

UNLOCKING THE POTENTIAL OF MATARAM'S SOUTH SEA PEARL INDUSTRY FOR SUSTAINABLE GROWTH

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Abstract

The South Sea pearl industry in Mataram is a vital component of the region's creative economy, contributing to local livelihoods and economic growth. Despite its potential, the industry faces challenges such as limited technological adoption, inadequate branding strategies, and fragmented regulatory support, which hinder its global competitiveness and investment appeal. This study aims to analyze the dynamics of the pearl industry in Mataram and propose strategies for sustainable growth and investment.

A descriptive qualitative methodology was employed, utilizing secondary data from academic literature, government reports, and market analyses. The findings highlight the critical role of technological innovation, strategic branding, regulatory reforms, and socio-economic inclusion in enhancing the industry's performance. The integration of the pearl industry with the tourism sector is identified as a key opportunity for diversification and increased revenue generation.

The study underscores the importance of adopting modern production techniques, digital marketing strategies, and inclusive policies to unlock the industry's potential. These insights offer valuable guidance for stakeholders and policymakers, positioning the South Sea pearl industry in Mataram as a model for sustainable development in creative economies. Future research should focus on primary data collection and innovative practices to further advance the field.

Keywords: South Sea pearls; creative economy; investment strategies; technological innovation; sustainable development

INTRODUCTION

The economic potential of marine resources in Indonesia has long been recognized as a significant contributor to national development. With two-thirds of its territory comprising maritime areas, Indonesia possesses extensive opportunities for aquaculture development. Among the various marine commodities, South Sea pearls (*Pinctada maxima*), particularly those cultivated in the eastern regions of Indonesia such as Nusa Tenggara Barat (NTB), Sulawesi, and Papua, have emerged as a globally sought-after luxury product. This unique commodity not only represents a source of regional pride but also holds immense economic value, particularly for the tourism and craft industries in NTB, including Lombok and Mataram.

Lombok's South Sea pearls, renowned for their golden sheen and exceptional quality, have been hailed as "The Queen of Pearls," a designation first articulated during the 1995 Kobe Pearl Conference in Japan. Despite this recognition, the export penetration of Lombok's pearl products remains relatively low compared to domestic sales. Challenges such as limited technological resources, insufficient market access, and intense competition from imported pearls, particularly from China, have constrained the

industry's ability to expand into international markets. These dynamics necessitate an in-depth exploration of the business strategies and their implications for enhancing investment in Mataram's pearl industry.

The South Sea pearl industry in Lombok exemplifies a synergy between traditional craftsmanship and modern economic potential. The cultivation process, requiring meticulous care over several years, produces pearls of unparalleled quality. This artisanal value is further enhanced by its integration with the local jewelry industry, where pearls are often combined with gold and silver to create exquisite pieces. Such products not only attract local buyers but also serve as a key draw for tourists visiting Lombok. However, despite its potential, the pearl craft business in Mataram faces multiple hurdles, including a lack of advanced technology, market intelligence, and professional business management practices. These issues significantly impact the industry's contribution to regional economic growth and investment attraction.

The primary objective of this study is to examine the business patterns within Mataram's pearl craft industry and their effects on fostering investment. By analyzing these dynamics, this research aims to uncover strategies that can bolster the industry's global competitiveness while simultaneously enhancing its local socio-economic impact (Cahayani et al., 2024; Fachrozi et al., 2024). Furthermore, this study addresses a crucial gap in existing literature, as previous studies have primarily focused on the technical and cultural aspects of pearl production rather than its business implications and investment potential.

Extensive studies have examined the dynamics of the creative economy and the role of local industries in regional economic development, with specific focus on the pearl industry in Indonesia. (Sturman et al., 2016) emphasized that the cultivation and commercialization of South Sea pearls have become a cornerstone of Lombok's local economy, contributing significantly to employment and cultural preservation. Their research highlighted how the industry combines traditional craftsmanship with modern marketing strategies, although challenges such as limited technological adoption persist.

A critical study (Gandhiwati & Rahmanita, 2023) explored the potential of pearl tourism in Lombok, identifying it as a unique intersection between the creative economy and the tourism sector. This study revealed that pearls not only function as an economic commodity but also as a cultural symbol that attracts international tourists. However, it pointed out gaps in branding and international market penetration that limit the full potential of Lombok's pearl industry.

(Yuridhista et al., 2023) analyzed the role of government intervention in supporting pearl craft industries in West Nusa Tenggara (NTB). Their findings indicated that government policies, such as the provision of training programs and financial support for small and medium enterprises (SMEs), have improved local production quality. However, they also noted that these interventions are often fragmented and lack the integration needed to sustain long-term growth.

Another significant contribution comes from (Renaldi et al., 2023), who examined the export challenges faced by the South Sea pearl industry in Indonesia. They identified high competition from countries such as China and the Philippines as a major obstacle. Their research suggested adopting digital platforms and improving logistics networks as essential steps to enhance global competitiveness.

In a more recent study, (Lestariningsih et al., 2023) focused on the branding strategies of pearl-based SMEs in Lombok. They highlighted how traditional branding approaches, centered on cultural identity, resonate well with local and domestic consumers but are less effective in capturing the international market. Their study proposed integrating modern branding techniques, such as digital

marketing and storytelling, to improve market outreach.

The significance of technological innovation in the pearl industry was examined by (Liu et al., 2022), who explored the use of technology in pearl cultivation and processing. Their findings revealed that while technology adoption improves production efficiency, it remains underutilized due to high costs and limited expertise among local producers. They argued for the establishment of technology transfer programs to bridge this gap and enhance productivity.

Lastly, (Rostiana & Djulius, 2019) studied the socio-economic impacts of the pearl industry on local communities in Mataram. Their research showed that the industry contributes to reducing poverty by providing employment opportunities and promoting skills development. However, they also highlighted the uneven distribution of benefits, with larger businesses often outcompeting smaller ones.

The theoretical underpinnings of this research draw upon concepts of creative economy and investment theory. The creative economy framework, as defined by (Ilhamuddin et al., 2021), emphasizes the importance of intellectual property, innovation, and cultural uniqueness in generating economic value. This aligns closely with the dynamics of Mataram's pearl industry, where traditional craftsmanship intersects with global luxury markets. Additionally, investment theory provides a lens to examine the flow of capital and the factors influencing investment decisions in the creative sector.

Research on investment strategies, such as those outlined by (Hu et al., 2024), highlights the significance of creating a conducive business environment, technological adoption, and market diversification in attracting investors. Applying these theoretical perspectives, this study aims to propose actionable recommendations for enhancing the business and investment landscape of Mataram's pearl industry.

This research makes a novel contribution by integrating the creative economy framework with a localized analysis of the South Sea pearl industry in Mataram. Unlike existing studies that predominantly focus on either the cultural or technical aspects of pearl production, this research emphasizes the strategic business practices and their implications for investment attraction. Additionally, the study employs a multidisciplinary approach, combining insights from economics, business management, and tourism to provide a comprehensive understanding of the industry's potential.

By addressing these dimensions, the study not only enriches academic discourse but also offers practical insights for policymakers, business owners, and investors. The findings are expected to inform strategies that enhance the competitiveness of Mataram's pearl industry in both domestic and international markets, ultimately contributing to the region's economic resilience and growth.

METHODS

This study adopts a descriptive qualitative methodology to analyze the dynamics of the South Sea pearl industry in Mataram and its potential to attract sustainable investment. The qualitative descriptive approach is particularly well-suited for this research as it provides a systematic and detailed examination of current conditions and their underlying factors. By relying on secondary data sources, the study seeks to explore and interpret key aspects of the pearl industry, including business practices, market dynamics, and socio-economic impacts within the context of regional development.

The data for this research were obtained from various credible secondary sources, including academic literature, government reports, and industry publications. Academic studies provided a foundational understanding of the broader dynamics of creative economies and their intersection with

regional development. Government reports, such as those issued by the Ministry of Tourism and Creative Economy and regional planning agencies, offered insights into relevant policies and initiatives aimed at supporting the pearl industry. Additionally, trade and market data, including export-import statistics and consumer trends, were incorporated to contextualize the economic performance and global competitiveness of the South Sea pearl industry in Mataram.

The analysis involved systematically categorizing and interpreting the collected data to identify patterns and relationships within the pearl industry. The data were organized thematically, focusing on aspects such as technological challenges, market opportunities, regulatory frameworks, and socio-economic impacts. These themes were then analyzed in the context of Mataram's economic and cultural environment to draw meaningful insights into the industry's potential for growth and investment. Comparative analyses were also conducted to highlight areas where the Mataram pearl industry aligns with or diverges from broader trends in the global pearl market.

To ensure the validity and reliability of the findings, the research applied rigorous evaluation and cross-referencing methods. Triangulation was employed by comparing data from multiple sources to ensure consistency and accuracy. Each source was critically evaluated based on its relevance, credibility, and methodological soundness. Furthermore, preliminary interpretations were reviewed by experts in the fields of creative economy and regional economic development to enhance the robustness of the analysis.

While this methodology provides a comprehensive framework for understanding the pearl industry in Mataram, certain limitations must be acknowledged. The reliance on secondary data means that recent developments or nuanced stakeholder perspectives may not be fully captured. Additionally, the study's focus on Mataram as a case study may limit the generalizability of the findings to other regions with different socio-economic and cultural contexts. Future research involving primary data collection, such as interviews or field observations, would complement and enrich the insights provided by this study.

By employing a descriptive qualitative approach, this research aims to deliver a nuanced understanding of the South Sea pearl industry in Mataram. It provides actionable insights into the industry's potential as a driver of regional investment and sustainable economic growth, offering a foundation for further exploration and practical application.

RESULTS AND DISCUSSION

The South Sea pearl industry in Mataram embodies a unique convergence of traditional craftsmanship and modern economic potential. As a cornerstone of the region's creative economy, the industry is intricately linked to local culture, socio-economic development, and global market trends. This section examines the dynamics of the pearl industry in Mataram through a descriptive qualitative lens, analyzing key aspects such as technological challenges, market accessibility, regulatory frameworks, socio-economic impacts, and integration with the tourism sector.

Technological Challenges and Opportunities

The production of South Sea pearls requires precision and advanced techniques, yet the pearl industry in Mataram faces significant technological barriers. Studies, such as those by (Sturman et al., 2016), highlight that the adoption of modern technology in pearl cultivation and processing remains limited. While traditional methods have preserved the artisanal value of pearls, they often result in

inconsistencies in quality and inefficiencies in production. This technological lag places Mataram at a disadvantage compared to international competitors, such as Japan and China, where technology-driven production methods are the norm.

Schumpeter's innovation theory, which posits that technological advancement drives competitive advantage, underscores the need for Mataram's pearl industry to adopt innovation as a strategic priority. However, the high costs associated with modern equipment and the limited technical expertise of local producers create barriers to widespread adoption. Government-led initiatives, such as technology transfer programs and subsidized equipment procurement, could address these gaps. Collaborative efforts with research institutions and technology providers are also critical to introducing cost-effective and practical solutions tailored to the local context.

Additionally, advancements in post-harvest technology could significantly enhance the marketability of pearls. Processes such as color enhancement, surface polishing, and durability treatments can add value to the final product, making it more competitive in the luxury goods market. By investing in these areas, the pearl industry in Mataram can position itself as a leader in high-quality pearl production while preserving its artisanal heritage.

Market Accessibility and Branding Strategies

The market dynamics of the South Sea pearl industry in Mataram are characterized by robust domestic demand but limited global penetration. Local markets account for a substantial share of sales, with pearls being a popular commodity among tourists visiting Lombok. However, as (Gandhiwati & Rahmanita, 2023) point out, the industry's ability to penetrate international markets is hindered by high competition and inadequate branding strategies.

Porter's Five Forces framework provides a useful lens for understanding these challenges. The high bargaining power of buyers in international markets, coupled with the threat of substitutes from synthetic or lower-cost pearls, exerts significant pressure on Mataram's producers. To mitigate these challenges, the industry must adopt innovative branding strategies that emphasize the uniqueness of Lombok's pearls.

Digital marketing platforms offer a promising avenue for expanding market reach. By leveraging e-commerce websites, social media, and virtual showrooms, producers can showcase their products to a global audience. Modern branding techniques, such as storytelling, can further enhance the appeal of Lombok's pearls by highlighting their cultural significance and the meticulous craftsmanship involved in their creation. For instance, emphasizing the "Queen of Pearls" designation, first introduced at the 1995 Kobe Pearl Conference, could reinforce the brand's association with quality and exclusivity.

Moreover, partnerships with luxury brands and international retailers could provide Mataram's pearls with access to premium markets. Collaborative marketing campaigns that align Lombok's pearls with global trends in sustainability and ethical sourcing could also resonate with environmentally conscious consumers.

Regulatory Frameworks and Investment Climate

The regulatory environment plays a pivotal role in shaping the investment potential of the pearl industry in Mataram. (Samodra et al., 2024; Yuridhista et al., 2023) note that fragmented government policies often hinder the industry's development. While financial support programs for small and medium enterprises (SMEs) exist, they are frequently underfunded or lack the coordination necessary to create meaningful impact.

Institutional economic theory emphasizes the importance of stable and supportive regulatory frameworks in fostering economic growth. For Mataram's pearl industry, this necessitates a cohesive policy approach that integrates support for SMEs, incentives for technology adoption, and mechanisms for market development. The establishment of a dedicated pearl industry task force could streamline these efforts, ensuring that resources are allocated effectively and that producers receive the support they need.

Additionally, creating a favorable investment climate is essential for attracting both domestic and international investors. Tax incentives, subsidies, and infrastructure development could make Mataram's pearl industry more attractive to potential investors. Clear and consistent regulations regarding export procedures and quality standards would also enhance investor confidence and facilitate market expansion.

Socio-Economic Impacts

The pearl industry in Mataram has significant socio-economic implications, particularly in terms of employment generation and skill development. (Rostiana & Djulius, 2019; Vallas et al., 2022) emphasize that the industry provides livelihoods for a large segment of the local population, from pearl farmers to artisans and retailers. However, the distribution of these benefits is uneven, with larger businesses often dominating the market and marginalizing smaller producers.

Inclusive growth theory advocates for economic development that benefits all stakeholders equitably. In this context, fostering cooperatives or producer associations could provide smaller players with access to shared resources, training, and market opportunities. Such initiatives would not only promote equity within the industry but also enhance its overall resilience and competitiveness.

Furthermore, the industry's potential to empower women entrepreneurs is noteworthy. Many pearl-related businesses in Mataram are owned and operated by women, who play a vital role in sustaining the industry. Providing targeted support for female entrepreneurs, such as access to credit and capacity-building programs, could amplify the socio-economic impact of the pearl industry.

Integration with the Tourism Sector

The integration of the pearl industry with Mataram's tourism sector offers a unique opportunity to create a synergistic relationship that benefits both industries. Research by (Awaloedin et al., 2024; Yuridhista et al., 2023) highlights the potential of pearl-related tourism to generate additional revenue streams. Tourists visiting Lombok are often drawn to cultural experiences, and showcasing the pearl cultivation process or hosting pearl-themed festivals could enhance their engagement.

Cultural economy theory, which views culture as an economic asset, underscores the value of integrating cultural heritage with economic activities. By positioning pearls as both a luxury product and a cultural artifact, the industry can attract tourists seeking authentic and enriching experiences. Collaborations between the tourism board and pearl producers could result in innovative initiatives, such as guided tours of pearl farms, interactive workshops on pearl crafting, and curated exhibitions that celebrate Lombok's pearl heritage.

Additionally, integrating sustainability practices into these initiatives could appeal to eco-conscious tourists and align with global trends in responsible tourism. For example, highlighting the environmentally friendly aspects of pearl farming and the efforts to preserve local marine ecosystems could enhance the industry's reputation and attract niche markets.

Strategic Recommendations

The South Sea pearl industry in Mataram possesses significant potential to contribute to regional economic development and position itself as a competitive player in the global market. However, realizing this potential requires a multi-faceted and strategic approach that addresses existing challenges while capitalizing on emerging opportunities. The following recommendations provide a roadmap for industry stakeholders, policymakers, and investors to enhance the industry's performance and long-term sustainability.

First, investment in technology and innovation must be prioritized. The adoption of advanced technologies for pearl cultivation, processing, and post-harvest treatment can significantly improve production efficiency and product quality. For example, automated monitoring systems for water quality and oyster health could reduce losses and enhance yield consistency. Advanced finishing techniques, such as surface polishing and color enhancement, could increase the market value of pearls, particularly in luxury markets. To facilitate this, the government and private sector should collaborate to establish technology transfer programs, making modern equipment accessible to local producers at subsidized costs. Furthermore, partnerships with academic institutions and research centers can drive innovation tailored to the unique needs of Mataram's pearl industry.

Second, capacity-building initiatives for local producers and artisans are essential to ensure that technological advancements are effectively implemented. Training programs focused on technical skills, business management, and digital literacy can empower SMEs to adopt and leverage new technologies. These programs should be inclusive, targeting marginalized groups such as small-scale producers and women entrepreneurs who form a significant portion of the industry's workforce. Establishing regional training hubs or centers of excellence dedicated to the pearl industry could serve as a platform for continuous learning and knowledge sharing.

Third, branding and marketing strategies must evolve to align with the demands of modern consumers and global market trends. The unique cultural heritage of Lombok's pearls provides a powerful narrative that can differentiate them from competitors. Emphasizing the artisanal craftsmanship and sustainable practices behind South Sea pearls can resonate with environmentally conscious consumers and luxury markets. Digital marketing platforms, including e-commerce websites, social media campaigns, and virtual showrooms, offer cost-effective channels for reaching international audiences. Integrating storytelling into branding—such as showcasing the journey of a pearl from cultivation to craftsmanship—can enhance consumer engagement and build emotional connections with the product.

Collaborations with global luxury brands and high-end retailers represent another avenue for expanding market access. Such partnerships could position Mataram's pearls within premium product lines, enhancing their prestige and visibility. Additionally, attending international trade fairs and exhibitions could provide direct exposure to global buyers while establishing Mataram as a credible source of high-quality pearls.

Fourth, regulatory reform and policy coordination are critical for creating a conducive environment for investment and industry growth. The establishment of a dedicated task force or advisory body for the pearl industry could streamline policy implementation and ensure that resources are allocated effectively. Simplifying export procedures and standardizing quality certification processes would enhance the ease of doing business, making Mataram's pearls more attractive to international buyers and investors.

Tax incentives and subsidies for technology adoption, research and development, and infrastructure projects could further stimulate investment. For instance, providing tax breaks to businesses that integrate sustainable practices into their operations could encourage broader adoption of environmentally friendly methods. A regulatory sandbox approach could also be introduced, allowing producers to pilot innovative business models and payment systems, such as integrating blockchain for supply chain transparency.

Fifth, fostering synergies between the pearl industry and the tourism sector offers a unique opportunity to amplify the industry's economic impact. Developing pearl-themed tourism experiences, such as guided tours of cultivation farms and workshops on pearl crafting, could attract both domestic and international tourists. These activities not only generate additional revenue but also serve as marketing tools that showcase the cultural and economic value of Lombok's pearls.

Collaborations between the tourism board and pearl producers could result in initiatives like pearl festivals, exhibitions, and cultural showcases that celebrate the region's rich heritage. For example, an annual "Pearl Week" event in Mataram could feature craft demonstrations, fashion shows incorporating pearl jewelry, and educational seminars on sustainable pearl farming. Integrating these activities with broader tourism campaigns would position Mataram as a destination that offers both cultural authenticity and luxury experiences.

Finally, promoting sustainability and social inclusion is essential for ensuring the long-term viability of the pearl industry. Adopting eco-friendly farming practices, such as reducing the use of harmful chemicals and protecting marine ecosystems, aligns with global trends in responsible consumption. Highlighting these efforts in marketing campaigns could attract niche markets of eco-conscious consumers while strengthening the industry's reputation.

Social inclusion initiatives, such as forming cooperatives or producer associations, can empower smaller players by providing access to shared resources, training, and collective bargaining power. These structures can also facilitate knowledge transfer and innovation dissemination, ensuring that the benefits of industry growth are distributed equitably. Supporting female entrepreneurs, who play a prominent role in pearl-related businesses, through targeted credit schemes and capacity-building programs would further enhance the industry's socio-economic impact.

CONCLUSION

This study has analyzed the South Sea pearl industry in Mataram, focusing on its challenges, opportunities, and potential to attract sustainable investment. Using a descriptive qualitative approach, the research highlights the critical role of technological adoption, strategic branding, regulatory reform, and socio-economic inclusion in driving industry growth. The findings contribute to understanding how traditional industries like pearl cultivation can align with modern economic frameworks to enhance competitiveness.

By integrating theoretical insights such as innovation and cultural economy theories, this study provides a basis for actionable strategies. Investments in technology, digital branding, and regulatory coordination are identified as key to unlocking the industry's potential. Furthermore, the synergy between the pearl industry and tourism offers a promising pathway for diversification and revenue growth.

This research emphasizes the need for inclusive development to ensure equitable benefits,

particularly for small producers and marginalized groups. Future studies should incorporate primary data and explore innovations like blockchain and eco-friendly practices to advance the field further. The findings offer valuable guidance for policymakers, stakeholders, and investors, positioning Mataram's pearl industry as a model for sustainable growth in creative economies.

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