STRATEGY FOR THE DEVELOPMENT OF VANILLA (Vanilla planifolia) FARMING IN THE KALAITI FARMER GROUP, KELAISI TENGAH VILLAGE, SOUTH ALOR DISTRICT, ALOR REGENCY

(Strategi Pengembangan Usaha Tani Vanili (Vanilla Planifolia) Di Kelompok Tani Kalaiti Desa Kelaisi Tengah Kecamatan Alor Selatan, Kabupaten Alor)

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ABSTRACT

This study was conducted in the Kalaiti Farmer Group, Kelaisi Tengah Village, South Alor District, Alor Regency, from November to December 2024. The objectives of this study were to describe vanilla farming in the Kalaiti Farmer Group, identify the internal and external factors related to vanilla farming, and formulate development strategies for vanilla farming in the study area. The study used descriptive qualitative and quantitative approaches. The respondents for internal-factor analysis consisted of 26 vanilla farmers selected using a census technique, while the external-factor respondents consisted of five key informants, namely village government representatives, an agricultural extension worker, and traders. Data were analyzed using IFAS, EFAS, and SWOT matrices. The results showed that the main internal strengths were skilled and experienced human resources, good road and transportation access, sound production-process planning, and complete farming equipment. The main weaknesses were limited production land, low use of social media for promotion, persistent pest and disease problems, and production dependence on weather conditions. External opportunities included relatively high vanilla prices, community participation and mutual cooperation, supportive government permits and regulations, and a relatively suitable production climate. External threats consisted of limited working capital, production security risks, limited extension support, and insufficient government assistance in the distribution of fertilizers and pesticides. The SWOT position was in Quadrant I, indicating an aggressive strategy. Therefore, vanilla farming development should prioritize SO strategies by maximizing existing strengths to exploit market and institutional opportunities.

Keywords: strategy, development, farming, vanilla, SWOT

ABSTRAK

Penilitian ini dilakukan di Kelompok Tani Kalaiti Desah Kelaisi Tengah Kecamatan Alor Selatan Kabupaten Alor pada bulan November dan Desember tahun 2024. Penilitian ini bertujuan untuk mengetahui; 1).usaha tani vanili di Kelompok Tani Kalaiti di Desa Kelaisi Tengah Kecamatan Alor Selatan Kabupaten Alor; 2).faktor internal dan eksternal terkait usahatani vanili di Kelompok Tani Kalaiti Desa Kelaisi Tengah Kecamatan Alor Selatan Kabupaten Alor; 3).strategi pengembangan vanili di Kelompok Tani Kalaiti Desa Kelaisi Tengah Kecamatan Alor Selatan Kabupaten Alor. Hasil penilitian ini menunjukan bahwa faktor internal dan eksternl yang mempengaruhi strategi pengembangan usahatani vanili di Kelompok Tani Kalaiti, Desa Kelaisi Tengah Kecamatan Alor Selatan Kbupaten Alor yaitu faktor internal terdiri dari kekuatan yaitu : SDM yang terampi dan berpengalaman,akses jalan dan transportasi baik,perencanaan proses produksi yang bagus,peralatan pertanian yang lengkap. Sedangkan kelemahan yaitu : luas lahan produksi petani masi terbatas antaea 0,5- 1Ha,kurangnya pemanfaatan sosial media dalam mempromosikan vanili,hama dan penyakit masi menjadi masala serius bagi petani,jumlah produksi tergantung pada cuaca.

Sementara faktor eksternal yang termasuk peluang yaitu :harga vanili yang relatif tinggi,parsitipasi masyarakat kelompok tani gotong royong,izin dan peraturan pemerintah sangat baik,iklim produksi relatif cocok. Sedangkan ancaman yaitu :modal kerja relatif kurang,keamanan produksi masi terancam,dukangan penyuluhan relatif masi kurang, kurangnya perhatian pemerintah dalam hal distribusi bantuan berupa pupuk pestisida.Alternatif strategi pengembangan usahatani vanili di lokasi peniitian kelompoktani vanili di Desa Kelaisi Tengah Kecamatan Alor Selatan Kabupaten Alor lebih difokuskanpada strategi agresif.Strategi agresif merupakanstrategi yang melibatkan tindakan proaktif untuk mencapai tujuan,seperti meningkatkan produksi,

meningkatkan harga,atau meningkatkan promosi dari yang sbelumnya.Strategi SO (*Strengths Opportunities*) bertujuan memaksimalkan kekuatan untuk memanfaatkan peluang yang ada.
Kata Kunci:Strategi,Pengembangan,Usahatani,Vanili

INTRODUCTION

Agricultural development is currently faced with a strategic environment that continues to change dynamically and increasingly moves toward international trade liberalization. To take advantage of existing opportunities, agricultural development must focus more on leading commodities that are able to compete in both domestic and international markets. Indonesia is the second-largest vanilla-producing country in the world after Madagascar (Rosman, 2005). In general, vanilla seedlings in Indonesia are produced through vegetative propagation, particularly stem cuttings.

Based on agroclimatic suitability, Alor Regency is categorized as less suitable for vanilla because it is a dry region with an F climate type, characterized by four wet months with average rainfall above 100 mm per month and eight dry months with average rainfall below 60 mm per month. Although it is categorized as less suitable, vanilla has been cultivated by many farmers in Alor Regency. The vanilla planted is generally a local type that has adapted well over a relatively long period. For almost 50 years, this vanilla plant has been associated with the environment of the Alor Islands and has been able to produce high yields (Hadad & Djazuli, 2010). Therefore, it has been designated as a location-specific variety for the Alor Islands.

Alor vanilla has distinctive characteristics, including light-green round vines, dark-green oblong leaves, and yellowish-white flower crowns. Each bunch contains approximately 28 to 40 flowers. Alor vanilla begins flowering at the age of 28 months. The pod length ranges from 23.01 to 27.10 cm, with a diameter of 1.30 to 1.55 cm and a weight of 1.90 to 2.30 kg per 100 pods. Its productivity ranges from 2.65 to 3.18 kg per plant per year, equivalent to 3.55 to 4.81 tons per hectare per year, with a vanillin content of 2.32 to 2.85% (Hadad et al., 2010). In addition to rainfall, which is an important indicator of agroclimatic suitability for vanilla (Rosman, 2005; Ramli et al., 2009), other factors may support the growth and development of vanilla in the dry-climate environment of the Alor Islands.

Vanilla is one of the spice crops with high economic value and export orientation. Global demand for vanilla is expected to remain high along with the development of the vanilla industry. Indonesian vanilla has a relatively high vanillin content of 2.75% (Lawani, 2002) and is widely known in the international market as Java Vanilla Bean (Ilham et al., 2004). Vanilla is used as a flavoring and fragrance ingredient in foods, confectionery, ice cream, and beverages. In addition, vanilla can be used for aromatherapy, appetite stimulation, and immune-supporting purposes. In Alor Regency, dry vanilla can be sold for approximately IDR 6,000,000 per kg, while fresh vanilla is valued at approximately IDR 875,000 per kg, with total vanilla production in the regency reaching around 40 tons per year.

The Kalaiti Farmer Group is one of the farmer groups engaged in vanilla farming. In 2023, this group had a land area of 0.15 ha, or 15 ares, with production of 200 kg. However, farmers still face several constraints because the development of vanilla farming remains relatively inefficient and suboptimal. The selling price is unstable and largely determined by traders, while farmers act as price takers. In addition, farmers still have limited understanding of the vanilla farming system. Based on these conditions, this study was conducted to analyze the strategy for developing vanilla farming in the Kalaiti Farmer Group, Kelaisi Tengah Village, South Alor District, Alor Regency. The objectives were to describe vanilla farming, identify the internal and external factors, and formulate appropriate development strategies for the farmer group.

METHODS

This study was conducted in the vanilla farming area of the Kalaiti Farmer Group, Kelaisi Tengah Village, South Alor District, Alor Regency. The sampling method used was a census technique, in which the entire population was used as the research sample. The population consisted of 26 vanilla farmers; therefore, all 26 farmers were included as respondents. According to Sugiyono (2010), when the population size is less than 100, the entire population should preferably be used as the sample.

For external factors, the sample consisted of five key informants, namely two village government representatives, one agricultural extension worker, and two traders. The data collected in this study consisted of primary and secondary data. Primary data were obtained through direct interviews with farmers, traders, and related respondents using a prepared questionnaire. Secondary data were collected from relevant institutions to support and complement the primary data required in the study.

To answer the first objective, namely to describe vanilla farming in Kelaisi Tengah Village, descriptive qualitative and quantitative analyses were used. Qualitative descriptive analysis was applied to analyze, describe, and summarize various field conditions and situations based on interviews and observations (Winartha, 2006). Quantitative descriptive analysis was used to objectively describe the observed conditions using numerical data, from data collection and interpretation to presentation of the results (Arikunto, 2006).

To answer the second objective, internal and external factors were identified using the Internal Strategic Factors Analysis Summary (IFAS) and External Strategic Factors Analysis Summary (EFAS) matrices. The IFAS matrix summarizes and evaluates the main strengths and weaknesses of the farming business, while the EFAS matrix summarizes and evaluates external factors such as economic, technological, sociocultural, demographic, competitive, and environmental information (Rangkuti, 2015).

To answer the third objective, the vanilla farming development strategy was formulated using SWOT analysis. This analysis systematically identifies strengths, weaknesses, opportunities, and threats to formulate SO, ST, WO, and WT strategies. The analysis is based on the logic of maximizing strengths and opportunities while minimizing weaknesses and threats.

RESULT AND DISCUSSION

Respondent Characteristics

Age is an important factor in determining farmers' work capacity. Bakir and Maning (1984) stated that the productive age for work ranges from 15 to 55 years. The results showed that most respondents were in the 15-50-year age group, totaling 23 people or 94.5%, while respondents aged 51 years and above totaled three people or 5.5%. This indicates that most respondents were classified as being of productive age and had the potential to manage their farming activities effectively. Although some farmers were outside the productive age category, field observations showed that they remained actively involved in farming activities.

The level of education also affects how farmers process information and apply farming strategies. The results showed that 10 respondents had completed elementary school, 10 respondents had completed junior high school, and six respondents had completed senior high school. Higher formal education may improve farmers' ability to absorb information, but in practice, farming experience is also an important source of knowledge for farmers in managing vanilla farming.

The number of family dependents is another factor that needs to be considered in relation to household income and needs (Hasyim, 2006). Most farmer households had small family dependents of four people or fewer, totaling 21 households or 84.6%. Four households had moderate dependents of five to six people, and one household had seven or more dependents. This condition indicates that most respondents had relatively small family burdens.

Farming experience reflects the length of time farmers have been involved in vanilla farming. Respondents with experience of less than or equal to 10 years totaled two people, respondents with 10-20 years of experience totaled 23 people, and those with more than 20 years of experience totaled one person. These results indicate that most respondents had considerable experience in vanilla cultivation, which can support better decision-making in farm management.

Regarding land ownership status, all members of the Kalaiti Vanilla Farmer Group cultivated their own land. The average land area was 0.61 ha, with the largest area being 1.5 ha and the smallest 0.1 ha. Although the land cultivated by farmers was relatively small, farmers were still able to generate vanilla production. Most respondents had production of 25 kg or less, while several respondents produced between 25 and 50 kg, 50 and 100 kg, and more than 100 kg.

IFAS and EFAS Matrices

Based on the analysis of the internal and external environments, several factors influencing the success or failure of vanilla farming were identified. Strengths and weaknesses were derived from the internal environmental analysis, while opportunities and threats were derived from the external environmental analysis. These factors were summarized in IFAS and EFAS matrices.

Table 1. Internal Strategic Factors Analysis Summary (IFAS) of Vanilla Farming in Kelaisi Tengah Village, South Alor District, Alor Regency

No	Internal Factors	Average Weight	Average Rating	Weighted Score
Strengths				
1	Skilled and experienced human resources	0.14	3	0.42
2	Good road and transportation access	0.15	3	0.45
3	Good production-process planning	0.16	4	0.48
4	Complete agricultural equipment	0.16	4	0.48
	Weighted total for strengths	0.61	14	1.83
Weaknesses				
1	Limited production land, approximately 0.5-1 ha	0.12	3	0.36
2	Limited use of social media to promote vanilla	0.06	3	0.06
3	Pests and diseases remain a serious problem for farmers	0.11	4	0.33
4	Production volume depends on weather conditions	0.10	4	0.20
	Weighted total for weaknesses	0.39	14	0.95
	Total IFAS weighted score	1.00		2.78

Source: Primary data processed, 2025.

The strength factors had a total weighted score of 1.83. The most influential strengths were complete agricultural equipment and good production-process planning, each with a weighted score of 0.48. The main weaknesses were limited production land and pest and disease problems, with weighted scores of 0.36 and 0.33, respectively. These weaknesses need to be addressed to support sustainable vanilla farming development.

Table 2. External Strategic Factors Analysis Summary (EFAS) of Vanilla Farming in Kelaisi Tengah Village, South Alor District, Alor Regency

No	External Factors	Average Weight	Average Rating	Weighted Score
Opportunities				
1	Relatively high vanilla price	0.18	5	0.69
2	Community participation and mutual cooperation	0.17	4	0.68
3	Good government permits and regulations	0.17	4	0.68
4	Relatively suitable production climate	0.15	4	0.43
	Weighted total for opportunities	0.67	17	2.48
Threats				

No	External Factors	Average Weight	Average Rating	Weighted Score
1	Limited working capital	0.09	2	0.19
2	Product security remains threatened	0.09	2	0.19
3	Extension support remains limited	0.07	2	0.14
4	Insufficient government attention to distributing fertilizers and pesticides	0.08	2	0.16
	Weighted total for threats	0.33		0.68
	Total EFAS weighted score	1.00		3.16

Source: Primary data processed, 2025.

The EFAS results show that vanilla farming in Kelaisi Tengah Village has responded well to available opportunities and is able to address threats. This is indicated by the total weighted EFAS score of 3.16. The largest opportunities are the relatively high price of vanilla and the strong participation of the community through mutual cooperation. Meanwhile, the major threats are limited working capital and production security risks.

Strategic Position and SWOT Alternatives

The IFAS and EFAS calculations show that strengths are more dominant than weaknesses and opportunities are greater than threats. The internal score difference was obtained from strengths minus weaknesses, namely 1.83 - 0.98 = 0.85. The external score difference was obtained from opportunities minus threats, namely 2.48 - 0.68 = 1.80. These coordinates place vanilla farming in the Kalaiti Farmer Group in Quadrant I of the SWOT diagram. This position indicates an aggressive strategy, which means that the farming business is in a favorable condition and has strong potential for further development. This strategy focuses on SO strategies, namely maximizing strengths to take advantage of available opportunities (Farid, 2021).

Table 3. Alternative SWOT Matrix Strategies for Vanilla Farming in the Kalaiti Farmer Group

Internal / External Factors	Strengths (S)	Weaknesses (W)
	1. Skilled and experienced human resources 2. Good road and transportation access 3. Good production planning 4. Complete agricultural equipment	1. Limited farmer land area of 0.5-1 ha 2. Limited social-media promotion 3. Pests and diseases remain serious problems 4. Production depends on weather
Opportunities (O) 1. High vanilla price 2. Community mutual cooperation 3. Good permits and regulations 4. Suitable production climate	SO Strategy (Aggressive) 1. Improve the quality and quantity of vanilla crops. 2. Develop product marketing for vanilla crops.	WO Strategy (Stability) 1. Utilize available labor to meet production needs. 2. Improve access to market information, especially vanilla prices.
Threats (T) 1. Limited working capital 2. Product security remains threatened 3. Limited extension support 4. Limited assistance in fertilizers and pesticides	ST Strategy (Diversification) 1. Increase information access on production processes, pests, and diseases through agricultural extension. 2. Encourage more uniform selling prices.	WT Strategy (Defensive) 1. Develop appropriate policies and regulations for healthy vanilla development. 2. Strengthen government supervision of vanilla security and prices.

Source: Primary data processed, 2025.

The alternative strategy that should be prioritized is the aggressive SO strategy. This strategy can be implemented by improving the quality and quantity of vanilla crops, strengthening production planning, expanding market access, increasing product promotion, and making better use of the relatively high market price of vanilla. Farmers can use existing strengths as the operational basis while taking advantage of opportunities to anticipate threats and reduce business risks.

CONCLUSION AND RECOMMENDATION

Conclusion

1. Vanilla farming in the Kalaiti Farmer Group, Kelaisi Tengah Village, South Alor District, Alor Regency, consists of several production stages, namely land selection, land preparation, seedling preparation, planting, maintenance and fertilization, flower pollination, harvesting and processing, and marketing.
2. The internal factors related to vanilla farming consist of strengths and weaknesses. The strengths include skilled and experienced human resources, good road and transportation access, good production-process planning, and complete agricultural equipment. The weaknesses include limited production land of approximately less than or equal to 1 ha, limited use of social media for vanilla promotion, pest and disease problems, and production dependence on weather conditions.
3. The external factors consist of opportunities and threats. The opportunities include relatively high vanilla prices, community participation and mutual cooperation, good government permits and regulations, and a relatively suitable production climate. The threats include limited working capital, product-security risks, limited extension support, and insufficient government attention to distributing assistance in the form of fertilizers and pesticides.
4. The development strategy for vanilla farming in the Kalaiti Farmer Group is an aggressive strategy. This strategy emphasizes SO strategies, namely maximizing strengths to exploit the available opportunities.

Recommendation

Based on the research findings and discussion, the following suggestions are proposed:

1. Vanilla farmers should actively seek information on market prices so that village-level traders cannot easily manipulate the selling price received by farmers.
2. The government should provide stronger support to vanilla farmers by improving the performance of agricultural extension services and providing superior vanilla seedlings, considering that vanilla has a high export value and can contribute to regional and national income.

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