Analysis Impact of Coronavirus Disease (Covid-19) Pandemic on Income, Working Hours and Customers of Merchants in Pahawang Island Tour

by Ukhti Ciptawaty

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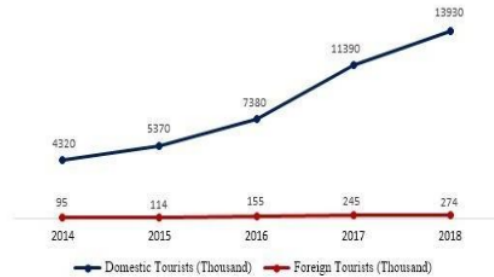
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Abstract. The objective of the research is identify the impact of coronavirus disease (Covid-19) on income, working hours and customers of merchant at Pahawang Island Tour, Pesawaran. The research was conducted by using primary data with quantitative descriptive analysis method and Wilcoxon Signed Rank test to determinate the impact of Covid-19 case. The results of this study showed that pandemic Covid-19 affected the income, working hours and the amount of merchant customer in Pahawang Island Tour, Pesawaran. Merchants gained more decreased in their income, working hours and customers of merchants during the Covid-19 pandemic.

Keywords: Tour, Income, Working Hours, Customers, Merchants, Covid-19.

1 Introduction

The development of tourism tends to show a very rapid progress from year to year, because more and more people get higher incomes and the socio- economic changes in countries in the world are the reasons for the development of tourism. Tourism foreign exchange is one of the reasons related to the importance of the tourism sector, where in the last five years, tourism foreign exchange earnings have continued to increase with an average annual rate of US $ 14.5 billion. When compared to other service exports, the share of foreign exchange for tourism is the highest, reaching 54% of total service exports. The tourism services balance surplus was also maintained, supported by a consistent increase in tourism foreign exchange. In addition, amidst the contraction in exports of major commodities in recent years, the improving performance of tourism has placed the foreign exchange value of the tourism sector as the second largest after coal exports (Bank Indonesia, 2019)
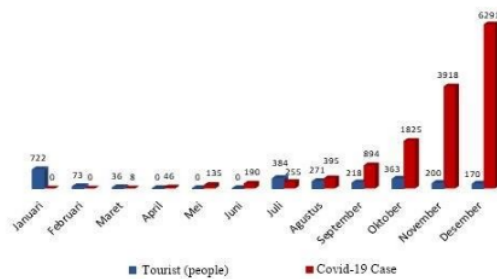
In addition, in 2019 the number of tourist visits to Indonesia increased by 16.1 million or an increase of 1.88% compared to the previous year. Likewise in Lampung Province, according to the Lampung Province Tourism Office, the tourism sector is one of the income supports. The following is the number of domestic and foreign tourist visits in Lampung Province in 2014-2018:

Fig. 1. Number of Tourist Visits per Regency/City in Lampung Province

In 2014-2018, the trend of growth in the Number of domestic and foreign tourists continued, the highest tourist growth occurred in 2016-2017, namely domestic tourists amounting to 54.33 percent and foreign tourists 58%. Pahawang Island has the characteristics of a beautiful underwater charm, both in the form of coral reefs and marine life in it. The leading tourism activity that can be done on Pahawang Island, namely snorkeling, where the diversity of the underwater world and marine life is still awake and staying on the island with various available homestays is a unique characteristic, far from urban areas, allowing tourists to relax their minds by watching the sunset and sunrise from Pahawang Island. In addition, access to Pahawang Island itself can only be passed by boat, so this is what makes Pahawang Island tourism different from other tourist attractions.

The number of tourist visitors to Pahawang Island itself in 2017-2019 continued to decrease because of the eruption of Mount Anak Krakatau that occurred during 2017-2018 in the form of a weak explosive eruption (strombolian) and a tsunami that hit the Sunda Strait on December 22, 2018 which caused the number of visitors to reduce. So, at the beginning of 2020 was a period of recovery for Pahawang Island tourism to begin to rise from previous years.

Fig. 2. Number of Covid-19 Cases in Lampung and Number of Visitors to Pahawang

From April to June 2020 the government closed tourism activities so that there were no activities related to tourism on Pahawang Island. In August the government gave allowance the people to conduct tourist activities. The number of visitors kept ups and downs, there were many

restrictions would be found in several areas, therefore they affected the tourism Activities. Moreover, the situation took place in December, especially a few days before the end of the year Pahawang Island was closed to avoid year-end celebrations at tourist sites. Tourism activities will be affected by various situations and circumstances, including the Covid-19 pandemic. The risk is greater when people are still traveling amidst Covid-19 cases in Lampung Province. This will ensure the safety of visitors, namely they will be infected with the corona virus. Related to this risk, there will be a change in the number of visitors on Pahawang Island and income traders on Pahawang Island. Based on previous research, an event will have an impact on tourism. According to [1] that the earthquake in Italy 2009 offered new accommodation to government survivors (the so-called CASE project).

That was earthquake resistant, sustainable, environmentally friendly and compatible [2]. In addition, normal floods usually have a positive impact on agricultural growth and even on the growth of other economic sectors. However, in contrast to research [3], natural disasters and unexpected events generally have a negative impact, resulting in reduced tourist arrivals after an event. In line with the research of [4], that the problem of the ability of African countries to achieve the SDGs target and the potential for increased risk of instability, migration across African countries, decreased trade and opportunities for economic cooperation as a consequence of climate change. exacerbates the negative consequences. In addition, research related to differences before and after changes in conditions, namely research from [5]) results from a model related to the impact of natural disasters in Sri Lanka at this time on inequality and changes in different levels of income. Next, the research results of [6], that during the Covid-19 pandemic, the number of clients in hypermarkets and supermarkets has decreased significantly, while convenience stores, butchers and grocery stores have gradually gained popularity.

Based on differences in the results of various previous studies and the findings of researchers during the pre-survey, namely changes in the conditions of the presence of Covid-19, it attracted the author to conduct this research regarding the impact of the non-natural disaster Coronavirus Disease (Covid-19) on Pahawang Island tourism, by taking the variables of income, working hours, and the number of merchant consumers before and during the Covid-19

2 Literature Review

The impact of natural and non-natural disasters on the economic aspect would cause the growth of economy slow down, due to obstruction of all economic activities would cause an economic decline, where before the pandemic took place, the community was used to carryout their daily economic activities, but after the pandemic, they were encouraged to carry out activities from home and reduce activities outside the home, including tourist activities for tourists.The impact of natural and non-natural disasters on the economic aspect would cause the growth of economy slow down, due to obstruction of all economic activities would cause an economic decline, where before the pandemic took place, the community was used to carry out their daily economic activities, but after the pandemic, they were encouraged to carry out activities from home and reduce activities outside the home, including tourist activities for tourists

3 Methodology and Data Analysis

Location of the Research

This research was conducted in Pahawang Island and Ketapang pier which were the main entrances with 4 piers to Pahawang Island. This location had various advantages as an attraction, easy accessibility, it was about 1 hour from Bandar Lampung to reach the location and the road is quite good. In addition, tourism activities such as snorkeling and staying at a homestay were carried out and become a leading activity in Pahawang Island tours.

The Technique of Analizing Data

In analyzing data, the researcher used the normality and significance difference test. The normality test was carried out to assess the validity of the data using the Komogorov Smirnov (Liliefor) test with the SPSS version 20 program to determine whether the data was normally distributed or not. Next, a paired sample t-test could be done for normally distributed data or the Wilcoxon signed rank test for data not normally distributed. The significance difference test was carried out to test the difference between paired data through the before and after observation data. Operational variables were used to this study use income, working hours and the number of consumer merchants.

1. Income: traders' perceptions of income earned per day before and during the Covid-19 without deducting other expenses. This merchant's income was expressed in rupiah (Rp).
2. Working Hours: the time was used by traders to sell per day before and during the Covid-19 in hours.
3. Number of Consumers: people who bought merchandise per day before and during the Covid-19 in units of people

4 Research Result and Discussion

This study used a sample of 51 traders. Descriptions of respondents in this study on Pahawang Island tourism included gender, age, education level, number of dependents and length of trading. Normality test was performed to determine whether the data had a normal distribution or not. The method used to test for normality was using the Kolmogorov-Smirnov test. Here whether the sig value <0.05, so the hypothesis was normally distributed was rejected. The results of the normality test in the study were as follows:

Table 1. Normality Test Results

Tests of Normality

Nama		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Hasil Penelitian	Before Covid-19 Income	0.198	51	0	0.887	51	0
	During Covid-19 Income	0.164	51	0.001	0.895	51	0
	Before Covid-19 Working Hours	0.203	51	0	0.947	51	0.023

During Covid-19 Working Hours	0.186	51	0	0.921	51	0.002
Before Covid-19 Consumers	0.225	51	0	0.851	51	0
During Covid-19 Consumers	0.201	51	0	0.88	51	0

The results of the normality test above indicated that the data were not normally distributed. This can be seen in the calculated Kolmogorov-Smirnov sig value which was smaller than 0.05 (χ^2-table).

Furthermore, by using the Wilcoxon signed rank test, where this test could see the relationship of each variable between before and during the Covid- 19 pandemic. This test was carried out as a test of differentiation because the respondent's data was related to different times before and during the Covid-19 pandemic. Based on the results of the analysis, it could be seen whether before and during the existence of Covid-19 could make a difference in income, working hours and the number of consumer merchants on Pahawang Island tours.

Table 2. Wilcoxon Signed Rank
Test Results of Income Variables Before and During the Covid-19 Pandemic

	BEFORE- DURING
Z	-6.032[b]
Asymp. Sig. (2-tailed)	.000

Based on the results of the Wilcoxon different test in table 3, there was a significant difference in income before and during the coronavirus (Covid-19) in Pahawang Island tourism at a 95% confidence level. It indicated the asymp.sig (2- tailed) value, which was 0.000 less than 0.05.

The difference between the income level and the highest income before the Covid-19 was Rp. 3000,000/day and the lowest income was Rp. 30,000/day. Meanwhile, the highest income of traders during the Covid-19 was IDR 1,200,000/day and the lowest was IDR 20,000/day.

Based on the theory that income continued to increase as one of the factors measuring the level and welfare of people's lives [7]. However, this was not in line with the research results, that in Pahawang Island tourism income decreased. It was caused by the restrictions of the activities, many visitors only stayed for a short time (one day) so that their tour activities Pahawang Island did not spend for a long time. Of course, it took place because visitors afraid of the spread of pandemic out of circumstance.

It was accordance with the research of [8], that the household-level fixed effects regression, the results showed that the income from work decreased almost one-third and income from gifts and remittances was reduced more than one-third after the beginning of the pandemic.

Table 3. Wilcoxon Signed Rank Test
Variable Results of Working Hours Before and During the Covid-19 Pandemic

	BEFORE-DURING
Z	-4.133[b]
Asymp. Sig. (2-tailed)	.000

Based on the results of the Wilcoxon different test in table 4, there was a significant difference in working hours before and during the corona virus (Covid-19) on Pahawang Island tours at a 95% confidence level. It indicated that the asymp.sig (2-tailed) value, which was 0.000 less than 0.05.

There were 29 samples had no different duration of their working hours. They did their businesses at or near their homes, so they spent their time to sell their goods that the tourists needed. Based on the human capital theory [9], related to investment in human resources (human investment theory), which is a sacrifice in the hope of obtaining a better income in the future. This research is in line with the finding of respondents who do not experience changes in trading time, which is an effort to make the most of it in the hope of getting a high income.

According to (Anwar, 2020), which reveals that traders maintain and begin to change their operational working hours to 24 hours, in an effort to retain customers and traders' businesses. In addition, previous research has revealed that many countries have conditioned store openings to order special shopping hours for vulnerable groups, a practice that can be extended to home delivery so that sales can be maximized [11]

Table 4. Results of the Wilcoxon Signed Rank Test Variable Number of Consumers Before and During the Covid-19 Pandemic

	BEFORE DURING
Z	-6.106[b]
Asymp. Sig. (2-tailed)	.000

Based on the results of the Wilcoxon different test in table 4, there is a significant difference in the number of consumers before and during the coronavirus (Covid-19) in Pahawang Island tourism at a 95% confidence level. This is indicated by the asymp.sig (2-tailed) value, which is 0.000 less than 0.05.

There was difference in the number of merchant consumers on Pahawang Island tours before and during the coronavirus disease (Covid-19). The highest number of merchant consumers before Covid-19 reached 100 people per day and the lowest was 10 people per day. Meanwhile, when there was a pandemic, the highest number of merchant consumers was only 30 people per day and the lowest was only 4 people per day. The demand of a person or society for an item is determined by various factors, one of which is consumer taste [12]. Thus, even though in 2020 the number of visitors has increased, the results of the study show that there is a decrease in the number of merchant consumers, this is due to the fact that visitors only eat food and drink provided by the inn or villa. In addition, visitors can bring their own food and drinks from outside so that cleanliness and safety are more guaranteed.

The statement above is accordance with [13], the Covid-19 pandemic and the lockdown and social distancing mandates have disrupted consumer buying and shopping habits. Consumers are learning to improvise and learn new habits. For example, consumers cannot go to the store, so that shop comes to the house.

5 Implication and Suggestion for Future Research

This study aimed at determining the impact of the coronavirus disease (Covid-19) pandemic on income, working hours and the number of consumer traders in Pahawang Island tours,

Punduh Marga, Pesawaran. Based on the formulation of the research problem used, as well as data analysis that had been carried out and the discussion that had been illustrated. There were three inclusions as follow:

1. There was a significant difference in the income level of traders before and during the coronavirus disease (Covid-19). Traders had a tendency to decline in income during the pandemic.
2. There were significant differences in the level of working hours of traders before and during the coronavirus disease (Covid-19). Traders had a tendency to decrease their working (operational) hours during the pandemic.
3. There were significant differences in the level of the number of consumers before and during the coronavirus disease (Covid-19). Traders were experiencing a downward trend in the number of consumers during the pandemic.

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