

West Kalimantan Border Development Strategy through Tourism Sector Using Analytic Network Process Method

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Abstract

The development of the border area of West Kalimantan is not only to increase regional income, but furthermore, the aims are to improve people's welfare and reduce regional disparities that result in backwashing the economy. One of the flagship areas in the border area that requires serious attention is tourism development. This research uses ANP (Analytic Network Process) to obtain a tourism development strategy in the border area of West Kalimantan. Nine respondents are development planners. Tourism development strategies in border areas include natural, cultural, and culinary tourism. The problems that arise in the tourism sector are poor infrastructure, lack of promotion, and inadequate transportation for the development of natural tourism. For cultural tourism, the main problem is the lack of maintenance of cultural assets, rarely do festivals and locations are difficult to reach. In comparison, culinary tourism focuses on maintaining guaranteed halalness, having reasonable prices, and maintaining cleanliness. The rater agreement in this study consisted of the consistency index value in the range of 0.02 – 0.09 and Kendall's Coefficient of Concordance of 0.667.

Keywords: border areas, tourism development strategies, analytic network process

INTRODUCTON

1. Background

The construction of the border area has become a necessity. Through Law No. 27 of 2017 in the RPJPN, the government has affirmed that the development of border areas that were previously *inward-looking* become *outward-looking*. This paradigm shift explains that the construction of the border that initially made the border as a backyard turned into the front yard and entrance of a country (Rustiadi et al., 2011). Furthermore, it was followed by Law No. 43 of 2008, which explained the management and utilization of State Territories and State Borders. This management and utilization has a goal for the welfare of the community, reducing regional disparities and *backwash economy* (Priyarsono, 2017).

One of the developments that must be considered on the border of West Kalimantan is the tourism sector (Sandy & Damajanti, 2013). The tourism sector can be relied upon to improve community welfare and national development (García-Hernández et al., 2017) because the region is supported by diverse natural resources that have the potential to be processed and utilized. In addition, the border of West Kalimantan is very rich in various culinary tours, regional cultural arts, customs, historical relics, and no less attractive is the beauty of the natural panorama that is potential enough to be appropriately developed (Elyta & Nuzulian, 2020). All this, of course, adds to the characteristics of Indonesia's cultural wealth and is a source of foreign exchange for the country.

Although the tourism potential on the border of West Kalimantan is very diverse, the tourism resources owned are not well managed. Some of the problems facing the border region, such as inadequate infrastructure and transportation, long distances from the economic center, lack promotion, become the main problems faced by tourism. Solving this problem should be the

thinking of the central and regional governments by selecting the right strategy. To that end, this research aims to provide tourism development strategies in the border region of West Kalimantan.

2. Literature Review

2.1 Border Area Development Strategy

Along with developing knowledge, technology, and community needs, development strategies in the border region undergo a paradigm shift. The latest paradigm of development planning in the border area explains. **First**, development activities should be aimed and carried out by local communities to improve the welfare of communities in a sustainable manner that requires adjustment to the capacity and environmental condition of their natural resources. In contrast, the role of the government is increasingly shifting more as a facilitator of development, public infrastructure providers, and designing policies and incentive structures towards increasing the productivity of economic actors. Thus, the present and future development approach is local community-based economic development. The importance of reorienting local community-based regional development is increasingly emerging due to various government failures that often have more severe impacts than market failures that have often been used as a reason for public intervention by the government (Bellinger, 2007). According to the current development paradigm, the role of government needs to be increasingly limited to areas where other economic actors (private and community organizations) have no incentive to do so. The role of government should be further encouraged as an institution that facilitates communication and transfer of information and technology that bridges information between developed and relatively lagging regions. **Second** is the domestic resource-based *development* approach. Reorientation of the current development approach requires implementing a domestic resource-based regional development approach. Domestic resources in question include

resources in a broad sense, including physical-natural resources, human resources, artificial resources, and social resources. Thus, a development planning approach is needed based on the potential of domestic nature, local human resources, and local development results so far, including the availability of existing domestic physical and social infrastructure. This approach requires identifying the *base sectors (base sectors)* driving *forces of* regional economic activities.

Related to the strategy of development in the border region (Wu., 2001), in one of his studies, outlined five main elements that must be done, namely:

- a. *Economic Complementary* is the development of a border area that complements each other (between bordering regions) in production and can increase profits for both parties.
- b. *Private Sector Interest* is the development of a region that relies on good location factors for the private sector to invest. The depiction of this condition is a Shenzhen industrial area that can attract the private sector to invest due to location factors (Von Thunen Location Theory).
- c. *Government Intervention* in the development of border areas through broad government policy interventions does not rely solely on the private sector, especially on infrastructure, labor providers, and economic growth. In line with Bellinger's explanation (2017), the government must provide subsidies, incentives, or other assistance for the economy to develop.
- d. *Institutional Framework* becomes very important that when development occurs, this institution helps promote collaboration between institutions, evaluating development and paying attention to socio-cultural and environmental sustainability factors.

- e. *Cultural* / Culture proves that psychic and cognitive distances can be minimized.

Policies that assume that the development of border areas will be faster if focused on the economy are not very appropriate, but culture is also a catalyst for development.

For this reason, in line with Wu's thinking above, the approach to border development carried out by the Indonesian government in the border area is reflected in the original *security approach* (security approach) into a *prosperity approach* (welfare approach) but still does not leave the problem of state security (RPJPN 2005-2025). The implementation policy can then be translated into the following four things:

- a. Spatial Policy; One of the implementations of border area spatial policies is to create a growth center. This growth center will explicitly serve as a guide and goal for developing the border area in the form of Lokpri (Priority Location). Loki will be equipped with infrastructure facilities.
- b. Economic policy; The growth center that is the primary condition of the border area must have an industrial area that supports the region's economy. The characteristics of the industrial area that is expected as an economic driving force are (1) economic activities to develop rapidly so that they become drivers for other activities, (2) the regional economy becomes perspective, (3) there is an excellent economic development carrying capacity, (4) sufficient resource capacity and (5) conducive institutional and regulatory capacity. The economy of the developed region must be supported by the production of raw materials available around the site, so *local economic development* must also be a focus.
- c. Community Welfare Policy; Border area development policies are expected to improve the community's welfare. This is reflected in society's rising income levels, increased school age, and high human development index.

2.2 Tourism as a Source of State Revenue

Tourism development has significant meaning when viewed from various aspects. This sector is expected to be a foreign exchange earner and a source of state income; for that, the government must strive for development and improvement in the tourism sector over time. Tujuan preserves existing tourist attractions because they want to improve the quality of tourism in order to attract tourists to visit and increase state support through taxes. In recent years, in terms of the economy, tourism has contributed positively to Gross Domestic Product (GDP), both through foreign exchange and economic turnover (Sujai, 2016). The tourism sector also opens tourism service business opportunities, both directly and indirectly, through tourists who visit and open many job opportunities (Ikram & Fitrianti, 2017).

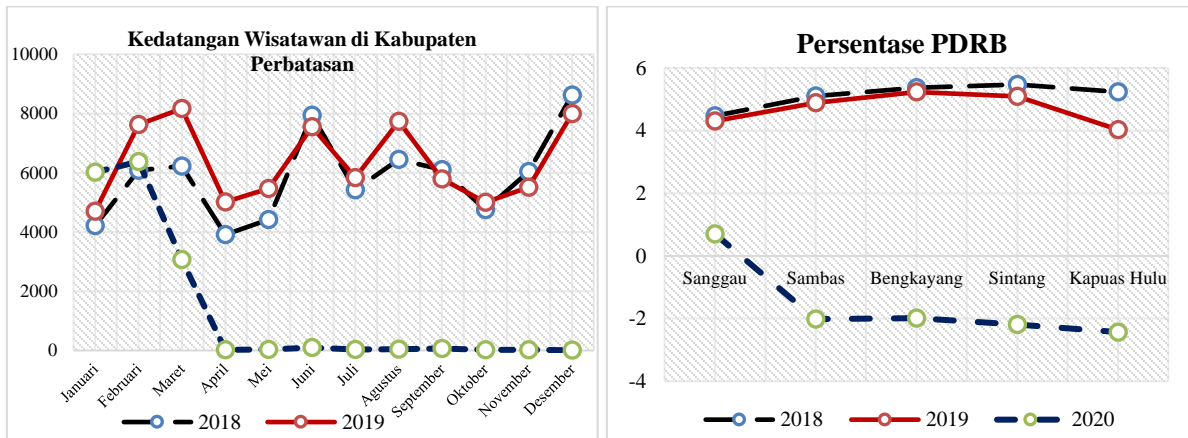


Figure 1
Tourist Arrivals and Percentage Increases in PDRB

The data above shows that the increase in the number of tourists in the border area also increases the percentage of PDRB. The sharp decline occurred in 2020, and this is due to the covid-19 pandemic that makes human movements hampered, thus reducing regional income.

3.3 Tourism in the Bprder Area

Following the potential, tourism in the border area is grouped according to its type to be developed as an activity with its characteristics (Suwena & Widyatmaja, 2010). The development of tourism as an ideal industry should be based on four basic principles, namely:

- a. Ecological continuity: the development of tourism must ensure the creation of maintenance and protection of natural resources that are the attraction of tourism, such as marine environments, forests, beaches, lakes, and rivers.
- b. The survival of social and cultural life, namely that the development of tourism, must increase the role of the community in the supervision of living arrangements through the value system embraced by the local community as the identity of the community.
- c. Economic survival, namely the development of tourism, must create employment opportunities for all parties to engage in economic activity through a healthy and competitive economic system.
- d. They are improving and improving the quality of life of local people by allowing them to engage in tourism development.

There are many attractions and tourist attractions owned by the Kalimantan border area. These attractions and attractions are spread along the border with various cultural differences and uniqueness that each region has. No less than twenty tourism locations are the flagship for the local government, natural attractions such as Lake Sentarum Wong Prawan Waterfall, and cultural tourism such as Singkawang Grand Mosque and Tri Dharma Monastery, which has been hundreds of years old. Including the main attractions are culinary in the border area, a mixture of Malay - Chinese and Dayak culture that has a unique taste.

RESEARCH METHODS

This research uses the Analytic Network Process (ANP) method, which solves an unstructured problem and has a relationship between its participants (Nugroho et al., 2016). ANP in the process has objectives, criteria, subcriteria, and alternatives in its completion. ANP consists of two parts: (1) a hierarchy of controls or a network of criteria and a subcriteria that controls interactions in a system and (2) a network that shows the influence between members in a cluster or between clusters (Saaty & Vargas, 2013). There are three ANP principles, namely (1) the decomposition principle, applied to structure complex problems into hierarchical frameworks or networks of clusters, sub-clusters, sub-clusters, and so on. In other words, decomposition is to model the problem into the ANP framework, (2) *comparative judgment*, applied to build *pairwise comparisons* of all combinations of elements in the cluster, judging by its parent cluster. The comparison of these pairs is used to derive local priority from the elements in a cluster viewed from the parent cluster, lastly, (3) hierarchical or synthesis positions are applied to shift the local priority of elements in the cluster with the global priority of the parent element, which will result in the global priority of the entire hierarchy and sum it up. To generate global priority for the lowest level element (usually an alternative) (Jharkharia & Shankar, 2007).

In an ANP, a known *consistency index* (CI) is a consistency number that must be obtained to state the consistency of respondents when answering various questions. The recommended CI value is 0 - 0.1 (Padmowati, 2009). If it exceeds the above value, the respondent's answer is unacceptable and must be reconfirmed. In addition, there is a *rater agreement*, a measuring instrument that shows the level of agreement or approval of answers. The *rater agreement* value is marked by *Kendall's Coefficient of Concordance*, which is between 0 and 1. The closer to 1, *the rater agreement* shows better results. The formula used to find out *Kendall's Coefficient of Concordance* is:

$$\tilde{A} = \frac{\sum Ri}{n}(1) d_i = Ri - \tilde{A}$$

$$W = \frac{12 \sum_{i=0}^n d_i^2}{m^2 n(n^2 - 1)}$$

Where:

$W = \text{Kendall's Coefficient of Concordance}; 0 \leq W \leq 1$

Table 1
Interpretasi Kendall's Coefficient Concordance

In	Interpreted
0	Without consent
0.1	Low deal rate
0.3	The level of agreement is enough
0.6	Strong deal rate
1	Perfect deal rate

Respondents in the study were development planners in the border area (National Agency for Border Management-BNPP) five persons, development planners in West Kalimantan province (Regional Development Planning Agency – Bappeda) two persons, and academics two persons. Interviews are conducted using the in-depth interview method.

RESULTS AND DISCUSSIONS

The border area of West Kalimantan has a variety of exciting cultures and deserves to be used as an icon of tourism development. Tourism potential in cultural arts, natural tourism (national park and nature reserve tourism), and culinary tourism. All these attractions have their advantages and attractions, but a priority scale is needed for their development. The model structure built on this research consists of the goal of Tourism Development. Then the criteria are

Natural Tourism, Cultural Tourism, and Culinary Tourism. While subkriteria is Subkriteria

Cultural Tourism, Subkriteria Nature Tourism and Subkriteria Culinary Tourism. (Figure 2).

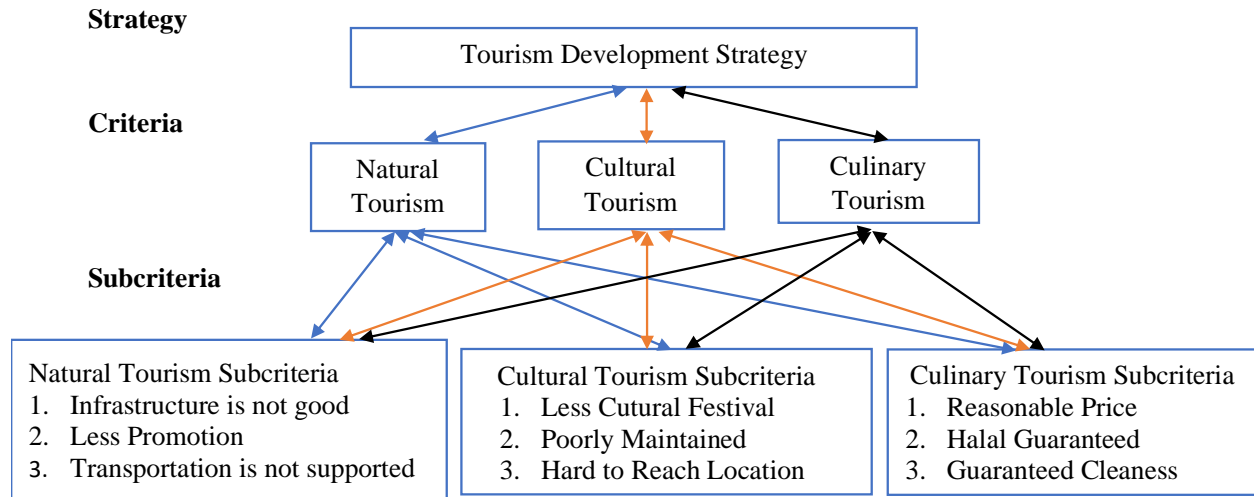


Figure 2
Structure of the research model

The results of research based on The ANP method, the development of tourism that can be developed in the border area of West Kalimantan are natural tourism (0.403), cultural tourism (0,360), and culinary tourism (0.236) (Figure 3).

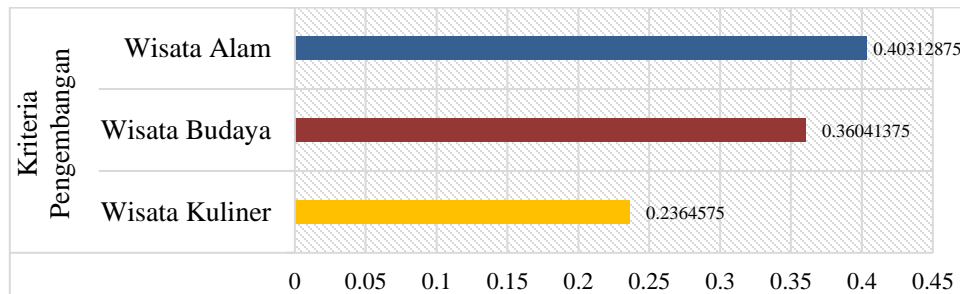


Figure 3
Order of Tourism Development on the Border of Kalimantan

1. Development of Natural Tourism

Natural tourism ranks first in the development of the area on the border of West Kalimantan. The increase in the number of tourists resulted in an increase in Regional Original Income (PAD)

through tax revenues. No less than 10 natural attractions scattered, including Lake Sentarum in Nanga Badau (Kapuas Hulu), Pasir Panjang in Singkawang, Lemukutan in Bengkayang, Temajuk in Sambas and Bukit Kelam in Sintang. All these tourist areas can attract many local tourists and foreign tourists. The arrival of tourists can undoubtedly increase regional income and increase people's income. Nevertheless, based on the results of the in-depth interview found problems that must be fixed in natural tourism on the border of West Kalimantan, namely:

- a. Poor infrastructure refers to physical systems that provide transportation, irrigation, drainage, buildings, and other public facilities, which are needed to meet basic human needs in the socio-economic sphere (Kodatie, 2005). The role of infrastructure as a mediator between economic and social systems in the order of human life with the natural environment becomes crucial (Sumaryadi, 2005). It cannot be denied that the distance of the border area from the economic center of the district makes travel to tourist areas difficult to reach and infrastructure that is not good. The government has started working to fix it. Road construction began massively to improve connectivity between regions.
- b. Lack of promotion; One of the developments in natural tourism is the lack of promotion in the border area. Introducing tourism products requires promotion; without adequate promotion, the attraction cannot be known, so the level of tourist visits must be below.
- c. The last problem of the development of nature tourism is inadequate transportation. Ayuningtyas (2017) has asserted that one of the main problems in tourism in West Kalimantan is transportation. However, this adequate transportation is for the convenience of visitors who do not have a private vehicle to tourist sites.

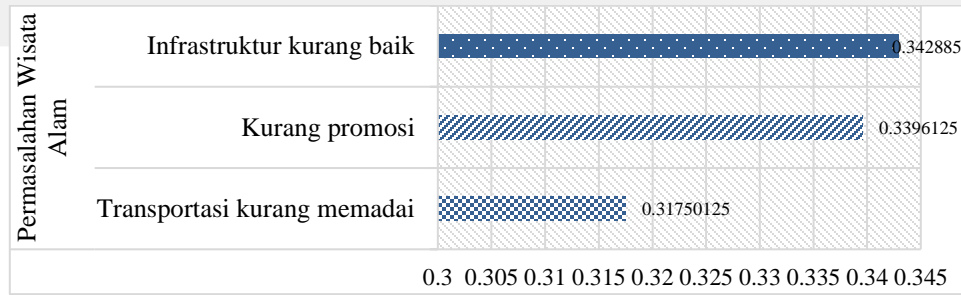


Figure 4
Order of Natural Tourism Problems in the Kalimantan Border

2. Development of Cultural Tourism

The second order of tourism development on the border of West Kalimantan is the development of cultural tourism. The variety of tribes in West Kalimantan, such as Malay, Chinese, and Dayak, makes the culture-rich and varied. As a tourism attractor in the border area, it requires the ability to package various cultural assets owned to meet the demand of the tourism market. However, cultural tourism at the border has problems that should be a concern, namely:

- a. Poorly maintained; the cost of maintaining cultural heritage and historical relics is indeed a problem for areas that have cultural assets. Indeed, the government has issued maintenance funds, but it cannot be denied that the funds available are not sufficient. For that, the manager takes retribution from tourists.
- b. Rarely do festivals; Festivals are part of the promotion. Cultural promotion needs to be done so that the wider community uses and as a means of education. The rarity of festivals makes cultural tourism less famous. In the era of social media as it is now, the promotion of cultural festivals that are carried out becomes more accessible and able to reach the whole world.
- c. Locations are difficult to reach; One of the problems in the border region of West Kalimantan is a location far from the economic center of the province. As well as its cultural location. The border district consisting of Kapuas Hulu, Sambas, Sintang,

Bengkayang, and Sanggau is far from Pontianak (provincial capital). This remote

location makes cultural locations also far away and difficult to reach.

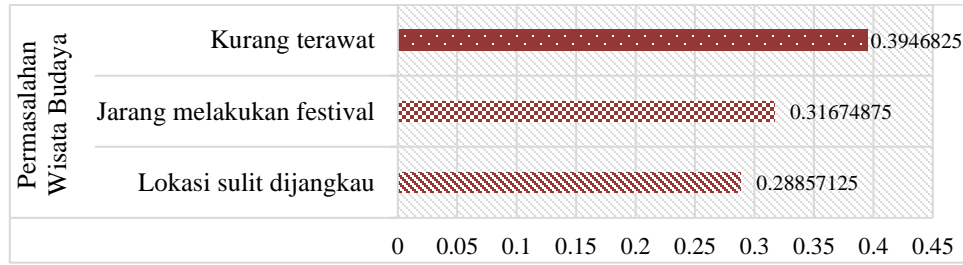


Figure 5
Order of Cultural Tourism Problems in the Kalimantan Border

3. Development of Culinary Tourism

The third stage of tourism development on the border of West Kalimantan is culinary tourism. The diverse culture makes culinary in West Kalimantan fascinating and full of variety. The high flavor obtained from the excellent quality of spices makes culinary in this region very famous. However, several considerations are of concern to tourists, namely:

- a. Reliability is guaranteed; Halal food is the main requirement for Muslim tourists. I was considering a large number of Muslim tourists. Then this main requirement should be the primary consideration for regional development by the government.
- b. Reasonable price; Price considerations are also one of the focuses in introducing culinary tourism. Tourists in general like affordable prices and not too pricy
- c. Maintained cleanliness; Cleanliness is the main thing, for that cleanliness becomes a consideration that is also prioritized in the development of border areas.

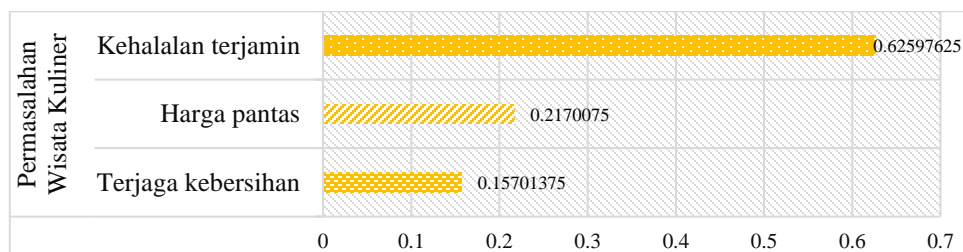


Figure 6

Order of Culinary Tourism Problems in Kalimantan Border

4. Rater Agreement

Rater agreement is the result of the agreement of experts who are respondents to the results of the strategy made. The rater agreement results are as follows:

Table 2
Rater Agreement

No	Expert	Consistency Index (CI)	Kendall's Coefficient of Concordance	Interpretation
1	Expert 1	0.02 – 0.09		
2	Expert 2	0.03 – 0.08		
3	Expert 3	0.05 – 0.09		
4	Expert 4	0.02 – 0.09		
5	Expert 5	0.05 – 0.09	0.667	Strong deal
6	Expert 6	0.02 – 0.08		
7	Expert 7	0.04 – 0.08		
8	Expert 8	0.04 – 0.09		

Source: Data processed 2021

The results above showed that all respondents had a strong level of agreement on the results of strategies related to tourism development in the West Kalimantan border region.

CONCLUSION

The development of border areas in West Kalimantan is an inevitability, increasing state revenues and being able to anoint regional disparities, reduce inequalities, and increase state revenues. One of the border area developments is through the development of tourism. Tourism on the border of West Kalimantan is prosperous and diverse. The order of tourism development consists of natural tourism, cultural arts tourism, and culinary tourism.

To get maximum results, some of the things that need to be done by the central and local governments are (1) in terms of natural tourism development need to improve infrastructure to tourist sites promote, and prepare transportation to tourist sites. In terms of the development of cultural tourism, the primary blame is (1) the lack of care for cultural assets, (2) rarely festivals so that many people do not know, and (3) the location of these cultural assets is difficult to reach. While the development of culinary tourism that needs to be considered is (1) pay attention to the idolatry of culinary in order to be enjoyed by all tourists, especially Muslim tourists, (2) have a reasonable price, and (3) maintain cleanliness.

SUGGESTION

The task of developing the border area, in this case, the development of tourism, is not the duty of the central government and local government only, but in it, there is the role of the community, private and other community institutions. All *these stakeholders* need to cooperate in developing tourism in this border region. The point of improvement lies in three things: reliable planning supported by policies, substantial funding, and *community development*.

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