

Tourism Development: Economic Interests and Environmental Problems (Yogyakarta Tourism Destinations Study, Indonesia)

Moh. Solehatul Mustofa¹, Atika Wijaya² and Kemal Budi Mulyono³

Abstract

Tourism is an important part of economic development efforts in various countries, as well as being an economic driver who plays an important role in advancing economic life. However, tourism also harms the environment, especially the waste problem. This study aims to examine the negative impact of tourism on waste generation at tourist destinations in the city of Yogyakarta, especially in the tourist destination Malioboro and its surroundings. The research was conducted using qualitative methods, with a case study approach. The results revealed that tourism in the city of Yogyakarta plays an important role in driving the economic life of the community and government in various service, trade, industrial/crafts, and agricultural sectors. Related to the emergence of environmental problems, the government has anticipated maintaining cleanliness in the city of Yogyakarta. The part that is still a problem related to waste disposal is the Final Waste Disposal Area. Suggestions that can be proposed are efforts to increase the budget for waste handling; application of more advanced technology, and continuing to support the development of eco-friendly tourism.

Keywords: Economic Interests, Environmental Problems, Tourism Development

INTRODUCTION

Tourism is understood by experts in social and economic sciences from various countries to be an opportunity for the economic development of a nation's people because it can act as a driving force for various fields and broad economic sectors (Odeh, 2010). Tourism can advance the economic sector services, trade industry, and agriculture. Progress in the service sector, for example, the hotel sub-sector, communication facilities/infrastructure, public transportation and transportation, the trade sector for example supermarkets, shops, restaurants, traditional markets, and street vendors, the industrial sector for example the production of various handicraft souvenirs, clothing, the food and beverage industry, the building materials industry, and so on (Mihai, 2016). The agricultural sector will also develop, for example, fruits, vegetables, livestock, fish, and so on.

This progress occurs because tourist visits can not only bring in income from the money spent by tourists but also through the interaction of tourists with the local community (Tamaki & Ichinose, 2019). Tourists who visit have prepared provisions to meet their needs and shop at tourist destinations so that they can increase the income of the people of Mateu et al (2013). The interaction of tourists with the community can lead to an exchange of information, and ways of life and is often followed up by carrying out activities that involve tourists and the local community. Thus, the development of tourism in a place will activate various fields of life including in the economic field in various sectors.

Tourism development is in line with the SDGs program launched by the United Nations, especially those related to economic growth and decent work, and of course also the other 16 components (Glyptou, 2022). Tourism is related to many fields and sectors of life. By developing tourism, other components of the SDGs can be achieved (Oyabu et al, 2020). On the other hand, tourism is seen as causing environmental problems. The large number of tourist visits has had the effect of increasing the amount of waste produced and can cause pollution to various tourist objects and waste disposal sites (Comerio et al, 2021). In various tourist destinations, the amount of waste is proven to be very large in various forms, both organic and inorganic waste. Traditional

¹ Universitas Negeri Semarang, Indonesia. E-mail: mustofa@mail.unnes.ac.id

² Universitas Negeri Semarang, Indonesia. E-mail: atika.wijaya@mail.unnes.ac.id

³ Universitas Negeri Semarang, Indonesia. E-mail: sonmuly@mail.unnes.ac.id

and minimal waste management often causes mountains of waste to landfills, causing environmental pollution (Manomaivibool, 2018). Communities residing around landfills are most often the affected communities. The water sources around them tend to stink, and the air around them also smells pungent and can have the effect of spreading disease from an unhealthy environment (Qian & Schneider, 2016; Miller & Howell, 2019). Socially, the people around the landfills are under pressure and it is not uncommon for them to fight the garbage collectors, resulting in social conflict.

Problems related to waste and tourism are very urgent to be studied further in big questions (1) Should tourism still need to be developed? (2) How can tourism be a source of environmentally friendly economic growth that supports the achievements of the SDGs program? This study is based on tourism in Yogyakarta Province, Indonesia.

LITERATURE REVIEW

The potential for tourism in Indonesia is one of the supporters of the engine of development and economic growth from year to year. This potential is an indication that tourism has a significant impact on economic development and social welfare at the national level and also on the development of small businesses (Haryana, 2020). Meanwhile, Yunus & Indrasari's (2017) view suggests that the tourism industry collaborates with the creative industry in business activities. Based on A study by Hole et al, (2019) shows that in India, tourism has an important role in increasing travel, hospitality, and income. This context is also in line with the contribution of the tourism sector in Indonesia which is also one of the sectors that has the highest value contribution to economic progress, especially the long-term economy, not in the short term but must be accompanied by strategic policies (Hariyani, 2018).

Tourism development is in line with the 17 SDGs targets which include: 1. Eliminate Poverty; 2. Hunger Elimination; 3. Health and Welfare; 4. Quality Education; 5. Gender Equality; 6. Clean Water and Sanitation; 7. Clean and Affordable Energy; 8. Economic Growth and Decent Work; 9. Resilient Infrastructure, Inclusive and Innovative Industry; 10. Reducing Gaps; 11. Inclusive and Sustainable Cities; 12. Sustainable consumption and production; 13. Climate Change and Disaster Risk Reduction; 14. Preservation and Sustainable Utilization of Marine Ecosystems; 15. Preservation and Sustainable Utilization of Land Ecosystems; 16. Peace, Justice, and Strong Institutions; 17. Partnership for All Development Goals (Yunus & Indrasari, 2017).

Regarding the contribution of tourism to the country's economy, from cases in India, it is known that in India there were a total of 18 million tourists in 2019, ranking 14th in the world in absolute terms. India generates around 13.41 billion US Dollars in the tourism sector alone. The role of tourism in income can also be seen from the contribution of tourism to economic development in Indonesia. Tourism Revenue in Indonesia increased to 1626.32 USD Million in the second quarter of 2022 from 218.45 USD Million in the first quarter of 2022 (World Data, 2022).

The tourism sector based on studies in Madeira (a small island that is part of Portugal) shows that tourism contributes 26.6% of the regional GDP and 16.7% of employment in the region (Teixeira, 2021). However, this sector is a source of adverse environmental impacts. One of the environmental impacts of tourism, considered an externality, is the generation of solid waste (Machado, 2011). The problem of waste and tourism also occurs in Ghana, Africa. Efforts to deal with solid waste from research conducted on how to handle waste by several hotels have not shown the right way with more advanced technology (Eshun & Tichaawa, 2019).

A record of the waste problem, it is suggested that the first and most important waste handling, Reduce, is an effort to reduce the occurrence of waste; second, Reuse, reuse items that have been used; third, Recycle, recycling waste; fourth, Treatment, namely efforts to process waste; and fifth, Disposal, namely garbage disposal. The most desirable effort is towards action number one and the least expected is towards fifth, disposal (Jam et al., 2013). The economic literature contains several references to the environmental impact of tourism and its implications for public policy.

Many economists have highlighted that the negative environmental impacts of tourism are negative externalities (Palmer & Riera, 2003; Gooroochurn & Sinclair, 2005; Pintassilgo & Silva 2007; Gago et al. 2009). In that context, Palmer and Riera (2003) note that studies of negative externalities associated with tourism focus on

the destructive effects of mass tourism on natural ecosystems, forgetting that urban areas may also experience similar effects. In an extreme scenario where the number of tourists exceeds the physical absorptive capacity of the place, long-term negative external effects (i.e., pollution and congestion) are unacceptable.

Destinations that see an excessive growth in the number of tourists tend to experience a destruction of the heritage and quality of life of their inhabitants, slowly becoming uninhabitable places, not only for those who live there but also for those who visit them (Palmer & Riera, 2003). Meanwhile, the views of Pintassilgo and Silva (2007) revealed that open access to the tourism accommodation industry generally leads to excessive economic and environmental exploitation. According to the authors, the resource environment typically presents common resource pool characteristics, where exploitation of the resource by one agent reduces the availability of the resource for others and where exclusion from other agents is extremely difficult and costly. In this way, capture processes by users of these natural resources that destroy the resources they depend on are likely to occur; this phenomenon is called the “tragedy of the commons” by Brennan (2012).

To achieve an efficient social solution, the government urgently needs to encourage industry to have an optimal social responsibility, where the distinction between private and social costs must be eliminated. Various policy instruments can be applied in the tourism sector to internalize external costs (Logar, 2010).

Logar (2010) mentions that there are three types of tourism management policy instruments: economic, regulatory, and institutional. Economic (or market-based) instruments consist of environmental taxes, user fees, financial incentives, and tradable building permits. These regulatory instruments include quotas and zoning. Institutional instruments refer to eco-labels and changes in property rights. Gooroochurn and Sinclair (2005) highlight that in the presence of negative consumption externalities, the market does not provide the optimal quantity, given that social costs are greater than private costs. Namlis and Komilis (2019) argue that consumption taxes are an ideal policy for correcting consumption externalities at their source. The basic method is to use a Pigouvian tax to ensure that the market achieves an efficient outcome, given that the tax rate bridges the gap between marginal social cost and marginal private cost. These tariffs must be applied to all agents that cause negative externalities and are directed at goods and services that cause adverse effects without price (Arbulu et al, 2016).

METHODOLOGY

This study uses a qualitative method with a case study approach, where the object of this research is tourism in Yogyakarta, with the research locus around the coast and the Malioboro area. This study uses several key people to provide objective and transparent data using in-depth interview data collection methods. Then the data obtained was sorted, coded, and triangulated either by subject or method, then the results were concluded.

FINDINGS/RESULTS

The role of tourism in the economy

The city of Yogyakarta and the surrounding area in the Special Region of Yogyakarta, Indonesia, is a major tourist destination in Java. Tourists who visit are not only domestic tourists (domestic) but also tourists from foreign countries (overseas). In the city of Yogyakarta, there are many tourist destinations. An informant named Rofi, a 41-year-old resident of Yogyakarta from Tegal, Central Java, said that in the city of Yogyakarta, tourist attractions that are busy with tourists include the Malioboro Shopping Center, the Kraton, Taman Sari, Prawirotaman and Taman Pintar. Tourists who come to Yogyakarta come from various regions in Indonesia and even from foreign countries.

Based on field observations and other secondary data sources, the City of Yogyakarta has been equipped with adequate facilities and infrastructure. The available facilities and infrastructure for roads, air and land transportation (trains, buses) and local transportation are very adequate. Hotels and inns, supermarkets, shops and other shopping facilities are found in various places in Yogyakarta. There are also many old historical buildings here and there. Besides that, the natural beauty and richness of cultural arts from the creativity and customs of the people of Yogyakarta attract the attention of tourists visiting Yogyakarta.

The development of the city of Yogyakarta and its surroundings to become a tourist destination fosters the emergence of entrepreneurial actors. Many entrepreneurs have sprung up around the tourist spots. One of the famous tourist destinations in the city of Yogyakarta is Malioboro. The Malioboro tourist destination is a shopping tourism object in the form of shopping centers and street vendors that provide clothing, handicrafts, and culinary services. For a long time, the Malioboro area has become a shop and street vendor selling various merchandise on the terraces of the shops. The number of street vendors in the Malioboro area in 2018 before the relocation was around 2500 people. Based on data from the Malioboro Technical Implementation Unit (UPT), the number of street vendors in Malioboro reached 1,786 traders. This number belongs to several street vendor communities or associations, namely Tri Darma street vendors with 800 traders, Pemalni with 440 traders, Padma with around 23 traders, Senthir Market with 214 traders. Then the culinary Handayani traders association during the day reached 61 traders, the Malioboro evening lesehan traders had 43 traders, the Afternoon Market had 104 traders and the Sosrokusumo Association had 11 traders and the Yogyakarta Street Vendors Association (PPKLY) unit 37 had 90 traders.

In addition to traders who use the Malioboro area, there are also artists performing cultural arts who provide entertainment. In Malioboro, cultural arts performances by Yogyakarta artists are often held. Thus, the Malioboro area has become very well known as an important destination for shopping and arts and culture tourism in Yogyakarta. The regional newspaper named *Republika* sources indicate that during school holidays visitors to Malioboro can reach 25 thousand people per day and Saturday and Sunday holidays an average of 15 thousand people per day. The crowds in Malioboro, especially at night. Many tourists take the time to visit Malioboro for various reasons, from shopping, and entertainment to culinary delights.

Since 2018 Yogyakarta has been planning the development of the Malioboro Area within the framework of the development of the Malioboro JPG (Jogja Planning Gallery). Currently, the Malioboro area has changed. The street vendors who were originally located in the storefront were moved to a building on the east side of the road across from the shops. Part of it on the east side is now a park and a place for visitors to sit, and part of it is a parking area. At a glance, the Malioboro area doesn't look lively but is neater and cleaner. One of the things that make the Malioboro area lively is the presence of street vendors in the storefronts. Currently, street vendors have created their place in the building known as the PKL/People's Mall.

The crowds in Malioboro cannot be separated from the tourist destinations around it. Not far from the shopping center of Malioboro are the Yogyakarta Palace, Lor Square, Kidul Square, Taman Pintar, and Taman Sari as well as Bering Harjo Market. All tourist destinations in the city of Yogyakarta are visited by many tourists. The attractiveness of each destination is always there, even though it is different. At the door of the palace, musical performances from artists are often held which are the center of attention of tourists. In the Kidul (South) square which has not been fenced like in the lor (north) square on weekdays or holidays during the day, there are not many traders but on holidays and at night many tourists and street vendors arrive. Next to the square is the palace's elephant kendang which is often visited by tourists. Street vendors around the Kidul (South) Square serve visitors for food and drink needs after visiting various tourist attractions. Many tourists who visit various tourist destinations visit to shop at Malioboro. Typical Yogyakarta goods, especially batik fabrics, and handicrafts made of leather, which are tourist destinations, can be found in Malioboro.

The tourism sector is one of the most reliable supports for economic growth in DIY. The attractiveness of hundreds of tourist destinations in DIY can bring in millions of tourists (*Tribunjogja.com*, *Yogya*). Data from the DIY Central Statistics Agency (BPS) stated that the number of guests staying at hotels during August 2016 was recorded at 400,673 people, consisting of 370,176 domestic guests and 30,497 foreign guests.

Tax revenue in the tourism sector in 2019 includes hotel taxes of IDR 284,165,359,372.00, restaurant taxes of IDR 201,656,434,486.75, and entertainment taxes of IDR 35,990,525,637.80. The Head of the DIY Tourism Office, Aris Riyanta said, that tourists who contribute to the regional budget through the tourism sector come from domestic tourists outside the city of Yogyakarta. His party noted that the contribution of income from domestic tourists outside DIY reached IDR 7.2 trillion, for domestic tourists from the DIY area it was only around IDR 600 billion, while foreign tourists contributed around IDR 3.2 trillion. The Gross Regional Domestic Product (GRDP) of DIY is IDR 141 trillion a year. Of that amount, said Ike, ten percent, or IDR 14

trillion was contributed directly by the tourism sector, namely accommodation and food. If these two business sectors experience a slump of between 70 percent and 80 percent, the direct contribution lost is around IDR 12 trillion.

Amount of Garbage as an Environmental Problem

The large number of tourists in the city of Yogyakarta, including in Malioboro, causes a large amount of waste. Garbage from Malioboro also contributes to the large amount of waste in the city of Yogyakarta, which reaches 370 tons per day, and during long holidays, such as feast holidays, it can reach 400 tons per day. This amount is certainly very large and can disturb tourists if there is no good handling.

Even though a large number of tourist visits resulted in a lot of garbage, the interesting thing in the city of Yogyakarta is that the roads and tourist visit centers now look clean. This was stated by tourists from Semarang Nia and Tami who visited Malioboro and its surroundings in Yogyakarta. The two tourists confirmed that in general the Malioboro area looks clean along the shopping center road and in the parking area there is no dirty impression with garbage. The same thing can be seen in other areas in Taman Sari, Alun-alun Kidul, Alun-alun Lor, and in Pasar Bering Harjo, all of which look clean and free of the trash. From observations, it can be seen that there are trash cans on many road corners, in parking areas, and in other public places such as a mosque close to the Taman Sari tourist attraction, all of which are in the vicinity of Malioboro seem to provide garbage disposal sites with a healthy and clean environment.

From an informant named Rofik who sells pedicab transportation services, information was obtained that in the Malioboro area every three hours the city cleaning staff comes and picks up trash that has been placed in a trash can/basket. The same thing was explained by an informant named Ika who was a street vendor in Alun-alun Kidul. He has been selling there for about 24 years. Currently, he is 56 years old. She comes from Blitar, East Java, and for 30 years she and her husband have migrated to Yogyakarta. It is said that Alun-alun Kidul is very crowded with visitors, especially on holidays and at night. In Alun-alun Kidul many vendors serve the culinary needs of tourists who come to Alun-alun Kidul. In South Square, a place or elephant enclosure belongs to the palace. The Elephant Cages are also frequently visited by tourists. Apart from that, Alun-Alun Kidul is close to Malioboro and Taman Sari so many people after visiting Malioboro and around Alun-alun Kidul also visit South Alun-Alun and vice versa. Therefore, in Alun-alun Kidul there is also a lot of garbage. However, there are trash bins where trash is collected every three hours so that trash doesn't pile up. From the observations of the researchers, it was also seen that the trash bins did not seem to have time to be full of garbage. This result is because the garbage has been taken by the city cleaning staff before the garbage is full. From *Republika* sources, it is also known that the Malioboro Cultural Heritage Management Unit, Ekwanto Yogyakarta City always monitors waste problems and disposes of garbage at any time so that it does not disturb the comfort of tourists. The Department of Environment is also doing the same thing, which is monitoring the progress of the waste problem in the City of Yogyakarta. Garbage dumps are placed not far away so that tourists and residents do not throw garbage in the designated place.

In addition to handling waste in the city of Yogyakarta, it is also free from clogged water flows. On either side of the main roads, there are waterways closed at the top with a cavity for water to enter the waterway at a certain distance. With the cavity of the waterway, the water does not stagnate. This can be seen along the road to the tourist attraction.

Efforts to maintain cleanliness can be seen in places of worship, parking lots, and toilets located around tourist attractions. Almost all toilets in public places in tourist destinations in Yogyakarta are leased to private parties. In general, those who dare to hire toilet service businesses are ethnic Sundanese from West Java. They are more daring to rent toilet service establishments than residents of Yogyakarta and other Indonesian ethnicities. In managing toilet services there appears to be a commitment to cleanliness. In the vicinity of the toilets in the Malioboro parking lot, there was also no trash scattered around. To dispose of trash has also been provided a place in the box or trash basket.

There is an increasing amount of waste in the Piyungan District used for waste disposal from the cities of Yogya, Sleman and Bantul, but the management has not been carried out in a modern way. Garbage in Piyuan,

which was originally made up of layers of garbage, soil, trash and so on, is now just piled up. If you look at the amount, it reaches 700 to 800 tons per day, showing a very complicated problem in tackling the waste problem in DIY. Until now, another location has not been sought to become a new TPST (Integrated Waste Disposal Site) and there have been no steps to turn waste into another resource.

The Piyungan Integrated Waste Disposal Site (TPST) is a final processing site for waste originating from three regions in Yogyakarta Province including Yogyakarta City, Sleman Regency, and Bantul Regency. It is called the Piyungan TPST because this location is in the Ngeblak and Watugender Hamlets, Sitimulyo Village, Piyungan District, Bantul Regency. The area that is used as a landfill is approximately 12.5 hectares with a capacity of 2.7 million cubic meters, while the waste that enters every day ranges from 400-500 tons/day and on busy days it can reach 800 tons/day if it is managed with a landfill control waste management system, it cannot be overcome. Control landfill is a waste management technique by treating waste that will be stockpiled and then leveled. If the heap is full, it will be compacted and covered with soil again. The waste management strategy should use the incinerator method, namely processing by separating the waste from the waste that will be recycled. Non-recyclable waste will be burned. Combustion process like this is usually done as a last alternative.

Funds coming in from the tourism sector in Yogyakarta are very large, reaching more than 14 trillion which the state receives in the form of taxes from hotels, restaurants and tourist attractions. Funds allocated for waste management in Piyungan which received data from the cities of Yogyakarta, Sleman and Bantul from media sources amounted to Rp. 25 billion (Media Solopos.com), the Government of Sleman Regency, DI Yogyakarta, will build an integrated waste disposal site (TPST) in an area of 1.3 hectares with a budget of around Rp. 38 billion. If you look at the amount of waste, if it is only concentrated in Piyungan and even though it is added with an area of 1.3 ha in Sleman it will not be sufficient to collect garbage from three regions (Yogyakarta City, Sleman and Bantul). In addition, the budget for dealing with waste management is too small so that adequate TPST cannot be prepared.

Based on the explanation above, concerning several sources of literature, it appears that tourism in the city of Yogyakarta is like in various places in the world which shows that tourism cannot be avoided as a pillar of economic development and progress. Tourism is a source of income for citizens and the government. Therefore, the government and the people of Yogyakarta City have taken adaptive and responsive steps towards the development of tourism in Yogyakarta. Problems that arise related to the development of the City of Yogyakarta as a tourist destination are the joint responsibility of the government and the community. Some of the problems, the same as those that occur in several countries, are environmental problems, especially the waste problem.

Regarding the waste problem, the government and the people of the City of Yogyakarta have made efforts to deal with the waste problem by placing waste in the space provided. Efforts to overcome waste through socialization and provision of facilities for garbage disposal and transportation as well as cleaning staff who keep the city of Yogyakarta clean from garbage. The issues that are still unresolved are around the final waste disposal site in Piyungan and waste processing at that location. The method of processing waste which is still directed at dumping and piling up creates piles of garbage that cause pollution.

How handling efforts are carried out needs to be improved, waste is not just piled up in landfills. Garbage disposal needs to be managed with more modern technology. For this reason, the government budget for the waste management needs to be increased.

CONCLUSION

Tourism based on cases in the city of Yogyakarta, especially in Malioboro and its surroundings, shows a very important role in the economic life of the community and government, as a driver of the economy and also a source of government revenue. Tourism has contributed to driving economic life in the service sector, trade, industry, or crafts as well as agriculture. Tourism has caused environmental problems, especially waste problems that have not been fully resolved, namely the emergence of pollution at the final disposal site.

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