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Product Development and Branding Strategy to Enhance the Export Competitiveness of Bengkalis Pineaplle

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Abstract

This study aims to formulate effective product development and branding strategies to enhance the export competitiveness of Bengkalis pineapple (Ananas comosus). Pineapple is one of Indonesia's key tropical fruit commodities with significant export potential, yet its competitiveness remains constrained by limited value-added processing, inconsistent product quality, and weak global branding. This research adopts a qualitative descriptive approach using secondary data synthesized from fifteen recent scientific journals (2021–2025) that address product innovation, supply chain efficiency, value addition, and international market strategies for pineapple-based products. The results highlight the importance of adopting sustainable product innovations, circular bioeconomy principles, and integrated branding efforts to strengthen market positioning. The findings are expected to support the development of strategic policies for local agribusiness stakeholders and promote Bengkalis pineapple as a globally competitive export commodity. Additionally, this research provides a conceptual perspective that links innovation, sustainability, and marketing as interconnected elements for building regional competitiveness. The expected outcome is a strategic guideline that can help local producers and policymakers optimize the potential of Bengkalis pineapple within global export markets.

Keywords : Pineapple, product development, branding, export competitiveness, Bengkalis

1. INTRODUCTION

Indonesia possesses substantial potential for tropical fruit exports, including pineapple, which contributes significantly to the *agribusiness* sector. However, despite its high production volume, the export competitiveness of Indonesian pineapple—particularly from Bengkalis Regency—remains limited due to challenges in post-harvest handling, product standardization, and brand recognition in global markets. According to (Study et al., 2021), smallholder-based pineapple *agribusinesses* still experience inefficiencies within *distribution* and *value chains*, leading to reduced profitability and competitiveness. This situation suggests that structural and operational challenges persist at the grassroots level, where small farmers and cooperatives often lack access to modern processing technologies, financial support, and training programs that could help them meet export requirements.



Fig. 1. Bengkalis Pineapple (Ananas comosus)

Recent studies emphasize the importance of innovation in product quality and preservation. (Anggraini et al., 2025) and (Foong et al., 2025) demonstrated that *edible coating* technology can significantly maintain the freshness of minimally processed pineapples, thereby extending shelf life and ensuring quality stability during cold storage. These findings support the need for local producers to adopt post-harvest innovations to meet international standards and reduce quality losses in export *supply chains*. In the context of Bengkalis, the adoption of such innovations could also act as a catalyst

for diversifying local pineapple products, allowing producers to move beyond fresh fruit exports and venture into processed forms with higher economic value.

Moreover, studies by (Paz-Arteaga et al., 2024), (Kocakaplan et al., 2024), and (Beltrán Sanahuja et al., 2025) indicate growing global attention toward *circular bioeconomy* approaches, where pineapple by-products are transformed into high-value materials such as antioxidants, functional food ingredients, or biodegradable packaging. These sustainable innovations not only create additional economic value but also enhance the brand image of pineapple-based industries as environmentally responsible. Applying these approaches in Bengkalis could help local producers align with global sustainability trends, improving export credibility and consumer trust.

On the marketing side, (Ariela, 2024) and (Untoro et al., 2021) emphasized the strategic role of international trade agreements and export competitiveness analysis, particularly for processed pineapple products entering markets such as Japan and the European Union. Their findings reveal that effective *branding*, coupled with strategic utilization of trade partnerships, can improve the visibility and acceptance of Indonesian pineapple in high-demand markets. This indicates that Bengkalis producers need to develop a strong regional identity through consistent *branding* narratives that reflect quality, sustainability, and authenticity, which are highly valued in global markets.

Therefore, this research focuses on integrating *product development* and *branding* strategies to strengthen Bengkalis pineapple's export potential. The study aims to identify innovation pathways and marketing approaches that align with sustainable *agribusiness models*, contributing to the competitiveness of local agricultural products in the global market. By combining theoretical insights with regional context, this research aspires to provide a strategic framework that can be practically applied to enhance the economic performance and international reputation of Bengkalis pineapple.

2. REVIEW OF LITERATURE

Product development plays a crucial role in ensuring the quality and market acceptance of agricultural commodities. (Anggraini et al., 2025) and (Foong et al., 2025) found that *edible coatings* based on carrageenan and soy protein isolates can maintain the physicochemical quality of fresh-cut pineapples, reducing oxidation and microbial activity. Such innovations directly contribute to enhancing export readiness by improving product stability. Additionally, (Santos et al., 2021) proposed valorizing pineapple by-products into functional *bio-ingredients*, providing a foundation for diversified product lines. This evidence supports the notion that innovation-oriented approaches are vital for transforming Bengkalis pineapple from a raw commodity into a competitive, value-added export product.

The concept of *circular bioeconomy* has gained prominence in pineapple research. (Paz-Arteaga et al., 2024) highlighted the potential of transforming pineapple waste into value-added products, promoting sustainable industrial practices. Similarly, (Beltrán Sanahuja et al., 2025) demonstrated the integration of pineapple antioxidants into biodegradable packaging for meat preservation, representing a synergy between food innovation and environmental sustainability. Incorporating such sustainable methods within Bengkalis' production systems could increase international market confidence and serve as a unique selling point for eco-friendly *branding*.

In terms of *agribusiness value chains*, (Study et al., 2021) and (Rai et al., 2023) analyzed the structural inefficiencies in local pineapple *supply chains*, noting the need for coordinated marketing and cooperative models. (Purbiyanti et al., 2025) further emphasized the economic benefits of utilizing pineapple leaf waste for handicraft and fiber industries, aligning with the concept of rural-based value creation. Strenghtening these *value chains* through training, infrastructure, and partnerships could bridge gaps between producers and exporters, improving both profitability and product consistency.

From the export perspective, (Ariela, 2024), (Ayu Fadillah & R Indika, 2024), and (Untoro et al., 2021) explored barriers and opportunities within pineapple export markets. These include logistics challenges, tariff preferences under trade agreements, and *branding* deficiencies. (Hasan et al., 2024) provided evidence from Bangladesh that strengthening marketing channels and producer networks can substantially enhance pineapple's market

access. Collectively, the literature underscores the interconnection between *product innovation*, value addition, and *branding* as determinants of export competitiveness. Hence, Bengkalis can learn from these global and regional insights to develop a holistic strategy combining technological innovation and market positioning.

3. METHOD

This study employs a qualitative descriptive research design based on secondary data analysis. Data sources include fifteen peer-reviewed journal articles published between 2021 and 2025, focusing on pineapple *product innovation*, marketing strategies, and export competitiveness. The research was conducted through *content analysis*, where each journal was systematically reviewed to extract relevant concepts, findings, and strategic implications. The analysis followed three stages: (1) classification of journals by thematic focus—*product innovation*, *value chain*, or marketing; (2) synthesis of recurring strategic themes; and (3) formulation of integrated strategies applicable to Bengkalis pineapple *agribusiness*.

This method was chosen because it allows a comprehensive and contextual understanding of existing knowledge while aligning theoretical insights with regional needs. By employing qualitative synthesis, the study aims to generate conceptual models rather than statistical generalizations, which makes it appropriate for exploratory research of this nature.

The research site context refers to Bengkalis Regency, Riau Province, Indonesia, known for its distinctive honey pineapple variety. The methodological framework draws upon comparative analysis among international and regional studies to derive applicable strategic insights. The resulting conceptual model will guide future empirical research and policy formulation on improving export competitiveness through innovation-driven *branding* and sustainable *product development.* In addition, qualitative approaches enable the identification of underlying drivers of competitiveness—such as innovation culture, *branding* consistency, and stakeholder collaboration—that quantitative data may not fully capture.

4. RESULT & DISCUSSION

Analysis of Bengkalis Pineapple Export Competitiveness

Analysis of the Bengkalis pineapple *value chain* indicates that its primary export challange lies in two key areas: limited product *differentiation* and low *brand equity* in international markets.currently, the majority of exports consist off fresh fruit, which is highly susceptible to price volatity and quality degradation during long-haul shipping. Furthermore, the absence of a collective regional brand specifically for Nenas Bengkalis results in low bargaining power and minimal differentiation from competitiors in tthe global market. This finding implies that Bengkalis must move beyond commodity-based trade and establish a distinct product identity that communicates both quality and cultural value.

Despite these challenges, the region holds untapped potential. The consistent year-round availability of pineapples, along with the community's expertise in cultivation, provides a solid foundation for long-term export strategies. However, realizing this potential requires technological adaptation, better quality assurance systems, and government facilitation for international certification.

To provide a clearer picture of the current situation, a SWOT analysis was developed to identify the key internal and external factors influencing the competitiveness of Bengkalis pineapple exports.

Table 1. Strategic Position Factors

Title 1 (*regular*)	Title 2 (*regular*)	Title 3 (*regular*)
Factor Type	**Spesific Finding**	**Implication of Strategy**

Internal Strength	*Availability of Nanas Moris variety*	Unique selling proposition for product development
Internal Weaknnesses	**Minimal product processing/diversification**	**High vurnerability to fresh market competition**
External Opportunity	**High global demand for processed fruit derivatives**	**Opportunity to create high-value export products**

Proposed Strategic Framework for Product Development and Branding

To address the identified weaknesses and capitalize on external opportunities, a strategy focusing on *Product Development* and Regional *Branding* is proposed. The strategy involves two main components:

1. *Product development*, which includes moving towards processed products (e.g., canned/dried pineapple, *byproduct utilization*) to enhance shelf life and achieve higher margins.
2. *Branding*, which involves creating the "*Nenas Bengkalis*" brand identity based on the unique characteristics of the *Nanas Moris* variety, ensuring market recognition and trust.

This dual approach not only responds to market demands but also aligns with Indonesia's national goal of promoting sustainable and competitive agricultural exports. In practice, implementing this framework will require coordination among farmers, cooperatives, and local industry actors to standardize quality, design attractive packaging, and strengthen storytelling in international promotion

The relationship between strategic components can be summarized by the following equation, demonstrating that *Export Competitiveness* (E_C) is a function of a successful *brand* (B_S) and *value chain performance* (V_{CP}):

$$E_C = \beta 1(B_S) + \beta 2(V_{CP}) + \varepsilon$$

Where B_S is brand success (Recognition, Equity) and V_{CP} is Value Chain Performance (Efficiency, Quality).

This framework illustrates that the improvement of one component reinforces the other; effective *branding* enhances perceived quality, while efficient *value chains* ensure that brand promises are consistently delivered to consumers.

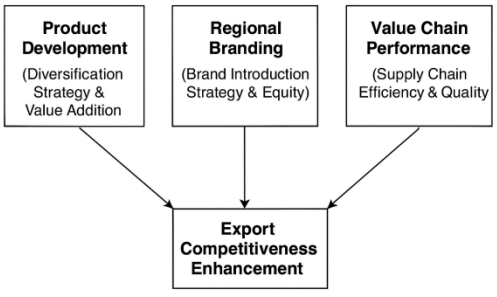


Fig. 2. Conceptual Framework for Enhancing Bengkalis Pineapple Export

Fig.2. Illustrates the conceptual framework underpinning this strategy. The framework visually integrates the key strategic inputs necessary to elevate Bengkalis pineapple's positioning in the international market, ensuring a holistic approach that answers the research problems.

Overall, the discussion demonstrates that achieving export competitiveness is not only about increasing production volume but also about transforming how the product is perceived, valued, and distributed. By developing a unified regional brand supported by innovation, Bengkalis can position its pineapple as a premium, sustainable export commodity.

5. CONCLUSION

The study concludes that enhancing the export competitiveness of Bengkalis pineapples requires an integrated approach combining *product innovation, branding,* and *market integration*. *Product development* through processing diversification and quality improvement must be complemented with strong *branding* reflecting regional identity. Policymakers, cooperatives, and entrepreneurs in Bengkalis should collaborate to build an export-oriented *agribusinessecosystem* supported by technology, sustainability principles, and *digital marketing*. This research contributes to the literature by linking product *development* and *branding* as strategic levers for regional export competitiveness.

In the long term, such collaboration will create a self-sustaining system capable of continuous innovation and adaptation to market dynamics.. Moreover, this research provides a conceptual contribution by linking theoretical constructs of innovation and *branding* with practical implications for regional development. The findings can serve as a basis for further empirical studies or policy formulation aimed at enhancing Indonesia's fruit export competitiveness.

This research contributes to the literature by linking *product development* and *branding* as strategic levers for regional export competitiveness. It also highlights the importance of community participation and government intervention in creating an enabling environment that encourages innovation, cooperation, and sustainable growth within the Bengkalis pineapple industry.

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