Pro Poor Tourism Initiative in Lagoi Tourism Area: An Empirical Study Food Value Chain

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ABSTRACT
This study aims to identify the tourism value chain and its contribution to improving the local community's economy, especially in the food supply chain of 10 hotels/resorts in the Lagoi tourism area, Bintan Regency, Riau Archipelago Province. This study uses a qualitative method related to the food supply chain consisting of vegetables & fruits, fish & seafood, poultry and meat. This study uses primary data through semi-structured interviews with sources from hotel/resort managers, collectors, farmers, fishermen, traders, and suppliers. Foodstuff transaction data obtained directly from the sources. Secondary data obtained from reports by related sources. The results of this study indicate that the existence of the Lagoi tourism area contributes to the economic turnover of the people in Bintan. This shows that all food needs for hotels/resorts are supplied by local economic actors, i.e., supplied by business actors in the agriculture, fish/seafood, poultry and local meat sectors. Local suppliers have become the priority for hotels/resorts. When the requested item cannot be obtained, hotels/resorts will seek it from outside of Bintan. The economic impact is felt directly by producers, be they farmers or fishermen. However, the four sectors mentioned above, the fish/seafood supply chain has a high economic value compared to others, so that it has a broad and real impact, especially for fishermen and related stakeholders. This is shown by the image that Bintan is an archipelago that has a wealth of marine products, supported by various beach and sea destinations that attract tourists to enjoy the processed marine products.

KEY WORDS: Tourism value chain; Food value chain; Sustainable tourism; Lagoi area

INTRODUCTION
The Riau Archipelago (Kepri) occupies the second largest number of foreign tourist visits after Bali. The data shows that the number of foreign tourist visits to Indonesia in 2019 amounted to 16,106,954, with Bali as a tourist destination of 38.86 percent, Riau Islands 17.79 percent, Jakarta 15.24 percent, and other areas spread out at 28.01 percent. This shows that Riau Islands is the second largest favorite destination for foreign tourists in Indonesia after Bali. When viewed from the country of origin, most foreign tourists visiting the Riau Islands came from Singapore at 48.52 percent, followed by Malaysia 10.57 percent, China 10 percent, and India 5.25 percent. Meanwhile the remaining 20.5 percent of tourists come from the Philippines, South Korea, Japan, England, Australia, the United States, and (BPS Province of Riau Islands, 2019). Foreign tourists visited the Riau Islands through four doors, namely Batam (68%), Bintan (22.16%), Tanjung Pinang (5.91%), and Karimun (3.94%).

For the majority of foreign tourists from Singapore, Malaysia and China who visit Bintan Island, their main destination is the Lagoi tourism area which has 15 hotels and resorts, managed by PT. Bintan Resort Cakrawala (BRC) which serves many resorts with foreign tourist market segments. The visiting foreign tourists will go through the entrance to the boat pier which is in the Lagoi tourism area connecting Bintan (Lagoi) and Singapore with a travel time of around 60 minutes by boat which is provided and managed by PT. BRC. Thus, of the 22.16 percent of foreign tourists who visit Bintan, most of their main destinations are in the Lagoi area. Meanwhile, other foreign tourists are scattered in tourist destinations around Bintan Island, most of which offer natural attractions, such as beaches, diving or snorkeling.

In particular, number of tourists who visit the Lagoi...
tourist area increases from year to year from 2000-2019 (see Figure 1). In 2000, 315,472 tourists visited the Lagoi area and this number continues to increase to 1,094,442 in 2019.

Figure 1. Number of tourists visiting Lagoi in 2000-2019
Source: PT. BRC, 2021

Based on the country of origin of tourists, Indonesian tourists still dominates, although not significantly compared to Chinese tourists, which Indonesian tourists is 31.87%, China is 31.08%, Singapore is 17.95% and followed by other countries (see Figure 2). Chinese tourists increased significantly from 2017 to 2019 reaching 340,000 people.

Figure 2. Number of tourists visiting Lagoi in 2000-2019
Source: PT. BRC, 2021

The tourism industry in the Bintan area with the foreign tourist market segment contributes significantly to Bintan Regency Local Revenue, reaching more than 50 percent of the total local revenues (PAD) for all sectors in Bintan Regency. Tourism sector revenue data for the last six years (2015-2020) shows that the trend of the contribution of the tourism sector to PAD in 2015-2018 has increased, with the lowest contribution of 51 percent in 2015 and 62 percent in 2018 (Tourism Office of Bintan Regency, 2021). Clearly, the tourism industry with the segmentation of the foreign tourist market is the prime driver of development and poverty alleviation in Bintan Regency. However, the COVID-19 pandemic has a major impact on foreign tourist visits to Bintan island until it reaches zero occupation, which has resulted in several resorts stopped their operations. The sluggishness of the tourism industry is followed by the decreasing contribution of the tourism sector in Bintan Regency's local revenues. Data from the District Tourism Office of Bintan show that, in 2019, the contribution of the tourism sector is 47 percent (although it still dominates the income) and it declines more to 35 percent in 2020. Because the pandemic condition still persists, there are still no tourist visiting from Singapore, Malaysia, India, China or from other countries. the amount of the local revenues (PAD) of Bintan has decreased compared to the PAD of the previous year.

Revenue from the tourism sector, especially visits by foreign tourists, has a high added value compared to domestic tourists due to currency exchange and trade transactions that are profitable for the country and entrepreneurs. But it becomes a problem when the tourism sector with the foreign tourist market segment is the only reliance for revenue and support for regional development. (Sjuchro et al., 2022) This is proven by the existence of the COVID 19 Pandemic affecting the tourism sector which has an impact on all other supporting industrial chains, such as transportation, hotels, restaurants, food, agriculture, services, and others.

Departing from the phenomenon above, this study aims to examine whether the tourism industry in Lagoi has an impact on driving the economy of the people in Bintan. The main aspects to be measured is the hotel/resort food supply chain in the Lagoi area.

Tourism makes a significant contribution to the economic sectors of the world's major countries. Data from the WTTC (World Travel and Tourism Council, 2021) in 2018, the travel and tourism sector experienced 3.9% growth. This figure exceeded global economic growth of 3.2% for eight consecutive years. Data shows that in the last five years, 1 in 5 jobs is contributed by the tourism sector. This condition encourages the sector to become a partner of the government, even though the government's contribution is not too significant compared to the private sector (Ashley et al., 2000). The tourism sector is strategic for job creation. More than 319 million people worldwide work in the tourism sector and it contributes to 10.4% of
global GDP. For this reason, tourism is very dependent on health and the environment. Thus, it is important to address environmental issues (Butler, 1999; Pjerotic et al., 2017; Waligo et al., 2013).

The British Department for International Development (DFID) was the first agency to promote the concept of Pro-Poor Tourism (PPT), which was successfully placed in the Commission on Sustainable Development report in April 1999 (Liu & Yu, 2022; Spenceley & Seif, 2003). Pro-poor tourism (PPT) is defined as tourism that brings benefits to the poor, which can be economic, social or environmental. As long as the poor receive benefits, tourism can be classified as ‘pro-poor’ (even if the rich benefit more than the poor). The PPT approach focuses on strategies that increase benefits for the poor, and aims to open up opportunities for the poor, rather than expanding the overall size of the sector (Ashley et al., 2000).

Tourism is a complex industry driven by the intervention of the private sector and multinational companies. It has been projected that tourism is an industry whose growth sector is pro-poor (Ashley et al., 2000; Truong & King, 2009). Tourism has now become part of poverty alleviation through optimizing positive impacts and minimizing negative impacts, by involving local communities, giving them control as hosts, and having access to markets and ownership (Ashley et al., 2000; Goodwin, 2009).

Accelerating the development of the tourism industry requires collaboration between the government and the community (Hasbi & Badollahi, 2019). Without this strategic cooperation, there will be many imbalances. Direction of development policies will place communities as the actors or subjects of development. Furthermore, the involvement of economic actors, mass media and academics is needed to achieve a sustainable tourism (Syaifudin et al., 2022). Moreover, of all the things mentioned above, improving the quality of human resources is the important issue for the achievement of sustainable tourism (Purwanto et al., 2021). These issues are closely correlated with the socio-cultural conditions of the local community.

According to Porter (2008), value chain is a strategy used by an organization to better understand the competitive advantage of an organization. The nature of value chain itself varies depending on the type of industry of an organization. Pearce and Robinson (2013) added that value chain is a description or way of seeing an organization or company as a chain of activities that transforms inputs into outputs that has a value for users/customers. Value chain is also an analytical tool that is useful for increasing the value of a product to determine the effectiveness and efficiency of each activity. Value chain activities is classified in two interrelated activities, namely main activities and supporting activities. Value chain can also help organizations to focus more on their strategies chosen by the organizations that strive to gain a competitive advantage.

The value chain analysis aims to provide an understanding of how tourism economic flows operate, what portion of tourism spending reaches different groups of people in destinations, and to classify through the analysis, for example, the poor, youth or/and women. Through this segmentation, it is possible to identify potential short, medium and long term interventions that can increase the economic benefits of any or all of these target groups, or even contribute to the development of the general competitiveness of the tourism destination itself (Vignati & Laumans, 2009; Yilmaz & Biti, 2006).

Furthermore, Vignanti & Laumans (2009) stated that the tourism value chain generally integrated five productive activities or segments: accommodation, bar and restaurant, travel agents and tourism operators, transportation and shopping (souvenirs). In each segment, various supply chains can be distinguished and analyzed. But in this study, the researchers conduct an analysis of the value chain of food in the Lagos area.

Christopher (2011) said that food supply chain management is closely related to upstream management and downstream management which includes suppliers and customers by providing value for customers by presenting the reasonable price in the entire series of the supply chain. It relates on how consumers get safe and high-quality foods. Unlike industrial supply chain, food supply chain management does not require detailed management practices. Furthermore, Zuurbier et al., (1996) in (Tobing, 2015) describe a food supply chain into types of production and distribution of vegetable and animal products, and supply chains of processed food products. Fresh food products will involve farmers, collectors, wholesalers, importers and exporters, retailers and special stores. Processed food products use agricultural and fisheries products as raw materials for high-value food products through food preservation processes.
METHODOLOGY

This study uses a qualitative descriptive approach as the research approach to see the value chain of tourism through food supply chain for hotels/resorts in the Lagoi area and to observe the economic impact for the community in Bintan. This supply chain will be traced from upstream as producers to downstream to the end user. Thus, it will appear to be the role of each of them and the economic added value in them (Porter, 2008). Ideally, if talking about food, it consists of many products in it, such as milk, bread, spices, drinks, and other types. But this study only studies a few types of foods that are often ordered in a large-scale order originating from Bintan (local). The supply chain of food studied consists of supply chains of vegetables & fruits, fish & seafood, poultry and meat. This study was conducted in Bintan, Riau Islands Province, with research objects of 15 hotels/resorts in the Lagoi tourism area. A deep structured interview with key informan from all related stakeholders is used for data retrieval technique.

This interview uses a snowball technique in identifying the actors involved in the food supply chain. The first step interview is applied to 15 hotels/resorts especially in the logistics and purchasing section, as well as data collection from four food commodities above over the past 5 years (2016-2020). This data is intended to examine the trend of food transactions from year to year, followed by comparison of the trend during the Pandemic Covid-19. The data will be validated by the operational manager of each hotel and resort before being submitted. Furthermore, continuing to identify the suppliers of goods or food ingredients from each of the hotels/resorts with the hope of tracing producers that supply foods requested by the suppliers. Other key informan are producers consisting of farmers, fishermen and farmers who in this context as providers or those that produce food ingredients. Those producers are those who take part in the supply chain from the upstream. From the supply chain, the value of the item and its impact on the community’s economy are then calculated.

RESULTS AND DISCUSSIONS

The research plan which was supposed to conduct interviews and extracting data from 15 resorts in the Lagoi area, in practice only 10 resorts obtained by the data. The condition of the Covid-19 pandemic forced five other resorts to officially close their operations. Furthermore, in several other resorts there is a change of ownership in 1 or 2 years before the Covid-19 pandemic. These problems have implications for data availability. System migration and management from the old to new causes the unavailability of data as a whole. For example, because transaction data in the last ten years (2010-2020) is not available, data that can be presented is only data of the last five years (2016-2020) as shown below.

![Figure 3. Number of food transactions in 10 resorts in the Lagoi area (within million rupiahs)](image)

The Figure 3 above shows all food transactions that include transactions of vegetables/fruits, fish & seafood, poultry meat and beef from 10 resorts that are still operating in the Lagoi area. The data shows an increased trend from 2016-2019 and a significant decline in 2020 caused by the impact of Covid-19. The explanation of each supply chain as the results of identification and in-depth interviews is as follows.

Vegetable and Fruit Supply Chain

There are several supplier partners or fixed suppliers of vegetable raw materials for 8 hotels/resorts in the Lagoi area, all of which are mostly from Bintan. Mostly, vegetable suppliers come from the Wacopek area of Kijang. Not all parts of Bintan area can be planted with all types of plants or vegetables because Bintan land contains bauxite so that it has a high level of acidity. The Wacopek area has become a vegetable and fruits plantation area, limited to mustard, papaya, salak, banana and durian. There are only two suppliers in this area which play role in not only as the receivers of agricultural products but they also have tens of hectares of agricultural lands. One of suppliers is individual and the other one is assisted by the Air Force. These suppliers accomodate agricultural products, both vegetables or fruits, from all farmers, in addition to agricultural products from private lands. Most of the existing agricultural products come from privately
owned lands. Every day, vegetables will be harvested, accommodated, then distributed to the market for sale, with a total production of 4 tons every day. Sales are carried out in two large markets in Tanjung Pinang City with 1 ton of production and the remaining 3 tons were distributed in the Batam region. This division is based on the number of requests, where Batam has more population, supported by industries of manufacturing, shipyards, services, and others. In particular, Batam Suppliers already have permanent customers who will come every day to take the vegetables using speedboat transportation.

The product will be delivered to the agreed dock, vendors from hotels/resorts in the Lagoi area obtain vegetables from market merchants of Tanjung Pinang Market so that transactions are made at Tanjung Pinang Market by ordering first to local traders. Other types of vegetable such as carrots, cabbages, potatoes, mustards, and broccolis obtained from suppliers from Sumatra to meet the needs of other vegetables from Jakarta. Next, the ordered vegetables will be delivered to each hotel/resort in the Lagoi area. Fruit commodities that are not available in Bintan will be brought in from other regions. The average amount of income from the accommodating supplier from the transaction daily reaches 40 million rupiah. The prices of vegetables fluctuate driven by weather or climate factors that cause crop failure so that this condition pushes the increase of prices to almost double. Thus, the involvement of local farmers who have small piece of lands in the supply chain is still small because they cannot consistently provide a certain amount of vegetable demands. Vegetable demands are supplied by two large agricultural land owners who are also as accommodators. The role of small and medium-scale farmers is in their supplying of vegetables for vegetable stalls in Bintan and Tanjung Pinang.

Same as vegetable commodities, fulfillment of fish and seafood needs for hotel/resort consumers in the Lagoi area is answered through the appointment of several vendors, with the aim of ensuring the availability for consumers or guests’ demands visiting hotels and restaurants. The supplied commodities are in the form of various types of fish, such as grouper, snapper, and various other types of fish on demand, other than various types of shells, mangroves crabs, platform crabs, gonggongs, and various types of shrimp. These commodities are obtained from the fishermen of the Riau Islands. If there are requests for other commodities that are not available in the Riau Islands such as lobster, salmon, and others type of fish, they are obtained from outside the area. When there is a scarcity of crabs and shrimps, they are usually brought in from Tarakan and Makassar regions. However, 70% of commodities usually from the sea products of local communities.

To ensure the availability of supply of fish and seafood, vendors collaborate with several other suppliers, namely, fishermen, fish accommodators and fish farmers. Not only as vendors with hotels/resorts & restaurants in the Lagoi area, they are also fish farmers too. The involvement of local fishermen is an important part of the supply chain because the orientation of vendors is not just a business, but also there is an element of empowering local fishermen. Fish/seafood supplies from local fishermen have not been able to meet the existing demands because of fluctuations in their uncertain catches, so that vendors will cooperate with large accommodators who are able to provide large and continuous fish/seafood demands. The accommodators obtain fish supply from fishermen using large ships and also from local fishermen. Most fish accommodators are also the owners of large ships for fish.

The need for grouper and snapper commodities is supplied by cultivators in the Bintan Islands, namely Senggarang, Pengepan, Selat Bintan, Penerbaga, Busung, and Tanjung Uban. There are more than 20 groups of cultivators. These cultivators are assisted by the Bintan Regional Government in the context of empowering and improving the economy of the local community. Vendors always collaborate with 20 cultivators for fulfilling fish needs. With many groups of cultivators in Bintan, the availability of grouper and snapper can be guaranteed and sustainable. Because of limited capital, the payment method to several suppliers is made via cash and debt methods. However, payments originating from small fishermen are carried out in cash, while the payments for fish accommodators are

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Figure 4. Supply Chain of Vegetables and Fruits

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made through bill or debt, in the sense that vendors can get fish/seafood products first, then payment or repayment can be done if the hotel/resort has paid the bill. The payments through bill or debt are also made for fish cultivators.

The amount of the number of requests each month can reach approximately 500 kg of fish, 1 ton of gonggong, 200 kg-300 kg of crabs, and more than 300 kg of shrimp, with the transaction value every month 1 billion rupiah on average for each vendor. There are 3-4 vendors serving fish/seafood demand needs in the Lagoi area. So, it can be concluded that transactions on average can reach 3 billion rupiahs per month for the Lagoi area. In the practice, vendors not only fulfill the demand from the Lagoi area but also provide the demands from hotels/resorts/restaurants located in the Trikora area which is a tourist destination by domestic tourists and foreign tourists, especially tourists from China, and vendors become suppliers for Batam area. From the empirical data above, it can be concluded that their income is much larger.

The distribution of the basic needs for chicken breeding is carried out from the companies to the "big bosses" who will be distributed or sold to fostered partners. In addition, these 'big bosses' control the market, so poultry companies cannot directly sell their products to the market. Existing poultry companies also rent chicken coops for raising livestock, which are managed by or involve the 'big bosses.' Chicken harvests are done according to market needs. For example, to fulfill all chicken related food products, it needs different weight of chicken. So, the chicken harvest for the weight of 700 gr-800 gr, 1 kg, 1.5 kg, 1.8 kg – 2 kg and above 2 kg take approximately 35 days, which is done at different times. Each cage contains a minimum of 6000-7000 chickens, some even reach 11,000 chickens.

The average harvest reaches 8-9 tons with a net margin obtained before deducting labor costs for each cage reaching 10 million – 15 million, while the ownership of the cage varies between 2-5 cages. All chicken harvests from all partners, including the cages owned by the poultry company will be sold to the 'big bosses' and will then distribute to the Bintan area to markets and chicken slaughterhouses scattered throughout the area. Not only in Bintan, the Batam area is also the major destination for chicken sales, due to its high demand. The implication of this model is that partners/breeders have higher capital expenditure for operational costs because they cannot go directly to the poultry company but rather through the "big bosses".
bosses' intermediaries. To meet demands from hotels/resorts in the Lagoi area, vendors obtain fresh and frozen chicken from markets or privately owned chicken slaughterhouses.

![Figure 6. Poultry Supply Chain](Image)

**Meat Supply Chain**

The need for meat, especially beef, is obtained from slaughterhouses located in Tanjung Pinang and slaughterhouses owned by individuals. In Bintan, there are only two slaughterhouses in the city of Tanjung Pinang. Vendors will directly buy the meat orders from slaughterhouses, while slaughterhouses will get cattle from breeders in Bintan. Usually, breeders will bring their livestock directly to the slaughterhouses. Because there are only a few of breeders, they use the system of ‘one cattle cage for all’ for those with limited funds. Meanwhile, there are only two large-scale cattle breeders in Bintan and Tanjung Pinang. The need for imported beef is obtained through messages via the Batam or Jakarta routes.

**CONCLUSION**

Of the four supply chains that have been identified in depth, it can be concluded that the fish/seafood supply chain has a significant impact on fishermen and business actors involved in it. This result is in line with the largest transaction data in resorts for fish/seafood, this is driven by the image of tourists that Bintan culinary is synonymous with fish/seafood. It has become a promotional material for hotels/resorts that apart from offering the beauty of nature, they also offer different culinary experiences. Fish distributors do not only serve requests from hotels/resorts from the Lagoi tourism area, but requests from hotels/restaurants throughout the Bintan area. Mainly serving the demand for tourists from China which experienced a significant increase as presented in the first part of this article.

The results above confirm that the tourism industry in Bintan has implemented a Pro Poor Tourism approach, referring to the definitions of experts (Ashley et al., 2000; Gascón, 2015; Torres & Momsen, 2004). An indicator of success in the pro-poor tourism approach is an increase in the economy of the surrounding community, by empowering local potential in the form of food supply to meet the needs of hotel and resort guests, prioritizing originating from local resources. Not to mention other service sectors, be it transportation, labor, food, beverages, and others driven by the tourism industry.

Although only the fish/seafood supply chain has a significant impact on the economy of the people in Bintan, prompted by requests from hotels/resorts in Lagoi, this is only in one aspect of demands, namely demands from hotels/resorts. This result cannot then be generalized that only the demand for the food sector by hotels/resorts that has driven the community's economy. It is because there are still many other aspects that have not been studied. For example, the workforce working in the Lagoi area according to data for 2021 is 3,284 people with an assumption that several of them have families, which in turn this number can increase two folds. Certainly, this number has a direct impact on the growing demand for foods, beverages, and other service needs. In addition, this number can encourage the growth of other productive economies due to the impact of the tourism industry in Lagoi because tourism industry can drive other economies around it.

In developing the tourism industry, a pentahelix synergy is currently needed, namely the synergy of communities, government, mass media, business actors and academics to achieve optimal results. This collaboration determines the success of development, in which the direction of development policy is centered on communities by involving them in every decision-making and placing the communities as the subject of the development. Because the orientation of sustainable tourism development is to improve people's welfare as the focus and indicator of success, every development policy needs to consider this aspect.

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