

Co-Producing Sustainable Solutions in Indigenous Communities Through Scientific Tourism: A Case Study on Baduy Village in Banten

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Article History	Abstract
Accepted: 19 June 2024 Revised: 19 July 2024 Published: 30 June 2024	<p><i>Sustainable development is a common agenda of various world countries including Indonesia. This development is applied in various sectors, one of which is tourism, known as the sustainable tourism development approach. This concept supports tourism activities that pay attention to natural, cultural, and environmental aspects in their management. One form of alternative tourism that can support sustainability is scientific tourism. This form of tourism is usually carried out by researchers who travel in the context of research or data collection. One of the locations that has become the destination of scientific tourism is Baduy Village. Various studies were conducted with respondents in the form of the Baduy tribe community, both with a co-production approach and through an extractive approach. The high intensity of research conducted for various interests, while the benefits of the research are not necessarily felt by the Baduy community. It is feared that it will have a negative impact on the Baduy community, especially in the socio-cultural aspect. In anticipation of this, efforts to control tourism activities need to be made. One of the ways that can be taken is the provision of boundary parties that ensure that the interaction between the community and tourists is safe, which can be in the form of tour guides and the formation of boundary organizations. The role of boundary parties is to provide access and provide education services by adjusting to the needs of researchers.</i></p> <p>Keywords: Baduy community, scientific tourism, sustainable tourism.</p>



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INTRODUCTION

Sustainable development is one of the development concepts introduced through the global action of Sustainable Development Goals (SDGs) campaigned by the United Nations and supported by various countries (<https://www.sdg2030indonesia.org/>). Meanwhile, the definition of sustainable, according to the United Nations General Assembly (1987) is development that is carried out to meet current needs without reducing the ability of future generations to meet their own needs. The concept of sustainable development is considered a solution to conventional development that tends to be exploratory and pays little attention to the availability of future generations. Therefore, this concept has gained support from many countries.

The concept of sustainable development is adopted in the development of various sectors, one of which is tourism. In the tourism sector, sustainable development is also one of

the most ideal development approaches and is known as sustainable tourism. Sustainable tourism development is defined as an approach to tourism activities that takes into account natural, cultural, and environmental aspects in its management. UNWTO (1996) states that the occurrence of excessive pressure on these three aspects if not managed properly, will cause various damage and other negative impacts. Some of the issues that arise related to the failure of the implementation of sustainable tourism are the occurrence of over tourism; pollution of air, water, and soil; exploitation and damage to natural resources; the occurrence of noise that disturbs local residents; and changes in the character and culture of local residents. Through the concept of sustainable tourism development, it is expected that these negative things can be suppressed. In the planning, implementation and receiving the benefits of tourism activities, managers can pay serious attention to the condition of tourism resources based on the balance of environmental, socio-cultural and economic aspects.

In order to achieve sustainable tourism, there are various different ways carried out by tourism actors. In Indonesia, the sustainable tourism approach is carried out in various forms of alternative tourism such as the development of ecotourism in conservation areas and the development of community-based tourism in rural areas or customary areas. One form of sustainable tourism that is widely practiced but not well recognized is scientific tourism. Scientific tourism is also known as research tourism, where the purpose of tourism is to conduct research or collect data. Rosyidie, A (2012) explains scientific tourism as a form of tourism that includes science objectives in the trip, such as trips to observe or study the diversity of flora and fauna in the forest; trips to observe the behavior of animals or marine life, observe the stars and the universe in observatories, science and technology gallery visits, geological visits or trips to volcanic areas, etc. In Green & Wood (2015), one form of scientific tourism offered by the Australian Wildlife Tourism and Research Network (AWTRN) is involvement in research activities carried out with several requirements, namely scientific, tourism staff with a scientific background, or staff who do not have a scientific background but work with scientific, or non-tourism scientific. In this context, scientific tourism is more about research activities. In this paper, scientific tourism will focus on tourism activities carried out by researchers with the aim of collecting data. This form of scientific tourism is almost inseparable from the activities of academics, including students, lecturers, research staff at study centers, and other researchers. While this type of travel is mostly carried out by researchers who collect data in the field such as to rural areas for research on anthropology, sociology and other sciences that want to know the lives of rural communities and to forest areas for research related to the diversity of living things, the existence of indigenous peoples, etc., this type of travel is carried out by researchers who collect data in the field.

In Indonesia, this type of travel for research is very easy to find. Almost all universities even require every student to conduct field research, not only as material for preparing a thesis/final project, but also to fulfill course assignments. The duration of research for course needs is usually enough to be done in one day if the location is affordable, while for final assignments or other advanced research requires relatively longer time. Of the various types of areas that researchers go to, rural areas, new areas, areas with preserved local wisdom, or even conflict areas often attract a lot of attention.

Baduy Village is one of the locations that is often used as a research location or scientific tourism. Baduy Village is a place where one of the Sundanese ethnic groups lives, namely in the Kendeng Mountains, Kanekes Village, Leuwidamar District, Lebak Regency, Banten. The Baduy tribe consists of "Baduy Luar" and "Baduy Dalam". The difference between the two groups lies in the level of enforcement of customary rules. "Baduy Dalam" fully implements customary rules, while "Baduy Luar" becomes a buffer between "Baduy Dalam" and cultures outside Baduy (Zidny, R, & Eilks, I; 2018). The Baduy community includes indigenous peoples who live in harmony with nature and away from modern things. Their uniqueness attracts many tourists to come, stay with the community, and learn about the daily life of indigenous people. The meeting between the community locality and tourism that brings in many people from outside with various cultures and interests certainly raises various threats, one of which is from the socio-cultural aspect. This paper will discuss the development of scientific tourism in Baduy Village and its sustainability. Sustainability in this context is based on the impact received by the community in Baduy Village.

RESEARCH METHOD

The research method is descriptive qualitative. The methods of data collection are done through literature studies and interviews. A literature review is done by reading books and similar research to find the theory that best fits the research topic and object of study, namely the theory of scientific tourism, the concept of tourism in indigenous communities, and the concept of tourism in Baduy Village. Literature studies were also carried out using different websites as a source of definitions and supporting information. The interview method was used to determine the tourism activity in Baduy Village. The data collected is then analyzed by comparing the facts found about tourism in Baduy with the theory of scientific tourism and the concept of scientific tourism in indigenous communities.

RESULT AND DISCUSSION

Christine N. Buzinde, David Manuel-Navarrete & Tod Swanson (2019) in a journal published by the Journal of Sustainable Tourism, conducted research on the relationship between scientific tourism and sustainability. The research was conducted in the Kichwa indigenous community living in the Ecuadorian Amazon. The indigenous community has become one of the places of learning for various academics, especially those studying the diversity of biota and culture in indigenous villages. The local community is usually involved as a provider of information or help in providing housing and rides for researchers who come from outside the area. Seeing this concept, two people who were part of the educated Kichwa community, an American academic who grew up in the Ecuadorian Amazon, and his wife pioneered the Andes and Amazon Field School (aka. Iyarina). They see the potential of scientific research conducted in indigenous villages as a form of tourism, namely scientific tourism, where researchers are tourists and the community as hosts.

They have the view that most scientific tourism is not in favor of the host because it is only oriented to the needs of tourists, who in this case are researchers. Indigenous peoples are communities that still hold tightly to local wisdom and local wisdom belonging to indigenous communities. Meanwhile, many researchers come from western countries. In conducting

research, tourists tend to only extract knowledge without really involving the community fully. The relationship between researchers and indigenous peoples and the resulting relationship patterns are depicted in Figure 1. Sustainability outcomes are aligned with high horizontal and intercultural relationships centered on knowledge co-production, rather than hierarchical multicultural relationships informed by knowledge extraction.

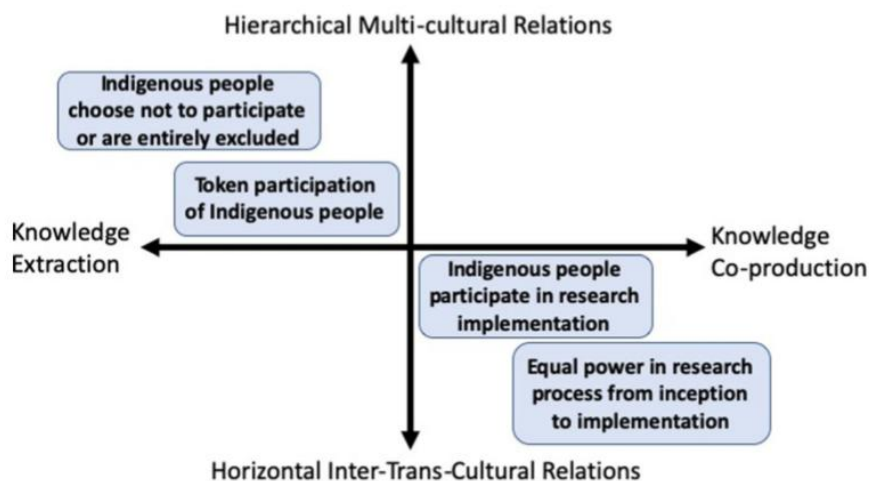


Figure 1. Pattern of Scientific Tourism: The Context of Field Activities Occurring in Indigenous Communities
Source: Buzinde et al (2020)

In the figure there are 4 types of relationships, 2 in the upper left quadrant and 2 in the lower right. The x-axis illustrates the level of “extraction” carried out by researchers, the higher up the relationship the more extractive it is, while the lower down the relationship the more balanced the role of researchers and indigenous peoples. Meanwhile, the y-axis describes the pattern of relationships that occur between researchers and indigenous peoples. The further to the left the relationship is, the further away from horizontal it is from vertical, while the further to the right it is, the more horizontal it is.

In order to anticipate the overexploitation of scientific tourism, the Ecuadorian field school is a boundary organization. Field schools (Figure 2) act as boundary organizations between academia and indigenous peoples to promote synergies, exchanges and co-generated sustainability outcomes.

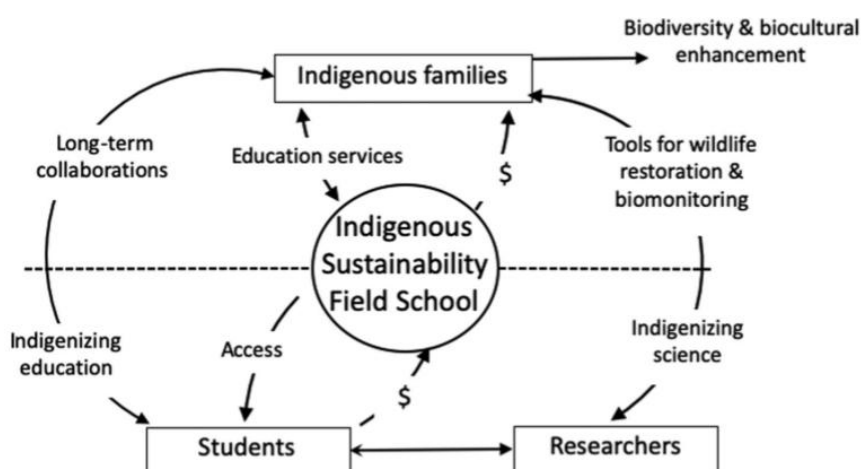


Figure 2. Indigenous Sustainability Field School Model - Boundary Organization.
Source: Buzinde et al (2020)

In order to anticipate the overexploitation of scientific tourism, the Ecuadorian field school is a boundary organization. The field school serves as a bridge between the protection of indigenous communities and the fulfillment of the needs of scientific researchers in these communities. The role of the field school consists of opening access between researchers and indigenous communities and providing educational services using a variety of prepared media. The scheme is considered to play a very good role for both parties. Through the implementation of this scheme, scientific tourism in this community is considered more sustainable due to the reduction of risk of loss and the growth of quality benefits.

One form of scientific tourism in indigenous communities in Indonesia occurs in Baduy villages. Baduy Village has long been known as a learning and research destination because of the indigenous people who hold tightly to all the customary rules applied. The first form of tourism that appeared was scientific tourism conducted by researchers. This is as stated by Slocum et al (2015) that scientists who act as researchers are often the first foreign visitors to live in rural areas or remote areas, sometimes done to form ecotourism projects or community-based tourism projects aimed at alleviating community poverty. These schemes are usually carried out in collaboration between local NGOs, local communities or local governments. The concept more or less also occurs in Baduy Village, where the uniqueness of the Baduy Tribe community in holding tight to customary rules in the midst of modernization and globalization.

“Baduy Luar” is one example of an indigenous community that interacts with many tourists for many years until finally they are influenced by cultures outside their customary rules. Out of necessity, the customary leader softens some rules to maintain their survival. “Baduy Luar” are allowed to use electronic goods, soap, and even motorized vehicles. These things were customary prohibitions in the beginning. However, for “Baduy Dalam”, who initially rejected the arrival of foreigners, the customary rules are still well maintained (Dewantara, 2019).

In the beginning, many anthropologist researchers conducted research by living with the community in Baduy Village. In the past, “Baduy Dalam” could not be accessed by migrants or foreigners. Meanwhile, “Baduy Luar” could receive visits in very limited numbers and with assistance from local parties (Musadad, 2012). However, currently, the types of research conducted in Baduy Village are very diverse. This affects the condition of Baduy community slowly. “Baduy Luar” has openly accepted general tourists with economic purposes, this can be seen from the production and buying and selling of souvenirs deliberately carried out by the “Baduy Luar” community.

At present, “Baduy Dalam” has been visited by many tourists, both in the form of researchers and general tourists. It is even easy for tourists to find a guide who can help them get to the “Baduy Dalam” settlement. This condition is reminiscent of “Baduy Luar”, which experienced the development of tourism first. If no control is done, it does not mean that “Baduy Dalam” will also experience the same thing. This opinion is supported by Ikeguchi's statement (2008), when cultural contact occurs, individuals will recognize new values outside their values and culture, so they can internalize and develop them in their behavior. Based on this opinion, the type of tourists who visit will affect the type of change that occurs. If all Baduy people gradually experience changes, it can threaten their sustainability.

The Role of Boundary Work in Tourism Activities in Baduy Village

As mentioned earlier, the types of tourists who visit are no longer limited to research purposes, so control or regulation is very necessary. One of the parties that bridge the implementation of tourism activities is the existence of a guide who escorts tourists. The guide usually comes from the “Baduy Luar” community who has long interacted with non-Baduy communities. According to Abdillah (2020), during a tourist visit to “Baduy Dalam” for 1 day and 1 night, the guide who accompanied him actively provided information about customary rules and asked tourists to follow what was instructed. However, in the field, there were still some tourists who used their cellphones to document some locations and “Baduy Dalam” community. By using disciplined guides, things that violate the rules can be avoided.

Meanwhile, scientific tourism in Baduy has also been very diverse. Some studies show that the research process is done by living side by side with Baduy community directly, data collection is done by doing observation and natural interaction in daily life. Meanwhile, some studies are conducted by using questionnaires and asking Baduy community as respondents guided by researchers and accompanied by local people to be able to answer every question. When viewed from the chart of data collection types in scientific tourism and the role of researchers, the conditions in Baduy are still very diverse.

The highest level of extraction can be seen from filling out the questionnaire openly asking the community to answer several questions in a structured manner with the help of local people to bridge language differences. The second level of extraction can also be seen from the research by filling out questionnaires or answering some open interview questions by involving local people, for example “Baduy Luar”, to mobilize “Baduy Luar” and “Baduy Dalam” according to the need of research. This approach makes Baduy community used to be an informant or information provider by getting a reward. The reward in this case can consist of various forms, one of which is to fulfill the needs of visiting researcher tourists.

Meanwhile, the co-production scheme is also found in the form of anthropological research that requires the help of local people to gain access. The purpose of the research was originally for the academic purpose of knowing the way of life of an ethnic group so that it can be used as a consideration in approaching development or other programs from the government/other parties. However, the type of tourism that developed for the first time actually triggered curiosity and interest of various parties to visit. Thus, many researches with various topics and purposes were conducted in Baduy Village, with a live-in scheme. Very frequent intensity has resulted in changes in the acceptance of the Baduy community, especially that of Baduy Luar. This is also starting to be seen in “Baduy Dalam”. Various researches are actually conducted to reveal what is in Baduy community, not many researches are aimed at solving the problems of Baduy community. So, in terms of the benefits of scientific tourism for Baduy community, it is still limited to economic benefits. Meanwhile, from the socio-cultural aspect, researchers actually learn a lot from the local community.

In the context of research, the role of boundary work can be applied to bridge the “data collection process” and “data provision” as in Ecuador Field School. The organization can consist of “Baduy Luar” who are used to interacting with non-Baduy, traditional leaders, anthropologists who are in charge of ensuring that the approach scheme is appropriate, and various academics with backgrounds according to the needs of the type of research. The

organization will provide basic information related to the life of Baduy community. Various information that has been provided by the Baduy community before is collected and becomes one of the trusted sources of information, so researchers do not need to extract it directly. The organization can facilitate sharing or discussion session with some community representatives only. Discussion sessions are usually conducted to juxtapose indigenous knowledge with scientific knowledge, as in the field school in Ecuador. This is also considered based on research schemes that compare scientific theories with the daily lives of indigenous communities. Meanwhile, the economic benefits of this activity can be given to the community in a form that is tailored to their needs. This also avoids the perception that the arrival of foreigners is the arrival of money for them, anticipating money oriented research activities that risk inappropriate research results.

CONCLUSION

Baduy Village is one of the scientific tourism destination locations due to the existence of indigenous people, namely the Baduy tribe, who live in unity with nature. Local wisdom in the form of a way of life, customary rules and various customary knowledge that lives in the Baduy community becomes a uniqueness and attraction for academics to conduct research. This turns out to trigger the growth of tourism which has an impact on cultural changes for some Baduy people. In addition, various forms of research by making the Baduy community as research informants through various levels of approaches are feared to cause irritation for the local community. It is risky to cause the change of culture or life value of the community.

In controlling the negative impact of tourism, implementing boundary work is considered to be helpful in bridging the needs of both parties. Researchers still get the data they need, get discussion facilities related to things that need to be explored more deeply, but still maintain that the Baduy community is not exploited as a producer of information that they may not need, or directly exposed to various characteristics of tourists. The boundary work can be applied through guides who become the boundary party, as well as boundary organizations that bridge the "access" between researchers and Baduy community, and play a role in providing "educational services" according to the needs of researchers. This concept can be developed by involving various parties needed such as representatives of indigenous people, customary leaders, NGOs, anthropologists and academics, as well as local governments. This method is only one of various alternatives that can be done to control the negative impact of the high interaction between researchers and communities with extractive approaches.

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