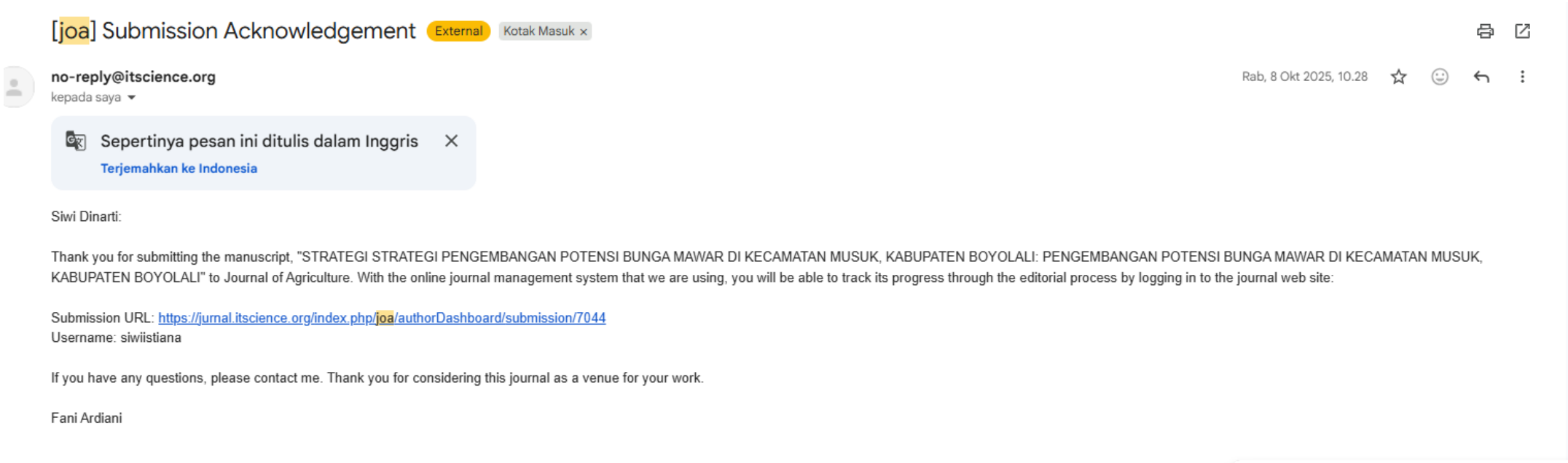
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STRATEGY FOR DEVELOPING FLOWER POTENSIAL IN MUSUK DISTRICT, BOYOLALO REGENCY

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Abstrak

The rose flower, as a commodity widely cultivated in Musuk District, possesses great potential to boost both regional and local economies. Despite the significant potential of rose flowers, it has not yet been optimized by the community and government. The lack of community knowledge regarding the existing potential is one of the factors contributing to the suboptimal production of these rose flowers. The aim of this research is to identify the potential of rose flowers and analyze strategies for developing the existing rose flower potential in Musuk District. The method used in this research is a descriptive qualitative approach. Informant selection technique utilized snowball sampling. SWOT analysis was the analytical method employed to determine the condition of the rose flower potential and to formulate strategies for its development and economic improvement. The SWOT analysis results indicate that the rose flower potential is in Quadrant V, suggesting that the rose flower is in a stable condition but lacks a strong competitive advantage. Strategies to optimize the rose flower potential include diversifying rose flower products, expanding the market, and conducting replanting to rejuvenate old rose plants to increase production. Efforts to enhance the economy through rose flower potential involve product diversification into items like rose chips, rose tea, rose syrup, and rose water.

Keywords : Potential, Rose Flower, Income Improvement

Pendahuluan

Rose flower (*Rosa multiflora L.*) is a rose species belonging to the **Rosaceae family** and is widely known as an ornamental plant that possesses many color and shape variations (Muzaki et al., 2021). *Rosa multiflora L. is often referred to as the **wild rose** or **Japanese rose** due to its origin in East Asia, specifically Japan, Korea, and China. This plant was first introduced to various countries in the 19th century, and since then has been widely cultivated globally. This rose species is known for its **high adaptability** to various climate and soil conditions, making it popular in many countries as a garden or fence ornamental plant, and as a raw material for the **cut flower industry**.*

In addition to its role as an ornamental plant, *Rosa multiflora L.* also possesses several other benefits. This plant can be utilized for various purposes, ranging from **cut flowers**, **perfume**, to **essential oils**. Certain varieties of *Rosa multiflora L.* are also used in the **cosmetic** and **health industries** due to their content of active compound (Muzaki et al., 2021). Its beauty, aroma, and inherent benefits make the rose a horticultural commodity with **high economic value** in both domestic and international markets.

The **agricultural sector** is a top priority as it constitutes the primary sector in the social economy. Consequently, the rose flower, which holds significant potential in enhancing community economics, particularly for farmers in Musuk District, Boyolali Regency, has received attention from the government (Rochaeni, 2023). In this region, the rose flower is not merely used as an ornamental plant but also has a **high demand** for crucial events such as religious ceremonies, weddings, decoration, and even as a raw material for perfume and cosmetics (Pamekas et al., 2023). Rose products from Musuk are known for their **good quality**, supported by the generational expertise of the farmers in cultivating this plant.

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Musuk District is located in **Boyolali Regency, Central Java**, which is known as an **agrarian area** with substantial agricultural potential. In Musuk, the rose flower has become one of the **superior commodities** widely cultivated by the community. The geographical conditions of Musuk, situated at an elevation of approximately 800 to 1,000 meters above sea level with cool temperatures, adequate rainfall, and fertile volcanic soil, highly support the growth of high-quality roses. However, despite many farmers in Musuk District engaging in rose cultivation, various constraints such as **limited technology**, **market access**, and **price fluctuations** remain the primary challenges (Pamekas et al., 2023). The inherent potential must be continually developed to become more optimal. It is necessary to **identify regional potential** by viewing the rose flower as a key commodity in Musuk District. Furthermore, an **appropriate strategy** is required to maximize the existing potential. With the right strategy, this potential can be optimally utilized to **improve the welfare of farmers** and the **regional economy**. To enhance the welfare of farmers and the regional economy, additional processing can be implemented to produce value-added products from the rose flower, thereby ensuring that both farmers and the community involved in processing the rose flower will obtain **stable income**. The utilization of rose flowers in Musuk District must be further developed by identifying the rose flower potential and **analyzing the appropriate strategy** in an effort to enhance the existing rose flower potential, which can ultimately assist residents in increasing their income and improving their welfare..

Literature Review

Fitriana et al., (2025) in the title *Potensi Pemanfaatan Bunga Mawar untuk Produksi Minyak Atsiri di Wilayah Sawahan Nganjuk* (Potential of Rose Flower Utilization for Essential Oil Production in the Sawahan Nganjuk Area). This research aimed to identify the potential for rose flower processing and provide guidance to the community in the processing. This initiative intended to encourage the formation of a rose-based community capable of increasing economic value and making this product a superior commodity at the local level. The study used a literature review, observation, and interviews to explore the potential utilization of rose flowers as raw material for essential oil production in the Sawahan area. The research showed that Sawahan has great potential in rose cultivation thanks to its fertile soil and supportive climate. However, challenges such as a lack of cultivation knowledge, limited distillation technology, and narrow market access remain obstacles. Development strategies that can be implemented include government support through empowerment programs, extension services, technical assistance, and the provision of modern distillation technology. The global market opportunities for essential oils, especially in the cosmetic and aromatherapy sectors, continue to increase. Besides the agriculture and marketing sectors, rose-based educational tourism also has the potential to be developed to introduce local potential, create jobs, and encourage sustainability. Collaboration between various parties can make Sawahan a competitive essential oil production center

Okvitawanli & Adiandari, (2022) with the title Membangun Desa Wisata melalui Peningkatan Skala Ekonomi Kreatif (Building a Tourism Village through Scaling Up the Creative Economy). This community service program in Bangli Regency was implemented to develop tourism villages and improve the local economy, particularly in Guliang Village and Pengotan Village. In Guliang Village, innovation in aromatherapy incense products was developed, while Pengotan Village focused on dried flower products. As many as 8000 marigold seedlings and 2000 rose seedlings were distributed as raw materials to support the community's creative economy empowerment. Tourism village development was carried out through digital promotion via websites and social media, as well as strengthening local identity through product packaging, creative photo spots, and the introduction of experience-based tourism. In Guliang, tourists can mix their own incense, while in Pengotan they can pick and arrange flowers directly, including delivery services for the arrangements. Located in a beautiful hilly area, this experiential tourism not only attracts tourists but also provides additional income for residents. The program proved to improve community welfare and is expected to encourage sustainable tourism economic growth in Bali.

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Research Method

This research employed a descriptive qualitative research method. Data collection techniques included interviews and questionnaire distribution to measure the internal and external factors influencing the development of rose potential. The location survey was conducted through direct observation in rose agricultural fields to understand the agronomic conditions, cultivation techniques, and supporting infrastructure. SWOT analysis was used in this study to formulate the appropriate strategy addressing the potential and problems related to the development of rose agribusiness in the region (Selvia & Danasari, 2023). The informant selection technique used Snowball sampling. The research used primary and secondary data, and the study was conducted through a survey method taking the case in Musuk District, Boyolali Regency. The location was determined intentionally (purposive) based on the consideration that the area has a lot of rose potential. Data analysis was performed descriptively qualitatively, focusing on the exploration of social phenomena. This analysis was used to formulate strategic recommendations applicable to farmers and the local government. The research locations were in two villages: Sruni Village and Cluntang Village..

Results and Discussion

A. General Overview

Based BPS (2023) Musuk District has a total area of 30.530km2. Musuk District has various kinds of plants and vegetables that grow well. Among them are cabbage, chili, shallots, potatoes, tomatoes, rose flowers, and tobacco. One commodity with high production volume but unstable income due to frequent price fluctuations is the rose plant..

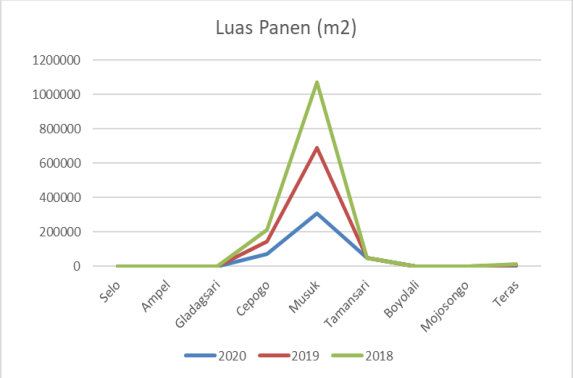
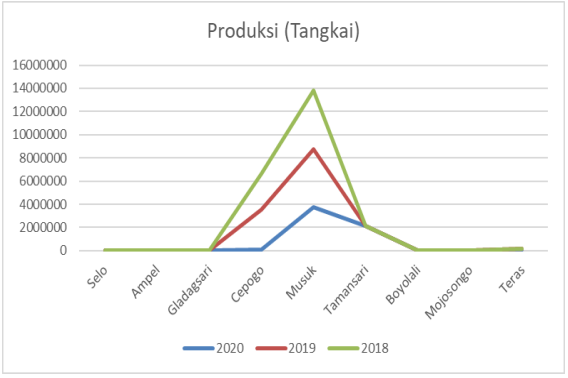


Figure 1.1 Data on Harvest Area



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Figure 1.2 Rose Production

Musuk District possesses the highest rose harvest area and production among other districts in Boyolali Regency. For instance, in 2020, the harvest area was 310,000m2 with a total production of 3,760,000 rose flower stems. Among the villages in Musuk District that cultivate rose flowers are Cluntang Village and Sruni Village. All residents in Sruni Village and Cluntang Village own rose plants, whether located in their home yards or on their private agricultural land. The average land area owned by the community is approximately 1,000m2 with an average of 612 rose plants, and the entire rose yield is intended for sale. Some of these roses are sold to the market, middlemen (tengkulak), or rose processing houses located in Musuk District, Boyolali Regency. Farmers in Sruni Village and Cluntang Village typically harvest rose flowers every **two days** for sale in the market. Each farmer can usually sell a minimum of one basket (*bakul*), with one basket weighing **3 kg** of rose flowers. Rose farmers can harvest up to 15 times every month. Rose flower prices frequently experience significant fluctuations, depending on the season and market demand. The price of roses obtained by farmers ranges from IDR 10,000 to IDR 400,000 per basket. This condition leads to **income uncertainty** for farmers, making it difficult for them to plan their business sustainably..

One of the constraints faced by farmers in Sruni Village and Cluntang Village is the continued reliance on traditional cultivation methods which are less efficient, particularly concerning rose plant rejuvenation (replanting), irrigation, fertilization, and pest and disease control. The limited access to modern technology results in suboptimal productivity. Another constraint faced by farmers is the lack of regular consumers, leading to fluctuations in farmer income because consumers only purchase rose flowers during specific seasons. Furthermore, farmers have a poor understanding of online marketing and lack knowledge regarding general marketing practices. Additionally, there are no partners willing to cooperate directly with the farmers, as partners currently only collaborate with rose processing businesses..

B. SWOT Analysis of Rose Flower Potential in Musuk District

The rose flower is one of the commodities widely cultivated in Musuk District, especially in Sruni Village and Cluntang Village. Although a large number of roses are produced, this has not significantly increased the community's income. Therefore, an analysis is needed to boost community income from rose flowers. SWOT analysis, by compiling internal and external analysis, is used to determine the potential of rose flowers in Musuk District.

The SWOT analysis, by compiling internal and external analysis, was used to determine the potential of rose flowers in Musuk District. The internal analysis utilizes the Internal Strategic Factors Analysis Summary (IFAS) Matrix to identify the strength and weakness factors of the rose flower potential in Musuk District (Hm & Narto, 2022). Data collection was obtained from the results of interviews and questionnaires with rose farmers in Cluntang Village and Sruni Village. The results of the IFAS matrix analysis are shown in Table 1.1 below.

Table.1 Matriks IFAS

No	Internal Factors	Weight	Rating	Score
Kekuatan				
1	Abundance of available roses	0,20	4	0,80
2	Location is easily accessible, both in terms of transportation and communication	0,15	3	0,45

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3	Adequate financial, technological, or other resource support is available	0,10	3	0,30
Sub total		**0,45**	**10**	**1,55**
Weaknesses				
1	Old plant condition that is not replanted	0,20	2	0,40
2	Dry agricultural land conditions	0,10	1	0,10
3	Lack of farmer knowledge in proper rose cultivation	0,10	1	0,10
4	Lack of understanding of marketing	0,15	2	0,30
Sub Total		**0,65**	**6**	**0,90**
Total		**1,00**	**16**	**2,45**

The calculation results show that the score for the strength factor is 1.55, while the score for the weakness factor is 0.90, with a total IFAS matrix score of 2.45.

he External Strategic Factors Analysis Summary (EFAS) Matrix was utilized for the external analysis to analyze the opportunities and threats that may influence the rose flower potential (Hm & Narto, 2022). The result of the EFAS matrix compilation is presented in Table 1.2 below.

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*Table **Error! Use the Home tab to apply 0 to the text that you want to appear here.**2 EFAS Matrix*

No	Internal Factors	Weight	Rating	Score
Opportunities				
1	ose flower sales will increase during certain seasons	0,20	4	0,80
2	Roses can be made into products such as essential oils and processed food products	0,15	3	0,45
3	Partnering with cosmetic and souvenir companies	0,10	3	0,30
4	Can be sold up to export	0,05	3	0,15
Sub total		**0,50**	**13**	**1,70**
Ancaman				
1	Fluctuating rose product selling prices	0,20	2	0,40
2	Grubs (*uret*) attacking rose plants	0,15	2	0,30
3	Monkeys that come to eat rose flowers when they have not bloomed	0,10	1	0,10
4	Climate conditions with low rainfall	0,05	2	0,10
Sub Total		**0,50**	**7**	**0,90**
Total		**1,00**	**20**	**2,60**

Hasil perhitungan matrik EFAS diperoleh faktor peluang sebesar 1,70 dan faktor ancaman sebesar 0,90 dengan total matrik EFAS adalah 2,60. Kemudian menyusun matrik IE untuk mengetahui posisi Potensi bunga mawar di Kecamatan Musuk.

Table 1..3 IE Matrix (Internal – External)

EFAS Score (2,60)				
		Strong (3-4)	Medium (2-2,99)	Weak (1-1,99)
IFAS Score (2,45)	High (3-4)	I	II	III
	Medium (2-2,99)	IV	V	VI
	Weak (1-1,,99)	VII	VIII	IX

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Based on the IE matrix results, the rose flower potential in Musuk District is in Quadrant V (Medium-Medium). This indicates that the rose flower is in a stable condition but does not have a strong competitive advantage. The compilation of the SWOT matrix results in 4 alternative strategies that can be used to develop the existing rose flower potential in Musuk District

Table 1.4 SWOT Matrix

	Strength - High availability of roses - Easily accessible location, regarding both transportation and communication - Sufficient financial, technological, or other resource support is available	**Weakness** - Aging plants without replanting/rejuvenation - Dry farming land conditions - Lack of community knowledge regarding marketing
Opportunities - Rose sales increase during certain seasons. - Roses can be processed into products such as essential oils and processed food products - Partnering opportunities with cosmetic and souvenir companies. - Potential for sales up to export.	**Strategy (SO)** Implementing product diversification and increasing marketing efforts by establishing strategic partnerships.	**Strategy (WO)** Improving farmer skills in cultivation and online marketing is crucial for market expansion. Replanting aging plants and planting drought-resistant varieties will enhance productivity. Digital strategies utilizing social media and marketplaces can significantly boost sales.
Threats - Fluctuating rose product selling prices. - Rose plants being attacked by grubs - Monkeys frequent the area to consume unbloomed rose flowers - Climate condition characterized by low rainfall	**Strategy (ST)** Investment in irrigation systems, agricultural technology, and pest control is projected to enhance productivity. Collaboration with distributors will aid in stabilizing prices, thereby ensuring business sustainability.	**Strategy (WT)** The implementation of replanting, robust irrigation systems, and farmer education focused on pest control is essential to boosting productivity and increasing plant resistance against adverse environmental conditions

The compilation of the SWOT matrix resulted in four alternative strategies that can be utilized to develop the existing rose flower potential in Musuk District. The alternative strategies include:

1. Implementing product diversification and enhancing marketing by establishing partnerships.
2. Improving farmer skills in cultivation and online marketing is crucial for market

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expansion. Replanting aging plants and planting drought-resistant varieties will enhance productivity. Digital strategies utilizing social media and marketplaces can significantly boost sales.

3. Investment in irrigation systems, agricultural technology, and pest control will increase productivity. Cooperation with distributors helps maintain price stability, ensuring business sustainability.
4. Replanting, irrigation systems, and farmer education regarding pest control will enhance productivity as well as plant resilience to environmental conditions

.

C. ROSE FLOWER POTENTIAL IN INCREASING INCOME

The rose flowers cultivated in Musuk District have a considerably high demand, both for important events such as weddings and decoration, and as a raw material in the perfume and cosmetic industries. Rose flower products from this area are known to possess good quality, supported by the generational expertise of the farmers in cultivating this plant. Thus far, rose flowers have been primarily used as scattering flowers during pilgrimages in certain seasons, yet besides being utilized for scattering, roses can be transformed into processed food products, such as chips, tea, and syrup. Furthermore, the rose flower can also be processed as industrial raw material, such as for essential oils, rose water, and perfume. If this potential is managed better through the optimization of production and marketing, this sector can become a main source of income for the local community and create new job opportunities..

Conclusion

The results of the analysis and observation used to determine the rose flower development potential in Musuk District through the SWOT analysis yielded four strategies that can be utilized to address the problems and potential for rose flower development. Among these four strategies, it can be concluded that the rose flower potential can be developed by diversifying rose flower products, expanding the market, and conducting replanting to rejuvenate old rose plants in order to increase rose flower production. In an effort to enhance the economy through the rose flower potential, product diversification is carried out into items such as rose chips, rose tea, rose syrup, and rose water.

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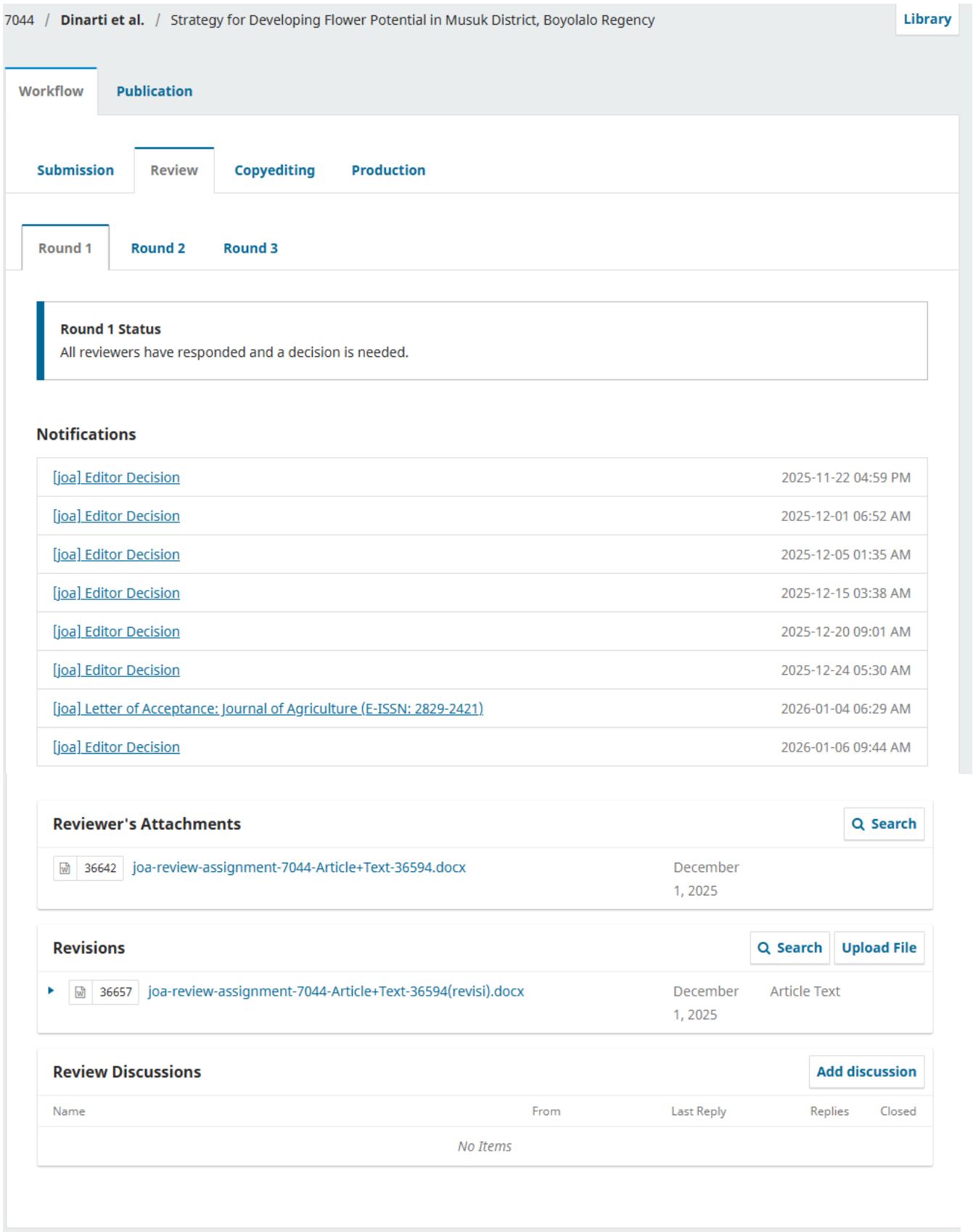
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2. Revisi Pertama (1)



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STRATEGY FOR DEVELOPING FLOWER POTENSIAL IN MUSUK DISTRICT, BOYOLALO REGENCY

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Abstrak

The rose flower, as a commodity widely cultivated in Musuk District, possesses great potential to boost both regional and local economies. Despite the significant potential of rose flowers, it has not yet been optimized by the community and government. The lack of community knowledge regarding the existing potential is one of the factors contributing to the suboptimal production of these rose flowers. The aim of this research is to identify the potential of rose flowers and analyze strategies for developing the existing rose flower potential in Musuk District. The method used in this research is a descriptive qualitative approach. Informant selection technique utilized snowball sampling. SWOT analysis was the analytical method employed to determine the condition of the rose flower potential and to formulate strategies for its development and economic improvement. The SWOT analysis results indicate that the rose flower potential is in Quadrant V, suggesting that the rose flower is in a stable condition but lacks a strong competitive advantage. Strategies to optimize the rose flower potential include diversifying rose flower products, expanding the market, and conducting replanting to rejuvenate old rose plants to increase production. Efforts to enhance the economy through rose flower potential involve product diversification into items like rose chips, rose tea, rose syrup, and rose water.

Keywords : Potential, Rose Flower, Income Improvement

Pendahuluan

Rose flower (*Rosa multiflora L.*) is a rose species belonging to the **Rosaceae family** and is widely known as an ornamental plant that possesses many color and shape variations (Muzaki et al., 2021). *Rosa multiflora L. is often referred to as the **wild rose** or **Japanese rose** due to its origin in East Asia, specifically Japan, Korea, and China. This plant was first introduced to various countries in the 19th century, and since then has been widely cultivated globally. This rose species is known for its **high adaptability** to various climate and soil conditions, making it popular in many countries as a garden or fence ornamental plant, and as a raw material for the **cut flower industry**.*

In addition to its role as an ornamental plant, *Rosa multiflora L.* also possesses several other benefits. This plant can be utilized for various purposes, ranging from **cut flowers**, **perfume**, to **essential oils**. Certain varieties of *Rosa multiflora L.* are also used in the **cosmetic** and **health industries** due to their content of active compound (Muzaki et al., 2021). Its beauty, aroma, and inherent benefits make the rose a horticultural commodity with **high economic value** in both domestic and international markets.

The **agricultural sector** is a top priority as it constitutes the primary sector in the social economy. Consequently, the rose flower, which holds significant potential in enhancing community economics, particularly for farmers in Musuk District, Boyolali Regency, has received attention from the government (Rochaeni, 2023). In this region, the rose flower is not merely used as an ornamental plant but also has a **high demand** for crucial events such as religious ceremonies, weddings, decoration, and even as a raw material for perfume and cosmetics (Pamekas et al., 2023). Rose products from Musuk are known for their **good quality**, supported by the generational expertise of the farmers in cultivating this plant.

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Commented [Anonim2]: Keywords are written alphabetically and using the sign (;).

Commented [Anonim3]: Activate each citation in the Introduction section with APA Style format.

Commented [Anonim4]: Too long and repetitive; several paragraphs repeat the same information regarding the potential of roses.

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Musuk District is located in **Boyolali Regency, Central Java**, which is known as an **agrarian area** with substantial agricultural potential. In Musuk, the rose flower has become one of the **superior commodities** widely cultivated by the community. The geographical conditions of Musuk, situated at an elevation of approximately 800 to 1,000 meters above sea level with cool temperatures, adequate rainfall, and fertile volcanic soil, highly support the growth of high-quality roses. However, despite many farmers in Musuk District engaging in rose cultivation, various constraints such as **limited technology**, **market access**, and **price fluctuations** remain the primary challenges (Pamekas et al., 2023). The inherent potential must be continually developed to become more optimal. It is necessary to **identify regional potential** by viewing the rose flower as a key commodity in Musuk District. Furthermore, an **appropriate strategy** is required to maximize the existing potential. With the right strategy, this potential can be optimally utilized to **improve the welfare of farmers** and the **regional economy**. To enhance the welfare of farmers and the regional economy, additional processing can be implemented to produce value-added products from the rose flower, thereby ensuring that both farmers and the community involved in processing the rose flower will obtain **stable income**. The utilization of rose flowers in Musuk District must be further developed by identifying the rose flower potential and **analyzing the appropriate strategy** in an effort to enhance the existing rose flower potential, which can ultimately assist residents in increasing their income and improving their welfare..

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Literature Review

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2.Lacks critical comparison and synthesis.

Fitriana et al., (2025) in the title *Potensi Pemanfaatan Bunga Mawar untuk Produksi Minyak Atsiri di Wilayah Sawahan Nganjuk* (Potential of Rose Flower Utilization for Essential Oil Production in the Sawahan Nganjuk Area). This research aimed to identify the potential for rose flower processing and provide guidance to the community in the processing. This initiative intended to encourage the formation of a rose-based community capable of increasing economic value and making this product a superior commodity at the local level. The study used a literature review, observation, and interviews to explore the potential utilization of rose flowers as raw material for essential oil production in the Sawahan area. The research showed that Sawahan has great potential in rose cultivation thanks to its fertile soil and supportive climate. However, challenges such as a lack of cultivation knowledge, limited distillation technology, and narrow market access remain obstacles. Development strategies that can be implemented include government support through empowerment programs, extension services, technical assistance, and the provision of modern distillation technology. The global market opportunities for essential oils, especially in the cosmetic and aromatherapy sectors, continue to increase. Besides the agriculture and marketing sectors, rose-based educational tourism also has the potential to be developed to introduce local potential, create jobs, and encourage sustainability. Collaboration between various parties can make Sawahan a competitive essential oil production center

Okvitawanli & Adiandari, (2022) with the title Membangun Desa Wisata melalui Peningkatan Skala Ekonomi Kreatif (Building a Tourism Village through Scaling Up the Creative Economy). This community service program in Bangli Regency was implemented to develop tourism villages and improve the local economy, particularly in Guliang Village and Pengotan Village. In Guliang Village, innovation in aromatherapy incense products was developed, while Pengotan Village focused on dried flower products. As many as 8000 marigold seedlings and 2000 rose seedlings were distributed as raw materials to support the community's creative economy empowerment. Tourism village development was carried out through digital promotion via websites and social media, as well as strengthening local identity through product packaging, creative photo spots, and the introduction of experience-based tourism. In Guliang, tourists can mix their own incense, while in Pengotan they can pick and arrange flowers directly, including delivery services for the arrangements. Located in a beautiful hilly area, this experiential tourism not only attracts tourists but also provides additional income for residents. The program proved to improve community welfare and is expected to encourage sustainable tourism economic growth in Bali.

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Research Method

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This research employed a descriptive qualitative research method. Data collection techniques included interviews and questionnaire distribution to measure the internal and external factors influencing the development of rose potential. The location survey was conducted through direct observation in rose agricultural fields to understand the agronomic conditions, cultivation techniques, and supporting infrastructure. SWOT analysis was used in this study to formulate the appropriate strategy addressing the potential and problems related to the development of rose agribusiness in the region (Selvia & Danasari, 2023). The informant selection technique used Snowball sampling. The research used primary and secondary data, and the study was conducted through a survey method taking the case in Musuk District, Boyolali Regency. The location was determined intentionally (purposive) based on the consideration that the area has a lot of rose potential. Data analysis was performed descriptively qualitatively, focusing on the exploration of social phenomena. This analysis was used to formulate strategic recommendations applicable to farmers and the local government. The research locations were in two villages: Sruni Village and Cluntang Village..

Results and Discussion

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A. General Overview

Based BPS (2023) Musuk District has a total area of 30.530km2. Musuk District has various kinds of plants and vegetables that grow well. Among them are cabbage, chili, shallots, potatoes, tomatoes, rose flowers, and tobacco. One commodity with high production volume but unstable income due to frequent price fluctuations is the rose plant..

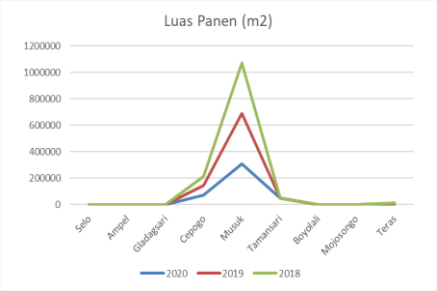
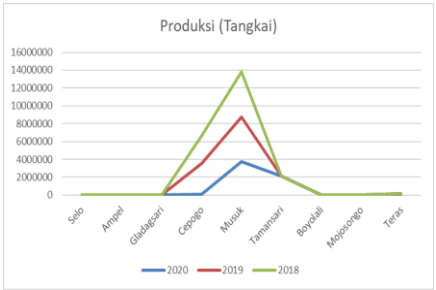


Figure 1.1 Data on Harvest Area



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Figure 1.2 Rose Production

Musuk District possesses the highest rose harvest area and production among other districts in Boyolali Regency. For instance, in 2020, the harvest area was 310,000m2 with a total production of 3,760,000 rose flower stems. Among the villages in Musuk District that cultivate rose flowers are Cluntang Village and Sruni Village. All residents in Sruni Village and Cluntang Village own rose plants, whether located in their home yards or on their private agricultural land. The average land area owned by the community is approximately 1,000m2 with an average of 612 rose plants, and the entire rose yield is intended for sale. Some of these roses are sold to the market, middlemen (tengkulak), or rose processing houses located in Musuk District, Boyolali Regency. Farmers in Sruni Village and Cluntang Village typically harvest rose flowers every **two days** for sale in the market. Each farmer can usually sell a minimum of one basket (*bakul*), with one basket weighing **3 kg** of rose flowers. Rose farmers can harvest up to 15 times every month. Rose flower prices frequently experience significant fluctuations, depending on the season and market demand. The price of roses obtained by farmers ranges from IDR 10,000 to IDR 400,000 per basket. This condition leads to **income uncertainty** for farmers, making it difficult for them to plan their business sustainably..

One of the constraints faced by farmers in Sruni Village and Cluntang Village is the continued reliance on traditional cultivation methods which are less efficient, particularly concerning rose plant rejuvenation (replanting), irrigation, fertilization, and pest and disease control. The limited access to modern technology results in suboptimal productivity. Another constraint faced by farmers is the lack of regular consumers, leading to fluctuations in farmer income because consumers only purchase rose flowers during specific seasons. Furthermore, farmers have a poor understanding of online marketing and lack knowledge regarding general marketing practices. Additionally, there are no partners willing to cooperate directly with the farmers, as partners currently only collaborate with rose processing businesses..

B. SWOT Analysis of Rose Flower Potential in Musuk District

The rose flower is one of the commodities widely cultivated in Musuk District, especially in Sruni Village and Cluntang Village. Although a large number of roses are produced, this has not significantly increased the community's income. Therefore, an analysis is needed to boost community income from rose flowers. SWOT analysis, by compiling internal and external analysis, is used to determine the potential of rose flowers in Musuk District.

The SWOT analysis, by compiling internal and external analysis, was used to determine the potential of rose flowers in Musuk District. The internal analysis utilizes the Internal Strategic Factors Analysis Summary (IFAS) Matrix to identify the strength and weakness factors of the rose flower potential in Musuk District (Hm & Narto, 2022). Data collection was obtained from the results of interviews and questionnaires with rose farmers in Cluntang Village and Sruni Village. The results of the IFAS matrix analysis are shown in Table 1.1 below.

Commented [Anonim9]: The SWOT discussion lacks depth; it doesn't connect the scores to actual conditions on the ground.

Table.1 Matriks IFAS

No	Internal Factors	Weight	Rating	Score
Kekuatan				
1	Abundance of available roses	0,20	4	0,80
2	Location is easily accessible, both in terms of transportation and communication	0,15	3	0,45

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3	Adequate financial, technological, or other resource support is available	0,10	3	0,30
Sub total		**0,45**	**10**	**1,55**
Weaknesses				
1	Old plant condition that is not replanted	0,20	2	0,40
2	Dry agricultural land conditions	0,10	1	0,10
3	Lack of farmer knowledge in proper rose cultivation	0,10	1	0,10
4	Lack of understanding of marketing	0,15	2	0,30
Sub Total		**0,65**	**6**	**0,90**
Total		**1,00**	**16**	**2,45**

The calculation results show that the score for the strength factor is 1.55, while the score for the weakness factor is 0.90, with a total IFAS matrix score of 2.45.

he External Strategic Factors Analysis Summary (EFAS) Matrix was utilized for the external analysis to analyze the opportunities and threats that may influence the rose flower potential (Hm & Narto, 2022). The result of the EFAS matrix compilation is presented in Table 1.2 below.

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*Table **Error! Use the Home tab to apply 0 to the text that you want to appear here.**2 EFAS Matrix*

No	Internal Factors	Weight	Rating	Score
Opportunities				
1	ose flower sales will increase during certain seasons	0,20	4	0,80
2	Roses can be made into products such as essential oils and processed food products	0,15	3	0,45
3	Partnering with cosmetic and souvenir companies	0,10	3	0,30
4	Can be sold up to export	0,05	3	0,15
Sub total		**0,50**	**13**	**1,70**
Ancaman				
1	Fluctuating rose product selling prices	0,20	2	0,40
2	Grubs (*uret*) attacking rose plants	0,15	2	0,30
3	Monkeys that come to eat rose flowers when they have not bloomed	0,10	1	0,10
4	Climate conditions with low rainfall	0,05	2	0,10
Sub Total		**0,50**	**7**	**0,90**
Total		**1,00**	**20**	**2,60**

Hasil perhitungan matrik EFAS diperoleh faktor peluang sebesar 1,70 dan faktor ancaman sebesar 0,90 dengan total matrik EFAS adalah 2,60. Kemudian menyusun matrik IE untuk mengetahui posisi Potensi bunga mawar di Kecamatan Musuk.

Table 1..3 IE Matrix (Internal – External)

EFAS Score (2,60)				
		Strong (3-4)	Medium (2-2,99)	Weak (1-1,99)
IFAS Score (2,45)	High (3-4)	I	II	III
	Medium (2-2,99)	IV	V	VI
	Weak (1-1,,99)	VII	VIII	IX

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Based on the IE matrix results, the rose flower potential in Musuk District is in Quadrant V (Medium-Medium). This indicates that the rose flower is in a stable condition but does not have a strong competitive advantage. The compilation of the SWOT matrix results in 4 alternative strategies that can be used to develop the existing rose flower potential in Musuk District

Table 1.4 SWOT Matrix

	Strength - High availability of roses - Easily accessible location, regarding both transportation and communication - Sufficient financial, technological, or other resource support is available	**Weakness** - Aging plants without replanting/rejuvenation - Dry farming land conditions - Lack of community knowledge regarding marketing
Opportunities - Rose sales increase during certain seasons. - Roses can be processed into products such as essential oils and processed food products - Partnering opportunities with cosmetic and souvenir companies. - Potential for sales up to export.	**Strategy (SO)** Implementing product diversification and increasing marketing efforts by establishing strategic partnerships.	**Strategy (WO)** Improving farmer skills in cultivation and online marketing is crucial for market expansion. Replanting aging plants and planting drought-resistant varieties will enhance productivity. Digital strategies utilizing social media and marketplaces can significantly boost sales.
Threats - Fluctuating rose product selling prices. - Rose plants being attacked by grubs - Monkeys frequent the area to consume unbloomed rose flowers - Climate condition characterized by low rainfall	**Strategy (ST)** Investment in irrigation systems, agricultural technology, and pest control is projected to enhance productivity. Collaboration with distributors will aid in stabilizing prices, thereby ensuring business sustainability.	**Strategy (WT)** The implementation of replanting, robust irrigation systems, and farmer education focused on pest control is essential to boosting productivity and increasing plant resistance against adverse environmental conditions

The compilation of the SWOT matrix resulted in four alternative strategies that can be utilized to develop the existing rose flower potential in Musuk District. The alternative strategies include:

1. Implementing product diversification and enhancing marketing by establishing partnerships.
2. Improving farmer skills in cultivation and online marketing is crucial for market

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expansion. Replanting aging plants and planting drought-resistant varieties will enhance productivity. Digital strategies utilizing social media and marketplaces can significantly boost sales.

3. Investment in irrigation systems, agricultural technology, and pest control will increase productivity. Cooperation with distributors helps maintain price stability, ensuring business sustainability.
4. Replanting, irrigation systems, and farmer education regarding pest control will enhance productivity as well as plant resilience to environmental conditions

.

C. ROSE FLOWER POTENTIAL IN INCREASING INCOME

The rose flowers cultivated in Musuk District have a considerably high demand, both for important events such as weddings and decoration, and as a raw material in the perfume and cosmetic industries. Rose flower products from this area are known to possess good quality, supported by the generational expertise of the farmers in cultivating this plant. Thus far, rose flowers have been primarily used as scattering flowers during pilgrimages in certain seasons, yet besides being utilized for scattering, roses can be transformed into processed food products, such as chips, tea, and syrup. Furthermore, the rose flower can also be processed as industrial raw material, such as for essential oils, rose water, and perfume. If this potential is managed better through the optimization of production and marketing, this sector can become a main source of income for the local community and create new job opportunities..

Conclusion

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The results of the analysis and observation used to determine the rose flower development potential in Musuk District through the SWOT analysis yielded four strategies that can be utilized to address the problems and potential for rose flower development. Among these four strategies, it can be concluded that the rose flower potential can be developed by diversifying rose flower products, expanding the market, and conducting replanting to rejuvenate old rose plants in order to increase rose flower production. In an effort to enhance the economy through the rose flower potential, product diversification is carried out into items such as rose chips, rose tea, rose syrup, and rose water.

Acknowledgments

The authors wish to express their gratitude to all parties who have provided support and assisted in the execution of this research. Special thanks are extended to the communities of Sruni Village and Cluntang Village who collaborated and participated in the data collection and field observation process. We also thank the Institute for Research and Community Service (**LPPM**) of **INSTIPER** for the support and facilities provided to us in ensuring the smooth running of this research.

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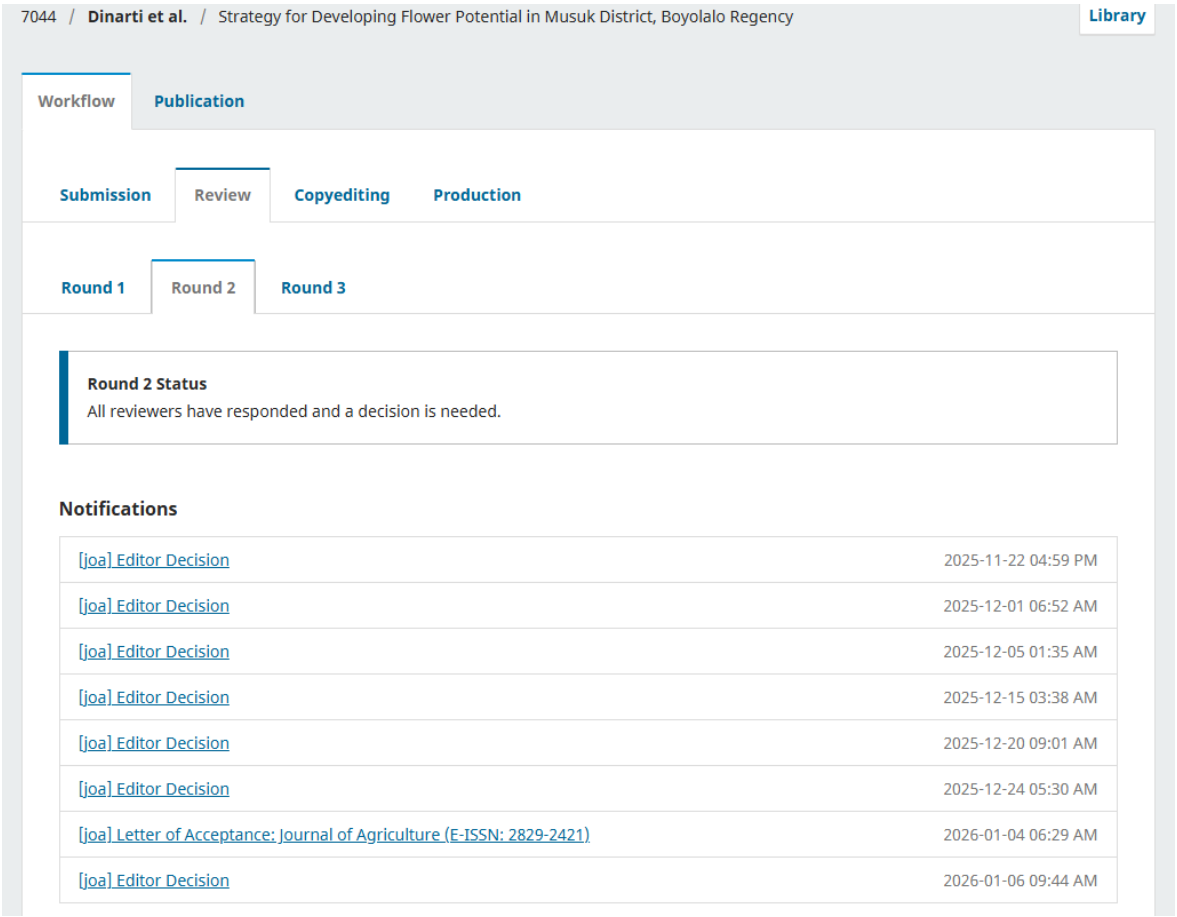
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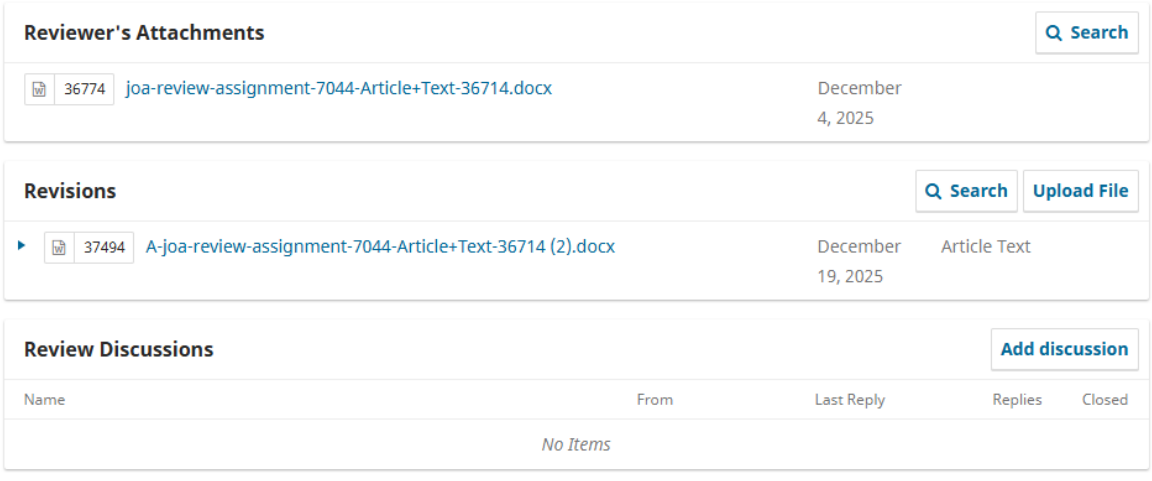
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2.Revisi kedua





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STRATEGY FOR DEVELOPING FLOWER POTENTIAL IN MUSUK DISTRICT, BOYOLALO REGENCY

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Abstrak

The rose flower, as a commodity widely cultivated in Musuk District, possesses great potential to boost both regional and local economies. Despite the significant potential of rose flowers, it has not yet been optimized by the community and government. The lack of community knowledge regarding the existing potential is one of the factors contributing to the suboptimal production of these rose flowers. The aim of this research is to identify the potential of rose flowers and analyze strategies for developing the existing rose flower potential in Musuk District. The method used in this research is a descriptive qualitative approach. Informant selection technique utilized snowball sampling. SWOT analysis was the analytical method employed to determine the condition of the rose flower potential and to formulate strategies for its development and economic improvement. The SWOT analysis results indicate that the rose flower potential is in Quadrant V, suggesting that the rose flower is in a stable condition but lacks a strong competitive advantage. Strategies to optimize the rose flower potential include diversifying rose flower products, expanding the market, and conducting replanting to rejuvenate old rose plants to increase production. Efforts to enhance the economy through rose flower potential involve product diversification into items like rose chips, rose tea, rose syrup, and rose water.

Keywords : Income Improvement , Potential, Rose Flower,

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Keywords are written alphabetically and using the sign (;).

Pendahuluan

Rose flower (*Rosa multiflora L.*) is a rose species belonging to the **Rosaceae family** and is widely known as an ornamental plant that possesses many color and shape variations . *Rosa multiflora L. is often referred to as the **wild rose** or **Japanese rose** due to its origin in East Asia, specifically Japan, Korea, and China. This plant was first introduced to various countries in the 19th century, and since then has been widely cultivated globally. This rose species is known for its **high adaptability** to various climate and soil conditions, making it popular in many countries as a garden or fence ornamental plant, and as a raw material for the **cut flower industry***. (Muzaki et al., 2021).

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2.The research gap is weakly formulated and lacks clarity.

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In addition to its role as an ornamental plant, *Rosa multiflora L.* also possesses several other benefits. This plant can be utilized for various purposes, ranging from **cut flowers**, **perfume**, to **essential oils**. Certain varieties of *Rosa multiflora L.* are also used in the **cosmetic** and **health industries** due to their content of active compound (Muzaki et al., 2021). Its beauty, aroma, and inherent benefits make the rose a horticultural commodity with **high economic value** in both domestic and international markets.

The **agricultural sector** is a top priority as it constitutes the primary sector in the social economy. Consequently, the rose flower, which holds significant potential in enhancing community economics, particularly for farmers in Musuk District, Boyolali Regency, has received attention from the government (Rochaeni, 2023). In this region, the rose flower is not merely used as an ornamental plant but also has a **high demand** for crucial events such as religious ceremonies, weddings, decoration, and even as a raw material for perfume and cosmetics (Pamekas et al., 2023). Rose products from Musuk are known for their **good quality**, supported by the generational expertise of the farmers in cultivating this plant.

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Musuk District is located in **Boyolali Regency, Central Java**, which is known as an **agrarian area** with substantial agricultural potential. In Musuk, the rose flower has become one of the **superior commodities** widely cultivated by the community. The geographical conditions of Musuk, situated at an elevation of approximately 800 to 1,000 meters above sea level with cool temperatures, adequate rainfall, and fertile volcanic soil, highly support the growth of high-quality roses. Despite the high potential of rose cultivation in Musuk District, farmers continue to face significant challenges, including limited access to appropriate technology, inconsistent market linkages, and severe price fluctuations (Pamekas et al., 2023). The inherent potential must be continually developed to become more optimal. It is necessary to **identify regional potential** by viewing the rose flower as a key commodity in Musuk District. Furthermore, an **appropriate strategy** is required to maximize the existing potential. With the right strategy, this potential can be optimally utilized to **improve the welfare of farmers** and the **regional economy**. To enhance the welfare of farmers and the regional economy, additional processing can be implemented to produce value-added products from the rose flower, thereby ensuring that both farmers and the community involved in processing the rose flower will obtain **stable income**. The utilization of rose flowers in Musuk District must be further developed by identifying the rose flower potential and **analyzing the appropriate strategy** in an effort to enhance the existing rose flower potential, which can ultimately assist residents in increasing their income and improving their welfare. The primary gap lies the absence o fan intergrates strategic framework that moves beyond general cultivation practices. Specifically, three is a critical need to : systematically identifity the untapped economic potential and develop an appropriate and targeted strategy.

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Commented [Anonim6]: Missing theoretical foundation related to regional development or agribusiness strategy.

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Literature Review

Fitriana et al., (2025) in the title *Potensi Pemanfaatan Bunga Mawar untuk Produksi Minyak Atsiri di Wilayah Sawahan Nganjuk* (Potential of Rose Flower Utilization for Essential Oil Production in the Sawahan Nganjuk Area). This research aimed to identify the potential for rose flower processing and provide guidance to the community in the processing. This initiative intended to encourage the formation of a rose-based community capable of increasing economic value and making this product a superior commodity at the local level. The study used a literature review, observation, and interviews to explore the potential utilization of rose flowers as raw material for essential oil production in the Sawahan area. The research showed that Sawahan has great potential in rose cultivation thanks to its fertile soil and supportive climate. However, challenges such as a lack of cultivation knowledge, limited distillation technology, and narrow market access remain obstacles. Development strategies that can be implemented include government support through empowerment programs, extension services, technical assistance, and the provision of modern distillation technology. The global market opportunities for essential oils, especially in the cosmetic and aromatherapy sectors, continue to increase. Besides the agriculture and marketing sectors, rose-based educational tourism also has the potential to be developed to introduce local potential, create jobs, and encourage sustainability. Collaboration between various parties can make Sawahan a competitive essential oil production center

Okvitawanli & Adiandari, (2022) with the title Membangun Desa Wisata melalui Peningkatan Skala Ekonomi Kreatif (Building a Tourism Village through Scaling Up the Creative Economy). This community service program in Bangli Regency was implemented to develop tourism villages and improve the local economy, particularly in Guliang Village and Pengotan Village. In Guliang Village, innovation in aromatherapy incense products was developed, while Pengotan Village focused on dried flower products. As many as 8000 marigold seedlings and 2000 rose seedlings were distributed as raw materials to support the community's creative economy empowerment. Tourism village development was carried out through digital promotion via websites and social media, as well as strengthening local identity through product packaging, creative photo spots, and the introduction of experience-based tourism. In Guliang, tourists can mix their own incense, while in Pengotan they can pick and arrange flowers directly, including delivery services for the arrangements. Located in a beautiful hilly area, this experiential tourism not only attracts tourists but also provides additional income for residents. The program proved

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to improve community welfare and is expected to encourage sustainable tourism economic growth in Bali.

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Research Method

This research employed a descriptive qualitative research method. Data collection techniques included interviews and questionnaire distribution to measure the internal and external factors influencing the development of rose potential. The location survey was conducted through direct observation in rose agricultural fields to understand the agronomic conditions, cultivation techniques, and supporting infrastructure. SWOT analysis was used in this study to formulate the appropriate strategy addressing the potential and problems related to the development of rose agribusiness in the region (Selvia & Danasari, 2023). The informant selection technique used Snowball sampling. This approach is necessary because the target population rose farmers actively engaged in cultivation and prossessing specialized knowledge in the Musuk Discrit is not easily identifiable through oficial lists. The research used primary and secondary data, and the study was conducted through a survey method taking the case in Musuk District, Boyolali Regency. The location was determined intentionally (purposive) based on the consideration that the area has a lot of rose potential. Data analysis was performed descriptively qualitatively, focusing on the exploration of social phenomena. This analysis was used to formulate strategic recommendations applicable to farmers and the local government. The research locations were in two villages: Sruni Village and Cluntang Village..

Results and Discussion

A. General Overview

Based BPS (2023) Musuk District has a total area of 30.530km2. Musuk District has various kinds of plants and vegetables that grow well. Among them are cabbage, chili, shallots, potatoes, tomatoes, rose flowers, and tobacco. One commodity with high production volume but unstable income due to frequent price fluctuations is the rose plant..

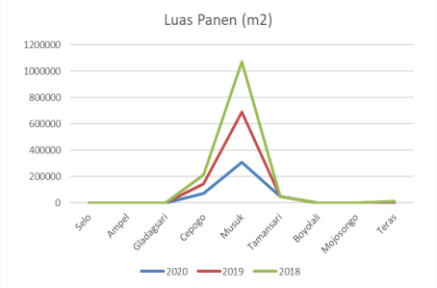


Figure 1.1 Data on Harvest Area

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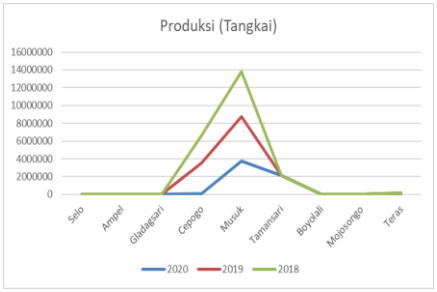


Figure 1.2 Rose Production

Musuk District possesses the highest rose harvest area and production among other districts in Boyolali Regency. For instance, in 2020, the harvest area was 310,000m2 with a total production of 3,760,000 rose flower stems. Among the villages in Musuk District that cultivate rose flowers are Cluntang Village and Sruni Village. All residents in Sruni Village and Cluntang Village own rose plants, whether located in their home yards or on their private agricultural land. The average land area owned by the community is approximately 1,000m2 with an average of 612 rose plants, and the entire rose yield is intended for sale. Some of these roses are sold to the market, middlemen (tengkulak), or rose processing houses located in Musuk District, Boyolali Regency. Farmers in Sruni Village and Cluntang Village typically harvest rose flowers every **two days** for sale in the market. Each farmer can usually sell a minimum of one basket (*bakul*), with one basket weighing **3 kg** of rose flowers. Rose farmers can harvest up to 15 times every month. Rose flower prices frequently experience significant fluctuations, depending on the season and market demand. The price of roses obtained by farmers ranges from IDR 10,000 to IDR 400,000 per basket. This condition leads to **income uncertainty** for farmers, making it difficult for them to plan their business sustainably..

One of the constraints faced by farmers in Sruni Village and Cluntang Village is the continued reliance on traditional cultivation methods which are less efficient, particularly concerning rose plant rejuvenation (replanting), irrigation, fertilization, and pest and disease control. The limited access to modern technology results in suboptimal productivity. Another constraint faced by farmers is the lack of regular consumers, leading to fluctuations in farmer income because consumers only purchase rose flowers during specific seasons. Furthermore, farmers have a poor understanding of online marketing and lack knowledge regarding general marketing practices. Additionally, there are no partners willing to cooperate directly with the farmers, as partners currently only collaborate with rose processing businesses.. The finding that farmers in Sruni and Cluntang still rely on traditional cultivation methods, resulting in suboptimal productivity, aligns with observasions by Muzaki et al (2021), who noted similar tecnological barries among smallholder flower farmers in neighboring regions.

B. SWOT Analysis of Rose Flower Potential in Musuk District

The rose flower is one of the commodities widely cultivated in Musuk District, especially in Sruni Village and Cluntang Village. Although a large number of roses are produced, this has not significantly increased the community's income. Therefore, an analysis is needed to boost community income from rose flowers. SWOT analysis, by compiling internal and external analysis, is used to determine the potential of rose flowers in Musuk District.

The SWOT analysis, by compiling internal and external analysis, was used to determine the potential of rose flowers in Musuk District. The internal analysis utilizes the Internal Strategic

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Factors Analysis Summary (IFAS) Matrix to identify the strength and weakness factors of the rose flower potential in Musuk District (Hm & Narto, 2022). Data collection was obtained from the results of interviews and questionnaires with rose farmers in Cluntang Village and Sruni Village. The results of the IFAS matrix analysis are shown in Table 1.1 below.

Table.1 Matriks IFAS

No	Internal Factors	Weight	Rating	Score
Kekuatan				
1	Abundance of available roses	0,20	4	0,80
2	Location is easily accessible, both in terms of transportation and communication	0,15	3	0,45
3	Adequate financial, technological, or other resource support is available	0,10	3	0,30
Sub total		**0,45**	**10**	**1,55**
Weaknesses				
1	Old plant condition that is not replanted	0,20	2	0,40
2	Dry agricultural land conditions	0,10	1	0,10
3	Lack of farmer knowledge in proper rose cultivation	0,10	1	0,10
4	Lack of understanding of marketing	0,15	2	0,30
Sub Total		**0,65**	**6**	**0,90**
Total		**1,00**	**16**	**2,45**

The calculation results show that the score for the strength factor is 1.55, while the score for the weakness factor is 0.90, with a total IFAS matrix score of 2.45.

he External Strategic Factors Analysis Summary (EFAS) Matrix was utilized for the external analysis to analyze the opportunities and threats that may influence the rose flower potential (Hm & Narto, 2022). The result of the EFAS matrix compilation is presented in Table 1.2 below.

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*Table **Error! Use the Home tab to apply 0 to the text that you want to appear here.**2 EFAS Matrix*

No	Internal Factors	Weight	Rating	Score
Opportunities				
1	ose flower sales will increase during certain seasons	0,20	4	0,80
2	Roses can be made into products such as essential oils and processed food products	0,15	3	0,45
3	Partnering with cosmetic and souvenir companies	0,10	3	0,30
4	Can be sold up to export	0,05	3	0,15
Sub total		**0,50**	**13**	**1,70**
Ancaman				
1	Fluctuating rose product selling prices	0,20	2	0,40
2	Grubs (*uret*) attacking rose plants	0,15	2	0,30
3	Monkeys that come to eat rose flowers when they have not bloomed	0,10	1	0,10
4	Climate conditions with low rainfall	0,05	2	0,10
Sub Total		**0,50**	**7**	**0,90**
Total		**1,00**	**20**	**2,60**

Hasil perhitungan matrik EFAS diperoleh faktor peluang sebesar 1,70 dan faktor ancaman sebesar 0,90 dengan total matrik EFAS adalah 2,60. Kemudian menyusun matrik IE untuk mengetahui posisi Potensi bunga mawar di Kecamatan Musuk.

Table 1..3 IE Matrix (Internal – External)

EFAS Score (2,60)				
		Strong (3-4)	Medium (2-2,99)	Weak (1-1,99)
IFAS Score (2,45)	High (3-4)	I	II	III
	Medium (2-2,99)	IV	V	VI
	Weak (1-1,,99)	VII	VIII	IX

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Based on the IE matrix results, the rose flower potential in Musuk District is in Quadrant V (Medium-Medium). This indicates that the rose flower is in a stable condition but does not have a strong competitive advantage. The compilation of the SWOT matrix results in 4 alternative strategies that can be used to develop the existing rose flower potential in Musuk District

Table 1.4 SWOT Matrix

	Strength - High availability of roses - Easily accessible location, regarding both transportation and communication - Sufficient financial, technological, or other resource support is available	**Weakness** - Aging plants without replanting/rejuvenation - Dry farming land conditions - Lack of community knowledge regarding marketing
Opportunities - Rose sales increase during certain seasons. - Roses can be processed into products such as essential oils and processed food products - Partnering opportunities with cosmetic and souvenir companies. - Potential for sales up to export.	**Strategy (SO)** Implementing product diversification and increasing marketing efforts by establishing strategic partnerships.	**Strategy (WO)** Improving farmer skills in cultivation and online marketing is crucial for market expansion. Replanting aging plants and planting drought-resistant varieties will enhance productivity. Digital strategies utilizing social media and marketplaces can significantly boost sales.
Threats - Fluctuating rose product selling prices. - Rose plants being attacked by grubs - Monkeys frequent the area to consume unbloomed rose flowers - Climate condition characterized by low rainfall	**Strategy (ST)** Investment in irrigation systems, agricultural technology, and pest control is projected to enhance productivity. Collaboration with distributors will aid in stabilizing prices, thereby ensuring business sustainability.	**Strategy (WT)** The implementation of replanting, robust irrigation systems, and farmer education focused on pest control is essential to boosting productivity and increasing plant resistance against adverse environmental conditions

The compilation of the SWOT matrix resulted in four alternative strategies that can be utilized to develop the existing rose flower potential in Musuk District. The alternative strategies include:

1. Implementing product diversification and enhancing marketing by establishing partnerships.
2. Improving farmer skills in cultivation and online marketing is crucial for market

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expansion. Replanting aging plants and planting drought-resistant varieties will enhance productivity. Digital strategies utilizing social media and marketplaces can significantly boost sales.

3. Investment in irrigation systems, agricultural technology, and pest control will increase productivity. Cooperation with distributors helps maintain price stability, ensuring business sustainability.
4. Replanting, irrigation systems, and farmer education regarding pest control will enhance productivity as well as plant resilience to environmental conditions

Based on the IFAS and EFAS Matrix analysis conducted through field interviews and surveys.The high weight reflects its perceived importance among farmers, while the low rating of 2 signifies that this weakness is already severely impacting current productivity, as evidenced by low yield per plant observed in Sruni Village.The internal analysis shows a clear advantage in existing resources, primarily the 'Abundance of available roses

C. ROSE FLOWER POTENTIAL IN INCREASING INCOME

The rose flowers cultivated in Musuk District have a considerably high demand, both for important events such as weddings and decoration, and as a raw material in the perfume and cosmetic industries. Rose flower products from this area are known to possess good quality, supported by the generational expertise of the farmers in cultivating this plant. Thus far, rose flowers have been primarily used as scattering flowers during pilgrimages in certain seasons, yet besides being utilized for scattering, roses can be transformed into processed food products, such as chips, tea, and syrup. Furthermore, the rose flower can also be processed as industrial raw material, such as for essential oils, rose water, and perfume. If this potential is managed better through the optimization of production and marketing, this sector can become a main source of income for the local community and create new job opportunities..

Conclusion

The results of the analysis and observation used to determine the rose flower development potential in Musuk District through the SWOT analysis yielded four strategies that can be utilized to address the problems and potential for rose flower development. Among these four strategies, it can be concluded that the rose flower potential can be developed by diversifying rose flower products, expanding the market, and conducting replanting to rejuvenate old rose plants in order to increase rose flower production. In an effort to enhance the economy through the rose flower potential, product diversification is carried out into items such as rose chips, rose tea, rose syrup, and rose water. Product Diversification and Value Addition: Immediate implementation of small-scale processing to convert surplus fresh roses into high-value processed goods, such as rose chips, rose tea, rose syrup, and rose water. This directly addresses the threat of price fluctuation by creating stable, year-round income streams.Technological and Cultivation Improvement: Mandatory replanting and rejuvenation programs for aged rose plants must be introduced, supported by investment in basic irrigation systems and comprehensive farmer education in modern pest control, directly targeting the major internal weaknesses. Policy Implication & Market Expansion: Local government policy must facilitate strategic partnerships (SO Strategy) by connecting farmer groups directly with cosmetic industries or specialized distributors, bypassing traditional middlemen (tengkulak), and providing mandatory training in online marketing to tap into the high-potential export and seasonal markets.

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Acknowledgments

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The authors wish to express their gratitude to all parties who have provided support and assisted in the execution of this research. Special thanks are extended to the communities of Sruni Village and Cluntang Village who collaborated and participated in the data collection and field observation process. We also thank the Institute for Research and Community Service (**LPPM**) of **INSTIPER** for the support and facilities provided to us in ensuring the smooth running of this research.

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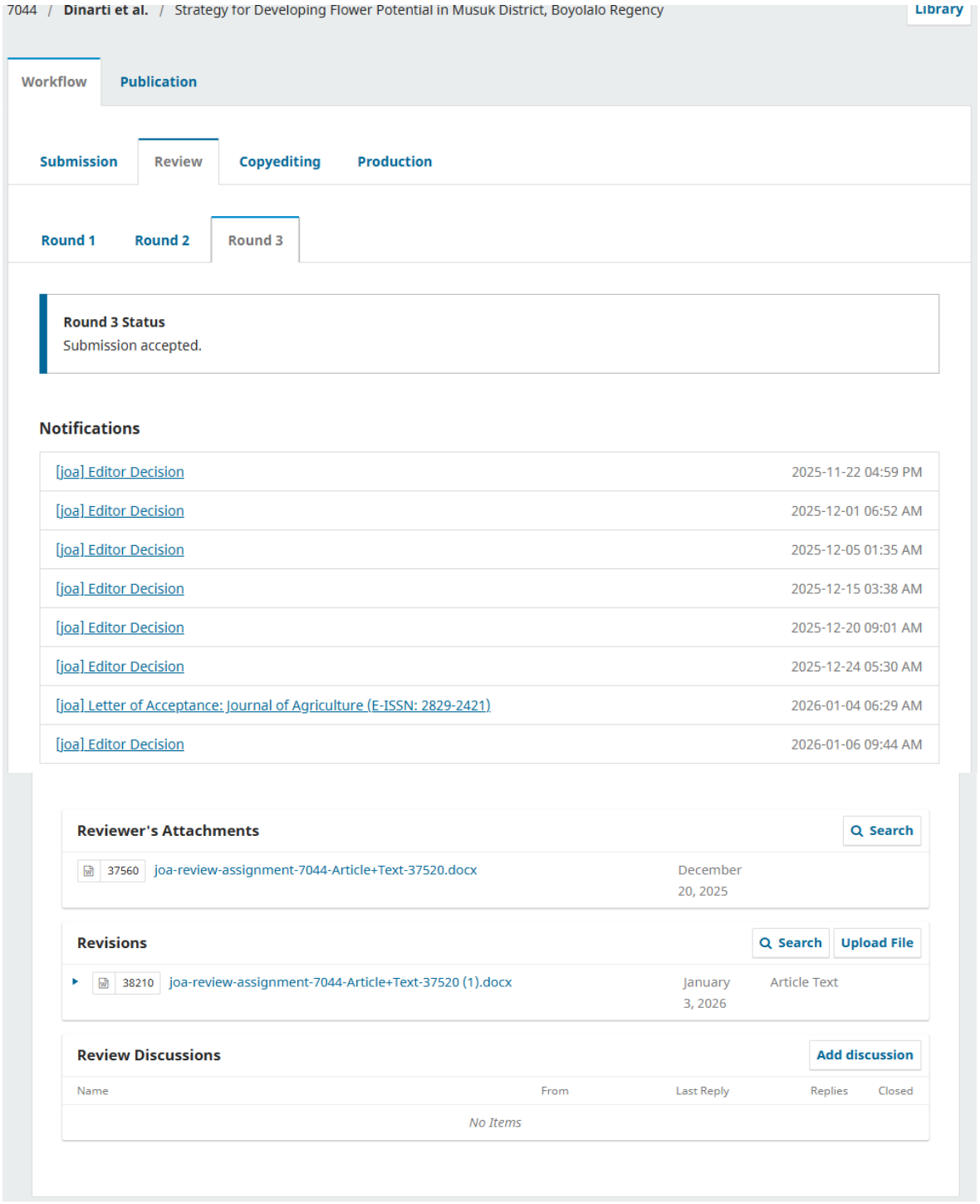
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2. Revisi Ketiga



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STRATEGY FOR DEVELOPING FLOWER POTENTIAL IN MUSUK DISTRICT, BOYOLALO REGENCY

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Accepted: ... (Filled in by editor): dd/mm/aaaa
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Abstrak

The rose flower, as a commodity widely cultivated in Musuk District, possesses great potential to boost both regional and local economies. Despite the significant potential of rose flowers, it has not yet been optimized by the community and government. The lack of community knowledge regarding the existing potential is one of the factors contributing to the suboptimal production of these rose flowers. The aim of this research is to identify the potential of rose flowers and analyze strategies for developing the existing rose flower potential in Musuk District. The method used in this research is a descriptive qualitative approach. Informant selection technique utilized snowball sampling. SWOT analysis was the analytical method employed to determine the condition of the rose flower potential and to formulate strategies for its development and economic improvement. The SWOT analysis results indicate that the rose flower potential is in Quadrant V, suggesting that the rose flower is in a stable condition but lacks a strong competitive advantage. Strategies to optimize the rose flower potential include diversifying rose flower products, expanding the market, and conducting replanting to rejuvenate old rose plants to increase production. Efforts to enhance the economy through rose flower potential involve product diversification into items like rose chips, rose tea, rose syrup, and rose water.

Keywords : Potential, Strategy, Diversification

Pendahuluan

Rose flower (Rosa multiflora L.) are a species of rose belonging to the **Rosaceae family** and are widely known as ornamental plants with a wide variety of colors and shapes. Rosa multiflora L. is often referred to as wild roses or Japanese roses because of its origin in East Asia. This rose species is known for its **high adaptability** to various climate and soil conditions, making it popular in many countries as an ornamental garden or hedge plant, and as a raw material for the cut flower industry. (Muzaki et al., 2021). In addition to its role as an ornamental plant, this plant can be used for various purposes, from cut flowers, perfumes, to essential oils. Some varieties of Rosa multiflora L. are also used in the cosmetics and health industries due to their active compound content (Muzaki et al., 2021). Its beauty, aroma, and benefits make it a horticultural commodity with high economic value in both domestic and international markets.

In the agricultural sector, roses play a role in improving the community's economy, particularly for farmers in Musuk District, Boyolali Regency, and have received government attention (Rochaeni, 2023). In this region, roses are not only used as ornamental plants but are also in high demand for important events such as religious ceremonies, weddings, decorations, and even as raw materials for perfumes and cosmetics (Pamekas et al., 2023).Rose products from Musuk District are known for their high quality, supported by the farmers' inherited expertise in cultivating these plants. Musuk's geographical location, at an altitude of approximately 800 to 1,000 meters above sea level with cool temperatures, adequate rainfall, and fertile volcanic soil, is highly conducive to the growth of high-quality roses.

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Although the potential for rose cultivation in Musuk District is significant, farmers face significant obstacles in producing rose products, including limited access to appropriate technology, inconsistent market relations, and severe price fluctuations (Pamekas et al., 2023). This potential must be continuously developed to optimize its potential. As a form of development, it is necessary to identify regional potential, considering roses as a primary commodity in Musuk District. The significant potential for agricultural products must be balanced with supporting strategies so that the products can provide a significant economic impact for farmers. In an effort to improve farmer welfare and the regional economy, additional processing can be implemented to produce value-added products from roses, thus ensuring that both farmers and communities involved in rose processing receive a stable income.Identifying the potential of roses and analyzing appropriate strategies to enhance existing rose potential can ultimately help residents improve their income and well-being. The main gap lies in the absence of an integrated strategic framework that goes beyond common cultivation practices. Specifically, there is a critical need to systematically identify untapped economic potential and develop appropriate and targeted strategies.

Literature Review

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Fitriana et al., (2025) in the title *Potensi Pemanfaatan Bunga Mawar untuk Produksi Minyak Atsiri di Wilayah Sawahan Nganjuk* (Potential of Rose Flower Utilization for Essential Oil Production in the Sawahan Nganjuk Area). This research aimed to identify the potential for rose flower processing and provide guidance to the community in the processing. This initiative intended to encourage the formation of a rose-based community capable of increasing economic value and making this product a superior commodity at the local level. The study used a literature review, observation, and interviews to explore the potential utilization of rose flowers as raw material for essential oil production in the Sawahan area. The research showed that Sawahan has great potential in rose cultivation thanks to its fertile soil and supportive climate. However, challenges such as a lack of cultivation knowledge, limited distillation technology, and narrow market access remain obstacles. Development strategies that can be implemented include government support through empowerment programs, extension services, technical assistance, and the provision of modern distillation technology. The global market opportunities for essential oils, especially in the cosmetic and aromatherapy sectors, continue to increase. Besides the agriculture and marketing sectors, rose-based educational tourism also has the potential to be developed to introduce local potential, create jobs, and encourage sustainability. Collaboration between various parties can make Sawahan a competitive essential oil production center

Okvitawanli & Adiandari, (2022) with the title Membangun Desa Wisata melalui Peningkatan Skala Ekonomi Kreatif (Building a Tourism Village through Scaling Up the Creative Economy). This community service program in Bangli Regency was implemented to develop tourism villages and improve the local economy, particularly in Guliang Village and Pengotan Village. In Guliang Village, innovation in aromatherapy incense products was developed, while Pengotan Village focused on dried flower products. As many as 8000 marigold seedlings and 2000 rose seedlings were distributed as raw materials to support the community's creative economy empowerment. Tourism village development was carried out through digital promotion via websites and social media, as well as strengthening local identity through product packaging, creative photo spots, and the introduction of experience-based tourism. In Guliang, tourists can mix their own incense, while in Pengotan they can pick and arrange flowers directly, including delivery services for the arrangements. Located in a beautiful hilly area, this experiential tourism not only attracts tourists but also provides additional income for residents. The program proved to improve community welfare and is expected to encourage sustainable tourism economic growth in Bali.

A study entitled "Development Strategy for Kebon Gulo Agrotourism in Musuk District, Boyolali Regency," written by Mainurlisma & Joko (2025) aimed to analyze and develop the potential of Kebon Gulo Agrotourism in Boyolali using the SWOT and AHP approaches. The analysis revealed that this location is strategically located in quadrant 1, indicating significant

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strengths and opportunities for development. Key strengths include the diversity of fruit commodities, comprehensive facilities, affordable ticket prices, and promotion through social media. Key constraints include inadequate promotion, a less strategic location, and a lack of post-harvest innovation. External factors indicate significant opportunities from increasing tourist numbers, the back-to-nature trend, and educational and employment opportunities. Threats include competition, climate variability, and pest infestations. Recommended development strategies include using SO strategies to capitalize on strengths and opportunities, such as developing fruit festivals and broader promotions, and WO strategies to address weaknesses through product innovation and enhanced digital promotion. Key recommendations include strengthening promotion, developing locally sourced processed products, improving facilities, and fostering multi-sectoral collaboration with the government and community. This strategy is expected to optimally increase the attractiveness, sustainability, and visitation of the Kebon Gulo Agrotourism.

Research Method

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This research employed a descriptive qualitative research method. Data collection techniques included interviews and questionnaire distribution to measure the internal and external factors influencing the development of rose potential. The location survey was conducted through direct observation in rose agricultural fields to understand the agronomic conditions, cultivation techniques, and supporting infrastructure. SWOT analysis was used in this study to formulate the appropriate strategy addressing the potential and problems related to the development of rose agribusiness in the region (Selvia & Danasari, 2023). The informant selection technique used Snowball sampling. This approach is necessary because the target population rose farmers actively engaged in cultivation and prossessing specialized knowledge in the Musuk Discrit is not easily identifiable through oficial lists. The research used primary and secondary data, and the study was conducted through a survey method taking the case in Musuk District, Boyolali Regency. The location was determined intentionally (purposive) based on the consideration that the area has a lot of rose potential. Data analysis was performed descriptively qualitatively, focusing on the exploration of social phenomena. This analysis was used to formulate strategic recommendations applicable to farmers and the local government. The research locations were in two villages: Sruni Village and Cluntang Village..

Results and Discussion

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A. General Overview

Based BPS (2023) Musuk District has a total area of 30.530km2. Musuk District has various kinds of plants and vegetables that grow well. Among them are cabbage, chili, shallots, potatoes, tomatoes, rose flowers, and tobacco. One commodity with high production volume but unstable income due to frequent price fluctuations is the rose plant..

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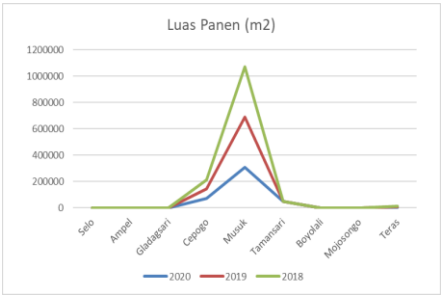


Figure 1.1 Data on Harvest Area

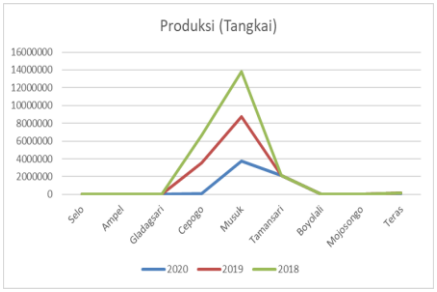


Figure 1.2 Rose Production

Musuk District possesses the highest rose harvest area and production among other districts in Boyolali Regency. For instance, in 2020, the harvest area was 310,000m2 with a total production of 3,760,000 rose flower stems. Among the villages in Musuk District that cultivate rose flowers are Cluntang Village and Sruni Village. All residents in Sruni Village and Cluntang Village own rose plants, whether located in their home yards or on their private agricultural land. The average land area owned by the community is approximately 1,000m2 with an average of 612 rose plants, and the entire rose yield is intended for sale. Some of these roses are sold to the market, middlemen (tengkulak), or rose processing houses located in Musuk District, Boyolali Regency. Farmers in Sruni Village and Cluntang Village typically harvest rose flowers every **two days** for sale in the market. Each farmer can usually sell a minimum of one basket (*bakul*), with one basket weighing **3 kg** of rose flowers. Rose farmers can harvest up to 15 times every month. Rose flower prices frequently experience significant fluctuations, depending on the season and market demand. The price of roses obtained by farmers ranges from IDR 10,000 to IDR 400,000 per basket. This condition leads to **income uncertainty** for farmers, making it difficult for them to plan their business sustainably..

One of the constraints faced by farmers in Sruni Village and Cluntang Village is the continued reliance on traditional cultivation methods which are less efficient, particularly concerning rose plant rejuvenation (replanting), irrigation, fertilization, and pest and disease control. The limited access to modern technology results in suboptimal productivity. Another constraint faced by farmers is the lack of regular consumers, leading to fluctuations in farmer income because consumers only purchase rose flowers during specific seasons. Furthermore, farmers have a poor understanding of online marketing and lack knowledge regarding general marketing practices. Additionally, there are no partners willing to cooperate directly with the farmers, as partners currently only collaborate with rose processing businesses.. The finding that

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farmers in Sruni and Cluntang still rely on traditional cultivation methods, resulting in suboptimal productivity, aligns with observasions by Muzaki et al (2021), who noted similar tecnological barries among smallholder flower farmers in neighboring regions.

B. SWOT Analysis of Rose Flower Potential in Musuk District

The rose flower is one of the commodities widely cultivated in Musuk District, especially in Sruni Village and Cluntang Village. Although a large number of roses are produced, this has not significantly increased the community's income. Therefore, an analysis is needed to boost community income from rose flowers. SWOT analysis, by compiling internal and external analysis, is used to determine the potential of rose flowers in Musuk District.

The SWOT analysis, by compiling internal and external analysis, was used to determine the potential of rose flowers in Musuk District. The internal analysis utilizes the Internal Strategic Factors Analysis Summary (IFAS) Matrix to identify the strength and weakness factors of the rose flower potential in Musuk District (Hm & Narto, 2022). Data collection was obtained from the results of interviews and questionnaires with rose farmers in Cluntang Village and Sruni Village. The results of the IFAS matrix analysis are shown in Table 1.1 below.

Table.1 Matriks IFAS

No	Internal Factors	Weight	Rating	Score
Kekuatan				
1	Abundance of available roses	0,20	4	0,80
2	Location is easily accessible, both in terms of transportation and communication	0,15	3	0,45
3	Adequate financial, technological, or other resource support is available	0,10	3	0,30
Sub total		**0,45**	**10**	**1,55**
Weaknesses				
1	Old plant condition that is not replanted	0,20	2	0,40
2	Dry agricultural land conditions	0,10	1	0,10
3	Lack of farmer knowledge in proper rose cultivation	0,10	1	0,10
4	Lack of understanding of marketing	0,15	2	0,30
Sub Total		**0,65**	**6**	**0,90**
Total		**1,00**	**16**	**2,45**

The calculation results show that the score for the strength factor is 1.55, while the score for the weakness factor is 0.90, with a total IFAS matrix score of 2.45.

he External Strategic Factors Analysis Summary (EFAS) Matrix was utilized for the external analysis to analyze the opportunities and threats that may influence the rose flower

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potential (Hm & Narto, 2022). The result of the EFAS matrix compilation is presented in Table 1.2 below.

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*Table **Error! Use the Home tab to apply 0 to the text that you want to appear here.**2 EFAS Matrix*

No	Internal Factors	Weight	Rating	Score
Opportunities				
1	ose flower sales will increase during certain seasons	0,20	4	0,80
2	Roses can be made into products such as essential oils and processed food products	0,15	3	0,45
3	Partnering with cosmetic and souvenir companies	0,10	3	0,30
4	Can be sold up to export	0,05	3	0,15
Sub total		**0,50**	**13**	**1,70**
Ancaman				
1	Fluctuating rose product selling prices	0,20	2	0,40
2	Grubs (*uret*) attacking rose plants	0,15	2	0,30
3	Monkeys that come to eat rose flowers when they have not bloomed	0,10	1	0,10
4	Climate conditions with low rainfall	0,05	2	0,10
Sub Total		**0,50**	**7**	**0,90**
Total		**1,00**	**20**	**2,60**

Hasil perhitungan matrik EFAS diperoleh faktor peluang sebesar 1,70 dan faktor ancaman sebesar 0,90 dengan total matrik EFAS adalah 2,60. Kemudian menyusun matrik IE untuk mengetahui posisi Potensi bunga mawar di Kecamatan Musuk.

Table 1..3 IE Matrix (Internal – External)

EFAS Score (2,60)				
		Strong (3-4)	Medium (2-2,99)	Weak (1-1,99)
IFAS Score (2,45)	High (3-4)	I	II	III
	Medium (2-2,99)	IV	V	VI
	Weak (1-1,,99)	VII	VIII	IX

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Table 1.4 SWOT Matrix

	Strength - High availability of roses - Easily accessible location, regarding both transportation and communication - Sufficient financial, technological, or other resource support is available	**Weakness** - Aging plants without replanting/rejuvenation - Dry farming land conditions - Lack of community knowledge regarding marketing
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Conclusion

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The results of the analysis and observation used to determine the rose flower development potential in Musuk District through the SWOT analysis yielded four strategies that can be utilized to address the problems and potential for rose flower development. Among these four strategies, it can be concluded that the rose flower potential can be developed by diversifying rose flower products, expanding the market, and conducting replanting to rejuvenate old rose plants in order to increase rose flower production. In an effort to enhance the economy through the rose flower potential, product diversification is carried out into items such as rose chips, rose tea, rose syrup, and rose water. Product Diversification and Value Addition: Immediate implementation of small-scale processing to convert surplus fresh roses into high-value processed goods, such as rose chips, rose tea, rose syrup, and rose water. This directly addresses the threat of price fluctuation by creating stable, year-round income streams.Technological and Cultivation Improvement: Mandatory replanting and rejuvenation programs for aged rose plants must be introduced, supported by investment in basic irrigation systems and comprehensive farmer education in modern pest control, directly targeting the major internal weaknesses. Policy Implication & Market Expansion: Local government policy must facilitate strategic partnerships (SO Strategy) by connecting farmer groups directly with cosmetic industries or specialized distributors, bypassing traditional middlemen (tengkulak), and providing mandatory training in online marketing to tap into the high-potential export and seasonal markets.

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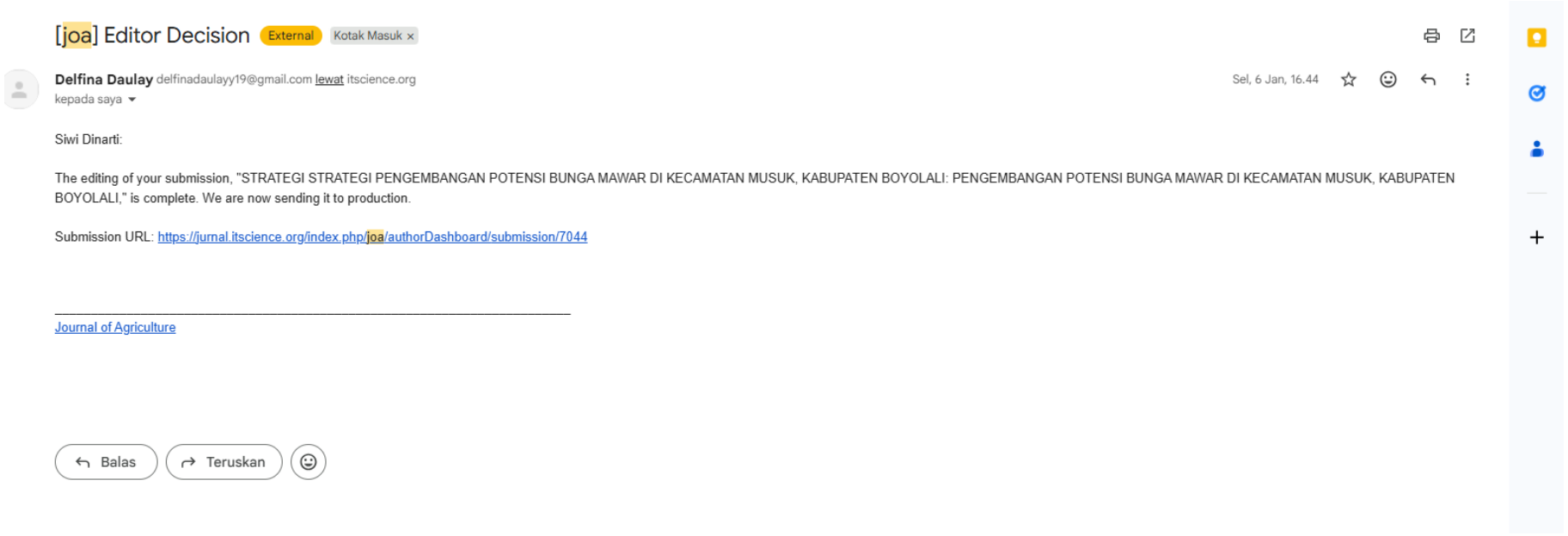
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