



## INCREASING MELON FARMERS INCOME THROUGH AGRIBUSINESS DEVELOPMENT STRATEGIES

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### ABSTRACT

The Kulon Progo Regency is one factor contributing to the growth of agriculture. Melons are among the several horticultural crops grown in the area. Due to the relatively high price of melon relative to other commodities, this commodity has the potential to significantly improve the economic well-being of farmers. The aims of this research are to assess the advantages, disadvantages, possibilities, and hazards associated with developing melon commodities in an attempt to boost farmers' income. Participants were 31 people from the Kulon Progo Regency who farmed melons. Primary data were collected via interviews with melon farmers. Archives, literary works, and internet searches were used to collect secondary data for research purposes. Internal and external factors influencing the strategy for creating a melon agribusiness are analyzed. Internal Factor Evaluation (IFE) analysis, External Factor Evaluation (EFE) analysis, Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, and Quantitative Strategic Planning Matrix (QSPM) analysis are used as data analysis techniques

Keywords: farmers income, melon commodities, agribusiness strategic

### INTRODUCTION

The melon (*Cucumis melo L.*) is one of the fruits often offered as dessert at banquets. This fruit's unusual flavor, which is sweet, crisp, and has a distinct scent, is making it more popular across almost all social strata. People who have sampled melons are often compelled to consume them again. Melon is abundant when the weather is hot, especially during the dry season. Melon has a moderately high nutrient density. Melons also include protein, calcium, phosphorus, iron, fiber, and water, in addition

to vitamins A, B1, and C. Prior to 1980, melons were imported into Indonesia and consumed by the upper class, particularly foreign experts residing in the country. Government regulations that restricted the distribution of imported fruits in Indonesia at the time prompted agribusiness entrepreneurs to cultivate melons in Indonesia.

PT Jaka Utama Lampung started developing melons in Indonesia in the 1980s in the Cisarua (Bogor) and Kalianda (Lampung) regions (Prajnanta 2004). Melon (*Cucumis melo L.*) is one variety of fruit that



has been grown in Indonesia relatively recently (Wang et al. 2021). Melons appeal to customers due to their tasty, sweet, aromatic, unique, and refreshing flavor. Meanwhile, the economic importance of melon makes it appealing to farmers (Aliah 2009). Compared to watermelon (*Citrullus vulgaris*) or cantaloupe, melon is more similar to cantaloupe than it is to watermelon (Pichot et al. 2022). The aroma of both melons and cantaloupes when they are ripe is nearly identical. However, melons taste better. In terms of fruit size, the melon is often smaller and more precisely spherical than the cantaloupe. The flesh of melons is softer, crunchier, and sweeter (Setiadi 1995).

Producing melons may provide substantial advantages for farmers. However, growing of this plant has benefits and drawbacks. (Aasa, Njobeh, and Fru 2022) Riskier cultivation of melons may be attributed to a number of variables, including the increased expense of growing melons. According to the findings of the preliminary study, farmers suffer an average production cost of IDR 4,000,000,-/1000 m<sup>2</sup> while cultivating melons. On the other hand, melon's greater price relative to other regularly cultivated commodities in Kulon Progo is a benefit. The price of melons might exceed IDR 5,000/kg during the March 2019 planting season, at the farmer's pricing level. According to the findings of the preliminary study, melon growers may sell their plants for IDR 12,000,000,- per 1,000 square meters.

Several issues, including crop failure, low fruit quality, and dropping prices owing to the harvest season, might hinder farmers from receiving excellent pricing or any income at all. The larger the revenue collected, the better a business's capacity to

fund all operating expenditures and operations. A person's condition may be quantified using the idea of income, which represents the total amount of money earned by an individual or family during a certain time period (Samuelson and Nordhaus 2013).

This study's objectives are to: analyze the strengths, weaknesses, opportunities, and threats to develop melon commodities in an effort to increase farmers' income; analyze the formulation of appropriate alternative strategies for the development of melon commodities in an effort to increase farmers' income; and identify the priority strategy that should be selected for the development of melon commodities in an effort to increase farmers' income.

The Kulon Progo Regency is an agriculturally promising region. The enormous land area in Kulon Progo Regency is one of the reasons supporting the development of agriculture. Various sorts of plants, including horticulture crops, have been planted in rice fields and sand fields. Melons are among the many horticulture crops that are farmed (WENG, ZENG, and LIN 2021). Due to the relatively high price of melon compared to other commodities, this product has a considerable potential for enhancing the economics and well-being of farmers (Tan et al. 2021). At 2017 saw a decline in both the harvested area and the quantity of melons produced. This is due to the fact that the land use area in the Kulon Progo Regency has altered between 2016 and 2017. All kinds of land undergo change, including paddy fields, agricultural land other than rice fields, and non-agricultural land. In 2017, the area used for paddy fields declined by 1.08 percent, or 112 ha, from 10,366 ha to 10,252 ha. The extent of agricultural land



excluding rice fields declined by 0.14 percent, or 49 ha, from 34,933 ha to 34,883 ha. The non-agricultural land area has expanded by 161 hectares, or 1.21 percent, from 13,328 ha to 13,489 ha (BPS 2017).

Many melon producers who had previously used paddy fields started to move to sandy soil as a growing medium. Farmers of melons and watermelons may improve their output once again by depending on modern technologies to cultivate sandy soils (Mahendra, Suprpto, and Barima 2021). Panjatan District along the shore of Bugel and Galur District along the coast of Trisik are the locations of Kulon Progo where melons are grown on sandy soil. In an attempt to boost the revenue of farmers, the author is interested in investigating melon agribusiness development ideas (Mahendra 2019). This study is devoted to establishing the melon agribusiness development plan for raising the income of farmers in Kulon Progo.

## RESEARCH METHODOLOGY

The site of the study was Kulon Progo Regency, D.I. Yogyakarta. From February to April 2022. There are two categories of data used: main and secondary. Interviews with melon growers were used to collect primary data (Namugenyi, Nimmagadda, and Reiners 2019). The sample method used purposive sampling based on the respondent's area of expertise. This method is known as Judgmental Sampling (Bougie, Roger, and Uma 2010). 31 individuals from the Kulon Progo Regency who grew melons participated in the study. Secondary data were gathered from the archives of the Kulon Progo Regency agricultural office, literary books, and internet searches for research-

supporting material. A descriptive case study in Kulon Progo Regency served as the basis for the research methodology. Observation, interviews, and the completion of questionnaires were used as methods for data and information collecting. Internal Factor Evaluation (IFE) analysis, External Factor Evaluation (EFE) analysis, Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, and Quantitative Strategic Planning Matrix (QSPM) analysis are used as data analysis techniques (David 2011). The improvement in profitability of melon producers in Kulon Progo Regency is explained by descriptive analysis. IFE and EFE are used to assess internal and external aspects affecting the strategy for establishing a melon agribusiness. Utilizing SWOT and QSPM to generate alternative strategies and strategic priorities, respectively (Nasser and Chung 2020).

## RESULT AND DISCUSSION

The results of interviews and filling out questionnaires to the respondents obtained several factors from the IFE and EFE analysis (strengths, weaknesses, opportunities, and threats):

### 1. Strengths

The strength of the rice commodity agribusiness in Kulon Progo Regency is the application of agricultural technology, competent human resources, high commodity prices, planning of programs to increase melon production, solidity of agricultural apparatus and related agencies, and the motivation of farmers, according to the results of data processing derived from the responses to the questionnaire.

Table 1. Strength score rating

Strengths	Weight	Score	Weighted score
Application of agricultural technology	0,02	3	0,06
Competent human resources	0,08	3	0,24
High commodity prices	0,11	4	0,44
Melon production improvement program planning	0,05	3	0,15
Solidity of agricultural apparatus and related institutions	0,07	3	0,21
Farmer's motivation	0,17	4	0,68
Total	0,5		1,78

## 2. Weaknesses

Weaknesses internal to the growth of melon agribusiness in the Kulon Progo Regency include diminishing land productivity, inadequate financial capacities, the conversion of rice fields, farmer institutional management, and amenities and infrastructure.

Table 2. Weaknesses score rating

Weaknesses	Weight	Score	Weighted score
Declining land productivity	0,11	2	0,22
Weak financial capacity	0,12	2	0,24
Change the function of rice fields	0,11	2	0,22
Farmer institutional management	0,09	1	0,09
Facilities and infrastructure	0,07	1	0,07
Total	0,5		0,84

## 3. Opportunities

The rising demand for melons, the presence of financial institution services, the appropriateness of the geographical location, and the availability of better seed types may be used as strategic considerations as prospects for the growth of melon agribusiness in Kulon Progo Regency.

Table 3. Opportunities score rating

Opportunities	Weight	Score	Weighted score
Increasing demand for melon	0,11	4	0,44
Financial institution support	0,07	2	0,14
Geographical suitability	0,09	4	0,36

Land development potential	0,12	3	0,36
The existence of superior seed varieties	0,11	3	0,33
Total	0,5		1,63

Climate change	0,12	3	0,36
Total	0,5		1,3

#### 4. Threats

Strategic factors that can be used as threats to the development of melon agribusiness in Kulon Progo Regency include fluctuations in production input and output prices, decreased interest in agriculture among the younger generation, substitute products, attacks by plant-disrupting organisms, and climate change.

Table 4. Threatis score rating

Threats	Weight	Score	Weighted score
Fluctuations in production input and output prices	0,11	2	0,22
Decreased interest in the younger generation in agriculture	0,06	1	0,06
There are competing products	0,06	1	0,06
Attack of plant-disturbing organisms	0,15	4	0,6

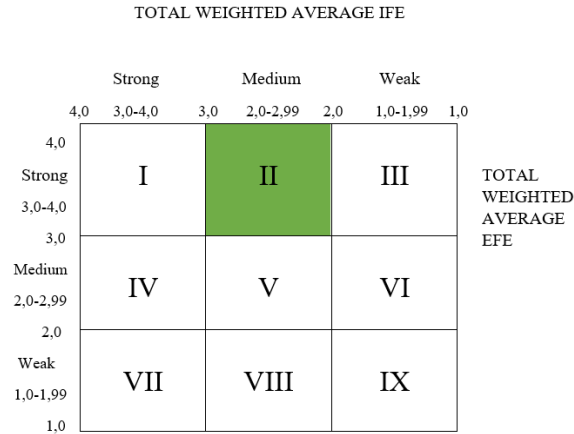


Figure 1. Total Weighted Average

Table 5. Strategic Table

	<b>STRENGTHS-S</b>	<b>WEAKNESSES-W</b>
	<ol style="list-style-type: none"> <li>1. Application of agricultural technology</li> <li>2. Competent human resources</li> <li>3. High commodity prices</li> <li>4. Planning of melon production improvement program</li> <li>5. Solidity of agricultural apparatus and related institutions</li> <li>6. Farmer's motivation</li> </ol>	<ol style="list-style-type: none"> <li>1. Declining land productivity</li> <li>2. Weak financial ability</li> <li>3. Change the function of rice fields</li> <li>4. Farmer institutional management</li> <li>5. Facilities and infrastructure</li> </ol>
<b>OPPORTUNITIES-O</b>	<b>STRATEGY-SO</b>	<b>STRATEGY-WO</b>
<ol style="list-style-type: none"> <li>1. Increasing Demand for Melon</li> <li>2. Support from financial institutions</li> <li>3. Geographical suitability</li> <li>4. Land development potential</li> <li>5. The existence of superior seed varieties</li> </ol>	<ol style="list-style-type: none"> <li>1. Application of superior machine and seed technology</li> <li>2. Synergy between farmers, entrepreneurs and related agencies</li> <li>3. Maximize land use</li> </ol>	<ol style="list-style-type: none"> <li>1. Agricultural land intensification</li> <li>2. Improvement of agricultural land facilities and infrastructure</li> <li>3. Improved financial access to financial institutions</li> <li>4. Improved management and technology for farmers</li> </ol>
<b>THREATS-T</b>	<b>STRATEGY-ST</b>	<b>STRATEGY-WT</b>



<ol style="list-style-type: none"> <li>1. Fluctuations in production input and output prices</li> <li>2. Decreased interest in the younger generation in agriculture</li> <li>3. There are competing products</li> <li>4. Attack of plant-disturbing organisms</li> <li>5. Climate change</li> </ol>	<ol style="list-style-type: none"> <li>1. Local policies that favor farmers</li> <li>2. Development of agricultural schools</li> <li>3. Improving the quality of human resources for extension workers and farmers</li> </ol>	<ol style="list-style-type: none"> <li>1. Seed differentiation</li> <li>2. Improve coordination with all related institutions</li> <li>3. Making appropriate financial policies and regulations for melon agribusiness.</li> </ol>
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## CONCLUSION

Based on the results of the SWOT analysis, it has been determined that the melon agribusiness development plan in Kulon Progo Regency, D.I. Yogyakarta falls into the moderate category. In this area, the recommended measures include leveraging land intensification, enhancing land facilities and infrastructure, expanding farmers'

financial access, and enhancing their technological management. After improving the list of tactics, it is envisaged that the revenue of farmers engaged in watermelon cultivation would rise. Along with the growth in revenue of melon producers in Kulon Progo, the area economy will also improve.

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