Cross Border Tourism and Regional Development: Case Indonesia-Timor Leste

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ABSTRACT

This study aims to: (i) describe the perception of stakeholder about cross border tourism in Wini Indonesia and the Oecusse-Timor Leste, (ii) analyze the impact of cross border tourism on the regional development. The study was conducted in Wini North Insana Subdistrict, North Central Timor Regency in April-June 2019. The study used a survey method using descriptive analysis to achieve the first aim and mathematical analysis to achieve the second aim. The results showed that tourist decides to go to Wini as cross border tourism cause the complete attraction covers beach, mountain, cross border tourism, fish culinary or the large number of attractions (90%); then unique tourist attraction (80%). The result also showed the economic agglomeration 2,03; that moderate agglomeration and its increasingly strengthening the region as a new growth center, also shown by an increase of growth economic 68.79% as regional development indicator.

Keywords
Cross Border Tourism Agglomeration Regional Development

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1. Introduction

Wini is one of the main crossings to the Oecusse District of the Timor Leste. Development of the border region reflects the government’s performance in the neighbor country. Therefore Indonesia set rules for direct develop boundary area, its presidential regulation number 179 of 2014 concerning spatial planning of national border areas in the Province of NTT.

This spatial plan aims to create an independent and competitive boundary economic cultivation area. One of the strategies is to develop a maritime, cultural and religious tourism area with supporting infrastructure that still preserve the environment.

Development of cross border tourism on Wini as a pilot to increase domestic and foreign tourist arrivals; intended for to capture enormous economic opportunities. Timothy (2000) stated cross border tourism is a day trip (whether leisure, business, or grocery shopping is a form of tourism if it crosses an international border. It means that activity across borders between countries for a particular purpose and not for settling is a form of tourism activity.

Cross border tourism in Wini will be prospective cause Oecusse is the special district in Timor Leste. The area begins to improve by building an airport, international ports, highways, water infrastructure and agriculture. In addition, the plan to build an entertainment center as a tourist attraction. Wini’s have been strategic geopolitical position and a center, according to hierarchy of urban. Every guest to visits Oecusse needs variety services such as transportation services, lodging, culinary, souvenirs. Each type of business is expected to be close together that forming economic agglomeration. Therefore needs innovation, creativity and strong community competitiveness.

Indonesia is currently starting to boost cross border tourist. The Indonesian government sets 15 million foreign 3.1 million tourists in 2017, include cross border tourist. This shows how strategic cross border area for regional development, so competitive tourism need human resources that friendly, polite and attractive appearance.

Previous study of Sanak (2011) and Manek (2015) focused on socio-cultural aspects; while Rio et al (2017) and Sephanova (2014) focused on relationship between countries. Detail on the basis of cooperation are relatively few. Taena (2009) discusses the development model of the border region with agropolitan model, the center of growth, transit and tourism. This research combines tourism and growth center with main aim: (i) to describe the perception of stakeholder about cross border tourism in Wini Indonesia and the Oecusse-timor Leste, (ii) to analyze the impact of the development of cross border tourism on the regional development.

2. Literature Review

Cross Border Tourism

Sofield TB (2006) stated types of borders, such as those of a national park or cultural heritage reserve, that exist within a country. The way in which advances in the technologies of mobility and modes of transport have influenced the expansion of territorial boundaries over the centuries, from terrestrial to marine to aerial dimensions, is related to contemporary forms of tourism. International tourism – visitation involving travel across the borders of sovereign states, that explore the social and cultural spaces of border communities where politics often play a significant role. The social construction of space and place refer to ‘half populations’ occupying ‘Third Space’. Tourism sector, specific border tourism, which have principles of human mobility (tourism flows), typologies of political relations that affect cross-border tourism flows and tourism partnerships, and particularities of transnational tourism development.

Zhang S et al (2019) found border tourism in China as a sector that develop local economic and important sector for international cooperation. Physical factors, cultural diversity, regional policies,
the relationships between neighboring countries, and public facilities are shown to be the main factors influencing the pattern of border tourism. The government should polices based on local resources and combine it, strengthen the cooperation domestically and internationally, improve public facilities, conserve the environment and protect the culture.

Batala LK et al (2017) found numerous potential marketing strategies for development and co-operation in tourism industries along Nepal and China. Recently “the one belt one road” is a very hot proposal prolonged by Chinese president “Xi Jinping”. This paper also gives a blueprint for the immediate bilateral co-operation along belt and road strategy in Nepal and Tibetan autonomous region frontier.

Prokkola EK (2008) stated In the process of nation-building border regions have been integrated with the national centres and cross-border connections. Such state-centric, differential development has been challenged in many border regions, and there has been a shift towards cross-border partnership and cooperation, manifested in common tourism development strategies and the building of cross-border destinations. The relational distance created by the border and the dependence of cross-border tourism development on programme funding causes hindrances, particularly when viewed from the perspective of sustainable development of the tourism industry.

Dewi and Rachmawati (2018) found the main obstacle in developing cross border tourism on Sota low human resources cause the low ethos of the local community. Other obstacles are the lack management of natural resources and the lack of public facilities. The proposed strategies to encourage: participation of youth, women, tour-aware groups, supervision group and developing border festivals with various cultural attractions and culinary promotions.

Shusanti et al (2019) found local economic empowerment that could be developed to support cross border tourism as follows: (i) increasing community skills and participation in creating cooperation, involving institutions, and providing intensive assistance, (ii) delivering information to tourism operators and visitors, (iii) supporting facilities as worship facility and the number of water-friendly toilets.

Regional Development

Jovovic R et al (2017) stated growing market globalization, increasing global competition, more complex products results in application of new technologies, methods and business processes- due to the tendencies novel need new strategies. Gumerov AV et al (2016) Types of regions and their features the consideration of which is necessary to evaluate regional development. The factor analysis made the foundation for a rating assessment of corporate entities impact on the region; it allowed to estimate quantitatively corporations’ activity and the level of regional development at a certain time period.

Tykkyläinen M et al. (1997) recommends that factors, general explanatory, sectoral, local specific, policy in restructuring economic to improve development. Different theoretical approaches in geography, regional and socio-economic sciences for developing the region under certain conditions.

Agglomeration Economic

Mauleny AT (2015) stated that production agglomeration has a significant and positive impact on economic growth but negative on poverty rates. Agglomeration and economic growth accelerated with coordination to handle regional strategic issues which can improve economic performance overall and expand the impact of equitable development that must be done. Alternative solutions covers the development of the transportation system to support economic, social, and cultural activities; improvement of quality of roads; development of mass transportation; and enhancing the capacity of local government in order to manage of urbanization and control spatial and regions.
Sodik J and Iskandar D (2007) considered factors affecting the economic growth, such as agglomeration, labor force, inflation rates, the openness rate of the provinces, and human capital. The study found the significant influence of the regional economic growth: labor force, inflation rates, and the openness rate of the provinces; whereas agglomeration and human capital are likely to have no significant effect.

**Economic Growth**

Shen H et al (2018) stated economic growth and rapid urbanization has brought spatial imbalance. Spatial imbalance has attracted considerable attention of the government, because it has hindered regional sustainable development. Previous research by Lestari S and Gunawan RS (2017), also found if economic growth rises, it causes inequality to rise, on the contrary if growth falls then inequality also will go down. The cause is a trade-off between economic growth and equity, where local governments tend to concentrate more on increasing growth, thus ignoring equity.

Therefore, the quality of growth is needed throughout the tourism specially cross border tourism. Govdeli T (2017) found that the increase of tourism revenues had a positive effect on the economic growth. Harmonize with it, Tabash MI (2017) done causality test affirms a causal relationship from international tourism towards economic growth in Palestine. So, Palestinian government should develop dynamic policies to promote the tourism sector that leads to generate economic growth.

**3. Research Method**

**Data**

This research was conducted in Wini, North Insana Subdistrict, North Central Timor Regency as a main cross border Indonesia and Oecusse Timor Leste as clearly on Figure 1. The intended stakeholders are the government, business actors, tourists, community leaders. The research sample of 50 people conducted by purposive sampling.

![Figure 1. Research Location](Source: Processed Satelite Image Data, 2019)

Data collection techniques used interview, observations, documentation. Primary and secondary data that will be examined in this study are as follows: (i) the tourist attraction of the cross border
tourism on Wini, (ii) public facilities are provided to support cross border tourism in Wini, (iii) number of tourists visiting cross border tourism on Wini, (iv) reason the tourist visiting Wini, (v) the type and amount of business that is developing in wini and its surroundings, (vi) Amount income spent by tourists in Wini, (vii) distribution of the amount of income spent by tourists on each type of business in Wini, (viii) average total income of business in Wini.

**Analysis of Data**

Descriptive analysis to describe the perception of stakeholder about cross border tourism in Wini Indonesia and the Oecusse-timor Leste. Analysis of the impact on the economy is done using descriptive and quantitative approach.

a. **Agglomeration**

Agglomeration analysis used Balassa Index, which used to calculate agglomeration using labor variables. The Balassa Index formula as Sbergami (2002):

\[
\text{Balassa Index} = \frac{\sum_{i} \frac{\sum_{j} E_{ij}}{E_{ij}}}{\sum_{i} \sum_{j} E_{ij}}
\] .......................... (1)

- \( i \) = sector
- \( j \) = region
- \( E \) = labour

Classification of agglomeration according to Balassa Index as follows:
- \( > 4 \); means high agglomeration
- \( 2-4 \); means moderate agglomeration
- \( 1-2 \); means low agglomeration
- \( 0 \); no agglomeration

b. **Regional income and growth economic**

\[ Y = \sum I_u \] .......................... (2)

Information:
- \( Y \): Regional income
- \( I_u \): Total income for each type of business

Then, formula mathematics of growth economic as follow:

\[ r = \frac{I_{t1} - I_{t0}}{I_{t0}} \times 100\% \] .......................... (3)

Information:
- \( r \): growth income
- \( I_{t1} \): income 2018
- \( I_{t0} \): income 2016

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**Figure 2. Research Framework**
4. Results and Discussion

The Perception of Stakeholder about Wini cross border tourism in Wini Indonesia and Timor Leste

The perception of stakeholder regarding border tourism and its development to contribute government and community to managing border tourism. Refer to Stoffelen et al (2017) who study cross border tourism in German, which stated the German-Czech borderlands have seen a successful development of local cross-border tourism projects since 1989. Stakeholders in the region unanimously observed the advantages for tourism development of being located in proximity to international borders. In contrast, the presence of comparable multi-scalar tourism governance arrangements in East Belgium and the German Eifel, together with a high concentration of cross border networking platforms, equalize power relations between stakeholders in crossborder regionalization processes between Belgium and Germany.

The perception of stakeholder about cross border tourism in Wini Indonesia and Timor Leste showed of this study as displayed in Table 1. The highest stakeholder perception on the large number of attractions (90%) and then unique tourist attraction (80%). It means tourist decides to go to Wini cause the complete attraction (beach, mountain, cross border tourism, fish culinary). In addition to knowing the benefit of cross border tourism (70%) and the relationship with neighboring country (60%). In harmony with that, Rio et al (2017) found the positive and direct impact of the visitor’s knowledge, attitude, perceived value, satisfaction and loyalty towards cross border destination.

<table>
<thead>
<tr>
<th>Table 1. The Perception of Cross Border Tourism Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Distance to the city is close</td>
</tr>
<tr>
<td>Good road Infrastructure</td>
</tr>
<tr>
<td>Unique tourist attractions</td>
</tr>
<tr>
<td>A large number of attraction</td>
</tr>
<tr>
<td>Complete tourist support facilities</td>
</tr>
<tr>
<td>Economic benefits for the community</td>
</tr>
<tr>
<td>Studying Nationalism on Border Area</td>
</tr>
<tr>
<td>Relationship with Neighboring country</td>
</tr>
</tbody>
</table>

Source: Processed Data, 2019

Based on the reason, the research found the number of tourists visiting several attractions in cross border tourism. The tourist attraction in Wini are grouped into: natural, artificial and organizing tourist event. UU RI no 10 of 2009 concerning tourism stated recreational destination for study the uniqueness of the tourist attractions visited. The description of each tourist attraction in Wini as follows:

1. Natural
   a. Tanjung Bastian

   The Tanjung Bastian Beach with a background in the Kolboki and Bastian mountains. The Tanjung Bastian beach is a beach with white sand about 200 m with crystal sea water. In additional, the Tanjung Bastian beach is full of tamarind trees that shady. The combination of white sand, hills, horse racing tracks, and fish culinary while enjoy the view of sunset. Then, every tourist who goes to Tanjung Bastian has the choice of a boat trip.
b. Wini Beach

Wini Beach is an unspoiled beach tourist attraction with beautiful white sand, the clarity of water and seen at the bottom of the beach amount diverse rock and enjoy the sunrise. Some visitors travel to the Wini Beach to witness attraction of sharks that usually appear in the morning or evening. Wini beach is adjacent to Wini port which has been known since the 17th century. Wini port to serve the shipping to Makassar and Wetar (Maluku). The adjacent location makes Wini Beach more visitors.

c. Humusu Wini Mountains

This mountain range is known as Indonesia’s grand canyon cause it consists of beautiful rows of hills (note: the Grand Canyon in the United States is one of the wonders of the world). Some people call it a giant alley because the main road is in the middle of a series of hills. The natural mountains, will be developed into tourist attraction, such as: rock climbing, aeromovel (cable car). Some of the views from Indonesia’s grand canyon are displayed as follows.
2. Artificial

The Wini Cross Border Post directly with Oecusse Timor Leste as a new tourist destination that has amazing destinations. The number of tourists who come to reach more than 100 people per day. In fact, before the Wini cross border post built, there was not tourist who visited there cause the border gate an ordinary border post and sterilized. Stepanova (2014) stated the experience in Russian: “The socioeconomic transformations in the Russian Federation, the openness of border regions under the influence of integration process taking place in the world community facilitates tourist mobility between neighbouring countries. It is proven that Russian border regions are less competitive than the territories of neighbouring states in terms of the development of cross-border tourism”.

The Wini Cross Border Post stands on an area of 4.42 hectares, the grandeur of the building does not displace elements of local wisdom. A Lopo (cone-shaped building) functions like a pavilion, to decorate the front porch of the cross border post. The cross border post also provides green open space for parks that can be used for tourism, so that the border can be used to increase tourist attraction. The border as a tourist attraction, not only visited by local tourists (North Central Timor Regency), but also tourists from other regions in Indonesia and foreigners (such as: Timor Leste). This is an opportunity, so the government holds various tourist attractions in Wini to attract more foreign tourists.
3. The organizing of the event

Rio et al (2017) stated the role of the agents and responsible of the destination to achieve the loyalty of the tourist is key. Therefore, they have to improve the attitude and information to the visitor on the different tourist attractions of the border destination, so that the impacts on the tourists’ satisfaction; that will help to reinforce the loyalty for the border destination. Border areas have other factors that can be created into a unique attraction that distinguishes the two sides of the border region. In line with that Timothy (2000) stated that “the existence of political boundaries in a region creates unique political, economic and social conditions”. Tourism creations on the Wini cross border are the Wonderful Indonesia Festifal and Horse Rising.

a. Wonderful Indonesia Festifal

Annual festivals are organized by the Indonesian tourism ministry with the aim to knowing the several tourist sites in Indonesia, especially cross border tourism. Participants from all regions in Indonesia and Timor Leste. Attraction of the wonderful Indonesian festival in Wini such as: cultural, dances, etc.

b. Horse Rising

Traditional horse racing is held at the Tanjung Bastian arena, to attract tourists to this area. Horse race participants come from another region in Indonesia and Timor Leste. The number of spectators is very much (500-1000 people) at the same time visiting other tourist attraction on the border area.

The development of social media technology also has an impact on increasing tourist visits. Juniarti (2018) stated technology has both positive and negative impact on social economic. Wini Beach and Cross Border Post are the most visited locations (Table 2).

<table>
<thead>
<tr>
<th>No</th>
<th>Tourist attraction</th>
<th>Per Day (Man)</th>
<th>Per Month (Man)</th>
<th>Per Year (man)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tanjung Bastian Beach</td>
<td>100</td>
<td>3,000</td>
<td>36,000</td>
</tr>
<tr>
<td>2</td>
<td>Wini Beach</td>
<td>200</td>
<td>6,000</td>
<td>72,000</td>
</tr>
<tr>
<td>3</td>
<td>Cross Border Post</td>
<td>180</td>
<td>5,400</td>
<td>64,800</td>
</tr>
<tr>
<td>4</td>
<td>Port</td>
<td>85</td>
<td>2,460</td>
<td>29,520</td>
</tr>
</tbody>
</table>

Source: Processed Data, 2019

The Impact of Cross Border Tourism on Regional Development

1. Cross Border Tourism and Agglomeration

The reason tourists visit cross border cause a large number of attractions and complete facilities. It means agglomeration as stated by Weber in Adisasmita (2005) that the location of a business is determined by the cost of raw materials, labor concentration and symptoms of agglomeration. The symptoms of agglomeration form a new growth center. Losch in Rustiadi et al (2011) that the new growth center functions to: (i) increase the movement of economic sector, (ii) implies the need for spatial planning.

The agglomeration symptoms in Wini occur with the development of other business due to cross border tourism. The business referred to are: hospitality, restaurants, shops, parking business and other services. Data from these business is displayed Table 3.
Tabel 3. The Data of Agglomeration Business in Wini 2018

<table>
<thead>
<tr>
<th>No</th>
<th>Business</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Restaurant and food stalls</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>Coffee Shops</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Grilled fish</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Shops</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>Grocery stalls</td>
<td>47</td>
</tr>
<tr>
<td>6</td>
<td>Border Market and Traditional Market</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Parking business</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Hospitality (Marjon Resort)</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Home stay</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Primary Data, 2019

Balassa Index analysis results 2.03 that means classified as moderate agglomeration. Regulating relations between agglomerated economic sectors can be improved multiplier effect economic in Wini. That means having high forward and backward linkages, also reducing regional leakage. These conditions also prove the function of Wini as a border city (hierarchy II) in Indonesia. Wang et al (2018) stated sectorially and institutionally, clustering is an interconnected system whose value as a whole is greater than the sum of its parts. Some material fruits of the clustering are agglomeration and interconnection. The agglomeration reflects the geographic concentration of an industry or related activities. Whereas, interconnection involves the competitive/cooperative relationship that is established between the regional actors. The tourism sector does not exist alone independently. Whereas it is closely related to the other private and public sectors, also development in a cohort with other sectors and requires fundamental supports from a wide range of cross-sector cooperation. Meanwhile, it is also an activity endowed with the enormous possibilities that may produce, direct, indirect, and induced effects in an economy through employment, collaborative interaction and dynamics of other sectors and institutions already established.

2. Cross Border Tourism and Growth of Economic Regional

Based on Table 3, there are various business sectors in Wini that indicate the economy in Wini is getting better and developing. Measurement of regional income as an impact cross border tourism refer to Tarigan R (2010) stated regional income is the accumulation of income for the each sector, the total of the results of interaction between sectors in the region and other region.

Table 4 shows each type of business that make the biggest contribution to regional income are grocery stalls (IDR 451,200,000). Then restaurant and food stalls (IDR 132,000,000). Grocery stalls actors are local people who are in the middle class. The analysis of growth economic showed 68.79% (or income increase about IDR 492,000,000) in Wini cause the income in previous year IDR 223,200,000. That means economic interaction due to cross border tourism contributes to economic growth as an indicator of regional development so it requires better management. Previous research, Taena (2018) stated border regions needs Spatial Planning will make mutually beneficial interaction.
Table 4. Profits of the Business on Wini as Cross Border Tourism in 2018

<table>
<thead>
<tr>
<th>No</th>
<th>Business</th>
<th>∑</th>
<th>Omset (IDR)</th>
<th>Profit per Month (IDR)</th>
<th>Profit per Year (IDR)</th>
<th>Total Profit per Year (IDR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Restaurant and food stalls</td>
<td>11</td>
<td>1,500,000</td>
<td>1,000,000</td>
<td>12,000,000</td>
<td>132,000,000</td>
</tr>
<tr>
<td>2</td>
<td>Coffee Shops</td>
<td>2</td>
<td>750,000</td>
<td>500,000</td>
<td>6,000,000</td>
<td>12,000,000</td>
</tr>
<tr>
<td>3</td>
<td>Grilled fish</td>
<td>2</td>
<td>1,500,000</td>
<td>1,000,000</td>
<td>12,000,000</td>
<td>24,000,000</td>
</tr>
<tr>
<td>4</td>
<td>Shops</td>
<td>7</td>
<td>2,000,000</td>
<td>750,000</td>
<td>9,000,000</td>
<td>63,000,000</td>
</tr>
<tr>
<td>5</td>
<td>Grocery stalls</td>
<td>47</td>
<td>1,500,000</td>
<td>800,000</td>
<td>9,600,000</td>
<td>451,200,000</td>
</tr>
<tr>
<td>5</td>
<td>Parking business</td>
<td>2</td>
<td>300,000</td>
<td>250,000</td>
<td>3,000,000</td>
<td>6,000,000</td>
</tr>
<tr>
<td>6</td>
<td>Hospitality (Marjon resort)</td>
<td>1</td>
<td>1,750,000</td>
<td>1,500,000</td>
<td>18,000,000</td>
<td>18,000,000</td>
</tr>
<tr>
<td>7</td>
<td>Home stay</td>
<td>1</td>
<td>1,155,000</td>
<td>750,000</td>
<td>9,000,000</td>
<td>9,000,000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>715,200,000</td>
</tr>
</tbody>
</table>

Source: Processed Data, 2019

5. Conclusion

Conclusion

The results showed that the characteristics of cross border tourism are the large number of attractions (90%), then unique tourist attraction (80%). The result also showed the economic agglomeration (Balassa Index 2.03 means moderate agglomeration) which is increasingly strengthening the region as a new growth center, also shown by an increase of regional income by IDR492,200,000 or 68,79% in 2018 and multiplier effect economy as an indicator of regional development.

Implication/Recommendation

Cross border tourism potential will continue to grow. Indonesia and Timor Leste can build cooperation to develop cross border tourism. Livandovschi (2017) stated Cross-border cooperation is a form of interregional and international cooperation, transitional and trans-frontier cooperation. Cross-border regions often share the same historical and cultural traditions and attractive natural landscapes. Cross border regions can benefit from cooperation, that can help create greater diversity and differentiation of the range of tourism and environmental products; create economies of scale and make promotion more effective, and can help better address specific problems for tourism development.

Implication of recommendation for cooperation between Indonesia and Timor Leste to develop cross border tourism as follows:
1. Cooperation tourist object that can be accessed together (namely international destination)
   a. Indonesia : Tanjung Bastian Beach, Wini Beach, Humusu Mountains
   b. Timor Leste : Religious tourism, beach, and etc
2. Increase cooperation in organizing the event of tourism (such as: organizing together the tourism event)
3. Land and sea tours together
4. Tourist object is developed with supporting facilities and various business.
5. Research about sustainable tourism and sustainable development in Wini as cross border area.
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