

Marketing Strategy for Coconut Brown Sugar to Improve Community Welfare in Pasiang Village

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Abstract. *This study examines the marketing strategies of coconut brown sugar and their implications for the welfare of artisans in Pasiang Village, Matakali District, Polewali Mandar Regency. The study employed a descriptive qualitative approach using a case study. The research location was purposively selected, with 36 informants consisting of producers, collectors, suppliers, retailers, and consumers. Data were collected through observation, interviews, questionnaires, and documentation and analyzed using the Miles and Huberman model. Marketing strategies were formulated through SWOT analysis using IFAS and EFAS matrices. The results show that coconut brown sugar marketing remains traditional and involves three marketing channels with several marketing institutions. The Producer-Supplier-Retailer-Consumer channel is the most efficient because it provides producers with a higher selling price than other channels. The SWOT analysis produced an IFAS score of 2.82 and an EFAS score of 2.62, placing the business in Quadrant I and indicating an aggressive growth strategy. Recommended strategies include improving product quality, expanding market share, utilizing digital marketing, developing efficient distribution channels, and strengthening producer institutions. These strategies can enhance product competitiveness, expand market access, increase artisan income, and ultimately improve the welfare of coconut brown sugar artisans in Pasiang Village.*

Keywords: Marketing Strategy, Coconut Brown Sugar, SWOT, Community Welfare

JEL Classification: Q13, M31, Q12, I31, O18

Received: June 15, 2026

Received in Revised: July 19, 2026

Accepted: August 12, 2026

INTRODUCTION

The agricultural and home-based agro-industrial sectors play an important role in supporting rural livelihoods by generating employment, utilizing locally available resources, and creating household income (Barrett et al., 2019; Gómez-Jiménez et al., 2025; Umam, 2024; Nahatkar, 2025). In Polewali Mandar Regency, coconut is one of the principal smallholder plantation commodities, indicating that coconut-based processing has considerable potential to support local economic development (Badan Pusat Statistik Kabupaten Polewali Mandar, 2026). The availability of coconut resources provides rural communities with opportunities to produce higher-value commodities, including coconut brown sugar, rather than depending exclusively on the sale of unprocessed agricultural products (Kurniawan et al., 2025; Davila, 2020; Atapattu et al., 2024).

Coconut brown sugar is produced by heating coconut sap until it reaches the concentration and consistency required for molding. Its distinctive sensory characteristics and potential as a natural sweetener provide opportunities for product development and market expansion (Hebbar et al., 2022; Sarpong et al., 2024; Sarkar et al., 2023; Saraiva et al., 2023). At

the household level, coconut brown sugar production can generate employment, involve family labor, and provide an important source of income. Kusumadewi et al. (2022), for example, found that brown sugar production contributed 50.10% of the total household income of the producers examined in their study. Similarly, Maulana & Okoye (2026), Matondang et al. (2017), Kitili et al. (2025) demonstrated that coconut sugar production was financially feasible and capable of generating income for producers. These findings indicate that coconut brown sugar agro-industry can contribute meaningfully to household economic welfare when production and marketing activities are managed effectively (Desrial et al., 2025; Srimarliani et al., 2024; Mayka et al., 2024).

Despite this potential, the economic benefits received by producers are not determined solely by production capacity. Marketing arrangements influence selling prices, market reach, distribution costs, and the proportion of the final consumer price received by producers. Small-scale coconut sugar producers commonly operate through intermediary-based marketing systems because they have limited access to market information, transportation, promotion, capital, and direct consumers.

Although intermediaries facilitate product distribution, excessive dependence on them may weaken producers' bargaining position and limit their ability to determine selling prices (Neirotti & Raguseo, 2021; Bougette et al., 2019; Zhang & Chung, 2020). Research on brown sugar traders has shown that product, price, distribution, and promotional practices must be managed together to increase sales and strengthen market performance (Chairani et al., 2024). Therefore, improvements in production alone may not substantially increase producer income unless they are accompanied by an appropriate marketing strategy.

Oklander et al. (2024) and Rossi et al. (2014), changes in consumer behavior and communication technology also provide new marketing opportunities for small agro-industrial businesses. Digital marketing can help producer groups communicate product information, reach consumers beyond local markets, and reduce their dependence on conventional distribution channels. Chasanah et al. (2022), Bragg et al. (2017), Agus et al. (2024) and Sharma et al. (2021) demonstrated that website-based marketing could support the marketing activities of an organic coconut sugar business group.

However, the adoption of digital marketing by rural producers may remain constrained by limited technological knowledge, institutional capacity, product standardization, and business organization. Strengthening producer groups or cooperatives is therefore important for improving market access, production coordination, product quality, and bargaining power. Badriah et al. (2025), Padma et al. (2025), Ilmy et al. (2026) similarly emphasized the relevance of institutional strengthening, product development, and market-oriented strategies to the development of coconut sugar enterprises.

In Pasiang Village, Matakali District, coconut brown sugar production constitutes a household-based economic activity and a source of income for local artisans. However, its economic potential has not been fully realized because marketing remains largely traditional. Producers face low selling prices at the producer level, lengthy distribution channels, limited promotional activities, restricted access to market and price information, and substantial dependence on collectors (Mgale & Yunxian, 2020; Gebru et al., 2014; Shiferaw et al., 2016).

These conditions may produce price disparities across marketing actors and prevent artisans from obtaining an equitable share of the product's final market value. Consequently, the sustainability of the business and its contribution to household welfare depend not only on the availability of coconut raw materials but also on the efficiency of marketing channels and the capacity of producers to respond to internal and external business conditions.

Previous studies have examined the financial feasibility of coconut sugar production (Ekawati et al., 2022), its contribution to household income (Kusumadewi et al., 2022), digital marketing applications (Chasanah et al., 2022), business-development strategies through

producer institutions (Francesconi & Wouterse, 2015; Rytönen et al., 2023), and marketing practices among brown sugar traders (Chairani et al., 2024). Nevertheless, these studies were conducted in different geographical and institutional contexts. Limited research has specifically examined the configuration of coconut brown sugar marketing channels in Pasiang Village while integrating the experiences of producers and marketing actors with an assessment of internal and external strategic factors. Furthermore, the relationship between marketing constraints, alternative marketing strategies, and the welfare of coconut brown sugar artisans in this locality has not been adequately explained.

To address this gap, the present study analyzes the marketing of coconut brown sugar in Pasiang Village, Matakali District, Polewali Mandar Regency. Specifically, the study aims to identify the existing marketing channels, examine the internal and external factors affecting coconut brown sugar marketing, formulate appropriate marketing alternatives using the Strengths, Weaknesses, Opportunities, and Threats framework and the Internal Factor Analysis Summary and External Factor Analysis Summary matrices, and explain the implications of these strategies for artisan income and community welfare. By integrating marketing-channel analysis with strategic analysis, the study is expected to provide context-specific recommendations for improving market access, distribution efficiency, producer bargaining power, and the economic contribution of coconut brown sugar production without altering the traditional character of the local enterprise.

METHODS

Location and Time of Research

This research was conducted in Pasiang Village, Matakali District, Polewali Mandar Regency, from May to June 2026. The research location was purposively selected. The village has significant potential for the coconut palm sugar business, supported by the abundant availability of coconut raw materials and the fact that some residents operate coconut palm sugar processing businesses as a source of income. Furthermore, Pasiang Village was deemed relevant as a research location due to various marketing challenges, such as dependence on intermediaries, limited promotion, and price fluctuations at the producer level. Therefore, it aligns with the research objective of marketing strategies to improve community welfare. Purposive sampling, or deliberate location selection, was used because the researchers selected locations deemed most appropriate to the characteristics and needs of the research. This approach is commonly used in agricultural socioeconomic research to obtain more specific and in-depth data (Tanjung et al., 2023).

Population and Sample

The population in this study comprised all actors involved in the coconut brown sugar marketing system in Pasiang Village, Matakali District, Polewali Mandar Regency, including coconut brown sugar farmers/craftsmen, collectors, wholesalers, and retailers. The sample was determined using purposive sampling, which involves the deliberate selection of respondents based on specific criteria aligned with the research objectives. The respondents included farmers/craftsmen actively producing and selling coconut brown sugar, traders directly involved in the purchase and sale of coconut brown sugar, and marketers with information on prices and marketing costs. The sample size was adjusted based on field conditions and the availability of respondents, ensuring that the data obtained represented the coconut brown sugar marketing patterns at the research site.

Research Type and Approach

Descriptive qualitative research is a type of research that describes social phenomena comprehensively, in-depth, and as they are, using data in the form of words, narratives, or images from natural sources without statistical manipulation (Akbar, 2024).

Research Location and Time

This research was conducted in Pasiang Village, Matakali District, which was selected as the research location because it had characteristics that matched the focus of the study and were relevant to the research problem. This village was deemed capable of providing the necessary data and information comprehensively through the activities and socio-economic conditions of the local community. The research period lasted three months, from May to June, covering the preparation phase, data collection, and data analysis. Purposeful site selection is the process of selecting a research location or unit based on specific objectives and criteria that align with the research focus, rather than randomly. In qualitative research, this is often done using purposive sampling, a strategy of selecting locations or cases deemed to have the most relevant and in-depth information about the phenomenon being studied (Muhajirin et al., 2024).

Data Collection Techniques

Observation

Observation is a data collection technique in which researchers directly observe behavior, phenomena, or situations being studied in the field to obtain information related to the research focus in a natural and contextual manner. The goal is to understand what actually happens without the influence of other instruments.

Interviews

Interviews are a data collection technique in which researchers interact directly with informants through questions and answers to obtain data in the form of respondents' perceptions, experiences, views, or meanings related to the topic being studied. In qualitative research, interviews are often conducted in-depth (Wahyuni & Fajarini, 2025).

Documentation

Documentation is a data collection technique that involves collecting documents, archives, notes, photographs, recordings, or other written materials relevant to the research to support or complement the data obtained from observations and interviews (Yuharqie & indah, 2025).

Data Analysis Techniques

Data analysis in qualitative research is conducted using the Miles and Huberman model, which includes three main stages: data reduction, data presentation, and conclusion drawing/verification. Data reduction is the process of selecting, focusing, simplifying, and grouping raw data obtained from observations, interviews, and documentation to align with the research focus. The reduced data is then presented in descriptive narrative form, tables, or matrices to facilitate researchers in understanding patterns, relationships, and trends among the data. The final stage is conclusion drawing and verification, which is the process of assigning meaning to the presented data and repeatedly rechecking conclusions until valid and accountable results are obtained. This analysis model is interactive and ongoing throughout the research process, making it highly suitable for use in descriptive qualitative research to gain a deep and systematic understanding of phenomena (Zahrani & Penmardianto, 2024).

RESULTS AND DISCUSSION

Respondent Characteristics

The study involved 36 respondents representing actors associated with coconut brown sugar production and marketing in Pasiang Village. The respondents consisted of producers, collectors, a supplier, a retailer, and a consumer. Their demographic and business characteristics are summarized in Table 1.

Table 1. Characteristics of Respondents

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	17	47.22
	Female	19	52.78
Age	20–30 years	8	22.22
	31–40 years	10	27.78
	41–50 years	10	27.78
	>50 years	8	22.22
Education	No formal education	3	8.33
	Elementary school	16	44.44
	Junior high school	9	25.00
	Senior high school	8	22.22
Role in the business	Producer	31	86.11
	Collector	2	5.56
	Supplier	1	2.78
	Retailer	1	2.78
	Consumer	1	2.78
Business experience	1–5 years	11	30.56
	6–10 years	15	41.67
	11–15 years	7	19.44
	>15 years	3	8.33
Family dependents	0–2 persons	17	47.22
	3–4 persons	14	38.89
	≥5 persons	5	13.89

Source: Processed primary data, 2026.

Women constituted 52.78% of the respondents, indicating that coconut brown sugar production and marketing involve both male and female household members. Most respondents were between 31 and 50 years old, showing that the business is predominantly operated by individuals of productive working age. Producers accounted for 86.11% of the respondents, consistent with the study's focus on coconut brown sugar production and marketing. Although more than half of the respondents had either no formal education or only elementary education, 69.44% had operated their businesses for more than five years. This suggests that respondents possessed substantial practical experience, even though their formal knowledge of business management, market analysis, product development, and digital promotion may remain limited.

Economic Performance of Coconut Brown Sugar Production

The economic performance of coconut brown sugar production was examined using average revenue, production costs, income, and the B/C ratio. The results are presented in Table 2.

Table 2. Economic Performance of Coconut Brown Sugar Production

Indicator	Average value
Revenue	Rp7,557,212.90
Production costs	Rp2,445,968.31
Income	Rp5,111,244.60
B/C ratio	2.055

Source: Processed primary data, 2026.

The average income of Rp5,111,244.60 was obtained from the difference between average revenue and average production costs. The B/C ratio of 2.055 indicates that the benefits

generated by the business exceeded its costs. Therefore, coconut brown sugar production was economically feasible under the conditions observed during the study.

This finding concerns production-level feasibility and does not, by itself, establish marketing-channel efficiency. An evaluation of marketing efficiency would require additional information on producer prices, consumer prices, distribution costs, marketing margins, and farmer's share.

Marketing Actors and Distribution Channels

The marketing actors consisted of producers, collectors, a supplier, and a retailer. Producers processed coconut sap into coconut brown sugar. Collectors purchased products from producers and combined relatively small production volumes. The supplier distributed products in larger quantities, while the retailer sold them to final consumers.

Three marketing channels were identified:

Producer → Collector → Supplier → Retailer → Consumer

Producer → Supplier → Retailer → Consumer

Producer → Collector → Retailer → Consumer

Channel I was the longest because it involved three marketing intermediaries before the product reached consumers. Channels II and III were shorter because each involved two intermediaries. Based on the information obtained from respondents, Channel II was considered relatively favorable because it involved fewer marketing actors than Channel I and reportedly provided a better selling price to producers. However, complete data on the prices, costs, and margins associated with each channel were not presented. Therefore, Channel II should be described as relatively favorable based on the field findings, rather than conclusively classified as the most efficient marketing channel.

Internal Factor Analysis

The IFAS matrix was used to evaluate the strengths and weaknesses affecting coconut brown sugar marketing in Pasiang Village. The internal factors included raw-material availability, profitability, producer experience, production costs, technology, business scale, intermediary dependence, market information, and bargaining power.

Table 3. IFAS Matrix

No.	Internal factors	Weight	Rating	Weighted score
Strengths				
1	Abundant availability of raw materials	0.15	4	0.60
2	Profitable business performance (B/C ratio > 2)	0.12	4	0.48
3	Extensive producer experience	0.10	3	0.30
4	Relatively low production costs	0.08	3	0.24
	Reported subtotal of strengths	0.55		1.92
Weaknesses				
5	Simple production technology	0.10	2	0.20
6	Small business scale	0.10	2	0.20
7	Dependence on intermediaries	0.07	2	0.14
8	Limited access to market information	0.10	2	0.20
9	Weak producer bargaining position	0.08	2	0.16
	Subtotal of weaknesses	0.45		0.90
	Reported total IFAS score	1.00		2.82

Source: Processed primary data, 2026.

The reported IFAS score of 2.82 indicates that the internal position of the business was relatively favorable. The reported strength score of 1.92 was greater than the weakness score of 0.90. Raw-material availability and business profitability received the highest weighted scores among the listed strengths. Among the weaknesses, simple technology, small business scale, and limited access to market information received the highest weighted scores.

A numerical inconsistency was identified in the original IFAS matrix. The four displayed strength weights total 0.45, while the reported strength weight is 0.55. Similarly, the displayed strength scores total 1.62, whereas the reported subtotal is 1.92. This suggests that one strength factor with a weight of 0.10 and a weighted score of 0.30 may be missing from the original table. The authors must verify the original questionnaire or scoring worksheet and restore the missing factor before publication. The value should not be reconstructed without reference to the original data.

External Factor Analysis

The EFAS matrix was used to evaluate the opportunities and threats influencing coconut brown sugar marketing.

Table 4. EFAS Matrix

No.	External factors	Weight	Rating	Weighted score
Opportunities				
1	Relatively stable market demand	0.15	4	0.60
2	Opportunity to shorten marketing channels	0.12	3	0.36
3	Government support for MSMEs	0.10	3	0.30
4	Potential market expansion	0.10	3	0.30
	Subtotal of opportunities	0.47		1.56
Threats				
5	Market-price fluctuations	0.13	2	0.26
6	Competition from other products	0.12	2	0.24
7	Dependence on intermediaries	0.15	2	0.30
8	Weather-related production risks	0.13	2	0.26
	Subtotal of threats	0.53		1.06
	Total EFAS score	1.00		2.62

Source: Processed primary data, 2026.

The EFAS score of 2.62 indicates that the external environment provides opportunities for developing the coconut brown sugar business. The opportunity score of 1.56 exceeded the threat score of 1.06. Stable market demand was the most influential opportunity, while dependence on intermediaries was the threat with the highest weighted score. Nevertheless, the presence of opportunities does not guarantee business growth. Producers need the technical, organizational, and marketing capacity to respond to market demand, access government assistance, and reach broader markets.

Strategic Position

The strategic position was determined by calculating the differences between the strength and weakness scores and between the opportunity and threat scores:

$$X=S-W=1.92-0.90=1.02 \quad Y=O-T=1.56-1.06=0.50$$

The coordinates (1.02,0.50) place the coconut brown sugar business in Quadrant I. This position indicates that the business possesses internal strengths and faces external opportunities that can support development. Therefore, the strategic direction is a growth-oriented strategy. However, the coordinates depend on the reported strength subtotal of 1.92. Because the original IFAS matrix contains a missing or undisplayed factor, the strategic coordinates must be

recalculated after the internal matrix has been verified. If the subtotal of 1.92 is confirmed through the original scoring data, the Quadrant I position remains valid.

SWOT Matrix and Alternative Strategies

The SWOT matrix was developed by matching internal strengths and weaknesses with external opportunities and threats. It produced four groups of strategies: SO, WO, ST, and WT.

Table 5. SWOT Matrix

Internal factors	Opportunities	Threats
Strengths	SO strategies 1. Use available raw materials and producer experience to meet confirmed market demand. 2. Improve product quality and consistency to access broader markets. 3. Develop more direct relationships with suppliers, retailers, and other potential buyers. 4. Utilize government support for training, packaging, promotion, and business development.	ST strategies 1. Improve product quality to strengthen competitiveness. 2. Use producer experience to maintain production consistency. 3. Emphasize the product's traditional process and local origin. 4. Use production-cost efficiency to respond to market-price fluctuations.
Weaknesses	WO strategies 1. Improve processing and packaging through practical training. 2. Establish or strengthen producer groups and cooperatives. 3. Increase access to market and price information. 4. Introduce accessible digital promotion through messaging applications and social media.	WT strategies 1. Shorten marketing channels where technically and economically feasible. 2. Reduce dependence on a single intermediary by developing relationships with multiple buyers. 3. Strengthen collective production and marketing coordination. 4. Adjust production commitments to weather-related raw-material availability.

Source: Developed from processed primary data, 2026.

The SWOT results support an integrated growth strategy comprising product-quality improvement, market expansion, distribution efficiency, access to market information, and producer institutional strengthening. The strategy should be implemented gradually and adjusted to the technical, financial, and organizational capacities of the producers.

Determining Strategic Position (SWOT Quadrant)

Calculating strategic position:

$$X = \text{Strength} - \text{Weakness} = 1,92 - 0,90 = 1,02$$

$$Y = \text{Opportunity} - \text{Threat} = 1,56 - 1,06 = 0,50$$

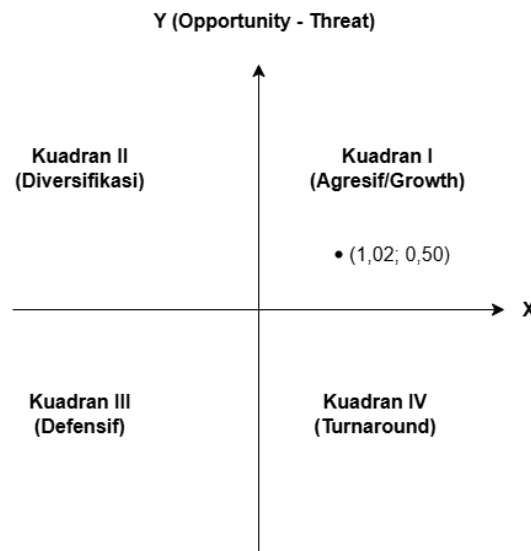


Figure 1. SWOT Strategic Position of Coconut Brown Sugar Marketing in Pasiang Village

The coordinates (1.02; 0.50) are in Quadrant I (Aggressive Strategy/Growth Strategy). This position indicates that the coconut palm sugar business is in a favorable position due to its strong internal strengths and supportive external opportunities. Therefore, the most appropriate strategy is Leveraging strengths to seize opportunities, Expanding markets and increasing production, Shortening marketing channels and Improving producers' bargaining position. Based on the IFAS and EFAS matrices, it can be concluded that the marketing strategy for coconut brown sugar in Pasiang Village should be directed at an aggressive strategy (growth strategy), with a focus on: Market development, Distribution efficiency and Strengthening producer institutions. This strategy is expected to increase the income and welfare of coconut palm sugar artisans.

Drawing Conclusions and Verification

The marketing strategy for coconut brown sugar in Pasiang Village remains suboptimal and should be directed toward shortening marketing channels where economically feasible, expanding producers' market access, and strengthening producer institutions. The dominant factors influencing marketing performance are the length of the distribution channel, limited access to markets and price information, and producers' weak bargaining position. Improvements in these areas have the potential to increase producer income and farmer's share while reducing price disparities among marketing actors. Therefore, a more efficient and well-organized marketing strategy may contribute to improving the household economic welfare of coconut brown sugar producers.

Economic Feasibility and Household Livelihoods

The financial results indicate that coconut brown sugar production provides positive returns to producers in Pasiang Village. The B/C ratio of 2.055 suggests that the business is economically feasible under the conditions observed. This result is consistent with Ekawati et al. (2022), who found that coconut sugar production in Mempawah Regency generated positive income and was financially feasible. Feasibility at the production level does not mean that producers receive the maximum possible return from the marketing system. Production profitability is determined by the relationship between revenue and production costs, whereas marketing performance is also influenced by producer prices, marketing costs, distribution arrangements, and bargaining power. Consequently, a profitable enterprise may continue to face marketing constraints that reduce the share of value obtained by producers.

The respondents' characteristics show that coconut brown sugar production is closely connected to household livelihoods. Women represented 52.78% of the respondents, and many

respondents had family dependents. The activity therefore provides both employment and income within artisan households. Kusumadewi et al. (2022) found that brown sugar production contributed 50.10% of household income among the producers included in their research. Although the present study did not calculate the precise contribution to total household income, its financial findings indicate that the business represents an economically important livelihood activity. The welfare implications should nevertheless be limited to the indicators examined. The study did not directly assess education, health, housing, household expenditure, or other dimensions of welfare. Therefore, the findings support the potential contribution of improved marketing to producer income and household economic welfare, rather than demonstrating comprehensive improvement in community welfare.

Marketing Channels and Intermediary Dependence

The three marketing channels demonstrate that producers rely on collectors, suppliers, and retailers to distribute coconut brown sugar. These intermediaries consolidate small production volumes, arrange transportation, connect producers with buyers, and sell products to consumers. Their involvement is particularly important when individual producers have limited transportation, capital, market information, or access to final consumers. Dependence on intermediaries is therefore not inherently disadvantageous. Collectors can reduce producers' marketing responsibilities by purchasing products directly from production locations. Nevertheless, problems arise when producers depend on a small number of buyers and have limited access to current price information. Under these conditions, producers may have little influence over price determination.

Channel II was reported as relatively favorable because it contains fewer marketing actors than Channel I and provides a better selling price to producers. A shorter channel can reduce repeated handling and the accumulation of margins. However, shortening a marketing channel also transfers transportation, storage, promotion, and customer-management responsibilities to producers or their organizations. For this reason, a shorter channel is not automatically more efficient. Its efficiency depends on whether the higher price received by producers exceeds the additional marketing costs and responsibilities they assume. Because the study does not present complete comparative data, Channel II should be treated as a promising alternative rather than conclusively identified as the most efficient channel.

Chairani et al. (2024) similarly demonstrated that brown sugar marketing performance depends on the combined management of product, price, distribution, and promotion. The marketing problem in Pasiang Village therefore cannot be resolved simply by removing intermediaries. Producers also require reliable information, consistent product quality, alternative buyers, and the capacity to manage distribution.

Interpretation of the IFAS Results

The reported IFAS score of 2.82 indicates that internal strengths exceed internal weaknesses. The availability of coconut raw materials supports production continuity, while producer experience contributes to the preservation of processing knowledge. The B/C ratio also confirms that producers have an economic incentive to continue the business. Several strengths require cautious interpretation. Family labor may reduce cash expenses, but it remains an economic input that should be recognized when determining actual production costs. Raw-material availability also does not guarantee consistent output because the quantity and quality of coconut sap can be affected by weather and harvesting conditions.

The weaknesses identified in the IFAS matrix are closely interconnected. Simple technology can affect product consistency, while small production volumes make it difficult for individual producers to supply larger markets. Limited market information increases dependence on intermediaries, and this dependence weakens producers' bargaining power. These conditions show that the marketing constraints are structural rather than isolated.

Technology improvement should preserve the traditional nature of coconut brown sugar production. It should focus on practical improvements in hygiene, heating control, product consistency, standardized weight, storage, and packaging. Beegum et al. (2022) and Santiago et al. (2024) found that processing conditions influence the chemical and sensory characteristics of coconut sugar. Consequently, better production control can improve market acceptance without replacing traditional processing methods.

Interpretation of the EFAS Results

The EFAS score of 2.62 indicates that opportunities outweigh threats. Relatively stable demand, government support, alternative distribution channels, and broader markets provide potential directions for development. Nevertheless, producers can benefit from these opportunities only when they can meet buyer requirements, supply products consistently, and manage distribution. Government support should be directed toward producers' practical needs, including quality control, packaging, bookkeeping, market information, and buyer connections. Assistance focused only on the distribution of equipment may have limited effect if producers lack the organization and market access required to use it productively.

External threats also remain significant. Price fluctuations can reduce income stability, competition can restrict producers' ability to increase selling prices, and weather can disrupt sap availability. Producers should therefore avoid expanding production beyond realistic market demand and raw-material capacity.

Interpretation of the SWOT Position

The Quadrant I position supports a growth-oriented strategy because the reported strengths and opportunities exceed the weaknesses and threats. However, this result should not be interpreted as a recommendation for rapid production expansion. Increasing production without confirmed demand, consistent quality, storage, and distribution could result in unsold products or declining prices. A more appropriate interpretation is controlled and market-oriented growth. Producers should improve product quality, strengthen market connections, and increase production only when demand can be reasonably confirmed. This approach is consistent with the existing nature of the business because it does not replace household production or traditional processing.

The SO strategies use raw-material availability, producer experience, and profitability to respond to market opportunities. These strengths can support gradual production development and broader market access. Nevertheless, market development should precede or accompany production expansion. The WO strategies address internal limitations through training and institutional support. Producer groups or cooperatives could combine production volumes, purchase packaging materials collectively, distribute price information, and negotiate with buyers. Karta et al. (2026) emphasized the importance of cooperative-based development for improving the added value and market orientation of coconut sugar enterprises.

Forming a producer group does not automatically improve marketing. The group must have transparent management, active member participation, clear responsibilities, and measurable economic benefits. Otherwise, it may become an administrative organization without resolving the actual constraints faced by producers. The ST strategies use product quality, producer experience, and relatively low costs to respond to competition and price fluctuations. Producers should avoid competing exclusively through low prices. Instead, they can differentiate their products through consistent quality, traditional processing, and local identity. These characteristics must be supported by reliable production standards and packaging.

The WT strategies focus on reducing vulnerability. Access to price information and relationships with multiple buyers can reduce excessive dependence on a single intermediary. Collective marketing may also improve negotiation, although it requires coordination of product quality, volume, and delivery schedules.

Market Expansion and Digital Promotion

Digital promotion provides an opportunity to introduce coconut brown sugar to markets beyond Pasiang Village. Chasanah et al. (2022) found that website-based marketing supported the marketing activities of an organic coconut sugar business group. For the producers in Pasiang Village, simpler tools such as messaging applications, social media, and electronic catalogues may be more appropriate than a complex e-commerce system. Nevertheless, digital promotion should not be presented as an independent solution. It requires consistent products, clear prices, attractive packaging, sufficient production, responsive communication, and reliable delivery. Without these elements, online promotion could generate orders that producers are unable to fulfill.

Digital marketing should therefore be developed gradually. Producer groups could initially assign one member to manage product information and buyer communication. More advanced platforms could be considered after the producers demonstrate the ability to manage product quality, orders, payments, and distribution consistently.

Implications for Artisan Welfare

The proposed strategies have the potential to improve household economic welfare by increasing price transparency, broadening market access, strengthening bargaining power, and supporting more stable income. However, these outcomes remain prospective because the proposed strategies had not been implemented and evaluated when the study was conducted. The study should therefore avoid stating that an aggressive marketing strategy has already improved welfare. A more evidence-based conclusion is that the strategy may improve producer income and household economic welfare if implemented successfully. An assessment of its actual impact would require comparison of income and welfare indicators before and after implementation.

The findings represent the specific context of Pasiang Village and should not be generalized directly to all coconut brown sugar producers. The study involved 36 purposively selected respondents, and the IFAS and EFAS weights and ratings include elements of stakeholder and researcher judgment. The original IFAS matrix also contains a numerical inconsistency caused by an undisplayed strength factor. The authors must verify this factor using the original questionnaire or scoring worksheet before confirming the total score and strategic coordinates. The absence of complete marketing-margin, farmer's-share, and multidimensional welfare data limits conclusions regarding channel efficiency and welfare improvement. Future research should calculate these indicators and evaluate changes after the recommended strategies have been implemented.

CONCLUSION

The marketing strategy for coconut brown sugar in Pasiang Village, Matakali District, is still simple and traditional. The marketing system utilizes several distribution channels, including wholesalers, suppliers, retailers, and a small portion of direct marketing to consumers. The most appropriate marketing strategy, based on the SWOT analysis, is an aggressive strategy (growth strategy), utilizing existing strengths to seize market opportunities through product quality improvement, market expansion, distribution efficiency, and strengthening producer institutions. Factors influencing the marketing of coconut brown sugar consist of internal and external factors. Internal factors include the abundant availability of coconut raw materials, producer business experience, relatively low production costs, simple production technology, small business scale, and weak producer bargaining power. External factors include stable market demand, government support for MSMEs, market expansion opportunities, price fluctuations, competition with other products, and weather factors that impact coconut sap production. The impact of marketing strategies on the welfare of coconut brown sugar artisans indicates that the better the marketing strategy implemented, the greater the opportunity to

increase community income. An effective marketing strategy can increase the selling price of products, expand the market, reduce price disparities, and increase farmer's share, thus having a positive impact on the welfare of the coconut palm sugar artisan community in Pasiang Village, Matakali District.

REFERENCES

- Agus, R., Sari, M., Barus, E. S., Zuhirsyan, M., & Lubis, M. R. (2024). Regional Feature Product Development Management Using Data Management Using Networked Websites in Assisted Villages in Realizing the Tridharma of Politeknik Negeri Medan. *International Journal of Research in Vocational Studies (IJRVOCAS)*, 3(4), 188-197. <https://doi.org/10.53893/ijrvocas.v3i4.251>
- Akbar, F. M. A. (2024). Metode kualitatif dan kuantitatif pada studi Islam. *Ar Rasyiid: Journal of Islamic Studies*, 2(2), 95-112. <https://doi.org/10.70367/arrasyiid.v2i2.23>
- Atapattu, A. J., Udumann, S. S., Nuwarapaksha, T. D., & Dissanayaka, N. S. (2024). Upcycling coconut husk by-products: transitioning from traditional applications to emerging high-value usages. In *Agricultural waste to value-added products: bioproducts and its applications* (pp. 249-273). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-97-2535-9_12
- Badriah, L. S., Rahajuni, D., Kadarwati, N., & Barokatuminalloh, B. (2025, January). Pengembangan Kelompok Usaha "Manggar Sari" Melalui Peningkatan Kualitas Produk Dan Penguatan Kelembagaan. In *Prosiding Seminar Nasional LPPM UNSOED* (Vol. 14, pp. 306-311).
- Barrett, C., Reardon, T., Swinnen, J., & Zilberman, D. (2019). Structural transformation and economic development: insights from the agri-food value chain revolution. *Cornell University*, 1-56.
- Beegum PP, S., Pandiselvam, R., SV, R., P, S., Nooh, A., S, N., ... & Hebbar, K. B. (2022). Sensorial, textural, and nutritional attributes of coconut sugar and cocoa solids based "bean-to-bar" dark chocolate. *Journal of Texture Studies*, 53(6), 870-882. <https://doi.org/10.1111/jtxs.12698>
- Bougette, P., Budzinski, O., & Marty, F. (2019). Exploitative abuse and abuse of economic dependence: What can we learn from an industrial organization approach?. *Revue d'économie politique*, 129(2), 261-286.
- Bragg, M. A., Eby, M., Arshonsky, J., Bragg, A., & Ogedegbe, G. (2017). Comparison of online marketing techniques on food and beverage companies' websites in six countries. *Globalization and health*, 13(1), 79. <https://doi.org/10.1186/s12992-017-0303-z>
- Chairani, T. B. T. D., Ratumbuysang, M. F. N. G., Setiawan, A., & Bahar, S. (2024). Analisis Strategi Pemasaran dalam Meningkatkan Penjualan Gula Merah pada Pedagang di Kecamatan Kusan Hulu. *Jurnal Pendidikan Ekonomi (JUPE)*, 12(3), 440-448. <https://doi.org/10.26740/jupe.v12n3.p440-448>
- Chasanah, N., Anggraeni, A. I., Ramadhanti, W., Krisnaresanti, A., Naufalin, L. R., & Dinanti, A. (2022). Implementation of website based e-marketing strategy in organic coconut sugar business group. *Jurnal Teknik Informatika (Jutif)*, 3(6), 1747-1756. <https://doi.org/10.20884/1.jutif.2022.3.6.616>
- Davila, F. (2020). Human ecology and food discourses in a smallholder agricultural system in Leyte, The Philippines: Davila. *Agriculture and Human Values*, 37(3), 719-741. <https://doi.org/10.1007/s10460-019-10007-6>
- Desrial, A., Syaukat, Y., & Sarma, M. M. (2025). Enhancing regional economy through the development of a coconut sugar-based industry in Indragiri Hilir Regency,

- Ekawati, E., Rizieq, R., & Ellyta, E. (2022). Financial analysis of coconut sugar production: A case study in mempawah regency, Indonesia. *Caraka Tani: Journal of Sustainable Agriculture*, 37(1), 132-141. <https://doi.org/10.20961/carakatani.v37i1.51866>
- Francesconi, G. N., & Wouterse, F. (2015). Promoting the role of farmer-based organizations for value chain integration: the tension between a program's targeting and an organization's investment strategy. *Agricultural Economics*, 46(4), 527-536. <https://doi.org/10.1111/agec.12179>
- Gebbru, Y., Ewnetu, Z., Kassa, H., & Padoch, C. (2014). Determinants of producers' participation in gums and resins value chains from dry forests and analysis of marketing channels in northwestern and southern Ethiopia. *Forests, Trees and Livelihoods*, 23(1-2), 54-66. <https://doi.org/10.1080/14728028.2013.875278>
- Gómez-Jiménez, M. Á., Manzano-Gómez, L. A., Rincón-Molina, C. I., Gen-Jiménez, A., Salvador-Morales, P., Rincón-Molina, F. A., ... & Rincón-Rosales, R. (2025). Agrobiotechnological Potential of *Pleurotus ostreatus* from an Ecological-Socioeconomic Perspective in Mexico. *Sustainability*, 18(1), 6. <https://doi.org/10.3390/su18010006>
- Hebbar, K. B., Ramesh, S. V., Ghosh, D. K., Beegum, P. S., Pandiselvam, R., Manikantan, M. R., & Mathew, A. C. (2022). Coconut sugar-a potential storehouse of nutritive metabolites, novel bio-products and prospects. *Sugar Tech*, 24(3), 841-856. <https://doi.org/10.1007/s12355-021-01101-3>
- Ilmy, N. A., Subagyo, Y., & Sari, L. K. (2026). Strategi Pemberdayaan Pengrajin Gula Semut di Kabupaten Banyumas Provinsi Jawa Tengah. *Jurnal Sosial Teknologi*, 6(5), 1730-1751. <https://doi.org/10.59188/jurnalsostech.v6i5.32815>
- Karta, N. L. P. A., Waworuntu, S. R., Widiastini, N. M. A., & Sindol Jr, I. S. (2026). From Local Products to Competitive Advantage: Stakeholder Roles in Alcoholic Beverage Branding in Bali's Hospitality Industry. *Jurnal Kajian Bali (Journal of Bali Studies)*, 16(1), 341-368. <https://doi.org/10.24843/JKB.2026.v16.i01.p13>
- Kitili, B. M., Ogotu, M., Kavinda, L., & Gongera, G. (2025). Effective Utilization of Coconut Palms for Sustainable Income Generation among Entrepreneurs in Kilifi District: A Case of SMEs in Kaloleni Division. *Journal of Entrepreneurship & Project Management*, 9(3), 102-122. <https://doi.org/10.53819/81018102t5394>
- Kurniawan, H., Rahayoe, S., & Amnah, H. Z. (2025). Processing and quality of crystalized palm sugar in indonesia: a review. *Jurnal Teknik Pertanian Lampung (Journal of Agricultural Engineering)*, 14(4), 1517-1533. <https://doi.org/10.23960/jtepl.v14i4.1517-1533>
- Kusumadewi, P. O., Darmawan, D. P., & Arisena, G. M. K. (2022). Kontribusi Pendapatan Industri Gula Merah Terhadap Pendapatan Rumah Tangga. *Jurnal Hexagro*, 6(2), 98-114. <https://doi.org/10.36423/hexagro.v6i2.925>
- Matondang, K. A., Suman, A., Sasongko, S., & AS, P. M. (2017). Local Economic Development-Based on Farming Manufacture of Coconut Sugar in West Sei Kepayang District. *International Journal of Social and Local Economic Governance*, 3(1), 49-55. <https://doi.org/10.21776/ub.ijleg.2017.003.01.9>
- Maulana, A. A., & Okoye, F. (2026). Economic and Financial Viability of Coconut Sugar Agribusiness in Kokap District, Kulon Progo Regency. *Jurnal Agroteknologi dan Inovasi Pertanian*, 2(1), 40-50. <https://doi.org/10.64845/jaip.v2i1.311>
- Mayka, S., Edy, P., & Imam, S. S. (2024). Factors Affecting Income And Development Strategies Of The Organic Coconut Sugar Agroindustry In Members Of The Central Agro Lestari Kub

Of Bojongsari District, Purbalingga Regency, Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*, 146(2), 131-143.

- Mgale, Y. J., & Yunxian, Y. (2020). Marketing efficiency and determinants of marketing channel choice by rice farmers in rural Tanzania: Evidence from Mbeya region, Tanzania. *Australian Journal of Agricultural and Resource Economics*, 64(4), 1239-1259. <https://doi.org/10.1111/1467-8489.12380>
- Muhajirin, M., Fachry, M. E., Wahid, A., Amri, A., & Arief, A. A. (2024). Pendekatan kearifan lokal masyarakat pesisir terhadap pemanfaatan sumber daya perikanan berkelanjutan di Kel. Lonrae, Kab. Bone. *Jurnal Masyarakat dan Budaya*, 26(1). <https://doi.org/10.55981.2024.14032>
- Nahatkar, S. B. R. (2025). Rapporteur's Report on Rural Transformation and Inclusive Development. *Indian Journal of Agricultural Economics*, 80(3), 1165-1199. <https://doi.org/10.63040/25827510.2025.03.033>
- Neirotti, P., & Raguseo, E. (2021). Mitigating resource dependence on internet visibility providers: Exploring complementarity effects in the positioning of small hotels on online intermediaries. *Information & Management*, 58(1), 103279. <https://doi.org/10.1016/j.im.2020.103279>
- Oklander, M., Yashkina, O., Petryshchenko, N., Karandin, O., & Yevdokimova, O. (2024). Economic aspects of Industry 4.0 marketing technologies implementation in the agricultural sector of Ukraine. *Ekonomika Apk*, 31(4), 55-66.
- Padma, B. A. J., Nugroho, M. I., Oktariani, B. R., Pambudi, D. N., Suliyani, S. R., Putra, L. M. B. O. R., ... & Puspitasari, C. E. (2025). Inovasi Briket Gula Aren Sebagai Upaya Peningkatan Nilai Tambah Produk Lokal Dan Penguatan Umkm Di Desa Gelangsar. *Jurnal Pepadu*, 6(3), 572-578. <https://doi.org/10.29303/pepadu.v6i3.7975>
- Rossi, M., Vrontis, D., & Thrassou, A. (2014). Agro business in a changing competitive environment–Campania firms' strategic, marketing and financial choices. *World Review of Entrepreneurship, Management and Sustainable Development* 5, 10(2-3), 312-333. <https://doi.org/10.1504/WREMSD.2014.060389>
- Rytkönen, P. I., Oghazi, P., & Mostaghel, R. (2023). Food entrepreneurship and self-employment in an island context. *British Food Journal*, 125(13), 237-252. <https://doi.org/10.1108/BFJ-06-2022-0537>
- Santiago, M., de Ramos, J., Organo, M. V., Santiago, M. V., Aquino, M. C., & Rala, N. (2024). Technical evaluation of coconut sugar production methods and quality of selected processors in the Philippines. *Philippine Journal of Agricultural and Biosystems Engineering*, 20(2), 23-36. <https://doi.org/10.48196/020.02.2024.02>
- Saraiva, A., Carrascosa, C., Ramos, F., Raheem, D., Lopes, M., & Raposo, A. (2023). Coconut sugar: chemical analysis and nutritional profile; health impacts; safety and quality control; food industry applications. *International journal of environmental research and public health*, 20(4), 3671. <https://doi.org/10.3390/ijerph20043671>
- Sarkar, T., Mukherjee, M., Roy, S., & Chakraborty, R. (2023). Palm sap sugar an unconventional source of sugar exploration for bioactive compounds and its role on functional food development. *Heliyon*, 9(4).
- Sarpong, F., Anning, D., & Oduro-Yeboah, C. (2024). Trends in coconut brown sugar production—a review of health and future prospect in the industry. *Turkish Journal of Agriculture-Food Science and Technology*, 12(s2), 2407-2414. <https://doi.org/10.24925/turjaf.v12is2.2407-2414.6907>

- Sharma, A. K., Gangwar, L. S., Singh, R. K., & Pathak, A. D. (2021). Agricultural credit and produce marketing in Uttar Pradesh: Challenges and way forward. *Indian Journal of Agricultural Marketing*, 35(1), 204-241.
- Shiferaw, B., Hellin, J., & Muricho, G. (2016). Markets access and agricultural productivity growth in developing countries: Challenges and opportunities for producer organizations. *Cooperatives, economic democratization and rural development*, 103-122. <https://doi.org/10.4337/9781784719388.00013>
- Srimarliani, Y., Dasipah, E., & Gantini, T. (2024). Business and Marketing Analysis of Coconut Sugar Agro-Industry Crafters in Ciracap District, Sukabumi Regency. *Journal Of Sustainable Agribusiness*, 3(2), 105-111. <https://doi.org/10.31949/jsa.v3i2.11668>
- Tanjung, A. F., Adha, R., & Batubara, C. (2023). Pengaruh Variasi Menu, Harga dan Lokasi Terhadap Keputusan Pembelian Makanan Di Tom Sushi Pada Mahasiswa FEBI UINSU. *Jurnal E-Bis*, 7(2), 586-600. <https://doi.org/10.37339/e-bis.v7i2.1277>
- Umam, K. (2024). From cassava to capability: Community-based economic empowerment through mocaf innovation in rural Cilacap, Indonesia. *WELFARE: Jurnal Ilmu Kesejahteraan Sosial*, 13(2). <https://doi.org/10.14421/welfare.2024.132-02>
- Wahyuni, H., & Fajarini, S. D. (2025). Ruang ekspresi diri di era digital (Analisis peran TikTok di kalangan Mahasiswa FISIP UMB). *Jurnal MADIA (Jurnal Humas dan Media Kontemporer)*, 6(1), 127-141.
- Yuharqie, K., & indah Sari, S. (2025). Analisis Peran Kepala Sekolah Dalam Meningkatkan Mutu Manajemen Sekolah Palapa Binjai. *JUMI: Jurnal Multidisiplin Ilmu*, 1(1), 207-216.
- Zahrani, S., & Penmardianto, P. (2024). Pola Komunikasi Orang Tua Terhadap Anak dalam Membiasakan Shalat Berjamaah di Masjid Al-Hasan Desa Simpang Padang Kecamatan Bathin Solapan Kabupaten Bengkalis. *KOLONI*, 3(1), 21-30. <https://doi.org/10.31004/koloni.v3i1.575>
- Zhang, L., & Chung, D. J. (2020). Price bargaining and competition in online platforms: An empirical analysis of the daily deal market. *Marketing Science*, 39(4), 687-706. <https://doi.org/10.1287/mksc.2019.1213>