

## Resilience study of the tourism industry in Malioboro Yogyakarta

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### Abstract

Malioboro Street is a pivotal point in disseminating Islam from the Yogyakarta Palace. Malioboro is interpreted as the journey to becoming a saintly figure (mali) and wandering (Oboro), encapsulating the concept of "sangkan paraning dumadi" or the human journey from birth to reunion with the god. Initially serving as a royal road, Malioboro progressively became a tourist attraction and an economic hub in Yogyakarta. Malioboro's tourism and economic development significantly impacted its vicinity's growth, manifesting in increased local incomes, employment opportunities, and enhanced community welfare. However, the pandemic Covid-19 disrupted its tourism landscape, impacting various sectors such as trade, transportation, and accommodation. An imperative research need emerged to investigate Malioboro's tourism industry's resilience regarding its impact resilience, particularly in the trade, transportation, and accommodation sectors. This research aims to investigate the strategies and approaches undertaken by these sectors in Malioboro to withstand the challenges posed by the pandemic. The research method is quantitative, with primary data collection methods, such as questionnaires and field observations, and secondary data collection from study literature. Data analysis comprises descriptive analysis and scoring to elucidate the resilience of Malioboro's tourism industry. The findings suggest varied resilience across sectors, with trade, accommodation, and transportation having resilience in specific segments. The outcomes of this research will provide insights crucial for enhancing the resilience and sustainability of Malioboro's tourism industry amid unprecedented challenges.

Keywords: Resilience, Tourism Industry, Malioboro, Pandemic, Strategies, Management

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### INTRODUCTION

Malioboro Street is one of the supporting points for the spread of Islam from the Yogyakarta Palace and was established to coincide with the establishment of the Yogyakarta Palace. Based on several references, Malioboro is interpreted with the meaning of the journey of being a guardian (mali) and wandering (Oboro). So, in short, the Malioboro area means the concept of "sangkan paraning dumadi" or the journey of man from birth to return to the creator. This is the teaching concept of Pangeran Mangkubumi (Sri Sultan Hamengku Buwono I) (Pemerintah Daerah Istimewa Yogyakarta, 2022).

In its development, Malioboro functioned as a royal road used for ceremonial activities or welcoming state guests. But along with its development, Malioboro developed into a tourism object and economic growth center in Yogyakarta. Many trade and service centers and government centers have developed in the area, including supporters for trade and service centers and government centers such as stations, accommodation, and education which also function as superior tourism in Jogjakarta. (Pemerintah Daerah Istimewa Yogyakarta, 2022).

The development of tourism and economic centers in Malioboro has had a lot of influence on the growth of the area. The development of Malioboro as a tourist attraction has many effects on the growth of Yogyakarta, as well as the emergence of other economic sectors around Malioboro tourism (Nisa & Haryanto, 2014). However, the pandemic in early 2020 had a significant adverse impact on the tourism industry at the national level, including Malioboro. Nationally, a slump in economic growth occurred in the second quarter from 5.32% to 4.19% (BPS, 2020). There was a decrease in the transportation and warehousing business field as well as in the provision of accommodation and eating and drinking sector which decreased from 30.84% to 22.02% (BPS, 2020). At present, it is estimated that

around 75 million jobs in the tourism sector have suffered a setback and the tourism industry is at risk of losing its turnover of approximately 2.1 trillion US dollars (Utami & Kafabih, 2021). Tourism has a very important economic role for many countries. International tourism is believed to drive a country's economic growth (Haryanto, 2020). The tourism sector has a strategic position to receive divisions and has an important contribution to employment (Bank Indonesia, 2018).

During the Covid-19 pandemic, research on the impact of Covid-19 has been conducted on an international scale, but little has been done on a local scale. International scale research such as the study of the impact of the Covid-19 pandemic which caused reduced income in the tourism sector in Bangladesh, India, Brazil, Rwanda, Romania, South Africa, and South Korea (Rutynskyi & Kushniruk, 2020) also affects the activities of city (Zhang et al., 2021). Due to the pandemic, the tourism industry is experiencing a downturn due to this due to people's reluctance to come to tourist attractions (Kartiko, 2020), including Malioboro tourism industry. Therefore, it is highly necessary to research the impact of Covid-19 on a local scale, so that it can be understood how the resilience of the tourism industry at the local scale and what factors influence it.

## LITERATURE REVIEW

### Tourism industry

Tourism has multifaceted implications on the economy, natural environment, local populations at destinations, and on the tourists themselves. The various impacts of production factors required to produce goods and services by visitors, as well as stakeholders involved in the tourism sector, necessitate comprehensive efforts in approaching tourism destination development, tourism management, and the monitoring of tourism activities. This approach is highly recommended for formulating and executing national and local tourism policies, as well as in the context of necessary international agreements or other processes (Utami & Kafabih, 2021).

The influence of the tourism sector on economic growth in Indonesia elucidates that tourism has a positive effect on economic growth and conversely, economic growth also positively influences tourism. The revenue from the tourism sector stems not only from the money spent but also from foreign investments (Yakup 2019). The development of the tourism sector can also trigger the growth of other sectors, thus serving as a catalyst for national economic growth. Economic growth and tourism have a reciprocal causal relationship. This implies that the growth of tourism and economic growth mutually benefit each other (Nizar, 2015).

Additionally, tourism is a labor-intensive endeavor that can create employment in other sectors Surwiyanta (2003), such as the tourism industry (Leiper, 2004). The tourism industry comprises organizational elements a collection of organizations engaged in tourism business collaborating in marketing tourism to provide tourism goods, services, and facilities.

### Resilience of the tourism industry

Resilience can be explained by external shocks or disruptions that require mechanisms to cope and persist. Resilience can explain the recovery to the original state or to a better one (Badoc-Gonzales et al., 2022). In the course of development, disruption often occurs Events in the world seldom unfold as expected. Some issues arise unexpectedly, and one of these is a pandemic. A pandemic is an epidemic or outbreak that occurs on a large scale, affecting multiple countries or crossing international borders, striking humans globally (Porta, 2008). Overall, the world has experienced various pandemics, such as smallpox and tuberculosis. The most devastating pandemic in history was the Black Death or Plague, which claimed around 75-200 million lives in the 14th century (Serbu, 2020). Subsequently, in 2020, the Covid-19 pandemic occurred (Roychoudhury et al., 2020). The Covid-19 pandemic has the potential to cause various adverse impacts on the entire global economy. In general, the resilience of the tourism industry has four important interrelated dimensions (Figure 1), namely governance resilience, environmental resilience, social resilience, and economic resilience.



**Figure 1.** Graphic of Resilience Dimensions  
Source: Badoc-Gonzales et al., (2022)

The resilience of the tourism industry is needed to navigate through such pandemics. In this case, resilience can be seen from the conditions of impact from normal conditions than during a pandemic. In the trade tourism industry, resilience can be seen from the economic aspect which consists of Purchase of goods, Store Activities (Frago, 2021), price of selling goods (Liang et al., 2021), income level (Masbiran, 2020), commodity offered (Hu et al., 2021), social aspect: the composition of buyers by tourists (Liang et al., 2021), store labor (Masbiran, 2020), labor security deposit (Dewi et al., 2021), additional livelihood, living conditions (Hu et al., 2021), Government aspect: assistance provide, tax costs borne (Hu et al., 2021), the environmental aspect of decreasing the use of electrical energy, the quality of environment around the soter (Zhang et al., 2021), reducing the amount of waste (UCLC, 2021).

Meanwhile, in the lodging tourism industry, resilience can be seen from the economy, namely from the condition of room rentals, lodging activities, a decrease in room rental rates (Kusuma et al. 2021), lodging business income (Masbiran, 2020). Social from the composition of the lodging business (Kusuma et al. 2021), lodging labor (Masbiran, 2020), lodging labor security money (Dewi et al., 2021), Government: assistance provided to lodging, tax costs borne (Azanella, 2020), Environment: decreased energy use, environmental quality of lodging (Zhang et al., 2021), reduction in the amount of waste (UCLC, 2021).

In the transportation tourism industry, resilience can be seen from the economic aspect, namely the condition of becak/andong passengers, becak/andong income (Tarmizi & Sulistyawati, 2021), social namely additional livelihoods (Rahadi, 2020), conditions for fulfilling the daily needs of becak/andong (Tarmizi & Sulistyawati, 2021) composition of becak/andong users, becak/andong waiting points (Rahadi, 2020). Government: assistance given to becak/andong, becak/andong tax (Rahadi, 2020), And environment i.e. petrol reduction, environmental condition (Zhang et al., 2021) and waste reduction (UCLC, 2021).

## RESEARCH METHODS

The research method used is the quantitative research method. Quantitative research methods emphasize theory testing by measuring research variables with numbers and then analyzing data with statistical procedures (Paramita, 2015) to produce accurate data. This research aims to find the factors that influence the resilience of the tourism industry. Thus, this method is considered suitable because it can explain how the impact occurs based on the theory from the previous literature study and then find out what steps are used for the resilience of the tourism industry.

### Data collection

The methods used in data collection are divided into 3 (three), such as questionnaire, observation, and secondary data. The questionnaire data will be processed using a scoring method while the observation and secondary data will be processed using a descriptive analysis method. Thus, it can be figured out which variables that affected by COVID-19 and to find out which variables have the possibility of becoming the factor of resilience in the tourism industry.

## a. Questionnaire

A questionnaire is used to gather data that cannot be obtained through secondary sources. The sampling technique used in the questionnaire is a random number table where 56 samples are obtained for the trade industry, 95 samples for the transportation industry, and 26 samples for the accommodation industry. We will ask about the impacts that occur and how to deal with the pandemic problems that occur.

## b. Observation

Field observation is conducted to verify the activities and existing facilities in Malioboro. Some data to be collected through observation include facilities, impact conditions, economic activities, and non-economic activities that occur in the area. This observation was conducted simultaneously with the questionnaire.

## c. Secondary data

Secondary data is used to see the condition of the tourism industry in Malioboro in terms of trade, transportation, and accommodation. This data was obtained from a literature review and previous research.

## Analysis

The analysis methods are divided into 2 (two), such as:

## a. Descriptive Analysis Method

Descriptive analysis is used to explain the condition of the existing tourism industry in Malioboro, both in terms of existing conditions in terms of economic activities and non-economic activities that occur in the area.

## b. Scoring

Scoring analysis is used to determine the impact of the pandemic on the tourism industry and the resilience that has been shown to deal with the pandemic by each tourism industry. It will be expressed on a Linkert. The Linkert scale is employed to measure the perceptions, attitudes, and opinions of an individual or a group of people about social phenomena. In this case, all results obtained from the impact and resilience have been recorded. Scores used in this technique range from 1 to 3 for each criterion. These criteria are adjusted to the variables of each research target indicator. Table 1 shows the variables collected and the criteria for the Resilience Study of the Tourism Industry in Malioboro.

**Table 1.** Variables for Resilience Study of the Tourism Industry in Malioboro

Commercial Industry		
Variables	Criteria	Score
Governance resilience	There was an increase in the merchant tax rate	3
	No change in the tax rate	2
	Reduce tax rates for traders	1
Tax costs are borne by the store	Assistance provided to traders due to the Covid-19 pandemic	3
	No change in assistance provided	2
	There is no assistance provided to traders due to the Covid-19 pandemic	1
Government assistance provided to traders	Criteria	Score
	Increase in purchase of goods	3
	No impact on the purchase of goods	2
Economic resilience	There was a decrease in the purchase of goods	1
	Longer store opening times occur	3
	No change in-store activity	2
Purchase of goods	Store closing activity occurs	1
	There is an increase in the price of goods	3
	No change in the price of goods	2
Store Activities	There is a decrease in the purchase of goods	1
Price of selling items		

	Increase in income	3
Income Level	Income does not change	2
	There was a decrease in revenue	1
	Increase in commodities/goods that can be offered	3
Commodities of goods offered	No change in commodities/goods that can be offered	2
	A decrease in commodities/goods that can be offered	1
Social resilience		
Variables	Criteria	Score
Composition of traveler buyers	There are foreign and domestic tourists with numbers above normal condition	3
	There are only domestic tourists with a normal number of conditions	2
	There are only domestic tourists with numbers below normal conditions	1
Shop Labor	There is an increase in the number of workers	3
	No impact on labor conditions	2
	Layoffs or furloughs occur	1
Additional livelihoods of shop workers	There are livelihoods outside the main job	3
	No livelihood outside the main job	2
	Termination of employment and no other employment	1
Additional livelihoods	There are livelihoods outside the main job	3
	There is no livelihood outside the main job	2
	There is labour termination and has no other work	1
Living conditions	Life's needs are increasingly being met	3
	The needs of life do not change	2
	People are struggling with the necessities of life	1
Environmental resilience		
Variables	Criteria	Score
Decrease in lodging energy use	There is a decrease in the use of electrical energy	3
	No change in electrical energy use	2
	There is an increase in the use of electrical energy	1
Quality of the lodging environment	The environment feels cooler	3
	The environment has not changed	2
	The environment gets hotter	1
Reduction in the amount of lodging waste	There is a reduction in the amount of waste generated	3
	No change in the amount of waste generated	2
	Increase in the amount of waste generated	1
<b>Accommodation Industry</b>		
Governance resilience		
Variables	Criteria	Score
Assistance was provided to the inn	There is help obtained due to the Covid-19 pandemic	3
	No change in assistance provided	2
	There is no assistance obtained due to the Covid-19 pandemic	1
Tax costs are borne by the inn	The increased tax rate for lodging	3
	No change in tax rate to lodging	2
	There is a reduction in the tax rate for inns	1
Economic resilience		
Variables	Criteria	Score
Room rental	Increase in overnight tourist visits	3
	No impact on overnight tourist visits	2
	There was a decrease in overnight tourist visits	1
Lodging Activities	Hotel/lodging activities are getting longer	3
	No change in hotel/lodging activities	2
	Hotel/lodging closure activities occur	1
Decrease in room rental rates	There was an increase in the price rate of room rent	3
	No change in price rates on room rent	2
	There was a decrease in the price rate of room rent	1
Lodging business income	Increase in income	3
	Income does not change	2

	There was a decrease in revenue	1
Social resilience Variables	Criteria	Score
Composition of room renters from tourist	There are room renters from foreign and domestic tourists	3
	There are only a limited number of domestic tourists renting rooms	2
	There are only a small number of domestic tourists renting rooms	1
Labor Lodging	There is an increase in the number of workers	3
	No impact on labor conditions	2
	Layoffs or furloughs occur	1
Lodging labour deposit	There is a security deposit for workers who are dismissed in full.	3
	There is security deposit for workers who are dismissed without full benefits	2
	There is no security deposit for dismissed workers.	1
Environmental resilience Variables	Criteria	Score
Decreased use of lodging energy	Decreased use of electrical energy	3
	No change in electrical energy use	2
	Increase in electrical energy use	1
Quality of the lodging environment	The environment feels cooler	3
	The environment has not changed	2
	The environment gets hotter	1
Reduction in the amount of lodging	There is a reduction in the amount of waste generated	3
	No change in the amount if waste generated	2
	Increase in the amount of waste generated	1
<b>Transportation Industry</b>		
Governance resilience Variables	Criteria	Score
Assistance provided to becak/andong	There is help obtained due to Covid-19 pandemic	3
	No change in assistance provided	2
	There is no assistance obtained due to the Covid-19 pandemic	1
Tax costs are borne by the becak/andong	The increased tax rate for becak/andong	3
	No change in tax rate to becak/andong	2
	There is a reduction in the tax rate for becak/andong	1
Economic resilience Variables	Criteria	Score
Tourist visit using becak/andong	Increase in tourist visits using becak/andong	3
	No impact on tourist visit using becak/andong	2
	There has been a decrease in tourist visits using becak/andong	1
Becak/andong fee	There has been an increase in the price of becak/andong	3
	There is no change in the price of becak/andong	2
	There has been a decrease in the price of becak/andong	1
Social resilience Variables	Criteria	Score
Becak/andong Activities	Becak/andong activity is getting longer	3
	No change in becak/andong activity	2
	There is a halt in becak/andong activity	1
Composition of becak/andong users from tourists	There are foreign and domestic tourists	3
	There are only a moderate number of domestic tourists	2
	There are only a small number of domestic tourists	1
Waiting point of becak/andong	There is an increase in the waiting point of becak/andong when they stop	3
	There is no change in the waiting point of becak/andong when they stop	2
	There is a decrease in the waiting point of becak/andong when they stop	1
Additional livelihoods	There are other livelihoods	3
	No additional livelihood changes	2
	No other additional livelihoods	1
Environmental resilience Variables	Criteria	Score

Decreased use of gasoline	There is a decrease in gasoline usage	3
	No change in gasoline usage	2
	Increase in gasoline usage	1
Quality of the surrounding environment	The environment feels cooler	3
	The environment does not change	2
	The environment gets hotter	1
Reduction in daily waste	There is a reduction in the amount of waste generated	3
	No change in the amount of waste generated	2
	There is an increase in the amount of waste generated	1

Source: Author’s analysis

- Note    3    Good resilience  
           2    Moderate resilience  
           1    Poor resilience

After obtaining the scores, they can be used to create intervals. The interval range is obtained by subtracting the lowest value from the highest value and then dividing it by the number of classes. Once the interval is determined, the scores of respondents’ answers for each criterion can be assessed to determine whether they have a positive impact or not.

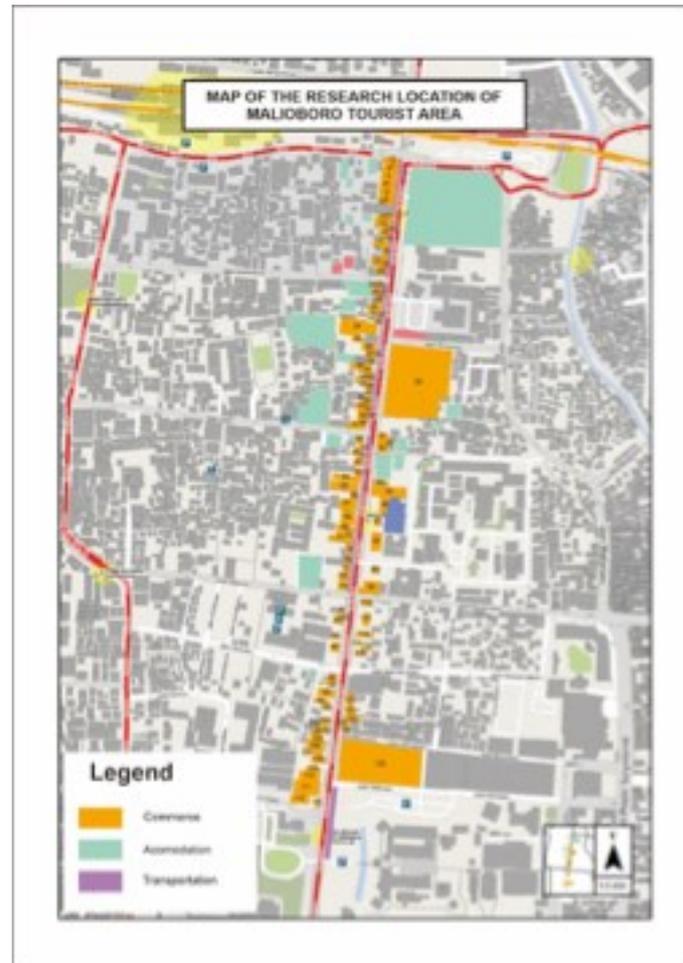
**Table 2. Scoring and Criteria Resilience**

<b>Commercial Industry</b>			
Governance resilience		Economic resilience	
<b>Interval score</b>	<b>Description</b>	<b>Interval score</b>	<b>Description</b>
5-6	Good resilience	13-15	Good resilience
3-4	Moderate resilience	9-12	Moderate resilience
2-3	Poor Resilience	5-8	Poor Resilience
Social resilience		Environmental resilience	
<b>Interval score</b>	<b>Description</b>	<b>Interval score</b>	<b>Description</b>
13-15	Good resilience	8-9	Good resilience
9-12	Moderate resilience	6-7	Moderate resilience
5-8	Poor Resilience	3-5	Poor Resilience
<b>Accommodation Industry</b>			
Governance resilience		Economic resilience	
<b>Interval score</b>	<b>Description</b>	<b>Interval score</b>	<b>Description</b>
5-6	Good resilience	10-12	Good resilience
3-4	Moderate resilience	7-9	Moderate resilience
2-3	Poor Resilience	4-6	Poor Resilience
Social resilience		Environmental resilience	
<b>Interval score</b>	<b>Description</b>	<b>Interval score</b>	<b>Description</b>
8-9	Good resilience	8-9	Good resilience
6-7	Moderate resilience	6-7	Moderate resilience
3-5	Poor Resilience	3-5	Poor Resilience
<b>Transportation Industry</b>			
Governance resilience		Economic resilience	
<b>Interval score</b>	<b>Description</b>	<b>Interval score</b>	<b>Description</b>
5-6	Good resilience	5-6	Good resilience
3-4	Moderate resilience	3-4	Moderate resilience
2-3	Poor Resilience	2-3	Poor Resilience
Social resilience		Environmental resilience	
<b>Interval score</b>	<b>Description</b>	<b>Interval score</b>	<b>Description</b>
10-12	Good resilience	8-9	Good resilience
7-9	Moderate resilience	6-7	Moderate resilience
4-6	Poor Resilience	3-5	Poor Resilience

Source: Author’s analysis

## Location Overview

The scope of the area in this study is in the Malioboro tourist area located on Malioboro Street, Yogyakarta. This area has an elongated linear axis, which has a length of approximately 2 km and starts from the north side, namely the road near Tugu Station to the south side, namely the Yogyakarta palace. In 2021, the world experienced the peak state of the Covid-19 pandemic. Malioboro tourist area is also affected by the Covid-19 pandemic which has implications for changes in the tourism industry. The scope of the area can be seen in Figure 2.



**Figure 2.** Location Map of Malioboro Tourism Area  
Source: Author's analysis

## RESULTS AND DISCUSSIONS

### The condition of the malioboro tourism industry

- **Commerce**

Tourism has a significant share in the emergence of the trade tourism industry (Nizar, 2012). The private sector has rapid growth from tourism. With this, economic growth can increase so that it creates jobs (Nizar, 2011). In this case, the tourism system of the trade tourism industry in Malioboro tourist attractions can be described by trade conditions such as shops, street vendors (street vendors), and markets. Shops in Malioboro are located around Malioboro street which extends from Tugu station to Tugu Zero KM. For street vendors in Malioboro Tourism Objects, at the time before the pandemic and the beginning of the pandemic, street vendors were on the sidewalks along Malioboro road with opening times from morning to night, and after the Covid-19 pandemic in 2022, the street vendors were relocated to other places located on Malioboro terraces 1 and 2. The manager of Malioboro 1 terrace is the central

government and for Malioboro 2 is UPT (Task Implementation Unit) Malioboro. For the tourism system, the market trade industry in the Malioboro area is the Beringharjo Market. Many tourist needs are met by the trade tourism industry such as shopping, eating, souvenir facilities, and places to hang out. Since the existence of the trade tourism industry, the development of the region has increased so that it is more prosperous for the community. Figure 3 shows the tourism industry trade system in Malioboro.



**Figure 3.** Tourism Industry Trade System

Source: Personal documentation

- **Acomodation**

Travelers need the lodging tourism industry to better accomodate their traveling and daily needs (Mulyana, 2021). The lodging tourism industry can affect the length of time tourists visit tourist attractions (Kusuma et al., 2021). In this case, the tourism industry can be explained as a business that uses a building that is specially provided, where everyone who uses the business can stay with or without eating and get services with payment (Mulyana, 2021). One example of the lodging industry is hotels and inns/homestays. In Malioboro tourist attraction itself, the existing lodging tourism industry consists of hotels, both star hotels and non-star hotels and inns.

Hotels and inns around Malioboro Tourism Objects consist of 26 objects. The star hotels consist of 5 objects consisting of Grand Inna Hotel, Malioboro Prime Hotel, Pyrenees Hotel, Royale Malioboro Hotel, and Aveta Hotel. As for the other 21 hotels and inns are non-star hotels and local inns. As for the Grand Inna Hotel, it is even included in historic tourism because the building is a Dutch heritage building and is still functioning today. Figure 3 shows accomodation industry tourism system in Malioboro.



**Figure 4.** Accomodation Industry Tourism System

Source: Personal Documentation

- **Transportation**

The tourism system of the transportation tourism industry is an infrastructure for the sustainability of the tourism process. One of the main characteristics of tourism is to travel, so without the transportation tourism industry, tourism will be paralyzed (Trisnawati & Sunaryo, 2014). In Malioboro tourist attraction,

there is a non-motorized transportation tourism industry in the form of andong and becak which can be said to be a tourist transportation tool in Malioboro. The existence of becak and andong is one of the attractions for tourists visiting Malioboro tourist attraction. In its development, the number of pedicabs and andongs in Malioboro has a large number, where many pedicab or andong drivers hang out in Malioboro during vacation time. The purpose of the becak and andong is to help tourists if they are reluctant to go around Malioboro on foot and go to tourism support places such as souvenir shops and bakpir places. The becak and andong rates are priced at an average price of 10,000 rupiah. Another transportation industry in Malioboro is the Trans Yogja bus. This Trans Yogja bus passes through Malioboro and connects with other areas.



**Figure 5.** Transportation Tourism Industry

Source: Personal documentation

## Resilience of the tourism industry

- **Commerce**

The resilience of the trade tourism industry in Malioboro has a poor resilience condition. This is due to a conspiracy assessment of governance, economic, social, and environmental resilience. In general, governance resilience is based on the role of the government to deal with the pandemic. In this case, there are two variables, namely the assistance obtained and the taxes paid (Hu et al. 2021). For Malioboro tourist attraction, it is found that the assistance provided has a moderate resilience value, this is because the percentage of assistance provided with assistance that is not received has a fairly large ratio. For the amount of tax borne, it has poor resilience results because the results of the tax provided have not decreased by almost the same amount as those that have decreased by 27%, namely in a ratio of 29:27.

Economic resilience is based on trade conditions that have experienced a reduction in buyer visits in purchasing goods, which is around 70%. This is due to large-scale social restrictions caused by the Covid-19 pandemic. With the decline in merchandise purchases, many retailers have experienced temporary closures (Frago, 2021). In this case, the average closure of shop activities that occurred at Malioboro tourist attraction was for 2 months. In connection with the resilience of the Covid-19 pandemic on the economy, the price rates circulating for the commodities offered have also decreased with the trend of buyers only from local tourists because foreign tourists have become less concerned about tourism activities (Liang et al. 2021). For the price rates of shops in Malioboro tourist attraction, it has a bad impact in the form of a price decrease of 8.88%. This also resulted in a decrease in revenue generated from the trade tourism industry which was also reduced due to the Covid-19 pandemic (Masbiran, 2020). For Malioboro tourist attraction, the average income is reduced by 69%. To continue resilience so as not to experience bankruptcy, most sellers choose to reduce the commodity goods offered. For Malioboro tourist attraction, there are 70% of traders reducing their merchandise commodities and 30% do not reduce their merchandise commodities.

Then there is social resilience influenced by the types of tourists that exist. Before the pandemic, tourists who came varied from domestic and foreign tourists, but in the pandemic, most buyers had a composition of buyers only from domestic tourists with a small number. From the economic downturn

and the decline in the type of tourists, workers in the trade tourism industry are also affected (Dewi et al. 2021). In this case, many shops in Malioboro stopped or laid off their workforce, where 73% of shop workers laid off their workforce and 27% did not lay off their workforce. In fact, according to the law to lay off workers, the store must provide severance pay equal to the old year multiplied by the amount of monthly money. For Malioboro tourist attraction, there are shops that provide severance pay in full at 47% and there are shops that do not provide severance pay at 53%. In response to this, half of the traders are looking for side jobs for additional livelihoods for the level of community resilience. From the results of the social and economic conditions above, the living needs of traders have a difficult life, they have difficulty making ends meet (Frago, 2021). This is also the case in the tourism industry at Malioboro tourist attraction where 30% of traders have difficulties in their living needs and 70% have no change in living needs.

Then to be able to environmental resilience has a good condition. As a result of the Covid-19 pandemic, there is a reduction in urban tourism energy consumption so that it can improve environmental quality (Zhang, et al., 2021). In addition to the impact on urban tourism energy consumption, the result of the pandemic can also reduce the amount of waste generated, this is due to a reduction in activities carried out in the area (UCLG, 2021). For the Malioboro tourist attraction area, there is a good impact where there is a 19% reduction in electrical energy and a 40% reduction in waste. For environmental quality due to the Covid-19 pandemic, Malioboro tourist attraction has no impact, which means that the environmental quality in Malioboro has not changed.

- **Acomodation**

For resilience in accommodation in Malioboro has a poor resilience condition. This is due to a conspiracy assessment of governance, economic, social, and environmental resilience. In general, governance resilience is based on the role of the government to deal with the pandemic. In this case, there are two variables, namely the assistance obtained, and the taxes paid (Hu et al. 2021). Existing inns and hotels need assistance from the government due to the Covid-19 pandemic such as in tax relief, assistance and electricity payments (Azanella, 2020). For inns or hotels in Malioboro tourist attraction, no assistance was given to all hotels and there were only 6 inns or hotels that received assistance. For the tax given, it is not affected because most inns or hotels do not experience changes in the price of taxes paid. However, there is a tax reduction given to inns or hotels that experience closure for one full year.

Economic resilience is affected by a decrease in the number of occupants of hotel rooms or inns every day (Kusuma et al. 2021). In this case, the case for lodging and hotels in Malioboro is similar, where there is a decrease in visits by people staying with an average percentage of 61%. As a result of this reduction in visits, there was a change in hotel activities with an average of 60 days. In this condition of reduced hotel rooms, there was also a decrease in tariff prices by 23%. As a result of the decline in visitors and adverse conditions associated with the Covid-19 pandemic, it resulted in a decrease in revenue for the inn or hotel (Kusuma et al. 2021). For inns/hotels in Malioboro tourist attraction, it was found that there was a decrease in income level of 64% with the result that all hotels or inns experienced a decrease in income.

With the result of low economic resilience and few foreign tourists, the social resilience of the lodging industry is also affected, which is bad. Many inns or hotels have terminated their workforce, some even without being given benefits (Masbiran, 2020). With the result of low economic resilience and few foreign tourists, the social resilience of the lodging industry is also affected, which is bad. Many inns or hotels have terminated their workforce, some even without being given benefits.

Then to be able to environmental sustainability has a good condition. Where due to the Covid-19 pandemic, there is a reduction in urban tourism energy consumption so that it can improve environmental quality (Zhang, et al., 2021). In addition to the impact on urban tourism energy consumption, the result of the pandemic can also reduce the amount of waste generated, this is due to a reduction in activities carried out in the area (UCLG, 2021). For the Malioboro tourist attraction area, there is a good impact where there is a reduction in electrical energy by 27% and a reduction in waste by

51%. For environmental quality due to the Covid-19 pandemic, Malioboro tourist attraction has no impact, which means that the environmental quality in Malioboro has not changed.

- **Transportation**

The sustainability of the tourism system of the transportation tourism industry has almost the same conditions as the trade and accommodation tourism industry, which has a poor classification. This is due to the conspiracy assessment of governance, economic, social, and environmental resilience. In general, governance resilience is based on the role of the government in dealing with the pandemic. In this case, there are two variables, namely the assistance obtained, and the taxes borne (Hu et al. 2021). The existing condition of *pembekak* still has no sustainability, so it is necessary to provide assistance to *pembekak* (Tarmizi & Sulistyawati, 2021). However, the assistance provided is still limited and to several related parties provided from the government. Instead, most of the assistance comes from third parties who feel sorry for the *pembekak/andong* so they provide assistance. In fact, these drivers are informal workers, so most drivers are experiencing difficulties in their lives, and are in dire need of assistance such as food and finance (Rahadi, 2020). The tax on *pembekak/andong* has been suspended during the Covid-19 pandemic.

The economic resilience of *becak/andong* drivers is influenced by passengers and the opposite happens, namely that the Malioboro tourist attraction itself occurs in the reduction of tourist visits using *becak/andong*, which is around 79%. This results in a decrease in income. Due to the decline in *becak/andong* users, many *becak/andong* drivers have lowered their fares in the hope of increasing the fares so that tourists are more likely to use *becak/andong*. In this case, the price tariff for *becak/andong* decreased by an average of 55%. However, there are also some *becak* drivers who increase the *becak* price to tourists. In relation to this, there is a high decrease in income levels, which is around 81%.

As a result of the decline in economic resilience, social resilience has affected the changes in *becak* pulling activities. Many *pedicab* drivers have stopped their activities. In this case, the decline in *becak/andong* activity occurred for an average of 50 days. This is due to the closure of activities that must be carried out. Due to these conditions, the drivers need additional work to support them, but there are still a few drivers who have side jobs to make ends meet, namely laborers. However, there are also those who move to other places to become *pedicab* drivers. The composition of *becak* users only includes a small number of domestic tourists, resulting in a decrease in the waiting point for *becak/andong* drivers. This is because even though there are more waiting points, the *becak* users are also limited.

Then to be able to sustain the environment has a good condition. Where due to the Covid-19 pandemic, there is a reduction in gasoline consumption which can improve environmental quality (Zhang, et al., 2021). In addition to the impact on gasoline consumption, the result of the pandemic can also reduce the amount of waste generated, this is due to a reduction in activities carried out in the area (UCLG, 2021). For environmental quality due to the Covid-19 pandemic, Malioboro tourist attraction has no impact, which means that the environmental quality in Malioboro has not changed.

## CONCLUSIONS

The development of Malioboro as the spread of Islam affected the lives of the surrounding community. From the beginning, it was only a royal road which later became a tourist and economic center in Jogja. However, due to the 2020 pandemic, all aspects of malioboro were affected. The decline in tourists affects the various tourism industry systems the most, especially in economic and social conditions. However, it has also affected the resilience of the tourism industry.

From the commerce sector, resilience that there has been a 70% decrease in buyer visits due to Covid-19, marked by store closures and a decline in the number of tourists, primarily from local visitors. There was a 69% decrease in revenue, leading to mass layoffs. Furthermore, the covid-19 pandemic has impacted the variety of goods offered by sellers by 70%. Similar to the commerce sector, the accommodation/lodging sector also experienced a decline due to a 61% decrease in the number of tourists. This condition forced hotel management to temporarily lay off their employees by 100%. The

transportation sector is also affected by a reduction in income from pedicab/Andong carriage services, where they are forced to lower their service rates to attract more tourists. There has been a 55% decrease in rates, causing difficulties for Pedicab/Andong operators to meet their living needs.

From these conditions, it can be concluded that the government, economic, and social resilience of the entire tourism industry has low resilience, but resilience for the environment has a good resilience condition. These conditions require adaptation to the impact of the Covid-19 pandemic where this adaptation occurs in changes in the resilience of the tourism industry. The resilience strategy carried out by tourism industry players needs to be supported by other parties to continue better resilience. Based on these conditions, a strategy for the sustainability of the Malioboro tourism industry is formulated as follows: Pay more attention to the impact on the condition of the tourism industry due to the Covid-19 pandemic such as the assistance provided, the tax burden, and the management of restrictions carried out. It is intended that various events that harm tourism actors are not too burdensome for various parties. The recommended post-pandemic policy is to strengthen the development direction of the Malioboro tourist attraction by paying attention to risk management and crisis management planning if a similar event occurs in the future. Maximize the availability of hygiene and health support facilities that can reduce the spread of Covid-19. This aims to build the trust of tourists visiting Malioboro tourist attractions.

This research has implications for preparing a strategy for resolving the resilience study of the tourism industry in Malioboro, so that if in the future similar events can be overcome before low resilience occurs.

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