

## **Developing River Watersheds into Tourism Destinations with an Environment Based Tourism (Ecotourism) Approach: A Case Study From Suntenjaya Tourism Village, Indonesia**

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### **Abstract**

Rural areas, especially those that are river basins, are very vulnerable to destructive changes from various activities, including tourism. This is also indicated as happening in the Suntenjaya Tourism Village, Indonesia. Therefore, it is necessary to study the application of ecotourism to mitigate the negative impacts of tourism on Cikapundung watershed conservation. The application of ecotourism to nature tourism activities in Suntenjaya Village was studied through descriptive research with a qualitative approach. Through observation, interviews, and secondary data collection, it was found that ecotourism has only been partially applied to nature tourism activities in Suntenjaya Tourism Village. The application of ecotourism can be promoted through the sustainable development orientation of Pokdarwis, but it is hindered by social conflicts and organizational duality in Suntenjaya Tourism Village.

**Keywords:** Watershed Management, Tourism Village, Ecotourism, Nature-Based Tourism

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### **A. INTRODUCTION**

Globally tourism in the past few decades has developed very rapidly either as a phenomenon or a dynamic development tool (Ruggieri, 2015). Particularly in Indonesia, the role of driven as a catalyst for regional development, especially towards increasing regional income, as well as infrastructure development. Costa & Lima (2018) stated that development in the tourism sector involves several aspects including socio-cultural, economic and social aspects that are political in nature. The multidimensional nature of tourism makes tourism development very vulnerable to adverse impacts in various aspects, especially social, cultural and environmental aspects. Currently, tourists tend to travel to lesser-known destinations or 'hidden gems' while helping the local economy (Calero & Turner, 2020) as well as shifting from mass tourism to villages or outdoor locations (World Travel & Tourism Council, 2023). The trend of tourist choice shows that world tourism leads to the sustainability of tourism activities carried out by prioritizing the welfare of local communities and environmental conservation.

The concept of tourism based on conservation, and which can reduce negative impacts on the environment in tourist areas is Ecotourism or Eco-Tourism. Ecotourism can be the basis for sustainable development and maintaining natural conditions which are part of existing local wisdom (McKinney, 2016). Through this research, the application of ecotourism to the development of tourism villages and the application of ecotourism activity criteria to each nature-based activity in Suntenjaya Tourism Village are studied more deeply so that they can be implemented as a basic concept for village tourism development plans.

On the other hand, Fennel (2015) focuses on the ambiguity between ecotourism and Nature Based Tourism (NBT). NBT can be interpreted as all tourist attractions related to the natural environment

(Weaver, 2001 in Fennel, 2015). Meanwhile Stronza et al. (2019) explains that ecotourism is a tourism activity with a main interest in the natural footprint of a destination, with a form of nature-based tourism that emphasizes nature in learning, sustainability (conservation and participation/ benefits for local communities), and planning, development, and ethical management of a natural environment.

As a developing country that is prioritizing its tourism sector, Indonesian government has responded to existing global trends with massive alternative tourism that is advanced, competitive, sustainable and promotes local wisdom (Antara & Sumarniasih, 2018). Tourist village theorem or what is commonly referred to as 'Desa Wisata' (Indonesian) is one of the most massive forms of alternative tourism which many have chosen as a breakthrough to utilize the rural environment in various countries to be much more productive with a responsible approach. This is also what the Government of the Republic of Indonesia chose to increase the productivity of several of its rural areas.

Indonesia, with its territory being predominantly rural, has many tourist villages. The Indonesian Ministry of Tourism and Creative Economy notes that by 2023 there will be 4,573 tourist villages, and they continue to be stimulated to increase. This shows that the tourism village program has become a national priority. Among the many tourist villages, one that is superior, especially in the West Java Province region, is the Suntenjaya Tourism Village. Suntenjaya Village is a tourism village based on wealth and natural beauty. Located at the foot of Mount Bukit Tunggul, this village has beautiful natural features with minimal pollution and cool mountain air. In their daily lives, the people of Suntenjaya Village still adhere to tradition and have a livelihood as farming, farm laborers, dairy farmers, coffee growers, and other laborers (Astiana & Kemala, 2022). The attractions are in Curug Luhur & Cibodas Suntenjaya Village, Bincarung Camping, Mount Bukit Unggul, Batu Lonceng, Geger Sunten, Batu Kreta, and Batu Ampar. Almost all of these attractions are included in the Cikapundung River watershed conservation area, the use of which is very limited. Based on this, the development of tourism in Suntenjaya Desa is limited by its function as a conservation area. The location features of Suntenjaya Village can be a double-edged sword, where this is a potential that can be exploited, but if it is not based on the right development approach and concept then utilization can have a negative impact on the river ecosystem and wider community life.

Fennel (2015) suggests the main criteria for ecotourism to make it easier to separate ecotourism from other forms of tourism. The main criteria are nature-based, ecotourism uses non-consumptive natural resources; sustainability, benefiting the surrounding community and implementing ecosystem management and biodiversity conservation management; Learning, Learning is environmental education; ethical imperative, tourists and ecotourism must have a better moral basis related to human relations with nature.

The definition of ecotourism and ecotourism criteria put forward by Fennel (2015) form the main theoretical basis for the study of ecotourism in Suntenjaya Village in this paper. Through this study, it will be known how the criteria for ecotourism are applied and the factors that can influence the implementation of ecotourism in the village of Sunten Jaya.

River watershed management is an important part of preserving the river environment and using it sustainably. Areas that support river flows and river borders are areas that are very physically vulnerable. This is related to the differences in characteristics and natural activities that occur on the surrounding land and within the river itself (Wang et al., 2016). This raises the risk of changes that will have a destructive impact and are even prone to disaster if massive changes occur.

Apart from that, as an area that becomes very fertile due to its rich nutrient content due to the flow of rivers, river basins tend to develop as areas that have extraordinary natural wealth. This provides a guarantee that there will be lots of natural features that are "tourism-worthy" and have valuable potential. However, on the other hand, if in the end these natural resources are used as capital to develop tourism activities, then there will be a threat of damage from these activities (Narendra et al., 2021).

This is what ultimately urges the authorities to intelligently plan the use of the river basin and build a responsible and sustainable management system. Salhi et al (2021) have explained that river watersheds must become strict conservation areas considering their sensitivity to change. However, on the other hand, it cannot be denied that the great potential contained in it to be utilized as an effort to improve the welfare of residents and the regional economy must be accepted and followed up as well. Therefore, a strategic and intelligent approach needs to be designed to balance all these interests (Naiman, 2012).

Tekken and Cropp (2015) stated that one of the tourism approaches that is most appropriate to apply in rural areas which include river basins and coastal areas is nature-based tourism or which is currently developing into ecotourism. Next, Fennel (2015) explained that in upholding ecotourism principles in rural areas there are at least several main criteria that need to be included, namely nature-based, ecotourism uses non-consumptive natural resources; sustainability, benefiting the surrounding community and implementing ecosystem management and biodiversity conservation management; Learning, Learning is environmental education; and Ethical imperative, tourists and ecotourism must have a better moral basis related to human relations with nature. These criteria were ultimately adopted in this study.

## **B. RESEARCH METHOD**

The research design adopted to obtain the desired data in this study is descriptive research which is operationalized through collecting and processing qualitative data. The data produced in this research is primary data in the form of transcripts of interviews conducted with several key informants using an accidental interview technique with a sampling approach by taking respondents using a discriminatory snowball sampling technique. Next, the collected data will be triangulated and mapped according to needs so that data analysis and discussion results can be obtained that can answer the research focus.

The study in this research focuses on the scope of the location, namely the Suntenjaya Tourism Village in West Bandung Regency, West Java Province, Indonesia. The selection of the scope is carried out based on the tourist village being included in the tourism development priority program by the local government. The informants who were identified are as follows:

**Table 1. List of Respondent**

<b>No</b>	<b>Respondent</b>	<b>Recommender</b>
1	Suntenjaya Village Government	Prasurvey Result
2	Pokdarwis (Tourism Awareness Group) Suntenjaya	Suntenjaya Village Government
3	Local community figures	Suntenjaya Village Government
4	Citarum River Region Headquarters	Suntenjaya Village Government
5	West Java Natural Resources Conservation Center	Citarum River Region Headquarters

Source: Research Data (2024)

### C. RESULTS AND ANALYSIS

Suntenjaya Village is in the east of Lembang District, is in a strategic position because it is located in the golden triangle area, because it is not far from Subang City, Sumedang Regency, and Bandung City. This village has developed into a tourist village because it has advantages such as cultural diversity, the potential availability of natural and human resources, strategic geographical location, and wide accessibility. With nearly 90% of its citizens still being natives. Suntenjaya Village is an agribusiness area where the agricultural and livestock sectors are the main economic activities of the community. In the agricultural sector, it was recorded that in 2017 there were 2,876 people or 34% of the total population of 8,403 people, with village commodities, namely bebi beans, spinach, cabbage, chilies, cabbage leaves and others. The livestock sector is developing with commodities such as dairy cows which are processed into milk and some dairy products, as well as goats and sheep.

Through the village's superior commodities, Suntenjaya Village has become a prominent agribusiness village. In addition, another sector that influences the development of agribusiness in this village is the tourism sector. As explained by the village head, the arrival of tourists can expand the market reach of Suntenjaya Village commodities. Therefore, the tourism sector is also one of the focuses for the Suntenjaya village government.

The tourism sector in Suntenjaya Village is developing through the cultural wealth that is maintained by the local community, as well as the natural wealth of Suntenjaya Village. The cultural wealth owned by Suntenjaya village is the existence of Kabuyutan Batu Lonceng. Kabuyutan is the term of the local community to refer to the ancient village of Batu Lonceng which has existed since pre-colonial times. In this kabuyutan area, sacred objects are stored, namely the Bell Stone, the Goong Stone, and the Wahyu Stone and the Ampar Stone. Each of these sacred objects is guarded by its 'kuncen' who has been hereditary caring for and preserving the stories about the stone.

Meanwhile, the cultural tourism attraction in Suntenjaya Village is an integral part of a tourist trip. When visiting this Tourism Village, this attraction is also supported by natural tourist attractions presented by the topography and natural features of Suntenjaya Village. Suntenjaya Village is famous for its existence as a hiking trail for Mount Bukit Tunggul (2,208 masl), Curug Luhur Cibodas, Geger Sunten, and the Taman Bincarung camping ground.

The potential for cultural and natural tourism attractions in Suntenjaya Village has been empowered to become active tourist attractions and activities as part of the Suntenjaya Tourism Village. Developments occurred so that Suntenjaya Village was designated as a tourist village in the 'developing' category through increased visitors, growth in agricultural commodities and infrastructure development.

The growth of the tourism sector and other sectors will certainly have an impact on natural and environmental conditions. Moreover, Suntenjaya Village with its natural wealth is the Cikapundung River Basin. The headwaters of the Cikapundung river are located in Kampung Cikapundung which is one of the villages/ hamlets in the Suntenjaya Village area. The Cikapundung river spring is also located on Mount Bukit Tunggul. As a water catchment area, this village has an important meaning for the sustainability of the Cikapundung watershed, as well as having a high disaster potential because this village is also located on the Lembang fault or fault.

Based on the data, the greatest erosion occurs on land that has a topography of 25-40% where it is utilized for paddy fields which have vegetable vegetation including Potatoes, Cabbage, Beans, Chilies, Tomatoes which are Suntenjaya Agricultural commodities. Building permanent buildings also reduces the surface of the land which has the potential to cause movement of soil and soil. On the other hand, the increase in the number of visitors also has an impact on the amount of waste that has the potential to pollute the environment.

Through these data Suntenjaya Village can apply the concept of ecotourism as the main concept of developing tourist attractions and activities, especially those originating from the village's natural resources. Through direct observation and interviews with village heads, managers (Tourism awareness group/ Pokdarwis) and tourists, the application of the eco-tourism concept (Fennell, 2015) to natural tourism activities in Suntenjaya Village is described in the following table:

Table 2. The results of the data findings correlated with the dimensions of the study

<b>Main Criteria for Eco-Tourism</b>	<b>Application to Suntenjaya Village Nature Tourism Activities</b>
Nature Based Consumption	In practice, most tourism activities do not actively spend or use natural resources, but are oriented towards the admiration of natural resources (trekking, hiking, sightseeing).
Sustainability	The community is not fully active in managing activities. There is a limit on the number of visitors.
Learning	Suntenjaya Village Nature Tourism is a basic education area for various groups of nature lovers.
Ethical Imperative	The natural resources used are fully owned by the community and the results of their utilization are distributed throughout the village community.

  

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Nature-based tourism activities in Suntenjaya village are camping, trekking and hiking. The mini-style activity center is located at the Bincarung Park campsite which is integrated with the trekking route to the Cibodas sublime waterfall, as well as being the gateway for climbing Mount Bukit Tunggul. Apart from that, Bincarung Park is also a tourism information center for tourists who want to visit cultural sites such as stone bells and other sites.

Consumption of natural resources occurs very minimally, in trekking and hiking activities, tourists pass through natural paths and the paths that have been provided, the available paths are very small and are made according to the topography of the tourist area and the existing vegetation. Consumption of natural resources is quite large at the beginning of the development of nature tourism activities, namely when land was cleared for the Bincarung Park camping ground.

However, this land clearing process was carried out in a tenuous vegetation area, so not much vegetation was sacrificed. In terms of sustainability, it can be said that tourism activities in Suntenjaya Tourism Village are still lacking in implementation, because not all communities are involved, and nature conservation is carried out only through conservation and natural learning which is carried out in basic education for nature lovers' groups. Limitations on the number of visitors are indeed implemented by the manager, but there are no written regulations or special studies that can be used as a basis. The learning aspect is fully concentrated in the basic education activities of nature lovers' groups, where the group is taught to respect nature as well as the basics of conservation, survival skills, and other nature-related abilities. Cannot find learning activities for general tourists (non-nature lovers' groups) who do trekking and hiking, because there are no packages with guides that can accommodate learning about the natural wealth of Suntenjaya Village. Ethically the use of natural resources or tourist areas is fully owned by the community, but not managed by the whole community. Managers only Some community groups can even be said as a family. However, the manager distributes benefits through non-material things to other communities through holding people's parties and other social activities.

Overall, natural tourism activities in the Suntenjaya Tourism Village apply to ecotourism partially. This is based on several factors. The driving factor for the implementation of eco-tourism is the mindset of the manager who is already oriented towards the sustainability and preservation of the village's nature, but the implementation of this aspect of sustainability is hampered by aspects outside of the key ecotourism criteria. These aspects are social and organizational aspects, there is a minor social conflict between the community that manages tourist attractions and activities and the community that owns the homestay. The conflict that occurred developed into an organizational conflict where there were two tourism conscious groups. There are Pokdarwis who manage nature tourism, and there are different Pokdarwis who manage homestays and rural or agricultural tourism activities (living in). These social and organizational aspects impede the integration of every aspect of existing tourism products in the village to apply a comprehensive and comprehensive concept, organizational duality results in information delays and the formation of the same development plan. In addition, this organizational duality can also be a gap for larger social and organizational conflicts.

Application of concepts ecotourism needs to be carried out thoroughly and comprehensively to be able to suppress the negative impacts of existing activities in the Suntenjaya Tourism Village so that tourism does not cause a decline in the performance of Suntenjaya Village as a Cikapungdung watershed conservation area.

#### **D. CONCLUSION**

Based on the results of the study it was found that rural tourism in Suntenjaya West Bandung Regency succeeded in increasing the number of visitors. Through this research it was also found that, nature tourism activities in the Suntenjaya Tourism Village apply eco-tourism partially. This is shown through the very minimal consumption of natural resources, not all members of the community participate in managing it, the learning aspects of activities exist but are not comprehensive, but tourism activities are carried out ethically through the distribution of non-material benefits from tourism activities to the community. Partial application of the concept of ecotourism is driven by the orientation of the sustainability of nature tourism activity managers, but comprehensive implementation is hampered by conflicts on social aspects and there is organizational duality in Suntenjaya Tourism Village.

Ecotourism which is applied partially has not been able to have a significant positive impact on nature conservation and the good conservation performance of Suntenjaya Tourism Village as the Cikapungdung Watershed. The application of this concept needs to be carried out thoroughly and comprehensively to be able to suppress the negative impacts of existing activities in the Suntenjaya Tourism Village so that tourism does not become the cause of the decline in the performance of Suntenjaya Village as a Cikapungdung Watershed conservation area.

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