

Halal Tourism and Industry in Blue Economy (Analysis on Kepulauan Riau Challenges Towards the Cross Border strategic location with neighbouring countries Singapore and Malaysia – Case Study Pulau Penyengat)

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Abstract. Kepulauan Riau's strategic geographic position, particularly its proximity to Singapore and Malaysia, offers immense potential for the development of Halal tourism and industry within the Blue Economy framework. This research focuses on Pulau Penyengat Island, a historically and culturally significant Islamic site, and examines the challenges and opportunities posed by the maritime border issues in this region. The study employs a qualitative methodology, utilizing interviews with local stakeholders, policymakers, and industry experts, alongside document analysis of regulatory frameworks and regional agreements. Key themes identified include cross-border cooperation, the impact of maritime border disputes on tourism development, and the integration of Halal standards in tourism and industry. Findings indicate that while Pulau Penyengat is poised to become a focal point for Halal tourism, challenges related to maritime boundaries and regulatory inconsistencies with neighboring countries complicate its progress. By addressing these challenges through targeted policies and collaborative frameworks, Kepulauan Riau can capitalize on its strategic location to enhance its Halal industry and contribute to sustainable Blue Economy initiatives. This study provides actionable insights for policymakers seeking to navigate maritime border complexities while promoting economic and cultural growth.

1 Introduction

The Riau Island province, well known as Kepulauan Riau is a strategic border location with these neighbouring countries namely Singapore and Malaysia. These neighbouring countries sharing its maritime boundaries with its potential for the optimalization of its maritime and tourism sectors. Situated in the heart of the crossroads of the world's busiest shipping lanes.

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This province is very well-positioned to the benefit from the concept of the blue economy as part of promoting the sustainable of ocean resources not only to improve the livelihood for economic growth but importantly preserving marine ecosystem.

Challenges towards the cross border location , this region has tremendous potential as tourism sector especially on halal or Muslim friendly tourism. The characteristic of Malay’s in Singapore and Malaysia is a targeted market for tourism sector. One of the most visit intention is Pulau Penyengat which located at Tanjungpinang, the capital of Riau Island Province. Penyengat Island is a key destination for cultural, historical, and religious tourism, with heritage from the Malay Kingdom of Riau – Lingga – Johor-Pahang. However, it has not been fully developed [1]. Visitor numbers to Penyengat Island are still lower than those to Tanjungpinang, even though both are in the same area. To tap into Penyengat Island's potential as a Halal tourism spot, solutions need to be found to increase its appeal. The halal tourism which accommodate to the requirement of Muslim’s traveller by adhering to Islamic guidelines is growing rapidly worldwide [2]. Below is the tourism map of Riau Archipelago



Fig. 1. Tourism Map of Kepulauan Riau
(Source: Tourism Department of Kepulauan Riau, 2011)

Not only covers towards the tourism sector , halal industry scope also includes various sectors such as food and beverages, pharmaceuticals, and cosmetics. An urgent requirement to create a strong halal certification system to enable local businesses in adhering to halal standards. Kepulauan Riau region could take advantage of the increasing global demand for halal products. This approach would not only enhance the local economy but also position the Riau Islands as a center for halal products and services, further boosting its strategic importance as a tourism destination while contributing to the blue economy concept as an integrative development approach [3].

Penyengat Island has been chosen by the Ministry of Tourism as a pilot project for halal tourism in the Riau Islands Province. The rich cultural and Islamic heritage legalised and designated as the National Cultural Heritage Area in 2018 and plays a crucial role in Malay Islamic studies. Historically, it was closely linked with Singapore and Malaysia as part of the Riau-Lingga Malay Kingdom leveraged not only its unique identity for both Singapore and

Malaysia, two major sources of tourists especially those Malays races , makes it an ideal entry point for visitors. To attract the segmented tourists, the development of halal tourism on Penyengat Island presents a unique opportunity. The promotion of this segment could appeal to both Muslim and non-Muslim tourists due to its broader service offerings.

The criteria concept of halal tourism destinations applies to Penyengat island . The Ministry of Tourism of Indonesia stated that halal tourism destination must at least meet three criteria, consisting of , amenity, that is, the parameters related to the availability of hotels or halal lodging places, as well as other facilities and infrastructure. Second, attractions, namely the availability of halal supporting facilities such as; the existence of halal tourist destinations, halal culinary, worship facilities and infrastructure, and the number of tourist visits [4].

Indonesai has been holding the Indonesian Muslim Travel Index (IMTI), an adaptation index of the Global Muslim Travel Index (GMTI) issued by MastercardCrescentRating (2019). The third parameter is the accessibility, availability of access, both transportation, information and supporting infrastructure. Included in this case, the efforts of the relevant Regional Government and stakeholders to carry out promotion and socialization regarding halal tourism in the relevant regions.

Due to the boundaries maritime., the threats to the ocean ecosystem is the illegal fishing which lead to the environmental degradation has to be monitored closely .With approximately 2000 m and a width of 850 and is 2 km away, bordered by the sea , Pulau Penyengat or Penyengat islang requires strong maritime management and close cross-border collaboration, Ensuring the sustainable development of the maritime sector is vital not only to safeguard marine resources but also to sustain various economic activities that depend on a thriving marine ecosystem. The existence as tourism destination has elaborated the blue economy framework into the concept of halal tourism and industry to ensure the sustainability by comprehending the ocean-marine environmental . Kepulauan Riau’s government has clasify Pulau Penyengay as best practices of religious tourism destination



Fig. 2. Pulau Penyengat as Religious Tourism Destination
(Source: Barenlitbang Kepulauan Riau 2022)

The strategic maritime position giving a chance to develop tourism and preserve it’s rich heritage on social and cultural aspect merge the potential with sustainable growth. Additionally, the island’s surrounding waters, part of a delicate marine ecosystem, present opportunities for development within the blue economy framework. Through sustainable management, Pulau Penyengat could foster eco-friendly tourism and support marine conservation. By integrating these efforts with its cultural heritage, the island can establish a unique identity as a destination that respects its past while contributing to the future sustainability of the Riau Islands and beyond.

Main research focus is highlighted the relationship between halal tourism, blue economy principles towards the Penyengat island as one of tourism destination in Kepulauan Riau . As one of archipelagic region which having the largest ocean waters. Penyengat island's economic development as tourism destination benefitted from its ocean economy, which provides employment across key sectors in the tourism sectors. Amongst of the economic activities such as marine capture fisheries, aquaculture, and fish processing contributed to the most of its region's economic value, However, as tourism destination Penyengat island facing the sustainability challenges, including unsustainable marine practices, pollution, and climate change, hinder the growth of this sector which clearly explained the Goal 14 of SDGs focused on the sustainable use of ocean resources [5].

Pulau Penyengat and the Riau island province gaining not only the major benefits as prospective halal tourism destination in generating income and employment for the local people . The challenges specifically is how the effectiveness of the halal tourism ecosystem is primarily determined by the role of the government as an initiator and a policymaker. The halal tourism ecosystem must be run with universal Islamic norms, and it must be avoid exclusive rules.

2. Research Problem Identification

From above background shown that despite its strategic location and its proximity to major economic hubs namely Singapore and Malaysia, the struggled in balancing the potential in the maritime sector and the implementation of halal tourism industry identified obstacles of unsustainable management of marine resources, environmental degradation hinder the region's ability to capitalize on its geographic advantages. This situation has been in contra to the global halal market which expanding rapidly. The region have not yet fully utilized their unique Islamic cultural heritage and pristine marine environments to position themselves as a prominent halal tourism and industry hub.

The rich heritage of Malay culture and Islamic civilization showcases significant untapped potential. However, there were no integrative and cohesive strategy that combines s blue economy principles with the growth of halal tourism and industry. This has led to doubt opportunities for both economic development and sustainability. Identifying the relation between the halal tourism and industry towards the blue economy concept facing the challenges as cross border strategic location with neighbouring countries Singapore and Malaysia , Pulau Penyengat with its rich cultural heritage and marine resources within the blue economy framework has also having supportive communities which could be a positive indicator . Expediting the implementation towards the blue economy concept is greatest path to achieve Sustainable Development Goals (SDGs) where empowering communities in Indonesia is one of the road-to to achieve the SDGs [6].

This research highlights several critical issues impacting the development of a sustainable halal tourism and industry sector in the Riau Islands. Firstly , it identifies key barriers, such as regulatory challenges, insufficient infrastructure, and limited cross-border collaboration, all of which hinder progress. The study also explores the potential for cross-border cooperation with neighboring countries like Singapore and Malaysia, [7] emphasizing the importance of building a unified regional strategy that benefits all stakeholders and strengthens the Riau Islands' competitive edge. Apart from above identification , creating integrated strategies by combining blue economy principles with the growth of the halal tourism and industry sectors is a must to ensure that economic development is balanced with environmental sustainability and cultural preservation.

Pulau Penyengat serves as a case study to demonstrate both the challenges and opportunities within this framework, showing how it can be developed as a model for sustainable halal tourism that honors its cultural and natural heritage. Overall, the study

provides practical recommendations for overcoming existing limitations and building a sustainable, competitive, and resilient halal tourism and industry sector. By doing so, the Riau Islands can enhance its role in the regional blue economy and contribute to the province's overall economic growth.

3 Methodology Research

The research using a qualitative methodology which exploring the correlation between halal tourism and the blue economy within the maritime context, focusing on Pulau Penyengat as tourism destination. This approach is particularly suitable for understanding the complex socio-economic and cultural dynamics involved in developing a sustainable halal tourism industry that aligns with blue economy principles.

Data collection consisted of compilation from in-depth interviews, focus group discussions, and participant observations. The interviews is targeted the key stakeholders, including local government officials, tourism operators, community leaders, and religious authorities. These methods allowing to capture nuanced insights into the challenges and opportunities associated with promoting halal tourism in a maritime region with strategic cross-border proximity to Singapore and Malaysia.[8]

The sampling used for selected participants who have direct experience and knowledge relevant to the research objectives while thematic analysis will be applied to identify key themes [9] related to the development of halal tourism within the blue economy framework. The regulatory challenges, community engagement, and potential for sustainable development is emerged to elaborate the findings [10].

4 Result and Discussion

4.1 Halal Tourism concept

An initial findings observed that halal tourism in this region is evolving towards a concept more aligned with "Muslim-friendly tourism." This shift reflects the need to optimize the development of the Riau Islands especially Pulau Penyengat as a destination for halal or Muslim-friendly tourism [11]. One of the key challenges identified is understanding the preferences of halal tourists, which may differ from those of non-halal tourists. This requires consideration of how market preferences influence the development of products and services within the industry. In Pulau Penyengat where island's location is surrounding within the maritime areas, both environmental and sustainability issues also play a significant role, as the implementation of the blue economy demands sustainable management of marine resources. The research assessed the potential negative environmental impacts of halal tourism development and propose appropriate mitigation strategies.

Additonally, research highlighted the importance of public policies, particularly those at the regional, provincial, national, and international levels, which significantly affect the development of halal tourism and the blue rconomy . Survey also identified the lack of policy alignment or overlapping regulations may complicate the implementation process.

Pulau Penyengat has made strides toward establishing itself as a halal tourism destination through various branding efforts. For instance, in 2017 appeared in Halal Trip.com, where a guidebook detailed the island's tourism facilities and amenities.



Fig. 3. Halal TourismE-Book Guide on Penyengat Island
(Source HalalTrip.com 2017)

The research also points to regional competition, as the Riau Islands must compete with other Southeast Asian destinations, such as Singapore and Malaysia, which also offer halal tourism. Identifying how the Riau Islands can differentiate itself and attract tourists from neighboring countries is essential. Stakeholders, including representatives from POKDARWIS Pulau Penyengat, have raised concerns about potential resistance to change, as local communities and industry players may be hesitant to adopt the necessary shifts toward halal tourism within the blue economy framework. An inclusive and participatory approach is required to address these challenges. There is no consistent agreement on the terminology and concept of halal or Muslim-friendly tourism, as this concept is relatively new and has not been systematically integrated into many regions, including the Riau Islands' medium-term development plan (RPJMD) [12]. The need to understand the potential halal tourism market in the Riau Islands is pressing, particularly with regard to demand from both domestic and international Muslim tourists.

There is a gap in integrating halal principles with blue economy strategies, as the two may have conflicting objectives. Halal tourism adheres to sharia principles,[13] while the blue economy focuses on sustainability and responsible marine resource management. Data and information limitations pose a challenge, particularly in terms of comparing halal tourism development in the Riau Islands with that of Singapore and Malaysia. The strategic location of the Riau Islands at the crossroads of Singapore and Malaysia brings complex cross-border regulatory challenges. These must be considered when developing the halal tourism industry [14].

Infrastructure limitations remain a significant barrier to the growth of halal tourism. Adequate accommodation, transportation, and other facilities that meet international standards are essential for development. A comprehensive and detailed investigation into these challenges will provide a solid foundation for formulating effective strategies for sustainable halal tourism development in the Riau Islands within the context of the blue economy.

4.2 Blue economy framework

The framework concept on the blue economy laid down emphasizing the promotion of the sustainable development concept in the Riau Islands . Pulau Penyengat’s challenges is to balance the economic growth with protecting marine and coastal environments. To incorporate with sustainable practices into tourism, especially on Pulau Penyengat can effectively utilize its rich maritime resources while maintaining ecological health strategy

supports economic stability and ensures that the natural heritage of the Riau Islands remains intact for future generations.

The strength of being strategically located in the border areas [7] can enhance the Riau Islands' status as a halal tourism destination but critical concern is on the environmental sustainability towards the rich marine ecosystem facing the threats from coastal degradation, illegal fishing and pollution. The development of tourism sector is hazardous to the potential for environmental damage, which calls for a balanced approach prioritizing conservation. Sustainable practices must be integrated into all aspects of tourism development to ensure that the natural resources upon which the region relies are preserved for future generations. This could involve engaging local communities in marine conservation initiatives and promoting eco-friendly tourism practices that mitigate environmental impact.[15]

The findings underscore the critical need for an integrated approach that aligns halal tourism development with the principles of the blue economy, which advocates for the sustainable management of marine resources in conjunction with economic growth. By adopting a holistic perspective, stakeholders can formulate tourism initiatives that not only attract visitors but also prioritize environmental protection. This integration is essential to ensure that economic benefits are achieved without compromising ecological integrity, thereby safeguarding the region's natural assets for future generations.

4.3 Intersection Halal Tourism and Blue Economy

Analysing how 'halal' tourism primarily which not only targets Muslim consumers but it is not exclusively targeted to Muslim itself. To get more understanding, in Arabic, 'halal' means 'permissible' or 'lawful' under Islamic guidelines. It is also linked with 'toyyibaan,' meaning 'good' or wholesome for people. [16] This concept ensures that halal products and services, including those in the halal tourism, are high-quality and beneficial. Many non-Muslims also embrace halal as a lifestyle choice because it emphasizes values like animal welfare, social responsibility, environmental sustainability, care for the planet, fairness in economics and society, and ethical investments [6].

The concept of halal tourism guided by Islam as a religion giving a platform of guidance in holistic ways of life which also supports the principles of the blue economy. These principles include creativity, innovation, using local resources, and recycling materials to better manage natural resources. The intersection of the halal tourism can help improve both the environment and the local economy. However, it can also harm the environment when local people and visitors misuse natural resources. Waste management is another issue of concern. The Blue Economy aims to increase skills, innovation, and creativity to use natural tourism resources more efficiently.

The principles of sustainable in blue economy, encompassing new sources of food, medicine, and renewable energy, is increasingly recognized as critical for future human security. There is urgent need to protect the ocean's capacity to generate economic, environmental, and social benefits. Achieving sustainable growth in this sector requires collaborative action to enhance both economic growth and resource management [5].

As stated at the Report of Indonesia's Blue Economy Roadmap 2023-2045 consolidates policies and programs to support sustainable ocean economies, aligning with the Vision 2045 to establish Indonesia as a sovereign, resilient, and advanced archipelagic nation. The roadmap outlines priority sectors and targets for economic growth, emphasizing stakeholder collaboration and forward-looking policies to ensure marine resources are well-managed and contribute to high economic growth.

4.4 Cross-border cooperation towards tourism aspect

The history implementation of positioning the cross-border cooperation with both neighbouring countries Singapore and Malaysia has promise the promoting of regional economic development and was regarded as a blue print towards the development for other regional cooperation initiatives [17]. But at the same time, the progress of triangle cooperation in many ways lacks sustainability. Reasons are various, but political coordination both regionally and internationally are hurdles factor. Apparently, the conventional top-down decision-making process needs a more balanced relationship between the three countries to level up the effectiveness on not only the administration but also to the operations on local affairs. Tourism sectors requires full attention to the environment 's threatens to the natural resources, and security. Being a border region, there should a comprehensive strategy to manage these issues. by focusing to strengthening a blue economy concept maritime defense, enhancing diplomacy, strengthening institutions that oversee maritime security, and boosting the economic welfare of people living on the border islands [14].

This research points out several important aspects namely tourism infrastructure development which is still a challenge apart from that as Penyengat island is a Malay kingdom heritage which cultural sensitivity needs to be maintained. Amongst the legal and bureaucratic that challenges namely the implementation of halal standards in tourism in Penyengat island were the halal certification requires attention for bureaucratic to simplify the process for the micro level community. There is still no blue print or master plan on tourism halal destination concept accommodated in Kepulauan Riau RPJMD (Rencana Pembangunan Jangka Menengah Daerah for the year of 2024-2029).

Cross border tourism collaboration with Singapore and Malaysia is the way to activity promotes the economic development of these geographical regions. Border tourism destinations are often characterized by the political and socioeconomic advantages that it offers, such as lower taxes or more permissive policies, favouring the development of certain types of tourism [7].

Most of the regulatory framework to many border policies which can definitely affected the tourists flow, in many circumstances may arise such as socio-cultural ones on both sides of the border while different policies or the vary on economic circumstances in each of the countries or border areas can be streamline by sharing regulatory framework on economic , social and cultural aspect [18].

The challenges towards the cross-border tourism are dominated by governance that has not been maximized, which includes unresolved legal issues, lack of management of natural resources, communication, criminal & drug smuggling, lack of border control, regulation, physical border arrangement and also the gap of tourism infrastructure comparing between Singapore, Malaysia and Indonesia. The promotions and marketing were in-contrary ineffective as well.

This research broadens the conversation about the environmental sustainability of Pulau Penyengat, particularly concerning the risks posed by illegal fishing, coastal degradation, and pollution. It discusses how eco-friendly tourism practices can be harmonized with the development of halal tourism. The sustainability of Pulau Penyengat hinges on active community participation, which is essential for sustainable development. There are possibilities to enhance tourism offerings, develop skills, and adopt sustainable methods. Actions that harm the environment, such as illegal fishing and pollution, undermine the principles of a blue economy. These insights extend beyond Pulau Penyengat and can serve as valuable guidance for other destinations seeking to thrive in the halal tourism sector. By tackling these issues and leveraging available opportunities, Pulau Penyengat and similar locations can improve their competitiveness, sustainability, and inclusivity, thereby fostering economic growth and cultural preservation.

The halal tourism sector presents a viable business opportunity that can significantly contribute to long-term sustainability where its sustainability criteria should be incorporated into the certification process for halal-friendly tourism products and services. Penyengat island as halal tourism destinations or moslem friendly destination can offer financial and tax incentives to halal tourism organizations, recognizing their role in preserving cultural heritage and Islamic values, thereby promoting social sustainability. Moreover, developing training programs aimed at raising environmental awareness among SMEs in the halal tourism industry is crucial. Islamic banks can also play a pivotal role in fostering sustainability within this sector by providing essential financing to start-ups, ensuring that funding criteria prioritize sustainability in project proposals.

Halal-friendly tourism and sustainability, offering a conceptual exploration of their interconnection. As halal tourism continues to thrive globally, there remain ample opportunities for future research in this area. Additionally, potential challenges that hinder the full adoption of sustainability within the halal tourism sector warrant further investigation [19].

Policymakers in Indonesia should define clearer, actionable recommendation to overcome above challenges. Amongst of the recommendation is towards the implementation of the halal ecosystem concept within Indonesia's public policy has yielded considerable social and economic benefits [20].

Legislation such as Law Number 33 of 2014 has been pivotal in establishing and enhancing infrastructure and the halal product certification process, thereby bolstering trust and integrity in halal offerings. Furthermore, the rising Islamic economic literacy index reflects a growing public awareness of these issues. However, the declining Sharia financial inclusion index highlights ongoing challenges that must be addressed.

There should be not only collaborative effort but also intensive coordination amongst the government, industry, educational institutions, and religious leaders to excel an integrated halal concept into daily life, benefiting both Muslim and non-Muslim communities globally. This highlighted on how well-coordinated policies and regulations can position Penyengat Island and the Riau Archipelago as leaders in sustainable and inclusive tourism, especially given their strategic border location.

Achieving accomplishment of success, it is essential for the regional government in region, provincial and national level to continuously update and improve legislation supporting the halal economy. Ensuring responsiveness to global trends and local demands while maintaining blue economy principles side by side. Additionally, businesses must prioritize innovation and standardization of halal products to foster consumer trust and meet evolving expectations.

An active participation from educational institutions to further expand research and educational programs to enhance understanding of Islamic economics and halal practices, particularly concerning literacy and financial inclusion challenges. Last but not least religious leaders are encouraged to actively engage in public education, providing communities with accurate knowledge of Islamic law and ensuring the effective integration of halal practices into everyday life. Through synergy and integrated collaboration among all stakeholders, Indonesia can strengthen its halal ecosystem, stimulate innovation, and maintain its leadership position in the global halal market.

5 Conclusion

Pulau Penyengat stands out as a promising example of sustainable halal tourism. By focusing on cultural immersion, community involvement, and environmental responsibility, the island can create a distinctive tourism experience that aligns with the values of contemporary travelers. To fully realize the Riau Islands' potential as a leader in halal tourism and the blue

economy, a collective commitment to innovation, sustainability, and community empowerment is essential. By adopting these principles, the Riau Islands can not only establish itself as a vibrant destination, with Pulau Penyengat leading the way, but also act as a guardian of its maritime heritage, enriching the broader narrative of sustainable development across Southeast Asia.

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