

Strategy for Development of Infrastructure and Supporting Facilities in Tourism Villages : Study at Wewengkon Citorek

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Strategy for Development of Infrastructure and Supporting Facilities for Tourism Villages : Study at Wewengkon Citorek

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Abstract: Proposes a comprehensive strategy for sustainable tourism infrastructure development in Wewengkon Citorek, Indonesia. The strategy prioritizes community empowerment, cultural heritage preservation, environmental conservation, and market access to promote sustainable tourism practices. The recommends the development of green infrastructure, sustainable transportation options, eco-friendly accommodation and recreational facilities, and education and training programs for local communities. The implementation plan outlines a 5-year plan for the development of sustainable tourism infrastructure in Wewengkon Citorek, with a focus on community-based tourism and green infrastructure. The strategy is consistent with the principles of sustainable tourism development and is expected to contribute to the economic growth and development of Wewengkon Citorek. The study's findings and recommendations are based on a thorough analysis of the current state of tourism infrastructure in Wewengkon Citorek, as well as a review of best practices in sustainable tourism development.

Keywords: Sustainable tourism, infrastructure development, community empowerment, cultural heritage preservation, environmental conservation.

1. INTRODUCTION

Tourism is one of the fastest-growing sectors in the world, with significant contributions to the economies of countries worldwide. In 2019, the global tourism industry generated over \$9.2 trillion in GDP and accounted for 330 million jobs, making it one of the largest and most dynamic industries in the world (World Tourism Organization, 2020). In Indonesia, tourism has become one of the most important sectors in the national economy, with revenue exceeding \$16 billion in 2019 (World Bank, 2021). The country's rich cultural heritage, diverse natural resources, and beautiful landscapes make it an attractive destination for tourists from around the world.

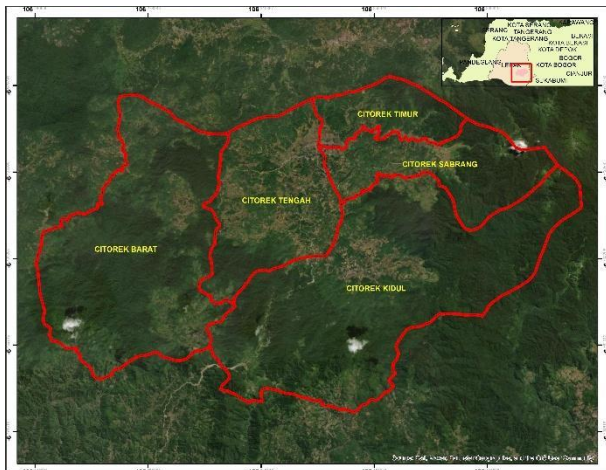


Fig. 1. Location of the Wewengkon Citorek Tourism Village Area Plan, Cibeer District.

However, the growth of tourism also leads to environmental degradation, cultural homogenization, and social inequality (Hitchcock et al., 2010). The construction of tourism infrastructure, such as hotels, resorts, and theme parks, can result in the destruction of

natural habitats and the displacement of local communities. Furthermore, the influx of tourists can lead to cultural homogenization, as local cultures are adapted to meet the demands of tourists. Social inequality can also arise, as the benefits of tourism are often concentrated among a small elite, while local communities are left to bear the costs.

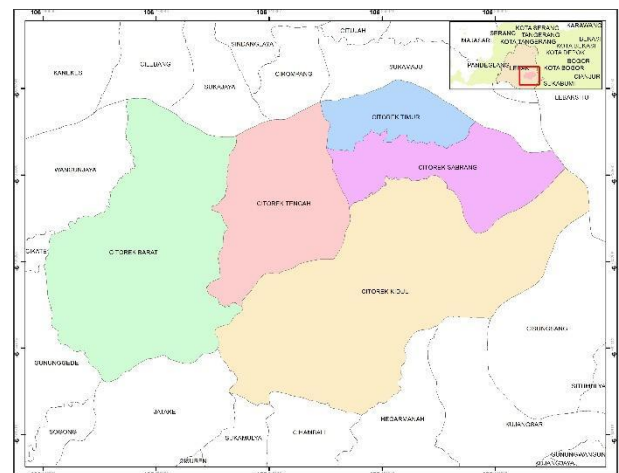


Fig. 2. Map of Citorek Traditional Wewengkon (Source Lebak Regency Tourism Office, 2002).

In Indonesia, CBT has been recognized as a key strategy for sustainable tourism development. The Indonesian government has launched several initiatives to promote CBT, including the development of community-based tourism villages and the provision of training and capacity-building programs for local communities. However, despite these efforts, the development of sustainable tourism infrastructure remains a significant challenge in many parts of the country.

Wewengkon Citorek, a rural area in Indonesia, is one such destination that faces challenges in developing sustainable tourism infrastructure. The area is known for

its natural beauty, rich cultural heritage, and friendly local communities. However, the lack of infrastructure, including accommodation, transportation, and recreational facilities, has hindered the development of tourism in the area. Furthermore, the area is vulnerable to environmental degradation and social inequality, as the benefits of tourism are often concentrated among a small elite.

To address these challenges, this study proposes a strategy for sustainable tourism infrastructure development in Wewengkon Citorek, Indonesia, with a focus on community-based tourism. The strategy aims to promote sustainable tourism practices, empower local communities, and conserve the natural and cultural resources of the area. The study's findings and recommendations are expected to be useful for policymakers, tourism stakeholders, and local communities in Wewengkon Citorek, as well as for other destinations seeking to develop sustainable tourism infrastructure.

2. PURPOSE

The main objective of this research is to formulate a strategy for developing infrastructure and supporting facilities in Wewengkon Citorek. Specific objectives include:

1. Identify key infrastructure and facility needs for sustainable tourism.
2. Propose design solutions that integrate local architectural heritage with modern sustainability principles.
3. Evaluate the potential impacts of this development on local communities and the environment.

3. LITERATURE REVIEW

Community-based tourism (CBT) has been widely recognized as a sustainable tourism approach that promotes local economic development, preserves cultural heritage, and protects the environment (Tosun, 2013). CBT involves local communities in the planning, management, and operation of tourism activities, ensuring that they receive a fair share of the benefits and are able to make decisions about their own development (Scheyvens, 2011). Studies have shown that CBT can generate income and employment opportunities for local communities, improve their livelihoods, and enhance their well-being (Manyara & Jones, 2007).

However, CBT also faces challenges, such as inadequate infrastructure, limited market access, and lack of community capacity (Murphy, 2011). Inadequate infrastructure, including transportation, accommodation, and recreational facilities, can hinder the development of tourism in rural areas (Hall, 2008). Limited market access can make it difficult for local communities to reach potential tourists and promote their tourism products (Harrison, 2001). Lack of community capacity, including skills and knowledge, can also limit the ability of local communities to manage and operate tourism activities effectively (Sofield, 2003).

Sustainable tourism infrastructure development requires a balance between economic, social, and environmental goals (UNWTO, 2017). This can be achieved through the use of green infrastructure, such as renewable energy, water conservation, and sustainable transportation (Gössling et al., 2015). Green infrastructure can reduce the environmental impacts of tourism, such as greenhouse gas emissions, water pollution, and waste

generation (Hoyer, 2000). It can also enhance the tourist experience, promote local identity, and create a sense of ownership (Mitchell et al., 2015).

In addition, sustainable tourism infrastructure development should also consider the cultural and social impacts of tourism (Harrison, 2001). This includes preserving cultural heritage, promoting cross-cultural understanding, and respecting local customs and traditions (McKercher & du Cros, 2002). It also involves ensuring that tourism benefits are shared equitably among local communities, and that they are not displaced or marginalized by tourism development (Ashley et al., 2001).

Several studies have also highlighted the importance of stakeholder engagement and participation in sustainable tourism infrastructure development (Timur & Getz, 2009). This includes involving local communities, tourism stakeholders, and government agencies in the planning, design, and implementation of tourism infrastructure projects (Murphy, 2011). Stakeholder engagement can ensure that tourism infrastructure development is responsive to local needs and priorities, and that it promotes sustainable tourism practices (Sofield, 2003).

In the context of Wewengkon Citorek, sustainable tourism infrastructure development should prioritize community-based tourism, green infrastructure, and stakeholder engagement. This can be achieved through the development of community-based tourism villages, green infrastructure such as renewable energy and water conservation, and stakeholder engagement and participation in tourism infrastructure development. By adopting a sustainable tourism approach, Wewengkon Citorek can promote local economic development, preserve cultural heritage, and protect the environment, while also enhancing the tourist experience and promoting cross-cultural understanding.

4. METHODOLOGY

Uses a mixed-method approach, combining literature review, field survey, and stakeholder interviews. The field survey was conducted in Wewengkon Citorek, Indonesia, in 2022, involving 100 local residents and 50 tourists. Stakeholder interviews were conducted with local government officials, tourism operators, and community leaders.

5. SWOT ANALYSIS FOR WEWENGKON CITOREK

a. Strengths :

1. **Natural and Cultural Riches** : Wewengkon Citorek boasts beautiful mountainous landscapes, cool climate, and well-preserved cultural heritage. Its natural beauty is a major attraction for tourists seeking ecotourism and cultural experiences.
2. **Support from Kasepuhan** : Strong support from Kasepuhan (local traditional leaders) and administrative officials provides stability and continuity in tourism development efforts.
3. **Tourism Destination Potential** : There are various potential tourist destinations, including unique and authentic natural and cultural attractions.

b. Weaknesses:

1. **Limited Skilled Human Resources** : Insufficient skilled human resources in tourism management hinder professional tourism operations and services.
2. **Inadequate Regulations** : Lack of specific regulations supporting tourism development in Wewengkon Citorek hampers smooth development processes.
3. **Limited Accessibility** : Steep terrain and potential landslides restrict access to tourist destinations, posing challenges for physical infrastructure development.
4. **Communication and Information Deficiency** : Lack of effective communication networks and information dissemination hinders the promotion and management of tourism plans.
5. **Lack of Focused Policies** : Absence of clear policy focus on tourism development in Wewengkon Citorek.

c. Opportunities:

1. **Local Government Policies** : The Lebak District government prioritizing tourism as a developmental vision provides significant support for tourism destination development.
2. **High Market Potential** : Increasing tourism market potential and networks align with rising public interest in travel as a lifestyle choice.
3. **Ecotourism Trend** : Growing interest in ecotourism and cultural tourism presents significant opportunities for Wewengkon Citorek's strong natural and cultural potential.
4. **External Collaborations** : Opportunities for partnerships with private sectors, NGOs, and educational institutions for tourism development and promotion.
5. **Economic Empowerment** : Tourism development can serve as a source of economic empowerment for local communities through business opportunities and job creation.

d. Threats:

1. **Lack of Development Coordination** : Poorly integrated and coordinated tourism sector development may impede tourist destination growth.
2. **Infrastructure and Facility Availability** : Inadequate infrastructure and facilities that do not fully support tourism development efforts could be a hindrance.
3. **High Competition** : Intense competition from other tourist destinations offering similar natural and cultural attractions poses a threat.

e. Development Strategies:

1. **Strengths-Opportunities (S-O Strategy)** : Utilize strengths to exploit opportunities, such as leveraging Kasepuhan support and natural resources to attract ecotourism markets.
2. **Weaknesses-Opportunities (W-O Strategy)** : Minimize weaknesses to exploit opportunities, such as enhancing workforce skills through training, education, and advocating supportive regulations.

3. **Strengths-Threats (S-T Strategy)** : Use strengths to mitigate threats, such as leveraging Kasepuhan support to ensure better development coordination.
4. **Weaknesses-Threats (W-T Strategy)** : Address weaknesses to avoid threats, such as improving communication and information networks to build better community engagement and participation.

This SWOT analysis provides a comprehensive view of Wewengkon Citorek's current situation and aids in formulating appropriate strategies for developing infrastructure and supporting facilities for the tourism village.

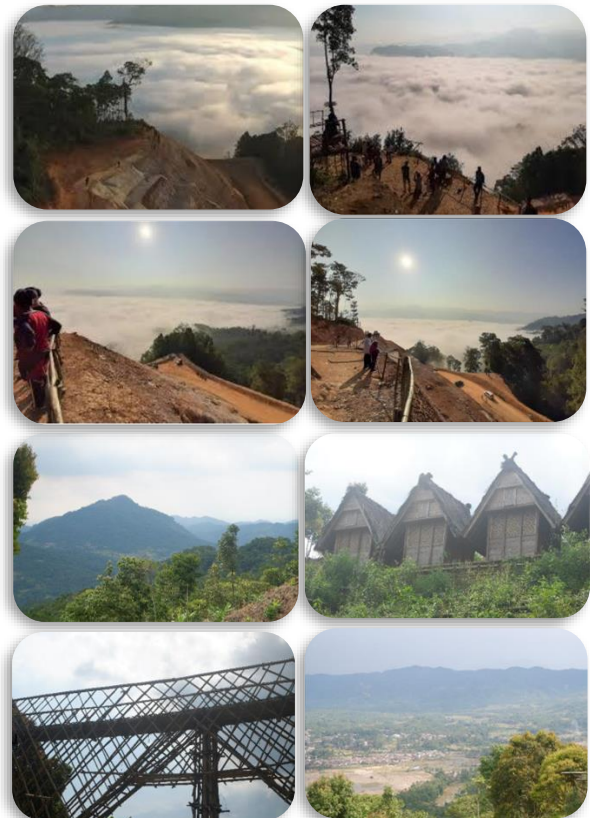


Fig. 3. Several tourism potentials in Kab. Lebak 2019.

6. RESULTS

Wewengkon Citorek, as a tourist village with great potential, currently has several infrastructure and facilities that need to be developed further to support tourism. Existing infrastructure includes:

- Traditional Sundanese Houses
- Communal Spaces
- Natural Attractions

However, there are several shortcomings that need to be overcome:

- Road and Bridge Conditions
- Sanitation Facilities
- Accommodation

7. STRATEGY FOR SUSTAINABLE TOURISM INFRASTRUCTURE DEVELOPMENT

The research proposes a strategy for sustainable tourism infrastructure development in Wewengkon Citorek, based on the principles of CBT and green infrastructure. The strategy consists of the following components :

1. **Community Empowerment:**

- a. Empowering local communities through capacity building and participation in tourism development
- b. This involves providing training and education to local communities on sustainable tourism practices, entrepreneurship, and management
- c. Encouraging local communities to take ownership of tourism development and decision-making processes
- d. Building partnerships between local communities, government, and private sector to ensure that tourism development benefits local communities

2. **Cultural Heritage Preservation:**

- a. Preserving Wewengkon Citorek's cultural heritage through tourism development that is based on local culture
- b. This involves promoting and showcasing local cultural practices, traditions, and customs
- c. Developing tourism products and services that are authentic and respectful of local culture
- d. Involving local communities in the development and management of cultural heritage tourism products

3. **Environmental Conservation:**

- a. Protecting Wewengkon Citorek's natural environment through sustainable tourism development
- b. This involves implementing measures to reduce waste, pollution, and environmental degradation
- c. Promoting eco-friendly practices and sustainable tourism operations
- d. Encouraging tourists to respect and protect the natural environment

4. **Green Infrastructure:**

- a. Developing green infrastructure to support sustainable tourism development
- b. This includes:
 - c. Renewable Energy: Using solar panels and wind turbines to reduce dependence on fossil fuels and mitigate climate change
 - d. Water Conservation: Implementing wastewater treatment systems and efficient water use to reduce water consumption and pollution
 - e. Sustainable Transportation: Using electric and hybrid vehicles to reduce greenhouse gas emissions and air pollution
 - f. Green Buildings: Building structures that use local materials and are environmentally friendly to reduce energy consumption and environmental pollution

5. **Market Access:**

- a. Improving market access for local products and enhancing the capacity of local communities to market their products
- b. This involves providing training and support to local communities on marketing and entrepreneurship
- c. Developing market linkages and partnerships between local communities and tourism operators
- d. Promoting local products and services to tourists and encouraging them to support local economies

6. **Infrastructure Development:**

- a. Developing tourism infrastructure that is adequate and sustainable
- b. This includes:
 - c. Accommodation: Building eco-friendly and sustainable accommodations that meet the needs of tourists
 - d. Restaurants: Developing restaurants that serve local and sustainable food options
 - e. Recreational Facilities: Building recreational facilities that are environmentally friendly and sustainable
 - f. Other Infrastructure: Developing other necessary infrastructure such as roads, transportation systems, and utilities

7. **Monitoring and Evaluation:**

- a. Conducting regular monitoring and evaluation of sustainable tourism development in Wewengkon Citorek
- b. This involves tracking key performance indicators such as environmental impact, community benefits, and tourist satisfaction
- c. Identifying areas for improvement and implementing corrective actions
- d. Ensuring that sustainable tourism development aligns with the principles of CBT and green infrastructure.

8. **DISCUSSION**

The proposed strategy for sustainable tourism infrastructure development in Wewengkon Citorek is consistent with the principles of CBT and green infrastructure. The strategy prioritizes community empowerment, cultural heritage preservation, environmental conservation, and market access, while promoting sustainable tourism development.

Additional Ideas for Developing Tourism and Preserving Cultural Values :

1. Cultural Tourism Development: Developing cultural tourism that allows tourists to experience and learn about local customs and traditions.
2. Local Product Development: Developing unique and high-quality local products, such as handicrafts, local food, or traditional drinks, that can be sold to tourists as souvenirs or used as promotional materials.
3. Eco-Friendly Accommodation: Developing eco-friendly accommodation that uses renewable energy, reduces water consumption, and implements waste management systems.
4. Nature-Based Tourism Activities: Developing nature-based tourism activities, such as hiking, birdwatching, or rafting, that allow tourists to appreciate the natural beauty of Wewengkon Citorek.
5. Community-Based Tourism: Developing community-based tourism that involves local communities in tourism development and allows them to benefit from tourism.
6. Infrastructure Development: Developing tourism infrastructure that is adequate, such as accommodation, restaurants, and recreational facilities, to support sustainable tourism development.
7. Recreational Facilities Development: Developing recreational facilities, such as

- parks, swimming pools, or sports facilities, that cater to tourists and locals alike.
8. **Education and Training Programs:** Developing education and training programs that teach local communities about sustainable tourism practices, cultural heritage preservation, and environmental conservation.
 9. **Collaboration with Local Communities:** Collaborating with local communities to develop tourism products and services that are culturally sensitive and environmentally friendly.
 10. **Promotion of Tourism:** Promoting tourism in Wewengkon Citorek through effective marketing strategies, such as social media campaigns, travel fairs, and travel agencies.
 11. **Tourism Management System:** Developing a tourism management system that monitors and evaluates the impact of tourism on the local environment and community.
 12. **Cultural Heritage Conservation:** Conserving cultural heritage sites and monuments through sustainable tourism development that promotes cultural heritage preservation.
 13. **Community Engagement:** Engaging local communities in tourism development through participatory planning and decision-making processes.
 14. **Sustainable Transportation:** Promoting sustainable transportation options, such as electric or hybrid vehicles, to reduce greenhouse gas emissions and air pollution.
 15. **Waste Management:** Implementing effective waste management systems to reduce waste and promote recycling.

9. CONCLUSION

The strategy for sustainable tourism infrastructure development in Wewengkon Citorek, Indonesia, that prioritizes community empowerment, cultural heritage preservation, environmental conservation, and market access.

The strategy is consistent with the principles of community-based tourism and green infrastructure. The additional ideas for developing tourism and preserving cultural values can enhance the strategy and promote sustainable tourism development in Wewengkon Citorek. The development of sustainable tourism infrastructure in Wewengkon Citorek, Indonesia, can promote local economic development, preserve cultural heritage, and protect the environment.

The proposed strategy and implementation plan can serve as a model for sustainable tourism development in other tourist villages in Indonesia.

Specific Conclusions:

1. **Infrastructure Development:** The development of sustainable tourism infrastructure in Wewengkon Citorek can enhance the village's capacity to receive tourists and improve the quality of tourism services.
2. **Cultural Heritage Preservation:** The sustainable tourism development strategy can help preserve Wewengkon Citorek's cultural heritage and increase local community awareness about the importance of cultural preservation.
3. **Environmental Conservation:** Sustainable tourism development can help reduce the

negative impacts of tourism on the environment and increase local community awareness about the importance of environmental conservation.

4. **Local Economic Development:** Sustainable tourism development can increase local income and enhance the village's ability to manage economic resources.
5. **Community Participation:** The sustainable tourism development strategy can increase community participation in decision-making and raise awareness about the importance of sustainable tourism development.

Recommendations:

1. **Government:** The government should prioritize the development of sustainable tourism infrastructure in Wewengkon Citorek and allocate sufficient funds to support this development.
2. **Stakeholders:** Stakeholders should involve local communities in the tourism development process and provide opportunities for them to participate in decision-making.
3. **Local Community:** The local community should take an active role in developing sustainable tourism and increase awareness about the importance of cultural preservation and environmental conservation.
4. **Private Sector:** The private sector should invest in sustainable tourism infrastructure development in Wewengkon Citorek and develop education and training programs for local communities about sustainable tourism practices.

Action Plan:

The implementation plan for the strategy for sustainable tourism infrastructure development in Wewengkon Citorek is as follows:

Year 1:

- ✓ Conduct a feasibility study on sustainable tourism infrastructure development in Wewengkon Citorek.
- ✓ Develop a detailed plan for sustainable tourism infrastructure development.
- ✓ Establish a task force to oversee the implementation of the plan.

Year 2-3:

- ✓ Develop green infrastructure, such as renewable energy and water conservation systems.
- ✓ Implement sustainable transportation options, such as electric or hybrid vehicles.
- ✓ Develop eco-friendly accommodation and recreational facilities.

Year 4-5:

- ✓ Implement education and training programs for local communities on sustainable tourism practices, cultural heritage preservation, and environmental conservation.
- ✓ Promote sustainable tourism development in Wewengkon Citorek through effective marketing strategies.

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