

**THE IMPACT OF TOURISM DEVELOPMENT ON ECONOMIC CONDITION OF COASTAL COMMUNITY IN BINYERI VILLAGE, YENDIDORI DISTRICT, BIAK NUMFOR REGENCY****Annisa Novita Sari, Lazarus Ramandei, Ines C Buiney**

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DOI: 10.5281/zenodo.3871646**KEYWORDS:** Tourism Development, Coastal Community, Economic Condition, Biak Numfor Regency**ABSTRACT**

Development of tourism sector in Indonesia is happening very rapidly. The tourism development has a positive impact, not only for local government but also for the private sector and the community. This is happen because of the tourism sector has high profit if developed, especially for economic condition of the community. One area where the development of the coastal tourism sector is increasing is Binyeri Village, Yendidori District, Biak Numfor Regency. Development of tourism sector in this area has a positive impact to economic condition of local community. Based on this condition, so the purpose of this research is to analyze the impact of the tourism development to the coastal community economic condition in Binyeri Village, Yendidori District, Biak Numfor Regency. The method used is qualitative method, with data collecting methods are observation and interview. The result of this research is the economic condition of the local community has increased due to the development of tourism. This is evidenced by an increase in the number of business types owned by the community and also an increase in community income. Before the tourism development, only there were 2 (two) business types, namely stall and stand with incomes ranging from Rp. 4,500,000 – Rp. 7,500,000 per month. Meanwhile, after the development of tourism in this area, the types of businesses owned by the community increased to 6 (six) types, namely stalls, stands, rental cottage, fishermen group, home industry of fish meat processing, and parking businesses. Community income also increased to Rp. 1,000,000 – Rp. 9,040,000 per month. Based on the result, so the conclusion is tourism development in Binyeri Village can increase the coastal community economic condition. Therefore, it is recommended that Local Governments can provide training to coastal communities to be more skilled and creative in creating jobs by utilizing the potential of the region.

INTRODUCTION

The tourism has become the world's fourth largest export industry after fuels, chemicals and food (Tugcu, 2014; Balli, Curry & Balli, 2015) (Ohlan, 2017). It is also happen in Indonesia. The tourism development in Indonesia increase rapidly. This is because of the natural resources potential of this country is very abundant so that it can become a tourist attraction. Besides that, the tourism development can give the positive impact for the regional economic condition, especially the economic condition of the local community. Petters and Bryden; Soekadijo (1997) in Arianti (2016) formulated 5 terms of the positive impacts of tourism development, are: (1) Contribute to the balance of payments, (2) Spread development to non-industrial areas, (3) Create employment opportunities, (4) Impact on economic development in general through multiplier effects, and (5) Linkages Tourism Sector with Other Sectors in the Economy. Liu and Wu (2019) said that the impact of tourism productivity on economic growth and illustrate the spill-over effects between tourism and other sectors caused by the externalities of physical and human capital and public services. Ohlan (2017) also said that the influence of inbound tourism on national economies is becoming increasingly important because of the growing size of the touristmarket.

One of the places that conducts tourism development is Biak Numfor Regency. The tourism development of this area is using the natural resources in tourism sector and fisheries sector. This is based on the geographical location of Biak Numfor Regency, which is an archipelago that borders directly with the ocean, so that the natural potential which is a superior potential is the fisheries and tourism sector.

Based on the interview with Head of the Tourism Office of Biak Numfor Regency (2019), it is known that one of the areas in Biak Numfor Regency which is being developed by the tourism sector is Binyeri Village in



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Yendidori District. This village has been designated as a fisheries tourism village in 2018. This is because this village has fisheries potential as a most fish supplier in Biak Numfor Regency. Besides that, based on the tourism office survey known that Binyeri Village has a beautiful sea coast that can be used as a tourist attraction. After being declared a marine fishery tourism village, the government has built a tourism infrastructure that supports Binyeri village as Marine Fishery Tourism village.

The designation of Binyeri Village as Marine Fishery Tourism Village is expected to have an impact on the economy of the local community, as stated by the Head of Binyeri Village. Moreover, it is supported by the formation of fishermen groups by the Government and the empowerment of women in processing fishery products into shredded fish and fish fumigation. Based on these conditions, this study was conducted to determine the impact of the development of tourism in Binyeri Village on the economic condition of coastal communities living in Binyeri Village.

RESEARCH PURPOSES

The purposes of this research are:

1. To identify the economic condition of local community before and after the tourism development in Binyeri Village, Biak Numfor Regency.
2. To analyse the impact of the tourism development to economic condition of local community in Binyeri Village, Biak Numfor Regency.

MATERIALS AND METHODS

The method used in this research is qualitative method. Based on Sukmadinata (2011), qualitative research aim to describe the phenomenon, both natural and human engineering, which is more concerned about the characteristics, quality and interrelationships between activities.

Time and Place of Study

This research done on August – November, 2019, and took place in Binyeri Village, Yendidori District, Biak Numfor Regency. The choice of this location is based on the determination of Binyeri Village as a Marine Fishery Tourism village, which also has a positive impact on the economic conditions of the community.

Sampling Methods

Sampling method used in this research is purposive sampling, which the subjects showed on Table 1. Purposive sampling is a technique to determining the number of samples with certain considerations (Sugiyono, 2001). The choices of the subject group in purposive sampling based on the characteristics of the population. In the other hand, sample unit based on the characteristics of the research purposes (Margono, 2004). This research took samples from various business types to see the economic changes that occur with the tourism development in Binyeri Village

Table 1. The Number of Research Samples in Binyeri Village Biak Numfor Regency

Number	Subject	Number of Sample
1.	Head of village	1
2.	Government	2
3.	Stalls	5
4.	Stands	0
5.	Rental Cottage	4
6.	Parking Business	4
7.	Home industry of fish meat processing	5
8.	Fishermen Groups	8
9.	Rental Toilet	2
	TOTAL	41



Data Collecting Methods

Data collecting method used in this research are:

- a. Observation, is conduct a direct observation at the research location.
- b. Interview, is data collecting with direct interview with competent stakeholders to give the information, such as the head of village, tourism manager, fishermen groups, and the local community.
- c. Documentation, is collect the data which documented by the local Government, also took the picture of the village condition.

Data Analysis

Data analysis used in this research is qualitative analysis, which follow the analysis steps from Miles and Huberman (1992), such as: data collection, data reduction, data presentation, and drawing the conclusions.

RESULTS AND DISCUSSION

Based on the research purposes, so the results of this research involve the economic condition of the coastal community before and after tourism development, also the impact that happened because of the tourism development, especially for economic condition of the coastal community. But, before examine the economic condition of the community, will showed first about general description of Binyeri Village area.

Geographic Position of Binyeri Village

Binyeri Village is one of 19 villages where located in Yendidori District, Biak Numfor Regency, Papua Province. Geographically, Binyeri Village is an area that is mostly low-lying in the coastal area. The location of Binyeri Village is flanked by three other villages which are also still included in the Yendidori District, namely:

- The east is bordered by Sunyar Village
- The west is bordered by Biak Ocean.
- The north is bordered by Samber Village
- The south is bordered by Waroi Village

Demographic Condition

Binyeri Village is a village where located on the Binyeri seashore. Kampung Binyeri di Distrik Yendidori, Kabupaten Biak Numfor adalah kampung yang terletak di tepi pantai Binyeri. The area of Binyeri Village is 15 km², with total population per August 2019 are 456 people, consist of 214 males and 242 females.

In 2018, the economic condition of Binyeri's community influenced by education level and population welfare. The average population of productive age works as farmers and fishermen. Only a few people work as Civil Servants, army / police officers and private employees.

Table 3. The Professions of Binyeri Village's Community in 2018

Number	Professions	Male (person)	Female (person)
1.	Farmer	56	48
2.	Sivil Servant	7	3
3.	Fisherman	65	-
4.	Army	1	-
5.	Retired of Sivil Servant/Police Officer/Army	2	2
6.	Employees	2	-
7.	Driver	2	-
8.	Taxibiker	4	-
9.	Mason / Carpenter	3	-
	Total	141	53



Tourism Supporting Facilities that has been Developed

The location of Binyeri Village is in the coastal area causes this village has large fishery potentials. Besides that, the natural beauty in Binyeri Village made this village developed as a tourism village. This combination of fishery and natural potentials is the basis of Binyeri Village designated as a marine fishery tourism village.

To support the fishery activities in Binyeri Village, the Local Government has given some facilities, which can already be enjoyed by the local community and tourist visitors. Some of the facilities are:

Motorboats

To support Binyeri Village as a marine fishery tourism village and also to realize the synergy of family planning village development, The Fisheries and Marine Department of Biak Numfor Regency, realized the assistance of motorboats to help fishermen groups in Binyeri Village. Provision of motorboat to support the national program of Biak Numfor Regency to become an integrated fishery center area in 2017.

Cold Storage

Six months after motorboats provision to fishermen groups, The Fisheries and Marine Department of Biak Numfor Regency realized the cold storage development, not only for Binyeri Village's fishermen, but also all of fishermen in Biak Numfor Regency. All fish caught by fishermen in Biak Numfor Regency are kept in cold storage (Figure 2) to be frozen which will be distributed to other regions in Indonesia.



Figure 1. Cold Storage In Binyeri Village

Place for Biak Munara Wampasi Festival

Biak traditional community have a tradition to catch fish in ocean during low tide, namely Snap Mor (Figure 3). This tradition is part of the traditional party of Munara, which can be interpreted as a culture of renewal in the dynamics of Biak community's lives. This tradition was held when sea level at the lowest and highest tide, to show the ability of Biak local community who have recognized the tidal cycle traditionally. The Biak people are able to read sea conditions and other natural signs to determine when and where fish can be obtained. This tradition is a tourism icon of Biak Numfor Regency, which always held annually and makes it as a festival. Binyeri Village was chosen as one of the locations to carry out the Biak Munara Wampasi Festival in 2018, so that the local government provided a venue for the festival.



figure 2. snap mor festival of binyeri village in 2018 (source: fisheries department of biak numfor regency, 2019)

Hold on Biak Fish Festival

On November 19th – 20th, 2018, the delegation of Indonesian Bank of Papua Province has a collaboration with the Tourism Department of Biak Numfor Regency held the Biak Fish Festival 2018 in Binyeri Village (Figure 4). This event is a first event in Papua, which raised the sea fish as the main commodity. This event held to increase the fishermen market access and also to increase the added value of fish products through processing into derivative products. This event held also to push the Biak Numfor Regency to become a leading tourist destination at the national level.



Figure 3. Fish Festival of Binyeri Village in 2018 (Source: Fisheries Department of Biak Numfor Regency, 2019)

Tourism Infrastructure in Binyeri Village

Tourism development requires adequate infrastructures to make the tourist feel comfort when they come to the tourist sites. The infrastructures are also needed to improve the economy of local community. This is because tourists can spend their money so that it drives the economy of the local community (Adinugroho, 2017). The tourism infrastructures also has been built in Binyeri Village, beside the facilities for the fisheries sector. The location of the infrastructures showed on Figure 4. The tourism infrastructures include:

1. Art Shop

Art shop use to sell the fish processing products. This building was built by Cooperatives and SME's Department of Biak Numfor Regency. The fish processing products are sell in this building consist of shredded fish and smoked fish. This effort was taken to increase the economy of the community and increase the welfare of the community by utilizing the existing natural potential to be developed into products with high selling value.

2. Diving Center



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Diving Center is a building which built by Tourism Department of Biak Numfor Regency, to support the diving activities. Diving spot is in Samber Pasi island, where the location is not far from Binyeri Village. This spot has beautiful coral and marine biota, which can be enjoyed by diving. Diving center is planned as a place for rent diving equipment. However, this building has not been used because the diving equipment is not yet available.

3. Fishing Center

Fishing center is a building which built by Fisheries Department, to empower people in fisheries sector. The building was made to carry out all forms of activities, such as socialization and training in fisheries sector.

4. Cottage

Cottages were built by Tourism Department of Biak Numfor Regency, which use to the tourist enjoy the view of Binyeri Beach. There are 10 units cottage built on Binyeri Beach. This cottage has not been utilized because there is no clear management from the community.

5. Amphitheater

Amphitheater is a theater building, which use to perform the traditional dance. This building was built to increase the participation of youth and traditional elders in presenting traditional Papuan performances to tourists.

6. Toilet

Public toilet is important infrastructure of tourism. Binyeri Village has only 1 unit public toilet, which built near Binyeri Beach. To use this toilet, visitors must pay 5,000 rupiahs. Source of water in this toilet is from well and rainwater shelter. But now a drilling well is being done to obtain good water for use.

7. Wooden Dock

Wooden dock on Binyeri Beach is the result work of Gajahmada University's students. This dock is used as a place to take a picture, to jump into the sea, and to enjoy the ocean view.

8. Stalls and Stands

There are 5 (five) stalls dan 10 (ten) stands in Binyeri Village which is managed by local community.



The condition of stalls and stands are good enough and located in front of people's house.

Figure 4. Map Of Tourism Infrastructure In Binyeri Village

Business Types of Local Community Before Tourism Development

Binyeri Village is a village that is the biggest supplier of fish in Biak Numfor Regency. The biggest livelihoods of the local community are fishermen, although there are other livelihoods owned by the local community. Based on interview results with the community, there are some business types that were owned by the community before tourism was developed in this village. This business has been owned by the community from 2015 and 2017. This business types are stalls and stands (Table 4).



Number	Business Types	Total (unit)
1.	Stall	3
2.	Stand	5
	JUMLAH	8

Source: Interview Result, 2019

Amount of stall before tourism development are 3 (three) units, and this is owned by government employees. The types of goods traded are groceries. And, amount of stand before tourism development are 5 (five) units. The types of goods in stands are fisheries and agriculture products, such as fish and vegetables. This goods are not sell on the market. In addition, there are stands also sell areca nuts and herbs.

Business Types of Local Community After Tourism Development

The number of tourists who was visiting Binyeri Beach has a positive impact on the economic conditions of the local community. This is indicated that there are many types of new businesses (Table 5) that have emerged after the tourism development. Before tourism was developed in Binyeri Village, many people became fishermen and farmers. But after tourism was developed, many people were active in the tourism sector. The existence of these new livelihoods is able to change the economic condition of the community better than before the tourism development.

Table 5. Business Types of Local Community After Tourism Development

NO	Business Types	Before Tourism Development	After Tourism Development
1.	Stands	5 unit	10 unit
2.	Stall	3 unit	5 unit
3.	Cottage Rental	-	4 unit
4.	Fishermen Groups	-	5 group (each group consist of 8 people)
5.	Home industry of fish meat processing	-	1 unit (consist of 5 people)
6.	Parking	-	1 unit (consist of 4 people)
7.	Toilet Rental	-	5 unit (consist of 2 people)
	JUMLAH	8	31

Source: Observation Result, 2019

Based on Table 5, known that there are seven business types managed by local community in Binyeri Village after tourism development. Two business types that existed before tourism development are stalls and stands. But after tourism development, the amount of stalls and stands become more, from 8 units become 15 units. Five new business types emerged after tourism development are cottage rental, fishermen groups, home industry of fish meat processing, parking and toilet rental. The new business types will explained below.



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1. Cottage Rental

There are four cottages made by local community on Binyeri Beach. This cottages made by wood. This cottages are rented at 50,000 rupiahs - 100,000 rupiahs. There are another cottages on Binyeri Beach, which made by Local Government but not yet used.

2. Fishermen groups

The fishermen group was formed by the government as a supporter of the village program, namely the fish tourism village. There are 5 groups of fishermen in Binyeri Village, where each group consists of 5-8 people. Each group was given facilities, namely motorboats (Figure 5). Fish catches will be shared equally among each group member.



Figure 5. Motorboats for Fishermen Groups provided by the Government

3. Home industry of fish meat processing

Home industry of fish meat processing is an effort to involve women in Binyeri Village by managing marine products. This effort is the result of training conducted by the Office of Cooperatives and SMEs in Biak Numfor Regency to train and empower the local community, especially women, to process marine products. The products which produced by this home industry are shredded fish and smoked fish.

4. Parking Business

Parking business appears during the holidays and festival days. This business is an additional effort for people who work as fishermen and farmers. Based on the results of the interview, the parking fee for the car is 30,000 rupiahs and for the motorbike is 20,000 rupiahs. Revenues will increase on festival days and on holidays if there are many visitors.

5. Toilet Rental

Although toilets are facilities built by the government, local people use them for business by renting them to visitors. Toilet rental rates are 5,000 rupiahs.

The Impact of Tourism Development

Tourism revenue can contribute to poverty reduction through business development by creating jobs based on the region's potential. Conservation of biodiversity must also be considered so that in addition to improving local services, tourism development also supports education to enable local people to call for protecting the natural environment (Ramandei, 2020). The tourism development in Binyeri Village also has a positive impact to the economy of local community. This is indicated by the community's income increase from the tourism sector. The community's income increased was caused by the number of business types managed by local community increased and the number of tourist visitors in Binyeri Village also increased. This income will more increase during the holidays and festival days. The community's income after tourism development will showed on Table 6.



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Table 6. The Binyeri Village Community's Income Before and After Tourism Development

Source: Interview Result, 2019

Number	Business Type	Community's Income Before Tourism Development (Rupiah/per month)	Community's Income After Tourism Development (Rupiah/per month)	Average Community's Income in Festival Days (Rupiah/day)
1	Stalls	7,500,000	9,040,000.00	570,000
2	Stands	4,000,000	6,400,000.00	630,000
3	Cottage Rental	-	2,500,000.00	700,000
4	Fishermen Groups	-	11,200,000.00	1,062,500
5	Home Industry of Fish meat processing	-	8,160,000.00	690,000
6	Parking	-	3,200,000.00	712,500
7	Toilet Rental	-	1,000,000.00	500,000

Based on Table 6 it is known that there was an increase in community income after the tourism development in Binyeri Village. Before tourism development, stalls has an average monthly income were 7,500,000 rupiahs. After tourism development, its income increase into 9,040,000 rupiahs per month. So it shows that there was an increase in community's income of 17%. An increase of community's income also occurred at stands. Before tourism development, the average monthly income of stands was 4,000,000 rupiahs. After tourism development, its income increase into 6,400,000 rupiahs per month. So it shows that there was an increase in community's income of 30% from stands. This increase in income was due to the increasing number of stalls and stands. The increasing number of tourists entering Binyeri Village is one of the factors that causes people to create new businesses that can meet the needs of tourists, namely stalls and stands. Vagonis (2010) in Snieska (2014) explains that the success of rural tourism is caused by the ability of suppliers to meet consumer needs and be able to provide good service to tourists.

In addition, there are new business types emerged besides stalls and stands, i.e. Cottage Rental, Fishermen Groups, Home industry of fish meat processing, parking and toilet rental. Monthly income from these new businesses, i.e. 2,500,000 rupiahs; 11,200,000 rupiahs; 8,160,000 rupiahs; 3.200.000 rupiahs; and 1,000,000 rupiahs. Specifically for the fishermen group, the income earned will be shared by 8 group members, which the income of each group member equal to 1,400,000 rupiahs. Likewise with home industry of fish meat processing. The income earned will be divided by 5 workers, which is equal to 1,632,000 rupiahs. Before having this business, the community was only at home, so after having the business there was a 100% increase in community income.

The existence of cottages, parking and toilets arose after the tourism development in Binyeri Village. This is due to the increasing number of visitors so that the local community wants to provide adequate facilities to visitors. Therefore, the community independently made a cottage as a place of rest for visitors while enjoying the beach view. Visitors can access this facility by paying a rental fee of 50,000 rupiahs - 100,000 rupiahs. Toilet facilities were also built as other supporting facilities, with a rental fee of 5,000 rupiahs. Parking business is intended to provide a sense of security to vehicles carried by visitors so that visitors can enjoy the scenery calmly. The parking price set is for cars 30,000 rupiahs and for motorbikes 20,000 rupiahs. The rental price set by the community is still affordable for tourists so that tourists can use these facilities comfortably. Sulistyana, et al. (2015) states that tourist facilities and prices are factors that support tourist visitor satisfaction. The results of their research indicate that tourist facilities and prices significantly influence consumer satisfaction.



CONCLUSION

Conclusion

The conclusion of this research are:

1. Before the tourism development, only there were 2 (two) business types in Binyeri Village, namely Stalls (5 units) and Stands (3 units). After the tourism development, there are 7 (seven) business types, namely stalls (10 units), stands (5 units), cottage rental (4 units), fishermen groups (5 groups), home industry of fish meat processing (1 unit), parking (1 unit) and toilet rental (5 units).
2. The tourism development has a positive impact for the economic condition of the coastal community, marked by an increase in the community's income, are: stalls income increased 17%, stands income increased 30%, while income of cottage rental, group of fishermen, home industry of fish meat processing, parking, and toilet rentals have increased by up to 100%.

Suggestion

Based on the result of the research, it is suggested that the Local Government of Biak Numfor Regency should make a training for the coastal community, especially the local community of Binyeri Village, to have an innovation in processing of marine fishery products, so it can further encourage the economic growth of the coastal community.

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REFERENCES

1. Adinugroho, G. 2017. Hubungan Perkembangan Wisata terhadap Ekonomi Wilayah di Gunungkidul Selatan. *Journal of Regional and Rural Development Planning*, 16-27. [Internet]. Available online at <https://scholar.google.com/>
2. Arianti, D. 2016. Pengaruh Sektor Pariwisata Terhadap Perekonomian dan Keruangan Kota Bukittinggi (Pendekatan Analisis Input Output). *Jurnal Pembangunan Wilayah dan Kota*, 347-360. [Internet]. Available online at <https://scholar.google.com/>
3. Ramandei, Lazarus. "Community Participation In Domestic Waste Management In Vim Village Abepura District Jayapura City." (2020).
4. Liu, A. 2019. Tourism Productivity and Economic Growth. *Journal Annals and Tourism Research*, 253-265. [Internet]. Available online at www.sciencedirect.com.
5. Margono. 2004. *Metode Penelitian Pendidikan*. Jakarta: PT. Rineka Cipta.
6. Miles, M. dan Huberman. 1992). *Analisis Data Kualitatif. Buku Sumber Tentang Metode-Metode Terbaru*. Jakarta: Universitas Indonesia Press.
7. Ohlan, R. 2017. The relationship between tourism, financial development and economic growth in India. *Future Business Journal*, 9-22. [Internet]. Available online at www.sciencedirect.com.
8. Snieska, V., K. Barkauskiene, and V. Barkauskas (2014). The impact of economic factors on the development of rural tourism: Lithuanian cas. *Procedia - Social and Behavioral Sciences*, 280-285. [Internet]. Available online at www.sciencedirect.com
9. Sugiyono. 2001. *Metode Penelitian*. Bandung: CV. Alfa Beta.
10. Sulistyana, R. T, D. Hamid, dan D. F. Azizah. 2015. Pengaruh Fasilitas Wisata dan Harga terhadap Kepuasan Konsumen (Studi pada Museum Satwa). *Jurnal Administrasi Bisnis*, 25(1), 1-9. [Internet]. Available online at <https://scholar.google.com/>