

NUTMEG COMMODITY DEVELOPMENT STRATEGY IN EAST SERAM REGENCY

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Submit: 8 December 2025, Revised: 26 August 2026, Accepted: August 2026

DOI : <https://doi.org/10.22487/agroland.v13i1.2812>

ABSTRACT

This study aims to formulate a strategy for developing nutmeg (*Myristica fragrans* Houtt) as a leading commodity in East Seram Regency, Maluku Province. The method used is descriptive with a quantitative approach through the collection of primary data from interviews and questionnaires with the government, farmers, traders, and buyers of the product, and secondary data from relevant agencies. The analysis was conducted using IFE, EFE, SWOT, and QSPM matrices. The results of the study show an IFE value of 2.60, which means that internal conditions are relatively strong, while an EFE value of 2.40 indicates that external response is still low. From the SWOT analysis, six alternative strategies were obtained, and based on the QSPM results, the main priority strategy is the development of production centers with a Total Attractiveness Score (TAS) of 8.327, followed by increasing the role of supporting institutions and developing farmer groups. This strategy emphasizes strengthening productive cultivation areas, improving the quality of human resources, utilizing technology, and collaboration between stakeholders. The implementation of this strategy is expected to increase competitiveness, productivity, and the welfare of farmers through the development of an integrated and sustainable nutmeg agribusiness system in East Seram Regency.

Keywords: Development Strategy, Nutmeg, Agribusiness, SWOT, QSPM.

INTRODUCTION

As the main industry supporting the national economy in Indonesia, an agrarian nation, the agricultural sector plays a crucial role in boosting the economy of the nation. (Sonia, 2023). Indonesia's agricultural development is crucial to the country's economy. (Mukhlis et

al., 2022; Mukhlis et al., 2024; Rauf et al., 2024).

The role of the agricultural sector in national development is very strategic, because in addition to providing food, this sector also absorbs labor, generates foreign exchange, and drives the development of other economic sectors (Todaro & Smith, 2011). The transformation of agricultural development

towards an agribusiness system requires upstream-downstream integration, starting from production facilities, cultivation, processing, marketing, to farmer institutions (Gumbira-Sa'id, 2011). With its comparative advantages in the form of available natural resources, tropical agroclimatic conditions, and biodiversity, Indonesia has great potential to develop commodity-based agribusiness that is highly competitive globally.

The plantation sub-sector is an important part of the agribusiness system that contributes significantly to the gross regional domestic product (GRDP), exports, and the improvement of rural community welfare (Badan Pusat Statistik, 2023 dan Kementerian Pertanian, 2022). Through various programs such as the Production Center Area (KSP), the Plantation Community Industrial Area (KIMBUN), and the Development of Smallholder Plantations in Eastern Indonesia (P2RWTI), the government is striving to strengthen the economic independence of communities based on local commodities. However, the success of these programs is highly dependent on the effectiveness of development strategies that can accommodate the potential of resources and socio-economic dynamics in each region.

The province of Maluku, particularly East Seram Regency, has great plantation potential, with nutmeg (*Myristica fragrans Houtt*) as one of its leading commodities. This spice plant is not only highly valuable economically as an export commodity, but also has strong historical and cultural value for the people of Maluku (Andaya, 1993 and Denissa, 2022). However, nutmeg productivity in this region remains relatively low due to limited technology application, weak access to capital, low institutional capacity among farmers, and suboptimal marketing and processing systems. In addition, price fluctuations and interregional competition pose challenges to the sustainable development of the nutmeg agribusiness.

Given these potentials and challenges, a comprehensive nutmeg commodity development strategy based on actual field conditions is needed. An analysis of the internal and external environment is necessary to identify the strengths, weaknesses, opportunities, and threats in commodity development (Pearce & Robinson, 2013). Through the SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis and Quantitative Strategic Planning Matrix (QSPM) approaches, the formulated strategy is expected to serve as a basis for decision-making by local governments and stakeholders in designing effective, competitive, and sustainable nutmeg development policies.

Thus, this study is expected to contribute academically and practically to formulating policy directions for nutmeg agribusiness development in East Seram Regency, as well as strengthening the role of the plantation sub-sector in supporting regional economic growth and improving farmers' welfare in a sustainable manner.

RESEARCH METHODS

The research method used in this study is descriptive with a quantitative research approach. Quantitative research relies on numerical data and statistical analysis to understand the relationship between variables on a large scale (Sugiyono, 2018 and Creswell, 2014). This type of research was chosen to explain or describe various phenomena occurring in the field regarding the objects and issues being studied, such as the description of nutmeg commodity development strategies in East Seram Regency.

The data used in this study was obtained from various literature sources, such as reference books, government policies, scientific journal articles, and statistical data from the Central Statistics Agency (BPS). Data analysis consists of IFE and EFE analyses to determine the influencing internal and

external factors and to examine the conditions and factors. According to Suprayogi & Haekal (2023),

SWOT analysis is based on logic that aims to maximize strengths and opportunities while simultaneously minimizing weaknesses and threats (Rangkuti, 2016; Kaunang et al, 2024). SWOT analysis (Strength, Weakness, Opportunity, and Threat) is a tool to derive useful or effective strategies that are applied according to the market and public conditions at the time (Galavan, 2014). Opportunities and threats are used to understand the external environment, while strengths and weaknesses are identified through internal company analysis. SWOT compares strengths, weaknesses, opportunities, and threats. Strengths and weaknesses are examined to identify current and future opportunities and threats (Gurel & Merba, 2017).

SWOT analysis is used to formulate various alternative strategies in the development of leading agribusiness commodities based on

plantations. Furthermore, QSPM analysis was applied to determine priority strategies objectively based on the attractiveness of each alternative strategy (David & David, 2017). This research was conducted using descriptive methods through surveys, direct interviews in the field, and questionnaires filled out by parties related to the formulation of agricultural development policies, particularly in the plantation sub-sector in East Seram Regency.

RESULTS AND DISCUSSION

Analysis of Internal and External Factors

An analysis of the internal and external environment was conducted to identify the strengths, weaknesses, opportunities, and threats in the development of nutmeg commodities in East Seram Regency. The results of the analysis using the IFE and EFE matrices can be seen in Table 1 and Table 1.

Table 1. Internal Factor Evaluation (IFE) Matrix

Internal Factor Evaluation Matrix (IFE)			
Internal Strategic Factors	Weight	Rating	Score
A. Strength			
Land Availability	0.092	3	0.276
Land Suitability	0.103	4	0.413
Farmer Motivation	0.089	3	0.268
Agricultural Department Work Program	0.088	4	0.354
Availability of Agricultural Production Facilities	0.088	3	0.264
Availability of Supporting Institutions	0.081	3	0.244
B. Weaknesses			
Availability of Capital	0.079	2	0.158
Coordination of Related Institutions	0.091	2	0.182
Strength of Customary Land Rights	0.086	2	0.172
Agricultural Business Management Capabilities	0.075	1	0.075
Human Resources	0.062	2	0.124
Appropriate Technology	0.064	1	0.064
Total	1,000		2,589

The total score of 2.589 indicates that the internal conditions for nutmeg development are strong, which indicates the region's ability to utilize internal factors to support nutmeg commodity development.

Table 2. External Factor Evaluation (EFE) Matrix

External Factor Evaluation Matrix (EFE)			
External Strategic Factors	Weight	Rating	Score
A. Opportunities			
Regional Autonomy	0.096	3	0.288
Local Government Support	0.101	3	0.303
Community Economic Growth	0.095	3	0.285
Climate Environment	0.090	2.5	0.225
Market Opportunity	0.085	2	0.17
Social and Cultural Community	0.073	2	0.146
Technology and Information Development	0.080	2	0.16
B. Threats			
Price Fluctuations	0.074	2	0.148
Natural Disasters	0.077	2	0.154
Geographical Location	0.080	2.5	0.2
Similar Products	0.067	2	0.134
Politics and Security	0.081	2	0.162
Total			2.375

The total score of 2.375 indicates that the response to external factors is still relatively low, requiring adaptive strategies to improve the competitiveness and resilience of the nutmeg sector in the region.

SWOT Analysis

Based on the results of the IFE and EFE, a SWOT matrix was developed to formulate alternative strategies for the development of the nutmeg commodity in East Seram Regency.

S-O Strategy:

1. Develop production centers based on agroclimatic potential.
2. Encourage private investment and the development of the nutmeg downstream industry.

W-O Strategy:

1. Improving farmer capacity through training and technological assistance.
2. Strengthening farmer group institutions to improve trade practices.

S-T Strategy:

1. Improving product quality and standards to address global competition.
2. Building partnerships with research institutions and the private sector.

W-T Strategy:

1. Developing a sustainable coaching system for farmers.
2. Reduce dependence on a single market through product diversification.

QSPM Analysis and Priority Strategy

The final stage was carried out using the Quantitative Strategic Planning Matrix

(QSPM) to determine the order of priority for the strategies. The results of the analysis

are shown in Table 3.

Table 3. Results of the QSPM Matrix Analysis for Nutmeg Commodity Development

No	Alternative Strategy	TAS Value	Priority
	Development of Production Center Areas	8,327	I
2	Enhancement of Supporting Institutions' Role	6,329	II
3	Growth and Development of Farmer Groups	6,126	III
4	Improvement of Production Quality and Proper Management of Natural Resources	6,088	IV
5	Establishing and Enhancing Partnerships	5,967	V
6	Community Outreach and Development	5,892	VI

Discussion

The results of the study indicate that internal strengths, particularly land availability and farmer experience, are fundamental assets in the development of nutmeg commodities in East Seram Regency. However, weaknesses such as low access to technology and weak farmer institutions need to be addressed immediately through capacity building and strengthening institutional support.

From an external perspective, the increasing demand for nutmeg in the global market opens up great opportunities for the development of this commodity, but this needs to be balanced with improvements in product quality in order to be competitive in the export market. These findings are in line with the research conducted by Rangkuti (2016) and David (2017), which emphasizes the importance of formulating strategies based on SWOT and QSPM analyses to determine the direction of development for leading commodities in an objective manner.

The implementation of priority strategies in the form of developing production centers is expected to increase production efficiency, strengthen agribusiness value chain integration, and encourage increased farmer income (Sari & Fauzi, 2020). Manyamsari et al. (2019) emphasize that synergy among stakeholders is the key to realizing a sustainable and competitive nutmeg agribusiness system.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study aims to formulate a strategy for developing nutmeg (*Myristica fragrans Houtt*) as a leading commodity in East Seram Regency, Maluku Province. Based on the results of analysis using the IFE, EFE, SWOT, and QSPM approaches, it was found that the internal factors for nutmeg development had a score of 2.60, indicating that the internal conditions were relatively strong, while the external factors had a score of 2.40, indicating that the ability to adapt to the external environment still needed to be improved. The main strengths lie in the availability of land, agroclimatic support, and farmers' experience in nutmeg cultivation, while weaknesses include limited access to technology, capital, and farmer institutions that are not yet optimally. Externally, significant opportunities arise from increasing global market demand and government policy support, while threats come from price fluctuations and competition between nutmeg-producing regions.

The SWOT analysis produced six main development strategies, and based on the QSPM results, the strategy with the highest priority was the development of a nutmeg production center with a *Total Attractiveness Score (TAS)* of 8.327, followed

by enhancing the role of supporting institutions and developing farmer groups. These results are in line with the findings of Simbolon (2024), who stated that the development of leading plantation commodities (including nutmeg), needs to be directed towards strengthening cultivation areas, increasing productivity, and optimizing the role of local institutions. In general, the formulated strategy has the potential to strengthen the competitiveness and sustainability of the nutmeg agribusiness through synergies between local governments as regulators and development facilitators, research institutions as providers of innovation and cultivation technology, financial institutions as supporters of agricultural financing, and farmer communities as the main implementers in the production system.

Recommendations

1. For Local Governments: Policies are needed that support the strengthening of the nutmeg agribusiness through the development of production centers supported by post-harvest facilities, access to capital, and adequate transportation infrastructure to facilitate the supply chain and distribution of products.
2. For Agricultural Agencies and Farmer Organizations: The Department of Agriculture needs to increase its capacity to provide extension services and training to farmers in the use of appropriate technologies, modern cultivation techniques, and farm management. Farmer organizations such as farmer groups and cooperatives must also be strengthened to improve farmers' bargaining position in the market.
3. For the Business World and Financial Institutions: There is a need to enhance partnerships between farmers and the private sector, particularly in financing, marketing, and processing nutmeg into value-added products. This collaboration

can help expand market access while creating a more efficient value chain.

4. For Researchers and Academics: Further research is needed on technological innovations in cultivation, integrated pest management, and the development of nutmeg derivative products to ensure competitiveness in the export market.
5. For the farming community: Farmers are expected to take advantage of government program support by increasing their active participation in farmer group activities and applying recommended technologies to achieve sustainable productivity improvements.
6. With the implementation of comprehensive and participatory strategies, it is hoped that the development of nutmeg commodities in East Seram Regency will increase farmers' incomes, strengthen the regional economy, and make nutmeg a highly competitive commodity at the national and international levels.

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