Citarum Watershed Restoration through Community Involvement and Tourism Village Development

Upaya Restorasi DAS Citarum melalui Keterlibatan Masyarakat dan Pengembangan Desa Wisata

## Citarum Watershed Restoration through Community Involvement and Tourism Village Development

## Upaya Restorasi DAS Citarum melalui Keterlibatan Masyarakat dan Pengembangan Desa Wisata

Evi Novianti<sup>1</sup>, Dian Wardiana Sjuchro<sup>2</sup>, Dina Oktavia<sup>3</sup>, Qorinah Estiningtyas Sakilah Adnani<sup>4</sup>, Lani Gumilang<sup>5</sup>, Sunardi<sup>6</sup>, Isni Nurfauziah<sup>7</sup>

<sup>1</sup>Sekolah Pascasarjana, Universitas Padjadjaran, Jl. Raya Bandung - Sumedang KM 21\* *Email: evi.novianti@unpad.ac.id* 

<sup>2</sup>Fakultas Ilmu Komunikasi, Universitas Padjadjaran, Jl. Raya Bandung - Sumedang KM 21 *Email: d.wardiana@unpad.ac.id* 

<sup>3</sup>Sekolah Pascasarjana, Universitas Padjadjaran, Jl. Raya Bandung - Sumedang KM 21 *Email: dina.oktavia@unpad.ac.id* 

<sup>4</sup>Fakultas Kedokteran, Universitas Padjadjaran, Jl. Raya Bandung - Sumedang KM 21 *Email:qorinah.adnani@unpad.ac.id* 

<sup>5</sup>Fakultas Kedokteran, Universitas Padjadjaran, Jl. Raya Bandung - Sumedang KM 21 *Email: lani@unpad.ac.id* 

<sup>6</sup>Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Padjadjaran, Jl. Raya Bandung -Sumedang KM 21

Email: sunardi@unpad.ac.id

<sup>6</sup>Fakultas Teknologi Industri Pertanian, Universitas Padjadjaran, Jl. Raya Bandung - Sumedang KM 21

Email: isni16001@mail.unpad.ac.id

Masuk tanggal : 21-07-2023, revisi tanggal : 27-12-2023, diterima untuk diterbitkan tanggal : 29-12-2023

#### Abstract

The Citarum watershed is a source of livelihood for communities in 13 cities and regencies in West Java and Jakarta. However, the Citarum River is considered one of the most polluted rivers in the world, prompting the central and local governments to implement conservation programs. For Tarumajaya Village, the conservation of the Citarum watershed starts from the Situ Cisanti area accompanied by the development of a tourism village to support the Citarum Harum Program. However, the existing participation is only seen from the government side, and there is no significant community participation in terms of communication and others directly in the process of developing this tourism village. Thus, this study aims to identify community involvement in the development of tourism villages to support the restoration of the Citarum watershed in the Upper Citarum Region. This qualitative study was conducted in Tarumajaya Village, Kertasari Sub-district, Bandung Regency. Primary data were obtained through non-participant observation and in-depth interviews, while secondary data were obtained from policy documents. Data analysis included data reduction, presentation, verification, and conclusion drawing. The research findings show that the development of creative tourism villages in Tarumajaya Village is carried out to support environmental preservation and has economic value for the welfare of the community,

thus supporting public health. Tarumajaya Village community innovation products have economic value in tourism and show community involvement in supporting sustainable tourism development which is expected to improve public health.

Keywords: Citarum river, community involvement, creative tourism, health, Situ Cisanti

#### Abstrak

DAS Citarum menjadi sumber penghidupan masyarakat di 13 kota dan kabupaten di Jawa Barat dan Jakarta. Namun, Sungai Citarum dianggap sebagai salah satu sungai paling tercemar di dunia, mendorong pemerintah pusat dan daerah untuk melaksanakan program konservasi. Bagi Desa Tarumajaya, konservasi DAS Citarum dimulai dari kawasan Situ Cisanti disertai dengan pengembangan desa wisata untuk mendukung Program Citarum Harum. Namun, partisipasi yang ada hanya terlihat dari sisi pemerintah belum terlihat secara signifikan partisipasi masyarakat baik dari segi komunikasi maupuun lainnya secara langsung dalam proses pengembangan desa wisata ini. Dengan demikian, penelitian ini bertujuan untuk mengidentifikasi keterlibatan masyarakat dalam pengembangan desa wisata mendukung pemulihan daerah aliran sungai Citarum di Kawasan Hulu Citarum. Studi kualitatif ini dilakukan di Desa Tarumajaya, Kecamatan Kertasari, Kabupaten Bandung. Data primer diperoleh melalui observasi non partisipan dan wawancara mendalam, sedangkan data sekunder diperoleh dari dokumen kebijakan. Analisis data meliputi reduksi data, penyajian, verifikasi, dan penarikan kesimpulan. Temuan penelitian menunjukkan bahwa pengembangan desa wisata kreatif di Desa Tarumajaya dilakukan untuk mendukung pelestarian lingkungan dan memiliki nilai ekonomi bagi kesejahteraan masyarakat, sehingga mendukung kesehatan masyarakat. Produk inovasi masyarakat Desa Tarumajaya memiliki nilai ekonomi dalam pariwisata dan menunjukkan keterlibatan masyarakat dalam mendukung pembangunan pariwisata berkelanjutan yang diharapkan dapat meningkatkan kesehatan masyarakat.

Kata Kunci: keterlibatan masyarakat, kesehatan, Sungai Citarum, pariwisata kreatif, Situ Cisanti

#### Introduction

River pollution is a global environmental issue that can lead to people living in unhealthy environments (Bashar Bhuiyan et al., 2013). Communities around major rivers that pass-through cities face this problem (Garg et al. 2018). The same is true for people living in Bandung City. In some areas of the city, a large river flows from the highlands of South Bandung to Jakarta, namely the Citarum River (Riyadi et al., 2020). Citarum is the longest and largest river in West Java Province (Pranoto & Subari, 2019). The Citarum River's headwaters are at Mount Wayang, located in Tarumajaya Village, Kertasari Subdistrict, Bandung Regency and empties into the Java Sea at Muaragembong, Cabangbungin Subdistrict, Bekasi Regency. The Citarum River flows through 13 district/city administrative areas. Based on data obtained from the Regional Environmental Management Agency (BPLHD) of West Java Province, Citarum supplies water for 28 million people spread across West Java and DKI Jakarta (Fridayani, 2020). The Citarum is a river that serves as a source of drinking water for people in Jakarta, Bekasi, Karawang, Purwakarta, and Bandung.

Citarum Watershed Restoration through Community Involvement and Tourism Village Development

Upaya Restorasi DAS Citarum melalui Keterlibatan Masyarakat dan Pengembangan Desa Wisata

Citarum is the lifeblood of Indonesia's economy with an estimated 20% of Gross Domestic Product with a stretch of industries along the Citarum River (Sunardi et al., 2021). In addition, the Citarum River also greatly affects the lives of surrounding communities (Belinawati et al., 2018). The utilization of the Citarum River varies from upstream to downstream to meet household, irrigation, agricultural, livestock, and industrial needs (Anwar et al., 2019). However, based on a river water quality assessment in 2010, it was concluded that the Citarum River is generally of very poor quality. The main contaminants that pollute the Citarum River are coliform, feces, sulfide, and phenol. Except for the part of the river that passes the Jatiluhur Dam (because it has received natural purification effects from three artificial sources) (Taswadi, 2020). The Citarum has been named one of the ten dirtiest areas in the world. The title was based on a report from Green Cross Switzerland and the Blacksmith Institute in 2013. The report states that the Citarum River is the third dirtiest in the world.

The poor water quality of the Citarum River is caused by an increase in pollution load from various pollutant sources originating from an increase in population, industrial development that produces massive waste, extensification and intensification of agricultural land, fisheries development, livestock population, and exploration of C excavation mining materials. This study also warned of an increase in water quality degradation from year to year, due to the increasing supply of pollution from untreated industrial and domestic effluents, especially in the Bandung area (Fulazzaky, 2014; Yokosawa & Mizunoya, 2022).

The existence of the Citarum River is so special that the Citarum Watershed and its water must be restored immediately. The government then launched the Citarum program under the name Citarum Harum which has the target of making the Citarum clean again so that the water upstream can be drunk (Haryadi et al., 2020; Husrin et al., 2022; Mustofa et al., 2021). This fact received attention from the central government, on February 22, 2022, President Joko Widodo visited the upstream area of the Citarum River, namely Situ Cisanti in Tarumajaya Village, Kertasari District, Bandung Regency. President Joko Widodo's visit was a form of government action, namely the Citarum Watershed Rehabilitation Movement, which has started since February 1, 2018.

The Citarum Watershed Rehabilitation Movement program, which serves as the foundation for accelerated efforts to control pollution and damage in the watershed, was inaugurated through Presidential Regulation No. 15/2018 on March 15, 2018, with the signature of President Joko Widodo. An integral part of the Citarum Harum Program, the project is scheduled to last for seven years, as revealed by Andri and Aziz (2021). The existence of the regulation reflects the government's seriousness and commitment in tackling the various problems plaguing the Citarum watershed.

One aspect of the strategy to accelerate the control of the Citarum watershed is through the development of a tourism village around the Situ Cisanti area, Tarumajaya Village. The concept of tourism village development, as explained by Pearce, can be interpreted as a process that emphasizes efforts to improve and develop the tourism potential of the village (Pearce, 2016). More specifically, the development of tourism villages is interpreted as a series of

efforts to perfect and improve tourist facilities, with the aim of meeting the needs of visiting tourists. This effort is an integral part of the government's systematic measures to provide holistic solutions to the complex problems involving the Citarum watershed, while creating positive impacts on the local economy and the welfare of local communities.

However, efforts to control pollution and damage to the Citarum watershed seem to be carried out only by the government, while the participation of the local community is still not significantly visible, even though community involvement or participation is a form of responsibility of every citizen in defending their country. Defending the country does not always have to be interpreted as facing enemies from outside, but also a commitment to face the threat of damage to nature and environmental ecosystems, because natural damage is a real threat to the country.

Community participation is part of the community empowerment process to meet the needs or overcome the problems experienced by the community. The form of community participation in the development of tourist villages is one of the important trips in tourism development in Indonesia. Regulation of the Minister of Culture and Tourism Number: KM.18/HM.001/MKP/2011 concerning Guidelines for the Independent Community Empowerment Program (PNPM) (2011) Tourism explains that a tourist village is "a form of integration between attractions, accommodation and supporting facilities presented in a structure of community life that blends with the prevailing procedures and traditions". Therefore, this research was conducted with the aim of identifying Community Involvement in Tourism Village Development to Support the Restoration of the Citarum River Watershed in the Upper Citarum Area. This research is expected to contribute to the environment of communication science by mapping how the community of the situ cisanti neighborhood communicates in the context of participation in the development of tourist villages in the region.

The previous relevant research was conducted by Palimbungga (2018) with the title Community Involvement in Tourism Development in Tabalansu Tourism Village, Papua. Based on the results of the discussion and analysis of the research, it is known that the form of community participation in tourism development in Tablanusu Village includes the planning, implementation and supervision stages. At the planning stage, the Tablanusu community has been able to communicate but is limited. The form of local community participation in Tablanusu Village at the implementation stage is divided into two, namely the implementation of participation related to programs designed by the government and community participation in the informal sector. Another study was conducted by Ulum and Dewi (2021) with the title Community Participation in the Development of Gamplong Tourism Village. The results of the field findings show that the community participates in real terms through labor and property and not in real terms through ideas. In addition, the level of community participation in planning and implementation is considered less than optimal, while in the utilization of results and evaluation is quite optimal. The field findings also reveal that the influencing factor is the overall involvement of the community. It is

Citarum Watershed Restoration through Community Involvement and Tourism Village Development

Upaya Restorasi DAS Citarum melalui Keterlibatan Masyarakat dan Pengembangan Desa Wisata

hoped that the community will receive consistent training and get a clearer division of roles.

#### Methods

This research was conducted over a period of six months, starting from March to August 2022. The research location was situated around Situ Cisanti in Tarumajaya Village, Kertasari, Bandung Regency. This study employed a qualitative method with a case study approach. The aim was not merely to examine 'what' (what) the object of study was but to have a more comprehensive and in-depth understanding of 'how' and 'why' the object occurred and formed as a particular case. The required data included the participation and implementation of creative tourism activities carried out by the local community.

Situ Cisanti is a lake that collects water from various springs on the surrounding mountains. The overflowing water from Situ Cisanti forms the Citarum River, which flows to the Java Sea, passing through 13 cities and regencies. Over time, the upstream area of the Citarum River began to be inhabited by a growing population, leading to deforestation and the conversion of natural forests into horticultural plantations or tree logging without replanting, resulting in deforestation. Moreover, the Citarum River Basin changed its function into a waste disposal site and human settlement along the river, making it one of the most polluted rivers in the world. The Situ Cisanti area, as the upstream of the Citarum River, attracted attention from both the central and regional governments to restore its functions. Various efforts were made by the government, but it seemed that these efforts were carried out solely by the government, with limited community involvement. However, the participation of the community is essential in restoring the Citarum River Basin. Based on this, the researcher was interested in examining the role of the community in assisting the development of Situ Cisanti through the implementation of creative tourism.

Primary data were obtained through non-participant observation of the community around Situ Cisanti and interviews with the Head of Tarumajaya Village, the Director of BUMDes Tarumajaya, community leaders, youth leaders, and members of the community involved in creative tourism activities around Situ Cisanti. On the other hand, secondary data were obtained through a literature review of policy documents and previous research related to the development of creative tourism and community involvement. The data were analyzed using a qualitative descriptive method. The data collected from the field were examined, classified by type, and analyzed to draw comprehensive conclusions through stages that included data reduction, data presentation, and conclusion drawing or verification.

Observation, which involved observing the activities of the government, especially the Tarumajaya Village Government and its community, in supporting the development of tourism in the area around Situ Cisanti. Interviews, which involved conducting interviews with the Head of Tarumajaya Village, Director of BUMDes Tarumajaya, community leaders, and youth activists in Tarumajaya Village. The questions during the interviews developed based on the responses of the interviewees, aiming to gather in-depth information related to the research. Document analysis, which involved analyzing the research results obtained from observation, interviews, and literature studies. This process was carried out to identify any data gaps and address them.

Once the data was collected, the researcher began to aggregate, organize, and classify it into manageable units. Aggregation involved abstracting specific details to identify general patterns in the data. The data could be organized chronologically, categorized, or grouped into typologies. Data analysis was conducted throughout the research, starting from data collection in the field and continuing after all data was gathered or the fieldwork was completed. Even after all the data was collected, the researcher continued to refine or reinforce new data related to the identified categories. The researcher compiled a communicative and easily readable report that described a phenomenon or social unit clearly, facilitating the reader's understanding of all essential information. The report was expected to immerse the reader in the case situation under study.

#### **Results and Discussion**

In 2022, the Human Development Index (HDI) of Kertasari Subdistrict was ranked 31 out of 32 subdistricts in Bandung Regency. The development of tourism villages was a program initiated by the Bandung Regency Government. Through tourism villages, the aim was to support the achievement of sustainable development goals (Hadian et al., 2021). The development of tourism villages in Kertasari Subdistrict was aligned and integrated with the Citarum Harum program to restore the Citarum River Basin, making its water drinkable by the year 2050. The upstream of the Citarum River was located at Situ Cisanti, now marked with the Kilometer 0 Monument of Citarum. Situ Cisanti is a spring located at the foot of Mount Wayang, administratively situated in Tarumajaya Village, Kertasari Subdistrict, Bandung Regency, West Java. Situ Cisanti was formed approximately 500 years before the Common Era. Its water flows to form the Citarum River, which later feeds the Saguling, Cirata, and Jatiluhur reservoirs, covering a length of 3,332 kilometers and an area of 8,779 square kilometers, passing through 13 administrative regions of regencies/cities in West Java.

Naturally, Situ Cisanti is surrounded by three mountains: Mount Wayang as the water source, Mount Rakutak, the Malabar Mountains, Bukit Bedil, and Mount Kendang, which form the natural boundary between Bandung Regency and Garut Regency, with several tea plantations in the PTPN VIII Pangalengan area. In the distance, behind Mount Kendang, one can find Mount Papandayan and Mount Jampang, which are part of Garut Regency's administration. The Situ Cisanti area, covering a total area of 10 hectares, has an average depth of 2.5 meters. There are seven springs in the Situ Cisanti area, including Pangsiraman, Cikoleberes, Cikawedukan, Cikahuripan, Cisadane, Cihaniwung, and Cisanti springs. The water in Situ Cisanti is sometimes not very clear due to the presence of a lot of green moss, which is utilized by many locals for selling to fishing enthusiasts.

Citarum Watershed Restoration through Community Involvement and Tourism Village Development

Upaya Restorasi DAS Citarum melalui Keterlibatan Masyarakat dan Pengembangan Desa Wisata

The community directly involved in the development of creative tourism in Situ Cisanti is the community of Tarumajaya Village. The majority of the residents in Tarumajaya Village are indigenous people, with a population of 15,176 individuals, consisting of 7,445 males and 7,731 females. The majority of the Tarumajaya Village community is engaged in various livelihoods, such as entrepreneurship, civil service, private employment, and farming.

The Tarumajaya Village Government has declared itself as Tarumajaya Tourism Village, offering a rural natural ambiance surrounded by mountains and tea plantations. Tarumajaya Tourism Village is located in the southern part of Bandung Regency, precisely in Tarumajaya Village, Kertasari Subdistrict, at an altitude of 1500-1800 meters above sea level. Tarumajaya Village has tourist destinations that can be visited by local and foreign tourists, including: 1. Situ Cisanti tourist destination (0 KM Citarum), 2. Bukit Paesan, 3. PAKAWA Pine Forest, 4. Village Education Tourist Park (TAWIDES), 5. AGP Mini Forest Bongkor, 6. President Jokowi Mini Forest (Citarum Mini Forest).

In the development of Tourism Villages, Tarumajaya Village follows the concept of the Five (5) A's, which are accessibility, accommodation, attraction, activities, amenities, and ancillary services. Accessibility refers to the level of ease with which a tourist destination can be reached by tourists (Sugiama, 2014). It involves the ease of access to the tourist destination and the necessary facilities and infrastructure required for tourists to reach the destination, such as the condition of roads, local transportation, routes, or travel patterns.

Regarding accessibility, the travel time from Bandung City to Tarumajaya Village takes about 2-3 hours, depending on traffic conditions. The roads leading to Tarumajaya Village are generally in good condition, as most of the roads in Kertasari Subdistrict have been cemented or asphalted. However, the winding and hilly nature of the roads, with an average width of 5 meters, can be a challenge, especially for large tourist buses (12 meters long and 2.5 meters wide). The public transportation available is the Ciparay - Santosa route that passes through Tarumaja Village.



Figure 1: Location map of Tarumajaya Village (source: maps.google.com, 2023)

Accommodation pertains to the ease of finding suitable, safe, comfortable, clean, and sanitary lodging. Accommodation in tourism villages differs from other destinations. In tourism villages, accommodation facilities typically consist of camping grounds, villas, or lodges. In Tarumajaya Village, there are currently no hotels, and only a few residents offer home-stay accommodations with rates ranging from Rp 150,000 to Rp 300,000.

Attraction refers to everything that can attract tourists to visit a destination. It can be natural resources or beauty provided by nature with its unique features. Attractions can also include local culture and heritage, such as art, history, religion, local customs, governance systems, and community traditions. The Citarum River's upstream area, Situ Cisanti, is surrounded by myths originating from local folklore, such as the "magical" water. In one corner of Situ Cisanti, there is a pool-like cavity about 1.5 meters deep, with clear and pure water believed to have healing properties. It is believed that anyone who bathes in this pool will be cured of their ailments and stay forever young. Nearby this pool-like cavity is a small hut containing a tomb. However, it is not an actual grave but a monument to Dipati Ukur, the Bupati (Regent) of Bandung in the 17th century. Situ Cisanti's area was often the place where Dipati Ukur would meditate and devise strategies to resist colonial rule. These aspects of Situ Cisanti become cultural and heritage attractions. Other cultural attractions, such as traditional martial arts (pencak silat) and dance performances, are also available. The monument of Dipati Ukur becomes part of the historical attraction. Additionally, there are also modernized attractions available. Other tourist destinations in Tarumajaya generally showcase the beauty of nature.

Activities refer to the activities offered in the tourist destination that will provide enjoyable experiences for tourists. Each tourist destination offers different activities according to its characteristics and unique features. In tourism villages, common activities involve participating in the daily life of the village community. In addition to this, the availability of facilities for engaging in fun and safe activities is also essential. In Tarumajaya Tourism Village, besides natural tourist destinations such as Situ Cisanti, Bukit Paesan, PAKAWA Pine Forest, TAWIDES, and Mini Forest, there are also educational tourism attractions, such as biogas education, conservation education, and Trif Coffee tourism.

In terms of amenities, various supporting facilities that tourists need in a tourist destination are provided. Amenities include diverse facilities to meet the needs of tourists, such as accommodations, food and beverage outlets, shopping areas, and other services like banks, ATMs, restaurants, as well as places selling handicrafts, souvenirs, and tourist information offices (Hadiwijoyo, 2012). What is currently not available in Tarumajaya Tourism Village are banks and ATMs. The nearest banks and ATMs are located in Cibeureum Village.

Regarding ancillary services, these are the support provided by organizations, including local governments, groups, or tourism destination managers, to organize tourism activities. Support from the central government, West Java provincial government, Bandung Regency government, and Kertasari Subdistrict government is quite strong. The central government supports through the issuance of Presidential Regulation Number 15 of 2018 concerning the

Citarum Watershed Restoration through Community Involvement and Tourism Village Development

Upaya Restorasi DAS Citarum melalui Keterlibatan Masyarakat dan Pengembangan Desa Wisata

Acceleration of Pollution Control and Damage to the Citarum River Basin Area. The West Java provincial government supports through its Citarum Harum program, while the Bandung Regency government has its Village Tourism program. All these policies directly or indirectly influence the integrated tourism development policy in Kertasari Subdistrict. Integrated tourism development here refers to the development of Tourism Villages, which includes the development of local micro, small, and medium enterprises (UMKM) products, as well as cultural literacy initiatives. These policies, in turn, are interconnected with the Citarum River Basin Restoration Program and contribute to the Human Development Index (HDI) of Kertasari Subdistrict in general and specifically to the HDI of Tarumajaya Village.

# The involvement of the community in the development of creative tourism in Tarumajaya Tourism Village

The involvement of the community in the development of creative tourism in Tarumajaya Tourism Village went through five stages: initial dialogue, strengthening support, conducting preliminary studies, decision-making, and action planning. The initial stage involved a dialogue, which began when there were policies from the Central Government, West Java Provincial Government, and Bandung Regency Government related to the Citarum Harum program. This program aimed to restore the natural function of the Citarum River so that it could be drinkable again by the year 2050. The program also reached the Tarumajaya Village government, inspiring them to support the successful implementation of the program. Moreover, the Tarumajaya Village is situated in the Citarum River Basin area, with the headwaters of the Citarum River located in Situ Cisanti.

The process of initial dialogue and decision-making by the Tarumajaya Village community was carried out effectively. Though there were initially pros and cons, the residents managed to overcome and resolve these conflicts. The development of creative tourism has a high potential when effective leadership is present. This is because a participatory planning approach tends to increase the need for effective leadership. Creative tourism development usually involves various stakeholders, each having different views and aspirations on how the activities should be developed in their respective areas. Therefore, the goals set by different stakeholders in terms of what they want to achieve from the participatory planning process tend to conflict.

The second stage was strengthening support, explaining the mechanism of support from the Tarumajaya Village community in their participation in the development of creative tourism in Situ Cisanti. Some of the support received by the Tarumajaya community, in collaboration with various stakeholders, included: 1) the village government as the area's administrative owner, 2) local residents who provided home stays for tourists visiting Situ Cisanti for economic reasons, and 3) collaboration with Universitas Padjadjaran for the development of creative tourism.

The third stage involved conducting preliminary studies. The involvement of the local community from the beginning was a good start for the participatory process of the community and the government as the main managers of Cisanti. This also marked an open and fruitful dialogue process. This stage aimed to better understand the current economic, political, and social situation of the local community. This is important as it determines the extent to which local community participation can be effective in each context, especially concerning how the local community perceives the participatory process and the constraints posed by existing political, economic, or cultural forces. This included community surveys, interviews with local "initiators and pioneers," and focus groups with residents and/or practitioners. The main task might include identifying the needs and desires perceived by the local community, who are the main leaders of development, etc.

The final stage was the development of an action plan. In this phase, creative tourism managers and the community worked together to create an action plan based on joint decisions regarding the scope of desired creative tourism development in the respective area. This stage can also be interpreted as an effort to detail several plans according to their respective tasks. The community's participation in the development of the action plan is related to their role as the indigenous community. Being the community where Situ Cisanti is located, their task is to describe matters related to the socio-cultural environment around Situ Cisanti. Additionally, the action plan includes their readiness to help local community workers clean up Situ, clean up the area, and maintain the village roads.

Situ Cisanti area is under the authority of Perhutani and TNI. Long before it became busy as it is now, the area around Situ Cisanti was dense forest. However, over time, the residents started clearing land for farming, even up to the mountain's peak. One example is Mount Rakutak, whose slopes are still used for agriculture by the locals. The pine forest area around Situ Cisanti is also the result of land restoration, as the area was previously in poor condition.

#### Implementation of Creative Tourism in Tarumajaya Tourism Village

Basically, the involvement of the village community did not arise spontaneously. The involvement of the Tarumajaya Village community in the development of creative tourism cannot be separated from the initiative of the Village Head of Tarumajaya and its officials. On the other hand, youth and community leaders also have initiatives to develop the village but need to communicate with the village authorities. The initiative of the village authorities with representatives of the community resulted in awareness and understanding, namely that community participation in the development of Tarumajaya Tourism Village has economic value for the community. Thus, the primary implementation is related to tourism supporting areas associated with the economy.

Community participation related to the economic aspect is related to how community members obtain benefits from tourism management, such as job opportunities and business opportunities. The utilization of tourism by the community includes food and beverages, coffee, souvenirs, and homestays owned by local residents. The maximum utilization of creative tourism includes the recruitment of daily labor, construction workers, food and beverage businesses, coffee businesses, culinary businesses, souvenir businesses, parking businesses,

Citarum Watershed Restoration through Community Involvement and Tourism Village Development

Upaya Restorasi DAS Citarum melalui Keterlibatan Masyarakat dan Pengembangan Desa Wisata

and motorcycle taxi services. The total number of people involved in the management of creative tourism until 2021 was 95 people, including job opportunities and business opportunities.

Meanwhile, the people who take advantage of business opportunities in the tourist area are members of the community who are economically more capable of utilizing their businesses. Most creative business actors in Situ Cisanti use their own capital. Male involvement in creative tourism includes coffee businesses, souvenir businesses, parking businesses, and motorcycle taxi services. Meanwhile, women are more involved in food and beverage businesses (F&B Business), while construction workers are relatively evenly distributed between males and females.

Not all data on community involvement in the development of Tarumajaya Tourism Village is recorded; many parties are involved in the implementation of participation in creative tourism in Cisanti, especially those behind the scenes. Of course, all those involved as tourism managers come from Tarumajaya residents. People involved in creative tourism activities tend to have specific skills and abilities required, such as construction workers and cleaning workers who are officially contracted by the government.

Creative tourism in the Situ Cisanti area and Tarumajaya Tourism Village, in general, also involves women who take advantage of job and business opportunities. The role of creative tourism from a gender perspective is also explained, indicating that creative tourism can create fair gender division of labor, increase income, boost confidence, and adopt women's leadership roles in local political arenas. This condition is different from the typical rural community structure, where the elderly and men hold higher roles and social status compared to women.

In addition to food and beverage businesses, there is also the Sapoci coffee business. This coffee has become a typical souvenir of Situ Cisanti because the coffee plants grow around Mount Wayang. Thus, when Sapoci coffee was proposed as a typical souvenir of Cisanti, other managers, especially the government, provided freedom and even financial assistance to the coffee entrepreneurs in Cisanti.

The existence of this coffee business was highly appreciated by the Tarumajaya Village government, where through Sapoci coffee, the village was very serious about promoting local participation as it proved to help the community's economy. Sapoci coffee is also widely marketed to various regions and becomes a source of pride. Moreover, open communication between entrepreneurs and the village government has helped in the further development of Sapoci coffee.

Furthermore, the initiative to maintain the quality and develop Sapoci coffee has also diversified and developed creative tourism in Cisanti. Consequently, various efforts in processing Sapoci coffee as a typical souvenir of Situ Cisanti have impacted the welfare of the community, especially their economy.

Evidence of the success of Sapoci coffee business is the establishment of coffee shops in the middle of the village. This is something rarely found in other rural communities. These popular coffee shops sell at affordable prices and are not part of the village culture. Therefore, it is reasonable that their presence is more common in urban areas, targeting urban communities. On the other hand, there is another souvenir business in Cisanti, namely the sale of wayang golek in the form of dolls. Besides generating economic profits, they also participate in developing creative tourism in Situ Cisanti.

Another business that also plays a role in developing creative tourism in the Situ Cisanti area is the sale of snacks and souvenirs at the Village-Owned Business Entity (BUMDES) store. Foods such as opak (fine rice crackers), rengginang (coarse rice crackers), cassava chips, sweet potato chips, and others are also traded at the BUMDES store in the Cisanti area. This effort is a contribution from the Tarumajaya residents because the entire process comes from them. From the raw materials to the cooking and packaging processes, they are all sourced from the efforts of the Tarumajaya villagers. As a result, this has an impact on the rural economy.

Other participations related to the economy are the parking attendants and ticket office clerks. This means that in the process of community participation, some of the Tarumajaya villagers are involved as parking attendants and ticket office clerks at Cisanti. For the parking attendants, it is recommended to divide eight people into two blocks: one block for parking motorcycles and the other for parking cars. Meanwhile, there are two people in the ticket office. All these workers are native inhabitants of Tarumajaya.

The Village Tourism Awareness Group (Pokdarwis) in Tarumajaya Village was formed based on the ideas of the community and the Tarumajaya Village Government. The activities of Pokdarwis in Tarumajaya Village are quite active. Regularly, the Pokdarwis in Tarumajaya Village organize mutual cooperation to arrange roads and potential areas to become tourist objects.

In addition, the community, fully supported by the Tarumajaya Village Government, has launched the Conservation Education Tourism program. The main material in the Rural Nature Conservation Education Program is how to introduce environmentally conscious living. Tour guides for Conservation Education Tourism include environmental activists from the Bandung Regency.

The concept offered in Conservation Education Tourism is tourists mingling with the villagers while learning about rural nature conservation. One example of participants in Conservation Education Tourism is SMP Semi Palar (Junior High School). In its curriculum, SMP Semi Palar implements Project-Based Learning. With the presence of Conservation Education Tourism, students of SMP Semi Palar in Tarumajaya Tourism Village learn together with the village community and the Tarumajaya Village Officials, directly led by the Head of Tarumajaya Village, about managing community-based tourism and environment. The Conservation Education Tourism package usually lasts between 3 to 4 days.

Citarum Watershed Restoration through Community Involvement and Tourism Village Development

Upaya Restorasi DAS Citarum melalui Keterlibatan Masyarakat dan Pengembangan Desa Wisata

Other educational tours conducted in Tarumajaya Tourism Village include the Trif Coffee Educational Tour, where participants can learn about the management process of Arabica coffee from Mount Wayang. The education covers everything from seed planting, cultivation, maintenance, harvesting, processing, hulling, to brewing. The Coffee Education Tour package required a duration of 2 days. Besides having economic value from the coffee beans, coffee trees are also classified as hardwood plants capable of protecting the soil from erosion threats. Thus, coffee trees, besides having economic value, also become part of environmental conservation.

The Biogas Educational Tour developed by Tarumajaya Tourism Village aims to share knowledge on how to utilize livestock waste as gas fuel for cooking and household lighting. During the biogas education, participants can follow the presentation of the processing stages until it becomes energy while enjoying fresh milk squeezed directly by the participants themselves.

In addition to nature and educational tourism, Tarumaja Village also revives and develops cultural tourism. Pencak Silat, a martial art heritage passed down from ancestors, is performed at the tourism object Bukit Paesan. The Pencak Silat there has a unique cultural value called Usik Gunung Wayang. Bukit Paesan itself has a natural landscape with extensive tea plantations. To surround it, there is a wooden bridge that curves like a compass.

The seriousness of the Tarumajaya Village Government, supported by various Tarumajaya Village communities, in building and developing the Tourism Village, is appreciated by the Department of Tourism and Culture of Bandung Regency. Tarumajaya Village received an award in the category of Champion of Pilot Tourism Village. The award ceremony took place on December 22, 2022, at the Cultural Building in Soreang. The award ceremony was part of the launching ceremony for the 2023 Calendar of Events by the Department of Tourism of Bandung Regency. In this event, the Department of Tourism of Bandung Regency presented awards and accolades to 10 out of 50 nominated villages in various Tourism Village categories.

Thus, the participation of the local community in the implementation process of creative tourism development in Situ Cisanti involved active engagement in food and beverage businesses, coffee businesses, snack businesses, parking attendants, ticket office clerks, village-owned businesses (BUMDES), ojek businesses, and lodging businesses. Furthermore, the development of creative tourism can reflect the community's well-being by enriching their welfare, happiness, and quality of life, which is beneficial for their health. People involved in the development of creative tourism in Situ Cisanti seemed happier and friendlier when interacting with foreigners who come to their place (McCabe & Diekmann, 2015). However, this area will require further research.

The participation of the local community must be linked to the economic benefits of creative tourism and the preservation of the natural environment. One fundamental justification for the development of creative tourism, as opposed to other conventional forms of tourism, is that the creative tourism approach explicitly acknowledges that the key to sustaining broader benefits from creative tourism is to properly preserve its resource base. Activities that do not consider their impact on the natural environment will ultimately not be sustainable, as the creative tourism industry will no longer be able to provide high-quality creative tourism products that meet the needs of tourists. Connecting the economic benefits of creative tourism with conservation helps ensure that this interdependence is recognized and properly accounted for in the planning and management of creative tourism.

### Conclusion

The process of developing Tarumajaya Tourism Village must prioritize two aspects: environmental preservation and economic value for the well-being of the community in order to support the improvement of the Human Development Index (HDI). Therefore, the next planning stage involves making efforts to strengthen moral and material support, especially from the government. Strengthening support is also carried out through a preliminary study process involving academics and experts from universities and government institutions. Lastly, the planning stage is conducted by creating an action plan through detailed task allocation, focusing on participatory stages in its implementation. Implementation in the economy is done by selling products such as goods and services to tourists, such as coffee, wayang golek souvenirs, culinary products, parking spaces, ojek services, and others. Participation in the economy is the core of participation that has a tangible impact on the economy and is expected to bring well-being health to the community of Tarumajaya and Village. Recommendations to related parties, namely, for the government to improve the quality of human resources and build tourism infrastructure that is still lacking, while for managers there needs to be good cooperation between the government as a facilitator, and the local community to work together so that the arrival of tourists and all tourism activities that develop in Tarumajaya Village. In addition, it is necessary to be able to conduct training to the local community, especially in managing small and medium enterprises (SMEs).

#### References

- Andri, Y., & Aziz, Y. M. A. (2021). Strategi Kebijakan Lingkungan Program Citarum Harum Di Kabupaten Bandung. *Ministrate: Jurnal Birokrasi Dan Pemerintahan Daerah*, 3(2). https://doi.org/10.15575/jbpd.v3i2.13561
- Anwar, R. K., Sjoraida, D. F., & Rahman, M. T. (2019). Socializing fragrant river program as a strategy for introducing environmental literacy to the upper citarum community. *Journal of Environmental Management and Tourism*, 10(3), 597–612. https://doi.org/10.14505/jemt.v10.3(35).14
- Bashar Bhuiyan, A., Mokhtar, M. B., Toriman, M. E., Gasim, M. B., Ta, G. C., Elfithri, R., & Razman, M. R. (2013). The environmental risk and water pollution: A review from the river basins around the world. In *American-Eurasian Journal of Sustainable Agriculture* (Vol. 7, Issue 2).

Citarum Watershed Restoration through Community Involvement and Tourism Village Development

Upaya Restorasi DAS Citarum melalui Keterlibatan Masyarakat dan Pengembangan Desa Wisata

- Belinawati, R. A. P., Soesilo, T. E. B., Asteria, D., & Harmain, R. (2018). Sustainability: Citarum River, government role on the face of SDGs (water and sanitation). E3S Web of Conferences, 52. https://doi.org/10.1051/e3sconf/20185200038
- Fridayani, H. D. (2020). The Government's Role in Facing SDGs 2030 Citarum River Clean-up Program, Indonesia: An Analysis. *Journal of Governance* and Public Policy, 7(1). https://doi.org/10.18196/jgpp.71120
- Fulazzaky, M. A. (2014). Challenges of integrated water resources management in Indonesia. In *Water (Switzerland)* (Vol. 6, Issue 7). https://doi.org/10.3390/w6072000
- Hadian, M. S. D., Suganda, B. R., Khadijah, U. L. S., & Anwar, R. K. (2021). River development as a sustainable geo-tourism with a participatory stakeholder approach. *Geojournal of Tourism and Geosites*, 34(1). https://doi.org/10.30892/gtg.34120-631
- Hadiwijoyo, S. S. (2012). Perencanaan pariwisata perdesaan berbasis masyarakat (Sebuah Pendekatan Konsep). In *Graha Ilmu : Yogyakarta*.
- Haryadi, J., Nastiti, A. S., & Krismono. (2020). Fisheries technology innovation supports the Citarum Harum program. *IOP Conference Series: Earth and Environmental Science*, 521(1). https://doi.org/10.1088/1755-1315/521/1/012010
- Husrin, S., Hidayat, H., Rahmadya, A., Aisyah, S., Hurley, R., Braaten, H. F. V., & Olsen, M. (2022). Riverine Plastic Monitoring during the Rainy Season in the Citarum Estuary of Muara Gembong. *IOP Conference Series: Earth and Environmental Science*, 950(1). https://doi.org/10.1088/1755-1315/950/1/012059
- McCabe, S., & Diekmann, A. (2015). The rights to tourism: Reflections on social tourism and human rights. *Tourism Recreation Research*, 40(2). https://doi.org/10.1080/02508281.2015.1049022
- Mustofa, M. U., Brahmantika, S. G. S., & Tarigan, B. R. (2021). Military and Water Governance Practices: A Theoretical Analysis of the Involvement of Indonesian National Armed Forces in the Citarum Harum Project in West Java, Indonesia. *Journal of Asian Social Science Research*, 3(1). https://doi.org/10.15575/jassr.v3i1.46
- Pearce, D. G. (2016). Chapter 1. Alternative Tourism: Concepts, Classifications, and Questions. In *Tourism Alternatives*. https://doi.org/10.9783/9781512807462-005
- Pranoto, W. A., & Subari, D. M. (2019). Study of Sediment Transport Discharges of Citarum River, West Java in Laboratory. *IOP Conference Series: Materials Science and Engineering*, 650(1). https://doi.org/10.1088/1757-899X/650/1/012059
- Pujiningrum Palimbunga, I. (2018). KETERLIBATAN MASYARAKAT DALAM PENGEMBANGAN PARIWISATA DI DESA WISATA TABALANSU, PAPUA. Jurnal Master Pariwisata (JUMPA). https://doi.org/10.24843/jumpa.2018.v05.i01.p10

- Riyadi, B. S., Alhamda, S., Airlambang, S., Anggreiny, R., Anggara, A. T., & Sudaryat. (2020). Environmental damage due to hazardous and toxic pollution: A case study of citarum river, west java, Indonesia. *International Journal of Criminology and Sociology*, 9. https://doi.org/10.6000/1929-4409.2020.09.211
- Sunardi, S., Fadilah, K., Istiqomah, N., Ariyani, M., Malini, D. M., Yolanda, S., Putri, A., & Ratningsih, N. (2021). Citarum River Water Pollution and Stress Responses in The Tolerant and Sensitive Fish. *Indonesian Journal* of Limnology, 2(1). https://doi.org/10.51264/inajl.v2i1.10
- Taswadi, T. (2020). Painting Waste with Communities on the Edge of Citarum River, Indonesia. https://doi.org/10.2991/assehr.k.200321.045
- Ulum, S., & Dewi, S. A. (2021). PARTISIPASI MASYARAKAT DALAM PENGEMBANGAN DESA WISATA GAMPLONG. Jurnal Manajemen Publik & Kebijakan Publik (JMPKP), 3(1). https://doi.org/10.36085/jmpkp.v3i1.1408
- Yokosawa, R., & Mizunoya, T. (2022). Improving Water Quality in the Citarum River through Economic Policy Approaches. *Sustainability* (*Switzerland*), 14(9). https://doi.org/10.3390/su14095038