



Competitiveness analysis of coconut commodity in gorontalo: market and product diversification review

Rismanto¹, Abdul Latif²

^{1,2}Department Of Islamic Economics, Islamic State Insitute Sultan Amai Gorontalo, Indonesia

ARTICLE INFO

Article history:

Received Jan 03, 2024

Revised Jan 05, 2024

Accepted Jan 14, 2024

Keywords:

Coconut;
Commodity;
Gorontalo;
Local Economy;
Market.

ABSTRACT

This research delves deeply into the realm of product diversification strategies within Gorontalo Province's coconut sector, emphasizing coconuts' foundational role in the region's economy. Through an exhaustive literature review, the study dissects the key determinants influencing coconut competitiveness, encompassing evolving global market trends, intricate trade regulations, and the imperative of product innovation. Highlighting the pressing need for diversification in an increasingly competitive global landscape, the research illuminates challenges and opportunities specific to the coconut sector in Gorontalo. Such insights not only inform stakeholders but also furnish essential strategic directives for formulating robust local economic policies, ensuring the sector's sustained growth and competitiveness amidst global challenges.

This is an open access article under the [CC BY-NC](https://creativecommons.org/licenses/by-nc/4.0/) license.



Corresponding Author:

Abdul Latif,

Departement Of Islamic Economics,

Islamic State Insitute Sultan Amai Gorontalo,

Jl. Gelatik No. 1, Kota Gorontalo, Gorontalo, 96135, Indonesia.

Email: abdullatif1003@gmail.com

1. INTRODUCTION

Coconut (*Cocos Nucifera*) is a tropical plant species that has been recognized by Indonesians as a symbol of life for many years. Also known as "the tree of life," this plant is considered very versatile because almost all parts of this plant can be utilized by humans, from its fruit, trunk, to its leaves (Alam, 2020).

Coconuts provide nutrient-rich food, refreshment, useful oil for both consumption and non-consumption purposes, commercially valuable fiber, and shells used in various industries and as fuel. In addition, coconuts also produce wood and a variety of other products that are used both in daily life and in various industrial sectors. In recent years, coconut has become increasingly popular as a healthy food, mainly due to its refreshing coconut water, virgin coconut oil, and coconut sap which are known to have significant health benefits (Sudha et al., 2023).

Coconut (*Cocos Nucifera*) has been the backbone of the economy of Gorontalo, Indonesia, for many years. This commodity is not only a major source of income for local farmers but also an integral part of people's lives. Despite the vital role coconut plays in the regional economy, the sector is not immune to increasingly complex challenges due to changing global market conditions and increased competition (Asir et al., 2022). Changes

in global market dynamics, price fluctuations, changing consumer trends, and changing trade regulations have affected the competitiveness of coconut commodities in Gorontalo.

This study aims to conduct an in-depth analysis of coconut commodity competitiveness in Gorontalo through a thorough literature review approach. The main focus of this research is to identify key factors that influence the competitiveness of coconut commodities, including changes in global market trends, trade regulations, and product innovation. In addition, this study will also highlight the importance of product diversification strategies as an effort to improve the competitiveness of coconut commodities in an increasingly tight global market.

The urgency of this research stems from the intrinsic significance of the coconut (*Cocos Nucifera*) as both a symbolic and economic cornerstone in Gorontalo, Indonesia. Recognized as the "tree of life" due to its multifaceted utility ranging from food and oil to commercial fibers and fuels coconuts have long been intertwined with the socio-economic fabric of the region. However, despite its vital role, the coconut sector faces an escalating array of challenges precipitated by evolving global market dynamics, fluctuating prices, shifting consumer preferences, and altering trade regulations. These complexities jeopardize the competitiveness and sustainability of the coconut industry, thereby imperiling the livelihoods of countless local farmers and stakeholders. Consequently, a comprehensive understanding of the factors influencing coconut competitiveness, coupled with actionable insights into strategic solutions like product diversification, becomes imperative. This research, thus, serves as a critical beacon, offering stakeholders from farmers and entrepreneurs to policymakers—a robust analytical framework to navigate challenges, optimize opportunities, and fortify the economic resilience of the coconut sector in Gorontalo. By bridging theoretical insights with practical applications, the study not only illuminates the intricate dynamics of the coconut market but also empowers stakeholders to foster sustainable growth, enhance regional economic vitality, and uplift farmers' welfare amidst a rapidly evolving global landscape.

In line with these objectives, this research has significant strategic implications for stakeholders in the coconut sector, including farmers, entrepreneurs, and local governments. With an in-depth understanding of the challenges and opportunities faced by the coconut sector, this research is expected to provide a strong foundation for the development of appropriate policies and strategies to strengthen the competitiveness of coconut commodities in Gorontalo. Through this approach, it is expected that this research will make a meaningful contribution to regional economic growth and farmers' welfare in a sustainable manner.

As such, this research is also expected to provide better insights into the market dynamics of coconut commodities and demonstrate how product diversification strategies can be an effective solution in the face of complex external challenges. Through in-depth literature analysis, this research aims to offer rich perspectives and innovative solutions that can be applied in practice to improve the competitiveness of coconut commodities in Gorontalo.

2. RESEARCH METHOD

This research embarks on an extensive literature review, meticulously examining a myriad of scholarly sources pertinent to coconut commodity competitiveness, both within the regional context of Gorontalo and on a global scale, as well as delving into strategies for product diversification. By immersing itself in a diverse array of literature, the study aims to decipher the prevailing market dynamics, pinpoint the challenges confronting the coconut industry in Gorontalo, and unearth latent opportunities primed for exploitation to bolster competitiveness.

The research unfolds through a systematic progression, commencing with the meticulous identification of pertinent literature sources germane to the study's focal areas. Subsequent stages encompass a rigorous selection process to ensure the inclusion of authoritative and relevant materials. Following this, an intricate phase of data analysis and synthesis ensues, allowing for a nuanced exploration of the identified factors shaping market competitiveness and product diversification strategies. Integral to the research methodology is the rigorous evaluation of data's suitability and validity, ensuring that the synthesized insights are both credible and actionable. Culminating the research process, the findings coalesce into a comprehensive synthesis, culled from the profound insights gleaned from the extensive literature analysis.

Employing a descriptive approach bolstered by rigorous literature analysis, the research architecture facilitates an exhaustive exploration of factors underpinning the competitiveness of coconut commodities in Gorontalo. The utilization of secondary data ensures a robust analytical foundation, with meticulous scrutiny applied to data quality and reference authenticity. By anchoring its findings in legitimate and reliable literature sources, the research underscores its commitment to upholding the highest standards of reliability and validity, thereby fortifying the credibility of its analytical insights and recommendations..

3. RESULTS AND DISCUSSIONS

Administratively, Gorontalo Province consists of 5 regencies and 1 city, namely Gorontalo Regency, Boalemo Regency, Pohuwato Regency, Bone Bolango Regency, North Gorontalo Regency, and Gorontalo City as the provincial government center. Gorontalo Province is located close to the equator, which results in relatively high temperatures, ranging from 26°C to 28°C, while the average air pressure reaches 1009.6 mb. The average air humidity is around 81.74%, while the average wind speed is around 1.84 m/sec. The highest rainfall usually occurs in November, with an average of 335 mm per year. Meanwhile, the lowest rainfall usually occurs in May, with an average of around 29.6 mm per year. In 2019, Gorontalo Province experienced a significant period of drought. The Meteorology Climatology and Geophysics Agency (BMKG) reported that the drought during 2019 was more severe than in the previous year (Endey et al., 2022).

3.1 Coconut Commodity of Gorontalo Province

In Gorontalo Province, coconut production is one of the main commodities managed by most farmers. Although the majority of farmers in this area are involved in mixed farming, with land allocations also earmarked for other crops such as maize and other crops (Sa'danoer, 2022). The land area of coconut crops in Gorontalo Province reaches 74,100 hectares, which only contributes to 2.19% of the total coconut land area in Indonesia nationally (BPS, 2021a). Coconut production in Gorontalo Province as a whole reached 64,700 tons, which is equivalent to 2.26% of total coconut production throughout Indonesia (BPS, 2021b). Data on land area and coconut production from 2019-2021 are shown in Table 1.

Table 1. Land Area, Total Production, and Productivity of Coconut Crops in Gorontalo Province

Year	Land Area (ha)	Total Production (tons)	Productivity
2019	73.700	60.900	0,826
2020	73.700	60.600	0,822
2021	74.100	64.700	0,873

Data from Table 1 shows that although the land area devoted to coconut in Gorontalo Province is relatively small compared to the national scale, coconut production in the province has increased from 2019 to 2021. This increase in production reflects a

significant increase in productivity from year to year, although fluctuations in production figures occurred between 2019 and 2020.

This increase in productivity can be attributed to a number of factors, such as the use of more efficient agricultural technology, the development of improved varieties, and the adoption of better agricultural practices (Fatmawati et al., 2023). In addition, the significant increase in production numbers from 2020 to 2021 indicates the potential for further growth in the coconut sector in Gorontalo Province.

However, the low contribution of Gorontalo Province to total national coconut production indicates that there is untapped potential. With positive growth in coconut production, there may be opportunities for Gorontalo Province to expand its market share and increase its contribution to the national coconut industry. This can be achieved through sustained productivity improvement efforts and the implementation of a more comprehensive coconut sector development strategy.

3.2 Key Factors in Coconut Commodity Competitiveness in Gorontalo

Changes in consumer preferences regarding coconut and other derivative products have affected the demand for coconut commodities in the global market. In line with these changes, the coconut industry in Gorontalo needs to adapt to changing global market trends to maintain and improve its competitiveness.

Global demand for coconut products and derivatives continues to change and increase in line with the development of global value chains (GVCs). Initially, two new coconut-derived products were added to the global trade: coconut fiber in 2005 and coconut charcoal in 2006. Meanwhile, total coconut imports in the global market continued to increase. Between 2012 and 2017, shredded or dried coconut was the most imported coconut primary product in the global market. The average import growth for this coconut primary product was recorded at 1.32%, which is higher than that of other coconut primary products such as fresh and processed coconut (1.21%), shelled coconut (1.14%), and copra (1.07%). On the other hand, the largest import demand for coconut manufacturing products in the global market is crude coconut oil. However, the highest average import value growth for coconut manufacturing products was recorded for coconut oil and its derivatives, at 1.45%, followed by coconut charcoal (1.41%), crude coconut oil (1.36%), coconut fiber (1.28%), and coconut meal (0.91%) (Suprehatin & Al Naufal, 2021).

Changes in international trade policies can have a significant impact on the competitiveness of coconut commodities in the global market. The coconut industry in Gorontalo must understand and adapt to changes in trade regulations to maintain market access and competitiveness at the international level (Parmadi & Zulgani, 2018). The development of coconut derivative product innovations that are responsive to the needs of global consumers can be a key factor in strengthening the competitiveness of coconut commodities in Gorontalo. The industry needs to continue to innovate to create added value from coconut commodities and increase product differentiation in the global market (Elizabeth et al., 2021).

3.3 Product Diversification Strategy in Improving the Competitiveness of Coconut Commodity

Globally, the demand for fresh coconut fruit and its derivatives continues to increase. The three main forms of coconut consumption considered important include fresh coconut (which includes direct consumption as well as its use to make coconut milk), coconut oil, and desiccated coconut. Global consumption of fresh coconut is experiencing significant growth, especially in relation to coconut water and coconut milk (about 30% of total coconut consumption). Coconut water is gaining popularity worldwide as a healthy drink, while coconut milk is used in a variety of food products. Export demand for coconut products in general shows an increasing trend. For example,

Indonesia's coconut market share in world exports has tended to increase over the past five years. A similar trend is also seen for desiccated coconut (Sa'danoer, 2022).

Product diversification strategy has become an important approach in responding to fluctuations in the global market, especially in the context of the coconut industry in Gorontalo. By expanding the range of products produced, companies can reduce dependence on a single type of product, which is vulnerable to the risk of price and demand fluctuations. Product diversification provides important protection against risks associated with changing consumer trends and global market uncertainty. By developing a variety of coconut-derived products, such as coconut oil, coconut fiber, coconut charcoal, and other processed products, the coconut industry can create a resilient and diversified portfolio (Murdhani, 2020).

The implementation of product diversification strategies also opens up new opportunities for market growth. By offering diverse products, the coconut industry in Gorontalo can expand its consumer base and reach previously untapped market segments. In addition, product diversification allows adjustments to dynamic changes in consumer needs, allowing the industry to position itself as a key player in the face of increasingly fierce global competition (Musnaini et al., 2019).

In addition, product diversification strategies play an important role in improving the competitiveness of coconut commodities in the global market. By offering a variety of high-quality and innovative products, the coconut industry can expand its market penetration and enhance its brand image. This will help increase consumer confidence and expand the product's reach in the international market (Baskara & Supriono, 2018). Thus, a product diversification strategy not only reduces the risks associated with global market fluctuations, but also significantly improves the competitiveness of the Gorontalo coconut industry in the international market.

3.4 Impact of Challenges and Opportunities on the Coconut Sector in Gorontalo

The coconut sector in Gorontalo faces a number of significant challenges due to increasingly complex global market dynamics. These include volatile price fluctuations, changes in international trade regulations, and uncertainties associated with global demand (Wau et al., 2021). Coconut farmers and industry players are exposed to high risks due to market instability, which can disrupt their production and income. In addition, increasing global competition is pushing industry players to continuously innovate and improve their operational efficiency to remain relevant and competitive in the international market (Mahendra Ardiansyah, 2023).

However, despite the challenges, the coconut sector in Gorontalo also has a number of opportunities that can be utilized to develop the coconut commodity market. The growing global awareness of the health benefits of coconut products, such as coconut oil and coconut water, opens up new opportunities for market expansion. In addition, the increasing demand for sustainable and environmentally friendly coconut products also creates opportunities for the sector to develop sustainable and environmentally friendly agricultural practices that can improve the image of coconut products from Gorontalo in the global market.

In this regard, stakeholders in the coconut sector need to collaborate to identify and capitalize on these opportunities. Collaboration between the government, farmers, and industry will enable the development of a holistic and sustainable strategy in the face of complex challenges in the global market. Through this approach, the coconut sector in Gorontalo can capitalize on available opportunities, while reducing the risks associated with global market fluctuations and improving the competitiveness of local coconut products in the international market (Sa'danoer, 2022).

3.5 Relevance of Findings to Local Economic Policy and Strategy Development

The findings of this research not only provide profound insights into the dynamics of the coconut sector in Gorontalo but also offer strategic implications that can shape local policy and economic strategies. Firstly, given the significant potential of the coconut sector in this region, it is crucial for the local government to take strategic steps to support its growth. A pivotal approach is adopting policies that foster innovation and product diversification (Rambing & Walangitan, 2021).

To create an environment conducive to a coconut-based industry, the local government can design policies that facilitate innovation and the development of new coconut-based products. This may include tax incentives for research and development, subsidies for sustainable agricultural technology, or educational and training programs to enhance skills within this industry (Wahyunti, 2020). Consequently, not only will there be an increase in production, but also an enhancement in value addition and product diversification, potentially boosting the competitiveness of Gorontalo's coconut products in the global market.

Furthermore, in the context of local economic growth, a product diversification strategy can be instrumental in improving the welfare of farmers (Junaidi, 2022). By developing derivative products from coconuts such as coconut oil, coconut fiber, or other processed products, farmers can optimize their resource utilization and create additional income sources (Dai & Asnawi, 2018). Additionally, diversification reduces the risk of dependence on a single product or specific market, thereby enhancing economic resilience and income stability for farmers (Saputra et al., 2021).

Equally important is for the government to focus on sustainable farming practices. By encouraging farmers to adopt environmentally-friendly and sustainable agricultural practices, the government not only aids in preserving the environment but also ensures that coconut production in Gorontalo remains sustainable in the long run (Bararah & Al Aminah, 2023).

By integrating all these elements into a holistic strategy, the local government has the opportunity to create an inclusive and sustainable economic ecosystem in Gorontalo. This will not only strengthen the coconut sector but also make a significant contribution to local economic growth, create sustainable employment opportunities, and enhance the overall welfare of the community. As a result, this research provides a solid foundation for the local government to formulate more effective and adaptive policies and strategies in the future (Vinatra, 2023).

3.6 Research Contribution to Understanding Coconut Commodity Market Dynamics and Innovative Solutions

The research conducted not only investigates the dynamics of the coconut commodity market but also provides an in-depth perspective spanning both local and global levels of analysis. Firstly, within the local context, this study successfully uncovers and analyzes various key factors influencing the competitiveness of coconuts in Gorontalo. These factors encompass aspects such as production methods, technology, local market demand, and competitive dynamics among local stakeholders (Asir et al., 2022). By delving into these aspects in detail, the research offers a more comprehensive understanding of how these variables interact and impact the competitiveness of coconut commodities at the regional level.

Furthermore, on a global scale, this research adopts a similar approach to identify market trends and changes in international trade regulations affecting the coconut industry. In today's era of globalization, where the coconut commodity market is closely linked to international markets, understanding the dynamics and changes at the global level becomes crucial (Subekti et al., 2018). This analysis aids stakeholders in Gorontalo in preparing adaptive strategies, not only based on local conditions but also anticipating the impacts of changes in the global market.

Additionally, a primary strength of this research lies in its ability to offer innovative and strategic solutions. Confronted with increasingly complex external challenges, the study emphasizes the importance of product diversification as a key approach. By expanding product ranges and creating added value, the coconut sector in Gorontalo can reduce dependence on a single product or market, thereby enhancing resilience against external fluctuations (Azis et al., 2020).

Moreover, by highlighting the importance of sustainable practices, this research provides a framework that enables stakeholders to integrate sustainability aspects into their operations. This is not merely about preserving the environment but also about creating long-term value for the industry and the local community.

Lastly, but equally importantly, the findings of this research have broad-reaching impacts and potential for adaptation in various contexts. Its ability to offer valuable insights and solutions can inspire researchers, practitioners, and other stakeholders in Gorontalo and even in other regions to develop more innovative and adaptive strategies in the future. Thus, this research serves not only as an academic analysis but also as a practical tool facilitating positive transformation in the coconut sector, both at the local and global levels.

4. CONCLUSION

This study highlights the importance of product diversification strategies in facing the complex challenges of the coconut sector in Gorontalo. Product diversification can provide protection against global market fluctuations and help the coconut sector to remain relevant and competitive. In addition, this strategy also enables the development of diverse products that can reach a wider market share, as well as make a positive contribution to farmers' welfare and overall local economic growth. By offering innovative solutions to improve the competitiveness of the coconut sector, this research shows the potential to inspire further practices and policies that can strengthen the coconut industry's position amidst intensifying global competition.

This research provides implications both theoretically and practically. On the theoretical front, the study enriches academic literature by emphasizing the crucial role of product diversification in safeguarding Gorontalo's coconut sector against global market fluctuations, deepening insights into strategic management and agricultural economics. Meanwhile, from a practical standpoint, the research offers valuable insights for stakeholders, including farmers and policymakers in Gorontalo. Farmers are encouraged to diversify their products to enhance market stability, while policymakers can formulate supportive economic strategies based on the research findings. Overall, the study lays a foundation for strengthening and enhancing the competitiveness of the coconut industry amidst escalating global challenges.

While this study provides in-depth insights, it predominantly focuses on literature analysis rather than direct empirical data. Consequently, future research could integrate empirical methods, such as interviews or field surveys, to gain a more comprehensive perspective on product diversification in Gorontalo. Moreover, there's room to emphasize the economic, social, and environmental aspects of diversification and explore practical barriers the industry might face in its implementation. Considering these limitations, opportunities exist for subsequent studies to combine qualitative and quantitative approaches, as well as engage in field or experimental research to deepen understanding and offer more practical recommendations for stakeholders.

ACKNOWLEDGEMENTS

We extend our deepest gratitude to all parties who have contributed to this research. Thanks to the Department of [Department Name], Affiliation, City, Country, for the

support and assistance provided throughout the research process. We would also like to express our gratitude to everyone who provided feedback, support, and inspiration during the course of this study. To our colleagues and research partners, we value the insightful discussions and valuable suggestions you have offered. Additionally, we thank all individuals who have contributed in any form, directly or indirectly, enabling the successful completion of this research. Finally, we want to thank everyone who has read and utilized the findings of this research. May this study contribute meaningfully to the advancement of science and society.

REFERENCES

- Alam, H. V. (2020). *Potensi Agroindustri Kelapa* (A. Umar, Ed.; 1st ed.). CV Pena Persada.
- Asir, M., Nendissa, S. J., Sari, P. N., Yudawisastra, H. G., Abidin Indriani R., Z., & Soeyatno, R. F. (2022). *Ekonomi Pertanian*. Penerbit Widina.
- Azis, R., Akolo, I. R., Pomalingo, M. F., & Staddal, I. (2020). Pengembangan Usaha Minyak Kelapa Tradisional untuk Meningkatkan Pendapatan IKM Desa Posso, Kabupaten Gorontalo Utara. *Agrokreatif: Jurnal Ilmiah Pengabdian Kepada Masyarakat*, 6(2), 150–158.
- Bararah, K., & Al Aminah, R. (2023). Strategi Pengembangan Pertanian Berkelanjutan: Optimalisasi Smart Greenhouse Di Kabupaten Mojokerto Melalui Penggunaan Agri-Voltaic. *TheJournalish: Social and Government*, 4(5), 353–363.
- Baskara, A., & Supriono, Y. (2018). Analisis Daya Saing Ekspor Kelapa Indonesia di Pasar Internasional. *61(1)*, 208–216.
- BPS. (2021a). Luas Lahan Tanaman Perkebunan. In *Badan Pusat Statistik*.
- BPS. (2021b). Produksi Tanaman Perkebunan. In *Badan Pusat Statistik*.
- Dai, S. I. S., & Asnawi, M. A. (2018). Analisis Pengembangan Produk Turunan Kelapa Di Provinsi Gorontalo. *Frontiers: Jurnal Sains Dan Teknologi*, 1(1).
- Elizabeth, R., Em, G. I., & Ivan, G. S. (2021). *Akselerasi Industrialisasi Perdesaan Inovatif dan Kelembagaan Pertanian Mewujudkan Kesejahteraan Petani* (Vol. 7, Issue 2).
- Endey, N., Kadek, I., Arsana, S., Katili, A. Y., Sahabi, A., & Talalu, M. A. (2022). Analisis Daya Saing Komoditi Unggulan Gorontalo Dalam Mendukung Ibu Kota Negara Baru Republik Indonesia. *Equilibrium: Jurnal Pendidikan*, 10(3), 380–396. <http://journal.unismuh.ac.id/index.php/equilibrium>
- Fatmawati, A., Mulyanti, D. R., Hasmidar, H., Nasution, A. H., & Muala, B. (2023). *EKONOMI PERTANIAN: Pengantar dan Konsep Dasar Ekonomi Pertanian di Indonesia*. PT. Sonpedia Publishing Indonesia.
- Junaidi, A. (2022). *Strategi Diversifikasi Produk di UD. Winna Sari Desa Pronojiwo Kecamatan Pronojiwo Kabupaten Lumajang*.
- Mahendra Ardiansyah, W. (2023). *Peran Teknologi dalam Transformasi Ekonomi dan Bisnis di Era Digital*. <https://journal.sabajayapublisher.com/index.php/jmeh>
- Murdhani, B. (2020). Analisis Rantai Pasok dan Nilai Tambah dalam Menentukan Strategi Pengembangan Usaha Perdagangan Komoditas Kelapa di Kabupaten Indragiri Hilir Provinsi Riau.
- Musnaini, M., Setiawati, R., & Besse Widiawati, B. W. (2019). Diversifikasi Produk Olahan Kelapa Bagian Dalam bagi Entrepreneurship Bumdes Di Jambi. *BAKTIMAS: Jurnal Pengabdian Pada Masyarakat*, 1(4), 180–187. <https://doi.org/10.32672/btm.v1i4.1719>
- Parmadi, *, & Zulgani, E. ; (2018). Daya saing produk unggulan sektor pertanian Indonesia dalam hubungannya dengan pertumbuhan Ekonomi. In *Jurnal Paradigma Ekonomika* (Vol. 13, Issue 2).
- Raming, P. R., & Walangitan, M. R. (2021). *Pengaruh Strategi Diversifikasi Produk Olahan Kelapa Terhadap Volume Penjualan Di Desa Sonsilo*.
- Sa'danoer, R. (2022). *Kajian Ekonomi Komoditas Kelapa Provinsi Gorontalo*. NSLIC/NSELRED.
- Saputra, T. A., Kunaifi, A., & Azizah, S. (2021). Diversifikasi Produk Pendekatan Islamic Ethic Dalam Meningkatkan Omset Bisnis Retail. *CENDEKIA: Jurnal Studi Keislaman*, 7(1), 1–16.
- Subekti, Y., Hadi, S., & Tety, E. (2018). Daya Saing Ekspor Produk Kelapa Indonesia di Pasar Internasional. *PEKBIS*, 10(1), 39–52.
- Sudha, R., Rajesh, M. K., Niral, V., Samsudeen, K., Shil, S., Ramchander, S., & Diwakar, Y. (2023). Analysis of genetic diversity and population structure in worldwide coconut germplasm (Cocos

- nucifera L.) using microsatellite markers. *Scientia Horticulturae*, 309, 111681. <https://doi.org/10.1016/J.SCIENTA.2022.111681>
- Suprehatin, S., & Al Naufal, H. (2021). Daya Saing Produk Kelapa Indonesia dan Eksportir Kelapa Utama Lainnya di Pasar Global. *Jurnal Penelitian Pertanian Terapan*, 21(1), 24–31. <https://doi.org/10.25181/jppt.v21i1.2073>
- Vinatra, S. (2023). Peran Usaha Mikro, Kecil, dan Menengah (UMKM) dalam Kesejahteraan Perekonomian Negara dan Masyarakat. *Jurnal Akuntan Publik*, 1(3), 1–8.
- Wahyunti, S. (2020). (2020). Peran strategis UMKM dalam menopang perekonomian Indonesia di Tengah Pandemi Covid-19. *J-Esa (Jurnal Ekonomi Syariah)*, 3(2), 280–302.
- Wau, T., Wibowo, M. G., & Ahli, T. (2021). *Ekonomi Internasional Suatu Kajian Teori dan Empiris (Seri 1)*.