An investigation of the ecotourism development based on local wisdom in accelerating the village’s sustainable development goals

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Abstract. This study aimed to study the role and strategy of the ecotourism sector based on local wisdom in Padusan Village, Pacet District, Mojokerto. The best strategy for developing the ecotourism sector based on local wisdom in Padusan Village in accelerating the achievement of sustainable development (SDGs) was the further milestone of this study. The participation of local communities was an important element in the activities and development of ecotourism in Padusan Village. However, the study regarding the determinants of participation was extremely rare. To strengthen this determinant, the researcher added the role of the government and business behavior which are used as two antecedent variables for the local community of Padusan Village in hot spring ecotourism sourced from the Welirang mountain range. Researchers applied a Partial Least Square - Structural Equation Model (PLS-SEM) that was analyzed using primary data from the 178 ecotourism business communities in Padusan Village. The results showed the role of the government significantly influences local participation in the development of ecotourism. Ecotourism and social capital business behavior showed a significant influence on the participation of local communities. In addition, the participation of local communities in Padusan Village had an impact on significantly increasing the benefits associated with tourist activities. The results of the study also show community participation through the value of local wisdom in the form of mutual cooperation culture to develop ecotourism. One of them is the involvement of local residents as workers and managers of hot spring tourism in Padusan Village.

1 Introduction

The SDGs agenda is to answer the problems faced by the community, especially community welfare, economic prosperity, and environmental protection [1]. One of the sectors that support the achievement of sustainable development goals (SDGs) is the tourism sector [2]. The current development of tourism, especially in the ecotourism sector based on natural resources and local culture, is very attractive to domestic and foreign tourists [3]. The potential of ecotourism for Biodiversity Conservation can be used as a direction for

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promoting culture in the format and creating jobs with community products without compromising the preservation and characteristics of local culture [4]. By prioritizing environmental sustainability around tourist sites so that economic activities in the village can be integrated to increase economic competitive advantage [5].

At its 6th Plenary, the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES) approved the Summary for Policy Makers (MSS) of Regional and Subregional Assessments for Biodiversity and Ecosystem Services, concluding that the environment should take precedence across all development sectors [6]. However, the ecotourism sector has experienced a drastic decline since the Covid-19 pandemic. According to World Travel & Tourism Council (WTTC), the tourism business plays a role of 10% in total world income so that when the tourism sector experiences a decline, it will affect the level of total world income [7]. For this reason, the government is currently launching a digital tourism program, namely a strategy to develop the tourism sector by utilizing digital media. The main characteristic of this strategy is the establishment of a digital ecosystem so that it can boost the productivity of the ecotourism sector without losing the element of local wisdom [8].

Padusan Village is a tourist village with local wisdom located in Pacet District, Mojokerto Regency. Its location which is located at the foot of the slopes of Mount Welirang and Mount Penanggungan with an altitude of 600 metres above the sea level places at Padusan Village, Pacet has tourism areas and potential plantations [9]. Pacet is also known as a tourist area for hot springs and beautiful waterfalls, not only being a tourist area, but also a very fertile agricultural area because it is located between two volcanoes. This environmental condition supports the potential of Padusan Village as a tourist village [10]. Padusan Village is growing very rapidly because it is located in a tourist area and the main route that connects Mojokerto City and Batu. The main potential of Padusan itself comes from the agricultural sector in the form of shallots and cassava while the potential for natural tourism is in the form of waterfalls and tahura [9].

2 Methods

This study uses a quantitative method with a descriptive approach. Quantitative research with a descriptive approach is a form of research strategy through a problem formulation to explore or identify social situations that will be studied holistically. In order to obtain valid quantitative data according to the topic of the problem, questionnaires were distributed to well-informed persons who were selected based on their knowledge and influence on ecotourism development in Padusan Village, Pacet, Mojokerto.

2.1 Conceptual research: models and hypotheses

In this study, researchers review the literature on variables that affect community participation (business behavior, economic benefits, socio-cultural benefits, village government policies, and social capital). The researcher then uses the results of this review to lay the basis for a behavioral model using Structural Equations, with Partial Least Squares (PLS) as the method of choice, as shown in Fig. 1 this will show the relationship between these variables and the strength of these relationships. Thus, the main objective of this study is to analyze the relationship between the variables of community participation, business behavior, economic benefits, socio-cultural benefits, village government policies, and social capital.
Based on Fig. 1 above, the researcher makes five hypotheses to describe the causal relationship between latent variables, namely:

H1: The behavior of the local industry has a positive effect on the participation of local communities to promote sustainable tourism;

H2: The role of local government has a positive effect on the behavior of local industries;

H3: Social Capital has a positive effect on local community participation to promote tourism sustainability;

H4a: Local community participation has a positive effect on socio-cultural benefits for community members;

H4b: Local community participation has a positive effect on economic benefits for community members.

2.2 Population, respondent sample, and research instruments

The population in this study are actors or stakeholders of the tourism industry in Padusan Village, Pacet District, Mojokerto Regency. Researchers chose these respondents to represent the local community because they are believed to have knowledge about various aspects of tourism in Padusan Village. The respondents selected were 178 figures proportionally based on the RT/RW in Padusan Village. Regarding data collection, the researcher designed and provided five alternative answer options using a Likerts scale. In this study, the researcher added a new variable instrument, namely social capital as a novelty from previous research. Furthermore, before the questionnaires were distributed to the selected respondents, the researchers conducted a trial of filling out the questionnaires.

2.3 Data Analysis

The questionnaire that has been obtained is then analyzed for validity and reliability to assess the quality of the questionnaire. A set of items is considered to have internal consistency if the Cronbach Alpha is equal to or greater than 0.70, however, for exploratory research, as long as the coefficient value is greater than 0.60, it is acceptable [11]. The next criterion for assessing the quality of the questionnaire is the validity of the items. An item is considered
valid if its correlation with the total items of the construct is equal to or greater than 0.30 as the lowest limit [12]. After proving the quality of the questionnaire, the researcher processed the data through the PLS method to test the research hypothesis.

3 Result and discussion

3.1 Respondent profile

The selected respondents are 178 people who are domiciled and have a business in Padusan Village, Pacet, Mojokerto. However, after the withdrawal of the questionnaire and evaluation of the quality control questionnaire on July 27, 2022, only 178 respondents were considered valid and could be processed as the final analysis of the study. Respondents selected were respondents who had criteria for the type of business such as villa rental owners, hot spring officers, village workers, village gardeners, and housewives who had knowledge of natural tourism in Padusan Village. Based on the results of filling in the questionnaire respondents have an average level of education last High School/Equivalent and Elementary School/Equivalent. In addition, as many as 117 or 66% of respondents are male and 61 respondents or 33% are female. Not only that, the age of the respondents ranged from 20-70 years. Furthermore, the selected respondents are the result of analysis and identification from the Village Head and Village Apparatus so that the distribution is based on household group (RT/RW) that is relevant to the research topic. There are 3 RWs where RW 1 consists of 4 RTs, RW 2 has 4 RTs, and RW 3 has 5 RTs. From these facts, the researcher concludes that the respondents represent the local community in Padusan Village and are well acquainted with ecotourism development and its impact on the area.

3.2 Discussion

Based on the results of the analysis of the significance test through bootstrapping, the conclusions are obtained in the following Table 1.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>P Values</th>
<th>Decision</th>
<th>Description Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Behavior Affects Community Participation (H1)</td>
<td>0.000</td>
<td>H1 accepted</td>
<td>Contextually tourism development makes local communities, determinant actors, and supporters of achieving tourism development goals [13]. Based on Butler's theory (1980) there are three stages of the tourism business process in Indonesia, where the first stage, or pioneering has a relationship with the involvement of local communities. At this pilot stage, the state or government has the authority to provide correct information to local communities about national tourism areas and involve local communities in planning tourism development including promotional activities or maintenance of supporting infrastructure [14].</td>
</tr>
<tr>
<td>Government Policy Affects Business Behavior (H2)</td>
<td>0.000</td>
<td>H2 accepted</td>
<td>Policies made by the village government can affect the contribution of business people in managing tourism potential in Padusan Village. On the other hand, based on PP Number 60 of 2014 the Village Government will be given funds to finance the implementation, development</td>
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<td>Hypothesis</td>
<td>P Values</td>
<td>Decision</td>
<td>Description Results</td>
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<tr>
<td>Social Capital Affects People Participation (H3)</td>
<td>0.000</td>
<td>H3 accepted</td>
<td>The growth of social capital in the community will coexist with the creation of trust between residents in particular in supporting the tourism potential of Padusan Village [16]. High social capital will create the desire of the community to participate in village activities that are cooperation and mutual assistance between communities [17]. The existence of cooperation also encourages participation which is a manifestation of the dynamic infrastructure of social capital. With the form of participation can form a network of interactions called social capital [18].</td>
</tr>
<tr>
<td>People Participation Affects Economic Benefits (H4)</td>
<td>0.000</td>
<td>H4 accepted</td>
<td>These results indicate, when community participation is high, it will increase the economic and socio-cultural benefits of the tourism potential of Padusan Village. In Kencana's research (2017) it is stated that the participation of local communities or community-based tourism will increase the benefits of local tourism [19]. Furthermore, the more local people benefit from tourism, the more likely they are to protect the natural and cultural heritage of the area [20].</td>
</tr>
<tr>
<td>People Participation Affects Socio-culture Benefits (H5)</td>
<td>0.000</td>
<td>H5 accepted</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data processing PLS 2022

4 Conclusion

The combination of ecotourism and local wisdom in the derivatives of the tourism sector is the main focus in achieving the Village SDGs. One of the villages in Indonesia that has the concept of nature tourism or ecotourism is Padusan Village, precisely located in Pacet, Mojokerto Regency, East Java. Based on the results of the study, shows that community participation in the form of local wisdom is the most important factor in advancing ecotourism in Padusan Village. The existence of local wisdom through community participation can prevent the replacement of the original culture of Padusan Village by outside cultures due to globalization [21]. Furthermore, the achievement of the SDGs in alleviating poverty, reducing inequality, as well as sustainably preserving the environment can be felt by both residents and the government in general.

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Reference
15. R. Adi and P. Nugraha, Law JJustice 6, 96 (2021)