



Implementation of Downstream Tourism Policy in Riau Islands Province: Penta Helix Review

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Abstrak

Tujuan dari penelitian ini adalah untuk menganalisis implementasi kebijakan hilirisasi pariwisata, serta mengkaji peran pelaku dalam kerangka Penta Helix, yang meliputi pemerintah, akademisi, dunia usaha, masyarakat, dan media. Penelitian ini menggunakan pendekatan kualitatif deskriptif, dengan data primer yang diperoleh melalui wawancara dan observasi mendalam, serta data sekunder dari dokumen kebijakan daerah seperti RPJMD dan RIPPDA. Analisis dilakukan dengan menggunakan teknik analisis tematik, dengan fokus pada tahapan perencanaan, implementasi, dan dinamika kolaborasi antar aktor. Hasil penelitian menunjukkan bahwa implementasi kebijakan hilirisasi pariwisata di Kepulauan Riau telah berjalan melalui program lintas sektor yang berorientasi pada penguatan ekonomi kreatif, pelatihan sumber daya manusia, dan digitalisasi promosi destinasi. Pemerintah berperan sebagai direktur kebijakan dan fasilitator utama, sedangkan akademisi, dunia usaha, masyarakat, dan media sudah mulai berkolaborasi dalam mendukung implementasi kebijakan tersebut. Namun, tingkat koordinasi antar aktor masih perlu diperkuat agar kolaborasi lebih fungsional dan berkelanjutan. Kesimpulannya, penerapan model Penta Helix dalam implementasi kebijakan hilirisasi pariwisata di Provinsi Kepulauan Riau telah menunjukkan kemajuan yang signifikan menuju tata kelola kolaboratif. Kolaborasi yang efektif menjadi kunci utama dalam memastikan keberlanjutan kebijakan dan optimalisasi potensi pariwisata wilayah kepulauan ini.

Kata kunci: Hilirisasi Kebijakan, Penta Helix, Pariwisata, Implementasi Kebijakan, Kepulauan Riau

Abstract

The purpose of this study is to analyze the implementation of downstream tourism policies, as well as examine the role of actors in the framework of the Penta Helix, which includes the government, academia, the business world, the community, and the media. This study uses a descriptive qualitative approach, with primary data obtained through in-depth interviews and observations, as well as secondary data from regional policy documents such as RPJMD and RIPPDA. The analysis was carried out using thematic analysis techniques, focusing on the stages of planning, implementation, and the dynamics of collaboration between actors. The results of the study show that the implementation of downstream tourism policy in the Riau Islands has been running through cross-sector programs oriented towards strengthening the creative economy, training human resources, and digitizing destination promotion. The government plays the role of policy director and main facilitator, while academics, the business world, the community, and the media have begun to collaborate in supporting the implementation of the policy. However, the level of coordination between actors still needs to be strengthened so that collaboration is more functional and sustainable. In conclusion, the application of the Penta Helix model in the implementation of downstream tourism policies in Riau Islands Province has shown significant progress towards collaborative governance. Effective collaboration is the main key in ensuring policy sustainability and optimizing the tourism potential of this archipelagic region.

Key words: Policy Downstreaming, Penta Helix, Tourism, Policy Implementation, Riau Islands



INTRODUCTION

Riau Islands Province (Riau Islands) occupies a strategic position in international trade and tourism routes, directly bordering Singapore and Malaysia. Geopolitically, the Riau Islands plays a role as the main gateway for economic interaction in the Southeast Asian region (Putri, 2025). This geographical advantage is strengthened by the rich natural and cultural potential: tropical nautical beauty, cluster of exotic islands, strong coastal Malay culture, and historical relics of the Riau-Lingga Kingdom which is the nation's cultural heritage. This potential makes tourism a mainstay sector to drive the regional economy and expand employment (Wibowo, Rusmana, & Zuhelfa, 2017). However, the latest data from the Central Statistics Agency of Riau Islands Province (2023) shows that there is an imbalance between the potential and economic realization of the tourism sector. The Riau Islands Gross Regional Domestic Product (GDP) reached Rp331.89 trillion with a growth of 5.2%, but the contribution of the tourism sector to Regional Original Revenue (PAD) is still relatively small because PAD is still dominated by motor vehicle taxes. Even until mid-2025, the realization of PAD will only touch 39% of the target of IDR 1.7 trillion (Riau Islands Antara, 2025). On the other hand, in Bintan Regency, the tourism sector showed a significant increase in PAD from IDR 19.8 billion (during the pandemic) to IDR 126.1 billion in 2023, with more than 589 thousand tourist visits (Batam Pos, 2023). On the other hand, inequality is still sharp: Batam's PAD reached IDR 1.3 trillion, while Anambas Regency only reached IDR 32 billion (Sidaknews, 2024)

This phenomenon shows that the tourism potential of the Riau Islands has not been utilized equally. Despite its beauty and high cultural value, the implementation of tourism policy still faces institutional constraints, limited infrastructure, and low coordination between actors (Wang & Ap, 2013). This is what drives the need for a downstream tourism policy strategy, so that public policies do not stop at the regulatory level, but really produce economic and social added value at the community level. In the public policy literature, downstream is defined as the process of translating macro policies into the form of programs and activities that have a direct impact on society (French, 2019). In the context of tourism, downstream means building a derivative economic value chain from tourism activities (Abdillah, 2021): the development of local culinary, crafts and souvenirs, performing arts, to a creative economy based on local culture. This approach also involves digital innovations ranging from online promotion, e-ticketing, to traveller data management to expand reach and improve service system efficiency

Downstream strategies in tourism are able to strengthen the linkage between development policies and people's creative economy activities (Carrigan, Lazell, Bosangit, & Magrizos, 2017). Meanwhile (Park, 2024) found that in the ASEAN region, downstream tourism contributes to regional economic integration, increased destination competitiveness, and job expansion. Thus, downstreaming is not only an economic development agenda, but also a social strategy to expand community participation in the tourism ecosystem. Downstreaming in the Riau Islands is relevant because the geographical character of the region consisting of thousands of islands demands adaptive and inclusive policies. Sea transportation infrastructure, digital connectivity, and the readiness of local human resources are decisive factors in accelerating the implementation of this policy. The success of downstream tourism in the archipelago requires synergy between cross-sector and cross-level government actors so that tourism potential is not only enjoyed by central areas such as Batam or Bintan, but also reaches underdeveloped areas such as Anambas and Natuna.

To analyze how the implementation of downstream tourism policies is carried out in the Riau Islands, this study uses the Penta Helix framework. This model was developed to describe synergistic collaboration between the five main actors of development (Muhyi, Chan, Sukoco, & Herawaty, 2017), namely: government, academia, the business world, the civil society, and the media. The government plays the role of policy makers, regulators, and facilitators of infrastructure development that supports tourism activities. Academics function as providers of research, innovation, and knowledge-based training that support the capacity building of human resources. The business world plays a role as a driver of investment, tourism service providers,



and developers of tourism derivative products with economic value. The community is a direct actor who manages tourist attractions, maintains local culture, and maintains the sustainability of the destination environment. Meanwhile, the media functions as a channel for promotion, public education, and boosting the image of the destination in the eyes of tourists.

The Penta Helix approach is relevant in the context of downstream policy because it views public policy not only as the result of government decisions (Rodrigues & Melo, 2013), but as a collaborative product of various parties that have complementary interests and roles. In the context of the Riau Islands Province, this framework places each actor in a strategic position: local governments play the role of policy directors and facilitators, academics assess the effectiveness of programs and provide data-driven inputs, the business world opens up space for investment and service innovation, communities become the main drivers of locally-based tourism potential management, and the media expands the reach of promotion and builds a positive image of destinations. Thus, the application of the Penta Helix model allows the creation of collaborative governance that ensures the sustainability of policies from the planning stage to implementation in the field (Azwar, Hanafiah, Zahari, Gani, & Ferdian, 2025). This approach also helps to identify the extent to which coordination between actors is effective, what obstacles arise during the implementation process, and what opportunities can be optimized to strengthen the contribution of the tourism sector to increasing the Riau Islands Province's Regional Original Revenue (PAD).

Several previous studies provide an important foundation for this research. For example, (Damanik et al., 2018) emphasized the importance of building tourism "from the bottom", namely strengthening local communities to become the main subject of destination management. (Ardhiatma, 2025) shows that the development of community-based tourism areas can be an innovative strategy in improving local welfare while strengthening regional institutional capacity. (Arnakim, Karim, Mursitama, & Tahalele, 2023) highlights the potential of tourism in ASEAN as a catalyst for regional economic growth. (Marín-González, Moganadas, Paredes-Chacín, Yeo, & Subramaniam, 2022) through a systematic review found that the effectiveness of tourism policies depends on planning consistency, intersectoral coordination, and sustainable infrastructure support.

However, most of these studies have not specifically examined the implementation of downstream policies in the archipelago. The novelty of this research lies precisely in the spatial context of the Riau Islands, a cross-border region with geographical, social, and economic complexity and its focus on implementation practices in the field involving various actors within the framework of the Penta Helix. This research has a novelty value that lies in three main aspects that strengthen its academic and practical contributions. First, from the implementation focus, this research does not stop at conceptual studies like most previous tourism policy studies, but directly traces the process of implementing downstream policies at the regional level so as to provide a real picture of how the policy is implemented in an empirical context. Second, in the context of the archipelago, this study presents a new perspective by examining the dynamics of downstream tourism in Riau Islands Province which has a unique geographical character in the form of a cluster of islands with accessibility challenges, infrastructure inequality, and cross-border economic integration.

This makes this research relevant not only for the Riau Islands, but also for other archipelago regions in Indonesia that face similar problems. Third, through the Penta Helix analysis framework, this study not only uses the model as a theoretical concept, but also makes it the main analytical tool to identify the role, interaction, and level of effectiveness of collaboration between actors in the downstream process of tourism policy. By combining these three aspects, this research makes an empirical contribution to the development of policy downstream theory. Based on the above background, this study aims to analyze the Downstream Implementation of Tourism Policy in Riau Islands Province



METHOD

Metode This study uses a descriptive qualitative approach because the main focus is to understand in depth how the downstream implementation of tourism policies is carried out in the Riau Islands Province. This approach allows researchers to contextually describe social realities and policy dynamics through the views of the actors directly involved. Qualitative research was chosen because it is more appropriate to trace the process, meaning, and interaction between actors in the implementation of tourism policies involving many parties within the framework of the Penta Helix (Ihalauw et al., 2023).

The data sources in this study consist of primary data and secondary data. Primary data was obtained through in-depth interviews with key informants representing five main elements within the framework of the Penta Helix, namely the government, academia, the business world, society, and the media. Government elements include officials of the Riau Islands Provincial Tourism Office and districts/cities, as well as the management of the Provincial/Regency/City Regional National Craft Council (DEKRANASDA) which is positioned as a partner institution of the local government in fostering the creative economy and developing tourism derivative products. Government informants come from the Batam, Bintan, and Tanjungpinang regions which are the centers of tourism and policy activities in the Riau Islands. The academic element consists of lecturers and researchers from the Raja Ali Haji Maritime University (UMRAH) who have expertise in the fields of public policy, tourism, and archipelago development. Elements of the business world include tourism business actors, resort managers, and tourism MSME actors operating in Batam and Bintan. Community elements were represented by the management of the Tourism Awareness Group (Pokdarwis) and community-based destination managers in the Tanjungpinang and Bintan areas. Meanwhile, the media element was represented by local media journalists in the Riau Islands who actively covered tourism issues and regional public policy. The informant was chosen purposively because he was considered to have a deep understanding of the implementation of tourism policies in his area. Meanwhile, secondary data was obtained from official government documents such as the Riau Islands Provincial RPJMD, the Regional Tourism Development Master Plan (RIPPPDA), the Tourism Office's performance report, the Central Statistics Agency's publications, as well as articles and news from mass media relevant to the research topic.

The data collection technique was carried out through three main methods, namely in-depth interviews, field observations, and documentation studies (Romero, Kwan, & Suchman, 2019). In-depth interviews were conducted in a semi-structured manner to explore the experiences, views, and roles of each actor in policy implementation. Field observations were carried out in several leading destinations such as Batam, Bintan, and Tanjungpinang to observe policy downstream practices directly. Meanwhile, the documentation study is used to complete and verify field data through the analysis of policy documents and activity reports. To ensure the validity of the data, this study applies triangulation of sources and methods, which is comparing the results of interviews, observations, and documents so that the findings obtained are valid, consistent, and scientifically accountable.

Data analysis was carried out using thematic analysis. The analysis stage starts from data reduction, namely selecting and filtering information that is relevant to the focus of the research; then continued with the grouping of data into main themes such as policy planning, coordination between Penta Helix actors, infrastructure support, community participation, and forms of innovation in downstream tourism. After that, data interpretation is carried out, namely interpreting the relationship between themes based on policy downstream theory and the Penta Helix approach to understand collaboration patterns and the effectiveness of policy implementation in the field. The entire analysis process is carried out inductively and reflectively to produce a comprehensive and in-depth picture of how downstream tourism policies are implemented in the Riau Islands Province.



RESULTS AND DISCUSSIONS

Downstreaming Tourism Policy in Riau Islands Province

The implementation of downstream tourism policy in Riau Islands Province (Riau Islands) departs from the typical regional context directly adjacent to Singapore and Malaysia, relying on the maritime strength and coastal Malay culture as well as the need to translate the policy agenda into real programs that touch the actors on the ground. In this context, downstream is understood as the process of "extending" the policy value chain: from planning documents to activities that produce derivative products/services, strengthen the capacity of actors, and enrich the tourist experience in a sustainable manner. The gateway character and cultural richness of the Riau Islands provide a strong foundation for downstream, but at the same time it requires cross-actor collaborative governance so that policies are truly alive in the archipelago's destinations. Institutionally, the implementation foothold starts from policy mainstreaming linking downstream issues to tourism sector planning and policy documents. Official sources that are work references include the RPJMD, the sector strategic planning apparatus, and the regional tourism development master plan (RIPPDA). This linkage is important to ensure consistency of direction, stakeholder assignment, and continuity of cross-year programs, especially when downstream requires cross-OPD and cross-level local government orchestration. The emphasis on the basis of planning documents can be seen in the list of research materials that contain the RPJMD/Strategic Plan and regional policy tools as the main work reference, so that the downstream program operates on an official mandate, not a partial initiative.

At the operational level, downstream translates into product development and derivative experiences that are rooted in local culture and resources. The literature that is the reference for the research places downstream as an effort to translate macro policies into concrete programs that enrich the value chain: typical culinary, crafts, performing arts, and experiential-based tourism activities. Strengthening the local creative economy is an integral part so that added value does not stop at the core attractions, but spreads to actors around the destination. At the same time, the integration of digital technologies from marketing, e-ticketing, to online services is seen as crucial to expand market reach and service efficiency, especially in the archipelago's areas that demand information reliability and cross-island booking. Implementation in the Riau Islands is explicitly mapped through the Penta Helix approach, which places the government, the business world, communities, academics, and the media as nodes of collaboration. This framework is not just conceptual; it is carried out through the collection of primary data from these actors (in-depth interviews and field observations), so that the implementation readings rely on the voices of the actors who run the daily program. The use of Penta Helix as an analysis lens helps identify crucial points of coordination, forms of contribution of each actor, and areas that need reinforcement so that downstream takes place consistently between districts/cities.

At the technical planning level, the downstream practices found include the preparation of cross-sector program packages: curation of cultural-based derivative products, competency training for actors (guides, homestay hosts, craft-culinary actors), and the preparation of a cultural event calendar that functions as a vehicle for local identity storytelling. These integrations are rarely stand-alone; usually intersect with small industry/MSME policies and trade promotion, so that the role of non-tourism OPDs is also present in the downstream chain. Thus, coordination between sectors is a prerequisite so that the program is not fragmented and can be read as an ecosystem of experiences for tourists. The implementation phase emphasizes two main routes: capacity building and digitalization. Capacity building (HR) is important to ensure that service quality is consistent with the value-added narrative promised in the planning document. Needs-based training ranging from hospitality, guiding, destination storytelling, to homestay management allows local actors to play a greater role in the value chain. The literature findings referenced confirm that community involvement and human resource strengthening are the foundation for sustainable policy implementation; Without it, downstream can easily be reduced to a series of events without a learning effect for actors at the destination.



Digitalization, on the other hand, is an enabler that brings together local products with a wider market both domestic and cross-border. In the context of Riau Islands, where the movement of tourists is influenced by proximity to nearby global cities, the availability of destination information systems, e-bookings, and integrated promotional platforms shortens the distance between "intention to visit" and "actual experience". The literature that is the reference for the research places the digitization of services and promotions as factors that "determine the effectiveness of sector development", not an additional accessory. In other words, digitalization is part of downstream itself because it connects policies, products, and travelers in one easily accessible service chain. Although the direction of implementation is clear, the research also captures the complexity of the field. The most common challenges are infrastructure disparities between island clusters, non-uniform human resource readiness, and weak points of policy coordination at the local level. It is stated in the theoretical reference that the lack of optimal integration of actors in the framework of the Penta Helix is an important gap, especially in archipelagic areas such as the Riau Islands which have different geographical and institutional characters than the mainland area. These findings are in line with the observation that implementation progress can be uneven: more connected destinations tend to adopt digitalization and product curation faster, while the outermost destinations need special affirmation so as not to be left behind in the downstream flow.

In terms of governance, implementation practices show a pattern of government-led collaboration: local governments are still the main guiding axis and facilitators, with the business world filling the space for investment and product development, communities as managers of local attractions and culture, academics as research/training providers, and media as promotional reinforcements. This pattern is natural in the early phases, but to deepen downstreaming, more and more co-creation is needed between actors outside the project framework. This study places Penta Helix not as a label, but as a way of reading whether collaboration really occurs at the level of program design, implementation, and policy learning.

From the perspective of the policy stages, the implementation mapped by the research follows a relatively structured flow. First, problem identification and preliminary studies screen for downstream strategic issues (e.g., coordination weaknesses or capacity building needs). Second, the design program concocts a cross-sector activity package that connects local culture, creative economy, and market access. Third, execution is carried out through training, community strengthening, event activation, and digital promotion. Fourth, learning & adjustment is carried out through validation and triangulation of findings, so that a loop of policy improvement can occur. This series is in line with the research work procedure starting from the preliminary study, followed by primary/secondary data collection, and analyzed thematically to map the downstream implementation process in the field. The methodology used in the research is in-depth interviews with Penta Helix actors, observations at leading tourist sites, and document studies has a dual function: as a way to collect evidence of implementation and as a reflective mechanism for policy implementers. Thematic analysis helps to classify findings into implementation themes such as cross-actor coordination, infrastructure support, human resource readiness, digital technology utilization, and derivative product development. These categories are relevant because they reflect the levers of downstreaming: the more coordinated and capable the perpetrators, the closer the "policy" is to the "experience" that tourists feel.

In many cases, coordination is at the heart of implementation. Because downstream is not only a tourism affair, success is highly dependent on connectivity with other sectors: industry (creative product standards), trade (market access), cooperatives/MSMEs (financing and mentoring), to infrastructure (sea/dock access and basic services). The referenced literature emphasizes that investment in supporting infrastructure and digitalization of service systems greatly determines the effectiveness of tourism development. Thus, reading downstream implementations also means reading the quality of the "supporting ecosystem" that allows local actors to execute derivative products/services consistently. In addition to coordination and supporting ecosystems, the sustainability of the program is also a key dimension of



implementation. Sustainability here is not just the continuity of the annual budget, but the sustainability of knowledge and networking. Collaborations with universities, for example, provide channels for ongoing training and action research that can bridge the gap between policy design and destination reality. In the MoU-supported roadmap, the main portion in the initial phase is to strengthen the design and institutions, before entering the model test phase in the next period. This means that healthy implementation does not rush to the expansion of activities, but rather prepares the foundation so that successful practices can be replicated across islands.

In daily practice, the media plays a cross-stage role from building awareness, educating the market about the uniqueness of local culture, to mainstreaming travel etiquette that respects the environment and community. In the framework of downstreaming, the role of the media does not stop at promotion; It also serves as a feedback channel for policymakers, as narratives, reviews, or media coverage are often early indicators of market response and experience gaps in destinations. Thus, inviting media early in the design–implementation cycle can narrow the distance between the "planned" and the "perceived" of tourists. The research also highlights the importance of documenting policies and good practices as part of downstreaming. The study of documentation of plans, activity reports, and promotional materials facilitates comparative analysis between regions within one archipelagic province. With a neat documentation base, policymakers can recognize patterns that work well (e.g., cultural event formats that effectively mobilize local actors) and patterns that require adjustment (e.g., event-intensive activities but minimal learning trails for actors). This process is in line with an analytical approach that emphasizes data reduction, theme coding, and interpretation based on the Penta Helix framework, so that the findings serve as concrete policy learning materials.

In the end, the implementation of downstream tourism policy in the Riau Islands, as read from the primary and secondary data of the research, shows a progressive direction with an increasingly strong foundation in institutional design and collaboration. However, the character of the islands demands policy sensitivity to connectivity gaps, variations in actor capacity, and the need for digitalization adjustments in the outermost areas. Therefore, an effective downstream implementation is a place-sensitive one: respecting differences in contexts between islands, building capacity from different starting points, and preparing a coordination toolkit that is flexible but clear in its roles and service standards. With an integrated planning footing, a mature Penta Helix collaboration, and an emphasis on capacity building and digitalization, the downstream of tourism policy in the Riau Islands is moving from just a plan to a practice that is increasingly internalized in the destination, a process that continues to be studied and adjusted through a loop of validation and triangulation of findings.

Collaboration Between Actors in the Penta Helix Framework

The implementation of downstream tourism policy in the Riau Islands Province (Riau Islands) cannot be separated from the synergy between development actors. Given the character of its territory consisting of thousands of islands with diverse social and economic conditions, the success of policy implementation depends heavily on the extent to which cross-sectoral cooperation can be carried out effectively and sustainably. In this context, the research uses the Penta Helix framework, a development collaboration model that involves five main elements: government, academia, business, community, and media. Each actor has a different but complementary role in encouraging downstream tourism policies so that they do not stop at the planning level, but really bring real benefits to the local community. The Penta Helix framework views that public policy, especially in the tourism sector, is not only determined by the role of the government alone. Tourism is a complex and dynamic sector because it involves the interaction between policies, investment, culture, environment, and society. Therefore, the success of the implementation of downstream tourism policy is highly dependent on how these five actors can work together in a collaborative governance system. Through this approach, downstream is not only understood as a "policy derivative", but as a social process that continues to develop and learn from the interaction of actors in the field.



The Role of Government: Regulators, Facilitators, and Policy Orchestrators

The Riau Islands Provincial Government has a central role as the main regulator and facilitator in the implementation of tourism policies (Wulandari, 2021). The government sets policy directions through strategic planning documents such as the RPJMD, the Tourism Office Strategic Plan, and the Regional Tourism Development Master Plan (RIPPDA). These documents are the main basis for the implementation of downstreaming, because they contain a vision for tourism development that is oriented towards increasing the added value of the regional economy and community welfare. As a facilitator, the government also plays a role in providing infrastructure and regulations that support the growth of tourism activities in various archipelago areas. This includes the construction of sea and air transportation access, the arrangement of tourist areas, as well as the granting of business licenses and certifications for tourism actors. The provincial government works closely with the district/city government to ensure that the downstream program runs synergistically and does not overlap. Within the framework of Penta Helix, the government also functions as an orchestrator, namely the party that regulates the rhythm of collaboration between actors. The government acts as a liaison between the business world and local communities, ensuring a balance between economic interests and socio-cultural sustainability. For example, in the training and development program of tourist destinations, the government collaborates with academics to strengthen the capacity of tourism human resources, as well as involve business actors in the provision of promotional facilities and investment in supporting infrastructure. Nonetheless, the study found that cross-sector coordination still faces challenges, especially in equalizing interagency vision and consistency of implementation in the field. Some OPDs still tend to work within a sectoral framework, so collaboration has not been fully realized systematically. For this reason, a special coordination unit or tourism delivery unit is needed at the provincial level that can facilitate synergy between actors in the implementation of downstream policies in an integrated manner.

The Role of Academics: Knowledge Generators and Policy Evaluation Partners

Academics have a strategic role as providers of research, data, and innovation in supporting policy formulation and implementation (Muluk & Winoto, 2018). In the context of Riau Islands, this role is carried out through collaboration between the Raja Ali Haji Maritime University (UMRAH) and the Riau Islands Provincial Government which is formalized through a Memorandum of Understanding (MoU) on education, research, and community service cooperation. This MoU opens up space for knowledge exchange and implementation of applied research that focuses on downstreaming tourism policies. Academics contribute to the preparation of policy recommendations, the development of destination governance models, and the training of human resources. Through community-based research, academics assist the government and the community in understanding the potential, obstacles, and the right development direction for each archipelago. For example, research conducted to map the potential of marine tourism in Anambas and Natuna Regencies has helped local governments in formulating investment priorities and more effective promotional strategies. In addition, academics play an important role as policy evaluation partners. Using scientific approaches and data-driven analysis, academics can provide an objective assessment of the effectiveness of ongoing downstream programs. This evaluation is an important basis for the policy learning process, which is continuous learning from policy implementation in the field to improve policy design in the future. However, the relationship between academics and policymakers still needs to be strengthened so that research results do not stop at academic reports, but are actually implemented in regional programs. A more intensive communication mechanism and a structured feedback system are needed so that academic knowledge can be downstreamed into contextual and applicative policies.



The Role of the Business World: Drivers of Investment and Innovation in Tourism Products

Within the framework of Penta Helix, the business world plays a role as a driving force for the implementation of tourism policies (Verbole, 2000). Tourism business actors in the Riau Islands include the hotel, transportation, travel agencies, restaurants, to micro and small businesses engaged in culinary, handicrafts, and tourism services. The business world plays an important role in the downstream process because it is the party closest to the market and consumers. They understand the dynamics of tourist demand, so they can adjust products and services according to market trends. Through investment in the tourism sector, the business world helps to expand employment, increase community income, and strengthen regional competitiveness as a tourist destination. The results of the study show that large business actors, especially in the Batam and Bintan regions, have integrated downstream practices through resort development, event tourism, and cross-country promotion. Meanwhile, small and medium enterprises in other districts still need support in terms of management training, marketing digitalization, and access to financing. Therefore, collaboration between the government and the business world must be focused on co-funding schemes or partnerships that can connect large investments with local supply chains. Innovation is also an important aspect in the role of the business world. Through the use of digital technology such as e-booking systems, cashless payments, and promotions through social media, business actors contribute to expanding the Riau Islands tourism market to the international level. The business world has the potential to become a link between local potential and the global market if supported by pro-innovation government policies and a conducive business climate.

The Role of Community: Social Mobilizers and Guardians of Local Identity

The community is the actor closest to tourism resources and is a direct actor in the implementation of downstreaming (Verbole, 2000). They play the role of guardians of cultural values, managers of tourist attractions, and creative economy actors at the local level. Through tourism awareness groups (Pokdarwis), the community plays an active role in caring for the environment, developing local products, and building a positive image of the destination. Community involvement is essential because it ensures that tourism development does not damage local social and cultural values. In the context of Riau Islands, which has a strong Malay cultural heritage and maritime tradition, the participation of local communities is a bridge between tourism modernization and the preservation of local wisdom. The community is also the party that directly feels the benefits of downstreaming, both through increased income and pride in regional cultural identity. However, the findings of the study show that the capacity of communities to manage destinations still varies. In areas with good access to transportation and infrastructure such as Batam and Bintan, the community is quite independent and able to manage tourism activities professionally. On the other hand, in archipelago areas such as Lingga and Natuna, limited facilities and technical support are still obstacles. Therefore, it is necessary to have a strategy to strengthen the community through training, business assistance, and providing access to digital platforms so that they are able to become the main actors in the downstream chain.

The Role of the Media: Promoters and Agents of Public Education

The media acts as a bridge of communication between tourism actors and the public (Florido-Benítez, 2023). In the context of downstream tourism policy, the media not only functions as a destination promotion tool, but also as an agent of public education and a guardian of policy transparency. Through the news, the media helps build public awareness about the importance of sustainable tourism and strengthens the positive image of the region in the eyes of tourists. Local media in the Riau Islands play an active role in highlighting tourism activities and providing space for the promotion of regional creative products. In addition, digital media such as news portals,



tourism influencers, and social media channels also contribute to expanding the reach of information to the international market. Collaboration between the government and the media in disseminating policy information, event calendars, and tourism development achievement reports is an important part of public transparency and strengthening public participation. However, collaboration with the media has not been fully strategically coordinated. The government tends to involve the media only at the stage of promoting the event, not from the policy planning process. In fact, media involvement from the beginning can help build a strong and consistent policy narrative and educate the public about the direction of regional tourism development. Thus, a more planned communication strategy is needed so that the media becomes an integral part of the Penta Helix collaboration system.

Collaboration Dynamics and Implementation Challenges

The results of the study show that although the five elements of Penta Helix have been involved in the development of tourism in the Riau Islands, the level of collaboration is still diverse. The government still plays a dominant role in the decision-making process, while the role of business actors, academics, and communities is often participatory or consultative. The main challenges in this collaboration include differences in capacity between sectors, limitations in cross-sector communication, and the lack of a measurable collaboration evaluation mechanism. In addition, the geographical condition of the Riau Islands, which is in the form of a cluster of islands, makes coordination between regions not always easy to do. Access to transportation, logistics costs, and limited communication networks are obstacles to the realization of intensive and sustainable collaboration. On the other hand, inequality in development between regions also creates differences in the level of readiness in implementing downstream policies. Areas with high infrastructure and investment such as Batam are adapting faster, while border areas such as Anambas and Natuna need more affirmative policy interventions. To overcome these challenges, a more adaptive and place-based collaborative approach is needed, namely adapting the strategy to the social, cultural, and economic conditions of each region. This approach allows downstream tourism policies not only to run uniformly, but also contextually according to local needs.

Overall, collaboration between actors within the framework of Penta Helix in Riau Islands Province shows a positive direction despite still facing various structural and technical challenges. The government has shown a strong commitment as a key policy steer and facilitator, while academics, business actors, communities, and the media are beginning to play an increasingly significant role in supporting downstream tourism policies. However, to achieve higher effectiveness, it is necessary to strengthen coordination between actors through the establishment of cross-sector communication forums, capacity building of human resources, and digital integration that is able to bring together all stakeholders in one integrated tourism information system. Thus, collaboration within the framework of Penta Helix is not only a theoretical concept, but really a collaborative governance system that is lively, dynamic, and oriented towards tourism sustainability in the Riau Islands Province

CONCLUSIONS AND SUGGESTIONS

Based on the research results and discussion, it can be concluded that the implementation of the downstreaming policy in the Riau Islands has shown a positive direction, although it still requires strengthening coordination and consistency between actors. First, the research results show that the implementation of the tourism downstreaming policy in the Riau Islands has gone through various strategic stages, starting from integrated planning in official documents such as the RPJMD and RIPPDA, to the implementation of programs in the field that emphasize the development of derivative products based on local culture, human resource training, and the implementation of digitalization to support destination promotion and services. Although there are variations in the level of readiness between regions, the steps taken by the government demonstrate a commitment to making downstreaming a driving force for



strengthening the regional tourism sector, particularly in the context of an archipelagic region that faces challenges in connectivity, infrastructure disparities, and the distribution of destinations across islands.

Second, in the context of collaboration between stakeholders, the research results show that the implementation of the Penta Helix framework has opened up space for collaboration between the government, academics, the business world, the community, and the media. The government acts as a policy director and infrastructure provider, academics contribute to research and innovation, the business world acts as an investment driver and service provider, the community plays a role in preserving cultural values and managing tourist attractions, while the media acts as a bridge for information and public promotion. Although this collaborative pattern has been established, coordination between parties still needs to be strengthened so that collaboration is not only formal, but also functional and sustainable. To address sectoral challenges and fragmentation of authority, this study recommends the establishment of a more operational coordination mechanism, such as a Tourism Implementation Unit or tourism delivery unit at the provincial level that functions as a liaison across regional government agencies (OPD) and across island regions. Furthermore, the establishment of a formal, bottom-up Penta Helix Forum involving communities, local business actors, and academics from the planning stage needs to be strengthened so that the downstream process is more responsive to local needs and does not become trapped in a purely sectoral approach. The application of the Penta Helix model in tourism downstream policies has proven to be able to build collaborative governance at the regional level. This collaboration provides a platform for the exchange of ideas, resources, and innovations between parties to achieve the shared goal of developing competitive tourism. This approach also helps identify the roles and contributions of each actor, clarify coordination mechanisms, and strengthen accountability in policy implementation.

Thus, this study concludes that the downstreaming of tourism policy in the Riau Islands Province has shown progress in terms of planning and collaboration, and is beginning to move towards more open and participatory governance. These findings have relevant policy implications for other archipelagic regions in Indonesia, such as Maluku and Nusa Tenggara, which both face geographical challenges such as inter-island isolation, limited market access, and development inequality. The uniqueness of the Riau Islands as a cross-border archipelagic region indicates that downstreaming of tourism needs to be designed in a place-based manner, adaptive to the geographic context, and supported by strong collaborative institutions. Future implementation success depends heavily on strengthening communication between stakeholders, building institutional capacity, institutionalizing cross-actor collaboration forums, and consistent evidence-based policy evaluation. The Penta Helix approach has proven relevant for understanding and strengthening the dynamics of tourism policy implementation, particularly in archipelagic regions that demand sustainable cross-sectoral and cross-regional synergy.

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