The Potential Of Sustainability Aspects For Development Of Tourism Sector In Central Java

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Abstract. Tourism supports economic development because tourism contributes to the economy of a region. The benchmark for the success of the tourism industry, especially its development, is the increasing number of tourists, both local and foreign, while always paying attention to the sustainability of tourism destinations. This research aims to document and analyze tourism development with indicators of the number of tourist visits, sustainable tourism with environmental aspects through reviewing waste management, and social aspects through the sustainability of cultural heritage in Central Java Province. The research location is in Central Java Province, with aggregate provincial data which shows that in this province tourism villages are being activated and promoted, while this research uses descriptive qualitative. The results of this research show that to reduce dependence on one particular market or tourist segment, market diversification is necessary. In the environmental aspect, it is necessary to provide sanctions for those who litter, strive to use environmentally friendly technology, and involve the private sector in supporting waste management programs. Social aspects by maximizing strengths, taking advantage of opportunities, overcoming weaknesses, and overcoming threats.

Keywords: sustainable tourism, number of tourist visits, environmental aspects, social aspects

INTRODUCTION

Tourism development has become increasingly popular since involving community components as economic drivers, especially in village areas, namely by involving the capacity of village communities to manage tourism businesses and increase income through the introduction of creative and productive activities in the tourism sector, always paying attention to environmental sustainability. Tourism has always been identified as a development tool, in other words, tourism can be used to support the economy, although there are predictable differences between regions (Centinaio et al. 2023). Over the last three decades, economic growth has been in line with the continuous expansion of international tourism (Balaguer et al. 2010). The principle of community-based tourism development is to place the community as the main actor in development through empowerment in various tourism activities so that the maximum benefits of tourism are felt directly by the community.

The benchmark for the success of the tourism industry, especially its development, is the increase in the number of tourists or tourist visits, because the more tourists who come, the greater the economic impact generated. In line with the tourism development program, strategies need to be developed to achieve this success. The basic elements of tourism success proposed by Cooper (2005) distinguish 4 (four) components that a tourism attraction must have, including attraction, accessibility, amenities, and ancillaries. Meanwhile, Buhalis (2000) put forward a different theory, that the components of successful tourism development consist of
six elements, including Attraction, Amenities, Ancillary, Activity, Accessibility, and Available Package.

The more tourists who visit a place, the greater the economic contribution generated by the tourism sector. However, it is not only the number of tourists that needs to be considered, but also how much money tourists spend during their visit. Tourist spending can provide an idea of how much economic impact the tourism industry produces in the form of local income. The impact of foreign tourist spending on the growth of added value per capita is positive and statistically significant, but not too large in economic terms (Bronzini et al., 2022). Likewise, types of tourists, including local and international tourists, as well as tourists with various interests and needs, such as cultural tourism, natural tourism, historical tourism, and so on, are a sign of success in creating destinations that are attractive to various groups.

Tourist attractions should always be maintained for the sake of environmental sustainability. Progressing tourism destinations without paying attention to environmental damage is not wise. Lately, we have heard a lot about the destruction of cultural heritage, the large amount of plastic waste found on several beaches, the fading of native regional culture due to the onslaught of modernization, and many other environmental damage problems. Lack of attention by the government and other relevant stakeholders is a major obstacle to the conservation, protection, management, and promotion of sustainable development (Nomishan et al., 2021). Vertical and horizontal conflicts influence the sustainability of cultural heritage in terms of preservation and enhancement, and these conflicts originate from the attributes of hierarchical governance structures (Wang et al. 2022).

The Central Java Provincial Government has been improving in recent years, especially in the period after the end of the COVID-19 pandemic in 2021. The pandemic has devastated the world economy, especially in Indonesia and Central Java Province in particular. Many economic sectors have been paralyzed, especially the tourism sector. Tourist attractions are empty of visitors, hotels are unoccupied and tourism activists, especially tourist attraction operators, restaurants and souvenir shops are silent and have no activities. But all that has passed, the world of tourism is starting to grow, especially with the arrival of foreign tourists. Local tourists are no less important than foreign tourists because there is a tourism fever after the COVID-19 pandemic. There is awareness that being healthy is important, so to be healthy they look for fresh air by visiting tourist attractions. Central Java Province itself is promoting tourist destinations by establishing tourist villages which are the spearhead in regaining an established economy for the welfare of local communities. As is the case in other areas, the
increase in the number of tourist visits fluctuates from year to year. The table below explains
the number of tourist visits, both local and foreign, in Central Java Province.

<table>
<thead>
<tr>
<th>Year</th>
<th>International Visitor</th>
<th>Domestic Visitor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>392,895</td>
<td>21,838.351</td>
<td>22,231.246</td>
</tr>
<tr>
<td>2012</td>
<td>372,463</td>
<td>25,240.021</td>
<td>25,612.484</td>
</tr>
<tr>
<td>2013</td>
<td>388,143</td>
<td>29,430.609</td>
<td>29,818.752</td>
</tr>
<tr>
<td>2014</td>
<td>419,584</td>
<td>29,852.095</td>
<td>30,271.679</td>
</tr>
<tr>
<td>2015</td>
<td>375,166</td>
<td>31,432.080</td>
<td>31,807.246</td>
</tr>
<tr>
<td>2016</td>
<td>578,924</td>
<td>36,899.776</td>
<td>37,478.700</td>
</tr>
<tr>
<td>2017</td>
<td>781,107</td>
<td>40,118.470</td>
<td>40,899.577</td>
</tr>
<tr>
<td>2018</td>
<td>677,168</td>
<td>48,943.607</td>
<td>49,620.775</td>
</tr>
<tr>
<td>2019</td>
<td>691,699</td>
<td>57,900.863</td>
<td>58,592.562</td>
</tr>
<tr>
<td>2020</td>
<td>78,290</td>
<td>22,629.085</td>
<td>22,707.375</td>
</tr>
<tr>
<td>2021</td>
<td>1,793</td>
<td>21,332.409</td>
<td>21,334.202</td>
</tr>
<tr>
<td>2022</td>
<td>129,718</td>
<td>28,441.688</td>
<td>28,571.406</td>
</tr>
</tbody>
</table>

Source: Dinas Kepemudaan, Olahraga Dan Pariwisata Provinsi Jawa Tengah (2023)

From the table above, it can be seen that the number of tourist visits in Central Java Province, both foreign and local, has increased significantly from year to year, this can be seen in the total number of tourist visits from 2011 to 2022. The peak in 2019 was an increase of 58,592,562 compared to 2018 of 49,620,775. However, at the end of 2019, the world experienced a prolonged economic crisis due to the Covid pandemic. The impact is that in 2020, the number of tourist visits experienced a very sharp decline, which was only half the number in 2019. The decline in number of tourists, especially among foreign tourists, in 2021 experienced a drastic decline from 78,290 in 2020 to 1,793 in 2021 and in 2022 the number of visits local and foreign tourists began to creep up with a total number of 28,571,406 tourists.

Sustainable tourism is closely related to economic, environmental, and social issues. Many aspects can be involved and require a complete understanding of sustainable tourism. This research aims to document and evaluate tourism development with indicators of the number of tourist visits, sustainable tourism with environmental aspects through reviewing waste management, and social aspects through the sustainability of cultural heritage owned by Central Java Province. Because the tourism dimension of sustainability describes positive and negative observations of environmental, socio-cultural, and economic sustainability (Chen et al., 2014). Tourism development faces significant challenges due to the conflict between economic development and cultural heritage preservation (Sangchumnon, et al 2021). The extent to which sustainable tourism brings new energy to the development of tourism destinations and has an impact on the development of tourism elements themselves. It is hoped that the results of this study can provide valuable input for both implementing institutions at the regional level and policymakers at the national level.
RESEARCH METHOD

The research location is in Central Java Province, where it is illustrated that this province is being activated and promoting village tourism, also for several reasons, including Central Java Province's very strategic location, many potential very interesting tourist attractions, and the depiction of sustainable tourist destinations. This research uses descriptive qualitative which is a research method that utilizes qualitative data and is explained descriptively. This type of qualitative descriptive research is often used to analyze social events, phenomena, or situations. A systematic, factual, and accurate description or painting of the phenomenon or relationship between the phenomena being investigated. (Kothari, C.R. 2004:19). This type of qualitative research data collects various types of data and uses time as effectively as possible to collect information at the research location (Creswell, 2013:267-268). Data sources consist of secondary and primary data. Secondary data was collected from routine reports from the Youth, Sports, and Tourism Department of Central Java Province from 2011 to 2023. Meanwhile, primary data was obtained from informant sources, cultural activists, volunteers in environmental conservation efforts, and environmental activists.

RESULTS AND DISCUSSION

One aspect of sustainable tourism is the economic aspect, where the number of tourist visits, both local and foreign tourists, is an indicator that can influence the economic impact on regions hosting tourist destinations, such as Central Java Province. In sensory, affective, behavioral, and intellectual aspects, as a whole, it influences the economic, cultural, and sustainability aspects of sustainable tourism destinations (Moraga, 2021). The sustainability of tourism destinations cannot be separated from the role of government and other stakeholders related to tourism activities, because destination development is the result of effective performance and governance. The tourism stakeholder framework explains how tourism stakeholders can leverage their collaborative roles and benefits in governing destinations through regulation, conservation, and livelihoods (Roxas et al 2020). Along with the end of COVID-19 from 2019 to 2021, Central Java Province is reorganizing tourist destinations which are the mainstay of regional income. The bar graph below provides an overview of the number of tourists visiting Central Java Province from 2018 to 2022.
Figure 1.1. Bar Graph of the Number of Local and Foreign Tourists Visiting Central Java Province

Source: Dinas Kepemudaan, Olahraga Dan Pariwisata Provinsi Jawa Tengah (2023)

Foreign and local tourist visits to several areas in Central Java Province seem to have their own favorite places because there are 5 (five) leading destinations for foreign tourists, including Batang Regency (102,154), Magelang Regency (47,545), Klaten Regency (34,863), Jepara Regency (2,452), Semarang City (2,355). Meanwhile, the 5 (five) areas visited by many local tourists are Semarang City (3,640,591), Klaten Regency (3,303,423), Magelang Regency (1,889,177), Banyumas Regency (1,795,352), and Semarang Regency (1,746,076). From the information on the number of tourist visits to Central Java Province above, the sources of income from the tourism sector can be described, the explanation of which can be seen in graph 2 below:

Figure 1.2. Income graph for the tourism sector in Central Java Province throughout 2018-2022

Source: Dinas Kepemudaan, Olahraga Dan Pariwisata Provinsi Jawa Tengah (2023)

From the graphic image above, we can see that income from the tourism sector cannot be ignored because the largest contributor to local revenue comes from the tourism sector. Because it is a more service-based business sector that has the potential for regional economic development. Lodging, transportation, restaurants, and dining services are several business sectors that need development. From several opinions of tourism actors, especially beneficiaries of tourist destinations, it can be concluded that tourism can provide economic improvement, work opportunities for local residents, and provide opportunities to develop
superior regional products. Many local entrepreneurs have emerged, including accommodation providers, food stall providers, special transport providers, and many others.

**Sustainable Tourism with Environmental Aspects Through Review of Waste Management in Central Java Province**

Sustainable tourism with the aspect of reviewing waste management, the existence of which influences environmental sustainability which can have a positive impact on environmental sustainability. When the environment is polluted and cannot be saved, the existence of tourist attractions will become extinct and government work will become more complex. Tourism does provide many opportunities for economic improvement for local residents. However, the condition of natural resources and the environment is increasingly declining. Apart from the social environment, social vulnerability is reported to be caused by excessive land use, external cultural disturbances, and air and water pollution due to traffic jams, accumulation of solid waste, sewage, and carbon emissions (Baloch, et al 2023).

Through the JAKSTRADA (Regional Strategy Policy) document, the regional government must prepare a document that describes the achievement targets and quantitative waste management efforts carried out by the Regional Government which are outlined in an integrated waste management program from the source to the final waste disposal site. There are many obstacles in managing waste, so efforts are made, including limiting landfills, reusing waste, and recycling waste. In such conditions, it is necessary to strengthen capacity by involving the community through communication, information, and education. The strategy and target carried out by the Central Java Provincial government is to reduce waste by 30% (thirty percent) and handle waste by 70% (seventy percent) of the household waste generation rate.

Handling waste is not necessarily only the task of local governments, there needs to be awareness among the public that handling waste is a shared duty and responsibility. In aggregate, the data for 2022 explains the amount of waste from Central Java Province, which can be seen in Table 2.

**Table 2. Data on Waste Processing and RTH for Central Java Province by SIPSN in 2023**

<table>
<thead>
<tr>
<th>Year</th>
<th>Regency/City</th>
<th>Daily Waste Generation (tons)</th>
<th>Annual Waste Generation (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>Kab. Cilacap</td>
<td>950,84</td>
<td>347,055,78</td>
</tr>
<tr>
<td>2022</td>
<td>Kab. Banyumas</td>
<td>536,89</td>
<td>195,964,49</td>
</tr>
<tr>
<td>2022</td>
<td>Kab. Purwalingga</td>
<td>509,92</td>
<td>186,120,80</td>
</tr>
<tr>
<td>2022</td>
<td>Kab. Kebumen</td>
<td>463,05</td>
<td>169,013,40</td>
</tr>
<tr>
<td>2022</td>
<td>Kab. Purworejo</td>
<td>289,57</td>
<td>105,694,22</td>
</tr>
<tr>
<td>2022</td>
<td>Kab. Wonosobo</td>
<td>366,25</td>
<td>133,682,56</td>
</tr>
<tr>
<td>2022</td>
<td>Kab. Boyolali</td>
<td>292,55</td>
<td>106,781,29</td>
</tr>
<tr>
<td>2022</td>
<td>Kab. Klaten</td>
<td>643,02</td>
<td>234,703,44</td>
</tr>
<tr>
<td>2022</td>
<td>Kab. Sukoharjo</td>
<td>361,92</td>
<td>132,101,09</td>
</tr>
</tbody>
</table>
From Table 2, we can see the daily and annual waste generation in each district/city throughout Central Java Province, and we can see that the highest score is in Semarang City, which incidentally is the city where the central government of Central Java Province is located. This raises concerns for the people of Central Java itself. Because the waste generated in Semarang City is 1,181.06 tons for daily waste and 431,085.22 tons for annual waste. City government programs to involve local communities in waste management, such as waste bank management or voluntary waste collection programs, have been implemented in recent years at the bottom line starting from the RT to the sub-district level. However, there is still a lack of adequate waste management facilities, including public waste bins, recycling facilities, and efficient collection systems.

To minimize violations related to waste management, it is necessary to provide sanctions for those who litter, so that effectiveness will be achieved through strict law enforcement. The city government has made efforts to use environmentally friendly technology in waste management, with innovations in processing organic waste into compost or producing energy from waste. However, it is necessary to collaborate with the involvement of the private sector to support waste management programs, namely through investment, innovation, and sponsorship.

### Sustainable Tourism with Social Aspects Through the Sustainability of Cultural Heritage in Central Java Province

Sustainability of cultural heritage owned by Central Java Province, namely by inventoring several cultural heritage areas in Central Java Province. Many cultural heritage
sites need to be preserved. Even though many threats come to change and eliminate the existence of this cultural heritage, the community should be able to maintain its existence. Adaptive reuse is the process of changing the image of a historic building without sacrificing its authentic value. Appropriate guidelines are needed for authorities and the private sector to adaptively reuse buildings. (Hanfi et al, 2019). One of the cultural heritage sites in Central Java Province is the ancient Dutch colonial buildings whose existence is still maintained, including:

**Theater Building or Sobokarti Arts Building**

As is known, the Sobokarti Arts Building is a forum for Javanese traditional culture activists in Semarang to be creative, practice, and preserve traditional culture. Apart from that, this art building has also been designated as a Cultural Heritage Inventory with a city-level ranking by the Semarang City Government on February 4, 1992, since then the title of Cultural Heritage has been attached to the object and this is one of the cultural potentials that can be categorized as material culture (*tangible*). Meanwhile in other sub-cultural resources; namely non-material (*intangible*) cultural resources, it is known that Sobokarti is still used as a space to continue developing various forms of traditional Javanese art by cultural activists in the Semarang city administrative area.

The government as the policy maker would be able to collaborate with other stakeholders such as the Sobokarti Cultural Activist Community and local communities to formulate a concept and format for cultural tourism which of course involves active participation from the other two stakeholders at the government level. The Cultural Activist Community and the community also develop existing cultural potential while controlling or controlling technical implementation once the system has been established and is running. In this interim draft, the government has a dual function apart from being a policy maker, but also as a party that seeks funding. So the ideal institutional format so that the Cultural Center concept can be applied optimally is the formation of a Regional Technical Implementation Unit or UPTD so that it can absorb the APBD to operate and innovate.

**Lawang Sewu Building**

Lawang Sewu was built by the Dutch on February 27 1904 and completed in 1907. Initially, this building functioned as the head office of the Dutch private railway company with the name Nederlands Indische Spoorweg Maatschappij abbreviated as NIS. Lawang Sewu is a silent witness to the darkness of the Dutch colonial period, after being abandoned by the NIS, this building was often used by the Dutch and Japanese colonialists as a prison. After the proclamation of independence, Lawang Sewu became an eyewitness to the Five Day Battle in Semarang (14 October – 19 October 1945) between AMKA youth or young railroad troops.
against the Kompetai and Kidobutai from the Japanese army. That’s why the Semarang City Government with Mayor’s Decree No. 650/50/1992 decided that Lawang Sewu was included in the 102 ancient historic buildings in Semarang City that must be protected.

Even though the current conditions are promising, Lawang Sewu is also faced with various challenges that need to be faced, including:

1. **Maintenance of Historical Buildings**
   To maintain the physical condition of a building, regular maintenance is necessary, this includes structural repairs and maintenance of typical building materials.

2. **Visitor Management**
   Increasing visitors requires effective visit management to avoid crowds and maintain a positive visitor experience, which in 2021 was recorded as 20,781 and in 2022 as many as 70,063.

3. **Sustainable Development**
   In the context of sustainable development, Lawang Sewu needs to pay attention to environmental issues, including waste management and preservation of the surrounding environment.

4. **Marketing and Promotion**
   Lawang Sewu must continue to strengthen marketing and promotional efforts to attract more tourists and ensure revenue sustainability.

5. **Local Community Involvement**
   The involvement of the local community in the development and management of Lawang Sewu is key to ensuring a positive impact on the local economy and society.

The opportunities and challenges faced by the two building reserves face several obstacles so they need sustainable development. As with the development of Kajoetangan Heritage, it is necessary to pay attention to all dimensions considering that there are still obstacles in developing Kajoetangan, such as increasing coordination between managers and sustainably building Kajoetangan. (Idris et al., 2023). So, by paying attention to these problems, the following analysis is needed.

**Maximizing Strength**

Ongoing maintenance: Sobokarti Arts Building and Lawang Sewu Arts Building must continue to prioritize the maintenance and restoration of buildings and ensure that this cultural heritage is well maintained. Enhanced visitor experience: Developing a more in-depth visitor experience, including more interactive architectural tours and an engaging cast, could increase the attractiveness of the Sobokarti Arts Building and Lawang Sewu Arts Building.

**Taking Advantage of Opportunities**

Sustainable tourism development: Sobokarti Arts Building and Lawang Sewu can capitalize on sustainable tourism trends by promoting conservation efforts and environmentally
friendly practices. Partnerships with schools and educational institutions: Further collaboration with schools and educational institutions can increase the role of the Sobokarti Arts Building and the Sobokarti and Lawang Sewu Arts Buildings in Education and research.

Overcoming Weaknesses

More efficient visit management: To overcome the problem of inconvenience due to increased visits, the Sobokarti and Lawang Sewu Arts Building can consider an online ticket booking system, visit scheduling, and better queue management. Employee Training: Conduct regular training for service staff and guides so they can provide a better visitor experience.

Overcoming Threats (Threats)

Security maintenance: Sobokarti Arts Building and Lawang Sewu must ensure that the security of visitors and buildings remains a top priority to overcome threats such as damage or theft. Negative online promotions: Overcome negative reviews or detrimental online promotions by building a positive reputation through good customer service and effective conflict management.

By taking these steps, the Sobokarti Arts Building and Lawang Sewu Arts Building, can take advantage of their tourism development potential, overcome challenges, and continue to maintain their status as attractive and sustainable historical tourist destinations.

CONCLUSION

This research aims to document and analyze tourism development with indicators of the number of tourist visits, sustainable tourism with environmental aspects through reviewing waste management, and social aspects through the sustainability of cultural heritage in Central Java Province. The results of this research show that to reduce dependence on one particular market or tourist segment, market diversification is necessary. In the environmental aspect, it is necessary to provide sanctions for those who litter, strive for the use of environmentally friendly technology, and involve the private sector in supporting waste management programs. The social aspect of maintaining and preserving cultural heritage is maximizing strengths, taking advantage of opportunities, overcoming weaknesses, and overcoming threats.

This is in line with previous research which highlights that sensory, affective, behavioral, and intellectual aspects, as a whole, influence the economic, cultural, and sustainability aspects of sustainable tourism destinations (Moraga, 2021). The sustainability of tourism destinations cannot be separated from the role of government and other stakeholders related to tourism activities, because the development of destinations is the result of effective performance and governance. The tourism stakeholder framework explains how tourism
stakeholders can leverage their collaborative roles and benefits in governing destinations through regulation, conservation, and livelihoods (Roxas et al 2020).

Tourism does provide many opportunities for economic improvement for local residents. However, the condition of natural resources and the environment is increasingly declining. Apart from the social environment, social vulnerability is reported to be caused by excessive land use, external cultural disturbances, and air and water pollution due to traffic jams, accumulation of solid waste, sewage, and carbon emissions (Baloch, et al 2023).

Even though many threats come to change and eliminate the existence of this cultural heritage, the community should be able to maintain its existence. Adaptive reuse is the process of changing the image of a historic building without sacrificing its authentic value. Appropriate guidelines are needed for authorities and the private sector to adaptively reuse buildings. (Hanfi et al, 2019). In short, sustainable tourism highlights many things including economic issues, the environment, and social impacts. Further study on each component is a must to mitigate the research results. This research recommends tourism development components from the perspective of social exchange, legal issues, and social capital.

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