Multimoda Transportation Development In Acceleration of Tourism Selection of Belitung Regency

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Abstract

Tanjung Kelayang Tourism Special Economic Zone (KEK) is one of the National Tourism Strategic Areas. The location of this area that reaches 27 km from the city of Tanjungpandan requires adequate transportation facilities and infrastructure. Customizable, reliable, effective and efficient transportation can be customized. The condition of an effective and efficient transportation system is expected to support the acceleration of the Tanjung Kelayang Tourism Special Economic Zone (KEK). The research method used is descriptive with a SWOT practical approach. Limited accessibility of transportation facilities and infrastructure, both sea and air, and the environment needed. Tanjung Kelayang Being less than optimal. Multimodal transportation development for acceleration. The Maritime and Maritime Sector is one of the main means for development needed by the Tanjung Kelayang Tourism Special Economic Zone.

Keywords: accessibility, facilities and infrastructure, multimodal transportation

Introduction

In 2018 the central government determines tourism as the top three leading sectors that will be optimized to boost economic growth. For this reason, the government released branding of 10 new tourism destinations to strengthen the slogan of Wonderful Indonesia in order to attract more tourists. The 10 new tourist destinations called "New Bali" are expected to be able to catch up with the national tourism target in 2018 as many as 17 million foreign tourists and 270 million domestic tourists. Tanjung Kelayang is also one of 10 national priority tourism destinations, the area has an exotic and enchanting beach and is expected to become the second Bali.

Tanjung Kelayang Special Economic Zone (KEK) of Belitung Regency is predicted to be one of the leading tourist destinations in Indonesia. The area managed by the Belitung Maritime Silk Road (BMSR) Consortium was developed
to attract a lot of foreign investment. The Coordinator of the BMSR Consortium said that the SEZ development was in line with the government's program to make tourism the largest foreign exchange earner in 2020, because tourism activities had a lot of multiplier effects for the development of other economic sectors.

The condition of an effective and efficient transportation system in supporting the acceleration of the Special Economic Zone (SEZ) Tourism has not been maximally achieved in Belitung Regency. Transport facilities and infrastructure are very limited and the unavailability of public transport services to tourist areas has resulted in slow development of tourism. A transportation system that has not been integrated with both air, land and sea modes has resulted in very low accessibility to the Tanjung Kelayang special economic zone. The status of the airport which has risen to become an international airport plus the increasing intensity of flights from Jakarta did not make tourist visits to increase even there was a decrease in the number of visits.

Based on data from the Department of Tourism, in 2013 domestic and foreign tourist visits amounted to 131,542 people, in 2014 as many as 199,823 people in 2015 tourist visits were 251,440 people, in 2016 as many as 292,885 people, and in 2017 as many as 251,649 people. While Belitung Regency targets a visit of 300,000 people.

From this background that Tanjung Kelayang has been designated as a Special Economic Zone of Tourism and tourist attraction that has distinctive features and is supported by various aspects will be able to attract tourists and travel agents. This does not necessarily increase the number of tourist visits, instead there is a decrease in the number of visits. Accessibility of transportation is an important element in the service and comfort of tourists.

Fulfillment of accessibility aspects will be the subject of this research so that researchers will limit the analysis of the development of multimodal transportation in an effort to support the acceleration of the Tanjung Kelayang Tourism Special Economic Zone (SEZ) in Sijuk District, Belitung Regency. The purpose of this research is to find out what tourism potentials are in Sijuk Subdistrict, knowing
what facilities and infrastructure are needed in supporting the multimodal transportation node and knowing how to develop multimodal related development efforts in the Tanjung Kelayang Tourism Special Economic Zone (SEZ).

Multimodal Transportation is the movement of people / passengers or goods from origin to destination depending on several modes of transportation using one ticket (passenger) or contract (shipping). Technically the same as intermodal transportation, but represents evolution which requires a higher level of integration between actors involved such as operators and terminal operators. (Rodrigue with Comtois and Slack, 2017).

**Figure 1. Orientasi Transportasi Multimoda**

*Sumber: Cetak Biru Sislognas (2012)*

The transportation system has several different things and is divided into 2 (two) perspectives, namely intermodal transportation network and multimodal transportation network. To develop an effective and efficient multimodal / intermodal transportation, it is necessary to have an integrated transportation network support that is able to optimize the role of intermodal and provide a node between modes which ensures seamless movement when intermodal transfer occurs.
To produce an intermodal / multimodal transportation network that can provide services efficiently, it is necessary to have a hierarchy of roles and functions of networks that are able to integrate different geographic scales from transportation services from global to local and vice versa. With the integration of infrastructure networks and transportation networks for each mode and the availability of reliable intermodal terminals, an area will have good access to international markets as a component of competitiveness.

According to Bae (2010) in the Hub-and-Spoke system, the Hub acts as the center of a region served. Each hub serves a group of cities in it. These cities are called spoke. This system is commonly used by air transport with small aircraft.

Unlike a hub-and-spoke system, point-to-point is an independent network system. In other words, the relationship between points is directly connected. In contrast to the previous system, flights with good market share and large capacity aircraft used to use this network system.

According to Cooper et al in Astuti and Noor (2016: 26) the potential of tourism objects is known as the A4 concept. The A4 concept is used to assess the size of the potential of a tourism object. The A4 concept consists of:

a. Attraction / Aktraksi: is the main product of a destination related to "what to see" and "what to do". Aktraksi can be in the form of beauty and uniqueness of nature, the culture of the local community, heritage of historical buildings, as well as artificial attractions such as games and entertainment facilities that must be unique and different.

b. Accessibility / Accessibility: means and infrastructure to reach destinations such as highways, docks, availability of transportation facilities, and signposts.

c. Amenitas: all supporting facilities that can meet the needs and desires of tourists while in the destination. Amenitas relates to the availability of accommodation facilities to stay and restaurants or stalls to eat and drink.

d. Tourist Additional Services (Ancillary): Availability of supporting facilities used by tourists such as banks, telecommunications, posts, hospitals and so on (Sunaryo, 2013: 159)
So, an ideal destination must first be examined in terms of the main aspects of attraction, accessibility, amenities and ancillary aspects. This concept should have been applied before a destination was introduced and sold to tourists.

**Method**

Based on the title of the research and the problems and in accordance with the objectives of the study the nature of the problem under study, this research is included in the type of qualitative research. Then using SWOT analysis to find out indications of strengths, weaknesses, opportunities and threats. An indication of various factors is systematically to formulate a strategy that is expected to solve a problem. This analysis is based on logic that can maximize strengths (strengths) and opportunities (opportunities), but together can minimize weaknesses and threats, (Freddy Rangkuti, 2008).

Data collection techniques are the most important thing in research, because the main purpose of the research is to get data. In this study, the instruments and data collection used were participatory observation, semi-structured interviews, documentation and triangulation. This research location is in the Tanjung Kelayang Tourism Special Economic Zone (SEZ) Sijuk Subdistrict, Belitung Regency, Bangka Belitung Islands Province.

The key informant in this study was the Head of the District Transportation Agency, Belitung and the Head of Traffic and Transportation Section of the Department of Transportation, Kab. Belitung, as well as for data sources as a comparison, were obtained through non-key informants, namely people who were considered to know the problem under study, namely the Head of the Tourism Office through the Tourism and Institutional Destination Section of the District. Belitung and Regional Planning Agency Kab. Belitung Regional Development and travel and tourists.
Discussion and Result

1. SWOT Analysis of Tanjung Kelayang Tourism SEZ Development

Special Economic Zone Development has strengths and weaknesses that can be positive and negative. Besides that, the opportunities and challenges also make the development of Tanjung Kelayang SEZ need to be done carefully and integrated. Some of the strengths, weaknesses, opportunities and challenges faced by Tanjung Kelayang SEZ and Belitung Tourism are shown in table 1 below:

Table 1. SWOT KEK Pariwisata Tanjung Kelayang

<table>
<thead>
<tr>
<th>IFAS</th>
<th>KEKUATAN (Strengths)</th>
<th>KELEMAHAN (Weaknesses)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Coastal-based natural potential and exotic giant granite rocks; 2. Support from the central government through stipulation to become a Special Economic Tourism Zone and included in the KSPN; 3. Leading sector of local government; 4. Road infrastructure; 5. Local cultural attractions, crafts and local food attractions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Weak coordination, integration and synchronization between various sectors; 2. The unavailability of public transportation services to the region; 3. Infrastructure supporting tourism; 4. Packaging tourist attractions; 5. HR in implementing conservation and protection of the region.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EFAS</th>
<th>PELUANG (Opportunities)</th>
<th>STRATEGI S-O</th>
<th>STRATEGI W-O</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. The increasing number of tourist visits; 2. Potential diversity of marine biota and its unique, rare and high economic value ecosystem and high interest of local and foreign communities; 3. The status of international airports so that the intensity of flights from Jakarta is getting higher; 4. Hotel growth continues to increase; 5. Investment support in regional infrastructure development (amenities).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Develop facilities for increase tourist activities, such as making spots for watersport, hotspots etc; 2. Representative layout arrangements so that the natural wealth owned is not polluted; 3. Carry out monthly / annual events that are thematic; 4. Meet the elements in the 4A tourism concept so that DTW is better prepared to receive mass visits.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Fulfillment of accessibility for tourists; 2. Development of a multimodal transportation network system to the surrounding area and DTW; 3. Construction of accommodation for tourists (toilets, places of worship, bins etc.); 4. Education and training for tourism HR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PELUANG (Opportunities)</th>
<th>STRATEGI S-T</th>
<th>STRATEGI W-T</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The high level of vulnerability of the region to mining, illegal logging and illegal timber trade; 2. Ownership of land around the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Conduct socialization on the importance of preserving the environment; 2. Conduct socialization and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Increasing positive emotional relationships from the surrounding community towards tourists;</td>
<td></td>
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</tbody>
</table>
area by entrepreneurs;
3. The image of tourism as a driver of drug trafficking, free sex and the spread of HIV;
4. Conflicts between sectors;
5. The low level of education of the community around the area.

<table>
<thead>
<tr>
<th>Area</th>
<th>Training for the Community Around the Area</th>
<th>Empowering the Surrounding Community in the Development and Joint Development of Tourism Objects in the Tanjung Kelayang Tourism Special Economic Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2. Empowering the surrounding community in the development and joint development of tourism objects in the Tanjung Kelayang Tourism Special Economic Zone.</td>
</tr>
</tbody>
</table>

Source: Analysis (2018)

Based on the EFAS and IFAS analysis, the P coordinate point in the region of the region's position quadrant in the vector diagram in Figure 1 follows:

```
Peluang

(Opportunities) +

P (-1.45; 1.25)

Kelemahan – (Weaknesses)

II

I

Kekuatan (Strengths)

III

IV

Ancaman (Threats)
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Source: Author

Based on the analysis with the EFAS and IFAS tables as shown in the vector diagram above, it turns out that the Tanjung Kelayang special economic area is scanned at P position (-1.40; 1.25) quadrant II, which means that Tanjung Kelayang Tourism KEK is relatively likely large compared to the threat, and the strength factor of the area is relatively unable to overcome the weakness.
factors. In theory, the region has the opportunity to run a strategy that is oriented to stability in the sense that it requires recovery of strength to be able to return to positive value because internal environmental factors have a negative power while external environmental factors have a positive chance. By looking at the results of the SWOT analysis above, the researcher formulated the WO (weaknesses-opportunities) strategy, which means fixing the weaknesses to take advantage of the great opportunities that exist, namely by developing a multimodal transportation strategy in an effort to accelerate the Tanjung Kelayang Tourism Special Economic Zone.

2. Potential of Tourist Attraction

According to Belitung Regency Tourism Office data, both local and foreign tourists visiting Belitung Regency mostly want to enjoy beach tourism and maritime tourism which has a cluster of giant granite stones located in Tanjung Kelayang Tourism Special Economic Zone, Sijuk District, partly driven by Laskar film Rainbow. November and December are vacation times so that during the month the visit will increase rapidly compared to previous months. Sijuk Subdistrict has 25 Travel Attractions, of which 17 are marine nautical DTWs that rely on white sandy beaches and clusters of giant exotic granite stones. The advantage of this beach destination is that makes the local government establish Sijuk District as a tourism development area.

Tourist Attractions located in Sijuk Subdistrict in fact not all meet the elements in the 4A concept of tourism (Accessibility, Attractions, Amenitas and Anciliari). Local governments are only trying to prepare and create new tourist destination locations without careful planning so that DTW's unpreparedness is seen when receiving mass tourist visits. Most of the DTWs do not have the accessibility element as expected, so this must be a concern of the local government, especially the Transportation Department, which is responsible for providing public transportation facilities and infrastructure.
3. Development of Multimodal Transportation in Belitung Regency

In general, there are several distribution of potential pathways in the development of Sijuk Subdistrict transportation services including improvement of existing routes. These developments include the following:

a. Trans Belitung BRT route

The development of the Trans Belitung BRT is one of the development of an integrated road passenger transportation system. The route for developing the Trans Belitung BRT can be developed as follows.

1) Tanjungpandan-Airport Terminal The village passed: Air Raya, Perawas, Badau Tourism Potential: Blue Lake, Badau Museum, Sharp Gunong, Tomb of Raja Badau, Tomb of Tanah Cerucuk City, Batu Mentas Waterfall.


3) Tanjungpandan-Terminal Terminal Sijuk. The village passed: Kebon oranges, Kerjan, Aik seruk, Aik Rembikang, Aik Selumar Tourism Potential: Tirta Marudang Indah Baths, Struggle Monument Relief, Kulong Island Fishing, Peramun Hill, Kuale Mangrove, Sijuk Old Mosque, Siantu Beach.

4) Tanjung Kelayang Tanjungpandan-KEK Terminal Villages passed: Tanjung Pendam, Air Saga, Batu Itam, Terong, Tanjung Binga, Tanjung Tinggi, Tanjung Kelayang Tourism Potential: Old City, Geological Museum and Animal Park, Tanjung Pendam Beach, Bukit Berahu, Tanjung Tinggi Beach, Tanjung Kelayang Beach.

b. Development of access nodes

Development of node access to support existing multimodal transportation systems. Development of access to nodes is as follows:
1) Development of access and the international airport stop of H.AS. Hanandjoedin.

2) Development of access to the SEZ and Tanjung Batu Port.

3) Development of access and pool of trucks at the City Terminal

C. Multimodal Transportation Development Review

1) Multimodal node of Tanjungpandan City

Tanjungpandan City as the main gateway to Belitung Regency has relatively complete transportation node facilities. The existence of Tanjungpandan City needs to be done in detail regarding the development of the existing transportation node. Some development activity plans that need to be developed are as follows:

- Improved access to road networks that enter the Port of Tanjung Batu and Terminal
- Development of Bus Rapid Transit (BRT) terminals at major transportation nodes, such as Tanjung Batu Port, H.AS International Airport, Hanandjoedin, Sijuk District. This is related to the planning of the BRT route that crosses the transportation nodes.
- Development of an access road network in the form of arterial roads to separate the external and internal movements of Tanjungpandan City with the presence of the northern arterial ring road.
- Development of Tanjungpandan Multimoda Transport.

2) Multimode node Sijuk Subdistrict

Sijuk Subdistrict is one of the multimodal nodes that many domestic and foreign tourists aim for. In Sijuk District, the flow of people and goods transportation is also relatively high for the internal area of Tanjungpandan. The existence of freight transportation movements, supported by the Tanjung Kelayang Tourism Special Economic Zone
(SEZ). Related to the need for detailed nodes in the Sijuk District as follows.

- Development of multimodal node at Tanjung Kelayang Tourism KEK.
- Development and improvement of the Sijuk passenger transport terminal.
- Development of intermodal nodes in Tanjung Tinggi and Tanjung Binga

4. Facilities and Infrastructure Support for Multimodal Knots

In the development of infrastructure requirements and facilities for multimodal nodes in the Belitung Regency, identification of the possibility of identical nodes is needed to be developed as a multimode node. This is to know the facilities needed for the development and support of this multimodal transportation. In general, the identification and development of multimodal nodes are as follows:

a. H.AS International Airport. Hanandjoedin

H.AS International Airport. Hanandjoedin is an air transportation mode node. While this only serves domestic flight routes (Jakarta, Pangkal Pinang, Palembang, Batam) and one international flight route Singapore. Some conditions and development of facilities at H. Hananjoedin International Airport as supporting the Multimodal node are as follows:

<table>
<thead>
<tr>
<th>Components / elements</th>
<th>Condition</th>
<th>Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer Mode</td>
<td>Airport Taxi Pick up / online</td>
<td><em>Bus Rapit Transit Access</em></td>
</tr>
<tr>
<td>Tranfer Node</td>
<td>Taxi parking loby Visitor parking Carport visitors</td>
<td>Airport stop Airport station / stop</td>
</tr>
<tr>
<td>Infrastructure facilities</td>
<td>Air side</td>
<td>Air side Realization of the extension of the runway extension, procurement of fuel tanks</td>
</tr>
</tbody>
</table>
b. Tanjung Batu Seaport

Tanjung Batu Port is expected to become a node of sea transportation mode in Belitung Regency. The level of service of this Port as the international hub of the Ocean Port. This Port Service is directly limited to shipping lines to Jakarta, Pangkal Pinang and Kalimantan. Several conditions and the development of existing facilities at Tanjung Batu Port as a support for this Multimodal node are presented as follows.

Table 3. Components of conditions and development of Tanjung Batu Port

<table>
<thead>
<tr>
<th>Components / elements</th>
<th>Condition</th>
<th>Development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transfer Mode</strong></td>
<td>Passenger</td>
<td>Passenger</td>
</tr>
<tr>
<td></td>
<td>Taxi</td>
<td>BRT access</td>
</tr>
<tr>
<td></td>
<td>Omprengan (unofficial)</td>
<td>Taxi</td>
</tr>
<tr>
<td></td>
<td>Pickup</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goods</td>
<td>Goods</td>
</tr>
<tr>
<td></td>
<td>Truck</td>
<td>Container</td>
</tr>
<tr>
<td><strong>Transfer Node</strong></td>
<td>Port stacking area</td>
<td>BRT bus terminal / stop</td>
</tr>
<tr>
<td></td>
<td>Port terminal parking area</td>
<td></td>
</tr>
<tr>
<td><strong>Infrastructure facilities</strong></td>
<td>Ferry terminals and port terminals become one</td>
<td>Separation of ferry crossing and sea port passenger terminals</td>
</tr>
<tr>
<td></td>
<td>Port of goods that is not yet optimal</td>
<td>Optimizing the system at the port of goods and containers with supporting infrastructure</td>
</tr>
<tr>
<td><strong>Approach access</strong></td>
<td>Access to the port can only be via the road with two access doors.</td>
<td>Improved access to access and development of access to the Port</td>
</tr>
</tbody>
</table>

Source: Analysis (2018)

c. Tanjungpandan Terminal

The development of the bus terminal as a node supporting the existing multimodal transportation becomes part of this system. The ideal bus
terminal is an important part of being an integrated terminal in ports and airports. Some integrated terminal plan facilities are as follows.

<table>
<thead>
<tr>
<th>Component/elements</th>
<th>Integrated terminal development</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.AS International Airport</td>
<td>Airports, bus stops, delivery / cargo goods terminals (pool road transport goods)</td>
</tr>
<tr>
<td>Hanandjoedin</td>
<td></td>
</tr>
<tr>
<td>Tanjung Batu Port</td>
<td>Ports, bus terminals, container terminals and cargo</td>
</tr>
<tr>
<td>Tanjung Kelayang SEZ</td>
<td>Ports, bus terminals and freight transport terminals</td>
</tr>
</tbody>
</table>

*Source: Analysis (2018)*

5. **Development related to Tanjung Kelayang Tourism KIM Multimode**

Increasing the status of the area into a Special Economic Tourism Zone is expected to make Tanjung Kelayang and Belitung Regency experience rapid development, especially in the tourism and economy. To anticipate uncontrolled developments, a reliable and efficient transportation concept is needed.

Unfortunately, the increase in transportation services has not been optimally carried out as a support for regional and economic development. Existing transportation services occur at certain transportation nodes that are not optimal. Therefore, it is necessary to develop a regional multimodal system that is focused on the movement of transportation modes for passengers and the distribution system to / from the transportation nodes of seaports and airports for both passengers and goods.

The concept of multimodal transportation that will be implemented certainly requires recent innovations that did not exist in the past in the development of transportation history in Indonesia. Laying a multimodal foundation by connecting the transportation system which in this case is the liaison of the Tanjung Kelayang Special Economic Zone. The integration of transportation modes is the basis for accessing seaports and airports. Access to internal mobilization of the SEZ area is also an important point in the placement of this foundation. Processes and handling systems facilities, infrastructure and
management are multimodal processes that need to be demonstrated. Speed and practicality in mode switching are the main keys.
Multimodal transportation applied in Tanjung Kelayang KEK is more directed towards a network system that connects travel to a place of origin and destination by involving more than one transportation mode (mode) that relies on management systems, infrastructure reliability, facilities, all of which will provide certainty in transportation.
In accordance with the theory and results of the SWOT analysis described earlier, the network strategy and system that will be used in the development of multimodal transport in the Tanjung Kelayang Special Economic Zone is the Hub-and-Spoke network system. Where the hub is H.AS airport. Hanandjoedin, sea port Tg. Batu, Tanjungpandan terminal, Sijuk terminal and Tanjung Kelayang Special Economic Zone. While the Spoke is a tourist destination and islands scattered around the area.

**Conclusion**

1. Development of tourism potential in Belitung Regency should still fulfill all elements in 4A CONCEPT, namely Accessibility, Amenity and Ancillary Attractions;
2. The condition of public transport services (land, sea, air) in Belitung Regency must now receive top priority. Accessibility of tourist attraction in each district must be connected between nodes;
3. Fulfillment of integrated transportation facilities between land, sea and air is the government's obligation which of course will also involve the private sector as the developer and manager of tourist attractions;
4. Development of integrated terminals, construction of bus stops at each point of tourist destination, procurement of mass transportation equipment is a mandatory means and infrastructure needed to support multimodal transportation nodes;
5. With the development of multimodal transportation using a hub-and-spoke network system, it is expected that the acceleration of the Tanjung Kelayang Tourism Special Economic Zone and the region in general will run optimally so that the national tourism target of 17 million foreign tourist visits and 270 million foreign tourist visits will be fulfilled.

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