



Ecotourism Development to Enhance the Welfare of the Walesi Village Community Through a Local Wisdom Approach in Jayawijaya, Highland Papua

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Abstract

Walesi Village in Jayawijaya District, Papua Mountains, has been selected as research subject due to its unique natural beauty and spectacular landscapes, making it one of the premier tourist destinations in the region. Post-pandemic, there has been a notable trend among travelers to return to nature, which remains a favored form of tourism. This trend is characterized by four key attributes: hygiene, minimal contact, low crowd density, and reduced mobility. Consequently, there is substantial potential for the development of ecotourism that can be marketed to both domestic and international consumers. This study aims to provide a systematic, factual, and accurate description of the facts, characteristics, and relationships between the investigated phenomena, while also outlining the challenges hindering the implementation of ecotourism based on local wisdom. Additionally, it seeks to identify the supporting factors for the application of locally based ecotourism in Jayawijaya District. The research methodology is classified as quantitative descriptive research. This means that the study aims to describe, explain, or summarize various conditions, situations, phenomena, or research variables as they exist. Data will be collected through various methods, including observation, interviews, and documentation. It is expected that this research will contribute to resolving issues related to the National Research Master Plan (RIRN) in the priority research area of Digital Marketing within the field of Economics and Business, focusing specifically on the development of ecotourism and the strengthening of socio-cultural aspects in the humanities and arts.

Keywords

Digital Tourism, Ecotourism, Local Revenue, Local Wisdom, Tourism Development

INTRODUCTION

The tourism sector is a part of the industry focused on travel and recreational activities undertaken by individuals or groups on local, national, or international scales. This sector encompasses a variety of services and infrastructure that support tourism activities, such as accommodations, transportation, restaurants, tourist attractions, and other services (1). By integrating local wisdom principles into the development of ecotourism, Walesi Village can achieve long-term benefits that include economic, social, cultural, and environmental aspects (2). The development of ecotourism is expected to provide several benefits, including increased income, skill development, preservation of culture and traditions, environmental conservation, improved infrastructure and services, empowerment of women and youth, and promotion of environmental awareness (3). However, it is essential to note that ecotourism development must be approached cautiously and sustainably to ensure that its benefits are equitably and experienced by the entire community. Prior research indicates that ecotourism development, both partially and simultaneously, significantly impacts community welfare, contributing to overall societal well-being (4, 5). In today's era of digital tourism, the development of ecotourism serves as an effective strategy to promote various destinations and tourism potential in Jayawijaya Regency through

diverse platforms. Digital tourism not only introduces but also broadly disseminates the beauty of tourism, thereby increasing the number of international tourists visiting Indonesia (6). This research aims to: 1). Assess the ecotourism potential in Walesi Village. 2). Analyze the needs and expectations of the local community. 3). Develop a local wisdom-based ecotourism model. 4). Measure the economic and social impacts of ecotourism development. 5). Encourage participation and partnerships. 6). Formulate policy recommendations based on findings and research results.

Problem Formulation What is the ecotourism potential in Walesi Village, including natural wealth, local culture, and other resources that can be utilized? What are the principles of local wisdom that can be integrated into the development of ecotourism in this area? How can local stakeholders, such as the local community, local government, NGOs, and private entities, be identified and engaged in the ecotourism development process? What effective marketing strategies can attract tourists to Walesi Village while considering the local wisdom values to be conveyed? How can the impacts of ecotourism on the environment and local culture be managed while ensuring equitable economic benefits for the local community? Are there regulatory frameworks or policies that need to be established or adjusted to support sustainable ecotourism development in Jayawijaya, Papua.

MATERIALS AND METHODS

Research Design

Research design is a process aimed at discovering answers to the research questions posed and serves as an initial step in planning a study. This process plays a critical role in guiding researchers to determine the appropriate strategies for collecting and analyzing data, enabling them to find valid and accountable solutions. Furthermore, research design significantly influences the outcomes of the entire study, as it dictates the methodological approach employed. In the context of this research, both qualitative and quantitative methodological approaches are applied simultaneously, utilizing a survey method as the primary instrument. The use of questionnaires is designed to identify key variables for further analysis and to establish a relevant research framework aligned with the study's objectives. This combination of approaches allows researchers to gain a more comprehensive and in-depth understanding of the phenomenon under investigation while enhancing the validity and reliability of the research findings.

Research Respondents

The population of this research focuses on the community visiting Walesi Village, located in Jayawijaya Regency, Papua Mountains. To determine the sample size, a purposive sampling approach is employed. This selection is aimed at obtaining a sample that accurately represents the research target and meets relevant criteria for providing significant information. The sample size is guided by the theory proposed by Roscoe, which suggests that an appropriate sample size in research ranges from 30 to 500. Notably, when the research involves multivariate analysis (such as correlation or regression), the sample size should be at least ten times the number of variables under investigation. Considering this, the minimum sample size for this study is set at 30 due to the involvement of three variables. However, to enhance the accuracy of the results from the questionnaire used, a total of 200 respondents will be included in the study.

Research Instruments

This research consists of three variables: Ecotourism Development as the independent variable, Local Wisdom as the mediating variable, and Community Welfare as the dependent variable. 1. Ecotourism Development refers to efforts aimed at sustainably utilizing and preserving natural resources and local culture to enhance environmentally friendly tourism that benefits local communities. 2. Community Welfare is defined as a condition in which all members of the community can adequately and sustainably meet their physical, social, economic, and spiritual needs. 3. Local Wisdom encompasses the knowledge, values, traditions, and practices passed down through generations by local communities, reflecting their adaptation to specific physical, social, and cultural environments, and contributing to the sustainability and cultural identity of a community.

Data Gathering Procedures and Ethical Considerations

In the data collection process, we have adhered to all established procedures, beginning with ensuring the confidentiality of respondents' identities and conducting instrument validation by experts in the field. Additionally, we have conducted a pilot test with a sample of lecturers to ensure the reliability of the instruments used while upholding research ethics.

Data Analysis

In this research, the data analysis employed is both descriptive and inferential statistical analysis. Descriptive analysis serves to outline the general characteristics of the data, such as frequency distribution, mean, and standard deviation, providing an initial overview of the patterns present in the data. In contrast, inferential analysis, including linear regression or correlation tests, is utilized to examine the relationships between variables and identify the influence of one variable on another. This approach enables researchers to generalize findings from the studied sample to a broader population, as well as to test previously formulated hypotheses at a predetermined significance level. The combination of these two types of analysis reinforces the validity of the results and conclusions of the research.

RESULTS

The ecotourism potential in Walesi Village encompasses a wealth of natural resources, local culture, and other exploitable assets

The ecotourism potential in Walesi Village presents significant opportunities for environmental preservation and local economic development through nature conservation, increased community income, and environmental education. The village boasts a rich biodiversity, a strong local culture, and environmentally friendly local wisdom as its primary attractions. The development of ecotourism is further enhanced by the implementation of digital tourism, which includes the creation of an official website and mobile applications that offer virtual tours and information related to tourist destinations. The impact of digital tourism is expected to increase the Local Revenue (Pendapatan Asli Daerah, PAD) by up to 15% within two years, leveraging sectors such as tourism, accommodation, culinary services, and local crafts.

Local wisdom principles that can be incorporated into sustainable tourism development

Fishing tourism and coffee plantation tours hold significant potential to become integral components of ecotourism development in Walesi Village. Fishing tourism, which emphasizes environmentally friendly fishing practices, can attract visitors interested in outdoor activities and conservation while helping to preserve aquatic ecosystems. Additionally, tourists can learn about the traditional fishing methods of the local community, adding an educational value to the ecotourism experience. On the other hand, coffee plantation tours offer a hands-on experience of sustainable coffee cultivation, from planting to processing, supporting the local economy and environmental preservation. Visitors not only enjoy the scenic beauty of the plantation landscapes but also engage in agricultural activities while tasting local coffee. These activities align with the principles of ecotourism, prioritizing environmentally friendly agricultural practices that minimize chemical use and protect biodiversity. By involving local communities as guides and service providers, both types of tourism contribute to economic empowerment and the preservation of local wisdom, creating a balance between environmental conservation and sustainable economic development in Walesi Village.

Identify and engage local stakeholders, such as local communities, local governments, NGOs, and the private sector, in the ecotourism development process

Engaging local stakeholders is a crucial step in the sustainable development of ecotourism in Walesi Village. The involvement of local communities, local government, NGOs, and the private sector is essential for enhancing the success of this program and ensuring that its benefits are equitably shared among all parties. Local communities play a central role, as they possess traditional knowledge about the environment and local culture. They can be empowered through training and skill development, allowing them to participate in various aspects of ecotourism, such as managing homestays, serving as tour guides, and providing local products. The local government is responsible for supporting infrastructure development and formulating regulations that facilitate sustainable ecotourism management. NGOs can offer technical assistance related to conservation and empowerment, acting as mediators between the community and government. The private sector contributes through investments in infrastructure, marketing, and improving tourism service quality. To integrate all these stakeholders, effective communication forums are needed, where inclusive and sustainable ecotourism development strategies can be collaboratively formulated. Through this collaboration, Walesi Village can evolve into a successful ecotourism destination that preserves environmental and cultural integrity while fostering economic growth.

An effective marketing strategy to attract tourists to Kampung Walesi, considering the values of local wisdom

The policy framework that has been discussed and will be tried and implemented to support sustainable ecotourism in Walesi District:

1. Environmental Management Policy First Determination of ecotourism area zoning which includes strictly protected areas, recreational areas (waterfalls, spiritual tourist attractions and areas with limited use to protect the fragile ecosystem in the area). Second, regulations on the sustainable use of natural resources, including the prohibition of excessive deforestation and poaching/exploitation of wildlife in ecotourism areas.
2. Involvement and Empowerment of Local Communities First A policy that requires ecotourism management to involve local indigenous peoples in decision-making, management, and daily operations. Second, the provision of training for local communities to improve their skills in managing ecotourism, such as tour guides, accommodation service providers, or local artisans. Third, arrangements so that part of the ecotourism income is channeled for the development of infrastructure and public services in the local community.
3. First Cultural Protection Regulation Policies that protect local cultural heritage from destructive commercialization, by ensuring that traditions, customs, and customary rites are respected by tourists. Second, restricting access to sacred or sensitive sites, considering the cultural and spiritual values of the local community.
4. Tourist Management Policy Restrictions on the number of tourists who can visit certain areas within Walesi District every day to prevent environmental damage due to over tourism. Providing guidelines for tourists related to environmental and cultural ethics, such as rules for bringing garbage back, not damaging flora and fauna, and respecting local customs.
5. Inter-Agency Cooperation Strengthening partnerships between local governments, indigenous peoples, NGOs, and the private sector in ecotourism management, with a clear division of roles and responsibilities. Support from the central and provincial governments in the form of incentive policies for the development of environmentally friendly infrastructure and sustainable investment in the ecotourism sector.

Managing the impact of ecotourism on the local environment and culture, and ensuring equitable economic benefits for local communities

Sustainable ecotourism management in Walesi Village requires a holistic approach that encompasses environmental, cultural, and economic aspects. Environmentally, measures such as visitor capacity regulations, the implementation of eco-friendly tourism practices, and ecosystem restoration are crucial for maintaining natural preservation. Culturally, safeguarding local traditions through the integration of cultural wisdom and educating tourists about respecting local customs can prevent excessive cultural commodification. Economically, the distribution of benefits must be equitable by involving the community in ecotourism management, supported by training programs and income diversification initiatives. Continuous monitoring and evaluation of ecotourism impacts are essential to ensure that social, economic, and environmental benefits are sustained over time. Additionally, the government should implement policies that promote wise land use, provide tax incentives for eco-friendly businesses, and encourage multi-stakeholder collaboration to achieve sustainability. This comprehensive approach can ensure that ecotourism yields lasting positive impacts across all facets of Walesi Village.

Policies that need to be prepared or adjusted to support the development of sustainable ecotourism in Jayawijaya, Papua

The sustainable ecotourism development in Jayawijaya, Papua, requires a holistic regulatory framework encompassing environmental protection, local community empowerment, investment regulation, sustainable infrastructure development, ecotourism promotion, and continuous monitoring. Conservation area zoning must be clearly defined and protected, with strict regulations regarding waste management and the implementation of Environmental Impact Assessments (AMDAL). Indigenous communities should be recognized as the primary managers, supported by training, certification, and prioritization of local workforce. Investments must be closely monitored to align with ecotourism principles, while public-private partnerships should engage communities fairly. Green infrastructure and environmentally friendly digital access are crucial for supporting ecotourism, and promotion should highlight local wisdom without undermining cultural integrity. Regular monitoring of environmental and economic impacts is essential to maintain sustainability and ensure equitable distribution of economic benefits to local communities.

CONCLUSION

The conclusion regarding the development of ecotourism in Kampung Walesi and Jayawijaya, Papua, highlights that the success of sustainable ecotourism requires a holistic approach involving various stakeholders, including local communities, local governments, NGOs, and private sectors. Community involvement is crucial, as they possess local knowledge that can be utilized in managing ecotourism and play a vital role in the equitable distribution of economic benefits. Policies for environmental protection and conservation, community empowerment, as well as investment regulation and infrastructure development must be designed in an integrated manner to ensure that ecotourism provides not only economic benefits but also preserves cultural and environmental integrity. Furthermore, promotion based on local wisdom and continuous monitoring is essential to evaluate the impacts and success of ecotourism management. With a planned and participatory approach, the development of ecotourism in this region is expected to create significant positive impacts for both the local community and the environment.

RECOMMENDATIONS

Recommendations for future research on the development of ecotourism in Kampung Walesi and Jayawijaya, Papua, include the need for more in-depth studies examining the social and economic impacts of ecotourism on local communities, focusing on a comparative analysis before and after the implementation of ecotourism programs. This research should employ both qualitative and quantitative methods to obtain comprehensive data regarding community perceptions, changes in income patterns, and impacts on the sustainability of local culture. Additionally, it is important to explore management models for ecotourism that can be adopted by local communities, as well as how government policies can become more responsive to the needs and aspirations of these communities. Further research could also analyze effective policies that maintain a balance between economic growth and environmental preservation, involving various stakeholders in the decision-making process.

DECLARATION OF CONFLICT

The authors state that there are no financial conflicts of interest or personal relationships that could influence the research findings presented in this paper.

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