Strategic Management of Coconut Industry Investment and Regional Competitiveness

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ABSTRACT

Coconut is a strategic commodity with high economic potential in West Sulawesi Province, yet its development and utilization remain suboptimal. This study aims to identify and strengthen the investment potential of coconut as a leading sector in the region. A participatory and systematic mapping approach was employed, combining secondary and primary data from planning documents, official statistics, field observations, and focus group discussions. Analytical methods included location quotient, shift share, and Klassen typology to assess the economic significance of coconut across regencies. The results indicate that coconut is a basic and growing commodity, particularly in Polewali Mandar Regency, with strong contributions to regional income. The development of coconut processing industries, especially coconut shell briquettes, shows high prospects due to abundant yet underutilized raw materials. Financial feasibility analysis confirms the viability of investment projects (NPV of IDR 24.94 billion, IRR 29%, Payback Period 3.9 years). This investment not only offers economic returns but also creates employment, increases farmers' income, and promotes environmentally friendly energy. Strengthening synergies among government, business actors, and communities is recommended to support targeted and sustainable investment policies in coconut commodity development.

Keywords*: Coconut Commodity, Economic Development, Financial Feasibility, Investment Potential.*

INTRODUCTION

Investment potential appears limitless and continues to grow. Investors should carefully consider several factors when evaluating potential opportunities, including market trends, risk assessment, financial planning, and funding availability. Market trends are particularly important, as understanding consumer demand and behavior can help predict the feasibility of a product or service in a specific market (Nst & Yasin, 2014; Faidah, 2020). Other considerations include selecting appropriate investment instruments and understanding applicable business and legal principles (Hapsari, 2018; Prawitra & Lutfi, 2021; Wahyudi et al., 2021). Population demographics and cultural practices also shape a region's social and political structure, influencing economic development and infrastructure investment (Riawanti, 2013).

The utilization of natural resources and food sources has always relied on products that are easily accessible, abundant, and multifunctional. Among these, plants are considered more effective than animals in meeting human needs due to their long lifespan, which allows them to produce food multiple times throughout their life (Fajri et al., 2022; Guntoro, 2024). Indonesia, as an archipelagic country located on the equator, has a

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geographical location that supports the growth of tropical plants such as cocoa, bananas, tubers, rice, and coconuts (Khairad, 2020; Widodo et al., 2024; Salsabila, 2025). Coconut trees are commonly found across Indonesia, both in highland and coastal areas, with a variety of types. The extensive coastal areas of West Sulawesi support the fertile growth of coconut palms (Handa, 2018; Sulistyowati et al., 2022; Fitriyani et al., 2024).

For generations, coconut farmers, including copra entrepreneurs in West Sulawesi, have become some of the largest coconut and copra exporters in Sulawesi and surrounding regions (Side et al., 2018; Fithriyyah et al., 2020). Coconut palm has several advantages compared to shallow coconut varieties, including a long lifespan that enables abundant fruit production averaging 60–110 fruits per tree per year and larger fruits with thicker flesh, producing more and richer coconut milk as well as higher oil yield (Syahri & Somantri, 2016).

The cultivation of coconut provides significant economic benefits not only for coconut farmers but also for the surrounding community, including copra entrepreneurs, charcoal and briquette producers, furniture and coconut shell craftsmen, and young coconut-based food businesses (Arnita, 1970; Side et al., 2018; Nur et al., 2024). Given these advantages, focused attention on the future development of this commodity is necessary. One effective approach is systematically mapping the plantation potential across West Sulawesi, focusing on coconut production throughout the province (Mulyono & Munibah, 2016).

However, the literature reveals several research gaps. Specific data on West Sulawesi's coconut potential remains limited, economic and social impact analyses are incomplete, and data-driven development strategies for government and business actors are lacking. Furthermore, empirical studies comparing productivity across coconut varieties, particularly the advantages of the coconut, are scarce. This study aims to address these gaps by providing detailed information on West Sulawesi's coconut potential and formulating more precise development strategies to maximize both economic and social benefits. Consequently, this research seeks to identify and strengthen the coconut investment potential as a leading sector in West Sulawesi Province.

LITERATURE REVIEW

Theoretical Foundations for Commodity Investment and Development

Theoretical perspectives on commodity investment and development draw on frameworks that explain how resources, markets, and institutional environments shape economic growth and sectoral performance. One influential theory is the Investment Development Path (IDP), which posits that the interaction between a country's economic development and patterns of investment (both inward and outward) follows identifiable stages that influence sector-specific investment attractiveness and competitiveness. In agricultural contexts, IDP has been applied to examine how agriculture evolves as economies develop, highlighting the importance of policies that encourage investment, capacity building, and participation in cross-border production networks (Djokoto et al., 2024).

Complementing IDP, Global Value Chain (GVC) theory emphasizes that participation in integrated production and trade networks enhances the development prospects of commodity sectors by linking producers to higher-value markets, technology flows, and diversification opportunities. Studies on agricultural GVCs demonstrate that value chain participation can improve productivity, strengthen competitiveness, and influence structural transformation within regional economies (Zhang & Sun, 2023). In addition, literature on value chain governance underscores that investment decisions are shaped not only by resource endowments but also by institutional support, infrastructure, and policies that facilitate linkages between smallholders, processors, and global markets (Nugraha et al., 2025).

Together, these theoretical foundations provide a robust basis for understanding how commodity investment potential is determined by economic development stages, global integration mechanisms, and institutional environments. They are particularly relevant to

this study's focus on identifying and strengthening the investment potential of coconut as a strategic commodity within the broader context of regional economic development.

Potential of Coconut in Indonesia and West Sulawesi

Indonesia, as an archipelagic country located on the equator, possesses geographical and climatic conditions that are highly suitable for coconut cultivation. Coconut is a strategic commodity because of its multifunctional uses, ranging from fruit, oil, and milk to derivative products such as copra, charcoal, and handicrafts made from coconut shells and leaves. Studies have emphasized that coconut has a long lifespan and high productivity, producing an average of 60–110 fruits per tree per year, which creates significant economic opportunities for farmers and entrepreneurs (Yang et al., 2018; Alouw et al., 2025). Moreover, coconut supports various downstream industries, including food processing, handicrafts, and alternative energy, making its development beneficial not only for farmers but also for the broader local and regional economy through a domino effect.

West Sulawesi is one of the regions with high coconut potential due to its extensive coastal areas and fertile soil that support coconut growth. Coconut commodities in West Sulawesi have long been a source of local income and one of the largest contributors to copra exports in Sulawesi Island (Henderson et al., 2010; Asba et al., 2020). Mapping coconut plantation potential in the region is a critical strategy to identify investment opportunities and strengthen the coconut sector as a leading commodity. In addition, understanding population demographics, cultural practices, and market demand helps investors design effective development strategies, ensuring that investments in this sector are not only financially profitable but also socially and environmentally sustainable (Riawanti, 2013; Guntoro, 2024).

Development Strategies and Economic Benefits of the Coconut Sector

The development of the coconut sector requires a comprehensive strategy, including selecting superior varieties, managing plantations effectively, and optimizing the use of derivative products. The coconut offers advantages over other types in terms of fruit size, thicker flesh, and higher coconut milk and oil production, making it a priority for investment. The presence of copra entrepreneurs, handicraft makers, and coconut-based culinary businesses demonstrates that coconut adds significant value by creating employment and increasing local income (Arnita, 1970; Nur et al., 2024). With a proper development strategy, the coconut sector can become a leading commodity with wide-ranging economic impacts, including the growth of downstream industries such as food processing and local handicrafts.

Furthermore, mapping coconut plantation potential in West Sulawesi is an essential step to identify highly productive areas and optimal investment opportunities. Such mapping allows data-driven decision-making regarding resource allocation, infrastructure investment, and market planning. The economic benefits of developing the coconut sector extend beyond farmers to the surrounding community involved in the coconut value chain, such as copra processing, charcoal/briket production, and culinary ventures. This development strategy aligns with the research objective of strengthening coconut as a leading sector and attracting sustainable investment, thus generating comprehensive economic, social, and environmental benefits for West Sulawesi Province (Mulyono & Munibah, 2016; Side et al., 2018).

RESEARCH METHODS

This study employed a descriptive research design with both qualitative and quantitative approaches, focusing on provincial investment potential mapping. The research aimed to identify and evaluate investment opportunities that could be developed into market-ready investments for potential investors, with an emphasis on the province's leading economic sectors. The study utilized both secondary and primary data sources, integrating spatial and economic analyses. Secondary data were obtained through

literature reviews and official documents, including the long-term development plan, the regional medium-term development plan, the Regional Spatial Plan (*Rencana Tata Ruang Wilayah*/RTRW) of West Sulawesi Province down to the Detailed Spatial Plan (*Rencana Detail Tata Ruang*/RDTR) per development unit, relevant documents from Local Government Agencies (*Satuan Kerja Perangkat Daerah*/SKPD), infrastructure development plans, and data from the Central Statistics Agency of West Sulawesi Province. These sources were complemented by satellite imagery, aerial photography, remote sensing data, geological records, census data, land-use maps, and demographic and employment information.

Data collection involved a combination of methods. Macroeconomic data, including Gross Regional Domestic Product (GRDP) and Gross Domestic Product (GDP) at constant prices (*Angka Dasar Harga Konstan*/ADHK), were collected at the provincial and district levels by sector and sub-sector. In addition, data on general infrastructure and sector-specific infrastructure were gathered, along with regional data such as demographics, geography, investment realization, and import-export statistics. Field surveys were conducted through direct observation and measurement to obtain site-specific data on the characteristics of each area. Stakeholders from multiple sectors, including government institutions, non-governmental organizations, community-based organizations, and local residents, were engaged through Focus Group Discussions (FGD) to validate and enrich the data.

The study population encompassed all development units and economic sectors in West Sulawesi Province, with particular focus on the 10 nationally recognized leading sectors and their sub-sectors. Priority was given to the agricultural sector, particularly the plantation sub-sector, which serves as a key driver of economic growth and has high development potential, such as coconut production. Data collection covered both spatial and quantitative aspects to provide a comprehensive understanding of production, distribution, and investment potential across the province.

Data analysis was carried out through the processing and interpretation of both primary and secondary data to identify leading sectors and sub-sectors. Quantitative analyses included the Location Quotient (LQ) to assess sector contributions to the regional economy, Klassen typology to evaluate sector growth and potential, and profiling of leading sectors. Commodity potential was further analyzed to identify investment opportunities based on available resources, including downstream industries such as coconut processing. Investment potential mapping utilized participatory and systematic approaches. Participatory mapping engaged stakeholders to capture spatially explicit data and empower local communities to identify problems and solutions, while systematic mapping employed Geographic Information Systems (GIS) to analyze multiple data layers quantitatively, producing comprehensive and easily interpretable investment potential maps.

RESULTS

Provincial Leading Sectors

The current economic development of West Sulawesi Province is not yet optimal. This is indicated by the fact that the primary sector still dominates the province's economic growth, accounting for 39% of the province's total GRDP. This regional economic sector generates the added value of GRDP (Keratorop et al., 2016; Rahma et al., 2024). The analysis was carried out on business sectors within the GRDP and classified into 10 sectors in accordance with the Minister of Investment Decree Number 50 of 2023. To determine the leading sectors in West Sulawesi Province, an assessment of these sectors is required based on their contribution and growth to the regional economy, their position within the wider region, and policies supporting the development of the economic sector (Fasyah et al., 2017; Sulistya, 2025). These parameters can indicate the superior position of each sector. The parameters used include the Location Quotient (LQ) index, the Klassen typology, and policies supporting the development of each sector.

Table 1. Result of the LQ index Calculation for West Sulawesi Province

Category	Description	LQ Value	Information
A	Agriculture	2.84	Base
B	Fishery	3.87	Base
C	Mining	0.30	Non-Based
D	Processing industry	0.51	Non-Based
E	Energy	0.22	Non-Based
F	Construction	0.74	Non-Based
G	Trade and Services	1.16	Base
H	Finance	0.55	Non-Based
I	Transportation	0.66	Non-Based
J	Tourist	0.08	Non-Based

Based on Table 1 and the analysis above, it can be concluded that there are three leading sectors in West Sulawesi Province with an LQ value greater than 1. The first is the agricultural sector, which includes several sub-sectors such as food crops, horticultural plants, plantations, and livestock. These sub-sectors are considered superior and fast-growing, with plantations having significant potential for further development. The second leading sector is the fisheries sector, which is also superior and demonstrates rapid growth. The third is the trade and services sector, which comprises wholesale and retail trade, including automobile and motorcycle repair, government administration, defense, and compulsory social security, as well as educational services, health services, social activities, and other services. Together, these three sectors form the core drivers of the province's economic growth and development.

Table 2. LQ Index of Leading Plantation Commodity Production West Sulawesi Province

Commodity	2018	2019	2020	2021	2022	2023	Average	Information
Coconut	1.40	2.06	1.85	1.68	1.67	1.43	1.68	Base
Coffee	0.54	0.95	0.92	0.83	0.87	0.77	0.81	Non-Based
Palm oil	0.78	0.69	0.69	0.75	0.77	0.79	0.75	Non-Based
Cocoa	11.36	16.71	16.70	14.11	14.92	13.59	14.57	Base
West Sulawesi Province	14.09	20.41	20.17	17.38	18.23	16.58	17.81	

Based on Table 2, the LQ index analysis of leading plantation commodities in West Sulawesi Province shows that coconut and cocoa are the primary base commodities, while coffee and palm oil are categorized as non-base commodities. The LQ values for coconut ranged from 1.40 in 2018 to 2.06 in 2019, with an average of 1.68 over six years, indicating that coconut consistently contributes more to the provincial economy compared to the national average. Cocoa exhibits a significantly higher LQ, with values ranging from 11.36 in 2018 to 16.71 in 2019 and an average of 14.57, reflecting its strong comparative advantage in the province. In contrast, coffee and palm oil have LQ values below 1, averaging 0.81 and 0.75, respectively, indicating they are non-base commodities that do not contribute as strongly to regional economic specialization.

These results suggest that coconuts are a superior commodity with substantial growth potential due to their consistent base status and relatively high contribution to regional economic development. Cocoa also maintains a strong base position, indicating rapid growth and a high level of economic specialization in the province. Meanwhile, coffee and palm oil, although produced in the region, have not yet reached a level of specialization that positions them as core contributors to the province's economic structure. The overall LQ for West Sulawesi Province, averaging 17.81, highlights the province's reliance on key base commodities, with plantation sub-sectors such as coconut and cocoa forming the foundation of regional economic strength. This analysis provides important insights for policymakers and investors, emphasizing that the strategic development of the coconut and cocoa sectors could significantly enhance the province's economic performance and create opportunities for further investment.

Table 3. Shift Share Index for Production of Leading Plantation Commodities

Shift Share Index	Commodity			
	Coconut	**Coffee**	**Palm oil**	**Cocoa**
Growt Prov.	-0.01	0.09	0.04	0.01
Growt National	-0.00	0.02	0.03	-0.02
inf	Negative	Positive	Positive	Positive
Contri. Prov	0.10	0.01	0.68	0.21
Contri.National	0.06	0.02	0.91	0.01
Inf.	Positive	Negative	Negative	Positive
Quadrat	3	2	2	1
Klassen	Develop	Stressed	Stressed	Proceed

Table 3 shows that the Shift Share analysis of West Sulawesi's leading plantation commodities shows that coconut and cocoa are the province's strategic commodities. Coconut has a slightly negative provincial growth (-0.01) but a positive economic contribution (0.10), placing it in Quadrant 3 ("Develop"), indicating strong development potential. Cocoa shows positive contribution (0.21) despite small growth, falling in Quadrant 1 ("Proceed"), reflecting superior performance and rapid growth potential. Coffee and palm oil have modest growth but low or negative contributions, placing them in Quadrant 2 ("Stressed"), suggesting limited impact on the provincial economy and a need for strategic improvement. Thus, coconut and cocoa are prioritized for investment and development, while coffee and palm oil require interventions to enhance their economic role.

Table 4. Shift Share Index for Production of Leading Plantation Commodities

Commodity	LQ	SS	Conclusion
Coconut	Base	Develop	Superior and has the potential to be developed
Coffee	Non-Based	Stressed	-
Palm oil	Non-Based	Stressed	-
Cocoa	Base	Proceed	Superior and Fast Growing

According to Table 4, the typology analysis of leading plantation commodities in West Sulawesi Province, based on the combination of the LQ and SS indices, provides a clear overview of the region's economic strengths. Coconut is classified as a base commodity with a "Develop" status, indicating that it is superior and has strong potential for further development. Cocoa is also a base commodity but falls under the "Proceed" category, reflecting its status as a superior and fast-growing commodity with high comparative advantage in the province. In contrast, coffee and palm oil are classified as non-base commodities with a "Stressed" status, showing limited economic impact and highlighting the need for strategic interventions to improve their performance. Thus, this typology confirms that coconut and cocoa are the leading plantation commodities with the most potential to drive economic growth in West Sulawesi, while coffee and palm oil require targeted support to enhance their contribution to regional development.

Potential Commodities in Leading Sectors

Coconut plays a vital role in the economies of tropical countries, including Indonesia, the Philippines, India, and several Pacific nations. It is recognized as a "multi-purpose crop" because almost all parts of the plant can be utilized, from the fruit, water, and fibers to the trunk (Rusdiana & Adawiyah, 2017; Siswati et al., 2023). Indonesia is recorded as the world's largest coconut producer, with a production of 2.8 million tons in 2022. In West Sulawesi, coconut is a leading commodity with strong potential for sustainable industrial development due to its significant contribution to regional economic growth (Side et al., 2018; Amelia et al., 2025). Coconut plantations in the province cover 42,899 hectares, of which 33,045 hectares are productive, consisting of 30,678 hectares of regular coconuts and 2,367 hectares of hybrid coconuts. Coconut production reached 34,017 tons per year in 2022, representing a 35% increase over the past five years.

Polewali Mandar Regency is the largest contributor, accounting for 59% of the total coconut land and production in West Sulawesi. This creates an opportunity for the regency to become a center for coconut-based product processing (Side et al., 2018; Rochman, 2021). According to data from the West Sulawesi Department of Industry, Trade, Cooperatives, and MSMEs, there are 529 coconut-processing MSMEs, with the majority (97%) producing cooking oil, while only 0.1% process coconut shells into briquettes. This indicates a significant opportunity to develop the coconut shell briquette industry. Polewali Mandar's strategic location is supported by its abundant raw material supply and its proximity to Majene Regency, which ranks second in coconut land area and production.

The coconut shell briquette industry development project aims to establish an efficient and sustainable factory, enhance the value of underutilized coconut shells, provide environmentally friendly energy alternatives, and create new local jobs (Prasetyo, 2007; Sutha et al., 2025). Raw material availability is crucial for smooth production, competitiveness, and economic stability, as a reliable supply enables efficient planning and production management (Rindrayani, 2017; Arisandi, 2023). In Polewali Mandar, total copra production reaches 17,661 tons per year, with the highest outputs in Mapilli (3,527.51 tons), Tapango (2,735.09 tons), Campalagian (2,613.98 tons), Tinambung (2,202 tons), Limboro (1,686.09 tons), and Binuang (1,470 tons). Although some coconut shells are processed into copra or other derivatives, only 0.1% of MSMEs convert them into briquettes, leaving raw material availability abundant for industrial use.

Investment feasibility analysis was conducted using Net Present Value (NPV), payback period, cost-benefit ratio, and Internal Rate of Return (IRR), based on projected production, selling prices, costs, and third-party loans at 12% interest (Sataral, 2021; Mahlil et al., 2021). Production growth is assumed to follow the five-year average, selling prices increase by 5% annually, and costs rise by 5% according to inflation. Approximately 70% of coconut shell waste is projected to be absorbed by the industry. Revenue is calculated from total briquette output multiplied by the selling price, while cash flow is derived from Earnings After Tax (EAT), plus depreciation and interest expenses adjusted for taxes.

The analysis shows a positive NPV of IDR 24,943,249,132, an IRR of 29% exceeding the 12% capital interest rate, and a cost-benefit ratio of 1.39 (>1). The Payback Period is 3 years and 9 months, faster than the economic period considered. Therefore, the investment in the coconut shell briquette processing industry in Polewali Mandar is feasible, with a total investment value of IDR 63,483,391,971.

Table 5. Feasibility and Sensitivity of Coconut Shell Briquette Processing Industries

Condition	Pay Back Period (Year)	IRR (%)	NET B/C (%)	NPV (IDR)
Normal	3.9	29	1.39	24,943,249,132
Income -5%	4.2	26	1.25	16,045,302,007
Cost +5%	3.11	27	1.33	20,662,259,172

Table 5 shows that investment in the coconut shell briquette processing industry is feasible and relatively risk-resistant. Under normal conditions, the Payback Period is 3.9 years, the IRR is 29%, the Cost-Benefit Ratio is 1.39, and the NPV is IDR 24.943 billion. If revenue decreases by 5%, the Payback Period extends to 4.2 years, the IRR is 26%, the Cost-Benefit Ratio is 1.25, and the NPV is IDR 16.045 billion, but the investment remains feasible. Meanwhile, if costs increase by 5%, the Payback Period is shorter at 3.11 years, the IRR is 27%, the Cost-Benefit Ratio is 1.33, and the NPV is IDR 20.662 billion, indicating the project remains profitable.

DISCUSSION

The findings confirm that West Sulawesi Province's economy remains anchored in the primary sector, particularly plantation agriculture, consistent with structural characteristics observed in many eastern Indonesian provinces where natural resource

endowments continue to define economic trajectories (Todaro & Smith, 2020). The dominance of agriculture, contributing 39% to provincial GRDP, reflects a development stage yet to transition toward productivity-driven diversification, a challenge commonly documented in regional economic literature where factor-driven growth persists without adequate institutional and infrastructural transformation to support higher value-added activities (Kuncoro, 2022).

The LQ analysis identifying coconut and cocoa as base commodities aligns with broad empirical evidence on comparative advantage in agricultural economies. Coconut's average LQ of 1.68 and cocoa's remarkably high average LQ of 14.57 suggest deeply embedded roles in the provincial economy. This finding is consistent with Widodo (2021), who demonstrated that high LQ values in Sulawesi plantation commodities correspond with favorable agro-ecological conditions that are difficult to replicate elsewhere, conferring durable competitive advantages over time. The persistence of these LQ values across six consecutive years further strengthens the argument that both commodities represent structurally stable economic pillars rather than cyclical anomalies.

The Shift Share analysis results further enrich this interpretation. Cocoa's position in the "Proceed" quadrant reflects sustained national and international demand, improved cultivation practices, and upstream investment that have collectively elevated its growth trajectory, consistent with observations by Arsyad (2021) regarding cocoa's enduring strategic position in Sulawesi's agricultural economy. Coconut's placement in the "Develop" quadrant, despite slightly negative provincial growth, indicates that its national-level competitive advantage compensates for localized growth constraints, a pattern associated with commodities retaining structural relevance even amid broader sectoral stagnation (Fauzi & Anna, 2019). In contrast, coffee and palm oil's placement in the "Stressed" quadrant underscores the need for targeted policy interventions involving institutional support, market linkage development, and technological upgrading to restore their competitiveness within the provincial economy (Sari & Purwanto, 2022).

The strategic focus on coconut downstream processing, particularly coconut shell briquettes, reflects a broader policy imperative to move beyond raw commodity export toward value-added production. The current reality that only 0.1% of MSMEs in the province engage in briquette production highlights a substantial untapped opportunity. This low adoption rate reflects systemic barriers, including limited access to capital, technology, and market information constraints that targeted policy intervention and investment facilitation could effectively address (Nasser et al., 2021). Taufiq and Setiawan (2022) similarly argued that downstream agricultural processing in eastern Indonesia represents one of the most viable pathways for inclusive economic transformation, given existing raw material abundance and available labor capacity.

The investment feasibility results with a positive NPV of IDR 24.94 billion, IRR of 29%, and Cost-Benefit Ratio of 1.39 provide strong empirical support for establishing a coconut shell briquette factory. These figures compare favorably with benchmark feasibility thresholds in agroindustry investment literature, where IRR values exceeding the prevailing discount rate and payback periods under five years are generally considered indicative of sound investment propositions (Gittinger, 2020). Sensitivity analysis further demonstrates project resilience even under adverse scenarios, consistent with Mahlil et al. (2021), who reported similar robustness for coconut-based agro-industrial projects in Sulawesi, attributing it to stable raw material supply and growing domestic and export market demand for biomass energy products. From an environmental and sustainability perspective, coconut shell briquettes support national renewable energy targets and carbon reduction commitments. Kalaipandian et al. (2024) showed that such biomass briquettes have high calorific value and lower carbon footprints than fossil fuels. Integrating waste-based energy into agricultural value chains reduces environmental impact and generates upstream and downstream economic benefits (Arisandi, 2023; Sjafrizal, 2021).

CONCLUSION

This study demonstrates that coconut is a strategic commodity with high investment potential in West Sulawesi Province, particularly in Polewali Mandar Regency, as the main production center. The results of location quotient, shift share, and Klassen typology analyses indicate that coconut is in a base and growing position, contributing significantly to the local economy. Opportunities for developing coconut processing industries, especially coconut shell briquettes, are highly promising due to abundant raw materials that are not yet fully utilized. Financial feasibility analysis confirms that this investment is viable, with a positive NPV, high IRR, and a relatively short payback period.

The implications of these findings include potential increases in farmer income, job creation, and support for environmentally friendly industries and green energy development. The study also highlights the importance of strong collaboration between government, business actors, and local communities to develop targeted and sustainable investment policies. However, the study has some limitations, including its focus on West Sulawesi and the limited availability of secondary data for more detailed quantitative analysis. Based on the findings and limitations, it is recommended that government and industry stakeholders optimize the use of coconut raw materials, encourage diversification of processed products, and implement data-driven investment policies. Future research could examine productivity comparisons among different coconut varieties, conduct a more detailed value chain analysis of the coconut industry, and assess the long-term socio-economic impacts of coconut processing industry development in other regions of Indonesia.

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