

Analysis on Infrastructure Effect towards to the Tourism of Holtekamp Beach, Jayapura City

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Abstract: *Tourism is an activity that contributes quite a lot of funds to the government. At least, the city of Jayapura has 15 tourist destinations, which one is Holtekamp beach. Supporting the activities and development of Holtekamp Beach tourism, completeness and good condition of infrastructure is needed. The purpose of this study is to analyze the effect of completeness and condition of infrastructure in the Holtekamp Beach to the tourist comfort. The used method is quantitative. Results shown that the lack of existing infrastructure has caused non comfort to the tourists.*

Keywords: completeness of infrastructure, tourism infrastructure, tourism comfort, Holtekamp beach

1. Introduction

Tourism is an activity that directly touches and engages the community. Even tourism can make the local people changes in all aspects. Besides being beneficial for the community, it also beneficial to the government. The benefits of tourism shown in terms of economic, social, cultural, environmental, social and scientific values, such as job opportunities.

Tourism is currently busy discussed by people because the developing of tourism will running good effect on other sectors. The demand of tourism is increasing in line with the human needs which increasing year to year. Government regulations was stated that the development of tourism improved and developed the government earnings, expand employment, encourage regional development, improve the welfare and prosperity of the people, enrich national culture, and still maintain the nation's personality, strengthening friendships between nations, fostering love for the motherland, and maintaining the quality and function of the environment. [6]

Holtekamp Beach is one of the tourist areas in Jayapura City. It is precisely located in the Muara Tami District. Before functioning the Bridge of Youtefa, the tourists who wanted to visit Holtekamp Beach, must travel overland 39 kilometers or 1.5 hours from the center of Jayapura City. But now, after functioning the bridge, just 15 kilometers or 45 minutes only. The beach has an attraction by its amazing beautiful scenery. Even it has white sand, surrounding by coconut trees and mangrove forests that can be used as a self-taken background for the tourists.

The faced problem is the lack of supporting infrastructure, such as transportation, public toilets, public canteens, hotels, trash bins, and other public facilities. All of these infrastructures are still not well ordered.

2. Literature Review

According to the Indonesian Law No. 10/2019 about concerning tourism, explained tourism is a variety of tourism

activities and is supported by various facilities and services provided by the community, business people, main government and regional governments. [6]

Tourism is an economic activity that must be seen from two sides, demand and supply side. Success in developing tourism depends to the ability of a planner in integrating the two sides equally. [10] [5]

Tourism is something complex including the movement of people, goods, services related to organizations, institutional and individual relationships and the need for service provision. The elements are subsystems that interrelated in a functional link that forms a system. Tthe tourism system consists of several subsystems in which referred the demand, supply, environment and configuration subsystem. [1]

The term of tourism is closely related to the understanding of travel that is a temporary residence of someone outside of their residence for some reason and not to conduct activities that generate wages. [8]

Mathieson and Wall, in Bidar, 2019, tourism is a series of activities which temporary movement of people to a destination outside of their residence or place of work. Many activities done in the destination area, so the facilities must provide either during the trip or in the destination. [2]

According to Grigg, in Lallo, 2016, infrastructure is defined as the physical facilities of a city or country that is often called public works [4]. Payne, in Priatmoko, 2017, defined that infrastructure in the physical environment is divided into two types, are essential evidence which is part of physical facilities (eg buildings, roads, equipment, etc.) and peripheral evidence which is physical facilities in the form of complement (eg paper flight ticket). Prakoso, in Priatmoko, 2017, believes that infrastructure such as roads and lighting as well as supporting facilities and attractions are elements of the carrying capacity of developing tourist routes. [7]

According to Yoeti, in Puspitasari, 2017, tourism infrastructure is the same infrastructure as economic

Volume 9 Issue 8, August 2020

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infrastructure in general because tourism activities are one of economic activities [9]. Suwanto, in Pongsitanan, 2018, defined that tourism infrastructure is a natural resources and man-made resources that are absolutely needed by tourists in tourist destinations, such as roads, water, electricity, telecommunications, terminals, bridges, and others. For the readiness of tourist objects to be visited by tourists in the tourist destination, the tourist infrastructure needs to be built according to the location and condition of the tourist attraction concerned. Tourism infrastructure in quantity refers to the number of facilities that must be provided and by quality refers to the quality of services provided which is reflected the tourist satisfaction in the destination.[6]

By Musenaf, in Kartika, 2019, infrastructure was included in the components of a tourist area such as road, electricity, clean water and telecommunications infrastructure. [3]

The development of tourism infrastructure must consider to the conditions and location in order to increase attractiveness of the tourist destination itself. The development of tourism infrastructure in the tourist destinations and attractions must be adjusted to the needs of tourists both quantity and quality. Quantity refer to the number of tourist facilities that must be provided, and quality refer to the quality of services provided which is reflected in the satisfaction of tourists who receive services. The minimum criteria and standards that must exist in the tourist destination are as shown in Table 1.

Table 1: The criteria and minimum standards for infrastructure in the tourism sites

No	Criteria	Minimum Standards
1	Object	One of the elements of nature, social, and culture
2	Access	Available roads, easy route, parking and affordable parking prices
3	Accommodation	Lodging services (hotels, guesthouses, inns)
4	Facilities	Travel agents, information centers, health facilities, fire engines, hydrants, TIC (Tourist Information Center), guides (tour guides), information signs, entry and exit officers
5	Transportation	Available of convenient mode of transportation as access
6	Catering Service	Food and beverage services (restaurants, canteens, restaurants)
7	Recreational Activities	Activities in the tourist sites such as swimming, walking, and others
8	Expenditure	Place to buy general goods
9	Communication	Available of TV, telephone signals, internet access, voucher sellers
10	Banking Service	The existence of banks and ATMs
11	Health	The existence of Health Service Centers (Clinics, Health Centers, Hospitals)
12	Security	Security guarantees
13	Cleanliness	The existences of bins and warning signs about bins
14	Worship Place	The existences of worship facilities (mosque, church)
15	Promotion	

Source: Yoeti, 1996, Introduction of Tourism Science, Bandung: Angkasa

Until now, the tourism sector in Indonesia is still not developing optimally. One of the causes is the availability of supporting infrastructure for the tourist area. To support the tourism sector, a number of improvements and infrastructure development are absolutely necessary. Air transportation infrastructure is needed to ensure connectivity between countries and Indonesia regional. Road infrastructure needs to be improved, because there are still many roads that lead to poor-conditioned tourism areas. There is also a need for public transportation to facilitate mobility and increase the comfort of tourists.

3. Methodology

This research was conducted in the tourist destination of Holtekamp Beach, Muara Tami subdistrict, Jayapura City. This place could reach by road using two or four-wheeled vehicles. The location of Holtekamp beach is shown in Figure 1.



Figure 1: Holtekamp Beach Tourism Location
Source: Observation

Analytical method used is quantitative descriptive, where results are obtained through data analysis which is done by interpreting the tables, graphs, or numbers. The population used are tourists and business people in Holtekamp beach tourism area. To determine the sample in this study, researchers will use the Slovin formula (Johan Oscar Ong, 2014) is as follows

$$n = \frac{N}{1 + N\alpha^2} \tag{1}$$

Where:

N : sample size

a : error (10%)

N : population size

According to Johan Oscar Ong, 2014, the Likert Scale is used to measure the attitudes or opinions of a person or a number of groups towards a social phenomenon where the answers of each instrument item have gradation from very positive to very negative. The scales used in this study:

- a. Very Satisfied or Very Important = 5
- b. Satisfied or Important = 4
- c. Quite Satisfied or Quite Important = 3
- d. Not Satisfied or Less Important = 2
- e. Not Satisfied or Not Important = 1

To test the hypothesis, a Cartesian diagram is used which can determine the level of satisfaction of tourists and business people with the infrastructure in the Holtekamp Beach. The Cartesian diagram can be described as shown in Figure 2.

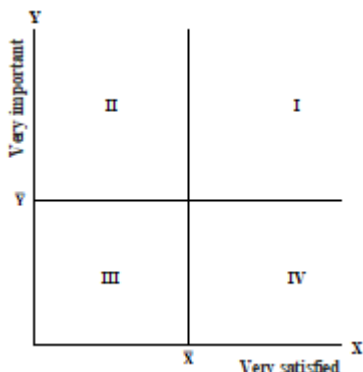


Figure 2: Cartesian diagram

Where:

X = Level of Tourist Satisfaction

Y = Importance of Tourism Infrastructure

\bar{X} = The average of tourist satisfaction obtained from the average results of the calculation of tourist satisfaction

\bar{Y} = The average of infrastructure importance is obtained from the average of the infrastructure importance according to tourists

\bar{X} = The second average is obtained from the average number of satisfaction divided by the number of basic infrastructure facilities

\bar{Y} = The second average is obtained from the average amount of infrastructure importance divided by the number of basic infrastructure facilities

The average = Jumlah nilai jawaban masing-masing responden/ N

The second average = Average / n

Quadrant I: explains that infrastructure is considered very important and satisfying for tourists, so it must be maintained in quality.

Quadrant II: explains that infrastructure is considered very important and not satisfying for tourists, so it must be improved in quality

Quadrant III: explains that infrastructure is considered lacking or not important and unsatisfactory for tourists

Quadrant IV: explains that infrastructure is considered lacking or not important but satisfying for tourists.

If the results are in quadrants III and IV, it means that the development of the infrastructure can be ignored, because it is considered less for tourists.

4. Discussion

Due to the observation and based on the criteria and minimum standards of infrastructure in tourist areas, known that among 15 basic infrastructure facilities, Holtekamp beach has only 9 facilities. They are objects, access, facilities, catering services, recreational activities, spending, communication, security and promotion.

Number of populations was 3,000, so the samples obtained was 97 respondents. The questionnaire filled out by

respondents, then an infrastructure importance score was obtained as shown in Table 2.

Table 2: Infrastructure Importance Score (Y)

No	Infrastructure	Score					Total	Y
		VI	I	QI	LI	NI		
1	Object	57	28	12	0	0	97	4,4184
2	Access	64	32	1	0	0	97	4,6020
3	Accommodation	19	26	26	17	9	97	3,2653
4	Facilities	36	34	15	12	0	97	3,9286
5	Transportation	33	29	23	7	5	97	3,7653
6	Catering Service	37	32	16	12	0	97	3,9286
7	Recreational Activities	30	34	20	13	0	97	3,7959
8	Expenditure	29	29	15	13	11	97	3,5000
9	Communication	62	24	11	0	0	97	4,4796
10	Banking Service	21	43	17	9	7	97	3,6020
11	Health	63	21	13	0	0	97	4,4694
12	Security	68	26	3	0	0	97	4,6224
13	Cleanliness	70	27	0	0	0	97	4,6735
14	Worship Place	44	34	11	5	3	97	4,1020
15	Promotion	38	25	34	0	0	97	4,0000
	Second average							4,0769

Where:

VI = Very Important = 5

I = Important = 4

QI = Quite Important = 3

LI = Less Important = 2

NI = Not Important = 1

Based on Table 2, can be explained that among the 15 basic infrastructure facilities, there are 8 that are important for the development of a tourist destination, and 7 facilities which are quite important. The same sample also obtained a Tourist Satisfaction Score, as shown in Table 3.

Table 3: Tourist Satisfaction Score (X)

No	Infrastructure	Score					Total	X
		VI	S	QS	LS	NS		
1	Object	11	28	17	26	15	97	2,9082
2	Access	23	29	25	10	10	97	3,4286
3	Accommodation	0	15	34	30	18	97	2,4490
4	Facilities	4	31	27	17	18	97	2,8265
5	Transportation	3	13	21	28	32	97	2,2245
6	Catering Service	1	23	31	23	19	97	2,6020
7	Recreational Activities	13	32	18	23	11	97	3,1020
8	Expenditure	1	15	30	28	23	97	2,3878
9	Communication	27	29	8	16	17	97	3,3061
10	Banking Service	0	18	26	22	31	97	2,2959
11	Health	4	9	13	33	38	97	2,0306
12	Security	4	11	15	31	36	97	2,1122
13	Cleanliness	4	10	12	37	34	97	2,0816
14	Worship Place	4	11	23	29	30	97	2,2551
15	Promotion	4	18	27	26	22	97	2,5204
	Second average							2,5687

VS = Very Satisfied = 5

S = Satisfied = 4

QS = Quite Satisfied = 3

LS = less Satisfied = 2

NS = Not Satisfied = 1

Based on Table 3. can be explained that of the 15 basic infrastructure facilities of a tourist area in the Holtekamp beach area, none of them are satisfactory for tourists.

Due to the coordinates shown in Table 2 and 3, then the Cartesian diagram formed as shown in Figure 3.

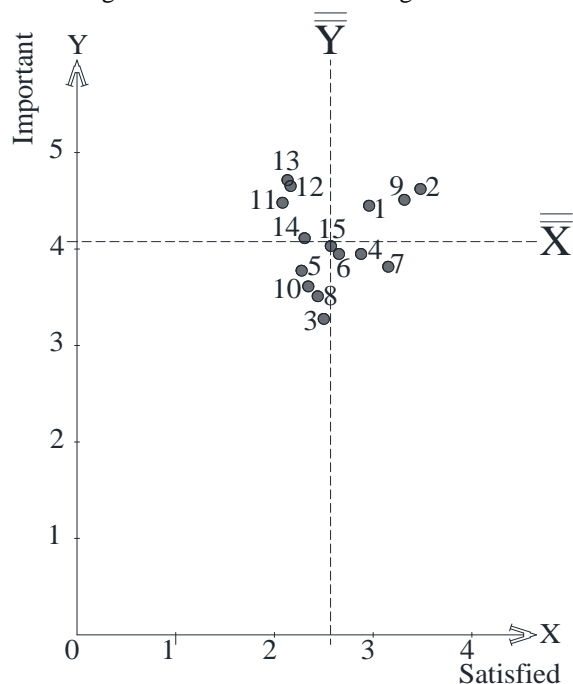


Figure 3: Cartesian Diagram of Tourist Satisfaction

Due to the Cartesian diagram in Figure 3, then interpreted:

1. Quadrant I: explains that infrastructure is very important and very satisfying for tourists. It must be maintained its quality. The variables included in this quadrant are: Tourist Attraction, Access and Communication networks
2. Quadrant II: explains that infrastructure is very important but unsatisfying for tourists. Its quality must be improved. The variables included in this quadrant are: Health, Security, Cleanliness and worship place.
3. Quadrant III: explains that the infrastructure is less or not important and less satisfying for tourists. The variables included in this quadrant are: Accommodation, Transportation, Expenditure, Banking Service and Promotion.
4. Quadrant IV: explains that infrastructure is lacking or unimportant but satisfying for tourists. The variables included in this quadrant are: Facilities, Catering Service and Recreational Activities.

5. Conclusion

Based on the analysis and discussion, concluded that:

- 1) Holtekamp Beach infrastructure is still not complete in religious facilities, accommodation (hotels and lodging), public transportation directly to Holtekamp beach and the banking system.
- 2) Lack of infrastructure in Holtekamp beach influence to the comfort of tourists
- 3) At least from the 15 variables, there are 4 infrastructures are important, but not yet satisfying. They are religious, sanitation, security and health facilities.

6. Recommendations

Based on this research, recommended that:

- 1) The Jayapura City Government and business people to build infrastructure facilities do not yet exist on site Holtekamp beach, such as religious facilities, rubbish bins, health facilities, lodging and parking area.
- 2) The Jayapura City Government and Business Actors must fix the damaged infrastructure, such as bathrooms.
- 3) The Jayapura City Government must establish an official route public transportation direct to the Holtekamp beach.

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