. This farming business has opportunities and strengths so that they can take advantage of existing opportunities.

Keywords
Arabica coffee; farming; development strategy

I. Introduction

Coffee is a perennial plant that can breed anywhere, except in certain areas, for example places that are too high and in extreme temperatures and in barren areas, and coffee is a plant that can be used as a delicious drink, besides being delicious, it can also be used to refresh the body, and the last one can eliminate drowsiness

Coffee plant seeds contain caffeine which can help the brain, heart, besides being useful for the body, coffee has a very distinctive aroma, that's why coffee is known in any part of the world.

Coffee is a source of livelihood for people in various regions and is a source of foreign exchange income for the country. It is necessary to conduct an in-depth study of the prospects for world coffee and real opportunities for Indonesian coffee to meet market needs in order to increase the national economy and improve people's incomes, especially coffee farmers.(Muttalib, 2012)

Global climate change can affect Four elements of climate and natural components that are closely related to agriculture, namely: (a) rising air temperatures which also have an impact on other climate elements, (b) changing rainfall patterns, (c) increasing intensity of climate events extreme (climate anomalies) such as El-Nino and La-Nina, and (d) rising sea levels due to melting of polar icebergs. The increase in temperature due to global warming causes the emergence of borer pests which result in a decrease in coffee production. As a result, farmers' production decreases and production costs increase, as a result, farmers are no longer able to meet their needs, agricultural yields have decreased dramatically(Ninla Elmawati Falabiba, 2019)

Simalungun Regency is one of the largest Arabica coffee producing districts in North Sumatra. Simalungun Regency has 31 sub-districts, of which there are 10 Arabica coffee-producing sub-districts (Ateng coffee), including: Silimakuta District, Pamatang

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Silimakuta District, Dolok Pardamean District, Sidamanik District, Girsang Simpangan Bolon District, Dolok Panribuan District, Jorlang Hataran District, Panei District Raya, Dolok Silau District, and Pamatang Sidamanik District. In Silimakuta District, there is Nagori, where most of the farmers cultivate Arabica clone coffee as a leading commodity, namely West Silimakuta.

Arabica coffee farming is the main source of livelihood for coffee farming communities in the Pamatang Silimahuta District, Simalungun Regency, especially in Nagori Silimakuta Barat. The development of Arabica coffee clones is very rapid.

Simalungun Regency is one of the largest Arabica coffee producing districts in North Sumatra. Simalungun Regency has 31 sub-districts, of which there are 10 Arabica coffee-producing sub-districts (Ateng coffee), including: Silimakuta District, Pamatang Silimakuta District, Dolok Pardamean District, Sidamanik District, Girsang Simpangan Bolon District, Dolok Panribuan District, Jorlang Hataran District, Panei District Raya, Dolok Silau District, and Pamatang Sidamanik District. In Silimakuta District, there is Nagori, where most of the farmers cultivate Arabica clone coffee as a leading commodity, namely West Silimakuta.

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Based on the description above, the research problems are identified as follows: What are the internal factors (strengths and weaknesses) and external factors (opportunities and threats) of Arabica coffee farming in the research area. And what is the strategy formulation in developing Arabica coffee farming in the research area.

II. Research Method

2.1 Place and Time of Research

The selection of the research area was carried out by purposive method, namely with certain considerations (deliberately). Nagori Silimakuta Barat, Pamatang Silimahuta District, Simalungun Regency. chosen with the consideration that the area is one of the centers of coffee production in Simalungun Regency. The research time was carried out for 4 months, starting from January to April 2021.

2.2 Sampling Method

The sample is part of the population to be studied and which is considered to be able to describe the population. The population in this study are farmers who have at least 200 Arabica coffee stems on the Arabica coffee farm. Sampling of respondents used in this study is the Snowball Sampling technique. Snowball Sampling is an approach to find key informants who have a lot of information. Using this approach, several potential respondents were contacted and asked if they knew other people with the characteristics in question for research purposes. Initial contact will help get other respondents through recommendations. To achieve the research objectives, this technique is also supported by interview techniques and field surveys (Suhardjo, 2008). Evaluation is done by comparing the data in the field with the standard so that a picture that shows the actual situation compared to the standard is obtained. This evaluation model also allows researchers to be able to give consideration without having to make decisions. (Aini, S. et al. 2019)

Thus, the determination of the sample members as many as 30 Arabica coffee farmers. The supporting factors in taking this sample are:

a. Arabica coffee farmers (30 people)
b. Farmer Group Leader (1 person)
c. Nagori apparatus (1 person)

2.3 Method of collecting data

The data collected in this study consisted of primary data and secondary data. Primary data is the result of direct researcher interviews with respondents who are the sample with a list of questionnaires that have been prepared previously. While secondary data were obtained from BPS, Simalungun Regency, Plantation Office of Simalungun Regency, Industry and Trade Office, PPL, Village Head, literature, books, and internet media that are in accordance with this research.

2.4 Data analysis method

The data obtained from the field were first tabulated in a simple manner and then analyzed using the appropriate analytical method. For the purpose of (1) descriptive analysis is used by describing and explaining internal factors (strengths and weaknesses) and external factors (opportunities and threats) of Arabica coffee farming in the research area. For the purpose of (2) the SWOT analysis method is used in Arabica coffee farming in the research area to determine the strategy for developing farming. In accordance with the theory put forward, the tool used to compile strategic factors is the SWOT matrix. This matrix can clearly describe how the external opportunities and threats faced can be adjusted to the strengths and weaknesses they have.

III. Result and Discussion

Internal factors that can support the growth and development of Arabica coffee farming in Nagori Silimakuta Barat are the strength factors which include good human resources, making good use of time, the importance of knowledge about Arabica coffee, the availability of adequate labor, using superior seeds, while the weakness factor is the equipment is still traditional, has not been able to manage finances well, the location of the land is far from home, has limited capital, there is no institution that provides superior seeds.

External factors that can support the growth and development of Arabica coffee farming in Nagori Silimakuta Barat are the opportunity factors which include the increasing number of home businesses and coffee shops in Simalungun Regency, the development of technology in processing coffee beans to become various types of beverages, Arabica coffee is mostly processed into beverages compared to robusta coffee, there are institutions willing to lend capital, the demand for raw materials for coffee beans in the country is increasing. while for the threat factors, arabica coffee is more susceptible to disease, climate and weather changes, coffee sales prices are not stable, the number of coffee-producing areas that are already well-known, the conversion of other plantation lands.

Table 1. IFAS Matrix of Arabica Coffee Farming Development in West Silimakuta Category, 2021

No	Strength	Weight	Rating	Score
1	Farmers who work hard and have high spirits	0.09	1	0.10
2	Make good use of time to care for plants	0.06	1	0.06
3	The importance of farmer knowledge for pest and disease management	0.07	2	0.14
4	Availability of adequate manpower	0.04	1	0.04
5	Using superior seeds	0.08	2	0.16
	Amount	0.34		0.5
	Weakness			
1	The coffee grinding equipment used is still traditional	0.15	3	0.45
2	Farmers have not been able to manage finances well	0.11	3	0.33
3	Land access and location are still difficult to pass	0.10	3	0.27
4	Have limited capital	0.13	4	0.52
5	The lack of institutions providing superior seeds	0.17	4	0.68
	Amount	0.66		2.25
	Total	**1.00**		**-2.75**

The factor that is the main strength that is expected to minimize the weaknesses to develop Arabica coffee farming in Nagori Silimakuta Barat is a farmer who works hard and has high enthusiasm with a score of 0.10 weight 0.09 and a rating of 1, using time well to care for the plant. a score of 0.06 with a weight of 0.06 and a rating of 1, the importance of knowledge a score of 0.14 a weight of 0.07 and a rating of 2, the availability of adequate labor a score of 0.04 a score of 0.04 and a rating of 1, using superior seeds a score of 0.16 0.08 weight and rating 2.

The weakness in the development effort that will be carried out is that the traditional coffee grinding equipment used has a score of 0.45 weighting 0.15 and a rating of 3, farmers have not been able to manage finances properly, a score of 0.33 weights of 0.11 and a rating of 3, access and the location of the land is still difficult to pass with a score of 0.27, a weight of 0.10 and a rating of 3, has limited capital, a score of 0.52, a weight of 0.13 and a rating of 4, a lack of institutions providing superior seeds, a score of 0.68, a weight of 0.17, and a rating of 4.

Based on the analysis of the internal factors of Arabica coffee farming in Nagori Silimakuta Barat, the results of the IFAS matrix analysis obtained a total score of -2.75

Table 2. External Factors (Opportunities and Threats) in Arabica Coffee Farming Development in West Silimakuta Nagori, 2021

No	Opportunity	Weight	Rating	Score
1	The number of home businesses and coffee shops in Simalungun Regency	0.09	1	0.09
2	The development of technology in the processing of coffee beans to become various types of drinks	0.08	2	0.16
3	Arabica coffee is more processed into drinks than Robusta coffee	0.07	2	0.14
4	There are institutions that are willing to lend capital	0.04	1	0.04
5	Demand for Arabica coffee raw materials in the country is high	0.06	2	0.12
	Amount	0.34		0.55
	Threat			
1	Arabica coffee is more susceptible to disease	0.11	1	0.09
2	Climate and weather changes can affect coffee production	0.14	2	0.16
3	The selling price of coffee is not stable	0.15	2	0.14
4	The number of competitors from well-known coffee-producing areas	0.10	1	0.04
5	Conversion of other crops	0.16	2	0.12
	Amount	0.66		1.74
	Total	**1.00**		**2.29**

The factor that becomes a very good opportunity is the number of home-based businesses and coffee shops in Simalungun Regencyscore0.09 with a weight of 0.09 and a rating of 1, the development of technology in the processing of coffee beans into various types of beverages, a score of 0.16 a weight of 0.08 and a rating of 2, Arabica coffee is processed more into beverages than robusta coffee a score of 0.14 a weight of 0 .07 and a rating of 2, the existence of institutions that are willing to lend capital a score of 0.04 with a weight of 0.04 and a rating of 1, the demand for domestic Arabica coffee raw materials increased by a score of 0.12 with a weight of 0.06 and a rating of 2.

Factors that pose a threat to Arabica coffee farming in Nagori Silimakuta Barat are Arabica coffee is more susceptible to disease with a score of 0.33 with a weight of 0.11 and a rating of 3, Climate and weather changes can affect coffee production with a score of 0.28 a weight of 0.14 and a rating of 2 unstable coffee sales with a score of 0.45 with a weight of 0.15 and a rating of 3. The number of competitors from more well-known coffee-producing areas scored 0.20 with a score of 0.10 and a rating of 2, Conversion of land for other crops with a score of 0.48 weights 0 ,16 and rating 3.

On internal factors, the total weight multiplied by the rating (bxr) for the strength component is 0.5 while for the weakness component is 2.25. The difference between the strength and weakness components is 0.5 minus 2.25, which is -1.75. The difference in this calculation becomes the position of the X-axis point. In internal factors, the number of weights is multiplied by the rating (bxr)for the opportunity component is 0.55, while for the threat component it is 1.74. The difference between the opportunity component and the

threat component is 0.55 minus 1.74, which is -1.19. The result of this difference becomes the position of the point on the Y axis. The position of the coordinates can be seen as follows:

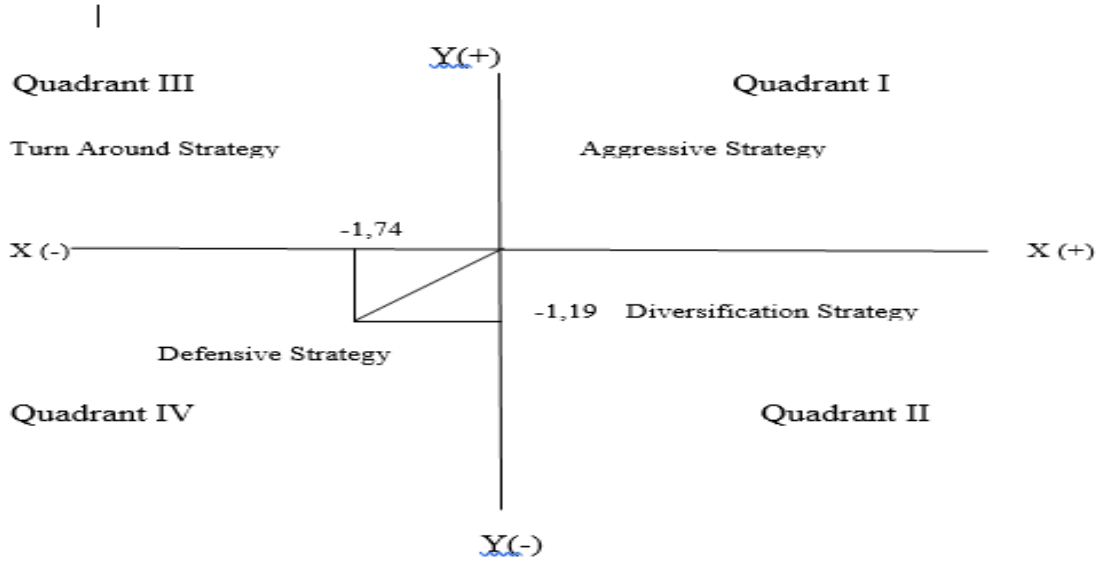

Figure 1. *IE Matrix.*

The increase in Arabica coffee farming production in West Nagori Silimakuta is in a favorable position. The position of Arabica coffee farming is in quadrant IV, meaning that the farm is in a very unfavorable situation, and the farm faces internal threats and weaknesses. Determination of alternatives can be done with several alternative strategies for increasing Arabica coffee production in accordance with how to make a SWOT matrix. This SWOT matrix is built based on strategic factors, both internal (strengths-weaknesses) and internal factors (opportunities-threats).

Based on the results of the IE matrix above, it shows that Arabica coffee farming in Nagori Silimakuta Barat shows in quadrant III, namely the Turn Around strategy. Based on these results, the appropriate alternative strategy used is the SO strategy that can be applied to Arabica coffee farming in Nagori Silimakuta Barat can be seen in Table 3.

Table 3. SWOT Matrix

Internal External	Strength (S) . Farmers who have high spirits and work hard . Make good use of time to care for plants . The importance of farmer knowledge for pest and disease management . Availability of adequate manpower . Using superior seeds	Weaknesses (W) The coffee grinding equipment used is still traditional Farmers have not been able to manage finances well Land access and location far from home Have limited capital The lack of institutions providing superior seeds
Opportunities (O) The number of home businesses and coffee shops in Simalungun Regency	SO Strategy Utilizing experience, knowledge, and technology to further	WO Strategy Make capital loans to related institutions (W4, O1, O4) Doing good financial

The development of coffee bean processing technology to become various types of drinks Arabica coffee is more processed into than Robusta coffee There are institutions that are willing to lend capital Domestic demand for Arabica coffee beans is increasing	increase the demand for coffee bean raw materials (S4, S5, O2, 03, 05) Increase the use of superior seeds because it can increase the production of arabica coffee and this coffee is preferred over robusta coffee (S3,S4,S5,O3,O5) Have a high enthusiasm to open a coffee shop or café business in the area where you live (S1,S2,O1,O4) Utilize capital institutions for home businesses or coffee powder processing (S1,S3,O1,O4)	management for business capital (W2,W4,O1,O2)
Threats (T) Arabica coffee is more susceptible to disease Climate change and weather The selling price of coffee is not stable The number of competitors from well-known coffee-producing areas Conversion of other crops	ST strategy Make the best use of the time possible to treat coffee plants that are susceptible to disease (S2, S3, T1, T2, T3, T5) Increase the population of arabica coffee so that there is no conversion to other plants (S5,T1,T5)	WT Strategy Reducing production costs to a minimum (W1,W2,W4) Ask the government to increase the supply of superior seeds and conduct counseling (W1,W5,T1,T5)

Source: Processed data (2021)

- SO Strategy

Leveraging experience, knowledge and technology to further increase exports. Factors that influence S4, S5 and O2, O3, O5. Increase the use of superior seeds. Factors that influence S3, S4, S5 and O3, O5 so that they can take existing opportunities and increase profits. This alternative strategy is taken because in utilizing knowledge and using superior seeds it can increase the demand for raw materials for coffee beans in the country.

- ST strategy

Make the best use of the time possible to treat coffee plants that are susceptible to disease. Factors that influence S2, S3, and T1, T2, T3, T5. Increasing the population of Arabica coffee does not occur conversion to other plants. Factors that influence S5 and T1, T5, and because by taking the time to treat coffee plants to avoid disease and not reduce coffee population or conversion of other crops.

- WO Strategy

Make capital loans to related institutions. The influencing factors are W4, and O1, O4. Doing good financial management for business capital. Factors that influence W2, W4 and O1, O2, the lack of capital to buy more modern equipment, is not enough to meet production, it requires loans to financial institutions to increase Arabica coffee production and perform financial management in order to manage it properly.

- WT Strategy

Pressing production costs to a minimum are W1, W2, and W4. Ask the government to increase the supply of superior seeds and provide counseling to farmers. The influencing

factors are W1, W5 and T1, T5 because with the improvement of access to land, farmers are more eager to take care of plants and with the government providing superior seeds, it can improve quality.

Arabica coffee farming in West Nagori Silimakuta is located in quadrant IV of the Turn Around strategy in the SWOT position matrix, the strategy used is the WT (Wearkness-threats) strategy, the strategy is to reduce production costs to a minimum to increase the income of Arabica coffee farmers in Nagori Silimakuta West and the next strategy is to ask the local government to pay more attention to the condition of farmers in the research area, one of which is to multiply superior seeds and provide counseling to local farmers

In contrast to the results of research conducted by Hakim (2011) which states the results of the analysis show Arabica coffee farming in Sitinjo Induk Village, Kec. Sitinjo, Dairi District is in quadrant III in the SWOT position matrix. Therefore, the strategy that is suitable to be used is the WO (weaknesses-Opportunities) strategy. The strategy is to plant superior seeds, reactivate Gapoktan, and take advantage of the opportunity for high Arabica coffee prices by maximizing the potential of nature and existing land.

IV. Conclusion

Based on the results of research on Arabica coffee farming in Nagori Silimakuta Barat conducted in this study, it can be concluded as follows:

a. Internal factors that can support the growth and development of Arabica coffee farming in Nagori Silimakuta Barat are the strength factors which include good human resources, making good use of time, the importance of knowledge about Arabica coffee, the availability of adequate labor, using superior seeds, while the weakness factor is the equipment is still traditional, has not been able to manage finances well, the location of the land is far from home, has limited capital, there is no institution that provides superior seeds.
b. External factors that can support the growth and development of Arabica coffee farming in Nagori Silimakuta Barat are the opportunity factors which include the increasing number of home businesses and coffee shops in Simalungun Regency, the development of technology in processing coffee beans to become various types of beverages, Arabica coffee is mostly processed into beverages compared to robusta coffee, there are institutions willing to lend capital, the demand for raw materials for coffee beans in the country is increasing. while for the threat factors, arabica coffee is more susceptible to disease, climate and weather changes, coffee sales prices are not stable, the number of coffee-producing areas that are already well-known, the conversion of other plantation lands.
c. Arabica coffee farming in Nagori Silimakuta Barat is located in Quadrant IV, namely Defensive Strategy. The strategy used is WT (Wearkness-threats) strategy by (1) Reducing production costs to a minimum to obtain maximum results.(2) Requesting the government to increase the supply of superior seeds in the West Silimakuta Nagori area. (3) asking the government to provide counseling to farmers in the West Silimkuta Nagori area. (4) Utilizing capital institutions for home-based businesses or coffee powder processing,
d. Dry coffee production is more dominant than Wet coffee in the Research Area

References

Aini, S. et al. (2019). valuation of Authentic Assessment Implementation in Public Elementary School 101775 Sampali, Deli Serdang Regency Academic Year 2019/2020. Budapest International Research and Critics in Linguistics and Education (BirLE) Journal. P.29-40

David, R. F. (2016). Managemen Strategik. Buku I, 12–30.

Fredy Rangkuti. (2009). Analisis_SWOT_Teknik_Membedah_Kasus_Bisn (p. 200).

Hoesain, M., Winarso, S., Sunartomo, A. F., & Alfarisy, F. K. (2020). Strategi Pengembangan Usaha Tani Melalui Penerapan Sni 6729-2016 Sebagai Upaya Peningkatan Pendapatan Petani Padi Organik. Dharmakarya, 9(3). https://doi.org/10.24198/dharmakarya.v9i3.23686

Muttalib, S. A., Nugroho, J., & Bintoro, N. (2012). Identifikasi Aroma Campuran (Blending) Kopi Arabika Dan Robusta Dengan Electronic Nose Menggunakan Sistem Pengenalan Pola. Prosiding Seminar Nasional Perteta.

Nggini, Y. H. (2019). Analisis Swot (Strength, Weaknes, Opportunity, Threats) Terhadap Kebijakan Pengembangan Pariwisata Provinsi Bali. Jurnal Ilmiah Dinamika Sosial, 3(1), 141. https://doi.org/10.38043/jids.v3i1.1739

Sianturi, R. (2018). Strategi Pengembangan Usahatani Kopi Arabika (Coffea Arabica L) Di Kecamatan Paranginan Kabupaten Humbang Hasundutan. Skripsi.

Utami, K. F., & Lily. (2017). Strategi Pengembangan Usaha Tani Kopi Arabica (Coffea Sp) Di Kabupaten Gayu. Jurnal Teknologi Dan Industri Pangan, X(8).