Research article

Collaborative Governance Model During COVID-19: Towards Sustainable Tourism in Yogyakarta

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Abstract. This article aimed to analyze the impact of collaborative governance on restoring the sustainable tourism sector affected by COVID-19 in Yogyakarta. The concept of collaborative governance was used in this study because the recovery of the tourism sector as a complex sector involves many varied actors so that synergies and collaborations are needed. This study used exploratory qualitative research methods. Secondary data were collected from 65 sources of online media published in 2019-2021. The results of this study indicated: 1) the COVID-19 pandemic has had a continuous impact, the implications of which have included a decline in the economy and people’s welfare, and the highest impact in the city of Yogyakarta was in the tourism sector where unemployment increased; 2) promotion of tourism in the city of Yogyakarta has been carried out in stages with various innovations that have been applied collaboratively; 3) stakeholder roles in Yogyakarta tourism recovery have not been maximized; and 4) the roles of the community and private sector have remained relatively low as implementers in responding to policies or innovations made by the Government for the recovery of the tourism sector.

Keywords: governance, tourism development, sustainability tourism, Covid-19, Yogyakarta

1. Introduction

This article aims to analyze collaborative governance in the recovery of the sustainable tourism sector during the COVID-19 pandemic in Yogyakarta. The COVID-19 pandemic in the city of Yogyakarta has had a significant impact on the economic growth of the community, especially in the tourism sector (I. D. G. Kusuma, 2020). The city of Yogyakarta is the city with the highest income in the tourism sector because most of its people depend on the tourism sector (Spillane, 2000). The tourism industry is one of the industries that has been badly affected by the spread of COVID-19; this can be seen...
from the massive decline in tourist arrivals, both local and foreign tourists, resulting in a significant decrease in revenue from the tourism sector (Li et al., 2021; Yeh, 2020). The presence of the COVID-19 pandemic has paralyzed all tourism sector activities in Yogyakarta because COVID-19 has become a hazardous virus with a high level of virus spread and easy to infect the public. This large fall in the number of tourists has a negative influence on regional original income and people’s income. Tourism is the sector most affected by the COVID-19 pandemic since it is one of the major industries in socioeconomic transformation and boosting people’s living standards (Budastra, 2020; Yoeti, 2000). Because mobility was not recommended during the COVID-19 pandemic, the tourism industry is one of the most hit.

The uncontrolled spread and transmission of the COVID-19 epidemic compelled the government to impose severe regulations such as lockdowns and restrictions in numerous Indonesian provinces (Handayanto & Herlawati, 2020; Herdiana, 2020; Ling, 2021). Yogyakarta has also taken similar steps to limit the uncontrolled spread of the COVID-19 epidemic. To limit the spread of the COVID-19 epidemic, the Yogyakarta City Council has blocked tourist attractions in practically all tourist districts of the city from March 2020. The central government’s call to campaign and order people to stay at home, work from home, and impose regional restrictions in several regions of Indonesia, on the other hand, has implications for reducing the number of tourist visits (Herdiana, 2020), so that the COVID-19 pandemic has a significant impact on the tourism industry.

The ongoing effects of the COVID-19 pandemic on the tourism industry sector include: first, a decrease in tourist arrivals (Vargas, 2020); second, a large-scale economic contraction; third, a reduction in micro, small, and medium enterprises (MSMEs); four tourism actors lost their jobs; and, fifth, tourism destinations began to deteriorate due to a lack of maintenance (Fong et al., 2021). Several earlier research on the impact of the COVID-19 pandemic on the tourism sector found both positive and negative effects on the tourism business. According to several research (Brouder et al., 2020; Fong et al., 2021), the COVID-19 pandemic provides an opportunity to rebuild a more environmentally friendly tourism business. Several studies, however, have found that the COVID-19 epidemic has a long-term influence on people’s life because most people rely on tourism for a living (Assaf & Scuderi, 2020). The coordination that is put in place must be consistent and structured in order to maintain or reconstruct the tourism business. As a result, collaborative governance is required to recover the tourism sector in Yogyakarta.

Collaborative governance is public decision-making and policy-management process that constructively engages communities throughout Indonesia, including public,
government, private, and civic bodies, to achieve unattainable public goals (Purnomo, 2020a). Collaborative governance can be carried out by the central or local government to resolve a public problem by working with other parties (Purnomo, 2020a). Collaborative governance is a rule or arrangement comprised of public institutions and sectors that directly involve non-governmental actors in the formal policy-making process to implement public policy (Zaenuri, 2013). Collaboration is when stakeholders, both government and private, work together to solve a problem through public policy (Effendi & Purnomo, 2020). To reestablish a sustainable tourism sector after the COVID-19 pandemic, stakeholders must be included in the collaborative governance concept. Because COVID-19 is a pandemic that the government cannot easily handle, there is a need for synergy and collaboration with other actors to address this issue. According to Gallardo et al., (2013) and Pereira et al., (2018), several things affect the success of collaborative governance, namely: (a) communication, to clarify the main tasks of each implementer (b) human resources, being one of the factors that can determine success in the policy journey (c) disposition, the attitude of the implementer which is a necessary consequence for the effective implementation of policies (d) there must be a bureaucratic structure that triggers that the organization includes traditional systematics and follows existing procedures (Apriliyanti & Randøy, 2019).

As an effort to recover sectors affected by the COVID-19 pandemic, the government makes policies and legitimacy in carrying out the concept of collaborative governance, which includes: PERPPU Number 1 of 2020, Article 1 paragraphs 1-3 concerning policies to protect, especially in all forms of action and activities related to the handling of COVID-19. Government Regulation (PP) Number 21 of 2020 states that cooperation between the center and the regions is needed considering the conditions of each area in Indonesia which have different characteristics and potential for handling.
Decree (KEPRES) Number 11 of 2020 states that in handling the COVID-19 pandemic, it is necessary to have cooperation and support from the community in carrying out policies made by the government. With this legitimacy, the concept of Collaborative Governance is indirectly needed in handling COVID-19, especially in the tourism sector which is significantly affected.

This study takes a case study in Yogyakarta because Yogyakarta is a famous tourist city with various beauties of natural, cultural, and educational tourism. This study uses exploratory qualitative research methods to find out in-depth the variables of the research conducted, namely Collaborative Governance and the recovery of the tourism sector due to the COVID-19 pandemic. To analyze more deeply, this study uses secondary data sources obtained through online media, which are then analyzed using the NVivo 12 plus application to visualize the research analysis results from the data obtained. Thus the hypothesis of this research will show the impact of the COVID-19 pandemic on the tourism sector and how collaborative governance includes the role of stakeholders in the recovery of the tourism sector in the city of Yogyakarta.

2. Method

This article aims to analyze the concept of collaborative governance in the restoration of sustainable tourism in Yogyakarta during the COVID-19 pandemic. This study uses exploratory qualitative research methods to analyze in-depth research variables (Apriliyanti & Randøy, 2019). This exploratory qualitative research method aims to explore the concept of collaborative governance to recover the tourism sector caused by the COVID-19 pandemic and how collaboration is carried out between the government and non-government, including citizens in the private sector. This exploratory research approach is used because it describes the phenomena and their direct relationship with the situation or a place. This exploratory research approach will present more diverse and informative data and cases with in-depth analysis (Raharjo, 2008).

This study uses secondary sources from online media news and the official government website from 2019-2021. The author analyzed the number of online media news is 65 online news, then analyzed using the Nvivo 12 plus application. The data collected through these 65 online news articles is to analyze the impact of COVID-19 on the tourism sector, its recovery efforts, and the role of stakeholders in the concept of collaborative governance. The Nvivo 12 plus application is helpful for qualitative research so that research results can be analyzed and produce more exciting and accurate research (Purnomo et al., 2021).
3. Results and Discussion

3.1. The Impact of COVID-19 on Tourism Sector

Tourism is one of the leading sectors that plays an essential role in a country or region’s economic growth, specifically by increasing regional income, which has implications for improving people’s welfare (Setijawan, 2018). Tourism is a labor-intensive industry that provides numerous job opportunities and markets local products to enhance people’s well-being. The high number of tourist visits to a tourist destination and the increase in the number of hotels will impact the increased absorption of labor, affecting the productivity level of people’s economic activities in the tourism industry. On the other hand, the tourism industry is highly vulnerable to natural disasters, pandemics, terrorism, rebellions, and so on.

The tourism industry is one of those affected by the COVID-19 pandemic, as evidenced by the massive decline in foreign tourist visits, which has resulted in a significant decrease in tourism sector income because the flow of global human mobility is limited in each of their activities (Prawoto et al., 2020). The impact of the COVID-19 pandemic in Indonesia resulted in a significant reduction in the number of domestic and foreign tourists (Fotiadis et al., 2021). The decline in tourist visits impacted the tourism-related business sector, causing a significant contraction in economic growth. Because tourism-related industries such as travel agents, transportation, hotels, food and beverages, and others are affected by the COVID-19 pandemic, they cannot operate optimally, resulting in more and more workers being laid off (Azmi et al., 2021; Satispi et al., 2021). The author examines why tourism is the sector most affected by the COVID-19 pandemic, as shown in the following visualization;

![Figure 2: The effect of COVID-19 on Tourism.](image-url)
Figure 2 shows the effects caused by the COVID-19 pandemic, which has an impact on human health and has a socio-economic impact (Chakraborty, I. and Maity, 2020; Suryahadi et al., 2020). The spread of COVID-19, on October 5, 2020, new confirmed cases globally were 34,804,348 positive patients with an increase in the number of positive patients within 24 hours of 304,433 and 1,030,738 with 5,000 deaths within 24 hours due to the COVID-19 pandemic (Spinelli & Pellino, 2020).

It can be analyzed that the impact of the COVID-19 pandemic on the tourism sector is the impact of policies made by the government by implementing PSBB or Lockdown and social distancing, causing a lack of mobility or human activity as an effort to minimize the spread of the COVID-19 pandemic that infects humans quickly (Sugihamretha, 2020). The mobility restriction policy and all of these activities cause travel to stop, making travel agents and transportation companies unable to operate correctly. In addition, the COVID-19 pandemic has also caused a decrease in the number of requests for services and other goods. This forces companies, MSME business actors, and others to go bankrupt, increasing the unemployed (Kimura et al., 2020). In the end, the ongoing impact due to the COVID-19 pandemic will impact the economic decline to lead to a decrease in people's welfare (Alon et al., 2021). Therefore, it is essential to restore the tourism sector in order to increase economic growth. The impact of the COVID-19 pandemic on the tourism sector has hit the city of Yogyakarta as one of the tourist cities that has the potential as Indonesia's leading tourist destination because it has advantages in terms of culture, cultural activities, customs, high tolerance, and heritage buildings that are still well preserved. The Central Statistics Agency (2021) stated a decline in the number of tourists, both local and foreign tourists. The total number of foreign tourists visiting Indonesia in 2020 was 4.02 million, compared to 2019; significantly inversely, the number of foreign tourists dropped dramatically by 75.03% (BPS, 2020).

From February to March 2020, the impact of the COVID-19 pandemic reduced foreign tourist visits by 50%, while foreign tourists fell by 20-30% due to cancellation of foreign tourist visits, resulting in a visitor shortage for travel agencies, hotels, and restaurants in the Yogyakarta City area (P. A. Kusuma et al., 2021). In addition to reducing the number of visitors, the COVID-19 pandemic has forced several tourist attractions and lodging in the city of Yogyakarta to temporarily halt operations due to government policies such as lockdowns or activity restrictions. The author explicitly analyzes the impact of the COVID-19 pandemic on the tourism sector and its derivative industries, as shown in the following visualization.
Based on the analysis results, it is known that the COVID-19 pandemic has an impact on the tourism sector which has resulted in a decrease in the number of tourist visits to the city of Yogyakarta. The reduction of the number of tourists has implications for the decline in the income of people working in the tourism sector. It also affects businesses such as food and beverage, travel agencies, shopping, housing, leading to unemployment. The number of increases in unemployment occurred significantly, namely; In 2017 and 2018, the number of unemployed in the city of Yogyakarta was 64,019 and 65,605, but then in 2019 it increased to 69,170 and reached the peak of a significant increase in 2020 with 101,846 people (BPS, 2020).

Data on the number of open unemployment in Yogyakarta is an affirmation that the presence of COVID-19 has an impact on increasing the number of unemployed. Because the tourism sector is the main contributor to the highest Regional Original Income in the City of Yogyakarta affects people’s income and increases the number of open unemployment. The results of the visualization analysis in Figure 3 related to the impact of the COVID-19 pandemic on the tourism sector in Yogyakarta City on the workforce of 0.83, while for tourists it has a value of 0.81, shopping and Place to Stay (Hotel) has a value of 0.81. The high value of the impact caused by the COVID-19 pandemic in the tourism sector can be seen from the decrease in the amount of taxes obtained from the tourism derivative industry.

Figure 3 of a hotel, restaurant, and entertainment tax revenue data shows that the COVID-19 pandemic has had a negative impact on the tourism sector, particularly in the hospitality, restaurant, and entertainment sub-sector. This is demonstrated by the increasing number of bankrupt hotels and restaurants, with 1,557 hotels and restaurants (BPS, 2020). The decrease in tax revenue resulted in a reduction of local income and an increased number of unemployed in Yogyakarta because tourism activities cannot function without human mobility. The high monetary value of the COVID-19 pandemic’s impact on the tourism sector demonstrates the importance of stakeholder collaboration in overcoming the COVID-19 pandemic crisis in the tourism sector. As a result, to
restore a sustainable tourism sector due to the COVID-19 pandemic, the concept of Collaborative Governance is required to minimize the impact of the COVID-19 pandemic. As a result, the effort to recover the tourism sector through synergy and collaboration among actors in dealing with the effects of the COVID-19 pandemic. It can be seen that the government’s role in dealing with the impact of COVID-19 is the most important compared to others because the government is the leading actor in dealing with the effects of COVID-19. Because the government is the main key to this collaboration, the government plays a role as a policymaker. However, the private sector and the community or citizens may also be important in this collaboration because the private sector and the community act as objects or implementers of government policymaking.

3.2. Tourism recovery Due to COVID-19 Pandemic

Tourism is one of the leading sectors in increasing economic growth because it contributes to Indonesia’s highest Regional Original Income (Sabon et al., 2018). Economic growth is an increase in a person’s standard of living over time for the majority of families in a country. Economic growth can be sourced from an increase in people’s income which allows them to consume more goods and services (Kurnaedi et al., 2021). Economic growth in the tourism sector can be seen from various tourism derivative industries that produce goods and services. Derived tourism industries include travel agencies, food and beverages, resorts and hotels, souvenir shops and others, and many other industries that increase local revenue. On the other hand, tourism is a sector that is very sensitive to disasters. The tourism industry is very vulnerable to disasters, such
as natural disasters, pandemics, terrorism, rebellions, and others. The involvement of actors in the development of the tourism sector involves all actors and stakeholders so that stakeholders related to the tourism industry need to prepare a strategy to prevent and restore the tourism industry affected by disasters (Wahyuni et al., 2021; Wijayaningsih et al., 2021).

The recovery process for the tourism sector as a result of the COVID-19 pandemic cannot be completed overnight; several stages must be completed, as well as good strategies and synergy in overcoming the complex tourism system. The recovery of the tourism sector as a result of the COVID-19 pandemic has been accomplished through a variety of efforts, beginning with the imposition of extreme policies such as Lockdown or Massive Restrictions (PSBB) in several Indonesian regions (Al Zobbi et al., 2020; Firmansyah, 2020). Yogyakarta is doing the same thing to slow the spread of the COVID-19 pandemic, which is out of control. The Yogyakarta City Tourism Office has closed several tourist attractions in almost all tourist areas of the city of Yogyakarta since March 2020 in order to limit the spread of the COVID-19 pandemic. Efforts to recover the tourism sector in Yogyakarta as a result of the COVID-19 pandemic can be seen in the framework analyzed by the author from online news collections and journals related to research variables.

**Figure 4:** Scheme Recovery of the Tourism Sector Due to the COVID-19 Pandemic in the City of Yogyakarta.

Figure 4 depicts how the Yogyakarta City government, in response to the COVID-19 pandemic, particularly in dealing with the impact on the tourism sector, has prepared and pursued various innovations and strategies supported by strengthening tourism recovery policies. To restore tourism in the city of Yogyakarta, specifically by implementing health protocols and social distancing policies to reduce the spread of COVID-19 infection. To support the policies put in place, there is a need for systematic and
complex strategic and innovative thinking in the tourism industry sector's recovery. Digital branding, reconstruction of tourism infrastructure, the establishment of digital information systems integrated with technology, information, and communication, and the formation of Smart Tourism are examples of recovery efforts through innovations and strategies used to recover the tourism industry sector Yogyakarta. Various government efforts are being made to restore the tourism sector, which the COVID-19 pandemic has harmed. This is because an uncontrolled COVID-19 pandemic has a long-term impact on economic growth and people's well-being. As a result, various strategies and innovations have been well designed, necessitating collaboration and synergy among the actors and stakeholders involved.

The recovery of Yogyakarta's tourism industry sector is being carried out in stages. Jogja Wajar Anyar conceptualized this recovery as a program to prepare the City of Yogyakarta in a new normal order to recover sectors affected by the COVID-19 pandemic (I. D. G. Kusuma, 2020). First, the tourism sector is being retrieved by imposing social distancing policies and implementing health protocols for business actors and tourists. Tourism derivative industry actors must provide the necessary needs and equipment to meet the health protocol requirements and standards established by the Ministry of Health of the Republic of Indonesia. UNWTO (United Nations World Tourism Organization) and WTTC (World Travel and Tourism Council) established post-COVID-19 pandemic tourism (Fong et al., 2021). To persuade consumers or tourists, tourism derivative industry players such as hotels, restaurants, processing industries, and tourist destinations must have safety and cleanliness certifications. The first and most crucial step in limiting the spread of the COVID-19 pandemic is implementing this health protocol and social distancing. However, if policy implementers do not follow this policy correctly, it will not reduce the spread of COVID-19. Because the community and the private sector are the primary actors in the government's policy implementation, policies aimed at controlling the COVID-19 pandemic and reviving the tourism sector will fail if there is no collaboration and synergy among the actors involved.

The government prepares innovations and tourism recovery strategies in the city of Yogyakarta in the second stage. This second stage includes digital branding, tourism infrastructure reconstruction, the establishment of a digital information system integrated with technology, information, and communication, and the formation of Smart Tourism (Tavitiyaman, 2021). Following the policy of implementing social distancing and health protocols in all lines of the tourism industry. The following stage is to carry out tourism reconstruction by preparing tourist destination facilities that are environmentally
friendly, comfortable, and kept clean, meet health protocol standards, and offer innovations for appealing, creative, and innovative tourist destinations. Tourism destination industry players must collaborate with tourism derivative industry players such as travel agents, hotels, and others to rebuild this new standard (Purnomo et al., 2021). So that the tourism sector’s recovery can be maximized, actors must work together to increase the number of tourist visits.

The tourism industry is also being rebuilt by integrating technology by providing an information technology-based system via the Jogja Smart Service. For example, a tourist destination in Malioboro has a barcode divided into 5 zones that is integrated with the Jogja Smart Service (JSS) to detect tourists who enter the tourist destination (P. A. Kusuma et al., 2021; Rachmawati et al., 2018). This system is used to prevent crowds by allowing visitors or tourists to determine the number of tourist densities in tourist destinations. Tourism reconstruction has been carried out in the following stage, after all policies have been implemented, namely by carrying out tourism branding activities. Branding is accomplished through the use of digital media in collaboration with all actors in the tourism industry. This tourist branding also aims to develop digital tourism by describing tourist destinations that have been rebuilt in accordance with health protocols. This digital tourism activity is carried out to attract tourists’ attention and provide information about new tourism programs, as well as to assure tourists of safety and comfort when traveling in the new standard era. The Yogyakarta City government participates in this digital branding activity as well, working with communities or influencers to upload and promote attractive tour package promotions.

In the second stage, the government prepares innovations and tourism recovery strategies in the city of Yogyakarta. This second stage includes Digital Branding, reconstruction of tourism infrastructure, the establishment of a digital information system that is integrated with technology, information, and communication, and forming Smart Tourism. After the policy of implementing social distancing and implementing health protocols in every line of the tourism industry. The next stage is to carry out tourism reconstruction by preparing tourist destination facilities that are environmentally friendly and comfortable and kept clean, meet health protocol standards, and offer innovations for attractive, creative, and innovative tourist destinations. In reconstructing this new standard, tourism destination industry players need to collaborate with various tourism derivative industry players such as travel agents, hotels, and others (Purnomo et al., 2021). So that the recovery of the tourism sector can be maximized if there is a collaboration between actors to increase the number of tourist visits.
The reconstruction of the tourism industry is also carried out by integrating technology by providing an information technology-based system through the Jogja Smart Service. For example, a tourist destination in Malioboro has a barcode divided into 5 zones to detect tourists who enter the tourist destination, integrated with the Jogja Smart Service (JSS) (Kusuma et al., 2021; Rachmawati et al., 2018). This system is used to prevent crowds, where visitors or tourists can find out the number of tourist densities in tourist destinations. In the next stage, after all, policies are implemented, tourism reconstruction has been carried out, namely by carrying out tourism branding activities. Branding is done by using digital media by cooperating with all actors involved in the tourism industry. This tourist branding also aims to create digital tourism that describes tourist destinations that have been reconstructed according to health protocols. This digital tourism activity is carried out to attract the attention of tourists and provide information about new tourism programs and assure tourists of safety and comfort when traveling in the new standard era. The Yogyakarta City government also carries out this digital branding activity through collaboration with communities or influencers to upload and offer attractive tour package promo.

3.3. Collaborative Governance to Recovery Tourism during COVID-19 Pandemic

Collaborative governance is a rule or governance arrangement made up of public institutions and sectors that directly involve non-government actors in the formal policy-making process with the goal of implementing public policy (Effendi & Purnomo, 2020). The concept of collaborative governance refers to the use of public policy by stakeholders such as the government, the private sector, or ordinary citizens to solve a problem (Zaenuri et al., 2018). Cooperation among stakeholders in government administration to solve community problems is a resource limitation in dealing with them (Hardianto et al., 2017). The collaborative governance approach is an appropriate step to take because it explains that the collaboration system will introduce various concepts that unite the government, the private sector, and the community, and that through this collaboration, there will be a dialogue in solving a problem (Jiang & Ritchie, 2017; Salahudin et al., 2019). Cooperation in the form of collaborative governance is defined as collaboration in achieving goals that cannot be accomplished independently, necessitating the participation of other actors in order to achieve the goals that have been planned jointly.

According to O’Flynn & Wanna (2008) has several dimensions: first, collaboration can involve cooperation to build similarities and harmonize activities between actors.
Second, collaboration can be a negotiation process in which compromises and trade-offs are made. Finally, collaboration can entail a supervisory role, joint inspection, and central coordination. Fourth, coercion and power are involved in collaboration, and fifth, commitment and future intentions are involved in collaboration. As a result, collaboration ultimately leads to involvement, the development of innovation, and more comprehensive and strategic motivation, resulting in stronger cooperation to improve the occurrence of public services. To restore the sustainable tourism sector as a result of the COVID-19 pandemic, stakeholders must be involved in the concept of collaborative governance. Because COVID-19 is a pandemic that the government cannot easily handle, there must be collaboration and synergy with other actors to overcome this problem.

![Figure 5: The Concept of Collaborative Governance in the Recovery of the Tourism Sector. (Source: Analyse by the author, 2021).](image)

The tourism industry recovery strategy to rise and move the wheels of the economy that was slumped by the COVID-19 pandemic is to involve all stakeholders in the Collaborative Governance concept, as shown in Figure 5. In the concept of collaborative governance in responding to the COVID-19 pandemic, it can be seen that there needs to be a role between stakeholders’ which includes the government as the leading actor in implementing policies and policy strategies for handling the COVID-19 pandemic cannot be achieved optimally without the support of other actors as policy implementers. Figure 5 shows that in the recovery of the tourism sector due to the COVID-19 pandemic, it is
necessary to improve the performance and resilience of the government, community, and private sector (self-efficacy) as positive beliefs to influence an event or environment (Fong et al., 2021; Vargas, 2020) in the face of the COVID-19 pandemic.

Collaboration between the government and the private sector in selectively reopening tourism while considering the current state of the spread of the COVID-19 pandemic refers to the explanation above that collaboration requires joint involvement and coordinated efforts in solving a common problem (Assaf & Scuderi, 2020). Joint involvement in this coordinated effort is expected to solve common problems well which in this context can resolve problems and impacts caused by the COVID-19 pandemic. The recovery process for the tourism sector due to the COVID-19 pandemic cannot be done instantly, it needs various stages to be carried out as well as good strategies, synergy and collaboration in overcoming the complex tourism system. The author analyzes how the role of actors and stakeholders including the government, society, and the private sector in carrying out their role for the recovery of the tourism sector in the city of Yogyakarta. The role of actors in the concept of collaborative governance in the recovery of the tourism sector is seen through four indicators: resilience, response, innovation, and sustainability.

The recovery of the tourism sector due to the COVID-19 pandemic is seen first, namely Innovation, where every actor involved in the tourism recovery strategy through Collaborative Governance is assessed from the innovations carried out, is it possible that innovations made by the stakeholders involved can restore the affected tourism sector COVID-19 (Mansfeld, 1999; Pforr & Hosie, 2008). In the next stage, through indicators of response and resilience to policies or innovations carried out between actors involved in tourism recovery. If the indicators of innovation, response, and resilience have been passed, then by measuring the policies or innovations made by actors in tourism recovery, whether they are sustainable or not can be seen through the sustainability indicators. The author analyzes and visualizes the involvement between actors in the recovery of the tourism sector due to the COVID-19 pandemic in the city of Yogyakarta based on four indicators, namely Innovation, Response, Resilience, and Sustainability obtained through an analysis of 65 online media news articles.

The recovery of the tourism sector is seen based on the government's role in responding to the impact of the COVID-19 pandemic. Various innovations and policies made in the recovery of the COVID-19 pandemic were also seen from the actors, including the community and the private sector in responding to policies made by the government in restoring tourism due to the COVID-19 pandemic. Figure 6 is the result of an analysis of the role of actors carried out on tourism recovery indicators,
including Innovation, Response, Resilience, and Sustainability. It can be seen that the highest score is the innovation carried out by the Yogyakarta City government with a value of 0.91, which can be seen that in the recovery of the COVID-19 pandemic, the city of Yogyakarta prepared complex and gradual strategies and innovations in the recovery of the tourism sector. The high score obtained by the government in this innovation shows that the Yogyakarta city government in responding to the COVID-19 pandemic in the tourism sector indicates that the government cares and responds through policies, strategies, and innovations made for tourism recovery that affect economic recovery.

The Yogyakarta City Government carried out various stages and innovations in recovering the COVID-19 pandemic by enforcing Health Protocols and Social Distancing policies. However, the value of the resilience indicator for this policy was still low with a value of 0.77 while the response was 0.79, the value of the community and private sector. As for the innovations carried out by the Yogyakarta City government based on the indicators of response and resilience seen from the community and private sectors, the highest value was digital branding, meaning that the community and private sector had good collaboration, and the lowest score was found in the Digital Information System (SIAAP) of 0.79. SIAAP has a low score seen from the response and resilience indicators because this strategy has not been maximally applied in the recovery of the tourism sector in Yogyakarta, so collaboration and synergy between stakeholders are needed in introducing this digital system to the public.

When viewed as a whole, the involvement of actors in tourism recovery due to the COVID-19 pandemic in the city of Yogyakarta in Figure ?? shows that the policies and innovations carried out by the government have been maximally carried out. Still, the government’s policies, strategies, and innovations are not maximally implemented by the policy implementers of the stakeholders involved. Thus, efforts to recover from...
COVID-19 in the City of Yogyakarta are still low in response to innovation policies made by the government; the concept of collaboration in collaborative governance has not been maximally implemented when viewed with indicators of response and resilience to strategies and innovations made in the recovery of COVID-19. Therefore, the role of stakeholders needs to be increased in restoring tourism due to the COVID-19 pandemic collaboratively and synergistically from the various actors involved.

4. Conclusions

Tourism, as one of the leading sectors in socio-economic transformation and improving people's livelihoods, is now the sector most affected by the COVID-19 pandemic. The tourism industry is one of the most affected sectors because during the COVID-19 pandemic, human mobility is not recommended. Yogyakarta as a tourism city experienced a significant impact in 2020, with this significant decrease in the number of tourists having an impact on a decrease in the amount of Regional Original Income and a decrease in people's income. The impact of the COVID-19 pandemic has a domino effect on the tourism sector in Yogyakarta City, which is worth 0.81 for tourism. This value has an effect and has implications for reducing the number of workers on a large scale with 0.83 unemployment value from the tourism derivative industry sector such as travel agents, hotels, and other sectors that suffer losses. Yogyakarta City tourism recovery with a gradual recovery strategy with various innovations and policies made by the Yogyakarta City government in response to the COVID-19 pandemic. The results of the analysis of the role of actors in the recovery of the tourism sector, the highest value is the government in responding to the COVID-19 pandemic with various innovations and policies made. Meanwhile, the response of the public and the private sector is still relatively low. The recovery of the tourism sector cannot be carried out by one actor, namely the government as a policymaker, but also requires collaboration and synergy between actors and policy implementers.

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