# IMPACT OF YOUTEFA BRIDGE DEVELOPMENT TO THE COMMUNITY'S ECONOMIC CONDITION ON HOLTEKAMP BEACH, JAYAPURA CITY

#### DAMPAK PEMBANGUNAN JEMBATAN YOUTEFA TERHADAP KONDISI PEREKONOMIAN MASYARAKAT DI PANTAI HOLTEKAMP, KOTA JAYAPURA

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#### ABSTRACT

Development in the infrastructure sector provides positive benefits for the community, including economic benefits. Youtefa Bridge is one of the infrastructures built on Youtefa Bay, Jayapura City, connecting Hamadi Village and Holtekamp Village. The existence of the Youtefa Bridge causes an enhancement of the community's economy, especially in Holtekamp Beach. Therefore, this study aims to analyze the community's economy in Holtekamp Beach after developing the Youtefa Bridge. The method used in this research is the quantitative method, with the sampling methods being observation and interview. The results showed a significant economic increase in Holtekamp Beach, marked by an increase in people's income by 50 – 70% after the development of the Youtefa Bridge. It can be concluded that Youtefa Bridge's development can improve the community's economy in Holtekamp Beach, Jayapura City. It is suggested that there is good cooperation between the regional government and beach managers in developing the tourism sector at Holtekamp Beach so that visitors will increase and the community's economy will also increase.

Keywords: construction, Youtefa Bridge, community's economy.

#### ABSTRAK

Pembangunan dibidang infrastruktur memberikan manfaat yang positif bagi masyarakat, salah satunya adalah manfaat ekonomi. Jembatan Youtefa merupakan salah satu infrastruktur yang dibangun di atas Teluk Youtefa, Kota Jayapura, yang menghubungkan antara Kelurahan Hamadi dan Kampung Holtekamp. Adanya pembangunan Jembatan Youtefa ini memberikan keuntungan bagi Kampung Holtekamp yaitu semakin meningkatnya aktivitas perekonomian di wilayah ini, khususnya di Pantai Holtekamp. Oleh karena itu, tujuan dari penelitian ini adalah untuk menganalisis kondisi ekonomi masyarakat di Pantai Holtekamp setelah adanya pembangunan Jembatan Youtefa. Metode yang dipergunakan dalam penelitian ini yaitu metode kuantitatif, dengan pengambilan sampelnya melalui observasi dan wawancara. Hasil penelitian menunjukkan terjadi peningkatan ekonomi yang signifikan di Pantai Holtekamp yang ditandai dengan adanya peningkatan pendapatan masyarakat sebesar 50 – 70% setelah adanya pembangunan Jembatan Youtefa. Hal ini dapat disimpulkan bahwa pembangunan Jembatan Youtefa mampu meningkatkan perekonomian masyarakat di Pantai Holtekamp, Kota Jayapura. Disarankan perlu adanya kerjasama yang baik antara pemerintah daerah dengan masyarakat pengelola pantai dalam mengembangan sektor wisata di Pantai Holtekamp sehingga pengunjung semakin meningkat dan perekonomian masyarakat juga semakin meningkat.

Kata kunci: pembangunan, Jembatan Youtefa, ekonomi masyarakat.

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#### INTRODUCTION

One of the objectives of infrastructure development is to improve the region economic condition. One of the benchmarks for the development of a region is the development of its economic sector. The country economic growth is a long-term growth that is used to measure the economic development of a country (Setyowati, 2015). The economic sectors in Indonesia are divided into nine sectors, including: agriculture, animal husbandry, marine and fisheries; mining and excavation; processing industry; building; trade, hotels and restaurants; electricity, gas and drinking water; transportation and communication; finance, leasing and other financial services; and services (Rosyidi, 2012).

One of the factors supporting the economic sector is transportation. Transportation is an important element and functions as the lifeblood of life and economic, social, political development and population mobility that grows together and follows developments that occur in various fields and sectors (Kadir, 2006). Transportation is very important for rural areas or semi-urban or urban areas in developing countries, because it provides access for people to meet their daily needs for goods and services, and also improves socio-economic life (Silondae, 2016). Transportation has an important role in promoting economic growth, which is the main development goal of each region, so various efforts are made to make it happen (Prasetyo, 2015). Investment in transportation infrastructure as an effort to improve the performance of the existing transportation network or to build a new infrastructure. One of the benefits of transportation investment when viewed from the value of economic benefits is that it can contribute to saving travel time and reducing transportation costs (Anas, 2017).

The purpose of transportation infrastructure development is the basis of Youtefa Bridge development in Jayapura City. This bridge connects Holtekamp Village and Tobati Village. Before building this bridge, the people in Holtekamp Village had to travel a very long distance to reach the center of Jayapura City. After building the bridge, the travel time required was much shorter. The construction of Youtefa Bridge also has an impact on the economic condition of Holtekamp Beach. One of them is the emergence of business actors along Holtekamp Beach. More business actors have sprung up after the Youtefa Bridge was built and operationalized in 2019. Therefore, this research will focus on how much impact the Youtefa Bridge will have on the economic conditions on Holtekamp beach, Jayapura City. Based on the description above, the purpose of this study is to analyze the impact of Youtefa Bridge on the community's economic conditions in Holtekamp Beach, Jayapura City, by looking at the parameters of the number and type of economic business actors, also their income.

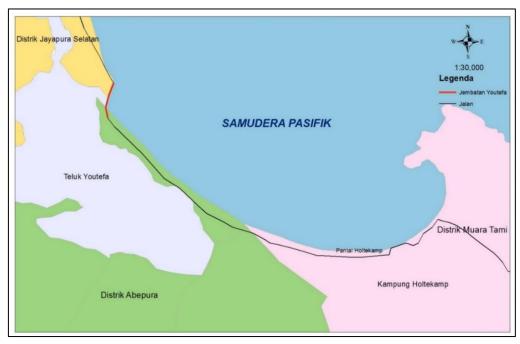
#### **RESEARCH METHODS**

This research was using quantitative research. Quantitative research involves the collection of data so that information can be quantified and subjected to statistical treatment in order to support or refute alternative knowledge claims (Apuke, 2017). The important aspect of quantitative research is the statistical data analysis as in regard to answering the research problem and testing the

hypothesis. The statistical method is chosen for understanding the research data that leads to a proper conclusion (Disman et al., 2017).

## **Time and Location**

This research was conducted for 6 months, from March to August 2020. The research location is Holtekamp Beach (Figure 1), because this location is an area directly affected by the construction of the Youtefa Bridge.



**Figure 1. Map of Research Location** (Source: Personal documentation, 2021)

# **Research Type**

This type of research is quantitative research with the research method is a survey method. The survey method is an investigation conducted to obtain facts from existing symptoms and seek factual information from a group or an area (Nazir, 2005). The survey was conducted to see the biophysical condition of the research site which includes: the history of bridge construction and economic conditions at Holtekamp Beach.

# Population, Sampling, and Data Collection Techniques

Data collection techniques used in this study were observation and interviews. The data collected includes the number of traders, type of business, income of traders, demographics and the size of the trading area on Holtekamp Beach. Sampling technique used Slovin formula (Susanti et al., 2019) with the error tolerance was 1% (0.1):

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

Where:

n = the number of sample of this research

N = the number of population in Holtekamp Village 2018 (1,129 people)

ne = error tolerance (1%)

Based on the calculation, the number of sample was about 91 persons consist of traders (80 people), business owners (9 people), government (2 people).

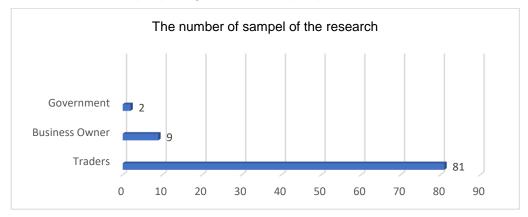


Figure 2. Chart of the Number of Sample

# **Data Analysis**

Data analysis process used in this study is a simple linear regression analysis. This is a regression that has one dependent variable and one independent variable (Sujarweni, 2019). This study had 2 (two) variables were independent variable (X) and independent variable (Y). The independent variable (X) was Youtefa Bridge construction and independent variable (Y) was economic conditions on Holtekamp Beach. The simple linear regression equation model is (Sujarweni, 2019):

$$Y = a + bX + e \tag{2}$$

# Hypothesis

 $H_0$ : The construction of the Youtefa Bridge has no impact on the economic condition of Holtekamp Beach  $H_1$ : The construction of the Youtefa Bridge has an impact on the economic condition of Holtekamp Beach With assumption:

If sig > 0.05, then  $H_0$  is accepted If sig < 0.05, then  $H_0$  is rejected

#### **RESULT AND DISCUSSION**

Based on the research purpose, this research's result involves the community's economic condition on Holtekamp Beach as an impact of Youtefa Bridge development. But first, these results will provide an overview of the research location.

#### **General Description of Holtekamp Village**

Holtekamp Village is one of the villages in Muara Tami District, Jayapura City which has an area of 1,168,559 Ha. The population in Holtekamp Village is 1,129 people (BPS, 2019). The livelihoods of the people in Holtekamp Village consist of farmers, fishermen, civil servants, traders (Table 1).

No.	Livelihood	Number of Family (person)				
1	Farmers	142				
2	Fishermen	36				
3	Civil servants	12				
4	Traders	12				
	Total	202				

Source: Data Processing (2020)

#### **History of Youtefa Bridge**

Based on the Regional Medium-Term Development Plan of Papua Province for 2013 – 2018, must immediately resolve development problems in Papua Province. One of them is the road and bridge network problem, which still does not reach all residential areas. As a result, most of the Papuan population cannot enjoy basic services equally. To overcome these problems, the Government of Papua Province has made it a development mission for the Papua Province, namely the acceleration of infrastructure development and inter-regional connectivity by prioritizing the principles of sustainable development. This mission aims to support the regional economy with community-based infrastructure, integration, and sustainability principles.

Transportation is one of the public facilities that must be fulfilled by the Government. Transportation services are the transfer of goods or people from one place to another so that benefits are obtained, from the economic, social, political, and security aspects (Sadyohutomo, 2009). So, to solve the problem of networking, Papua Government tries to build inter-regional connectivity. One of the inter-regional connectivity development programs in Jayapura City is the construction of the Holtekamp Bridge, which is currently known as the Youtefa Bridge. Youtefa Bridge is a bridge built over Youtefa Bay that connects Hamadi Village and Muara Tami District. The length of this bridge is 732 meters with a width of 21 meters. The construction of the Youtefa Bridge collaborates between the Central Government, the Government of Papua Province, and the Government of Jayapura City (Figure 3).



Figure 3. Youtefa Bridge Job Description (Source: DPR RI, 2018) The initiation of Youtefa Bridge construction began in the 1990s. In the planning, the bridge design changes 3 (three) times. Then, the Youtefa Bridge construction began on 9 May 2015 *(Kompas.com, 2020).* The contract for the Holtekamp Bridge construction was signed on July 31, 2015. The contract for the bridge construction is worth IDR 856.72 billion signed by a consortium of contractors consisting of PT Pembangunan Perumahan (Persero) Tbk., PT Hutama Karya (Persero) Tbk. and PT Nindya Karya (Persero) Tbk. Overall, the construction of this bridge requires a cost of 1.8 trillion rupiah. The source of funding for the Youtefa Bridge construction comes from the National Development Budget, the Regional Development Budget of Papua Province and the Regional Development Budget of Jayapura City. The main span bridge is funded by the National Development Budget, the approach bridge (297 meters) by the Papua Provincial Development Budget, and the access road to Hamadi (250 meters) and the access road to Holtekamp (596.2 meters) by the Regional Development Budget of Jayapura City. Construction of the main span of the bridge (433 meters) is planned for completion in 2018 *(KemenPUPR, 2020)*. But overall, the Youtefa bridge project could be completed 100% in May 2019. In the end, the Youtefa Bridge was inaugurated directly by President Joko Widodo on October 28, 2019.

The background for the construction of the Holtekamp Bridge, are (DPR RI, 2018):

- 1. As one of the solutions for the development of Jayapura City. Hamadi has become a dense urban area, so the existence of this bridge can have an impact on developments on the other side, namely the Muara Tami District.
- 2. To shorten the travel time from Jayapura to the Muara Tami Districts and Skouw (Border Cross) of Papua New Guinea.
- 3. As a supporting facility the implementation of PON 2020 in Papua Province.
- 4. As a new landmark in Papua.

#### The Condition of Holtekamp Beach before Youtefa Bridge was Built

Holtekamp Beach is located in Holtekamp Village, Muara Tami District, Jayapura City. Before the Youtefa Bridge, go to the Holtekamp Beach area by using a speedboat past the Holtekamp Steam Power Plant. Road access to this area is still not well opened, making it difficult for motorized vehicle drivers. The distance from the center of Jayapura City to Holtekamp Beach is about 39 km, with the travel time needed to get to Holtekamp Beach about 1.5 hours away. Difficult road access causes this area to be empty of visitors. Holtekamp Beach has a beautiful view because it directly faces the Pacific Ocean to be developed as a tourism area.





The economic activities that existed on Holtekamp Beach before the Youtefa Bridge was completed were only carried out by traveling traders from Koya. The types of merchandise are only snacks for visitors. There are no kiosks or food stalls on Holtekamp Beach yet. Based on data from BPS (2019), there are 17 kiosk units and 2 workshop units in Holtekamp Village, but the location is not on Holtekamp Beach. Meanwhile, there are no food stalls at all in Holtekamp Village.

However, there is one home trader who lives permanently on Holtekamp Beach. Based on the results of interviews with these traders, the types of merchandise are betel nuts, soft drinks, fried foods, and retail gasoline. The daily income of this trader is IDR 50,000 or IDR 1,500,000 per month. The initial capital is IDR 200,000 per month, so the profit obtained is IDR 1,300,000 per month. The status of buildings owned by traders is private property, so net profits are obtained during trading. The location of the first merchant on Holtekamp Beach is shown in Figure 5.

The lack of public interest in opening a business at Holtekamp Beach is due to the lack of visitors, which is caused by difficult access to Holtekamp Beach before the Youtefa Bridge existed.

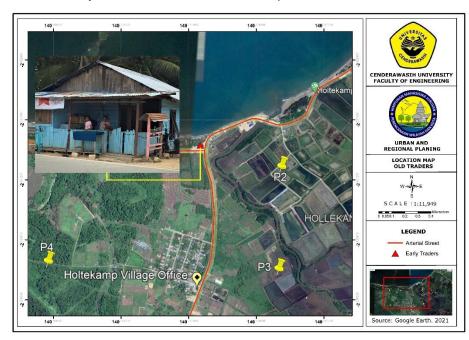


Figure 5. Map of First Merchant Location on Holtekamp Beach

#### Economic Condition on Holtekamp Beach after Youtefa Bridge was Build

Economic activity at Holtekamp Beach increased rapidly after the Youtefa Bridge was completed and used by the community. The people around Holtekamp Beach utilize this great opportunity to open a business on Holtekamp Beach. Local governments provide support by providing land for integrated business stalls. This causes more and more people to open businesses in that location. The new types of businesses in Holtekamp Beach include bike shops, cafes, stands, and food stalls (Table 2).

No.	Type of Business	Commodities	Amount	Origin of Merchant
1	Bike shop	Repair and sell workshop equipment	2	Arso Village
2	Café	Snacks and drinks	3	Arso Village
3	Stand	Agricultural products, snacks and drinks	80	Koya and Kilo 9 Village
4	Food stall	fried/grilled chicken, fried/grilled fish, fried rice	5	Arso Village
		Total	90	

 Table 2. Description of Economic Activity on Holtekamp Beach 2020

Source: Observation and Interview Result, 2021

According to Table 2, known that economic activity on Holtekamp Beach has increased significantly. This is marked by an increase in the number of business actors and types of businesses in Holtekamp Beach. Before the Youtefa Bridge existed, there was only one permanent business actor on Holtekamp Beach. After the Youtefa Bridge was established, business actors increased significantly to 90 businesses. This is due to the increasing number of people visiting Holtekamp Beach or just crossing the area. This situation provides an opportunity for the community to open a business in this location. The Regional Government also provides a special place (Figure 6) so that business actors and consumers can feel comfortable when conducting buying and selling transactions.



Figure 6. Map of the Distribution of New Business Locations on Holtekamp Beach

The new business types on Holtekamp Beach are:

1. Stand

There is 80 active stand on Holtekamp Beach (Figure 7). The local government provides a special location for these business actors to sell their products. Products sold include agricultural products, snacks, and drinks. But the traders are required to pay rent to the beach manager for IDR 500,000 per month.



Figure 7. The Location of Integrated Stands on Holtekamp Beach

The types of commodities sold by trader's installs are almost the same (Figure 8). The dominance is agricultural products supplied from the Muara Tami District. Muara Tami District is one of the areas in Jayapura City that has regional advantages from the agricultural sector, according to the Jayapura City Regional Spatial Plan for 2013 – 2023. This is what underlies Muara Tami District as one of the strategic areas for economic growth, focusing on Agropolitan and Minapolitan (Agrominapolitan), including West Koya Village, East Koya Village, Central Koya Village, and Holtekamp Village.

As an agricultural area, Muara Tami District has several agricultural commodities. The leading commodities in the agricultural sector in Muara Tami District are corn and sweet potatoes (Anzis, 2019). Corn is a local commodity that almost all traders sell. The corn sold is in the form of freshly cooked boiled corn. In addition, there are snacks and fruit. These items can be souvenirs for visitors. Prices offered to tend to be cheaper when compared to urban areas.



Figure 8. The Commodities for Sale in Stands

# 2. Food Stall

A new type of business in the Holtekamp Beach area is a food stall. There are five newly established food stalls on Holtekamp Beach. The types of food sold at this food stall include fried/grilled chicken, fried/grilled fish, fried rice. The income of this food stall every month ranges

from IDR 600,000 - 800,000. The income of this food stall varies, depending on the number of visitors who come to Holtekamp Beach.

3. Cafe

On Holtekamp Beach, there are also three cafes. Unlike the food stalls that sell heavy food, this cafe only sells snacks and drinks. The income of the café owner ranges from IDR 800,000 -1,000,000 per month, depending on the number of visitors who come to Holtekamp Beach. Revenue will increase on weekends because the number of visitors is more than on weekdays.

**Bike Shop** 4.

> The increasing number of visitors who come to Holtekamp Beach is one of the reasons this type of workshop business appears in this area. This workshop specifically serves two-wheeled vehicles. The form of service is service, oil change, and tire filling. If there are visitors who have problems with their motorized vehicles, they can use the services of this workshop. This workshop employs one employee with a salary of IDR 500,000 per month. The income from this workshop ranges from IDR 1,000,000 - 1,500,000 per month, depending on the number of visitors who come to Holtekamp Beach.

# Impact of Youtefa Bridge to Economic Condition

To find out the impact of the construction of the Youtefa Bridge on the economic conditions at Holtekamp Beach, a simple regression calculation was carried out using SPSS. This analysis involves the construction of the Youtefa Bridge as the independent variable (X) and the economic condition of Holtekamp Beach as the dependent variable (Y). The results of SPSS calculations are listed in Table 3.

		R Square	Adjusted R Square	Std. Error of the Estimate	Change				
Model	R				R Square Change	F Change	df1	df2	Sig. F Change
1	0.265 <sup>a</sup>	0.070	0.060	1.443	0.070	6.736	1	89	0.011
a Predic	ctors: (Cor	nstant) X							

Table 3. Correlation of Correlation of Youtefa Bridge (X) to Economic Condition (Y)

a. Predictors: (Constant), X

Based on the results of linear regression calculations, it is known that the sig value is 0.011. The result of this calculation is < 0.05, which means that H<sub>0</sub> is rejected. This means that the construction of the Youtefa Bridge has an influence on the economic conditions in Holtekamp Beach. The magnitude of the effect given is listed in Table 4.

Model		Unstandardized	d Coefficients	Standardized Coefficients	t	Sig.
	-	В	Std. Error	Beta		
1	(Constant)	5.175	0.486		10.650	0.000
	Х	0.480	0.185	0.265	2.595	0.011
<u> </u>	Dopondont Variable: V					

Table 4. The Coefficient of Influence of Youtefa Bridge (X) to Economic Condition (Y)

a. Dependent Variable: Y

Based on Table 4, it is known that the magnitude of the influence of the Youtefa Bridge construction on the economic conditions at Holtekamp Beach can be seen from the output of B which is 0.480, so the regression equation becomes:

$$Y = 5,175 + 0,480X + e$$

Based on the results of the regression equation, it is known that the construction of the Youtefa Bridge affects the economic conditions in Holtekamp Beach. This is due to the increasing number of economic activities at Holtekamp Beach, from previously there was only one business actor, then increased to 90 business actors. Another factor is the increased income of business actors at Holtekamp Beach. Before opening a business at Holtekamp Beach, business actors had incomes ranging from IDR 300,000 – 700,000. But after Holtekamp Beach was crowded with tourists as a result of the Youtefa Bridge, the income of business actors increased into IDR 600,000 – 1,500,000 or increased into 50 - 70% (Table 5).

Table 5. The Differences Economic Condition of Holtekamp Beach between Before and Afterthe Youtefa Bridge Construction

	ondition before		Economic o Bri	Percentage of income			
Number of business actors	Business types	Income/ month	Number of business actors	Business types	Income /month	increase (%)	
1	Home trader	IDR 300,000 - 700,000	90	Bike shop Café Stand Food stall	IDR 600,000 - 1,500,000	50 – 70 %	

Based on these results, the Youtefa Bridge has a positive impact on economic conditions in Holtekamp Beach. Other research also mentions that there was a positive correlation between the development of Soroja Toll Road and the medium-sized industrial profit of 77.27% because this industry can take the opportunity of the toll road development (Rahayu and Kipuw, 2020). So, it can indicate that there is a long-run and causal relationship between transport infrastructure and economic development. Transport infrastructure has long-run positive impact on economic development (Alam et al., 2020). Growth of transportation unit product also can lead to multiply growth of gross national product and employment (Chuan-Xu, 2004). Besides that, the productivity of the construction industry has a significant effect on the growth of the national economy as higher profits flow through the economy, so all industries depend on construction to some extent as part of their business investment (Chia et al., 2014).

Based on the result of this research, the contributions of this research are:

1. For Local Government

The results of this study provide an overview of the benefits obtained by the community with the construction of Youtefa Bridge, especially the economic benefits. Therefore, it is necessary to have good management of the Holtekamp Beach Area by the Local Government and related stakeholders, so more tourists will come to Holtekamp Beach so that the community's economy will also increase.

## 2. For Academics

This research can increase knowledge and research insights related to the benefits of Youtefa Bridge to the community, especially in improving the community's economy.

For Community

3. This research can be a promotion of trading commodities at Holtekamp Beach to the wider community so that more visitors will come and can improve the community's economy in Holtekamp Beach.

## **CONCLUSIONS AND SUGGESTION**

## Conclusion

The conclusion that can be drawn from this research is that the construction of the Youtefa Bridge has a positive impact on improving the economic conditions of the people in Holtekamp Beach, Jayapura City. Before opening a business at Holtekamp Beach, business actors had incomes ranging from IDR 300,000 – 700,000. But after Holtekamp Beach was crowded with tourists due to the Youtefa Bridge, the income of business actors increased to IDR 600,000 – 1,500,000. This is marked by the number of business actors increasing into 90 with income increasing into 50 - 70%.

## Suggestion

It is suggested that there is good cooperation between the regional government and beach managers in developing the tourism sector at Holtekamp Beach so that visitors will increase and the community's economy will also increase.

# AKNOWLEDGEMENT

First of all, thanks to Allah SWT for His mercy and guidance in giving me full strength to complete this article. This article was prepared to provide information about the economic condition of Holtekamp Beach, Jayapura City, after the development of Youtefa Bridge. We realize that there are many shortcomings in the preparation of this article. Therefore, we look forward to criticism and suggestions for the improvement and perfection of this article. We sincerely thank all parties who have helped in the preparation of this article. Hopefully, this article can be useful for all of us.

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