

SUSTAINABLE DEVELOPMENT PLANNING OF ECO-PARK KOTO KATIK AREA IN PADANG PANJANG CITY

PERENCANAAN PEMBANGUNAN BERKELANJUTAN KAWASAN ECOPARK KOTO KATIK DI KOTA PADANG PANJANG

¹*Sukma Yudistira*

¹Program Studi Doktor Kajian Pariwisata, Universitas Gadjah Mada, Yogyakarta

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ABSTRACT

Globally, ecotourism are struggling in implementing sustainable tourism principles. It is therefore important to identify source of challenges at planning process to avoid recurring problems in the future. Such a problema is apparent in the Koto Katik Ecopark in Padang Panjang, West Sumatera, despite government efforts utilizes the enormous opportunity for ecotourism development This paper evaluates the principles of sustainable tourism development adopted in the ecopark planning process. This research is based descriptive qualitative analysis data was collected through legal documents related to the planning process of Koto Katik Ecopark development. The data analysis includes description of the koto katik eco-park area, the potential for regional development, and examination of how sustainable tourism attributes exist. This study analyzes critical issues of ecotourism sustainable developmen, objectives, principles, and characteristics of the koto katik eco-park and their comparison with relevant theories and ultimately reveals the extent to which the principles of sustainable tourism development principles are followed. The result of the study shows that planning does not meet the principles of sustainable tourism development, such as the absence of conservation programs, design of tourism activities, distribution of stakeholder power, in planning, managing, and supervising ecotourism areas, analyzing the capabilities and expertise of local human resources, as well as supporting infrastructure and technology.

Keywords: *ecotourism; eco-park; tourism planning; sustainable tourism development.*

ABSTRAK

Secara global, ekowisata berjuang untuk melaksanakan prinsip-prinsip pariwisata yang berkelanjutan. Oleh karena itu, pentingnya untuk melakukan identifikasi sumber-sumber tantangan dalam proses perencanaan untuk menghindari masalah yang berulang ke depan. Misalnya, masalah yang muncul di Koto Katik Ecopark di Padang Panjang, Sumatera Barat, dapat menjadi upaya pemerintah untuk menggunakan kesempatan yang besar dalam pengembangan ekowisata. Tulisan ini ditujukan untuk mengevaluasi implementasi prinsip pariwisata berkelanjutan dalam proses perencanaan kawasan *ecopark* ini. Penelitian ini menggunakan metode analisis deskriptif kualitatif. Data dikumpulkan melalui dokumen-dokumen resmi yang terkait dengan ekowisata yang tersedia di internet. Analisis data, dengan mendeskripsikan kawasan *ecopark* koto katik, potensi pembangunan Kawasan, dan mengevaluasi implementasi atribut pariwisata berkelanjutan. Studi ini menganalisis isu-isu kritis;

*Corresponding author: sukma.yudistira@mail.ugm.ac.id.

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seperti tujuan, prinsip dan karakteristik ecopark koto katik dan perbandingannya dengan teori yang relevan, dapat diungkap seberapa besar penerapan prinsip pembangunan pariwisata berkelanjutan pada proses perencanaan. Hasil penelitian menunjukkan perencanaan yang belum memenuhi kaidah pembangunan pariwisata berkelanjutan seperti belum adanya program koservasi, desain kegiatan pariwisata, distribusi kekuasaan pemangku kepentingan, dalam perencanaan, pengelolaan, dan pengawasan Kawasan ekowisata, analisa kemampuan dan keahlian SDM lokal, serta infrastruktur pendukung dan teknologi.

Kata Kunci: *ekowisata; eco-park; perencanaan pariwisata; pembangunan pariwisata berkelanjutan.*

INTRODUCTION

Deteriorating socio-economic conditions in rural areas have become a continuing problem for developed and developing countries over the last few decades (Wang & Man, 2019). The use of agricultural land to tourism, for example, has been seen in many places as a viable way to solve socio-economic problems. As in the Indonesia, apart of Bali, there is a trend to use rice field, farm, livestock as an interested tourism attraction by providing natural view, local community life, culinary, and photo spot. It is aided by the diversity of ecosystems in developing nations, which serves as a natural platform for developing ecotourism activities. (D. A. Fennell & Dowling, 2003).

The city of Padang Panjang, a small town located in West Sumatra, Indonesia, with the potential for natural beauty, agriculture, and the best producer of traditional dairy cow's milk in the region, has begun to take advantage of this natural tourism opportunity. This city has been being famous to be visited before Indonesian independence as the transit city and education city by the most people from the mid and north Sumatera. The City Government has conducted a planning for a new tourism destination called Eco-park Koto Katik Area. This new destination is planned to support the tourism program, which is also one of the development and revenue priorities in this city and

contributing to reach the city tourist visits target of 1 million by 2023 (Dinas Pariwisata Kota Padang Panjang, 2019). In addition, the planning of this new tourism destination is also following one of the visions of the city of Padang Panjang, namely "Improving Regional Leading Economic Growth Based on Sustainable Development" (Dinas Pariwisata Kota Padang Panjang, 2019).

Besides, Eco-park area destination model is thought to be one of the models for tourism and recreation areas that have a high visitation rate (Indira Anggraini & Gunawan, 2021; Zamzami et al., 2021) and improve the economy of the surrounding community while preserving nature (Indira Anggraini & Gunawan, 2021). Similarly, the feasibility study of the Koto Katik Eco-Park area claim that this eco-park will have a direct and indirect positive impact on the surrounding community, including Padang Panjang City in general, such as increasing the income of SMEs, opening new jobs, and indirectly it will happen (Lico, 2019). In addition, In November 2020, the Koto Katik Eco-Park emerged as an investment opportunity for Padang Panjang City Investment Office programs.

However, some challenges need to be considered by ecotourism development stakeholders, namely compliance the principles of sustainable tourism development as a mandatory requirement for an ecotourism. It is due to, in Indonesia, obstacles in ecotourism development cannot be separated from the low quality of tourism human resources, both horizontally and vertically (Avenzora, 2016). Besides, in practice, ecotourism is underdeveloped due to sectoral ego clashes and overlapping regulations (Priherdityo, 2015). From 51 national parks in indonesia (Avenzora, 2016; Priherdityo, 2015), there is only 20 that is sustained and well organized due to less optimalization that is cause by the unclear regulations regarding the use of national parks or conservation areas as tourism areas, less public awareness in the use of natural resources, less institutional support, and less community motivation, both locally and nationally (Priherdityo, 2015).

In line, Fiji Islands also find it challenging to regulate the balance between the tourism business and nature conservation due to political instability (D. A. Fennell & Dowling, 2003). In Australia, ecotourism Protected areas, conflicts of interest exist in the application of ecotourism principles in many ways because ecotourism can be interpreted as a means to sustain tourism in particular, as a capitalist system in general, and as a famous marketing label (D. A. Fennell & Dowling, 2003). In addition, challenges also come from tourists who are more interested in consuming the experience while visiting rather than sustainable travel. As evidenced by various ecotourism websites where service providers use various solid attributes that focus on the ecotourism experience base, the ecotourism cornerstone attributes under more broad themes of hedonistic as pleasure (D. Fennell, 2008). In addition, the issue of privatization is also a concern in the practice of developing ecotourism in developing countries, as recommended by Fennell not to privatize parks and protected areas or joint property.

While, in the Koto Katik Ecopark, community's silence can also be interpreted that they do not understand the concept of sustainable tourism development. It is proved by the CVM analysis in the feasibility study document that describe the reasons of local community accept the development of Koto katik Ecopark are only demanding on how they can get direct benefit economically and ignoring the planning process (Lico, 2019). They just need realization than a plan and are expected to have a direct positive impact on them, the ecopark does not damage the rice fields, they have opportunity to sell and work to obtain additional income, and they does not feel afraid or disturbed if one day their place is crowded (Lico, 2019). It will make sustainability principles are challenging to apply because local ecological knowledge and environmental sensitivities are threatened, and communities lose their understanding and involvement of what is needed to maintain ecological systems (Taurro et al., 2021).

Reflecting these issues, the development planning of the Koto Katik Eco-park Area in Padang Panjang City that is built on the rational of increasing local government revenue by increasing the number of visitors, using public capital through investment scheme, and low quality of tourism human resources can lead the ecopark becoming a mass tourism due to domination of its economic potential intention. Therefore, the Koto Katik Ecopark Area planning need to be evaluated to determine whether a perfect principles of sustainable tourism development have been compliance. The research focused on planning of (1) sustainability of natural and human resources, (2) fair distribution of power, benefits and costs among tourism development stakeholder groups, and (3) empowerment of residents in controlling the development process. These three elements can reveal the true direction of Koto Katik Ecopark Area planning.

Likewise, there is a little number of evaluation research on ecotourism on planning stage than implementation stage. This research fill this gap by revealing the practice of ecotourism planning and generate recommendation that can be used to minimize and avoid the same problem in the future implementation.

This research refer the concept of sustainable tourism, which cannot be interpreted narrowly. Sustainable tourism is an adaptive paradigm that accepts various approaches to particular circumstances or perspectives (Hunter, 1997) and is not only about the environment. Therefore, The implementation of sustainable tourism begins with the application of sustainable development to the tourism sector. Sustainable tourism, according to sustainable development, is tourism development that meets the demands of the present without endangering future generations' ability to meet their own needs. (Y. Lee et al., 2012; Liburd & Edwards, n.d.) by minimizing the cons of tourism and maximizing the proponents of tourism (Guzzo et al., 2013; Y. Lee et al., 2012) and take into full account current and future economic, social, and environmental implications, as well as the needs

of tourism, industry, the environment, and host communities (Global Sustainable Tourism Council (GSTC) (2020); (World Tourism Organization, 2004)

Sustainable tourism should make the best use of environmental resources, which are critical components of tourism development, maintain critical ecological processes, and contribute to the preservation of natural heritage and biodiversity; respect the socio-cultural authenticity of the host community, preserve built and living cultural heritage, and traditional values, and contribute to intercultural understanding, ensure long-term economic viability, provide fair distribution of socioeconomic benefits to all stakeholders, such as permanent employment and income-generating opportunities, as well as social services for host communities, and contribute to poverty reduction (The Global Sustainable Tourism Council (GSTC) (2020); (World Tourism Organization, 2004)

Therefore, the principle of sustainable tourism development can be interpreted as developing sustainable tourism without damage the social and natural environment and providing a tremendous economic impact in the vicinity (Angelevska-najdeska & Rakicevik, 2012; Angelkova et al., 2012) by balancing environmental protection with job creation and livelihood enhancement (Sivesan, 2020) and incorporating a long-term perspective on resource exploitation (Amir et al., 2015) that supported by future trends in the tourism market (Mira et al., 2019). The solution for the sustainable development of natural areas is ecotourism (He & Wang, 2021; T. H. Lee et al., 2021) (Selkani, 2020). It is due to ecotourism is a low-effect, non-consumptive, and locally oriented form of nature-based tourism that is ethically managed to be low impact, non-consumptive, and locally oriented (control, benefits and scale) (D. Fennell, 2008). So, there is an alignment of goals between sustainable tourism development and ecotourism development.

Besides, it is also supported by the ecotourism concept that is a travel to relatively undisturbed or unpolluted natural places with the express intention of studying, ad-

miring, and enjoying the environment and its flora and fauna, as well as any extant cultural representations (both past and current) in the area (Ceballos-Lascurain, 1987). Specifically, Ecotourism can be defined as environmentally responsible travel to relatively untouched natural areas, travel to enjoy, study, and appreciate nature, conservation promotion, combining sustainable development with natural environments, and the use of natural assets and resources in ecologically sensitive areas to create unique visitor experiences with minimal impact on the areas (Dorobantu, 2012).

Therefore, ecotourism can be an intriguing alternative for protected area management since it helps to integrate preservation goals with economic and social development goals. Ecotourism encompasses all forms of nature-oriented tourism in which the tourist's primary objective is to observe and appreciate nature, as well as traditional cultures that thrive in natural areas. It incorporates local and indigenous populations into its design, development, and operation, and so benefits their well-being. It advocates for the preservation of natural regions (Selkani, 2020).

Based on this explanation, it can be identified that there are principles of sustainable tourism that exist in ecotourism, namely resource use, consumption control, biodiversity, long-term tourism planning, local economy, involvement of local communities, stakeholder and public involvement, staff training, marketing, research (Blamey, 2001). If categorized, ecotourism consists of natural diversity, cultural diversity, stakeholder participation, and infrastructure support (Pasape et al., 2015). (Blamey, 2001) also offers a sustainability continuum with degrees of fragile sustainability or sustainability that needs the whole capital stock, which is made up of natural, manufactured, human, moral, and cultural stocks, to remain stable throughout time. Weak sustainability, adjusted or herein as a result of the problematic nature of the premise of perfect replacement, and strong sustainability, necessitated - that natural capital remains constant in aggregation, but one source of natural capital may



Figure 1.
Map of the Koto Katik Eco-park Area Plan in Padang Panjang City
Source: Feasibility Study of Koto Katik Eco-park, 2009

replace another, subject to specific ecological constraints and extraordinary sustainability, or correlated with a steady-state economy defined by zero economic progress and zero population growth, and partially motivated by thermodynamic limits.

Thus, choosing ecotourism as a form of destination can have a minor negative impact on the environment and local culture in addition to helping the local economy. Some essential things that are a concern in ecotourism development can be concluded, namely; (1) limiting the number of visitors, (2) nature and cultural conservation tourism and education, and (3) helping to improve the local economy. These three point are the critical issues that need to be evaluated in the Koto Katik Ecopark Area Planning.

This research used descriptive qualitative method using the secondary data analysis document method, namely documents of Koto Katik Ecopark Area development planning and regulation documents of national government and local government and relevant research literature. The data collection technique collects all legal documents and state regulations related to Koto Katik Ecopark area planning on the internet. The data is then analyzed, starting from the feasibility study document to the strategic plan. This data was grouped according to the category of regulations and planning documents. The following data analysis started from explaining the importance of developing the koto katik eco-park area, and investigating the ex-

istence of ecotourism attributes. In the end, an analysis of critical issues is carried out, such as the objectives, principles, and characteristics of the koto katik eco-park and their comparison with relevant theories related to ecotourism and concludes to what extent the principles of sustainable tourism development existed in the development planning process of the koto katik eco-park.

DISCUSSION

From the perspective of the ecotourism principles proposed by (Blamey, 2001; Pasape et al., 2015), the results and discussion focused on analyzing and reviewing the conservation of natural diversity and its control, conservation of local culture, participation of stakeholders and local communities, economic viability, and feasibility of local human resources. It is aligned with the main components of sustainable tourism and ecotourism development, namely nature, environment, economy, and the involvement of local communities and stakeholders to find their presence in the planning process of the Koto katik eco-park area.

The description of Padang Panjang's city in this subtitle is summarized from the two planning documents: the Padang Panjang City Regional Medium-Term Development Plan (RPJMD) document for 2018-2023 and Feasibility Study Document for the Development of the Koto Katik Eco-Park area. In these two documents, it is generally explained that the City of Padang Panjang is a small city lo-

cated in the Province of West Sumatra, Indonesia, which is economically very strategic because it is located on a regional route that connects the main big cities in this province, namely the City of Padang and the City of Bukittinggi, Payakumbuh City, Solok City and Batusangkar City (Regional Medium-Term Development Plan (RPJMD) of Padang Panjang City 2018-2023, 2019). It is also on the crossing route connecting West Sumatra Province with North Sumatra Province and Riau Province (Regional Medium-Term Development Plan (RPJMD) of Padang Panjang City 2018-2023, 2019). This city has easy accessibility, not only because of the position of the city, which is a trajectory of significant cities in the province of West Sumatra but also easy access from the gates outside the province and also from abroad to enter the province, namely through the Minangkabau International Airport (BIM) (Lico, 2019).

From the land description, the hilly area of Padang Panjang City (Regional Medium Term Development Plan (RPJMD) of Padang Panjang City 2018-2023, 2019) has advantageous of nature and cultural-based tourism destination with panoramic natural advantages and cool air, as well as environmental and cultural diversity, and unspoiled culture (Lico, 2019). In addition, Padang Panjang City is one of the cities in West Sumatra Province which has relatively many tourism objects and attractions, not only because of its hilly natural beauty and surrounded by three mountains (Mount Singgalang, Mount Marapi, and Mount Tandikek) but also because of cultural and historical objects and attractions (sacred city, culinary, and Minangkabau documentation center). Various West Sumatran specialties can be found in many places, such as markets and other culinary spots (Lico, 2019).

The Koto Katik Eco-park area is located in Landuh village, Koto Katik Village, East Padang Panjang District, Padang Panjang City, West Sumatra Province (Lico, 2019). It is part of the City Green Open Space allocation (Regional Medium-Term Development Plan (RPJMD) City Padang Panjang Years 2018-2023, 2019).

Development Planning for the Koto Katik Eco-park Area

Based on the Padang Panjang City Medium Term Development Plan (RPJMD) period of 2018-2023, the Padang Panjang City government targets tourist visits this city to reach 1 million in 2023 and Koto katik Eco-park Area is assumed to contribute for 2% or 20,000 visitors (Lico, 2019). As a follow-up to the city government's mission, through the Padang Panjang City Tourism Office, a program of revamping tourism destinations and the development of new tourism destinations was held, one of which was the construction of the Koto Katik Eco-park Area. Because the Padang Panjang City Government will use alternative financing using an investment system, a feasibility study for this area was carried out by the Padang Panjang City Investment Office and PTSP in 2019 and published as an investment opportunity Padang Panjang City on November 14, 2019.

Based on the Feasibility Study Document for the Development of the Koto Katik Eco-park Area, the development of this area is claimed will be using nature and culture-based tourism models or ecotourism (Lico, 2019) by utilizing forest areas, agricultural land, livestock, and social and cultural elements in it. This element will be packaged into an ecotourism educational tour that makes the eco-park as an interactive vehicle with an integrated farming format while combining it with nature and the culture of the people in this village. This concept mainly introduces a dairy farming system starting from the subsystem on-farm (cultivation) to off-farm (processing) combined with community farming culture in Koto Katik Village (Lico, 2019). The feasibility study recommendations generally state that the Koto Katik Eco-Park area development is feasible and can bring in many tourists, opening up new jobs and growing SMEs. In addition, the feasibility study also stated that this destination was welcomed by stakeholders with a community-based scheme and aimed at nature, cultural and social conservation in the development plan area of Eco-park and improving

the economy of the surrounding community (Lico, 2019).

Furthermore, in the feasibility study document, following the purpose of writing this paper, the main aspects of sustainable tourism in ecotourism development in the planning process of the Koto Katik Eco-park Area are discussed in detail as follows:

Review of Natural Diversity Conservation and Consumption Control

Referring to the feasibility study, the irregular-shaped eco-park area has an area of $\pm 3,2850$ Ha ($\pm 32\,850$ m²), still in natural form with various slopes ranging from relatively flat to steep hills. There are still no buildings inside (in the form of vacant land). The flat land area that will be occupied for building and family recreation area is $\pm 7,000$ m² or $\pm 21\%$ of the total land area. This land will be developed for family-scale recreation and tourism areas (such as picnic areas, restaurants, farms, and flower gardens), with many visitors.

The rest ($\pm 79\%$) is forested and rocky land which is generally steep which can only be used for recreation, which does not change the existing form and land cover. This area is claimed to be able to be developed with particular interest types of tourism (such as forest trekking, rock climbing, and viewing) with a limited number of visitors at the same time. This limitation on the number of visitors (or the relatively low carrying capacity limit of this rocky area) maintains the initial landform and vegetation (not damaged due to high visits). This form will be maintained along with its natural vegetation, especially those in the hills and the sloping part in the area's north. Maintaining this condition is also to maintain the stability of water availability so that the needs for recreational and non-recreational activities, especially dairy farming, can be met.

The planning document predicts several negative impacts of this tourism activity. There will be an increasing amount of waste generated from tourism activities. In detail, the number of tourists is targeted at 10,000

visitors. With this number, it is expected to produce as much as 20-tons of waste every year. From this amount, organic waste will be dominated by 19.61 tons (98%), and the rest is divided into paper, plastic, wood, and glass waste. To overcome this, the feasibility study recommends that there must be good waste management. The other negative impact is noise due to transportation equipment, visitor activities, and odors originating from cattle farming activities. Environmental pollution due to noise and odors originating from cattle farms must be minimized by the circulation and layout of tourism activities (by design). At the same time, local regulations related to the management of eco-park areas can later overcome these negative impacts.

In addition, planning document also recommends that, because landslides usually occur due to slope factors, land cover, and rainfall, in areas with slopes above 25%, land management must be carried out that pays attention to soil conservation and does not become denuded or must remain vegetated following natural conditions. Therefore, the activities of the eco-park area are by not damaging and changing the natural ecological conditions in the initial area and adding facilities with the principle of harmony, improving the quality and benefits (education, recreation, etc.) of the area and its sustainability. Facilities and local concepts must also be designed based on environmentally friendly facilities (green facilities such as green buildings, green/eco drainage).

By reviewing this planning, it shows that developing eco-park areas, in general, ensures that most of the native nature in the area are maintained along with their impacts and controls. Impacts covered include garbage, noise, and odors.

The form of control is constructing a small area, constructing a waste management system, and the arrangement of the farm's location. For noise, no control is clearly explained. Hence, it could be stated that the planning analysis and consumption control are limited to are some of the most prevalent types of negative consequences harm to the

landscape, flora, and fauna caused by tourism activity (Hsu et al., 2020). There should be a missing analysis of how is the nature conservation program. Such as, locating the parking area that is far from the area and replace the access to the area with the natural based activity. For example trekking and walking.

Besides, the odor should not be included as the negative impact. It is included as the naturalness of the ecosystem. It is a part of the attraction since the ecopark use cattle farm as the main attraction. As in the ecotourism concept, the nature and existing ecosystem in this area are used as the tourism attraction and aimed for nature preservation for the next generation (D. Fennell, 2008). So, it could be a solid reference to include the nature conservation analysis and program in the planning document since activities take place directly in natural regions with little resilience to the pressures of usage (Hsu et al., 2020). In addition, without a proper conservation analysis and with the raising of demand and supply in the ecopark, parks and protected areas, as well as vulnerable indigenous/ethnic communities, are under increasing strain and are subject to change (Hsu et al., 2020).

Furthermore, for the nature conservation analysis and its program, environmental degradation and conservation are necessary to consider the character of flora and fauna and the types of tourism activities in this area (Pasape et al., 2015). Although there are particular areas for limiting the number of tourists in the feasibility study, unusual and uncontrolled tourist activities will impact the unsustainability of nature and the environment. It can be minimized by explaining the character of flora and fauna contained in the ecosystem. This explanation can also be used as a reference in determining the forms of tourism activities that are allowed for ecotourism purposes in this area. Tourists and organizers will be more concerned about their behavior and actions when knowing the character of flora and fauna and how to treat them. This kind of interaction is expected by the ecotourism concept, where there is a natural education process during tourist activi-

ties (Fennell, 2008; Fennell & Dowling, 2003; He & Wang, 2021; Lee et al., 2021)).

This action can also be categorized as controlling the use of nature and the environment apart from constructing a waste management system and building layout, following ecotourism and sustainable tourism development (Wearing & Neil, 1999). This control also impacts the sustainability of the ecotourism area itself because the attraction is the ecosystem itself. Therefore, the management of ecotourism areas and restrictions on tourism activities following the character of the ecosystem they have are an attempt to maintain natural diversity subject to natural conditions and rules or strong sustainability (Blamey, 2001). With this scheme, of course, no party will be harmed because it is mutually beneficial to each other (Amirudin & Kusuma, 2019). In addition, particular environmental indicators suggested and used in some cases involve reduced fuel and energy consumption, solid waste management, the purchase of recyclable and reusable goods, client and local education and information, the reduction of negative visual impacts through appropriate signage, and minimal impact on wildlife. (Hsu et al., 2020).

Besides, building planning also needs to pay attention to the sustainability of nature in this area (Hsu et al., 2020). The study results found that all buildings and supporting facilities also use an environmentally friendly concept. It is recommended to use green local materials as possible such as bamboo, cork, straw bales, recycled steel, reclaimed wood, etc and local decoration and architecture.

Moreover, determining the location and process of building construction needs to be added to this section by considering the forest area, agriculture, flora, and fauna. Building planning also needs to pay attention to its impact on the existing ecosystem apart from the shape and architecture of the building by minimizing their impact by not disturbing the environment, flora, and fauna such as crossing paths, foraging areas, and plant sources of animal native food to the ecosystem (Hsu et al., 2020). While under construction, noise and crowds due to development

activities will also impact the ecosystem. So, in building the facilities, it is essential to pay attention to the area, location, and construction process to maintain the ecosystem's sustainability.

To guarantee that tourism does not go beyond its sustainable basis, Understanding the factors that contribute to the provision of infrastructure for development, as well as the regulatory and institutional conditions for planning and managing ecotourism, is essential (Wearing & Neil, 1999). Limiting visitor numbers and the risk of environmental deterioration is a significant way of ensuring sustainability (Wearing & Neil, 1999). In this sense, ecotourism is a supply-led strategy, with visitor numbers determined by the environment's capacity (ability to support) rather than demand. So, in practice, without a progressive planning and policy framework, it is impossible to implement sustainability principles on a wide scale (Amirudin & Kusuma, 2019).

Review of Local Culture Preservation

Apart from nature, local culture is also the main element that is the concern of sustainable tourism (Fennell, 2008). Based on the findings in the feasibility study document, the conservation of local culture will be used as the attraction of this eco-park area. Although not precisely stated the type of culture in this area, the planning follows the rules of the original culture and invites the community to come back to know, learn and cultivate local culture to support the sustainable local culture of the Koto katik eco-park area.

Local culture, including local norms, based on ecotourism's objectives is preserving the culture and the cultural site (Pasape et al., 2015). Culture is a part that will be used as an object of education by tourists. Something will be interesting for tourists if it is unique and still pure local culture. Concerning the development planning of the koto katik eco-park, local culture is still not clearly described. By considering the majority's ethnicity, the culture to be introduced is Minangkabau culture. If using Minangkabau culture,

this area needs to find another uniqueness because this culture is also used as an attraction in the surrounding area of West Sumatra province in general. Such as, religious ceremony (*manyerakkan bareh kunyik*), language (minang language with local vocabularies and accent), art (*Lukah Gilo, Barzanji and Dabuih Ritual, batagak pangulu*), and technology and livelihood system (dairy cows and farmers). This characteristic will also become the local community's identity that can be used as a reference in developing an eco-park that will be presented as educational material to tourists (Hsu et al., 2020).

Seeing that this indigenous culture is no longer fully implemented in the social life of the local community, this cultural conservation process also needs to pay attention to the indicators of purity and readiness of the local community to return to implementing it in their social life. This conservation process will change the current pattern of social life that develops according to the needs and lifestyles of its time. Returning to the original culture needs to be considered and the continuity of social life and social irritations in the future. It needs to be studied more deeply in other studies. So, the local culture, such as the art of *Lukah Gilo, Barzanji and Dabuih Ritual*, social knowledge of a teacher social class, and social system that cannot be separated from the custom and Islam values, that will be conserved needs to considers the interests as a tourism attraction and the sustainability of local culture. This mutually beneficial relationship is the goal of ecotourism, and sustainable tourism (D. Fennell, 2008; Pasape et al., 2015), which can be said to include economic, environmental, and social interests with one of the indicators used to evaluate the socio-cultural issues of ecotourism is the continuation of traditional activities (Hsu et al., 2020).

The Role of Stakeholders and Local Communities

Based on the analysis results, the Contingent Valuation Method (CVM) (There is no valuation stated in the feasibility study) in the feasibility study found that the com-

munity, in general, supports the planning of the Koto Katik Eco-park area with the reason that they just need realization than a plan and are expected to have a direct positive impact on them, the ecopark does not damage the rice fields, they have opportunity to sell and work to obtain additional income, and they does not feel afraid or disturbed if one day their place is crowded (Lico, 2019). These reasons do not represent a good knowledge of local community about the ecotourism and sustainable tourism. The reasons are more focus on direct benefit in the form of generating income that can be generated from the existence of ecopark. There is no requirements of conservation and social preservation demanded by the local community. Therefore, the planners should involve in depth interview with local community leader, academician or expert in the planning process.

Moreover, the Feasibility study states that the development of this area will involve the local community as part of the development and management of this eco-park area, which is known as a form of community-based tourism. Aside from that, it is also stated that the role of the Padang Panjang city government is needed in preparing and improving the quality of the supporting facilities and workforce, especially those living around the eco-park area. Consequently, referring to the feasibility study, the eco-park area planning in Koto Katik Village will emphasize community involvement in regional tourism management, ensuring environmental sustainability, and focusing on culture and local wisdom.

Nevertheless, the role of local community in the planning and implementation should also be explained clearly in the form of community-based tourism. It is because the ecotourism should incorporates local and indigenous populations into its design, development, and operation, and so benefits their well-being as it advocates for the preservation of natural regions (Selkani, 2020). This is also make sure the sustainable principles of distribution of benefits fairly and proportionately. The role description is also need to be accepted by the all stakeholder.

Description of the local community, stated in the feasibility study, the Koto Katik Village, which has a reasonably high demographic bonus (population aged 15-64 years) with a proportion of the productive age population of 66.06%, will undoubtedly be very profitable, and is also expected to have a positive impact on economic development in Koto Katik Village. It is namely by making the level of population dependence, namely the level of the productive population which bears the non-productive population, is getting lower. The types of prospective work by the local people can be directly related to the needs of tourism activities and the management of the area and activities that are not directly related (such as transportation providers).

While, the Indonesian Central Bureau of Statistics (BPS) report that the productive age in the Padang Panjang City is 37,991 people or 67,47% (BPS, 2021). The open unemployment rate in 2020 is 7.22% which is dominated by high school graduates for 47.94% and Bachelors and Diplomas graduates for 25.68% (BPS, 2021). Due to the number of productive age is high, it can be interpreted that the unemployment productive age have sufficient education. It can support the development of Koto Katik ecopark.

Stakeholders in the koto katik eco-park area identified from the planning document consist of the Tourism Office, local communities, and investors. In planning this area, the role of local communities as stakeholders is unknown since the feasibility study is conducted by the third party. However the feasibility study claim the local community accept the development of ecopark in its CVM analysis, it does not show an active participation of local community. Furthermore, the emerged of ecopark development in investment office is only decided by local government. A regional development model in ecotourism should accommodates local community participation to have proper planning for maintaining agricultural land, nature, social and cultural activities as the tourist destination's attraction.

Meanwhile, the other stakeholder has a clear participation. In the feasibility study, the government, in this case, the Tourism Office, is recommended to facilitate community training and supporting infrastructure. Investors then have roles as funders and eco-park organizers. The planning will be successful if coordination and harmony in communication and cooperation in ecotourism management and services between the organizer and local communities (Pasape et al., 2015). Therefore, the planning should make a clear participation and flow of coordination of each stakeholder that is promulgated under the local government regulation. It can make sure appropriate shared power and benefits and legal basis for all the stakeholder to participate actively in planning, operation, and supervision.

However, what needs to be considered further is whether these relationships have power fairly distributed for each other. Because of the mix of external stakeholder perspectives and inadequate internal stakeholder interpretation, stakeholders themselves become a source of problems to the actual implementation of sustainable tourism (Ellis & Sheridan, 2014). Experts suggest a fair distribution in sustainable tourism development, especially local communities in planning, implementation, and supervision (Blamey, 2001; D. Fennell, 2008; Pasape et al., 2015). The statement in the feasibility study that the community gives permission as long as the eco-park applies the ecotourism principle has elements of planning and supervision. Meanwhile, the organizer is with the investors. The role of local communities as organizers needs to be explained in more detail to realize a fair distribution of power in the Koto Katik eco-park area. In the feasibility study, there has also been no further study or explanation of cooperation or management that the stakeholders will carry out together. Transparent consideration of the external and internal stakeholder interface may aid in addressing these problems in the community context. Projects where this occurs, may have a better probability of success (Ellis & Sheridan, 2014) because of one measure used

to evaluate the socio-cultural concerns of ecotourism, such as local people's engagement in planning and decision-making (Hsu et al., 2020).

In addition, as the successful ecotourism, such as in Mae Kampong Thailand, has charismatic, transformative leadership that has been so critical to the success of CBT which comes with a cost, namely that long-term success may now be excessively reliant on a unique type and degree of leadership (Kontogeorgopoulos et al., 2014). It is suggested that the management in ecotourism is not like a company but needs proper leadership, not only as a chairman in an organizational structure. The leadership runs on the CBT concept, which approaches the business term and dynamic approach (Kontogeorgopoulos et al., 2014).

In the feasibility study, there is a recommendation to use the Community Based Tourism scheme to improve the management of this area later. Suppose Community Based Tourism is to be used. In that case, the skills and knowledge of stakeholders need to be identified for the consistent application of sustainable tourism principles (Ellis & Sheridan, 2014) due to ability and knowledge also affect the quality of management and supervision ecotourism. Therefore, it is suggested that various capacity-building programs be implemented to improve stakeholders' knowledge and capacities. However, specific programs must consider the level of awareness and education of specific stakeholders to get the most remarkable results (Pasape et al., 2015).

Impact on Local Economy

Tourism expenditure is considered to have a significant ripple effect across all levels and sectors of a local economy (Wearing & Neil, 1999). At the same time, the economics of ecotourism are inextricably linked to the natural environment since economic sustainability is dependent on environmental sustainability (Hsu et al., 2020). By this relation, ecotourism is limited by the area condition, not the area's economic potential. Consequently, the economic impact forecast

should consider the minimal appropriate use of the area.

Insight the planning document, Eco-park development will impact Micro, Small and Medium Enterprises (SMEs) growth. It is in line with the increasing number of tourist visits in this village. Several types of businesses may develop, namely stalls, homestays, parking, and several creative businesses such as souvenirs. It is estimated that the amount of money circulating in this affected area, especially for workers, (Lico, 2019). It is also found as evidence that natural resources such as livestock and the manufacture of unique products. It is supported by the demographic bonus, which is explained as having implications for job creation for local communities. The local community also supports the reason of it can allow them to earn additional income from selling food, parking, and homestays (Lico, 2019).

Reviewing the feasibility study, which only focuses on the income generation potential, the significant difficulty faced by LDCs could appear in the interaction between people and conservation (World Tourism Organization, 2004). Theoretically, when sustainable tourism is utilized as a development tool for communities, the emphasis is on achieving rapid tourist development while also achieving long-term industry sustainability with extensive community benefits (World Tourism Organization, 2004). It is because the natural resources are commonly repurposed as tourist assets, or, at the very least, tourism contributes to education and conservation efforts. However, these natural resources are frequently the same ones that communities would prefer to employ to alleviate poverty (World Tourism Organization, 2004). It could be a dilemma in ecotourism development.

As ecotourism principles, there should be a balance of environment, social, and economy potential management reference given to investors or organizers through the law, local policy, or local communities supervision. It can be correlated to the principle of power distribution which is also inherent in economic principles for the balance of management and economic growth of local com-

munities. Specifically, the principle of ecotourism prioritizes improving the economy of local communities rather than higher and higher economic growth, which only focuses on economic potential (World Tourism Organization, 2004).

Furthermore, besides the focus on economic growth, providing the goods and services in the eco-park should also be considered due to tourist spending is much more spent outside the area of ecotourism. As a result, a significant impediment to any potential multiplier impact on income and employment (Hsu et al., 2020). The standards and specific economic indicators used for evaluation purposes include maximization of local expenditure, increase in local economic multipliers by reducing leakages of imported goods and services, training of locals for employment, local ownership of ecotourism ventures/services, local employment, and lodge purchases of local products (Hsu et al., 2020). It suggests that the economic impact of ecotourism should empower local products and services to generate more expenditure. This purpose has a strong relation to the skill of the local community and local community involvement.

Furthermore, promotion planning must be consistent with ecotourism principles and economic growth targets, as tourism is frequently promoted by the government or industry without a comprehensive strategy, without adequate attention to legal frameworks – such as determining whether planning and nature protection laws are adequate – and without consultation or inclusion of local communities, and effectively protected area management plans. It poses serious policy issues for the government (Wearing & Neil, 1999). In its planning, sustainable travel should above profit return intention (D. Fennell, 2008).

Hence, in ecotourism, economic principle planning should avoid consultation of corporatization with external consulting firms that attempt to meet funding body pricing points by providing community evaluations utilizing fast appraisal methodologies (Ellis & Sheridan, 2014).

Local Human Resources

The feasibility study also adds that this economic feasibility will not automatically have a positive impact on the economy without the participation of the Padang Panjang city government in preparing and improving the quality of the workforce, especially those living around the eco-park area. This principle is one of the determining indicators of sustainability. This staff training will provide quality service and a good tourist experience, increasing the number of visits and the sustainability (Hsu et al., 2020) of this eco-park koto katik later.

Furthermore, descriptions related to local communities' quality conditions and expertise that can be used for planning, implementation, and later monitoring have not been found in the planning documents. The condition of local HR is very important for synchronizing planned products and services at the destination with minimal expertise provided by local HR (Hsu et al., 2020). If the desired products and services are very different from the expertise of the local community, it will be difficult for the organizer. It will even employ workers from outside the area. It would violate the principles of eco-park sustainability (D. Fennell, 2008; Hsu et al., 2020).

Look at the educational background of the local community in the feasibility study document. Inevitably, the local community does not have the knowledge and experience in managing and providing services in tourism. This condition can be a planning reference in projecting the utilization and readiness of local human resources. It implies the need for the later organizer to conduct training, debriefing, and apprenticeships following tourism training procedures (Hsu et al., 2020). It is expected to be completed before implementing the eco-park koto katik as an indicator of the readiness of local human resources.

In addition to educational background, local people's occupations also need to be seen regarding their average income. If their future income from ecotourism is much higher than their current job, there will be a possibility of shifting people's professions to tourism and leaving their old professions. It is also very worrying because there will be community dependence only on tourism.

Indirectly it will also change their social life. However, the economy's dependency on only tourism has a remarkable positive impact on the local community behavior (Pizam, 1978). It can be dangerous because It has an impact on economic vulnerabilities that become the beginning of social conflicts in their countries, such as poverty, invariable employment opportunities, declining community welfare along with the abandonment of tourism in their country or tourism being taken over by large capital owners (Bernard & Cook, 2015).

Supporting Infrastructure

Some of the infrastructure planned is a waste management system following tourism development. The plan is also to open the southern ring line to capture opportunities for out-of-town tourists who will cross this route. From the east, tourists can catch opportunities from Solok, from the western tourists from the Payakumbuh area to Riau Province. Meanwhile, the fulfillment of basic needs is considered sufficient, such as electricity, clean water availability, telecommunication network, internet signal.

Constraints related to infrastructure faced stated in the feasibility study are, such as, the road to the less wide area and parking areas for visitor vehicles. Feasibility study recommends that it is necessary to consider alternatives to parking lots at locations not far from or ± 200 m away, such as in the Islamic Center tourism destination or other locations around the site. Another is the provision of land for parking visitors' vehicles around the current site which can accommodate ± 30 4-wheeled vehicles and 20 2-wheeled vehicles with a land area of ± 500 m².

With the area's hilly topography, there are obstacles in access and parking. While the road widening will, of course, use agricultural land around the area. It is recommended to use only existed parking lot in the other surrounding tourism destination as recommended by the feasibility study. While, the use of land for parking lot in the ecopark area can change a small part of the area however it is aimed to support access to the area. It still makes sustainability weak (D. Fennell, 2008).

Apart from the supporting infrastructure above, supporting infrastructure for nature and culture conservation and human resource development also needs to be established, such as flora and fauna information boards, traditional houses, community characters, and instructions during activities in the eco-park area. It is also a guide for tourists and becomes part of the education process in the eco-park area. In addition, this is also a control and reference for organizers and tourists to protect nature and local culture (Hsu et al., 2020). It

can also be realized with the help of technology such as a website as a reference for tourists before and during their visit. It is due to indications of the sustainability of nature-based tourist companies include the local economy, local population attitudes, natural resource conservation, company performance, human resources, regulations, and new technology. (Lee et al., 2021).

The recapitulation of evaluation of the Koto Katik Ecopark planning can be seen as follows:

Components	Planning	Recommendation(s)
Natural Diversity Conservation and Consumption Control	<ul style="list-style-type: none"> The distribution of area is planned for family recreation for 21% and ±79% is remain the existed nature. The form of control is constructing a small area, constructing a waste management system, and the arrangement of the farm's location 	<ul style="list-style-type: none"> consider the character of flora and fauna and the types of tourism activities determine the location and process of building construction by considering the forest area, agriculture, flora, and fauna
Local Culture Preservation	<ul style="list-style-type: none"> local culture is still not clearly described the planning only follows the rules of the original culture 	<ul style="list-style-type: none"> cultural conservation process also needs to pay attention especially the indicators of purity and readiness of the local community to return to implementing it in their social life
Stakeholders and Local Communities	<ul style="list-style-type: none"> emphasize community involvement in ecotourism management, ensuring and focusing on culture and local wisdom local community's roles as stakeholders and organizer is unknown 	<ul style="list-style-type: none"> the community-based tourism used that accommodates local community participation should describe in detail a clear participation and flow of coordination of each stakeholder is needed and promulgate under the local government regulation. Details of the role of local communities as organizers is needed to realize a fair distribution of power Planner should consider specific programs based on level of awareness and education of specific stakeholders
Local Economy	<ul style="list-style-type: none"> Eco-park development will impact Micro, Small and Medium Enterprises (SMEs) growth. It is in line with the increasing number of tourist visits in this village. Several types of businesses may develop, namely stalls, homestays, parking, and several creative businesses such as souvenirs. Opportunity for developing the product of natural resources such as livestock and the manufacture of local unique products. 	<ul style="list-style-type: none"> economic impact forecast should consider the minimal appropriate use of the area by creating the analysis of carrying capacity there should be a balance of environment, social, and economy potential management that is supported with a reference given to investors or organizers and issued under the law, local policy, or local communities supervision. The development should avoid consultation of corporatization with external consulting firms that attempt to meet funding body pricing points by providing community evaluations utilizing fast appraisal methodologies

Components	Planning	Recommendation(s)
Local Human Resources	<ul style="list-style-type: none"> • Local government preparing and improving the quality of the workforce, especially those living around the eco-park area. • descriptions related to local communities' quality conditions and expertise have not been found in the planning documents 	<ul style="list-style-type: none"> • analysis of the condition of local HR and synchronize planned products and services with minimal expertise provided by local HR in important for planners • details of the need for the later organizer to conduct training, debriefing, and apprenticeships following tourism training procedures is needed • identification of local people's occupations and average income is important. If their future income from ecotourism is much higher than their current job, there will be a possibility of shifting people's professions to tourism and leaving their old professions
Supporting Infrastructure	<ul style="list-style-type: none"> • Some of the infrastructure planned is a waste management system. • open the southern ring line to capture opportunities for out-of-town tourists who will cross this route • consider alternatives to parking lots at locations not far from • provision of land for parking visitors' vehicles around the current site 	<ul style="list-style-type: none"> • the fulfilment of other basic needs is considered sufficient, such as electricity, clean water availability, telecommunication network, and internet signal • the use of land for parking lot in the ecopark area can change a small part of the area however it is aimed to support access to the area. It still makes sustainability weak • supporting infrastructure for nature and culture conservation and human resource development also needs to be established, such as flora and fauna information boards, traditional houses, community characters, and instructions during activities in the eco-park area. • a website as a reference for tourists before and during their visit need to be included.

By evaluating the Koto Katik Ecopark Area planning, it can be stated that the eco-park is not compliance the sustainable tourism development principles. It is due to the majority of economics potentials analysis than environment, and social elements. Such as, in the component of Natural Diversity Conservation and Consumption Control, the description and analysis of land, flora and fauna is unavailable. It is useful for designing conservation program, tourism activities, building layout, and measuring carrying capacity. Likewise, the involvement of local community is unknown. There is no detail analysis of local communities' condition such as education, regular jobs, income rate, social life, and local culture. In line, the form of fairly distributed power and benefits is not included however the feasibility study

states that the local community is ignoring the planning process. The details of local community role is still needed to maintain the sustainability of the ecopark in the future. This condition portrays that the planner has no sufficient knowledge about the sustainable tourism development principles. As the impact, if the planning is implemented, the ecopark will remain as mass tourism, damaging the social and nature, and ecopark just be an interested tourism label.

CONCLUSION

As in the evaluation of development of the Koto katik eco-park area planning in the city of Padang Panjang, the ecopark planning is not compliance the sustainable tourism development principles. It cannot be claimed

as an ecotourism or tend to be mass tourism. It is due to the focus of the planning is stressed more on the economic impact. Such as opening new job, opportunity for developing SMEs that is in line with the increasing number of visitors, additional income for the local community. While the other two elements; environment and social, get little attention. There is no analysis of characteristics of nature land, flora, and fauna. It can confirm that there is no conservation program, proper sustainable tourism activities, appropriate building layout and supporting infrastructure. Moreover, the role of local community is unknown, so that, a fairly distributed power and benefits is also not defined. While, the local government have put the development program as an available opportunities for investment in the website of city's investment office

It is happened due to lack of knowledge of planners about the sustainable tourism development principles or still have the mindset of mass tourism base. It proved by many analyzed component that are not covering all the ecotourism requirements, such the naturalness of odor is included as the negative impact.

Besides, the local government that used third party as the consultant for conducting feasibility study need to identify the capability of the company or it is suggested that the local government to make cooperation with the tourism higher education to do it. Therefore, a perfect ecotourism can be well planned. It is due to the operating unsustainable ecotourism could be led by a misconduct of its planning. In addition, the stakeholder should also improve their knowledge about the sustainable tourism development in order to be able to participate in and evaluate appropriately the planning process to avoid the negative impact of tourism activities into their nature in the future.

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