




Ecotourism: Local Community's Role in Overcoming Watershed Pollution in Lake Cisanti, West Java

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ARTICLE INFO	ABSTRACT
<p>Keywords:</p> <p>Citarum river; Community development; Local wisdom; Natural tourism; Lake Cisanti.</p> <hr/> <p>Article history:</p> <p>Received 2024-11-17 Revised 2024-12-15 Accepted 2024-12-16</p>	<p>The World Bank said that the Citarum River was the most polluted river in the world, which led to safety measures and practical solutions. At the same time, this problem opens up opportunities for ecotourism, but it depends on how involved the people of the Citarum River are. A study looks at the roles that people from Tarumajaya village played in the planning, implementation, and evaluation phases of Lake Cisanti ecotourism. The research is based on a case study of Tarumajaya village, Kertasari sub-district, Bandung Regency, and Lake Cisanti's location. Interviews, non-participant observations, and documentation studies are all ways to collect data. There are three kinds of participation: planning, putting things into action (like protecting the environment and doing other things), and evaluating. This study shows how community involvement could help clean up rivers, restore nature, and make ecotourism stronger.</p> <p>Contribution: The research emphasizes the critical roles that local residents play in all phases of ecotourism development—planning, implementation, and evaluation. This underscores the importance of community engagement in environmental management efforts.</p> <p><i>This is an open access article under the CC BY-SA license.</i></p> 

1. INTRODUCTION

River pollution is a problem that has hit Indonesia (Chai Hin, 2019). The Citarum River in Indonesia is polluted. The longest and largest river in West Java is the Citarum. The Citarum River flows through 12 cities (Anwar et al., 2019). However, industrial chemical waste has contaminated the water of the Citarum (Sudarningsih, 2017). According to the World Bank, the Citarum is the dirtiest river in the world and also affects West Java.

This has led to efforts to address the pollution of the Citarum River with a safety approach first and then with a technological solution. Solution with a safety approach first. This approach involves the police and the Indonesian Armed Forces (TNI) in solving the problem of the Citarum (Imansyah, 2012). For example, the TNI protects the river channel from industrial pollution and littering in the Citarum. The river has several posts from the upper to the lower reaches. Regional mandatory ordinances targeting industries that still discharge industrial waste into the Citarum implement the safety approach. The Governor's

Executive Order (PERGUB) amending West Java Governor's Executive Order No. 5 of 2019 on the Implementation of Pollution Control and Mitigation in the Citarum River Basin illustrates this (Ahmad et al., 2020; Chandra et al., 2019; Rivandi, 2019). If the industry continues its violations, it faces 5–15 years in prison and 5–15 billion in fines (Sakti & Afyah, 2020).

Second, technological innovations offer practical solutions. For example, the government and the Indonesian Institute of Sciences (LIPI) are developing an independent technology for waste management in Citarum River Basin communities (Haq, 2019; Yulianto, 2020). LIPI and the government of West Java have also begun installing composting toilets to improve sanitation along the river, particularly to prevent private toilets from disposing of household waste (Utami, 2020). LIPI and the government have developed technologies to treat liquid waste, especially tempeh and tofu. A watershed in Giriharja, Sumedang, West Java, was the site of this effort (Abdoellah et al., 2019).

Research on the Citarum River problem is increasingly finding safe and practical solutions. Pratama et al. (M. A. Pratama et al., 2020), studied the government's solution to Citarum in a safety approach through Citarum Harum. Then Rozak et al. (Rozak et al., 2021) studied domestic waste management in the Citarum River basin. Also, see Heryawan (Heryawan, 2018) on Citarum's solutions with regulatory measures and competitive strategies for changes in the value of Citarum River water. Sumartias et al. (Sumartias et al., 2019) research on environmental communication patterns in the Citarum River concluded that community communication patterns related to sustainable solutions are still insufficient to address damage to the Citarum River. Another study was conducted by Sudradjat et al. (Sudradjat et al., 2020), who also photographed a solution to the Citarum problem by increasing resilience in dealing with flooding in the Citarum watershed in Andir sub-district in Bandung City. Meanwhile, practical solutions to overcome the Citarum problem were also developed through the research of Pratama et al. (R. P. Pratama et al., 2019) by developing a robotic solution to regularly monitor the water quality of the river, which can be monitored in real-time so that the water can continue to be protected from pollution. Then, Nabillah et al. (Nabillah et al., 2018) explained practical solutions for dealing with flooding due to Citarum overflow in the Dayeuh Kolot Bandung region through safe shelters in the form of tree houses.

The complexity of the Citarum problem requires other solutions, including direct community participation through ecotourism. Previous research on ecotourism development based on local community participation has not been able to discuss solutions to the Citarum from a community perspective. To fill this gap, this study explores ecotourism management as a solution to the Citarum problem with the participation of local people.

Local participation is essential for sustainable development that meets current and future needs while protecting natural resources and ecotourism (Komariah et al., 2019). Local participation allows communities to influence development projects, such as ecotourism, that affect them (Michener, 2013). Brian Garrod posited theories about ecotourism and local community participation. Garrod highlights local communities as developers of ecotourism. Garrod advises ecotourism developers to involve local communities from the beginning. This means that outsiders must accept local actions. There is no reason to start from scratch. Although external and internal parties (local communities) may agree to a concept created later, Garrod divides ecotourism development into planning, implementation, and evaluation phases.

First, Planning includes any plans or visions made prior to the development of ecotourism. This phase includes initial dialogue, strengthening of support mechanisms, preliminary studies, and the development of an action plan. This planning process includes a dialogue on the development of ecotourism management. This dialogue is supported by all sectors of society, especially the government.

Second, the implementation phase, in which ecotourism projects are carried out to combine economic benefits with the conservation of the natural resources that underlie ecotourism objectives; this is critical because many ecotourism projects have failed because they have not succeeded in combining natural sustainability with economic benefits. This participation allows the community to engage in environmental, economic, socio-cultural, historical, and cultural activities. This activity enables local people to participate in ecotourism.

Third, evaluation. This phase is crucial to ensuring compatibility between plan, implementation, and results. It is based on what has happened on the ground or what needs to be improved in developed ecotourism. Tourists and all management elements can respond to the government's proposals. The evaluation basis is critical to ensuring that ecotourism benefits many. The assessment identifies residents' commitment to protecting and promoting ecotourism.

We use Brian Garrod's theory of local engagement in ecotourism to explain Tarumajaya's engagement in ecotourism on Lake Cisanti. Garrod, 2010. The local community should implement ecotourism development using this theory (Garrod & Wilson, 2003). Garrod describes ecotourism development as balancing the economic benefits of tourism with the conservation of natural resources. The natural functions of ecotourism are ignored if the economy cannot be enjoyed (Garrod, 2010; Garrod et al., 2001).

2. METHOD

This study uses case studies to discuss several similar ecotourism development phenomena in Indonesia, particularly in West Java Province. According to Yin (1994), case studies explain a case to explain similar phenomena. To understand general phenomena related to local people's participation in ecotourism in Indonesia, this study focuses on Lake Cisanti, Bandung Regency. Quantitative and qualitative data are analyzed in this study. The quantitative data are tables and charts from residents working or participating in the region, while the qualitative data consists of narratives from informants. Documentary studies, in-depth interviews, and observations complement each other to complete the analysis. We observed the development of ecotourism for Lake Cisanti residents and its impact on the community (Rahman & Bukhori, 2022). We interviewed Lake Cisanti residents to learn more about their involvement. After data saturation, 20 informants were interviewed, selected, and presented. In Lake Cisanti, written data and publications about residents' participation in ecotourism were collected as part of a documentation study. The data were then analyzed using triangulation, which involves collecting information from multiple sources and extending the research process to verify the results. Before finalizing the analysis results, multiple informants confirmed the design in order to triangulate the sources. Extending the observation period ensured that no fundamental changes contradicted the preliminary analysis (Silverman, 2015).

3. RESULTS AND DISCUSSION

Lake Cisanti Ecotourism

Lake Cisanti is a lake (*situ*) at the foot of Mount Wayang, administratively located in Tarumajaya village, Kertasari district, Bandung regency, West Java. Lake Cisanti has a total area of 7 hectares and has seven springs: Pangsiraman, Cikoleberes, Cikawedukan, Cikahuripan, Cisdane, Cihaniwung, and Cisanti springs (Tarumajaya, 2020).



Figure 1. Cisanti Situ

The Lake Cisanti area, also located 0 km from the Citarum River, was recognized as a tourist destination in 2018 (Malik Sadat Idris et al., 2019). This Lake was polluted before it became a popular ecotourism destination, especially because of human activity. The migration of plants in the highlands is

what causes this pollution. These agricultural activities poison the water with pesticides from the nearby plantations. In addition, the behavior of tourists has also polluted Lake Cisanti because it is filled with garbage. However, with the awareness of local residents, this situ has been used as a reservation site and tourist spot that the residents of Tarumajaya village originally proposed.

The ecotourism of Lake Cisanti can be seen on the visitor tickets. Visitors have to buy a ticket to participate in this tourist activity. Each visitor pays Rp10,000 per person. There is an entrance fee of Rp. 5,000 for parking motorcycles and a fee of Rp. 10,000 for parking cars, but there is an exception for residents who do not have a ticket fee. Residents only pay the parking fees without considering the cost per person. Profits from parking fees are then shared with other managers, Perhutani, and the TNI. For the management of Lake Cisanti, i.e., the TNI, Perhutani, and the village administration, profit sharing is 20:30:50. This profit sharing is distributed monthly, with a profit-sharing of about Rp. 1,000,000 to 2,000,000 per month (Interview with Iksan, Chief of the Village, Bandung, 2/9/2021).

Other ecotourism processes can be seen in the initiative of residents to build accommodation facilities (homestay) to support the sustainability of ecotourism in Cisanti. This homestay is a resident's house selected according to pre-determined standards, such as adequate water supply, clean bathrooms, empty rooms, and dust-free houses. Residents' homes are selected as lodging facilities or referred to as guesthouses (Saepudin, 2021). Tarumajaya Village accommodation is for visitors who come to the area, such as tourists and researchers, who want to stay for a few days to a month. The cost of this accommodation usually ranges from Rp. 100,000 to Rp. 300,000 per person per night, plus Rp. 20,000 per person for a meal.

Community Participation Planning in Lake Cisanti Ecotourism

The village community of Tarumajaya participates in the planning of ecotourism in Lake Cisanti. In this phase, the objectives for the management of Lake Cisanti are established. Thus, participation in this phase includes dialogue about ecotourism and decision-making for Lake Cisanti. There are four methods of participation in this phase:

First, dialogue and action planning In this dialogue with villagers, the management of Lake Cisanti in their area is discussed. Village officials, RT and RW leaders, community leaders, traditional leaders, religious leaders, youth leaders, and others participated in this dialogue. During the dialogue, it was agreed to resume the management of Lake Cisanti to conserve nature and provide economic benefits to residents as an ecotourism area. The community will later discuss this internal agreement with Perhutani and the TNI.

The smallest governments, Rukun Tetangga (RT) and Rukun Warga (RW) play a significant role in this dialogue. Hasan, the head of RT 003, Tarumajaya Village, says that it is difficult to convince Lake Cisanti residents to participate in ecotourism development because they feel that the government does not care about them. It is believed that the government will not involve the residents in the development of Lake Cisanti. Evidence that the government is open to resident participation refutes this (Interview with Hasan, Bandung, 5/6/2021). By hiring residents as cleaners and selling and making souvenirs at Cisanti, residents believe that citizen participation has been fulfilled.

The central government, provincial and local governments, Perhutani, and TNI finally discussed the goals of Tarumajaya villagers after an internal agreement. Therefore, the residents presented the results of the formulation at regional and provincial meetings, using all the results of the internal dialogue. The government, Perhutani, and the TNI agreed that villagers must be involved in planning, implementation, and evaluation. The government also hopes that ecotourism will improve people's lives (Interview with Iksan, Chief of the Village, Bandung, 2/9/2021).

An action plan will come after the dialogue. This will require several task-specific plans. Community participation in this action plan is part of their local duties. As a Lake Cisanti community, they describe their socio-cultural environment. In addition, the action plan includes a willingness to help community workers clean up the Lake, Lake area, and village streets. The Village Party recognizes that this action plan clearly addresses the specific tasks of the village, especially technical issues such as assisting in the cleanup of the Lake area and the public road to Lake Cisanti.

Second, improve collaboration. Collaboration, especially with the government, strengthens the participation of local ecotourism (Chang, 2018; Schwake, 2021). This collaboration also involves the private sector, which connects ecotourism with tourists. Perhutani, the village, the regional government, TNI, and PT Astra Indonesia are working together as a CSR to fund the development of ecotourism in Cisanti. This collaboration started in 2019–2020 (Interview with Iksan, Chief of the Village, Bandung, 2/9/2021).

Third, preliminary study. In this phase, the ecotourism potential is studied. The development of ecotourism in Lake Cisanti begins with a preliminary study to determine the potential and which aspects are profitable and which are harmful. The West Java Regional Government, Perhutani TNI, academics, and residents of Tarumajaya village conducted a preliminary study on ecotourism during this phase.

The residents of the community participated in this preliminary study. They participate, especially the village administration, community leaders, youth, and NGOs. The goal is to hear the suggestions of the residents directly, as they see the potential of the Lake every day. Residents' suggestions, such as selfie spots, prayer rooms, and parks in the tourist area of the Lake, have been endorsed by other parties. Academics and environmentalists have studied the residents' proposals. In a detailed study of the management of Lake Cisanti, Rahman of the Ibnu Sina Research Institute found balanced cooperation. This is because management planning for Lake Cisanti has socialized and invited residents (Interview with Rahman, NGO Activist, Bandung, 5/9/2021).

Implementation of Community Participation in Lake Cisanti Ecotourism

Tarumajaya villagers participate in actual local conservation efforts and reap the economic benefits when they are implemented. In general, participation can take four forms, including protecting the environment by removing trash and revegetating the Cisanti site. The development of Lake Cisanti began with its cleaning and transformation into a nature reserve. This is achieved by cleaning the Lake together. Heavy equipment or manual labor is used in this cleaning method. Cleaning has also been done around Lake Cisanti. The local support is also good. They are excited to develop ecotourism by cleaning the Lake. Other stakeholders, such as the TNI, Polri, and Perhutani, support the cleaning of the Lake. Residents enthusiastically mow the grass, clean the leaves, and remove wild leaves. Residents also use boats and canoes to clear the river of trash. Reforestation in Cisanti is part of environmental protection. Tarumajaya village residents have planted trees in Lake Cisanti to help the TNI and Perhutani clean the situ. This fulfilled the government's and experts' demand to plant new trees in the deforested areas around Lake Cisanti, especially Mount Wayang, to prevent landslides and the decline of springs. Second, economic activity The next implementation concerns the economy, or efforts to make ecotourism in Cisanti a worthwhile rupiah. Community participation in the economy means using the results of tourism management to create jobs and businesses. The community uses tourism through stalls, food, coffee, souvenirs, and local accommodation. The majority of ecotourism is run by casual workers, construction workers, retail stores, cafes, food service establishments, souvenir stores, park stores, and motorcycle cabs. By 2021, 95 people will manage ecotourism, including employment and business opportunities.

Table 1.
Number of workers and servants around the Lake Cisanti ecotourism

No	Involvement	Number of people
1	Employee	10
2	Construction workers	30
3	Parking attendants and counters	10
4	Coffee business	15
5	Shop business	13
6	Taxi business	17

Source: Research data

Table 1 shows that this figure is only partially correct since many Cisanti residents are involved in ecotourism, especially behind the scenes. Of course, all tourism managers are Tarumajayans. Tourism managers also include construction workers and cleaners employed by the government. Trade affects the first economy. The sale of food and beverages does. One of the benefits of ecotourism in Cisanti is that the traders not only take care of their businesses but also take care of Lake Cisanti. A merchant who uses Cisanti on a daily basis feels like he owns it. That's why some merchants were excited about a cleanup program. Not only do the traders make a living here, but they also help maintain the beauty of the Lake. There are market traders and Sapoci coffee traders. This coffee, grown around Mount Wayang, is a typical Cisanti souvenir. When *sapoci* coffee was proposed as a Cisanti souvenir, other officials, especially the

government, were flexible and even invested in Cisanti coffee entrepreneurs. Asep Sutisna, doll-sized shadow puppets, are another Cisanti souvenir that boosts the economy. He has contributed to the development of ecotourism in Lake Cisanti and sells leather dolls to meet the needs of BUMDES kiosks that provide an alternative to Cisanti souvenirs. Sutisna says this craft helps his economy, especially when tourists visit Cisanti. Bundela kiosks and tourists sell it as a souvenir. *Wayang kulit* is a typical Cisanti souvenir (Interview with Sutisna, retailer, Bandung, 3/9/2021).

Snack souvenirs sold in Village Owned Enterprises (BUMDES) stores also promote ecotourism in Cisanti. BUMDES stores in Cisanti sell *opak* (cookies), *rengginang*, cassava fries, and sweet potato fries, among others. Tarumajaya residents provide the ingredients, preparation, and packaging for this business. This clearly impacts the economy of the village. Also associated with the economy are parking attendants and admissions desks. Tarumajaya villagers work as park rangers and at the Lake Cisanti access counters, among other jobs. Eight parking attendants work in two blocks: motorcycle and car.

There are two ticket booths. All of these workers are residents of Tarumajaya village with permanent jobs. A motorcycle taxi driver is another economically valuable occupation. A motorcycle taxi driver who frequently stopped in front of the village chief's office, either because someone wanted to camp or because tourists were too lazy to go to Cisanti, confirmed this. He uses his income to support the motorcycle taxi drivers. The lodging industry is also involved. Although there are no special accommodations, some locals host tourists in their homes. Guesthouses and temporary accommodations are primarily the homes of locals. The most important thing is good facilities and satisfied tourists. This will promote tourism in Cisanti. The community will feel the impact of a future resort, so it must take into account the wishes of the locals. Third, help preserve the Wayang Golek culture and manage the historical sites of Lake Cisanti. Tarumajaya Village conducts cultural activities that have become the community's legacy as a form of community participation. Socially, Tarumajaya village has preserved Sundanese art for generations.

Since Cisanti has a lot of space, the residents decided to hold a puppet show. The pavilion or field of Tarumajaya village is the venue for this event, but Cisanti holds it to attract tourists. The TNI and Perhutani have also already approved this project. In addition to ecotourism and culture, the Tarumajaya village community also participates in history management in Lake Cisanti. The Dipati Ukur burial site and the seven springs at this Cisanti site are associated with many local beliefs.



Figure 2. Dipatiukur Petilasan Site

Cisanti has historical sites, as shown in Figure 2. The spring and the sacred tomb are inseparable from Wayang Mountain. This mountain is located near Cisanti. This mountain is locally sacred. When stones are struck on Wayang Mountain, they can produce a loud sound, like drums used in Wayang performances. Situ Citarum, which is still flowing and useful today, is closely related to Wayang Mountain (Kokom, 2021).

Fourth, promoting Lake Cisanti on social media Promoting Lake Cisanti on social media is another measure. Adapting to the trends of tourism on social media Karang Taruna youth from Tarumajaya village have taken this action. Kim Smart Tarumajaya promotes tourism and news in the village. This KIM is part of the communication and information service of the Bandung region (Kominfo). Kim Smart Tarumajaya is located in Tarumajaya village. News and advertisements can reach the community with this KIM.

Evaluation of Community Participation in Lake Cisanti Ecotourism

The evaluation is based on an assessment. The response of tourists or visitors to Lake Cisanti is used to evaluate the community's involvement in ecotourism development. Tourists' dissatisfaction with Lake Cisanti's shortcomings forms the basis for the assessment. The tourists' impressions are important. In this way, ecotourism can evaluate and improve problems. There are some missing evaluations of ecotourism in Cisanti. The evaluations of the tourists are a record for the managers of Lake Cisanti. Tourists submitted this report after their visit to Lake Cisanti. Some tourists ask the manager about child-friendly rides. Some tourists ask the manager about special food stalls. A food court or many food stalls would allow tourists to taste the specialties of Bandung in Lake Cisanti without having to bring many supplies. Some tourists feel tense when the TNI guards are there. Visitors seem to be too afraid.

Therefore, some tourists hope that the security is not too strict to avoid any inconvenience. Based on this assessment, Tarumajaya villagers held internal and external assessment meetings with Perhutani and the TNI. In the internal assessment meeting of Tarumajaya villagers, the issues of the external assessment meeting were assessed and proposed. All RT, RW, village, community, and youth leaders with youth organizations were invited to this meeting. This meeting was well attended on September 30, 2021, and included representatives from the community. The meeting was about monitoring the progress of Tarumajaya village and recognizing its achievements. Evaluation, consultation, and questioning of all elements The assessment meeting recommended reopening COVID-19 and Lake Cisanti as soon as pandemic conditions improve. Merchants should open Cisanti, even if only partially, to support the livelihood of the community. Second, the village would like to work with Cisanti to spur new innovations that would make tourists want to travel again until they try to create campgrounds and modern selfie tours and accommodations. At the next meeting, Lake Cisanti and ecotourism development were evaluated together with Perhutani and the TNI. This meeting took place when Lake Cisanti was scheduled to close in 2020 due to the COVID-19 pandemic. At that time, Perhutani and the TNI surveyed Lake Cisanti and identified recalcitrant tourists. Some ignored the signs and entered the restricted area. The results of this investigation led to more information boards being erected to deter tourists.

Drivers of Participation in Ecotourism

The following factors promote local community participation in Lake Cisanti: First, Lake Cisanti has provided economic activity for Tarumajaya villagers. Lake Cisanti is used for irrigation of rice fields and agriculture. Tarumajaya village is one of the largest agricultural producers in the Kertasari sub-county and generates a lot of money. Rice, cereals, corn, cabbage, chili, broccoli and tuber crops This area is fertile for agriculture, and most residents are farmers or farm workers. Agriculture is their daily occupation. Bandung is the place where they sell their agricultural products. Of course, good irrigation is one of the most important requirements for agriculture.

Tarumajaya village residents also benefit economically from the development of ecotourism at Lake Cisanti. The long-established tourism industry at Lake Cisanti is showing its economic value. The villagers of Tarumajaya and Perhutani villages managed Lake Cisanti as a tourist attraction before it became popular.

Tarumajaya villagers initiated ecotourism at Lake Cisanti. The villagers are aware of the economic importance of Lake Cisanti. Their agriculture depends on Lake Cisanti, which they now use as a tourist attraction. In Bandung, Lake Cisanti has long been a natural tourist attraction.

Second, Cisanti has a history. History is important to any community. This is true for the people of Tarumajaya village, especially for the people of Lake Cisanti. Lake Cisanti is a historic place for the residents of Tarumajaya. The community has developed thanks to its ancestors, including Lake Cisanti. Mount Wayang and the remains of Dipati Ukur are also important to community members. Some Tarumajaya residents believe that their area is special because the most influential Sundanese have visited it.

Third, the establishment of environmental reserves around Lake Cisanti. Another important reason is to protect the environment. Pollution by local residents is the root of all the problems of the Citarum River. Therefore, residents' awareness of the cleanliness of the Citarum is the most important solution. The municipality must directly raise awareness about the cleanliness of the Citarum. Therefore, it is ideal to start solving the Citarum problem at Lake Cisanti, the headwaters of the river.

Lake Cisanti has long been the center of Tarumajaya. It provides irrigation and farmland. However, villagers did not care about the cleanliness of Lake Cisanti or the environment. This led to landslides and

flooding. The situation changed as people learned more. They became more concerned about Lake Cisanti and wanted to promote ecotourism there. From planning to evaluation, Tarumajaya residents agreed that the nature reserve should be the main destination for ecotourism in Cisanti.

4. CONCLUSION

Watershed pollution, which is a big problem in the Citarum River, cannot be fixed just by making safety policies or by coming up with new ways to use technology. A community-based approach is another way to solve the problem. One way to do this is to spread the word about how important it is to protect the Citarum River. This directly targets the community. This study shows that there is a way to deal with river pollution, especially in the upper Citarum River, which is the focus of this study. The people who live in Tarumajaya village have done ecotourism in a natural way by planning, putting it into action, and evaluating it. Residents of Tarumajaya create ecotourism management objectives performed by managers from those who work there, the Perhutani and the Armed Forces. The management of ecotourism at Cisanti focuses on two things: preserving the nature of the Lake and achieving economic benefits. These two objectives are manifested in the efforts to implement them economically, for example, in trade, in the provision of accommodation, and in the sale of souvenirs typical of the area, and the preservation of the Lake through the cleaning of the Lake and the greening of the area there. Another effort is to make Lake Cisanti a center for regional cultural activities such as *wayang golek* performances and to make it a historical center along with the Dipatiukur Memorial. To realize these efforts, Tarumajaya residents are also conducting creative promotional activities on social media. Tarumajaya residents' efforts to manage Lake Cisanti ended with an evaluation process. This process shows how serious Tarumajaya residents are about protecting and managing Cisanti and implementing shared responsibility with other elements, such as the Armed Forces and the Perhutani. Thus, there is harmony between the residents and the elements on both sides according to their respective shares. These forms of citizen participation in ecotourism in Cisanti are a sign of the formation of a mutually beneficial partnership. This research suggests to foster collaborations among various stakeholders, including government agencies, NGOs, and local communities. This approach can enhance resource sharing, knowledge exchange, and coordinated action towards river conservation.

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