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Strategies to Introducing Ecotourism Concept with Social Media for College Student in Malang

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Abstract

In Indonesia, research about Social Media and Ecotourism is still few. Some studies in Indonesia mostly still view social media as marketing advice. In fact, social media also plays an important role in regulating the perceptions of the people who come to the ecotourism site both from the content or the ease of access. Practically this research can be used as a strategic reference by stakeholders, to be able to use Social Media as media for promotion and education. Then academically, this research can be a reference for further research on the strategy of managing ecotourism with social media. This research is a descriptive type with quantitative and qualitative approaches, with research locations in Malang. Research using an online questionnaire with Google Form. The results are, Instagram is the most used social media by students in Malang. And for the management strategy with Instagram, it can be done with an aggressive strategy that is utilizing Strength and Opportunities from Instagram such as fast, cheap, environmentally friendly and widely used by students and can be more optimized with the AISAS strategy. Step by step to Introducing Ecotourism in social media are, getting the Attention maybe with Influencer or public figure, build interest with consistent post everyday, make user search about ecotourism, and get them to take action such as reading about ecotourism, increasing their engagement ecotourism, and for the last step will make them to share the information to fellow student as social media user.

Keywords: ecotourism, facebook, Instagram, Malang, social media, strategy, student.

INTRODUCTION

Indonesia is one of a country with the highest diversity of flora and fauna. Therefore, Indonesia categorized as a mega-biodiversity country, with 25% of the species in the world [1]. With abundant resources, good management is needed, thus it can be utilized optimally and sustainable for a long time.

One of the uses of natural resources is in the tourism sector. Tourism is a variety of tourist activities, which are supported by facilities and provided by the community, entrepreneurs, government, and local government [2].

Ecotourism is a type of tourism that is included in sustainable tourism [3]. Although it has many advantages in terms of conservation, improvement in the quality of community life, and cultural preservation, ecotourism also has several weaknesses. One of them still has limited access to information. For example, market networks and infrastructure for Ecotourism management [4].

One instrument that used as a way to access information is the Internet. Or more specifically with social media. China has started using Social Media as a tool. Not only in the interests of

marketing its exclusive location, but also trying to form perceptions of its visitors [5].

Social Media is a media which consist of three parts, i.e. infrastructure, information, and tools. It was used to produce and spread media content. Content in social media can be personal messages, news, ideas, and cultural products in digital form. Later, the role of producing and consuming media content can be individuals, organizations, or even industries [6]. In 2015, from 255 million population in Indonesia, 88.1 million were Internet users and 79 million of these internet users were active as social media users [7].

In Indonesia, research about Social Media and Ecotourism is still not done much. Most of the studies in Indonesia mostly still view social media as marketing advice, although some have started using Social Media as an educational medium. Previous research in China showed that social media also acts as a driver in social movements in society [8]. With social media, people will have a room for discussion, sharing the idea, keep in touch, etc. For a certain point, social media has a stronger side and sometimes can drive government for making policy. Social media also make people good and smart because they can share knowledge with others [8]. In addition, social media is also a very important instrument in regulating the perceptions of people who

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come to ecotourism sites both from their content or their accessibility [9].

Introducing knowledge about Ecotourism Concept become important because it can decrease pollution in tourism area that causes by Visitor. Because with knowing about Ecotourism concept, the visitor will know what they can and can't do, and also feel more involved with the preservation of the ecosystem. Visitor or tourist arrival in tourism area has a good and bad impact. The good impact is, will increase income from stakeholder and local people, and later the income can also be used to conserve tourism site. But the bad impact, the visitor will cause pollution such as emission from transportation, trash, and also deforestation because visitor comes [10].

This study conducted in Malang, because Malang has been known to be a city of education since the Colonialism era. In Malang, there are currently more than 88 colleges/universities [11]. For the number of students themselves, it is estimated that there are more than 350 thousand students, with estimated new students for University of Brawijaya in 2017/2018, around 10,000 students [12].

This study can be used practically as a strategic reference by stakeholders, to be able to use Social Media as a media for promotion and education. Then academically, this research can be a reference for further research on the strategy of managing ecotourism with social media.

The objectives in this study are to analyze the understanding of Students in Malang as social media users about ecotourism, analyzing the Social Media Platform that is most preferred by Students in Malang, and obtain appropriate strategies as one of the strategies for managing ecotourism with social media.

MATERIAL AND METHOD

This study is descriptive research with quantitative approaches. Descriptive research is a research that use to determine variable value between subjects independently without making a comparison or try to find a relation between variable [13]. Descriptive quantitative research use to understand phenomena that happened with help from the number and determine characteristic from subject [14].

This study conducted in Malang, with estimated new students for the University of Brawijaya itself in 2017/2018, around 10,000 students [12]. Currently, more than 88

colleges/universities, for the number of students estimated more than 350 thousand students in Malang [11]. So with a high amount and diverse student population, it can provide a clearer picture of how students understand about ecotourism. The study was conducted for one month, starting from May 17th 2018, to June 17th 2018.

Data Collection

Data collection is done using Online Questionnaire via google form (here is the link: <https://goo.gl/forms/LEV3Q2ulwJ4qWpT63>). The questionnaire itself is an indirect data retrieval technique. The questionnaire contained a list of questions that would later have to be answered or responded by the respondents. Respondents themselves have the freedom to give answers according to their perceptions [15].

Variable that included in this questionnaire for basic information are the name, age, College, favorite social media and time spent per day in social media, Intensity Tourism Post in social media and how they feel. For Ecotourism Knowledge are, what they know about Ecotourism, Ecotourism site that they know, what social media account that provides ecotourism information, their knowledge about conservation activity at tourism site, and activity that they usually do at tourism site. And for the last section is a question about how the post in social media should be that can make them interest about Ecotourism.

For data collection in this study, it has two phases. The first phase is conducted by the Questionnaire preliminary test to find out whether the questions submitted are appropriate to achieve the desired target for three days starting from May 11th 2018, to May 14th 2018. Then after being appropriate, then spread to as many student respondents for one month starting May 17th 2018 to June 17th, 2018. Questionnaire spread using Whatsapp media, Instagram, and there are also those taken directly.

The first phase of the distribution of questionnaires is to find out the validity of the data by knowing if the question list is appropriate. In the qualitative research conducted the test is on the data. So that later, to determine whether valid or not valid with the compatibility between the data obtained with the data reported [13].

Google form is one of product from Google whose function is to help plan surveys, provide

quizzes, and also collect information more efficiently. This form can also be directly connected with a spreadsheet in Microsoft Excel for further processing [16].

Data analysis

The final result from this study would be used to determine the strategy using the most widely used Social Media with SWOT Analysis. Step in SWOT analysis is, first identifying internal and external variables, followed by preparing relative point and ratings, then proceeding with weighting, relative point and also scores [17].

RESULT

From the retrieval of data, 138 respondents were students in Malang, with ages ranging from 19 to 30 years. Then for the most widely used social media platform by students, 79.2% of respondents use the Instagram Social Media Platform, then Facebook 8.3% and the rest are other Social Media. With 56.6% of respondents using social media more than two hours per day (Fig. 1).

Then for the respondent's understanding of ecotourism, results were obtained, from 138

respondents, 57.9% were doubtful about their understanding about ecotourism, 26.9% knew very well, and 15.2% did not know. Then to ascertain the truth, given further questions about what ecotourism is. And the results obtained, 65.5% answered correctly, and 34.5% mistakenly interpreted ecotourism (Fig. 2).

Data analysis then continued by knowing the activities they normally do by students at tourist attractions. From the data obtained provided that respondents can choose more than one, it is known that 47.2% prefer to look exist by taking photos at tourist attractions, 42.4% participating in activities with the community, and 29.2% relaxing and not forgetting to buy some things from the gift shop (Fig. 3). This data is in accordance with previous studies which say that the younger generation is still in the search for identity and also has narcissistic traits. Many who choose to take pictures in tourist attractions are also in line with the number of students using Instagram. Where characters from Instagram are social media with a focus on Photos and Videos.

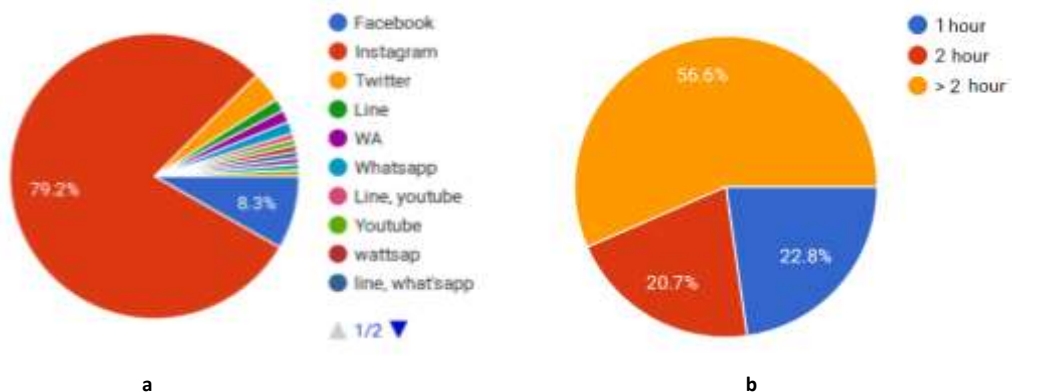


Figure 1. Social Media Use. a) Most Preferred Social Media by Student, b) Time spent using Social Media per day

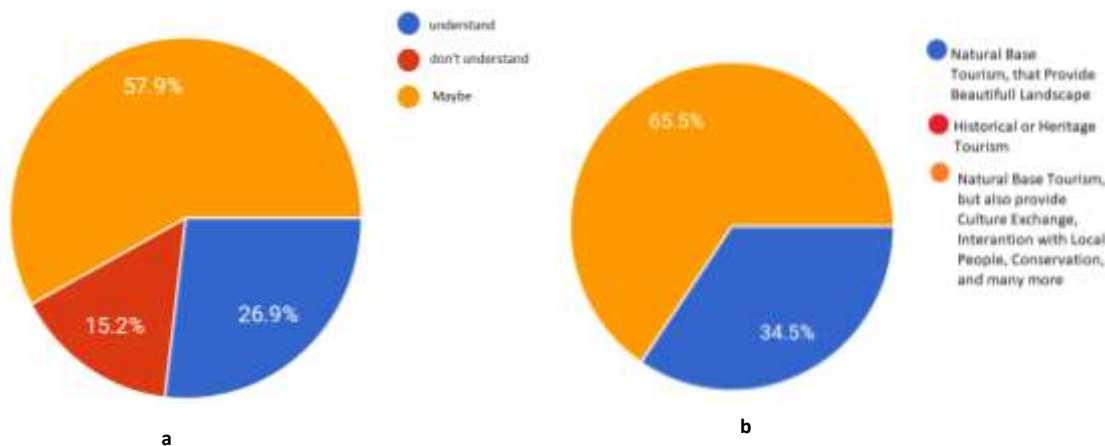


Figure 2. Ecotourism Knowledge. a) Understanding of Ecotourism, b) Ecotourism according to Respondent

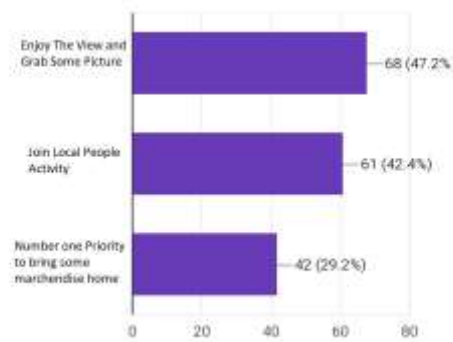


Figure 3. Normal Activities at Tourist Attraction

SWOT Analysis of Instagram

After discovered that Instagram is the most widely used social media platform, a SWOT analysis was carried out from Instagram so that the strategy could be arranged. The results of the calculation of internal and external factors (Table 1 and 2) indicate that external factors have a higher value than internal factors. This shows that internal factors are more influential than external factors in using Instagram as a strategy for ecotourism management. Both of these factors show positive values (quadrant 1) with coordinates 0.8 and 1.3.

Then for the results of the Grand Matrix strategy (Fig. 4), it is in Quadrant 1 with coordinates 0.8 and 1.3. Quadrant 1 shows a favorable situation. The strategy used in Quadrant 1 is an Aggressive strategy [17]. With this aggressive strategy, it can maximize the strength of Instagram and additional opportunities to be used as a management strategy.

DISCUSSION

Instagram became preferred social media among college student with time spent more than 2 hours per day. Friendly interface that Instagram have also make it favorite for the college student to express their narcissism [18]. But the interesting part is, with more than 2 hours per day on social media, the student still doubtful about their knowledge of ecotourism. That means lack of Ecotourism post in social media and with the right strategy, Instagram can be used to increase knowledge about ecotourism. An Aggressive Strategy that optimizes Strength and Opportunity is to optimize strengths and opportunities to spread the understanding of Ecotourism and create interesting Content to be seen by many people and spread faster.

Table 1. IFAS Matrix

No	Strength Variable	Relative Point	Rating	Score
1	Instagram are Ecofriendly	0.117	3	0.351
2	More than 300 million active user	0.159	4	0.636
3	Fast to spread information	0.159	4	0.636
4	Can use for chatting as well	0.117	3	0.351
Sub Total		0.552		1.974
Weakness Variable		Relative Point	Rating	Score
1	Limited for Android and IOS	0.130	2	0.260
2	Paid to Promote	0.159	3	0.477
3	Need to download before used	0.159	3	0.477
Sub Total		0.448		1.214
TOTAL		1.000		3.188

Table 2. EFAS Matrix

No	Opportunity Variable	Relative Point	Rating	Score
1	Cheaper than Facebook	0.107	3	0.321
2	Many Student User	0.149	4	0.596
3	Have unique alogaritm to make certain community	0.149	4	0.596
4	Suitable and fast to spread information among student	0.149	4	0.596
5	Connected with other Social Media	0.107	3	0.321
Sub Total		0.661		2.430
Threat Variable				
1	Can cause over visitor	0.149	4	0.596
2	Wide and Open Challenges from other	0.107	3	0.321
3	One day it will replaced by other Social Media	0.083	2	0.166
Sub Total		0.339		1.083
TOTAL		1.000		3.513

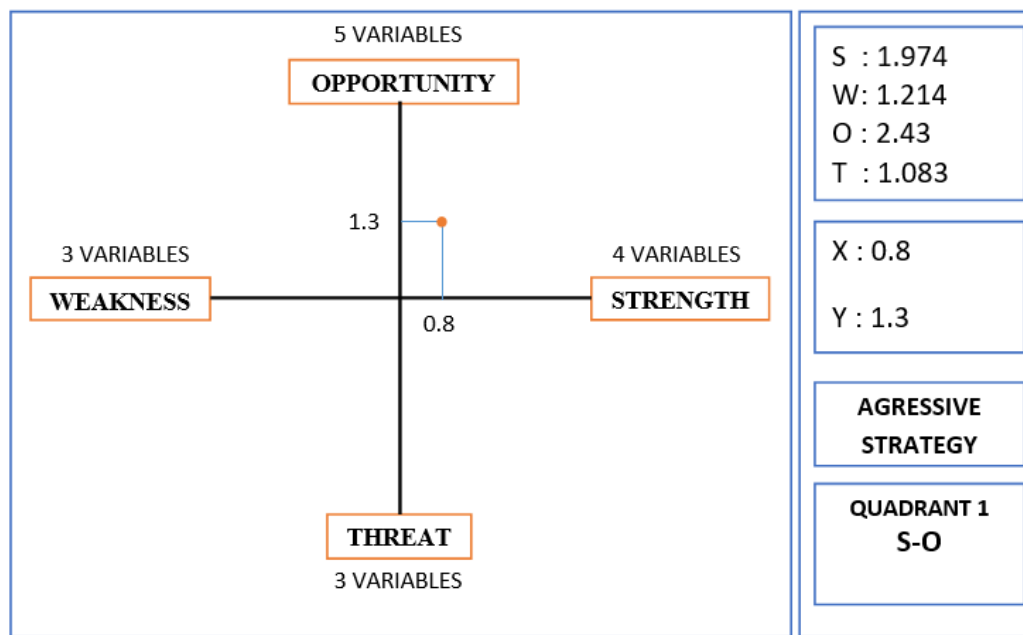


Figure 4. Matrix Grand Strategy

Then, for the form of communication strategy that can be used on Instagram is AISAS (Attention - Interest - Search - Action - Share). Step by Step using AISAS to introducing Ecotourism concept are Attention with using engagement such as using public figure or influencer in Instagram to spread the information, Interest with repost the information like 3 days in a row, after getting the interest, they will search to find out what happened and find ecotourism, Action will be taken by them with watching or see the information and then for the last part the will share the information to their social media to gain recognition from their follower [19]. This AISAS strategy will also provide engagement between users and ecotourism. Because if they share more of it, it will make ecotourism as a new trend or brand of tourism for young people and increasing sense of belonging [20]. This form will be very suitable to be applied to disseminate information about ecotourism especially for students.

CONCLUSION

From the research, it can be concluded that Instagram is the most used social media by students in Malang. And for the management strategy with Instagram, it can be done with an aggressive strategy that is utilizing excellence and Opportunities from Instagram such as fast, cheap, environmentally friendly and widely used by students. To be more optimal, later in using Instagram, we suggest to use the AISAS

communication strategy approach with interesting content as an entrance to attract attention.

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The Role of Social Capital in Community Based Tourism

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Abstract

The role of social capital in Community-based tourism (CBT) to reach local communities' welfare is being the concern of tourism activities. Previous research found that social capital approach could be used to achieve sustainability and prosperity. Mutually beneficial trust and collective action among the member of the community as aspects of social capital played an important role to implement CBT. The study aimed to analyze the role of trust and collective action as elements of social capital on the local community of CBT Kampung Tajur and to examine the link between trust and collective action. This study was conducted on a sample of Kampung Tajur community which was appointed as CBT because of their willingness to take collective action. The result showed that trust was a robust predictor of attending a religious meeting, participating in managing homestay, and joining for community work. On the other hand, the absence of attending a formal meeting and community meeting conducted by the community head did not have a link to trust among the community member. Our findings suggested that due to well implementation of social capital role in terms of trust and collective action, the community's members must be encouraged as the subject in tourism activity by enhancing knowledge, empowerment, and inspiration based on local wisdom.

Keywords: Collective action, Community-based Tourism, social capital, trust.

INTRODUCTION

Community-based tourism (CBT) is often associated with eco-tourism activities [1] which provide natural scenery as favorite activities. In CBT the community is empowered through tourism [2]. Community-based tourism (CBT) implementation that leads to local communities' welfare is being the concern of tourism activities. Tourism targets up to 2030 aimed to enhance knowledge, empowering and inspiring stakeholders to take-off tourism destination through policies [3].

The implementation of tourism destination means to sustain tourism destination where it has the ability to continue growing and carry out its activities by considering the environmental, economic, and social aspects, and drive local communities as the subject in tourism activities. There is must be a strategy to sustain the village such as to sustain culture and environment [4]. The local community must be able to play a role in protecting the environment and taking care of their nature such as planting trees, cleaning up the tourism environment, or not scribbling anything in tourist destinations. Those ideas of maintaining the environment should come from the local community [5].

In economic term, the community should be able to take benefit from the existence of a tourist destination, not only as a laborer who works for investors but serves as a business actor, and from his business, they can earn income for their welfare. For the social aspect, the local community must be able to create good relations both horizontally and vertically [6], internally and externally [7].

Tourism activities could create welfare, but up to now, it was not clear yet which side enjoyed the benefits of tourism activities or how the benefits of tourism could be obtained [8]. In a broader point of view, tourism activities should contribute nationalism sense such as the feeling of proud of their own culture. Based on the understanding of the importance of implementing CBT to achieve the sustainability and prosperity of local communities, this paper tries to analyze the implementation CBT through strengthening social capital.

Previous research found that social capital approach was used to achieve sustainability and prosperity [8]. Strengthening positive social capital also means strengthening trust and collective action. These two aspects are able to build long-term good relationships [9] among the member of the community. When relationships are established, then it will create various opportunities for cooperation. The bad relationships might affect some challenges, such as lack of infrastructure development, weak promotion, poorly trained human resources to improve local community competency, security

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issues, low leadership, and low knowledge in managing tourist destinations. All those challenges arise because of the lack of cooperation between various stakeholders [10] or lack of trust by others. The higher social capital of the community in tourist destinations, the higher welfare of the local community will be [11].

Strengthening social capital can improve welfare and suppress the fear of security concerns [12]. Social capital, especially about the trust and collective actions in a community, is able to increase economic growth by doing various innovations [13]. However, research on social capital that focuses on strengthening trust and collective action to develop CBT has not been widely implemented.

Research on social capital has been done with the object of coastal area analysis in Satoumi Japan [14], whereas research conducted with the object of analysis of community-based tourist villages focuses only on the participation of local communities [15]. Considering that there is a contribution of social capital especially in term of trust and collective action to implement CBT, the research on strengthening trust and collective action is essential.

One of CBT that received special attention from the local government of Purwakarta District in West Java, is Kampung Tajur. Kampung Tajur is a CBT with a focus on educational tourism because most of the visitors who come to Kampung Tajur are students from various educational institutions around West Java. Different to the family motive for traveling which is to escape from routine activities, the motive of the educational institution is for building young generation's characters.

In the beginning, the establishment of Kampung Tajur as an educational tourism village is a collective action taken by the village community to agree building houses that describe the identity of West Java or the Sundanese. The collective action of the villagers was on the trust of the village head of Kampung Tajur. The village head of Kampung Tajur was a leader who has a tourism insight as well as a high awareness to develop the village that leads to the achievement of sustainability.

The aspect of sustainability is evident in Kampung Tajur, although at present, the village head has changed and the new Village Head has less concern for the development of the tourism village. However, Kampung Tajur still maintains their village to continue as a tourism village for

educational tourism enthusiasts in West Java and surrounding.

There are 43 houses with Sundanese identity and all houses are functioned as home stays. However, the owner of the homestays has not decided the rate of the home stays, the payment based on visitors' willingness. This situation is opposite to the concept of CBT that must emphasize community empowerment [3,8].

Visitors who stay in the homestay usually ask for following daily activities conducted by villagers, such as enjoying a waterfall, which is named Curug Kahuripan, and Saung Signal where the signal can be easily accessed. Unfortunately, there are not any arranged tour packages yet, nor the tour guide for the visitors. All activities still depend on the individual creativity of the home stay's owner.

The role of being actors and uniformity [16] in their village could be achieved if there is trust among them. The trust [8] is going to encourage cooperation among actors [17,18] which is implemented as a collective action. Framework research is in Figure 1. The study aimed to analyze the role of trust and collective action as elements of social capital on the local community of CBT Kampung Tajur and to examine the link between trust and collective action, due to the effort to strengthen them as the potential social capital role.

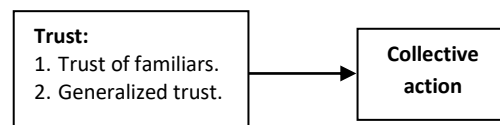


Figure 1. The Relationship of Trust and Collective Action

Social capital

Social capital is an important aspect of human life to achieve welfare. Bourdieu in 1983 and Coleman in 1988 first introduced social capital, and then Putnam in 2000 developed the Coleman concept [8,19]. The capital approach in economics inspires Bourdieu's concept of social capital. In economics, the concept of capital is often associated with goods and services. The analogy that Bourdieu defined the concept of social capital as an aggregate of the actual or potential resources available because of networking, good relationships, or membership in a group, enabling each member of the group to support each other collectively.

Coleman explained the concept of social capital in the context of rational choice theory. Coleman's opinion based on the idea that every

member of the community would be dependent on one another if they have the same interest in a resource and others controlled, in order to maximize the benefits that they could get. Coleman argued that social capital consisted of a relationship of mutual trust, authority relations, information potential, effective norms, and appropriable social organizations. A relationship would arise if A did something for B and had trust B for expecting that A would get benefit in the future. Authority rose if a diverted controlling rights to B, and then, in this case, B had social capital. Information potential is a form of social capital in the form of the ability to provide information. Effective norms were a collective value. The appropriable social organizations are social capital because of the similarity in achieving the target in the future [19].

Furthermore, Putnam [20] reinforces Coleman's social concepts. According to Putnam, social capital contained individual and collective aspects. If an individual has difficulty to get a job, it is not because by the individual's capacity but due to the absence of networking owned by the individual. The elements of social capital according to Putnam are trust, networking, and norms of reciprocity [19].

Moscardo defines social capital as the intention, potential, and access to resources owned by individuals or communities. Social capital can establish within a social network that had the same norms and values, shared obligations, and relationships, built on trust and mutual assistance. Communities with strong social capital had more effective collaboration and collective action than communities with weak social capital. It was because social capital affects the cohesion among members of the community [16]. In the context of tourism, social capital had a broader meaning, which included the importance of having a network, trust, and reciprocity to develop/maintenance/tourism destination.

Furthermore, Moscardo argued that the process of social capital development in a community to improve health, education, agriculture, business, and entrepreneurship, as well as natural management consistently showed uniformity in:

- 1) Shifting role of the village community; which originally only act as the object of change into subjects of change or development, involve more village communities as decision makers or empowering more the village communities.

- 2) Facilitating and providing support for building social networks and community associations.
- 3) Make use of social activities for building togetherness and concern to norms and values.
- 4) Building relationships between rural communities and educational institutions to facilitate conflict management.
- 5) Designing public spaces to encourage and support social interaction.
- 6) Support leaders who focus on the target and aspirations of the village community,
- 7) Establishing trust, especially trust to government and good governance.

The concept of social capital according to Bourdieu and Coleman is an inherent resource in the link between community members consist of two main subjects, namely social networks and resources. Putnam and Moscardo then added the aspect of collective action, trust, networking, and norms of reciprocity.

Social Asset is related to the way people connect and work together, whether in a household or a wider community. Well-connected households will jointly rely on social obligations and mutual support. All parties can play a role in times of crisis. Knowledge of social asset will reveal the ability to acquire and perform work [21].

The previous studies have not focused on the contribution of social capital to the development of CBT [8,19,21]. This study explores Putnam's theory that focuses on social capital in terms of trust and collective action.

Trust

Trust is a psychological statement or trustor's orientation to the trustee, with whom the trustor relies on to gain benefits over resources [17,18]. Trust is composed of trust of familiars and generalized trust. Trust of familiars includes the level of comfortable feeling on their neighbor, whereas generalized trust consists of someone's perception of their neighborhood. Trust can encourage cooperation among trustors, cultivate good intentions, reduce fear and greed, reduce risk, and increase partners' satisfaction with commitment to share.

Trust is not only about positive expectations, but it includes good intentions to behave according to the values adopted. Growing trust can build attitudes and behavior of community members to share. Within the broader scope, trust implies a positive interaction, maintaining

reciprocity, interdependence, and the desire to hear and appreciate anyone involved in an activity.

The erosion of trust may result in members being reluctant to participate in important activities in their neighborhood. Those lead to decrease of comfort, for example, they became reluctant to leave the child with the neighbors, hesitate to ask for help to their neighbors or relying on neighbors to do important activities.

In the point of generalized trust, trust can be a motivator for community members and can suppress conflict among community members and establishing relationships [22]. Trust is generally a key to strengthen social capital and view as a factor of connection and networks. Since the community members have a good connection and network among them, they would have a positive perception of their neighbors, such as: honest neighbors, their neighbors can be trusted, and to think that if they lost something in the village, then the item will be returned safely.

The local government must empower the community to gain the trust of the community. The government need to provide access to the community to gain knowledge of the tourism sector or enhance the quality of human resource [23], facilitate the community to get benefit from the development of the tourism sector in the region [17]. Public trust has a positive effect for local government which is known as the legitimacy of the local community. In other words, the local government will have political trust.

CBT as a society organization is able to establish trust by [8]:

- 1) recognizing CBT capacity
- 2) creating regular communication within CBT
- 3) flexibility and willingness to respond to community interests
- 4) focus on fair procedures
- 5) comply with the code of ethics
- 6) empower local communities
- 7) continuity of staff within the CBT
- 8) sharing authority with the community

Trust is an important component that contributes to social capital development, but trust is not a component of social capital [8]. Trust encourages people to attend regular meetings [17]. In the context of political trust, the community members who trust their leader will attend the meeting who conduct by their leader. The higher the trust of the community

members to their leader, the higher tourism implementation will be [17].

Collective action

Collective action needs the presence of leadership engagement [24]. Trust stimulate the local community cohesiveness [25]. If a member of the community who had local community cohesiveness then performs an action which was followed by other community members, it's called collective action [26]. From the logic of thinking, collective action is an action taken together with others. In the collective action, there is a participation of some members of the community such as exploring the village local wisdom to support sustainable development agenda [27].

Social capital influences community participation [28]. The lack of collective action implies a lack of community participation in a joint activity, whereas community participation is one of the important factors to conduct CBT [29, 30]. Community participation tends to be higher at the first stage of tourism development. Community participation is higher at the CBT; moreover female tends to shape community strongly.

The culture of collective actions can enhance the creativity and efficiency [31], renewable energy [32], have a positive effect on financial performance [33], and it becomes important since tourism business is changing easily [34,35]. Collective action in a community is a collective action in the context of vertical and horizontal relationships.

The vertical relationship which is based on political trust is between the community members and their local government such as the village head. Therefore, government policy should be able to encourage the growth of collective action or people participation [30,36] based on its local wisdom, because the implementation of an appropriate policy would increase the strengths [37]. The participation of the local community helps to conserve natural resources [35,38]. Collective action -that has participation value can strengthen social capital and thus change a policy [39].

Trust and Collective Action

Mutually beneficial trust and collective action among the member of the community as aspects of social capital play an important role in eco-tourism based community [38,39]. The implication of trust and collective action contributed positively to the development of

tourism business in residential areas [36], for example, it can increase entrepreneurial spirit [40]. It is understandable that someone wants to do business with the person they familiar with. Trust is also establishing harmonious inter-community relationships in eco-tourism [41].

Moreover, trust and collective action are cultural components in modern society [14], that able to encourage the welfare of the local community and minimize the negative impacts of tourism [8]. The negative impact of tourism could be employed for local residents only for low-level jobs. By strengthening the social capital of trust and collective action, the leader would be easier to have an agreement [24] with the community. The lack of managing tourism, collaboration, and partnership among stakeholders will lead to unsustainable eco-tourism [10]. The research of social capital in terms of trust and collective action had contributed to rural area, eco-tourism, modern society, and coastal areas, but research on the contribution of trust and collective action in CBT is still very rare.

MATERIAL AND METHOD

The research method used descriptive quantitative. The unit of analysis was local residents of CBT Kampung Tajur in Purwakarta, West Java. The number of family in CBT Kampung Tajur was 78 families.

The sample was saturated sample [42], so the sample was the same number to the number of families. The sample chosen was the head of the family, which considered to have the most interaction with the social activities. If the father of the family has passed away, then the respondent was the mother in the family. Participation in the study was voluntary, and the respondents did not receive any compensation for their participation. The questionnaires were administered using a standard paper-and-pencil format.

The variable in the study was social capital variables which consisted of trust and collective action. The data was collected on October up to December 2017 by distributing questionnaires, which separated into two parts. The first part collected respondents' socio-demographic (age, gender, education, marital status, employment, and household income). The second part asked respondents' perception of trust and collective action.

The analysis method of socio-demographic was frequency analysis, while the variables analyzed by frequency and crosstabs analysis.

Socio-demographic variables were dummy-coded (Table 1).

Social capital of trust and collective action [39] was used to assess the CBT of Kampung Tajur community. Trust divided into two sub-variable, namely trust of familiars and generalized trust. Trust of familiars assessed with three questions: I feel comfortable leaving the child to the neighbor, I feel comfortable asking for help to my neighbor, and I rely on neighbors to do important activities. Items are rated on a 5-point Likert-type scale, ranging from 1 (no trust at all) to 5 (trust completely). Internal consistency reliability of this six-item scale was high ($\alpha = .97$). All statements of trust have mean indicator:

- | | |
|----------------|--------------------|
| 1) 1.00 - 1.20 | = no trust at all |
| 2) 1.21 - 2.40 | = bad trust |
| 3) 2.41 - 3.60 | = trust |
| 4) 3.61 - 4.80 | = good trust |
| 5) 4.81 - 5.00 | = trust completely |

Collective action includes five items as follows:

- 1) Did you attend a formal meeting conducted by the village head, in the last 12 months?
- rated on 2 possibility answers, **yes** or **no**
- 2) Did you attend community meeting conducted by the community head, in the last 12 months?
- rated on 2 possibility answers, **0 up to 12 times per month** or **more than 12 times per months**
- 3) Did you attend a religious meeting regularly?
- rated in 2 possibility answers, **yes** or **no**.
- 4) What was your participation in tourism activity at Kampung Tajur?
- rated on five possibility answers, **homestay owner, tour guide, traditional culinary cook, tourism activist, or others** (provide catering, tourism coach, etc.)
- 5) In your perception, did you join others at Kampung Tajur for community work actively?
- rated on five possibility answers, **never, once, often, usually, or always**.

Crosstabs analysis was used to identify the percentage of trust to each statement of collective action, Chi-Square, and significance. Firstly, respondents' answers were grouped into three parts: 1-2.33 = low; 2.34-3.66 = moderate; and 3.67-5 = high. After that, we did a crosstabs analysis. Statistical analyses with SPSS 21 were used to analyze socio-demographic and the variables.

RESULT AND DISCUSSION

Socio-demography Characteristics

A total of 78 Kampung Tajur residents (66.7% females; 50% at the age of 40 up to 60 years old) participated in the present study. The previous study found that female influenced community participation strongly [43,44]. Table 1 presents a detailed description of the study sample.

Table 1. Sample Description

Variable	Percentage
Age	
<20 years old	1.3 %
20-<40 years old	37.2 %
40-<60 years old	50.0 %
≥60 years old	11.5 %
Gender	
Male	33.3 %
Female	66.7 %
Education	
No formal education	1.3 %
Elementary school	76.9 %
Junior High School	14.1 %
Senior High School	7.7 %
Employment	
Unemployed	1.3 %
Farm laborers	48.7 %
Small shop	11.5 %
Civil servant	1.3 %
Employee	5.1 %
Others (non formal workers)	32.1 %
Household income category (in IDR)	
<500.000	3.8 %
500.000-1.000.000	50.0 %
1.000.000-2.000.000	24.4 %
2.000.000-3.000.000	16.7 %
More than 3.000.000	5.1 %

Note: IDR=Indonesia Rupiah (1USD=approximately 15.000 IDR)

The present sample was the entire population of Kampung Tajur. Low educated participants overrepresented in the sample (76.9% hold an elementary school). Respondents in the study were farmers (48.7%) and earned below regional minimum wage (around IDR 500,000 up to 1,000,000) or lack of wellbeing in the point of economic aspect.

Validity and Reliability test

Validity test of trust's result was between 0.896 up to 0.931 (Appendix 1). It meant that all the statements were strongly valid. Reliability test describes that all the statements of trust were reliable (Cronbach's Alpha 0.971).

Mean and Frequencies

Table 2 shows descriptive statistics of mean on trust and frequencies of collective action.

Mean scores on the trust of familiars and generalized trust were good (mean 4.22 points).

Table 2. Trust and collective action

Questions/ statements	Mean
Trust	4.22
Trust of familiars:	
I feel comfortable leaving the child to the neighbor	4.18
I feel comfortable asking for help to my neighbor	4.23
I rely on neighbors to do important activities	4.21
Generalized trust:	
I have honest neighbor	4.26
Village people can be trusted	4.22
If I lost something in the village, then the item will be returned safely	4.23
Collective action	Percentage
Did you attend formal meeting conducted by the village head, in the last 12 months?	Yes No
	59.00 % 41.00 %
Did you attend community meeting conducted by the community head, in the last 12 months?	0-12 times per month More than 12 times per month
	52.60 % 47.40 %
Did you attend religious meeting regularly?	Yes No
	93.60 % 6.40 %
What was your participation in tourism activity at Kampung Tajur?	Homestay owner Tour guide Traditional culinary cook Tourism activist Other (catering, tourism coach)
	78.20 % 5.10 % 1.30 % 5.10 % 10.30 %
In your perception, did you join others at Kampung Tajur for community work actively?	Never Once Often Usually always
	2.60 % 6.40 % 2.60 % 70.50 % 17.90 %

The community had the good trust of familiars in terms of feeling comfortable leaving the child with the neighbor, asking for help to the neighbor, and relying on neighbors to do important activities. It related to Nunkoo's statement that trust is able to reduce fear, have positive expectations, and establish inter-dependence. Besides that, they also had the good generalized trust of having perceptions that they had honest neighbor, trusted neighbors, and didn't afraid of losing something. That condition is strengthening Nunkoo's argumentation that trust can create a good connection [17].

According to the data, 59% respondents attended in a formal meeting which was conducted by the head of the village and only

41% of respondents didn't attend the formal meeting which was conducted by the community head. The community attendance in a meeting which was conducted by the community head in the last 12 months was about 52.6% of respondents attended the meeting, while 47.4% absence. Nunkoo's stated that trust encouraged people to attend the regular meeting [21], but in Kampung Tajur, the low attendance wasn't described the community cohesiveness. It could be understood because the new formal leader had less attention in tourism.

The community participation in attending religious meeting regularly was 93.6%, and only 6.4% didn't. In term of participating in tourism, there was 78.2% as homestay's owner, 5.1% as a tour guide, 1.3% concerned of cooking traditional culinary, and 10.3 % did many informal jobs such as being tourism activist, providing catering, and being a coach. Moreover, 2.6% of respondents never participate in joining others on community work, 6.4% once participate in joining others on community work, 2.6% often participate on joining others in community work, 70.5% usually participate in joining others on community work, and 17.9 % always participate in joining others on community work (Table 2). Hardan argued that cohesiveness will perform collective action [25].

Trust and Collective Action Relationship

Based on crosstabs analysis (Table 3), we found that the respondents stated moderate trust 3.1% and high trust 96.9% for the statement "attended the formal meeting conducted by the village head in the last 12 months". Besides that, the respondents stated moderate trust 4.3% and high trust 95.7% for the statement "attended the formal meeting conducted by the village head in the last 12 months". The study showed P-value (0.076) and its significance (0.782) was higher than the significance level 0.05. It meant that trust among the community members didn't relate to the attendance of respondents in a formal meeting conducted by the village head in the last 12 months and its relationship wasn't significant.

In term of the respondents' attendance in the community meeting conducted by the community head in the last 12 months, with moderate trust 4.9% and high trust 95.1% attended the community meeting around 0-12 times per month. They also stated moderate trust 2.7% and high trust 97.3% for the statement more than 12 times per month. P-value (0.249) and its significance (0.618) were higher than the significance level 0.05. It meant that trust among the community members didn't relate to the attendance of respondents in community meeting conducted by the village head in the last 12 months and its relationship wasn't significant.

Table 3. Crosstabs Analysis of Trust and Collective Action

Variables of Collective action		Trust		Chi-Square	Sig.
		Moderate	High		
Did you attend formal meeting conducted by the village head, in the last 12 months?	Yes	3.1 %	96.9 %	0.076	0.782
	No	4.3 %	95.5 %		
Did you attend community meeting conducted by the community head, in the last 12 months?	0-12 times per month	4.9 %	95.1 %	0.249	0.618
	More than 12 times per month	2.7 %	97.3 %		
Did you attend religious meeting regularly?	Yes	4.1 %	95.9 %	0.214	0.644
	No	0 %	100 %		
What was your participation in tourism activity at Kampung Tajur?	Homestay owner	0 %	100 %	11.960	0.003
	Tour guide	25 %	75 %		
	Traditional culinary cook	15.4 %	84.6 %		
	Tourism activist	0 %	0 %		
	Other (catering, tourism coach)	0 %	0 %		
In your perception, did you join others at Kampung Tajur for community work actively?	Never	0 %	100 %	1.305	0.861
	Once	0 %	100 %		
	Often	0 %	100 %		
	Usually	0 %	100 %		
	Always	0 %	100 %		

For attending religious meeting regularly, the respondents who attended the religious meeting stated moderate trust 4.1% and high trust 95.9%. On the other hand, the respondents who didn't attend the religious meeting regularly had high trust 100%. P-value (0.214) and its significance (0.644) were higher than the significance level 0.05. It meant that trust among the community members didn't related to the attendance of respondents in religious meeting regularly, and its relationship wasn't significant.

All those results could be understood because most of the people who attend the formal meeting and the community meeting were male since most of the respondents (66.7%) were female. It's related to the statement of a respondent: "I didn't attend village head meeting, but the male did it" (Mrs. R, 38 years old). It's different from the religious meeting. The female always attends religious meeting periodically such as reading the holy Al Qur'an or attending religious events as a respondent said: "I participated in reading the holy Al Qur'an three times a week, on Monday, Wednesday, and Friday afternoon" (Mrs. N, 48 years old).

In term of occupation, the respondents stated 100% of moderate trust for homestay manager, 25% of moderate trust and 75% of high trust for the tour guide, 15.4% of moderate trust and 84.6% of high trust for the traditional culinary cook. P-value (11.960) was higher than the significance level 0.05, but its significance (0.003) was lower than the significance level 0.05. It implied that trust among the community members didn't relate significantly to their occupation.

In the point of respondents' perception of joining others at Kampung Tajur for community work actively: 2% high trust respondents answered 'never', 100% high trust respondents answered 'once', 100% high trust respondents answered 'often', 5.5% moderate trust respondents said 'usually' and 94.5% high trust respondents said 'usually'. P-value (1.305) and significance (0.861) were higher than the significance level 0.05. It meant that it didn't correspond between trust and the community members' perception of their participation in tourism and it's not significant.

This result was opposite to the previous research that collective action needs the presence of leadership engagement [24], but it implied that in term of the social aspect, the community have had good relations horizontally [6] and internally [7]. This condition meant that

there was trust among them [8] and they have a source of sustainability for achieving the welfare of the local community [11]. They didn't have fear to be cheated [12]. Approximately 36 respondents still had good trust in both trusts of familiars and generalized trust. This implied that the absence in fulfilling community head invitation for the meeting didn't describe trust among the community.

Trust stimulated the local community cohesiveness [16,25]; with or without community leader existence. It was interesting that 73 respondents, who had the good trust of familiars and generalized trust, attended religious meeting regularly. It implied that in CBT Kampung Tajur, trust was the most effective contribution on establishing the religious meeting. According to the participation in tourism activities, more than 61 respondents who had good trust were the homestay owners. This situation because the local government decided Kampung Tajur as CBT based on their willingness to establish the Sundanese traditional house as homestays. The Sundanese traditional house is a wooden stage house. It's called *Imah Panggung*. Finally, trust encouraged 55 people at Kampung Tajur to usually join community work actively. This community participation was one of the important factors for CBT [29,38,39].

Our findings regarding the role of collective action were in accordance with previous studies that social capital refers to resources derived from social relationships [9]. It described on the relationship between the community and its village head, the relationship among the community such as individual relationship [6], and the relationship between the community and their visitors which was known as external social capital [7], thus social capital emphasized mutual trust [38,39].

It is especially surprising that trust was still good among the community members, although the low attendance on community meeting conducted by the community head. The low leadership of the community head didn't impact trust among the community because due to the existence of trust among the community members, there must be entrepreneurial spirit [40], and cohesiveness among them [16]. However, this study was essential for several reasons. First, it extends Moscardo [8] and Payne [9] studies of social capital that trust and collective action might be strengthened to build a long-term good relationship. Second, it extended the discussion of reaching welfare [10-13]. Third,

the results derived from this study could give the local government insight into how to support the local community for developing community capacity.

CONCLUSION

Trust was a robust predictor of a collective action variable, such as attending a religious meeting, participating in tourism activity, and joining for community work. On the other hand, the absence of attending the formal meeting and community meeting conducted by the community head did not have a relation to trust among the community member. Our findings suggested that since trust and collective action has been a valuable resource in the society of CBT Kampung Tajur, enhancing knowledge, empowering and inspiring must be implemented to play a role as a subject in the village.

The knowledge which will be given to the community's member covers environmental, economic and social aspects. For example, the knowledge of the importance of protecting the environment in carrying out tourism activities, such as actively planting trees, not cutting trees carelessly, or forbidding visitors from vandalism. Regarding the growth of economic aspects, the community needs the knowledge about how to set homestays prices and catering costs, make tour packages, or become a tour guide. From the social aspect, the community needs to maintain their mutual trust that leads to positive collective action. After the community provided with the various information mentioned above, the community is empowered to manage tourism activities based on local wisdom. In the end, the community must be encouraged to explore their unique resources to present to visitors.

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Appendix 1. Validity and Reliability Test of Trust

		Correlations of trust						
		trust1	trust2	trust3	trust4	trust5	trust6	trust_tot
trust1	Pearson Correlation	1	,761**	,845**	,685**	,788**	,804**	,896**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000
	N	78	78	78	78	78	78	78
trust2	Pearson Correlation	,761**	1	,909**	,756**	,748**	,698**	,884**
	Sig. (2-tailed)	,000		,000	,000	,000	,000	,000
	N	78	78	78	78	78	78	78
trust3	Pearson Correlation	,845**	,909**	1	,730**	,761**	,768**	,916**
	Sig. (2-tailed)	,000	,000		,000	,000	,000	,000
	N	78	78	78	78	78	78	78
trust4	Pearson Correlation	,685**	,756**	,730**	1	,936**	,903**	,911**
	Sig. (2-tailed)	,000	,000	,000		,000	,000	,000
	N	78	78	78	78	78	78	78
trust5	Pearson Correlation	,788**	,748**	,761**	,936**	1	,934**	,942**
	Sig. (2-tailed)	,000	,000	,000	,000		,000	,000
	N	78	78	78	78	78	78	78
trust6	Pearson Correlation	,804**	,698**	,768**	,903**	,934**	1	,931**
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000
	N	78	78	78	78	78	78	78
trust_tot	Pearson Correlation	,896**	,884**	,916**	,911**	,942**	,931**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	
	N	78	78	78	78	78	78	78

** . Correlation is significant at the 0.01 level (2-tailed).

Reliability Statistics

Cronbach's Alpha	N of Items
,971	7

Tourist Accommodation: A Host-Tourist Matched for Batur Geotourism

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Abstract

This article presents research results on tourist accommodation available in Batur geotourism: a host-tourist approach. It is developed based on a documentary study. There are four main studies on Batur conducted earlier which reports were assessed that are relevant to discover the match of tourist needs and the availability of tourist accommodation in Batur geotourism area. This qualitative research using secondary data which was conducted in an effort to find a solution to the issue of a short tourist stays in Batur. The assessment results show three matched types of accommodation that highly compatible between guest-accommodation available in Batur and tourists' needs for accommodation. These includes homestay covering basic and functional accommodation; moderate standard accommodation including the villa, guest house, and two/three-star hotel; and luxury accommodation inclusive tourist attractions comprising boutique hotel. This concludes that the short tourist stays in the area is not due to the unavailability of accommodation. Further assessment is required to discover the solution to the matter. The problems might lie on the lack of information and promotion or the limited tourist attractions and activities available in Batur; that require further action from the management of Batur tourism as well as the government of Bangli Regency to address the issue. It is expected that these study results could be used as a reference by Batur geotourism management to further develop the area.

Keywords: Accommodation, Community-based tourism, Geotourism, Geotourism products, Geotourists, tourist stays.

Introduction

A longer tourist stay improves the productivity of any tourist destination significantly. Even though, Batur geotourism site receives substantial number of visitors, at an approximate of 300 people per day, only a small number of tourists stay in Batur to explore and enjoy the place [1]. Further, the majority are day-visitors who mostly came for the Sun-rise trekking. A question is raised: why not many tourists stay overnight in Batur? Related to the issue, some assumptions are postulated, which include: lack of the elements of to see and to do in Batur, as tourist attractions which play a very important part in extending tourist stay [2]. The other assumption is the lack of tourism facilities that support a longer tourist stay. In conjunction with the effort to extent tourist stay in Batur, this study was conducted to examine the types accommodation available in Batur and matches them with the needs of the visitors.

Batur is a geotourism site located in Bangli Regency in Bali Province in Indonesia. It is one of the most beautiful calderas in the world which was formed from the repeated eruptions of mount Batur [3]. Batur has a mild climate, at

1717 m elevation, and the temperature could range 16 – 17°C [4]; a warmer temperature is expected at the lower altitude around Batur caldera. Batur has many tourist attractions to offer starting from panoramic views around the caldera and atop the mountain; natural hot spring - a place to swim, culinaries, traditional lifestyle, geo-museum, temples and the lake (Fig. 1) [5].

Batur is registered as a member of the United Nation Global Geopark Network (UN-GGN) in 2012 [6]. UNESCO's Global Geopark Network scheme integrates conservation, education and the concept of sustainable and integrated development in a geological area embodied in geotourism. UNESCO defines geopark as a national conservation area that includes a number of vital, rare, or aesthetically pleasing geological heritage sites [7].

Geotourism

Geotourism includes the provision of services that enable tourists to have experiences not only for the purpose of appreciation and enjoyment but also for learning and understanding of the features of a geotourism-site. Dowling and Newsome particularly describe geotourism attractions which comprise: landscape, landforms, fossils, rocks, minerals, and an appreciation of the shaping and shaping process [8]. Meanwhile, Hose defines geotourism as providing facilities and interpretations along with

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Accommodation in Batur Geotourism Park
(Ernawati, et al.)

other services that enable travelers to gain knowledge and understanding of the geology and geomorphology of a geotourism-site, which is not solely for the purpose of appreciating beauty [9]. The definition proposed by Hose encompasses all geotourism activities including the site management in order to provide facilities and services that enable visitors to enjoy the beauty of geological sites and promote appreciation for geology [9].

Geotourism is a part of Nature Tourism. Fennell [10] discussed the 'community conservation' model in which local people are actively involved in and benefit from the conservation project. The effort of conservation of a natural site should involve the people live around the place. This is because the local living depends on the immediate environment. Involving locals in tourism development will provide an economic opportunity for the locals - an additional source of income; and other

opportunities such as the expansion of socio-cultural perspectives, increasing the locals' awareness and ability to participate in nature conservations. Community's involvement in any stage of tourism development and operation is referred to community-based tourism, wherein the locals manage and provide tourism services such as accommodation, tourist guide, local and traditional dishes, and transportation.

Accommodation for Geotourism

Tourism products could be divided into two main categories: attractions and industry elements [11]. The industry elements include travel services, accommodation, food and beverage services, transportation, souvenir. While, Frochot and Bata [12] argued that tourism product is tourist's experiences; thus, tourist satisfaction depends on all elements that composed the products.



Figure 1. Batur Geotourism Site [5]

Description: a) top of Mount Batur – trekking terminating point, b) tourist interacted with local fauna, c) sunrise at the top of Mount Batur, d) restaurant with lake view.

Within the entire range of accommodation from luxurious to budget, accommodation are differentiated into two main types, which include: *serviced* and *self-catered* [13]. Community-based tourism (CBT) tourists' needs on accommodation and identify three types of accommodation which include [14]:

- 1) good standard accommodation, such as villa-style accommodation in the village
- 2) homestays - clean rooms in villages with basic facilities for budget travelers that enable close interaction with hosts
- 3) luxury accommodation in resorts for day trippers.

Further, projecting age and accommodation types, more mature visitors prefer to access CBT products on day trips from their resort hotels, or stayed overnight in villas in the village. Younger travelers, who commonly travel on a budget, prefer homestays and intermingle with local people, provide they have clean facilities and a comfortable bed [14].

AA Hotel Services [15] assessed the standard quality of hotel services from 13 aspects, which are divided into 2 categories, namely:

1) Value for consumers

- a. Intrinsic quality - the intrinsic value of accommodation: 'an overnight service'.
- b. Condition - care and appearance of items: Is there a function suitability?
- c. Physical and personal comfort - does quality support user's comfort?
- d. Attention to detail - proof that attention and service have been given and done to ensure the customer experience is special, and a high standard for all.
- e. Guests' choice and ease of use - customer experience is enhanced by providing choices such as choices in the room type and menu selection. This can be improved by exploring how useful and efficient the subspaces for customers.
- f. Presentation - the way room and its content are displayed both on arrival-during stay.

2). Standard assessment of lodging services

- a. Overall standards (General standards)
- b. Services
- c. Meals/Breakfast - Dining quality and information (food quality and during dining)
- d. Bedrooms
- e. En-Suite bathroom and shower rooms or private facilities

- f. Public areas
- g. External areas (Areas outside the hotel)

Accommodation as one element of the tourist products plays very important part in delivering quality tourist experience. The availability of accommodation enables tourists to extend their stay thus increases the income of the destination. One of the way for local community participating in tourism is by providing accommodation for tourists. Thus, tourist spending goes directly to the local community members. Since, capital is a common limitation of community's participation in tourism [16], the accommodation offered by locals could be as simple as a spare room in a share building. Nonetheless, safety and cleanliness are requirements in running a homestay, wherein guest accommodation should be professionally provided and handled.

Geotourist

Geotourist is a niche within the alternative tourist markets. This segment is featured by particular interests and specific needs. Generally, alternative tourists travel alone or in a small group and participate in different challenges [17], enjoy and appreciate interaction with the local community members [18], consume local culinary [19], and enjoy cultural diversity as an instrument of self-enrichment [20]. They want to experience something different from their everyday lives, and are interested in ethnic culture, rural environment and natural beauty [21]. Alternative tourists usually accept the basic facilities available in villages [22], and want to contribute to the local community [20]. A previous study conducted on community-based tourism and identified two types of CBT tourists, day trippers and overnights. Both types presented similar characteristics with the overnights interested in a more engaged CBT experience [14].

The Travel Industry Association of America (TIAA) identified 16.3 million (29.6%) tourists as Geo-savvy whose profiles are: young people, highly educated, and environmentally conscious [23]. Mamoon conducted a study and discovered that the motivation of geotourists is primarily rooted in a person, thus the activity is valuable for the traveler her/himself [24]. Further, the author classifies five main intrinsic motivations of geotourists which include: to take a rest from the chaotic daily activities, to relax, to enjoy geotourism sites, to feel adventurous, and to advance knowledge.

Knowing customer needs is vital for geotourism managers. In several failure cases of tourism developments including CBT, the problem is rooted from the unidentified target market [16]. Thus, it is important for marketers and developers of tourism sites to understand their market segments. The failure in identifying the target market disables the developers to identify needs of the prospective customers, thus unable to focus in fulfilling these needs. These needs include the provision of accommodation services. To match the prospective customers' need, it is vital for local community members who participate in providing services especially visitors' accommodation to understand the target market of the respective destination or the tourist site.

METHODOLOGY

This articles was developed based on a qualitative documentary study using secondary data. The study includes assessing reports of the earlier studies conducted mainly by the authors and supplemented by a literature review. There are four studies that had been conducted earlier. The first research is in regard to products of community-based tourism - a case study in Bali. The next is a study specifically on geotourism products a tourist perspective in Batur. This was followed by an assessment on geotourism products that could be provided by the local community members in Batur, a local perspective. The last study is in regard to the accommodation available in Batur.

The study reports were examined and the information was divided into 2 classifications: accommodation from the 'supply perspective' and 'tourist perspective'. Lastly, both sections of information were compared to discover the match between the demand and the availability.

RESULTS AND DISCUSSION

Tourist Accommodation in Batur

The results of the earlier study on CBT tourists' needs for accommodation identified three types of accommodation, which include: homestay and villa in the village, and luxurious accommodation in tourist resorts [14]. It also found that some tourists who came for a day visit to a CBT village stayed in resort hotels.

The results of the first study conducted specifically in Batur regarding the general aspect of products including accommodation from *tourist perspective* indicated that the tourists'

desire on accommodation ranging from budget to luxury accommodation [1]. It is generally expressed that cleanliness is a prime important in all aspect of tourism facilities, this to include clean bed room from dust and free of stuffy odour. Further, this study identified three types of accommodation: homestays, villas and luxurious accommodation which represent the needs of the variety of market segments. An opinion also expressed that a luxury accommodation in wilderness i.e. in Batur is an attraction for tourists. This study also discovered that most of the tourists visiting Batur is in pursue of the Sun-rise climbing. The climbers will go straight back to their base which is outside Batur after the climbing is completed, thus no accommodation is needed in Batur; only the minority of respondents stay overnight in Batur. Most of the respondents do not know if accommodations are available in Batur.

In the second study [25] on accommodation from the 'supply-side' examined the type and standard quality of accommodation available in Batur based on the 13 aspects of standard set by AA Hotel Services [15], plus one aspect of 'cleanliness'; thus, made up a total of 14 aspects. This study identified four types of accommodation available in Batur, these include: Homestay – a basic and functional accommodation, Villa/Guest-house, Hotel of two/three star, and Boutique hotel; the descriptions are provided in the following section.

Homestay is the accommodation offered by locals who have spare room/s to be rented for tourists (Fig. 2). This type of accommodation is usually very basic and only fulfills minimal functions of a lodging, which are usually managed amateurly either in the aspects of services, physical buildings, style and arrangement of rooms and the home yards.

Villa is a special building that is specifically dedicated to providing accommodation for tourists which is usually delivered in a good standard (Fig. 3 - 4). However, in some cases this type of property is managed with less professionalism due to lack of ability of the staff or amateur management. Two-three-star hotel is an accommodation property that has reasonably large number of rooms with 2-3-star service standard (Fig. 5).



Figure 2. Homestay

Description: a) homestay front view, b) standard bed in homestay (Personal documentation, 2018)



Figure 3. Villa - Traditional style

Description: a) villa front view, b) standard bed in a traditional villa (Personal documentation, 2018)



Figure 4. Villa - Contemporary style

Description: a) standard bed in a contemporary villa, b) standard bathroom in a contemporary villa (Personal documentation, 2018)



Figure 5. Two/three-star hotel

Description: a) hotel front view, b) standard bed in a two/three-star hotel (Personal documentation, 2018)

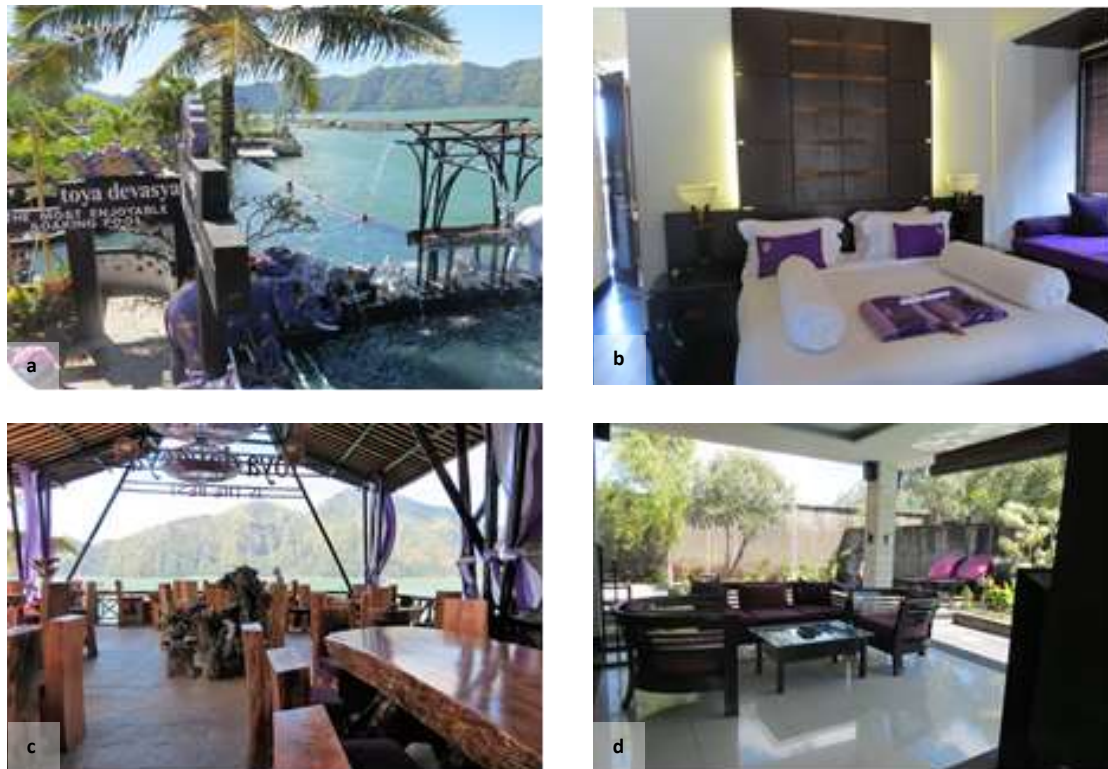


Figure 6. Boutique Hotel in Batur

Description: a) soaking/swimming pool, b) standard bed in a boutique hotel, c) dining room, d) lounge (Personal documentation, 2018)

Boutique hotel is a small scale property that offers luxury accommodation that has a special feature which becomes an attraction for guests [26]. There is one business that offers such service in Batur Geotourism with a variation of room types which include: suit room for honeymooners, family and the standard superior rooms (Fig. 6). This boutique hotel which is located in one side of Batur lake highlights its attractions with various type of swimming pools. The hotel has more than four swimming pools using room temperature and warm water with spectacular blended to nature pool design that unites the pool and the lake which gives an ambiance that the guests are swimming in Batur lake.

Tourist Accommodation in Batur: A Supply-Demand Match

Assessing the accommodation available in Batur and the tourist needs, it seems that they are highly matched. Even though it appears that the supply side indicates the availability of 4 accommodation types and the tourist's needs are classified into 3 (Fig. 7). As the two/three-star hotel could be classified into middle standard accommodation similar to villa or guest house,

noting that this type of property has more rooms to offer.

Between the availability and the need for accommodation in Batur geotourist, seemingly, there are differences namely: 4 classifications on the 'Availability' side and 3 classifications on the 'Need' side. However, basically both sides refer to the same essence, namely:

- 1) **Budget accommodation** to meet the basic need for the overnights prioritising cleanliness, which leads to the 'homestay' type of accommodation.
- 2) **Quality accommodation** to meet the basic function as well as to fulfill the need of personal comfort, and aesthetic value which leads to villas, guest houses and two/three-star hotels.

However, selecting this type of accommodation requires caution during purchase and product survey, as there are properties despite of being classified into this category, nonetheless offer less adequate quality in terms of basic function, comfort and aesthetic.

- 3) **Luxury accommodation** which also functions as tourist attractions.

There is one provider that meets this category, which is classified as boutique hotel. The business has a few luxurious suit rooms with a 'private pool'. This place is a paradise for those who enjoy swimming, there are warm and room temperature pools with various ambiance. A pool located on the edge of the lake applies a design as if guests are swimming in Lake Batur. Therefore, the property offers accommodation and entertainment.

In response to the question: why not many guests stay overnight in Batur? It could be identified now, it is not due of the unavailability of accommodation or a particular standard of hotel required by visitors. It is supported by the expression of one research participant stated that after the Sunrise trekking, she will go directly to Denpasar and have lunch on the way [1]. It is further stated that she did not know if there is anything they could do in Batur other than the Sunrise climbing. From this expression, it seems that the reason for a short tourist stay might be caused by the unavailability of sufficient elements of to see and to do by visitors (tourist activities). The other possibility could be the lack

of information on tourist attraction in Batur, thus information of all attractions within the whole Batur area needs to be made available. This will give choices to the tourists and an idea on how they will spend their time in Batur. Nonetheless, these hypotheses need to be further examined in search for the solution to the short tourist stay.

CONCLUSION

Based on quality and types, there is high compatibility between the supply of accommodation and the tourist's needs of accommodation in Batur. The supply-demand match of accommodation in Batur is within three domains, these include: homestay – basic and functional accommodation; villa, guest house, and two/three-star hotel; and boutique hotel.

It could be concluded that the short tourist stay in the site is not caused by the unavailability of accommodation or a particular standard of accommodation required by the tourists. The problems might be triggered by the lack of communication, promotion or the limitation of tourist attractions and activities in Batur. In this case, the need for accommodation needs to be created.

Tourist accommodation in Batur: A supply-demand match		
Accommodation available in Batur Geotourism		Tourist's needs of Accommodation in Batur
1. Homestay - only serve basic functions - a place to spend the night and rest 2. Villa/Guest house – a good quality lodging, sometimes has accommodated aesthetic elements 3. 2-3-star hotel 4. Boutique hotel	↔	1. Homestay - the need for basic lodging facilities for 'budget travelers 2. Villas are quality accommodations that have integrated the elements of comfort and aesthetics into their product design 3. The need for a luxury accommodation is expressed by respondent which is not solely to meet the need for high standard accommodation; a luxury accommodation in the wild is regarded as tourist attraction.
Accommodation in Batur geotourism: a supply and demand match: 1. Budget accommodation – homestay, basic and functional accommodation 2. Moderate standard accommodation – villa, guest house, and two/three-star hotel 3. Luxury accommodation – boutique hotel.		

Figure 7. Tourist Accommodation in Batur: A Supply-Demand Match

These actions are required in larger scale covering a wider scope. The management of Batur tourism as well as the government of Bangli Regency could play a very important role and provide assistance in addressing the emerging issue. This for example, promotion could be conducted effectively for Batur holistically as a tourist site rather than individual business/accommodation, which introduce all supporting facilities and tourist attractions available. Batur could strengthen its existing tourist attraction and by developing more variety of attractions, for instance: developing Batur lake as attraction focal point, and the traditional culture – a unique Batur farming life style to support the nature base tourist attraction – the current geotourism attractions.

Nonetheless, further assessment is required to precisely identify the problem and solve the issue; therefore, the tourist-stay could be extended and subsequently an increase earning from tourism. These study results academically could add a reference on accommodation studies especially for Geotourism. Practically, it can be used as a reference by tourism stakeholders, particularly, Batur Geotourism Management and the local government of Bangli Regency to further develop the area.

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Exploration of Understorey Vegetation's Beauty: Supporting Tourism Potential of Bukit Siguntang, Palembang

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Abstract

Bukit Siguntang Forest, an urban forest on a hill filled by trees that are believed to be a tomb complex of Malay kings. As an ecosystem, Bukit Siguntang Forest also consists of various understorey. Because of the tourist location, the understorey of Bukit Siguntang Forest tends to be easier to encounter cleaning which is considered as weed and disturbs beauty. The study purpose was to explore the aesthetic potential of the understorey vegetation of Bukit Siguntang Forest. The study method used vegetation analysis with the plot measuring 2m x 2m, which was followed by species identification. The results showed that the understorey identified as dominating species with aesthetic potential were *Asystasia gangetica*, *Bidens pilosa*, *Borreria laevis*, *Drymaria cordata*, and *Mimosa pudica*. The understorey which is included in herbs and shrubs had beautiful flowers, unique leaf shapes, and attractive colors. These plants provide the beauty of their parts so that they can be applied to form a flower bed, green coverage and refreshing scenery. However, the growth of understorey also needs to be controlled. That is because understorey can grow rapidly, so that will be growing too densely and messy planting mode.

Keywords: aesthetic function, Bukit Siguntang, tourism, understorey vegetation.

INTRODUCTION

Urban forest is the maintained or built forest in urban area that is consisted of woody vegetation, which has two main functions, namely intrinsic function (as an ecological function) and extrinsic function [1-4]. Therefore, Government of Palembang City through Regional Regulation (*Peraturan Daerah*) No. 15 of 2012 concerning the Regional Spatial Plan (*Rencana Tata Ruang Wilayah*) of Palembang City in 2012-2032 determined certain areas as urban forests. One of the urban forest areas is Bukit Siguntang Forest [5].

Bukit Siguntang Forest, although as an urban forest, is not only consisted of large trees (woody vegetation). Bukit Siguntang Forest also has the diverse understorey vegetation, which forms a complex ecosystem. Large trees and understorey are biotic components in ecosystems that have their respective roles [6] as key elements of Bukit Siguntang Forest [7]. Large trees with their canopy give the effect to microclimate through photosynthesis and evapotranspiration processes so as to reduce the heat island effect, and affect the air quality and noise levels [7,8,9]. While the

understorey vegetation occupies the position as ground cover or forest floor. The understorey plays the role in influencing underground processes such as decomposition, nutrient flow, and buildup of soil nutrients [10]. In addition, the understorey also plays a role in reducing the rate of surface runoff, thus reducing the potential for erosion [11,12].

The main extrinsic function of Bukit Siguntang Forest is a social and cultural function. This is because Bukit Siguntang Forest is one of the tourist destinations in Palembang City which contains a tomb complex of Malay kings. Because of this tourism location, the understorey vegetation of Bukit Siguntang Forest tends to be easier to encounter regular cleaning/weeding which is considered as a weed and disturbs the beauty. Besides being the main function in ecosystem, the understorey along with woody vegetation (trees) forms forest floors, walls and canopies which are architectural characteristics that provide an aesthetic function [13], thus provide the source of aesthetic inspiration and the various forms of recreation that support the health [14]. The understorey and trees in Bukit Siguntang Forest will help reduce the stress suffered by urban people due to the harshness of city life through coolness and natural beauty [3].

The understorey plants that can provide the aesthetic value, e.g. beautifying, improving the urban environment and enriching the landscape, are plants that include in herbs and shrubs. Herbs

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and shrubs have been widely applied in the form of botanical garden, flower bed and greening of gardens since a long time ago [15]. Therefore, this study aimed to explore the aesthetic potential of the understorey vegetation (herbs and shrubs) in Bukit Siguntang Forest.

RESEARCH METHODS

Study Area

Based on Regional Regulation of Palembang City No. 15 of 2012 concerning the Regional Spatial Plan of Palembang City in 2012-2032, Bukit Siguntang area is an area of 7 ha which is planned to be one of urban forests in Palembang City [5]. Bukit Siguntang area is a hill filled with parks and large trees and as the highest landscape in Palembang with a height about 26 m above sea level (Fig. 1). This location is under the responsibility of Department of Culture and Tourism of South Sumatra Province.

Bukit Siguntang is one of the tourism destinations in Palembang City which has the high historical value. Bukit Siguntang, by some Malay people in Sumatra and the Malay Peninsula, was considered sacred, because it was the origin of the Malays. Bukit Siguntang was also considered to be the location of Parameswara, the King of Palembang who brought down kings on Malay Peninsula. During the Srivijaya period, Bukit Siguntang played an important role as a place of worship and pilgrimage for Buddhists. Another role played by Bukit Siguntang was the location of people meetings in Srivijaya. With these three important roles, Bukit Siguntang was

considered the heart of Srivijaya Kingdom. During the Islamic period Bukit Siguntang was considered the origin place of Malay kings in the Archipelago. The other role of Bukit Siguntang in the Islamic period was as a place for people to commit spite if there were disputes among residents [16].

This time, Bukit Siguntang as the highest point in Palembang City is believed to be a tomb complex. The tomb complex is located on the highest ground. There are seven Srivijayan figures' tombs linked by locals to the figures of Malay-Srivijayan royalties and heroes. They were King Sigentar Alam, Prince Raja Batu Api, Princess Kembang Dadar, Princess Rambut Selako, Commander Tuan Junjungan, Commander Bagus Kuning, and Commander Bagus Karang [17].

Data Collection and Analysis

This study was the qualitative descriptive research conducted in September 2018. The floristic exploration of understorey vegetation in Bukit Siguntang Forest was carried out through the quadrant method with plots of 2m x 2m. The plots that used in the study aimed to inventory the understorey vegetation in the form of herbaceous and shrub plants. For unknown understorey encountered during fieldwork, notes of understorey's features were carried out, and then documented in the form of photos. Based on notes and photos, the identification was carried out using scientific articles and classification books related to understorey (herbs and shrubs).



Figure 1. The Study Site: Bukit Siguntang. Scale 1 : 2500.

Source: Google Map, 2019.

During the data collection process, the species richness of understorey vegetation was counted, so that the number of individual species was known. Species richness was the count of species [18]. The species with the most individuals was considered as dominant species that followed by codominant species. Therefore, the data analysis to answer the aim of study was qualitatively by using observational notes, photos, scientific articles, and reference books, so that the aesthetic potential of the dominant and codominant understorey can be known. The aesthetic potential of the dominant and codominant understoreies can be explored through their interesting parts, such as beautiful flower, unique leaf shape and attractive color.

RESULT AND DISCUSSION

Understorey in Bukit Siguntang Urban Forest

Bukit Siguntang with its high historical value is a lush green hill. The shady trees will welcome visitors for the first time when they enter the hill. Therefore, the Government of Palembang City set Bukit Siguntang as one of the urban forests. Although as urban forest, Bukit Siguntang also has other vegetation, namely the understorey vegetation. The understorey has ecological functions (intrinsic function) as the main function in ecosystem. Its role in ecosystems affects underground processes such as decomposition, nutrient flow, buildup of soil nutrients [10]. The understorey also plays the role in reducing the rate of surface run off, thus reducing the potential for erosion [11].

In order not to reduce the ecological functions of the understorey, the beauty of the understorey also needs to be known to provide added value. It is the aesthetic value of understorey (one of the extrinsic functions). The understorey can also provide the beauty through its parts. The understorey and trees in Bukit Siguntang provide the beautiful and green view in the middle of Palembang City which is filled by buildings and markets. The identified understorey is as dominant and codominant species that considered to have aesthetic potential through their interesting parts were explained as follows.

Asystasia gangetica (Chinese Violet)

Asystasia gangetica is perennial herbs, erect, decumbent, or clambering; 1-3 m in length. Stems quadrangular. Leaves opposite; blades simple, with numerous linear cystoliths on the

upper surface, the secondary veins conspicuous; stipules absent. Flowers are bisexual, zygomorphic, arranged in spikes on axillary branches. Calyx is green, 5-7 mm long, the sepals lanceolate; corolla asymmetrically funnel-shaped, light yellow or pale violet, 2.3-5 cm long, with glandular hairs on the outer surface; stamens and pistil inserted on the floral tube. Capsules ellipsoid or club-shaped, 2-2.5 cm long, light brown when ripe, densely covered with glandular hairs; seeds 2-4 light brown, with irregular margins, lenticular [19]. The beauty of *Asystasia gangetica* is shown in Figure 2.

Bidens pilosa (Blackjack)

Bidens pilosa is an erect annual herb [20], widely distributed across temperate and tropical regions [21]. It is 20–150 cm tall (in tall plants sometimes the branches straggling), very variable, reproducing by seeds. Main root is pivotant. Its stems are square, glabrous or minutely hairy, green or with brown strips [20, 21]. Dark green, opposite leaves on stems and branches, 4–20 cm long, up to 6 cm wide, the lower leaves simple, ovate and serrate, the upper leaves trifoliate or imparipinnate with 2–3 pairs of pinnae and a single terminal leaflet. Petioles are 2–5 cm long [20].

The inflorescence is an isolated or grouped pedunculated capitula, emerging from the leaf axil. Heads borne singly at the ends of long, slender, nearly leafless branches; narrow, discoid, the disk 4-6 mm wide at anthesis; ray florets, absent or 4–7 per head, white or pale-yellow, 2–8 mm long, disk florets, 35–75 per head, yellow. Achenes (commonly referred to as 'seeds') linear, black or dark brown, 1–1.5 cm long, flat, 4-angled, sparsely hairy. Pappus with 2–3(–5) yellowish barbed awns, 1–2 mm long. The achenes are the dispersal units; dispersion is aided by the awns as they readily attach to animal skin, machinery and clothing. *B. pilosa* is a short-day plant, the critical day length being 15 hours. The plant response to controlled photoperiod depends on the time of year. The minimum period for inducing flowering is between 10 and 14 short days. Induction could only begin with the third pair of leaves fully expanded [20]. *B. pilosa* prefers full sun and moderately dry soil. However, it can grow in arid and barren land from low to high elevations [21]. *B. pilosa* is shown in Figure 3.



(Personal Documentation, 2018)



[22]

Figure 2. *Asystasia gangetica* with its beautiful flower in the midst of greenery



(Personal Documentation, 2018)



[20]

Figure 3. *Bidens pilosa* with straggling branches

Borreria laevis

Borreria laevis is erect or scrambling annual herb 0.3–1.2 m tall; stems with slight ribs, glabrous or with lines of very short sparse hairs. Leaf-blades narrowly elliptic or elliptic-lanceolate to ovate, 0.8–5.5 cm long, 0.3–2.5 cm wide, acute at the apex, cuneate at the base into the stipule-sheath, the very narrow leaf-base resembling a short petiole $\pm$ 2 mm long, entirely glabrous save for very short hairs at and near margins above giving a slightly scabrid feel; stipules drying a rather bright reddish brown; bases slightly pubescent, 2–3 mm long, with 5–7 fine fimbriae 2.5 mm long, or at inflorescence-bearing nodes $\pm$ 100.5 mm long. Flowers in terminal and axillary many-flowered sessile clusters; stipule-derived bracteoles with fimbriae 3 mm. long. Calyx-tube narrowly obconic, 2–2.5 mm. long, 0.8 mm wide,

densely hairy above; limb obsolete; lobes triangular, 0.6 mm long, ciliate, separated by a fringe. Corolla white or lobes tipped with pink; tube 1.2 mm long; lobes lanceolate, 1.3 mm long, 0.6 mm wide, slightly hairy at the apex outside. Stamens with filaments exserted 1–1.2 mm Style exserted 1.3 mm; stigma 0.5 mm wide. Capsule ellipsoid or obovoid-fusiform, 2.5–4 mm long, 1.8 mm wide, 1 mm thick, hairy above, the valves completely falling, each 2.2 mm long, 1.8 mm wide, bifid at the apex, crowned by the calyx-lobes. Seeds are chestnut-brown, oblong-ellipsoid, 1.5–2 mm long, 0.7–0.8 mm wide, 0.5 mm thick, divided into transverse areas by anastomosing transverse grooves, while the actual areas reticulate [23]. The beauty of *Borreria laevis* is shown in Figure 4.



(Personal Documentation, 2018)



[24]

Figure 4. *Borreria laevis* with its unique leaf shape and color

***Drymaria cordata* (Tropical Chickweed)**

Drymaria cordata is a weak prostrate or creeping annual, or less commonly perennial, herb up to 50 cm across or tall, usually with a mass of extensively branched, trailing stems which may root at the nodes. Roots are fibrous, shallow, mainly from the base of the stem but also from the lower nodes where the soil is moist. Stems are weak, trailing or ascending, usually extensively branched to form a dense mat in the centre of the plant, smooth and slender, sometimes hairy, with swollen nodes. Leaves in opposite pairs on slender 3-10 mm long petioles, round to heart-shaped or oval with rounded bases, smooth margins and rounded or bluntly pointed tips, 5-25 mm long and wide, hairless, weakly three-nerved, and paler below. Very short stipules persist at the bases of the petioles [25].

Drymaria cordata's flowers are in small repeatedly forked terminal or axillary clusters (cymes), on slender, densely hairy, 5-15 mm long pedicels. The flowers consist of five narrow green sepals 2-4 mm long, five, deeply forked, white petals which are shorter than the sepals, and two or three stamens surrounding the deeply divided style. The fruit is a papery capsule 2-3 mm across, splitting at maturity into three parts to release the 5-10 small reddish tuberculate flattened seeds. The seedlings have epigeal germination. The hypocotyls are slender, erect, and about 5 mm long, the cotyledons resemble the adult leaves, and the first leaves develop in tight clusters in their axils [25]. The unique and distinctive of *Drymaria cordata* is shown in Figure 5.



[24]



[26]

Figure 5. *Drymaria cordata* with small leaves and round to heart shape

***Mimosa pudica* (Sensitive Plant)**

Mimosa pudica is a small, prostrate or ascending, short-lived shrub. Some authors consider it a woody herb. It may reach 1 m in height when supported on other vegetation and more than 2 m in horizontal extension. Its root is cylindrical, tapering rependant, with secondary and tertiary branches, varying in length up to 2-cm thick, surface more or less rough or longitudinally wrinkled; grayish-brown to brown, cut surface of pieces pale yellow, fracture hard, woody, bark-fibrous; odor, distinct; taste, slightly astringent. Its stem is cylindrical, up to 2.5 cm in diameter; sparsely prickly, covered with long, weak bristles longitudinally grooved, external surface light brown, internal surface grey, bark fibrous; easily separable from wood [27].

Its leaves are digitately compound with one or two pairs of sessile, hairy pinnae, alternate, petiolate, stipulate, linear lanceolate; leaflets 10–20 pairs, 0.6–1.2-cm long, 0.3–0.4-cm broad, sessile, obliquely narrow or linear oblong; obliquely rounded at base, acute, nearly glabrous; yellowish green. Its flower is pink, in globose head, peduncles prickly; calyx very small; corolla pink, lobes 4, ovate oblong; stamens 4, much exerted; ovary sessile; ovules numerous. Its fruit is lomentum, simple, dry, 1–1.6-cm long, 0.4–0.5-cm broad, with indehiscent segments and persistent sutures having —two to five seeds with yellowish spreading bristle at sutures, 0.3-cm long, glabrous, and straw colored. Its seed is compressed, oval-elliptic, brown to gray, 0–0.3-cm long, 2.5-mm broad, having a central ring on each surface [28]. The unique of *Mimosa pudica* is shown in Figure 6.



Figure 6. *Mimosa pudica* with attractive colored flower heads [29]

Aesthetic Value of Understorey in supporting the tourism in Bukti Siguntang

Briefly, those understorey plants provide the aesthetic value through their interesting or unique parts are as follows:

1. *Asystasia gangetica* with its beautiful flower in the midst of greenery.
2. *Bidens pilosa* with straggling branches.
3. *Borreria laevis* with its unique leaf shape and color.
4. *Drymaria cordata* with small leaves and round to heart shape.
5. *Mimosa pudica* with attractive colored flower heads.

These interesting or unique parts of understory plants can be applied to form a flower bed, flower-border, green coverage and refreshing scenery (Fig. 7) [14]. But the growth of understory also needs to be controlled. That is because understory can grow rapidly, so that will be growing too densely and messy planting mode. Therefore, the management of this urban forest of Bukit Siguntang must pay attention for both ecological function and aesthetic function.



Figure 7. *Asystasia gangetica* on right side in this picture gives green coverage and refreshing scenery (Personal Documentation, 2018)

The focus of management is on to an urban forestry's ecological integrity, in order to re-engage with landscape level processes which have important outcomes in relation to both protected area and sustainable tourism [30]. For those, beautifying Bukit Siguntang as an urban forest using understory can consider the following [15]:

1. As landscape edging dan combining it with stone.
2. Combining it with landscape element:

- a) artistic conception and reasonable plant allocation should be considered when combining herbs with landscape architecture.
 - b) reasonable plant disposition and appearance should be considered when combining herbs with landscape path.
 - c) richly colored landscape and reasonable plant allocation should be considered when combining herbs with flower-border.
3. It also offers attractive photo spots in the middle of Palembang City which are filled by buildings and markets.

CONCLUSION

Bukit Siguntang Forest, which is an urban forest, one of the tourist destinations in Palembang City. As an ecosystem, Bukit Siguntang Forest is also consisted of various understorey. The identified understorey vegetation as dominant and codominant species that considered to have aesthetic potential through their interesting parts were *Asystasia gangetica*, *Bidens pilosa*, *Borreria laevis*, *Drymaria cordata*, and *Mimosa pudica*. These interesting or unique parts of understory plants can be applied to form a flower bed, flower-border, green coverage and refreshing scenery. However, the growth of understorey also needs to be controlled. That is because understorey can grow rapidly, so that will be growing too densely and messy planting mode.

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Community Participation in Development of Ecotourism in Taman Beach, Pacitan District

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Abstract

Taman Beach as one of the superior tourist destinations in Pacitan has now begun to develop. The development of Taman Beach tourism object is inseparable from the efforts which are initiated by the Group of Turtle Rescue Society for Tourism "Taman Ria" which develops turtle conservation activities through the concept of community-based ecotourism. Local people have also developed tourist attractions such as flying fox and swimming pools to attract tourists to visit it and a portion of the tourism incomes for the funding of turtle conservation activities. However, in the development process, there are problems such as the low level of community participation and the lack of management of tourist object that is integrated with the local community. This study aims to analyze the role and level of community participation in supporting the development of community-based ecotourism in the Taman Beach area. The method used in this research is descriptive quantitative. Quantitative data analysis using the Multidimensional Scaling (MDS) approach. Data collection is done by using questionnaires and observations in the field. The variables studied included the dimensions of planning, management, monitoring, and supervision. The results of the study indicate that the involvement of local communities in the development of ecotourism does not support sustainability, with an average sustainability index value of 46.864. The level of community participation according to Arnstein's participatory ladder from the aspect of planning and management aspects has reached the level of placement participation in the tokenism category (accepting the provisions). Whereas from the aspect of monitoring and controlling has reached the level of consultation participation in the tokenism category (accepting the provisions). The results of the analysis show that policy strategies are needed to increase community participation through increasing community roles and responsibilities in planning, management, monitoring, and controlling.

Keywords: community based, ecotourism, multidimensional scaling

INTRODUCTION

Community-based ecotourism is a pattern of ecotourism development that supports and enables full involvement of local communities in the planning, management, monitoring and controlling of ecotourism businesses and all the benefits obtained. Community-based ecotourism is an ecotourism business that focuses on the active role of the community. Community-based ecotourism patterns recognize the right of local communities to manage tourism activities in areas that they have customarily or in other words as managers [1,2,3].

Taman Beach is one of the beaches in Pacitan Regency. One of the tourist attractions in Taman Beach is as a place for turtle conservation. This conservation is supported by the beauty of pristine beaches and the development of tourist attractions in the form of flying fox and

swimming pools. With this potential, Taman Beach can be developed in an effort to improve the economy and people's welfare. These efforts are carried out with the concept of sustainable development to minimize environmental damage in accordance with the concept of ecotourism combined with community-based ecotourism.

Strategies for developing ecotourism and involving community participation will be effective if the community is given a maximum role in its management [4]. Through the development of community participation, it will provide regional economic growth and better competition in sustainable development. The lack of development of Taman Beach as an ecotourism destination is caused by the concept of community-based tourism has not been applied optimally.

One strategy to develop the concept of community based ecotourism (CBE) is to place local communities around tourist objects as regulators who have complete control of tourist objects. Therefore, the community can benefit from the existence of tourism objects through improved welfare [5,6]. According to Himberg

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[7], the main component in active community participation is involvement in initiation and decision making.

There are four stages of community-based ecotourism planning processes: the assessment and preparation of community organizations, planning and preparation, delivery, and monitoring-evaluation [8]. Community-based ecotourism planning has involved community participation from the beginning, starting from the assessment and preparation of community organizations to the last stage. It is clear that community involvement in ecotourism development is very important and a major part of the success of the concept of community-based ecotourism.

Community participation in the development of ecotourism has different levels, depending on the role of the community. Arnstein [9], through its typology known as the level of community participation (the ladder of citizen participation) describes the level of community participation based on community strength to determine the final product. Arnstein explained that community participation is described in a multilevel pattern which is divided into eight levels grouped into three categories as shown in Figure 1.

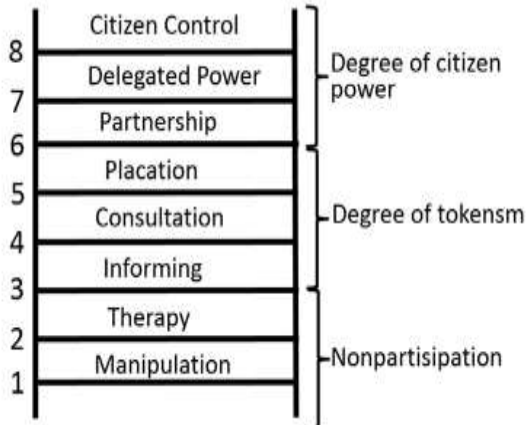


Figure 1.Level of Community Participation [9]

This research is important because it aims to analyze the role and level of community participation in developing the concept of sustainable ecotourism at Taman Beach as a superior tourist object. Thus, it can increase tourist visits and can increase the income of communities around the tourism area and Pacitan.

MATERIAL AND METHOD

The method used in this study is descriptive quantitative, supplemented by information

through in-depth interviews (in-depth interviews) and direct observation in the field to support and sharpen quantitative analysis. Data collection was obtained directly from the field through questionnaires and direct observation and Focus Group Discussion (FGD) both to respondents and informants.

The population in this study is the community around Taman Beach and stakeholders who are directly involved with the development of ecotourism in the coastal area of Taman Beach. Sampling used nonprobability sampling technique. The respondent's collection procedure was carried out by purposive sampling technique. The number of samples was determined using the Slovin formula with a deviation rate of 10%. Based on the calculation results, the number of samples was 88 respondents with the following calculations:

$$n = \frac{N}{1 + N \cdot e^2} = \frac{686}{1 + 686(0,1)^2} = 87,27 \text{ (88)}$$

Data analysis in this study was carried out with quantitative descriptive analysis techniques using the Multidimensional Scaling (MDS) analysis method. There are several steps to analyzing using MDS. First, determine in advance the dimensions and attributes of sustainability. Second, giving a score for each attribute, giving scores on each attribute can describe the sustainability conditions of each dimension, whether good or bad. The third stage, RAPFISH ordination with the aim of determining one point (value) that can describe the relative position of each dimension with the value of stress (S) and the coefficient of determination (R^2) to measure the goodness of fit. Good analysis results are shown with stress values smaller than 0.25 ($S < 0.25$) and higher R^2 values. Fourth, determining the sustainability status of management using the sustainability category refers to Table 1. The next stage is the Montecarlo analysis which is used to determine the stability of the results of the RAPFISH ordination. The final step is leverage analysis to find out the sensitive attributes of each dimension.

In this analysis, three dimensions are used: planning, management, monitoring and controlling dimensions. The number of attributes for each dimension can be seen in Table 2.

Table 1. Category of Sustainable Status[9]

No.	Dimension Index Value	Category	Keys
1	00.00 – 24.99	Bad	Not Sustainable
2	25.00 – 49.99	Less	Less Sustainable
3	50.00 – 74.99	Enough	Enough Sustainable
4	75.00 – 100.00	Good	Sustainable

Table 2. Number of Attributes in Dimension of Sustainability Roles and Levels of Community Participation

No	Dimension	Attribute number
1	Planning	16
2	Management	16
3	Monitoring and Controlling	8
Total		40

RESULT AND DISCUSSION

The results of the accuracy test of MDS-Rapfish analysis are reviewed from the Stress and R-square values for the three dimensions used as shown in Table 3.

Table 3. Summary of Feasibility Results/Goodness of MDS-Rapfish Analysis Management of Ecotourism in Taman Beach

Dimension	Stress (S)	R-Square (R)
Planning	0,195	0,904
Management	0,178	0,908
Monitoring and Controlling	0,227	0,902

Based on Table 3, it can be seen that the value of stress of all dimension values smaller than 0.25 and the third value of R-Square each

dimension above 0.90. It can be said that MDS analysis meets the Goodness-of-fit criteria. This is quite accurate and feasible to be further discussed and analyzed.

Index and Sustainability Status of the Planning Dimension

The results of the ordination analysis with MDS-RAPFISH indicate that the planning dimension has a sustainability index value of 40.566, as shown in Figure 2. The index value is in the range of 25.00 - 49.99, which means that this dimension is less sustainable. In other words, the involvement of community participation in supporting ecotourism development seen from the planning dimension in the research area is less support for sustainability.

Based on the results of the Leverage analysis three attributes were sensitive to the sustainability index value of the planning dimension : 1) the community could submit proposals in planning ecotourism development, but had very little opportunity to influence the program to be implemented, 2) the community could submit proposals in planning ecotourism development, but there is no guarantee that the idea will be realized in the program to be implemented, 3) the community only gets information on ecotourism development planning in the coastal area of the Park, but there is no opportunity for joint decisions (discussions are conducted in one direction). Leverage analysis results can be seen in Figure 3.

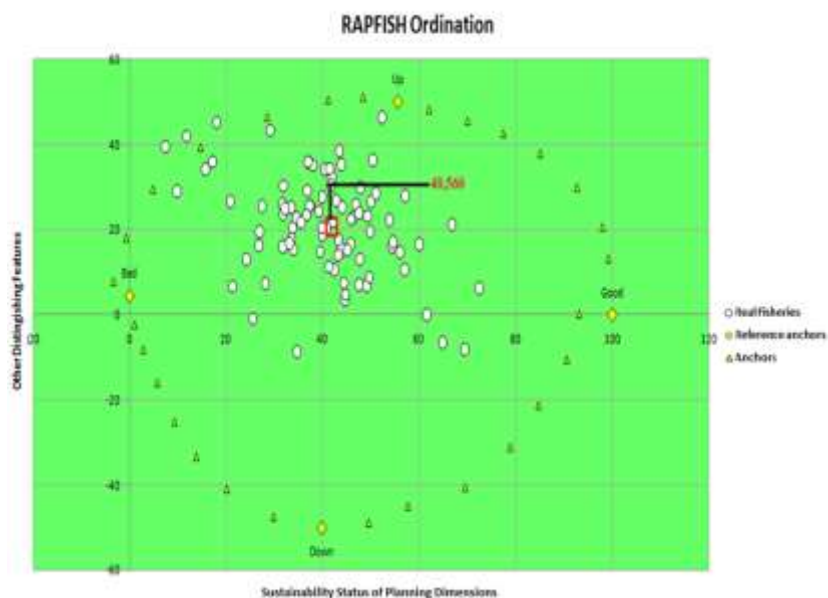


Figure 2. Sustainability Status of the Planning

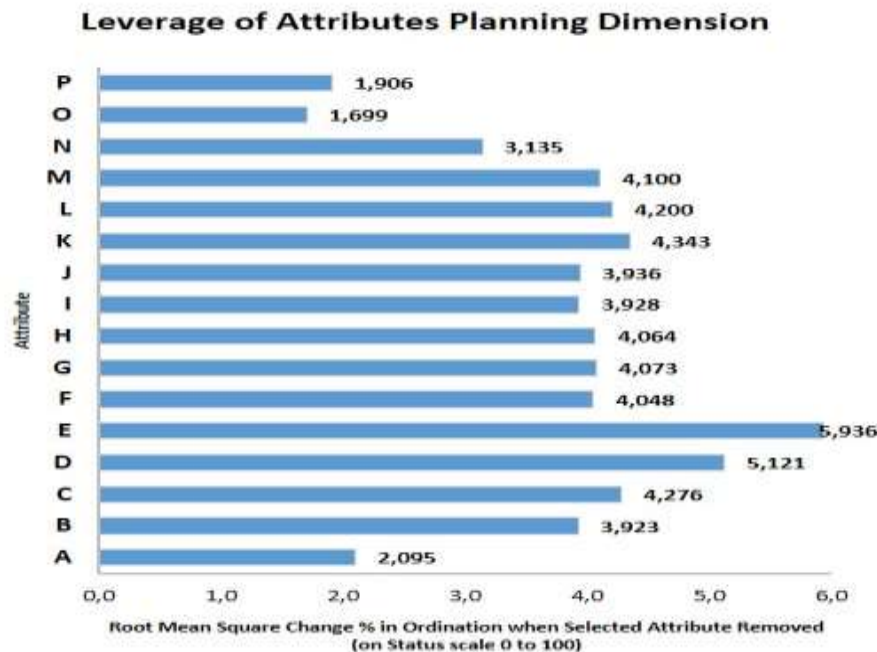


Figure 3. Planning Dimension Leverage

Description:

- A : The community does not have the authority to submit proposals for ecotourism development.
- B : There is opportunity for the community to submit proposal in planning ecotourism development, but there is no willingness from the community to submit proposal.
- C : There are proposals from the community in planning ecotourism development, but only modestly (as long as they submit proposals).
- D : The community could submit proposals in planning ecotourism development, but there is no guarantee that the idea will be realized in the program to be implemented.
- E : The community could submit proposals in planning ecotourism development, but had very little opportunity to influence the program to be implemented.
- F : The community proposals considered in the plan to develop ecotourism in the Taman Beach area are synergized with the Regional Government program and can be implemented.
- G : The community proposals have been considered in the plan for developing ecotourism in the Taman Beach area, but have not yet been prioritized.
- H : The proposals submitted by the community can be accepted and implemented in the ecotourism development program in the Taman Beach.
- I : Planning for developing ecotourism in the Taman Beach area there is not dialogue or consultation with the community.
- J : The community does not get the opportunity for discussion / deliberation, but gets information on ecotourism development planning policies in the Taman Beach area.
- K : The community only gets information on ecotourism development planning in the coastal area of the Park, but there is no opportunity for joint decisions (discussions are conducted in one direction).
- L : The community has the opportunity to discuss ecotourism development planning, but the results are not taken into account.
- M : The community has the opportunity to discuss planning for ecotourism development, with direction from the Regional Government.
- N : The community gets the opportunity to discuss and submit ideas / ideas for planning ecotourism development, but the result are little that counts.
- O : The community actively engages in discussions, and has the authority to make planning decisions on ecotourism development.
- P : The community actively conducts discussions, and is able to make planning decisions on ecotourism development.

Index and Sustainability Status of the Management Dimension

The results of the MDS-RAPFISH analysis provide a sustainability index value of 47.146, as can be seen in Figure 4. The index value is in the range of 25.00 - 49.99, which means this

dimension is of a less sustainable. In other words, the involvement of community participation in supporting ecotourism development seen from the management dimension in the research area is less support the sustainability.

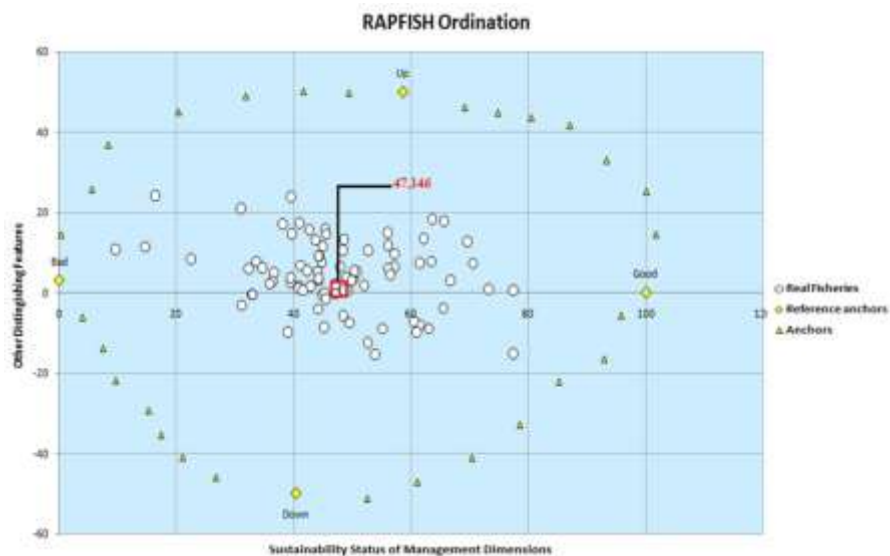


Figure 4. Sustainability Status Management Dimension

Based on the results of the Leverage analysis, three attributes were sensitive to the sustainability index value as shown in Figure 5: 1) cooperation between the government and the community in managing Taman Beach ecotourism, and sharing authority, 2)

government cooperation with the community in management of coastal Taman ecotourism, with guidance from the Regional Government, 3) the community gets very limited information and guidance on the development of the ecotourism of the Taman Beach.

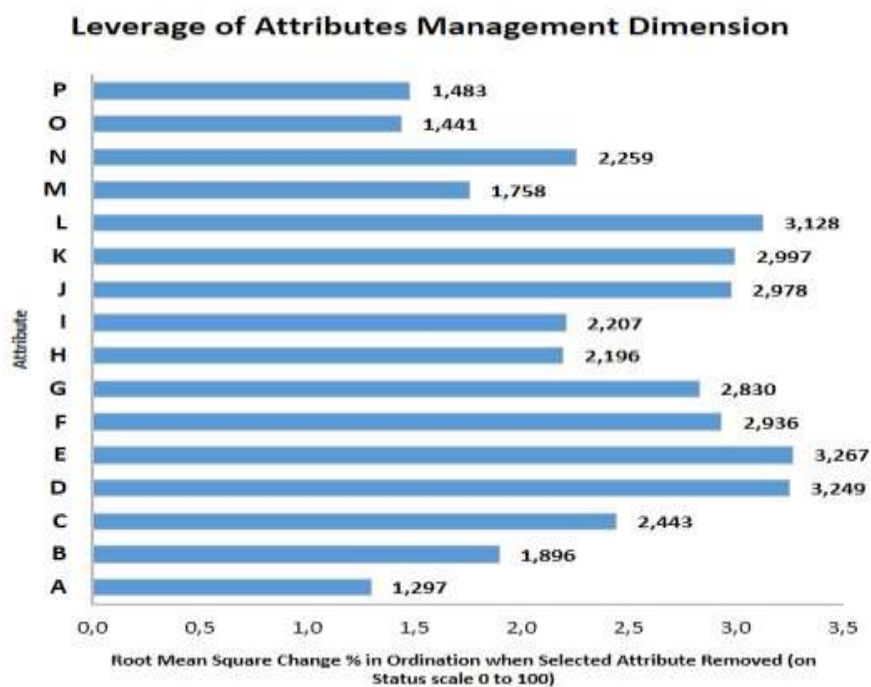


Figure 5. Results of Management Dimension Leverage Analysis

Description :

- A : The community is not involved in managing the development of Taman Beach ecotourism
- B : Communities are involved in managing ecotourism by force.
- C : The community is involved in managing Taman Beach ecotourism only for certain purposes.
- D : Government cooperation with the community in management of coastal Taman ecotourism, with guidance from the Regional Government.

- E : Cooperation between the government and the community in managing Taman Beach ecotourism, and sharing authority.
F : The existence of government cooperation with the community in the management of Taman Beach ecotourism, with direction from the Regional Government.
G : Management of Taman Beach ecotourism is fully carried out at the initiative of the community and given full responsibility.
H : The management of Taman beach ecotourism is fully carried out at the initiative of the community and contributes to their wealth, energy and time.
I : The community does not get information and direction about the development of Taman beach ecotourism.
J : The community gets information and direction about developing Taman beach ecotourism, but the community has not responded.
K : Communities get information and direction about the development of ecotourism beach parks as perfunctory.
L : The community gets very limited information and guidance on the development of the ecotourism of the Taman Beach.
M : The community gets information and direction on developing Taman beach ecotourism regularly.
N : The community gets information / direction about developing Taman beach ecotourism and contributes to disseminating this information.
O : The community gets information / direction about developing Taman beach ecotourism and actively disseminates it for the benefit of the development of Taman beach.
P : The community gets information / direction about developing Taman beach ecotourism and is able to innovate to develop it to be sustainable

Index and Sustainability Status of the Monitoring and Controlling Dimension

Based on the results of the analysis using MDS-Rapfish, the sustainability index value for monitoring and controlling dimensions is 45.394, as can be seen in Figure 6. The index value is in

the range of 25.00 - 49.99, which means that this dimension is less sustainable. In other words, the involvement of community participation in supporting ecotourism development seen from the dimensions of monitoring and controlling in the research area is less support to sustainability.

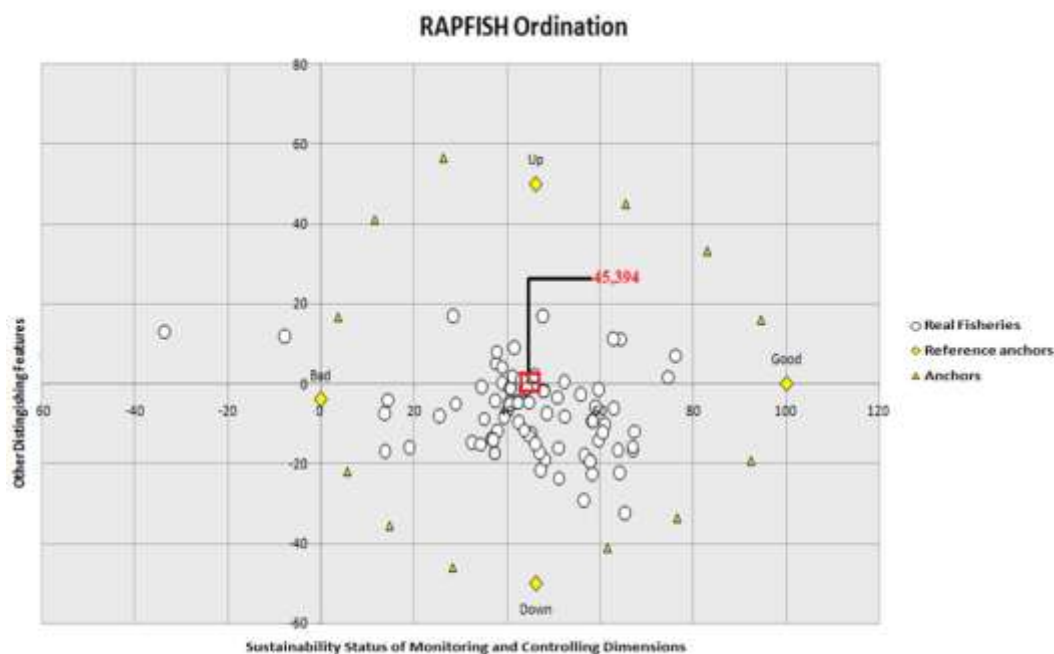


Figure 6. Sustainability Status of Monitoring and Controlling Dimensions

Based on the results of the Leverage analysis, three attributes that are sensitive to the environmental dimension index value are : 1) the community participates in monitoring and controlling the management of limited Taman

ecotourism in the interests of the Regional Government, 2) the community participates in monitoring and controlling the management of Taman Beach ecotourism due to force. Leverage analysis results can be seen in Figure 7.

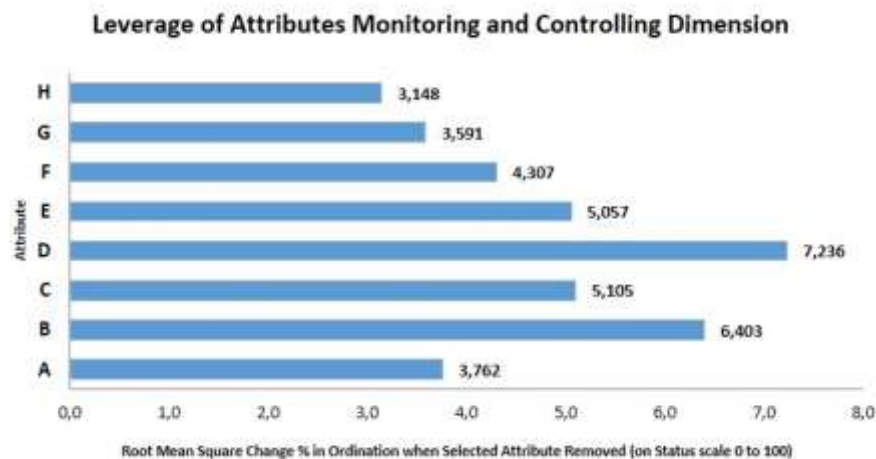


Figure 7. Dimension of Monitoring and Controlling Leverage

Description :

- A : The community is not involved in monitoring and controlling the management of Taman beach ecotourism.
- B : The community participates in monitoring and controlling the management of Taman Beach ecotourism due to force.
- C : The community participates in monitoring and controlling the management of just a small amount of coastal ecotourism.
- D : The community participates in monitoring and controlling the management of limited Taman ecotourism in the interests of the Regional Government.
- E : The community participates in monitoring and controlling the management of Taman beach ecotourism on its own accord and has the same responsibilities.
- F : The community participates in monitoring and controlling the management of Taman beach ecotourism on a regular basis on its own accord and has greater responsibility than the Regional Government.
- G : The community participates in monitoring and controlling the management of Taman beach ecotourism and is aware of the importance of the responsibility to participate in keeping it to be sustainable.
- H : Monitoring and controlling of the management of Taman beach ecotourism is fully carried out by the community and actively take care of / maintains it to be sustainable.

Status of Sustainability Multidimensional Community Participation

Based on the results of MDS-Rapfish analysis, the sustainability index value in community participation of Taman Beach, which consists of a combination of three dimensions, has an average sustainability index value of 44.369, as shown in Figure 8. This shows the education on the Taman beach is included in the unsustainable category, which included in the scale of 25.00 - 49.99.

The most superior dimension is the planning dimension, while the dimensions that have the lowest sustainability index are monitoring and controlling. Therefore, the issue of monitoring and supervision in particular needs to be given more serious attention so that the development of community participation in ecotourism on the Taman beach can be sustainable.



Figure 8. Kite Diagram of Sustainability Index Value from Three Dimensions of Community Participation in Taman Beach

To achieve a sustainable community participation there must be a balance between the dimensions of planning, management, monitoring and controlling [3]. Improvements to sensitive attributes affect especially the sustainability index values of these three dimensions need to be improved so that the value of this index in the future continues to increase until it reaches a balanced sustainable status [11].

Furthermore, to see the level of errors in the analysis of RAPFISH with MDS, the validity test was carried out using the Monte Carlo analysis method with a confidence level of 95%. Based on Table 4, it can be seen that the index of sustainability of community participation in ecotourism at Taman Beach shows a small difference in the value of the two analyzes (2.378%). This small difference in value indicates that errors in the analysis process can be minimized or avoided and RAPFISH's ordination analysis results are in a stable and uninterrupted position both in each dimension and in a combination of overall sustainability dimensions so that it can explain the sustainability of community participation in ecotourism in beach park.

Table 4. Difference in RAPFISH Analysis Sustainability Index Value with Monte Carlo Analysis

Sustainability Dimension	MDS result	Monte Carlo result	MDS-MC difference
Planning	40.566	42.275	1.709
Management	47.146	50.436	3.290
Monitoring and Controlling	45.394	47.529	2.135
Average	44.369	46.747	2.378

Strategies for Increasing Community Participation

Based on the results of the analysis, several strategies can be developed to maintain and improve the sustainability status of community participation while prioritizing the local culture and local wisdom.

Planning Dimension

The strategy for increasing community participation in ecotourism development is seen from the planning aspects, as follows:

- Improve the planning process and the development of the Taman Beach ecotourism through a bottom up

planning approach starting from the Village development planning meetings (*Musrenbang*) process, District *Musrenbang* and District *Musrenbang*.

- Involving all stakeholders in the development planning process and development of the coastal Park ecotourism in development *Musrenbang* starting at the village, sub-district and district levels.

Management Dimension

Strategies for increasing community participation in the development of ecotourism on the coast of Taman from the management dimension include:

- Increasing cooperation by giving greater responsibility and authority to the community in the management of ecotourism at the Taman beach.
- Providing information and direction and information to the community in efforts to develop and develop ecotourism at the Taman Beach.

Monitoring and Controlling Dimension

The strategy to increase community participation in the development of ecotourism on the Taman Beach from the monitoring and supervision dimensions includes:

- Giving greater responsibility to the community around the Taman Beach to monitor and control ecotourism activities on the Taman Beach.
- Increasing public awareness to be involved in monitoring ecotourism activities at the Taman beach.

Level of Community Participation

The form of community participation seen from the aspect of ecotourism planning begins when submitting proposals in the context of the development and development of turtle conservation ecotourism. The community has had the opportunity to submit a proposal for an ecotourism development plan on the Park coast, even though it has very little chance and there is no guarantee that the proposal will be implemented. The government has actually paid attention to the proposals of the community, but priority has not yet been taken to be implemented and the realization is carried out in stages in accordance with regional financial capacity.

In addition, the community did not get the opportunity for discussion/deliberation and joint decision-making in its development and development plans, but was informed of development planning policies and ecotourism development in the coastal area of Taman. Thus viewed from the aspect of planning, the community can submit a proposed development plan even though the opportunity is small and no guarantee is realized and has not been involved in discussion or deliberation, so it can be concluded that community participation seen from the planning aspect has reached the level of participation in the tokenism category (accept the terms) [3,8].

CONCLUSION

The sustainability index value of the level of community participation in multidimensional ecotourism management is 46.864 or less sustainable. In other words, community involvement in ecotourism does not support sustainability. The index value and sustainability status of each dimension, namely the planning dimension is the most superior dimension of 48.021 (less sustainable), the management dimension is 46.636 (less sustainable), the monitoring and controlling dimension is the lowest dimension of 45.936 (less sustainable).

The level of community participation in Arnstein's participatory ladder from the aspect of planning and management aspects has reached the level of participation of placations included in the tokensim category (accepting provisions). Whereas from the aspect of monitoring and supervision it has reached the level of consultation participation which is included in the tokenism category (accepting provisions). The alternative policy strategy for increasing community participation is through increasing the role and responsibility of the community in planning, management, monitoring and controlling.

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Development Strategy of Brau Edufarm Tourism in Batu

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Abstract

Brau Hamlet is a hamlet located in Batu City included in the category of underdeveloped Inpres regional where people's livelihoods are only based on dairy farming. Brau hamlet is known as the village of 1000 cows; the second largest after the Hamlet of Toyomerto in the city of Batu. Brau Hamlet is a hilly area with beautiful natural scenery. Brau hamlet has tourism and agricultural potential, but so far it has not been identified and mapped in an integrated manner. This study aims to formulate a strategy for developing edu farm tourism in Brau hamlet. Tourist Attractions in Brau Hamlet having the potential to be developed are edu farm tourism. The strategy of developing edu farm tourism in Brau Hamlet is in quadrant 1 which means that the strategy is done aggressively using the concentration of vertical integration. Vertical integration is carried out at all stages of the supply chain of cattle farms from upstream to downstream, such as; (1) Dairy Cow Nursery; (2) Provision of Feed; (3) Health access to Dairy Cows; (4) Processing cow's milk into finished products; (5) Waste treatment; (6) Product Marketing. As for the SWOT matrix, the biggest total score of the combination of internal factors and external factors is to strengthen the brand back to nature and always give innovation to tourist rides (S1.5 and T1.4) of 1.65. Based on the Internal External (IE) matrix analysis, the total value of IFAS and EFAS parameters is in cell 4. The strategy taken is growth strategy by carrying out vertical integration and slowly and carefully developing tourism management.

Keywords: CBT, Edufarm, Development, tourist attraction object, Strategy

INTRODUCTION

The Government of Batu City becomes one of the local governments in Indonesia concentrating on developing the tourism sector into its economic base. It reflected in the branding of *Kota Wisata Batu* (Batu Tourism City) icon. Tourism development in Batu City driven by many potentials of the tourism sector, such as agriculture, forestry, and artificial tourism. The tourism potential owned by Batu City is not only the charming nature, but also the typical customs, innovative landscape heritage, and the potential of education in husbandry [1,2].

Batu City consists of three districts i.e. Batu City, Bumiaji, and Junrejo. Each of them has the potential for developing tourism. One of them is Bumiaji Sub-district which specifically has the potential of agriculture, plantation, animal husbandry, and forestry. In this district, there is an underdeveloped Inpres region, namely Brau hamlet, Gunungsari Village. Brau is administratively adjacent to Pandesari Pujon Village (Malang Regency), south is adjacent to

Paralayang in Gunung Banyak area, and north is Jantur Hamlet, Celaket Hamlet in the east.

Access to Brau by the tendency of hilly areas has the potential to be used as trekking tours. Meanwhile, most people in Brau work as dairy farmers, of which the population of the Brau Hamlet with a greater number of cattle is a cow population. In each family, at least they have 5 dairy cows. Brau hamlet is known for its brand of the village of 1000 cows, which number is ranked 2nd in Batu City after Toyomerto Hamlet.

Through the potential of existing dairy farms, the residents of Brau Hamlet wish that livestock tourism can be developed in the hamlet. The expectations of Brau residents are the attending visitors are not just a mere picnic and then return home. But residents hope that visitors will get something by visiting the hamlet (experience). However, livestock tourism villages are still limited to be realized because there is no competency of people to formulate a strategy in developing livestock tourism villages that is appropriate and economical for Brau Hamlet. Therefore, the outcome of this study will be recommended as a strategy to develop livestock education and processed livestock tourism (farm edu tourism) to the Tourism Office and Government of Batu City as a pioneering model of underdeveloped village development in increasing regional economic independence as

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one of the pillars in realizing village universe and sharing economy.

Tourism can be a strategy to improve community welfare [3]. Community involvement from the planning level is the most vital aspect especially people playing an active role as the subject of development. The target of tourism object development planning will reach to build prosperous village communities around tourist sites [4].

To answer these challenges, Brau Hamlet need to develop an educational tourism paradigm focusing more on active participation from the community. In tourism, current tourist demand is not merely seeking satisfaction or enjoy, but the orientation into learning, experience, and challenges that possibly packaged by local residents [5]. Educational-based tourism is one of the lighters so that tourists will visit to realize sustainable development.

Considering on tourism that has developed in Brau Hamlet is still limited although the biodiversity of tourist attraction objects is very supportive. So far, the economic activities of the Brau Hamlet community have only based on primary livestock products. For the example, livestock and fresh milk are sold to cooperatives so that people's income tends on being stagnant due to the absence of value added from livestock activities that are carried out (not oriented to the development of current market demand). This makes Brau Hamlet community become relatively disadvantaged compared to other Batu area communities that economic growth is more advanced due to the development of a special interest tourism sector.

Finally, the remaining stigma when people hear Brau Hamlet is the area in the marginalized (isolated) Batu City so that it is necessary to create value-added livestock activities and tourism potential in Brau Hamlet to improve the economy of local communities. Therefore, the purpose of this paper is to map the potential of tourist attraction, as well as formulate a strategy for developing community-based edu farm tourism.

MATERIAL AND METHOD

Study sites

Brau Hamlet is close to popular tourism such as Paragliding, Rabbit Park, and *Omah Kayu* (tree house). However, the residents of Brau Hamlet do not have access for selling or being involved in the development of such popular tourism, which

eventually leads to inequality in welfare and social jealousy towards the residents of Brau Hamlet.

Geographically, the area around the Brau Hamlet is a potential area to be developed into a tourist attraction. The morphology of the land in Brau Hamlet is a type of hilly, fields, and surrounded by pine forests. The land used as a residential area is also used as a field to grow vegetables such as corn and for growing cattle feed. If it is mapped, the Brau hamlet has several tourism potentials to be developed, namely dairy farming, Goa Pandawa natural tourism, pine forest, and cow's milk processing industry. But so far there has not been an optimal mapping and development of the tourism potential.

Data Collection and Data Analysis

The method applied in this research includes an interview, analytical hierarchy process, survey, and questionnaire. Data collection techniques were obtained from (1) literature to obtain a global description of the evaluation of Tourist Attraction Objects (ODTW); (2) field observations, to observe the culture, socio-economic aspects of the community, and biophysics accompanied by the taking of coordinate points by utilizing GPS technology in every object and tourist attraction; (3) interviews and questionnaires, to retrieve primary data in a holistic and ethnographic field in making strategies to develop community-based tourism (CBT).

Interviews were carried out by involving village officials, tourism agencies, and tourism managers to discuss the potential of Attraction and Tourism Attractions. It is also about strategies in developing economy and efficient educational farm programs. The dissemination of the questionnaire aimed to determine the extent of people's insight into farm edu tourism, and how the readiness and willingness of the Brau Hamlet community to participate in realizing the farm edu tourism program; (4) Analysis of the hierarchical process was conducted to produce weight among factors used in farm edu tourism development strategy. Then, it was analyzed with IFAS and EFAS, scoring with key respondents and the results place on the IE matrix and space matrix; (5) SWOT analysis was to develop strategies by considering strengths, weaknesses, opportunities, and threats that become strategies for developing edu tourism farms (Fig.1).

RESULTS

Farm Edu Tourism Development in Brau Hamlet

Potential Tourist Attraction Objects (ODTW) in Brau Hamlet described in Table 1. The development strategy of Brau Hamlet farm edu tourism is obtained through several stages of analysis which include AHP, SWOT (IFAS Method, EFAS Method), IE Matrix Method, and Space Matrix Method. The steps in the analysis of the strategy are as follows:

Hierarchy Process

The hierarchy of strategies for the development of the Brau Hamlet farm edu tourism is presented in Figure 2.

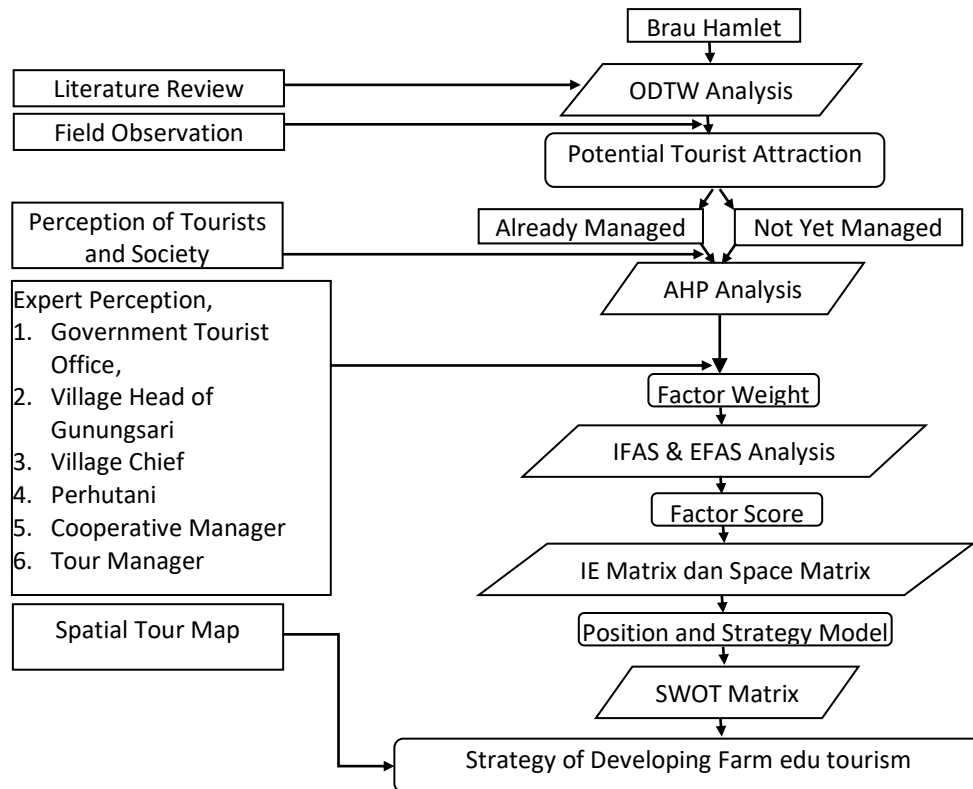


Figure 1. Flowchart of Data Analysis Method

Table 1. Tourist Attraction Objects of Brau Hamlet, Gunungsari Village

Object Name	Coordinate		Contex			Potential Tourist	
	X	Y	Landscape	Landform	Ownership	Type	Specific
Milk Stick	0664550	9131618	Settlement	Plain	Personal	Domestic Industry	Culinary
Paralayang Tours	0665291	9131317	-	Hilltop	PERHUTANI	Special Interest	Paralayang
Gua Pinus	664302	913719	Forest	Slope	PERHUTANI	Special Interest	Trekking
Livestock and Biogas	664925	9131465	Settlement	Plain	Personal	Domestic Industry	Education
Kampung Papua	-	-	Forest	Slope	Cooperation among PERHUTANI, Margo Makmur cooperation, and 4 Brau's People	Special Interest	Selfie Tourism
Goa Pandawa Park	-	-	Forest	Hilltop	Self-help People of Brau Atas Hamlet	Special Interest	Selfie Tourism

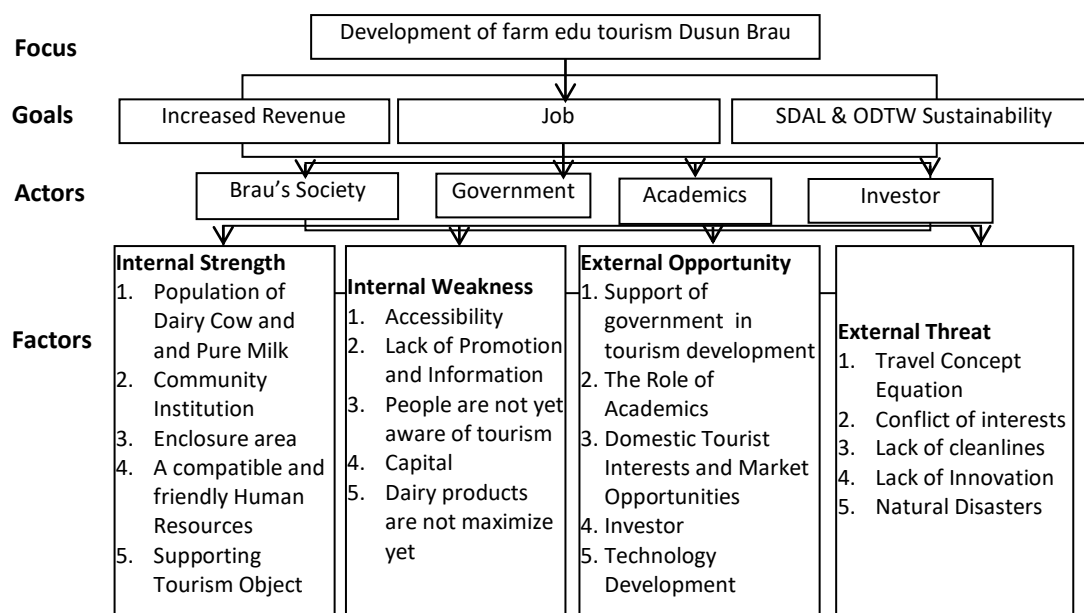


Figure 2. Hierarchical Structure of Strategy of Farm Edu Tourism

Based on Figure 2 above, it is explained that coordination between stakeholders (development actors) has a vital role in realizing edu tourism farms. Thus, the assessment of expert respondents was analyzed by using AHP (Analytical Hierarchy Process) producing quantitative values of each factor. This value will be the weight for the next analysis, namely IFAS and EFAS analysis.

Internal and External Strategy Factor Analysis

After obtaining factor weights in the AHP analysis, the next is the preparation of the Internal Strategic Factors Analysis Summary matrix (IFAS) and External Strategic Factor Analysis Summary (EFAS) as control attribution [7] presented in Table 2 and 3.

Table 2. IFAS Matrix

Internal Strategy Factors	Weight	Rating	Score
Strength			
Population of Dairy Cow and Pure Milk	0.2	4	0.8
Community Institution	0.1	3	0.3
Enclosure area	0.05	3	0.15
A compatible and friendly human Resources	0.05	2	0.1
Supporting Tourism Object	0.1	2	0.2
Weakness			
Accessibility	0.15	4	0.6
Lack of Promotion and Information	0.1	3	0.3
People are not yet aware of tourism	0.1	3	0.3
Capital	0.05	2	0.1
Dairy products are not maximize yet	0.1	2	0.2
TOTAL			3.05

Table 3. EFAS Matrix

External Strategy Factors	Weight	Rating	Score
Opportunity			
Support of government in tourism development	0.125	3	0.375
Support of Academics	0.1	3	0.3
Domestic Tourist Interests and Market Opportunities	0.1	3	0.3
Investor	0.075	2	0.15
Technology Development	0.1	2	0.2
Threat			
Travel Concept Equation	0.1	2	0.2
Conflict of interests	0.15	3	0.45
Lack of cleanliness	0.05	2	0.1
Lack of Innovation	0.15	3	0.45
Natural Disasters	0.05	2	0.1
TOTAL			2.625

Based on the results of Table 2 and Table 3, the total values of IFAS and EFAS will be used in internal-external matrix analysis (IE Matrix) and matrix space analysis.

Analysis of Internal –External Matrix (IE Matrix)

Based on the results of IFAS and EFAS analysis, the total score of internal factors is 3.05, and the total external factor value is 2.625. Each of these parameters is mapped into the IE matrix which then reflects the development strategy of the Brau Hamlet farm edu tourism object as shown in Figure 3.

Figure 3 showed that the total value of IFAS and EFAS parameters is in cell 4. It means that the strategy or policy taken is a growth strategy by carrying out vertical integration, slowly, and

carefully developing existing tourism management [8,9].

Vertical integration is implemented by strengthening the supply chain of cattle farms from upstream to downstream including; (1) Dairy Cow Nursery; (2) Provision of Feed; (3) Health access to Dairy Cows; (4) Processing cow's milk into finished products; (5) Waste treatment; (6) Product Marketing.

Matriks Space Analysis

Matrix space analysis is used to sharpen the strategy by using the difference from the internal score (strength and weakness) and the difference from the external score (opportunity and threat) with the following calculations:

$$\begin{aligned}\text{Strength} - \text{Weakness} &= 1.55 - 1.5 = 0.05 \\ \text{Opportunity} - \text{Threat} &= 1.325 - 1.3 = 0.025\end{aligned}$$

Figure 4, it shows that the strategy to develop farm edu tourism in Brau hamlet is in quadrant 1, which means that the strategy is done aggressively. Aggressive strategies are carried out including; (1). Excellence in overall costs, namely controlling costs aggressively, effectively, efficiently and sustainably; (2) Differentiation, which is to create uniqueness in the edu tourism farm that is felt by tourists; (3) Focus, namely prioritizing tourist needs and satisfaction as a basis for development. This position is advantageous considering Batu City with the brand image of a tourist city so that the village of Brau can continue to develop its tourism potential because it has the power to capture and take advantage of the opportunities available.

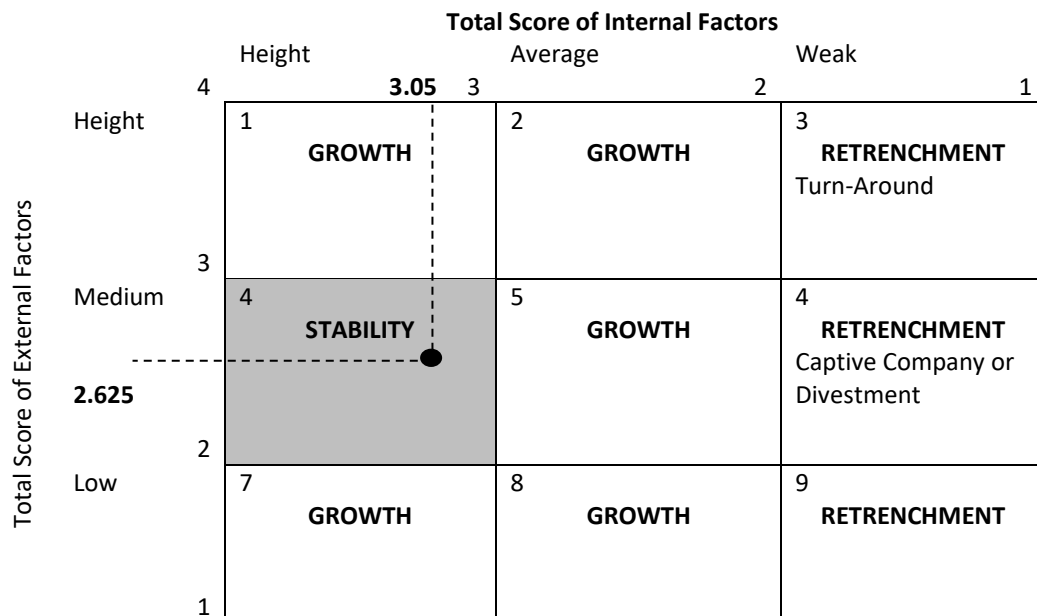


Figure 3. Internal-Eksternal Matrix based on Rangkuti [10]

Opportunities			
Internal Weakness	Quadran III Turn Around Strategy	Quadran 1 Agresive Strategy (0.05; 0.025)	Internal Strength
	Defensive Strategy Quadran IV	Diversification Strategy Quadran II	
Threats			

Figure 4. Result of Space Matrix Analysis based on Rangkuti [10].

Special Potential: Direction of Development of Edu Tourism Farm in Brau Hamlet

To provide direction for edu tourism development, the authors used SWOT matrix analysis as shown in the following Table 4. Based on the results of the SWOT matrix analysis and previous matrix space analysis, this study provided a formulation of strategies that can be applied by stakeholders, including the government; in this case the tourism department, tourism managers, and the Brau hamlet community. Generally, they need to aggressively build power objects both existing and non-existent tourist attraction, especially livestock tourism potential (farm edu tourism) in the form of milk tourism, dairy products, biogas production, and all things about cattle farming.

In the SWOT matrix, the total score of the combination of internal factors and external factors was the biggest factor to strengthen the brand back to nature and always give innovation to tourist rides ($S_{1.5} \& T_{1.4}$) of 1.65. This strategy is important in distinguishing Brau hamlet farm tourism from other tourism. Travelers will easily recognize a region if the brand is strengthened. Brand back to nature can be realized through optimization of cattle population and dairy products as a vehicle for educational tourism ($S_{1.3} \& O_{2.3} = 1.55$). This strategy is in line with the local potential of Brau hamlet which is comparatively superior in terms of cattle population and the amount of milk produced compared to other regions in Batu City.

Table 4. Result of SWOT Analysis

	Strength	Weakness
	1. Population of Dairy Cow and and Pure Milk 2. Community Institution 3. Enclosure area 4. A compatible and friendly Human Resources 5. Supporting Tourism Object	1. Accessibility 2. Lack of Promotion and Information 3. People are not yet aware of tourism 4. Capital 5. Dairy products are not maximize yet
Opportunities	S-O Strategy	W-O Strategy
1. Support of government in tourism development 2. The Role of Academics 3. Domestic Tourist Interests and Market Opportunities 4. Investor 5. Technology Development	1. Optimizing the population of dairy cows and the production of pure milk as tour packages and rides cow breeding tourism ($S_{1,3} \& O_{2,3}$) = 1.55 2. Increasing institutional capacity and capability through community, government, business, media and academic ($S_{2,4} \& O_{1,4}$) = 0.92 3. Utilizing the natural and social potential to become a supporting tourism object that can attract tourists wisata ($S_5 \& O_5$) = 0.4	1. Increasing therole of governmet and investor by building the telecommunication networks, and provide shuttle transportation($W_{1,4} \& O_{1,4}$) = 1.225 2. Opmitalizing promotion through social media and website to increase tourist ($W_2 \& O_{3,5}$) = 0.8 3. Educating society through socialization ($W_{3,5} \& O_2$) = 0.8
Threat	S-T Strategy	W-T Strategy
1. Travel Concept Equation 2. Conflict of interests 3. Lack of cleanlines 4. Lack of Innovation - Natural Disasters	1. Establishing cooperation and making tupoksi and SOP clearly between institutional and make an approaching to stakeholders and provide guidance to the tourists and the community to take care of cleanliness, provie waste bins and sanitation installation ($S_2 \& T_2$) = 0.75 2. Strengthening Brand Back to Nature ($S_{1,5} \& T_{1,4}$) = 1,65. 3. Improving manager competency and Build tourism in accordance with RTRW and AMDAL ($S_{3,4} \& T_{3,5}$) = 0.45	1. Increasing the quantity and quality of accessibility by providing shuttle transportation ($W_1 \& T_{2,4}$) = 1.5 2. Strenghtening capital through cooperation with investors and the government ($W_4 \& T_{3,5}$) = 0.65 3. Holding events and promotion $W_{2,3,5} \& T_1$) = 1

Geographically, the Brau hamlet is a remote area surrounded by hills with damaged road access and uneven contours. The strategy to overcome accessibility problems towards Brau hamlet is to cooperate with city transportation as a mode of shuttle transportation from tourist objects that have been crowded to get to Brau edu tourism farm ($W1 \text{ \& } T2.4 = 1.5$). In addition, managers between attractions can manage tour packages with one pass ticket.

Road access is also a vital part to be repaired, and the government through its allocation function is expected to immediately re-pave the road to the Brau hamlet. Infrastructure facilities for the convenience of tourists need to be built through cooperation with investors both from the addition of artificial tourist objects, toilets, prayer rooms, seats, parking lots, etc. ($W1.4 \text{ \& } O1.4 = 1.225$) ($W4 \text{ \& } T3.5 = 0.65$).

The construction of this facility must meet the RTRW, AMDAL, and tourism safety and in accordance with the management competencies ($S3.4 \text{ \& } T3.5 = 0.45$). Residents need to optimize the development of the quality of basic facilities and infrastructure at the location of tourist objects, such as cowhouse management and maintain the availability of feed so that cows as potential or attraction of edu tourism farms grow significantly. The community can increase the capacity of its human resources by making

various dairy products and processing livestock waste to make organic fertilizer.

The government then needs to neutralize the promotion of edu farm tourism and build adequate accessibility and spoil tourists' desires. The actions that can be taken by the government are paving the road in Brau Hamlet, increasing capital access for biogas installations to develop Brau Hamlet as an agro-tourism area in accordance with the Batu City agropolitan masterplan.

Development Model Plan

Seeing the potential of Brau, this area has the potential to become a tourist area, especially educational tourism. Educational tourism that can be developed in the Brau area is dairy cow education. The development that has been initiated by the community towards the results of dairy cows is to make biogas. However, this business is also not evenly distributed in the Brau community, and only about 40% of the Brau people enjoy the use of this biogas. With the potential of this new community, the potential for dairy education tourism can be mapped where this tour can work with tourism that is already existed around (Table 5). The implementation of the concept of educational tourism in this area can be mapped as a tourist path and livestock infrastructure scheme in following Figure 5.

Table 5. Activity and Users of Tourist Attraction in Brau Hamlet

No	Activity Group	Type of Activity	Place	Characteristics of Place	User Characteristics
1	Main Function	Education Center	Livestock and Biogas	Livestock place as educational tourism	Tourist and Cattle Raiser
2	Secondary Function	Special Interest Tourist	Goa Pinus dan Kampung Papua	Place to enjoy natural view	Tourist
			Goa Pandawa	Place to enjoy natural view	Tourist
			Dairy Products	Place to know and be involved in the culinary process	Tourist
			Bantengan Art dan Gallery	To know what Bantengan Art is	Tourist
3	Tertiary Function	Facilities and Infrastructures	Toilet	Support Facility	Tourist
			Mosque	Place of Worship	Tourist and Tour Manager
			Information Building	Information Center	Tourist and Tour Manager
			Make Up Room	Make Up Room	Actress, Actor, and Tourist
		Trade and Service	Ticketing	Ticketing	Tourist
			Foodcouth	Support Facility	Tourist
			Lounge Place	Support Facility	Tourist
		Parking	Parking Area	Parking Area	Tourist



Figure 5. Tourist Flow and Cowhouse Design

Description: *Kandang* = Cowhouse, *tempat makanan* = food stall, *gerbang* = gate, and *loket* = ticketing.

DISCUSSION

Research on the Strategy for Tourism Development

Tourism development strategy was discussed in the Andong Mountain area of Magelang [11], Bumiaji, Batu [1] and Ijen Crater [12]. The research showed that Strength-Opportunity (SO) strategy had the potential to be optimized. It is different to Brau farm edu tourism focusing on Strength-Threat (ST) strategy to be implemented immediately. The ST strategy prioritizes the development agrarian tourism as a new tourist destination, considering tourist variations by organizing folk festivals, collaborating with tourist travel agents, opening climbing equipment rental, visa-free policies as roads or opportunities, forming tour guides and porters [11].

Strategies of the development of community-based on agro-tourism were also studied in JUHUT Integrated Sheep Village, Banten Province [13]. The results showed Integrated Sheep Village had the potential becoming an agro-tourism destination including optimizing an advocate approach to achieve cooperation with outside parties, establishing agreements on equitable benefits among agro-tourism managers and travel agencies, and improving infrastructure (road, rest area, public toilet, information board map).

Pelaga Village, Petang District, Badung Regency had the potential used as alternative tourism. It was due to the availability of adequate accessibility (roads), supporting facilities, tourist attractions and institutions. There was a support from Pelaga Village community to plan and develop alternative tourism that was in line with the concept used, namely community-based tourism. The concept of tourism applied in Pelaga Village prioritized the involvement of local communities in tourism development in the area [14].

Research on the flower tourism objects in Sidomulyo Village, Bumiaji District, Batu City discussed efforts to develop interest tourism objects in local economic development. The development of flower tourism objects in Sidomulyo Village had a positive impact on local economic development. Besides being able to lift the economy of the community, the development of flower tourism also had other benefits such as the creation of new jobs, namely the existence of horse tours and tubbing. It made the community acquiring new skills or knowledge because many private parties were willing to provide counseling and socialization regarding the development and support of tourism activities. There were several inhibiting factors for tourism development in Sidomulyo Village, namely the lack of socialization to the community about the concept of maps and tour guides that

had not been formed yet. Sidomulyo community hospitality was the basic capital to attract tourists. However, this needed to be supported by adequate facilities such as good road infrastructure and the establishment of parking areas around tourist areas [15].

Furthermore, there was a research about the development of Jatiluwih Tourism Village in Penebel District, Tabanan Regency. The theory used was destination life cycle analysis, conflict theory, impact theory, participation theory, and perception theory. In developing a tourism village, a social change could occur. In this context, the value of mutual cooperation related to farmer activities, and the rice planting system was increasingly maintained. Traditional arts were increasingly preserved and developed, and their social organizations were increasingly maintained, but some shifts took place. For example, the use of cows or buffaloes to hijack fields has shifted to the use of tractors and the use of organic fertilizers to inorganic fertilizers [16].

The research also found public participation in the planning and supervision stages was manipulative and functional. At the development stage, the community actively was participated. Implementation of the aspects of *Pawongan* was not good at the planning and supervision stages, but at the development stage, it was going well. Tourist perception on the implementation of the Parahyangan aspect was good. Tourist perceptions of the implementation of the *pawongan* and *palemahan* aspects were not good [16].

Research in Brayut Tourism Village, Sleman Regency explained the change of managers greatly had affected the development of Brayut Tourism Village and the most dominant actor in the development of Brayut Tourism Village was the founder of Tourism Village and local government. In addition, the contribution of major *Ngayog* jazz events also had a positive impact on increasing tourist visits, and it also implicitly promoted Brayut as a tourist village. However, the event seemed more inclined to prioritize aspects of quantity than quality so that the manager felt less professional in developing the village as a tourist visit location [17].

Model of Participatory Development

From the description in the previous research above, not many has the strategy of developing tourism discussed as a model of participatory

development. The participatory development model presses on community partnerships, village government and national private sector in developing tourist destinations. The development of tourist destinations is intended to lead to a village model of ecotourism as sustainable alternative tourism. The concept of ecotourism is a potential development model for maintaining natural resources and supporting the process of improving the local economy [18].

Special tours of agriculture and animal husbandry (farm tourism) originated from ecotourism. This tourism development combines farms and the world of tourism with the attractions of farming or raising experiences. Attractions with the aim of gaining learning experience can be directly programmed through tourism education (edutourism). Therefore, the concept of *edufarmtourism* is a combination of educational tourism integrated with rural tourism models (farm tourism) and community tourism (community tourism) [19].

One form of participatory planning in tourism development is to implement Community Based Tourism (CBT) as a development approach. Community-based tourism is tourism that is aware of cultural, social and environmental sustainability. This form of tourism is managed by the community, and community helps tourists to increase their awareness and learn about the community and the way of life of the local community [18,20]. Furthermore, Suansri [21] reinforces the definition of Community Based Tourism as tourism that takes into account environmental, social and cultural sustainability aspects.

CONCLUSION

The tourist attraction object in the Brau hamlet that has the potential to be developed is a dairy cattle tourism (edu farm tourism). The analysis showed that the strategy of developing edu tourism farms in Brau Hamlet was in quadrant 1, which means that the strategy is aggressively used using the concentration of vertical integration. Vertical integration is carried out at all stages of the cattle farm supply chain. In the SWOT matrix, the biggest total score of the combination of internal factors and external factors is to strengthen the brand back to nature and always give innovation to tourist rides (S1.5 and T1, 4) of 1.65. Based on IE matrix analysis, the total value of IFAS and EFAS parameters was in cell 4, which means the strategy or policy

taken is a growth strategy by carrying out vertical integration and developing slowly and carefully in tourism management. The scenario for the development of edu tourism farms in Brau Hamlet is progressive.

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Efforts to Achieve Environmental Sustainability through Ecotourism

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Abstract

This paper will discuss specifically the effort of Kupa-Kupa Beach Cottage and Meti Beach Cottage managers to achieve environmental sustainability through the concept of ecotourism. Furthermore, private sector involvement and mixed marketing strategy will be discussed to describe how community empowerment and local community support as an essential factor in regional tourism development, especially in North Halmahera District. The research method used is qualitative with case study approach. This paper shows that the private sector tends to adopt a community-based ecotourism concept to achieve environmental sustainability and tourism sustainability itself. The government will act as a stimulus and catalyst that is synergistic with the needs of the private sector to provide tourism facilities according to tourists' preference. Kupa-Kupa Beach Cottage and Meti Beach Cottage managers seek to provide employment for local communities as part of a marketing strategy so that they are mutually beneficial.

Keywords: Community empowerment, ecotourism, environmental sustainability, mixed marketing strategy, private sector involvement.

INTRODUCTION

Tourism is one of the priority sectors of national development in Indonesia since 2015. The contribution of the tourism sector for the economy of Indonesia is the availability of employment opportunities as solutions to problems of unemployment and increase income per capita to prosper as a solution and tackle the problem of poverty in Indonesia [1-4]. Tourism also provides social benefits with a reduction of the potential economic consequences of the conflict as well as strengthen social values and local cultures [5,6]. Tourism also provides benefits to the environment through the concept of Ecotourism [7]. This indicates that tourism is capable of delivering the benefits of social, economic and environmental issues, although some researchers showed a negative impact from tourism [8,9].

Some researchers previously showed that the implementation of the concept of ecotourism by involving local communities is a strategy to achieve sustainable tourism [10,11,12]. Nevertheless, the study of private sector participation in the development of ecotourism still shows the gap in the detail according to each context of the regions, especially in developing countries [13]. This paper will outline the efforts of the private sector in achieving sustainable tourism through the concept of ecotourism.

Ecotourism development concept into environmentally friendly tourism and provide economic and social benefits [14]. Further, local people became an important actor in the process of implementation of the approach to ecotourism [15]. In addition, the Government is acting as a catalyst or stimulus in the development of tourism to increase the participation of local communities. Government and entrepreneurs in tourism also have a very important role in pushing the acceleration of development through ecotourism approach [16]. This indicates that private and public sector or local community have an essential role in achieving the success of the development of tourism, thus the partnership between stakeholders becomes a very essential aspect in achieving the sustainability of tourism itself.

Research on ecotourism development implementation tends to emphasize the participation of the community as well as the benefits of economic, social and environmental [17-21]. Nevertheless, different contexts of region and community show the different level of participation. According to the case of North Halmahera Regency as a post-conflict area which is located in the border area of Indonesia and the Philippines showed the shape and different levels of participation [4]. The community so actively participate in various meetings, coaching, and counseling, as well as maintaining environment

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security. Even so, the scope of his research is limited in Tagalaya, Kumo and Kakara Island. In another hand, the different case showed that the community as a fisherman in the North Kao region still use bombs in the process of catching fish so damaging coral reefs [22]. Thus it can be noted that each context show the different conditions.

This paper will discuss specifically the effort of Kupa-Kupa Beach Cottage and Meti Beach Cottage managers to achieve environmental sustainability through the concept of ecotourism. Furthermore, private sector involvement and mixed marketing strategy will be discussed to describe how community empowerment and local community support as an essential factor in regional tourism development, especially in North Halmahera District.

MATERIALS AND METHOD

The research method used is qualitative and case study approach. This study used in-depth interview technique, observation and document study. The informants involved in this research are the manager of Kupa-Kupa Beach Cottage (O and L) and Meti Beach Cottage (A and M). Interviews also conducted with the key informants of the local community in Kupa-Kupa Village (KD) and Meti Village (RT) and Tobelo Timur Sub-District Head (RJ). The discussions and interviews with the sea transport service provider from Mawea Village to Meti Island have agreed with the researchers not to publicize the identity of the informants. In addition, observations were conducted at the site of Kupa-Kupa beach Cottage and Meti Beach Cottage. The study of the intended document is the searching of information through the internet to sharpen the analysis. Data validation process use triangulation technique to obtain credible information. This study focuses on the efforts of the private sector to achieve environmental sustainability through ecotourism approaches.

Data Collections

The data retrieval process is done using an in-depth interview technique. In the early stages, researchers only come as tourists to observe the business environment of cottages on Kupa-Kupa beach and Meti Island. On the first visit, the researcher chatted with local people who sell around the tourist attraction while discussing related to the presence of cottage entrepreneurs. Researchers are wondering about the economic benefits derives from tourism activities to society.

Furthermore, researchers visited Kupa-Kupa Beach Cottage and Meti Beach Cottage entrepreneur to ask questions related to business

management. After establishing a good relationship with the entrepreneur, the researcher delivers the intent and purpose of conducting the research so that it takes time for in-depth interviews. The in-depth interview process can be done when the entrepreneur is not busy serving the guests, besides there is a different context between Kupa-Kupa Beach Cottage and Meti Beach Cottage.

Kupa-Kupa Beach Cottage has been started from 2006 while Meti Beach Cottage has only been pioneered since 2016. Nevertheless, both are struggling to keep the environment around the cottages from the activities of the people as fishermen who catch fish using bombs. Considering this, researchers focus on strategies or efforts to achieve environmental sustainability through service optimization in each business. Researchers make observations in the business environment to reconcile information obtained from interviews.

In addition, researchers also traced information through social media and online news to ensure the real conditions in Kupa-Kupa Bay and Meti Island. Thus, this study also uses observation techniques and document studies to obtain credible information. Although the focus is on entrepreneurs, researchers also conduct discussions with local people who are entrepreneurial in tourism objects as well as communities who work as a provider of local sea transportation services. Thus the process of this research can be completed.

RESULTS AND DISCUSSION

Ecotourism Development

Revitalization under Reconciliation is a portrait of the social, economic and environmental issues in North Halmahera Regency. In 1999-2000 in the town of Tobelo, North Halmahera Regency never happened due to conflict issues that influence the relationship of Sarah believers [23]. The implications of these conflicts affect the life of the community in sustaining life, related to livelihood. In situations of conflict, stunted economy activity so that an attempt to satisfy daily needs done in the traditional way as well as catching fish for consumption. In the context of Kupa-Kupa Village and Meti island, the coral reefs around have been damaged by fishing activity using a homemade bomb. This indicates the existence of a threat to environmental sustainability that also affects the tourism sector as defamation.

The local government cooperates with the police in collaboration to observe the water

environment conditions in Kupa-Kupa Bay and Meti Island by establishing a policy to ban fishing activities using fish bombs and to give strict sanctions to those who violate the regulation. In addition to negatively impacting the sustainability of the underwater natural environment, such activity is also harmful to individuals.

Based on Fatimah Yamin's information in Kompas media on 7th January in 2016 that one of the Kupa-Kupa villagers on behalf of Rulan Djakolo (39th) was found dead with both arms broke off in a boat due to a fish bomb exploding in hand. Meanwhile, a fellow victim named HR (35th) also suffered injuries to the head and chest. According to AR as headman of Kupa-Kupa village, the incident was known when he heard the explosion.

Meanwhile, the representation of North Halmahera Police, YR on Thursday the 7th day of January 2016 in cooperation with the Department of Marine and Fisheries investigated the case to find out the origin of the materials used in making the homemade bomb. This shows the efforts of various stakeholders to protect the environment by preventing the development of fishing activities using homemade bombs that negatively impact the environmental sustainability and image of regional tourism.

Fishing using homemade bombs is not only happening in North Halmahera, but also in other regions such as Sulawesi and Southeast Maluku. Arakan and Wawontulap villages as a part of Bunaken National Park, indicating the presence of fishermen who often catch fish with fish bombs [24]. Further explanation shows that bomb fishing started in the Permesta war in 1967-1959 when troops from the center were brought to North Sulawesi to feed troops in large numbers, so the army cooks invited some fishermen to catch fish using hand grenades.

In 1979, when Indonesia was safe, fishermen attempted to assemble their own bombs by cutting out unused bullets for gunpowder, inserted into bottles to bomb. The impact of the use of bombs on coral reefs is 25% of coral damage, so fishermen have to look to more remote areas. Meanwhile, the damage to coral reef ecosystems in Small Kei Sub-district, Southeast Maluku Regency consist of natural factors and human factors [25]. Further explanation shows that damage to the coral reef ecosystem is more dominant in human activities ie fishing using handmade bombs, nets, and coral retrieval for building materials.

In the other hand, the arbitrary fishing behavior in the use of illicit tools or materials is

caused by poverty [26]. The factors that influence the fishing behavior associated with poverty: institutional harm to small fishermen; programs that do not favor small fishermen; an *afterlife* oriented worldview; resource constraints; incompatibility of fishing gear; low investment; debt-bonded; extravagant behavior; limited seasons of arrest; damage to ecosystems; arrest of catch territory; weak law enforcement; competition to outperform other fishermen. This shows the factors that influence fishing behavior by fishermen.

In the context of the Kupa-Kupa Bay and Meti Island, coral reefs are the main attraction. This means that damage to coral reef ecosystems is a threat to the sustainability of the tourism sector. Local Government of North Halmahera determining the direction of policies and development strategies of tourism-based ecomarine, heritage and culture. Ecotourism is becoming one of the concepts of development of tourism in North Halmahera Regency so that elements of the conservation, the welfare of local communities and the responsible travel (responsible tourism) is very essential in the development of tourist attractions.

As for, the principles are taken into consideration in the development of tourism of North Halmahera Regency is as follows: minimize negative impact on the environment; increasing concern for the environment and culture; provide a positive experience for tourists visiting or host; provide financial benefits for local people. Recently, development strategies undertaken is the development of the natural attractions that paying attention to the sustainability of flora and fauna, the development of tourism facilities by considering their impact on the environment, as well as involving the community to actively participate in the activities of the tour. Thus it can be noted that the approach to ecotourism is strategies to achieve sustainable tourism through community-based tourism development.

Meti island is one of the leading tourist attractions in North Halmahera Regency. In 2015, there was an issue arisen from land use controversies that caused a number of ancillary facilities for tourism are not well-maintained to damaged [4,27]. However, the management of the tourist destination is getting better after being developed by the private sector. Meti island is currently the most popular tourist destination for foreign tourists as shown in Figure 1.



Figure 1. Meti Beach Cottage, in a) Local Visitors, b) Foreign Tourist (Source : PulauMeti, 2018)

Figure 1 shows that the island of Meti has tourism potential that can be developed so as to deliver the benefits of economic, social and environmental. In the year 2016, CV. Meti Bali Beach, establish communication with the landlord then hired a land use within the period agreed upon together. Meti Beach Cottage Manager develop attractions with themes of eco-friendly tourism. It can be seen from the building of cottages which uses eco-friendly materials in the form of bamboo and the roof of the local community which is also used in building settlements. In addition, the neighborhood cottage also cleaned and arranged well-giving rise to the impression is convenient for tourists who visit. As for the form of cottages that have been built can be seen in Figure 2 below.



Figure 2. Meti Beach Cottage (Source: Observation, 2018)

Figure 2 is a portrait of Meti Beach Cottages recorded using a drone. The concept of ecotourism adopted by Meti Beach Cottages entrepreneurs is inseparable from the characteristics of local culture. In addition, to create a comfortable and safe atmosphere and achieve environmental sustainability, businessman Meti Beach Cottage in cooperation with the Village Government and the people of Meti who work as a provider of sea transportation (*ketinting*) to synergize in determining the tariffs of affordable transportation services for tourists.

Furthermore, the matters discussed in the form of cooperation with the village government and the local community are the prohibition to catch fish using fish bombs, the rules for not catching fish around the cottages, the rules not to

dispose of plastic waste in the waters of Meti Island as well as in the cottage environment as well regulation not to consume liquor and drugs in the cottage environment. Thus it can be seen that the private sector has a very essential role in achieving environmental sustainability through ecotourism. In the context of Kupa-kupa Beach tourism object, Kupa-Kupa Beach Cottage entrepreneurs also adopt the concept of ecotourism. It can be seen from the building materials used and the beautiful environmental management, as in Figure 3 below.



Figure 3. Kupa Kupa-Beach Cottage (Source: Personal Documentation, 2018)

Figure 4 shows that the Kupa-Kupa Beach Cottage businessman adopts the concept of ecotourism through the building materials used. Kupa-Kupa Beach Cottage is also a stimulus for the development of tourism business on Kupa-Kupa beach. In addition, Kupa-Kupa Beach Cottage entrepreneurs maintain cleanliness and arranging the environment around the cottage so as to create a sense of security and comfort for tourists who visit. Entrepreneur Kupa-Kupa Beach Cottage also employs local communities in cottage business management, providing business locations for local communities. This indicates that the presence of Kupa-Kupa Beach Cottage not only provides ecological benefits but provides economic and social benefits for local communities, as in Figure 4 below.



Figure 4. Kupa-Kupa Beach Cottage, in a) Community Empowerment, b) Local Visitor (Source: Personal Documentation, 2018)

Figure 4 shows that the existence of the private sector in regional tourism development is very beneficial. Therefore, a collaboration

between the government, local community and private sector is needed to achieve sustainable tourism development by adopting ecotourism principles. In the context of North Halmahera Tourism, the main problem occurred is the land disputes which result in vandalism [4]. Therefore, the concrete step to achieving sustainability in tourism is to involve the private sector and provide space for creativity in accordance with their respective business development strategies without ignoring socio-cultural, economic and environmental conditions.

Marketing Strategy of Kupa-Kupa Beach Cottage and Meti Beach Cottage

Marketing strategies are always set based on the perceptions of consumers. In this context, the perception of local tourists and the foreign tourist is very essential to determine the right tourism products. On the other hand, perceptions of local communities can be known through communication in the form of discussions as well as in-depth interviews with classifying communities that benefit from the activity of the business community who are not cottages and benefit business activity of the cottage [28].

The perception of Kupa-Kupa Beach Cottage and Meti Beach Cottage entrepreneurs is inseparable from the marketing strategy. It is related to the product, location selection, price, promotion, process, physical environment condition and participant specified by the entrepreneur. Generally, entrepreneurs are oriented to economic advantage, where the desire to gain maximum profit is more dominant. Nevertheless, the subjectivity of the entrepreneur is able to show different things where the orientation of entrepreneurship based on social goals to achieve the welfare of the community [29]. Thus, it can be seen that the marketing strategy also reflects the orientation of entrepreneurs. Meanwhile, marketing strategy Kupa-Kupa Beach Cottage and Meti Beach Cottage can be seen in Table 1.

Table 1 shows the existence of differences and similarities in marketing strategies between entrepreneurs Kupa Kupa-Beach Cottage with Meti Beach Cottage. Marketing strategy of Kupa Kupa Beach Cottage in terms of product, location, price, promotion, process, environmental and physical conditions participants have run from the year 2006, the entrepreneur Kupa Kupa Beach Cottage very responsive and Adaptive on the development of information technology so that

innovation and diversification of products and services always adjust the demand of tourists.

Table 1. Mixed Marketing Strategy of Kupa-Kupa Beach Cottage and Meti Beach Cottage

Marketing Strategy	Mix	Kupa-Kupa Beach Cottage	Meti Beach Cottage
Product		Services Lodging	Services Lodging
Place		Kupa-Kupa Bay	Meti Island
Price		IDR. 250.000- IDR.450.000	IDR.5.850.000- IDR.6.950.000
Promotion		Word of Mouth, Social Media, Trip-Advisor, Youtube, Blog, Newspaper.	Word of Mouth & Social Media, Youtube, Blog, Newspaper.
Process		Check-in can be accessed online or via telephone and email, there is a pick-up service, hotel standard services.	Check-in can be accessed online or via telephone and email, there is a pick-up service, hotel standard services.
Physical Environment		Cottage surroundings are always cleaned as well as the waters surrounding always supervised	Cottage surroundings are always cleaned as well as the waters surrounding always supervised
Person		Local Community Empowerment	Local Community Empowerment

Different case with Meti entrepreneur Bali Beach which recently pioneered the effort in the year 2016 and is still in the stage of adaptation with the social environment of local communities. However, both attempts to maintain environmental sustainability and involve local communities in the management of business thereby providing economic benefits i.e. job opportunities and increase per capita income. Consider the efforts of Meti Beach Cottage that recently pioneered in the year 2017, the description of the related marketing strategies more dominant on the Kupa Kupa-Beach Cottage.

Kupa-Kupa Beach Cottage set the price according to the room service and a number room reserved around IDR 250,000 to IDR 450,000 Per-Day, depending on facilities and room types. While Meti Beach Cottage sells tourism products in packages with prices around IDR. 5.850.000 to IDR 6.950.000. In addition, the promotion is done gradually starting from the mouth (word of mouth) until the digital campaign products business through social media as well as other online applications like trip-advisor and youtube. Word of mouth promotion results i.e. impression travelers in trip-advisor online applications, as well as personal blogs, are written by travelers in

the form of impression and experience stay at Kupa Kupa-Beach Cottage.

The production process in this process of service provision can be done manually or use an online trip-advisor. The physical condition of the environment surrounding the business place become excellent products so that environmental sustainability is always maintained well. It can be seen from the various types of plants are maintained so as to make environmental businesses exquisite. Assessment of services in the Kupa Kupa-Beach Cottage can be searched online via the application of trip-advisor is used for promotion of the business as well as tourist blog tells about the experience of tourists during their stay in the Kupa Kupa-Beach Cottage. Even so, the assessment is a subjective opinion. As for the comment, in the application of trip-advisor on Kupa Kupa-Beach Cottages and can be seen in Table 2 below.

Table 2 shows the various impressions and commentaries as members of a trip-advisor on Kupa-Kupa Beach Cottage. Tourists who give an average rating of one person, while there are six tourists who provide excellent ratings and four

tourists who provide outstanding ratings. The most dominant tourists comment on the physical condition of the environment, room facilities, service, and employee friendliness. In addition, only three tourists comment on product prices, as for comments about the price of the product is not a negative comment but a positive comment where the price of the product in accordance with the products and services provided. Thus it can be seen that the perception of tourists visiting Kupa-Kupa Beach Cottage has a positive impression. This indicates that the existence of the private sector through cottages business are able to improve tourism destination brand.

In the year 2017, Meti Beach Cottage pioneering efforts with a different strategy. At the stage of pioneering, the entrepreneur seeks to synergize with local communities, learn to understand the local culture. In addition, Meti Beach Cottage manager adopted the concept of ecotourism as guidelines in the development of businesses that are able to provide the benefits of economic, social and environmental. It can be seen from the results of the interview along with A & M, as follows:

Table 2. Impressions and comments of travellers about the Kupa Kupa-Beach Cottage (Trip-Advisor Member)

Name	Account Trip Advisor	Traveler Rating (Excellent, Very Good, Average)	Stay (months and years)	Types Of Travelers (Family, Couples, Individuals, Business, Friends)	Comments				
					Product	Price	Environment	Process	Participants
Glein S		Average	December 2016	Family	√		√		
AtySilia (Ternate, Indonesia)		Very good	January 2017	Friend	√		√	√	
Torben A (Copenhagen, Denmark)		Very good	March 2016	Couples	√		√	√	√
Ulfulf		Very good	March 2016	Alone	√	√	√	√	
Michael G (Bendigo, Australia)		Very good	August 2015	Couples			√		√
Aisha H (Pekanbaru, Indonesia)		Very good	April 2015	Family	√		√	√	√
Cheryljxx (Hobart, Australia)		Very good	Octoberr 2014	Family	√		√	√	√
Claudia M		Incredible	December 2015	Couples	√	√	√	√	
TristanP83		Incredible	July 2016	Couples	√	√	√	√	√
Vidia K		Incredible	March 2016	Friend	√		√	√	√
Artika_Suri (Jakarta, Indonesia)		Incredible	December 2015	Friend	√		√	√	√

"We pioneered this cottage business since 2016 and until 2017 is still under construction. The concept we use is eco-friendly tourism or environment-based tourism. It can be seen from the materials or materials that we use mostly from Meti Island such as bamboo, wood, and roof. We tried to build an eco-friendly cottage, so the building materials such as the marble we had removed and used it to build this seat (while pointing to the seats that have been made). We involve the local community as a workforce to complete the construction of the cottages, in the future, we will provide a place of business for the local people next to it (pointing to the location) so that the people of Meti can feel the impact of tourism development. I am currently working to coordinate with the village government and the people of Meti and work to increase awareness related to the environment. Before I came here, the coral reefs have been destroyed by fishing activities using bombs so that small fish or base fish are rarely seen nearby. Since then, I have attempted to ban fishing activities around this place for a while so that the fish can return and can be seen by tourists. We also stipulate a regulation that plastic garbage underneath by tourists from Mawea or Tobelo should not be disposed of here, because there is no final disposal here, so we affirm that tourists take it back to Mawea. In addition, we also coordinate with people who provide sea transportation services (ketinting) to the Meti Island, so as not to monopolize the price of sea transportation services to this place. We have coordinated with the village government and the sea transportation service provider (ketinting) so that the number of tourists above five people is given the price IDR 10,000 / per person (round-trip), if less than five people then the price IDR.20.000 / per person (round-trip). Currently, there are no more people or people who catch fish using bombs around here, we are always watching and will immediately report to the authorities if there are elements who are still doing these crimes. In addition, I also observed many relics of the second world war on Meti Island that is not there, I hope the future local governments can pay attention to it with the existence of the policy of preservation of heritage objects ".

Kupa-Kupa Beach Cottage and Meti Beach Cottage managers do not always obtain the support of local communities. However, people who enjoy the benefits of Kupa-Kupa Beach cottages and Meti Beach Cottage will support and vice versa. As well as the results of observation

and discussions with the marine transportation service providers reluctant unnamed states that:

"Kupa-Kupa Beach Cottage and Meti Beach Cottage business activities do not always get local support. For people who benefit economically from business activities tend to provide support. However, people who do not benefit from the business activities of Kupa-Kupa Beach Cottage and Meti Beach Cottage show negative perceptions and even resistance."

Thus it can be seen that the development of tourism through the concept of community-based ecotourism are able to provide economic, social and environmental benefits. The presence of Kupa-Kupa Beach Cottage and Meti Beach Cottage are able to provide economic benefits through the availability of employment opportunities which is able to increase local community welfare.

Private Sector Involvement in Regional Tourism Development of North Halmahera District

Space for the private sector in regional tourism is beneficial in the effectiveness and efficiency of tourism development. Indirectly, Meti Beach Cottage managers have become a liaison between North Halmahera Regency and Morotai Island Regency through tourism product provided. As well as Kupa-Kupa Beach Cottage manager who is the liaison between North Halmahera Regency and Bali Island through their products. Through the involvement of the private sector in regional tourism development of North Halmahera District, can be seen the existence of mutually beneficial relations.

The adoption of the concept of ecotourism is able to maintain environmental sustainability as the main tourist attraction. This paper shows that the concept of ecotourism adopted by Kupa-Kupa Beach Cottage and Meti Beach Cottage managers not only provides ecological benefits for environmental sustainability but also provides economic and social benefits. Both use building materials in accordance with the characteristics of local culture, cleaning and arranging the cottage environment so as to provide a sense of security and comfort for tourists, and in cooperation with local government and authorities in overseeing the waters of Kupa-Kupa Bay and Meti Island from fishing activities using homemade bombs. Prior research is linked to ecotourism development, emphasizing the government's role in mobilizing tourism development and enhancing local community participation [30].

The collaboration between private, public and university sectors in triple helix partnership is also

essential in the implementation of ecotourism development concept [31]. In the context of Kupa-Kupa Bay and Meti Island, the partnership formed between cottage entrepreneurs and village government and local communities is limited to the coordination of tariffs for sea transportation services, indicating an effort to collaborate in achieving the objectives. Similarly, a collaboration between the private and public sectors is a strategy for achieving tourism development goals, it affects destination governance [32]. Thus it can be seen that the partnership becomes a very essential thing in an effort to achieve the goal of tourism development.

Meti Beach Cottage is still in development stage so the local community involvement still limited. Efforts to involve the community in the development of tourism on Meti Island is still limited in coordination to set the price on sea transportation services from Mawea Village to Meti Island. Unlike the case with Kupa-Kupa Beach Cottage which has empowered the community by providing business locations for local communities and employing local communities in the management of Kupa-Kupa Beach Cottage. This shows that the growing cottage business the higher opportunity to empower the community. Involving local communities in cottages shows the responsibility of the tourism industry to the local economy and social conditions [13,33].

Through empowerment, the capacity of local communities in tourism can be improved [19]. In a certain period of time, it can affect the livelihoods or livelihoods of local people from the agrarian sector to the service sector [34]. This suggests that the private sector has a very essential role as a stimulus for community-based tourism development. Thus it can be seen that the development of ecotourism in the development of attractions Kupa-Kupa Bay with Meti Island is dominated by the private sector. The government will act as a stimulus and catalyst that is synergistic with the needs of the private sector to provide tourism facilities according to tourists' preference.

CONCLUSION

This paper shows that private sector tends to adopt community based ecotourism concept to achieve environment sustainability and tourism sustainability itself. The government will act as a stimulus and catalyst that is synergistic with the needs of the private sector to provide tourism facilities according to tourists' preference. Kupa-Kupa Beach Cottage and Meti Beach Cottage managers seeks to provide employment for local

communities as part of a marketing strategy so that they are mutually beneficial.

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The Involvement of Women in Tourism Village of Pujon Kidul, Malang, Indonesia

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Abstract

Pujon Kidul Village has succeeded in tourism village, that improving the economy and social life and women's participation was seen in the technical sphere. It is interesting to analyze how women have played a role in a tourism village. This study aims to identify internal and external factors that support women's participation, identify the level participation, and analyze contributions to household income. We establish operational definitions in the form of internal and external factors and analyzed using cross tabulation and then Rank Spearman non-parametric statistical tests to provide an overview of study boundaries and data retrieval procedures. There are 56.7% of women who are graduating from high school/university and 173.33% have been in the tourism business for more than 5 years. Internal factors that have a significantly weak relationship are the level of women's education. Meanwhile, the aspect of the relationship between women's education level and women's participation as business actors in tourism villages was 100 percent in the low and medium categories, and 90 percent are in the high category. The influence of community actors to women participation is very high (100%). There are 53.57% of women had a high level of participation and contribution to household income.

Keywords: Involvement, Pujon Kidul, Village tourism, Women.

INTRODUCTION

The role of women in the development of tourism has experienced considerable debate, mainly because it is sensitive to the political, economic, social and cultural context [1]. However, women become one of the promoters of entrepreneurship in tourism. In fact, their actions of participation and creativity are very different compared to men [2]. Women's involvement also initiates the growth of experience and challenges in business, relations, and increased financial access, resulting in increased quality of life [3].

The ratio of Indonesian population showed a larger number of women than men. But in reality, there is a gap in the level of work participation between both of them. The census in 2014 showed that the female labor force participation rate only reached 50.22%, while the male reached 83.52% [4]. The lack of women's involvement is also seen in various strategic fields, for example, the parliament which only reached 17.32% and professionals who only reached 45.61%. This will have an impact on household income contribution which only reaches 35.64% [5,6].

However, we see that the role of women is considered very significant in rural development, one of which is through a tourism village program. This program was strongly initiated by the Ministry of Tourism through PNPB Mandiri Wisata, to increase the people's economic income, regional potential, and environmental sustainability [7]. In Pujon Kidul Village, Malang Regency, tourism village development has succeeded in improving the economy and social life of the community. The tour that was successfully built emphasized the role of regional arts and local products. However, full involvement of the community, especially women, is considered to be a separate force so that this tourism remains sustainable and growing.

In the case of tourism villages in Pujon Kidul, women's participation was seen in the technical sphere, such as culinary and souvenir activities, as well as inspirers and policymakers within the Tourism Awareness Group (*POKDARWIS*). This group is formed and managed independently for the sustainability of tourism villages. It is interesting to analyze how women have played a role in the development and management of a tourist village. The purpose of this study is to identify the internal and external factors that support women's participation in tourism village development. Internal and external factors are important for identifying the participation level of women's participation as entrepreneurs and

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analyze women's contributions to household income.

MATERIAL AND METHOD

The study was conducted in Pujon Kidul Village, Pujon District, Malang Regency in April 2017, which is one of the assisted villages of the local government in the development of the Tourism Village. This village is a pilot of the local government in a tourism village program and has even received a national award. Its development involves elements of the village community, both in the field of management and its workers, especially women. Therefore, this village is very suitable for research.

Respondents were determined by snowball techniques. We visited key figures to determine the respondents to be examined. We examined 30 respondents separately. This study used a quantitative and qualitative approach that is carried out together. In quantitative terms, questionnaires were used to understand the relationship of women's participation as business actors whose relationship as a participant, business actor, and their contribution to household income. Qualitatively, semi-structured in-depth interviews, observation, and field documentation were used.

The types of primary data obtained from the study were tested in tests of validity and reliability [8], then used in data analysis. The results of secondary data (documents and documentation) obtained were used to support the results of the analysis. Quantitative data results were presented in the frequency table, then processed with Microsoft Excel 2007 and IBM statistics 23.0. Then, a Spearman Rank correlation test was performed to show the level of significance or relationships between variables [8]. The form of relationship:

0.00 – 0.20	= Very weak
0.21 – 0.40	= Weak
0.41 – 0.70	= Strong
0.71 – 0.90	= Very Strong
0.91 – 0.99	= Very Much Strong
1.00	= Perfect

We also establish operational definitions in the form of internal and external factors that induce women's involvement as businesses. This definition was formed to provide an overview of study boundaries and data retrieval procedures (Tables 1 and 2).

The correlation between internal and external factors of respondents with the participation of women as business actors in tourist villages was

analyzed using cross-tabulation and then Rank Spearman non-parametric statistical tests were conducted to analyze the relationship between ordinal scale data and ordinal scale data. Decision making based on Sig. If the Sig. (2-tailed) or p-value is smaller than the real level (α) = 0.05, then H_0 is accepted, which means there is a significant relationship between the variables tested. The asterisk (*) in the correlation coefficient also shows the relationship between the variables tested. The nature of the correlation coefficient can be seen in data processing and analysis techniques. Internal factors of respondents consist of age, level of education, and length of women's business.

Tabel 1. Internal Factors that Influence Women Business Actors in Pujon Kidul Tourism Village

Variables	Definitions	Indicators
Age	The length of life of the respondent when the research is conducted is calculated from the date of birth stated in the year	1.Early (20-40 years) 2.Middle (41-64 years) 3.Late (over 65 years) [9]
Level of Education	Educational stages are determined based on the level of development of students. This level of education consists of basic education, secondary education and higher education	1.Low: no schooling, not completed, completed elementary school 2.Middle: completed junior high school 3. High: after senior high school
Duration in business	Duration of time a person spends to do a work effort	1.Low: <2 years 2.Middle : 2-5 years 3.High: >5 years

Table 2. External factors that influence women business actors in the Pujon Kidul Tourism Village

Variables	Definitions	Indicators
Influence Driving Actor Participation	Actor who grows Respondents' participation in tourism village development	1.Low: influence of private actors (banks, insurers), value = 1 2.Medium: the influence of motivating actors from government institutions (regional / central government), value = 2 3.High: the influence of the driving actor who comes from the family / community / tourism conscious group, the value = 3 1.Low: 6-10 2.Middle: 11-15 3.High: 16-20

Variables	Definitions	Indicators
Access Level Women Business Actors in Tourism Villages	There are opportunities for respondent to participate and in the development of tourism villages	There are 5 statement items, each item has a possible score: Never = 1 Sometimes = 2 Often = 3 Always = 4
Fund Source Level Business	There are opportunities for respondent to participate and in the development of tourism villages	Based on field observations, the level of business funding sources can be classified into: 1. Low: Source of funds from the private sector (bank, insurance), value = 1 2. Medium: Source of funds from government institutions (regional / central government), value = 2 3. High: Sources of funds from family / community / tourism conscious groups, value = 3
Acceptance of Patriarchal Culture	Cultural values that place as authority holders in the family, by giving decisions to women to participate as entrepreneurs in the development of tourism villages	1.Low : 1-5 2.Middle : 6-10 3.High : 11-15 There are 3 statement items, each item has a possible score: Never = 1 Sometimes = 2 Often = 3 Always = 4

RESULT AND DISCUSSION

Internal Factors

The results showed that as 12 women are in the age of young adults (Table 3). Thus women still have a lot of time and energy to carry out social activities outside the business of domestic activities. They are members of the community which are expected to be the main strength of the development of the Tourism Village. However, most of the respondents have reached middle-aged adults, where this factor will initiate women to mature family life, maintain social groups and economic life. Age variables have an impact on the quality of work and its relevance to work development innovations (Table 3). Workers who have a higher age, especially over 40, have a lack of innovation and energy [10].

Based on age, there are 56.7% of women who are graduating from high school/university which describe the level of formal education as high. This strongly supports the involvement of women

in Tourism Village Development. Education is the key to self and social maturity in initiating and finding innovation. Uniquely, 73.33% have been in business for more than 5 years. This illustrates the strength of women in entrepreneurship has been influential in the initiation of the formation of Tourism Villages, even before the arrival of government initiation. The results of the interviews revealed that their understanding of the potential of natural resources in their area was very good. The production results are used as raw materials for culinary business and sales of souvenirs that are now being undertaken. This illustrates that women have acted as part of a resilient and innovative rural community [11]. High education and the erosion of patriarchy culture make women freer to work and make decisions, including in the sale innovation of the products they created [12,13].

Table 3. Number and Percentage of Respondents According to Age, Education Level and Length of Business in Pujon Kidul Tourism Village

Internal Factors	Number (n)	Percentage (%)
Age		
Early (20 – 40 years)	12	40
Middle (41 – 64 years)	18	60
Late (over 65 years)	0	0
Total	30	100
Level of Education		
Low (not completed/completed primary school)	7	23,33
Middle (completed junior high school)	6	20
High (completed senior high school/college/university)	17	56,67
Total	30	100
Duration in business		
Low (<2 years)	0	0
Middle (2-5 years)	8	26,67
Tinggi (>5 years)	22	73,33
Total	100	100

The case of Pujon Kidul Tourism Village illustrated that women face increasingly severe challenges as internal factors. Even so, women have quite high participation (Table 4). The family economy must be fully supported by all its members, especially wives. Armed with education and experience about the village's natural resources, they become the initiators and active activists of the tourism village development groups. In Mersin, Turkey, women have acted as initiators in awakening the village's local economy and saving it from poverty through tourism development. This is done by the form of basic limitations and the desire to escape poverty [14].

The extent of women's experience is seen as effective to be the basis for the development of tourist villages. Most of the respondents have an effort that has been carried out intensely for more than 5 years. This role makes them more experienced in offering products and forms of tourism village management. Tourism destination management will be very important in strengthening competitiveness with other tourist destinations [15]. The form of management that deals directly with consumers is the quality of service. As a form of responsibility for the purpose of tourism, namely as a driver of economic, social, and environmental sustainability, the manager's role becomes very important. This is due to the fact that tourism formation is not temporary, but is sustainable and for a long time [16].

Correlation test results confirm previous findings. Internal factors that have a significantly weak relationship are the level of women's education (Table 5). This illustrates the form of participation that occurs not too affected by the level of education, but by the personal factors of the subject. The interview results illustrated the reason for this fact, where the willingness to change family conditions to a better economic level is a more important factor.

Another internal factor that has a strong negative relationship is the age level. Age affects physically in the maturity and will of women [16]. This is also illustrated by the distribution of respondents (Table 4). Meanwhile, the aspect of the relationship between women's education level and women's participation as business

actors in tourism villages was 100 percent in the low and medium categories, and 90 percent are in the high category. These three categories have high participation. This is because the relationship between the level of education of women and their participation as business actors in tourism villages has a weak significance. This indicated that the level of education does not guarantee the level of participation as a business actor in a tourist village. Although women's education becomes something that is prioritized in society with the aim of developing themselves in the social activities of the community, participation with self-desires becomes more distinctive.

Furthermore, there was an interesting fact in the relationship between the length of business > 5 years with women's participation reaching 65.22%, or in the high category and having high participation. This causes women who have long been doing business in the Pujon Kidul Tourism Village will know the environmental conditions and patterns of tourist visits, making it easier to adapt and carry out economic activities. In addition, the form of business that has been going on for a long time will be increasingly recognized and facilitate the marketing of its products. The high experience in managing business branding is very important for the business. Management of tourism areas is also no exception, where branding can improve competitiveness and construct various relationships with other economic businesses, such as travel, consumption, and investment [17].

Tabel 4. The Distribution of Respondents Based on the Correlation between Internal Factors and Women's Participation

Internal Factors		Women's Participation as Business Actors in the Tourism Village							
		Low		Middle		High		Total	
		n	%	n	%	n	%	N	%
Age	Low	0	0	3	25	9	75	12	100
	Middle	0	0	12	66.67	6	33.33	18	100
	High	0	0	0	0	0	0	0	0
Level of Education	Low	0	0	0	0	3	100	3	100
	Middle	0	0	0	0	7	100	7	100
	High	0	0	2	10	18	90	20	100
Duration in business	Low	0	0	0	0	0	0	0	0
	Middle	0	0	6	85.7	1	14.29	7	100
	High	0	0	8	3.48	15	65.22	23	100

Table 5. Rank Spearman Correlation Test between Internal Factors with Women's Participation as Business Actors.

Internal Factors	Women's Participation as Business Actors in The Tourism Village
Age	0.025 (<i>p-value</i>); -0.408* (correlation coefficient)
Level of Education	0.039 (<i>p-value</i>); 0.379* (correlation coefficient)
Duration in business	0.017 (<i>p-value</i>); 0.432* (correlation coefficient)

External Factors

The level of influence of the actors who drive women's participation

The influence of the actors driving the participation of women as entrepreneurs in tourism villages was reviewed through various involvement. The influence of participation activist actors was categorized into three groups, namely the influence of participation activists who come from the private sector, the government, and the community or tourism conscious groups. Based on the condition of the Pujon Kidul Tourism Village, which uses the concept of community-based tourism development (CBT), the highest policyholder of tourism village development is in the community. This has implications for the total utilization of the community towards village resources in the form of tourism village development, and each member can independently submit criticisms and suggestions for the development of the program. This is illustrated in Figure 1. The influence of society as an external factor occupies the highest portion compared to the government and the private sector.

The influence of community actors as drivers of women's participation in culinary business are very high (100%), as well as the driving force of women's participation in souvenir business (83.33%). Community actors who are families and members of the tourism awareness group described the spirit of community independence as the main capital in the formation of a tourist village. Community participation in initiating, working on and managing tourism villages is absolutely necessary to maintain sustainability [18].

Even though the numbers are not dominant, government actors influence women's participation. The government actors who are part of the industry and trade offices show that they are more dominant in driving souvenir business. The results of the interviews revealed that there was capital assistance channeled in small amounts, thus allowing participation.

The level of women's access to tourism villages

Women's access refers to something that can be achieved by women entrepreneurs in the development of tourism villages. This is the access of respondents to information on culinary and souvenir businesses, institutions, training information, providing criticism and suggestions, and access to monitoring tourism village development.

Access to information on culinary and souvenir businesses, as well as access to relative institutions are always conducted by respondents (Figure 2). This is because respondents want to get information on activities in tourist villages so that they can produce and market culinary or souvenir businesses for tourists who visit. Access to training information is relatively always carried out by respondents because respondents want to see new innovations that can be applied to their businesses. However, the respondent's access to monitoring village tourism development is quite often done. This is due to supervision activities carried out by tourism village managers and tourism conscious groups, despite the development of the Pujon Kidul Tourism Village using a community base.

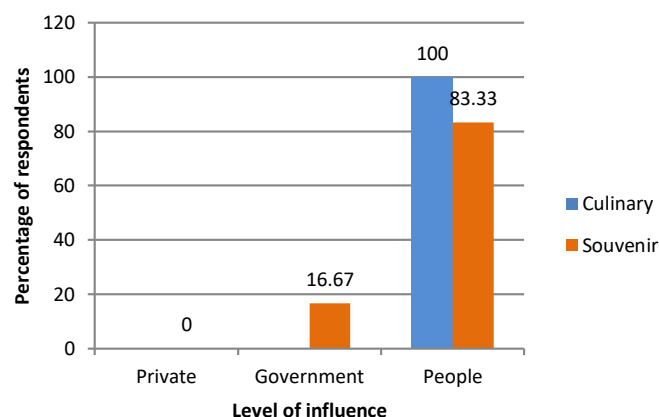


Figure 1. Percentage of respondents based on the level of influence of the driving actor of women's participation as culinary and souvenir entrepreneurs in the Pujon Kidul Tourism Village in 2018

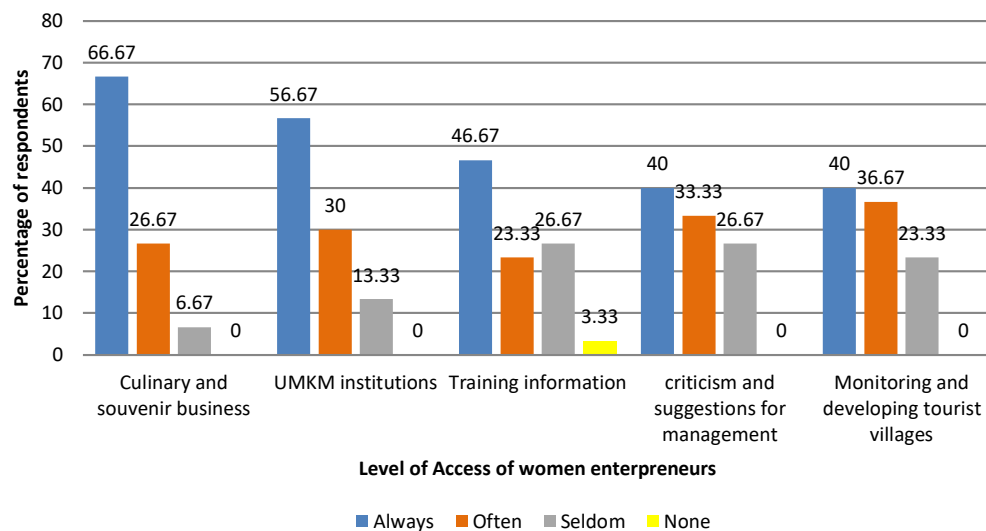


Figure 2. Percentage of respondents based on the level of access of women entrepreneurs in Pujon Kidul Tourism Village

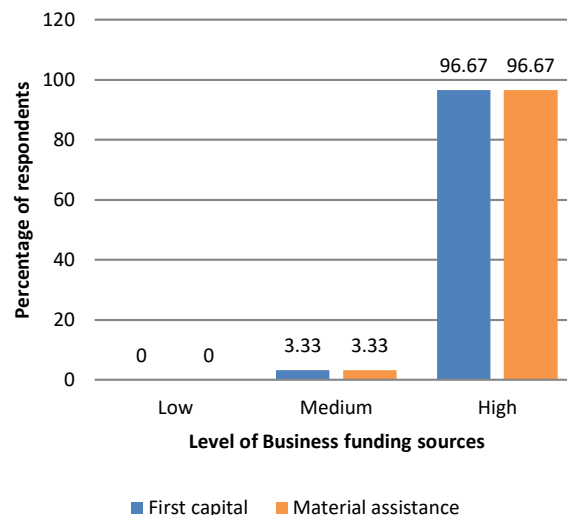


Figure 3. Percentage of respondents based on the level of business funding sources for women as entrepreneurs in Pujon Kidul Tourism Village in 2018

The level of the source of business capital

The level of the source of initial business capital for the participation of women entrepreneurs in the Pujon Kidul Tourism Village comes from the community (96.67%, Figure 3). It is explained that the respondent began to start a business with personal or family finances, without applying for help from the private sector or the government. Observations showed that only 1 respondent received funding from the government. This is because the respondent submitted the proposal to the service (government) for the help of an oven machine so that the initial capital of the business in the form of an oven came from the government.

CBT once again provides a role for the Pujon Kidul Tourism Village so that the allocation of non-governmental funds is used for mutual benefit. The community was invited to negotiate together to achieve a common goal for the welfare of the Pujon Kidul Tourism Village community. This is supported by the results of research by Raharjana [19] which states that local residents are given absolute rights to participate in determining the future. Based on business funding sources from several sectors can be categorized into three categories. Figure 3 describes the percentage level of funding sources for women's participation as businesses in tourist villages.

The level of patriarchal culture acceptance

Factors of Javanese culture that embrace many term patriarchal systems that position women lower than men both in the public sector and in the household. Patriarchal ideology characterizes that men are the household heads of breadwinners who are seen in productive work outside the home and as successors of descendants. However, the changing times have changed the role of women into benefits for families to increase income after marriage [20,21]. The permission of a husband or father as a business actor in the development of a tourist village, given criticism and suggestions by a husband or father as a business actor, and given material assistance by a husband or father as a relative business actor is always done by men to women in the Pujon Kidul Tourism Village.

Furthermore, women were relatively often given material assistance by husbands or fathers (16.67%). This is caused by the turnover of the results of the business carried out by women reused as capital to buy raw materials. Overall

respondents produce in the household so that they are often assisted by their husbands or fathers. If a production error occurs, the husband or father can reprimand and provide a solution.

Most women have a high level of acceptance of patriarchal culture (87%). It shows that men are still positioned as the main (higher) than women. This is in line with the research of Nimrah and Sakaria [22] stating that most people assume that male domination still occurs in every field, as in families still dominated by men as well as in the workplace is still led by men.

Sihite [20] described the existence of a strong external factor in the form of cultural ideology adopted. Factors of Javanese culture that embrace a patriarchal system that positions women lower than men both in the public sector and in the household. In this study, most of the women have a high level of acceptance of patriarchal culture (86.67%) proving that men have a higher position (position) than women, in their families and communities (Table 6).

Table 6. The number and percentage of respondents according to the level of acceptance of patriarchal culture women's participation as business people in the Pujon Kidul Tourism Village

The Acceptance of Patriachial Culture	Always		Often		Seldom		Never	
	n	%	n	%	n	%	n	%
Get permission from the husband or father as a business actor in the development of a tourist village	29	96.67	1	3.33	0	0	0	0
Criticism and suggestions are given by husbands or fathers as business people	26	86.67	3	10	1	3.33	0	0
Material assistance provided by husband or father as a business actor	22	73.33	5	16.67	3	10	0	0

The Correlation between External factors and Women's Participation

External factors that have a strong and significant relationship with women's participation are the level of influence of the actors driving participation, the level of access of women entrepreneurs in tourism villages, the level of business funding sources, and the level of acceptance of patriarchal culture.

The relationship between the influence of the motivating actors of women's participation and women's participation as business actors in tourism villages was 55.17% in the high category and had high participation. This is due to the willingness of the respondents to participate as entrepreneurs and develop the Pujon Kidul Tourism Village to be better and known by many people. Although there is one person who is driven by the government with assistance so that he can become a businessman in a tourist village.

Table 7. Correlation Test between External Factors with Women's Participation level as Business actors in Pujon Kidul Tourism Village

External Factors	Women's Participation as Business Actors
Level of Driving Actors Influence	0.023 (<i>p-value</i>); 0.415*
Level of Women Acces as Business Actors	0.014 (<i>p-value</i>); 0.443*
Level of Source Capital	0.023 (<i>p-value</i>); 0.415*
Level of Patriachal Culture Acceptance	0.013 (<i>p-value</i>); 0.447*

Furthermore, in Table 8 also shows the relationship between the levels of access of women entrepreneurs in tourism villages with the participation of women as entrepreneurs in tourism villages by 100 percent in the high category so that they have high participation. This is seen from access to information on

business actors in tourist villages, access to the Mekarsari UMKM (Micro, Small, and Medium Enterprises, MSMEs) institution, access to training information, access to criticism and monitoring of tourism village management.

Meanwhile, the relationship between the level of business funding sources and the participation of women as business actors in tourism villages showed that the initial source of business funding came from themselves (family) and had high participation of 93.1%. The majority of the initial business capital comes from the respondent's family. Women began to pursue culinary efforts with ingredients obtained around the tourist village, thereby reducing production costs. After successfully conducting production and marketing, respondents made large quantities of products to be marketed outside tourist villages. Meanwhile, the relationship between the level of acceptance of patriarchal culture and the participation of women as entrepreneurs in tourist villages in the Pujon Kidul Tourism Village shows that 96 percent have high participation in the acceptance of high patriarchal culture as well.

Patriarchal culture is still adhered to by respondents, it caused women to be able to do activities outside the home, such as attending training, marketing outside tourist villages, and nondomestic activities need to get permission from their husbands or fathers as holders of power in the household. In line with the results of Murdiyanto's research [23] which states that local communities are the part that best understands the state of the region, it will certainly be able to provide valuable input. The level of participation of women as business actors in tourist villages in the Pujon Kidul Tourism Village is in the high category of 53.33 percent. In the relationship of external factors with the participation of women as business actors in tourism villages, they managed to answer the hypothesis in this study. There is a strong significant relationship between the level of act of influence driving the participation of women, the level of access of women entrepreneurs in tourism villages, the level of business funding sources, and the level of acceptance of patriarchal culture with women's participation as entrepreneurs in tourist villages.

Table 8. Distribution of respondents according to the relationship between external factors and women's participation as business people in the Pujon Kidul Tourism Village

External Factors		Women's Participation as Business Actors in The Tourism Village							
		Low		Middle		High		Total	
		n	%	n	%	n	%	N	%
Level of Influence of Driving Actors	Low	0	0	0	0	0	0	0	0
	Middle	0	0	1	100	0	0	1	100
	High	0	0	13	44.83	16	55.17	29	100
Level of Acces	Low	0	0	0	0	0	0	0	0
	Middle	0	0	2	20	8	80	10	100
	High	0	0	0	0	20	100	20	100
Level of Capital Source	Low	0	0	0	0	0	0	0	0
	Middle	0	0	0	0	1	100	1	100
	High	0	0	2	6.9	27	93.1	29	100
Level of Acceptance of Patriachal Culture	Low	0	0	0	0	0	0	0	0
	Middle	0	0	2	40	3	60	5	100
	High	0	0	1	4	24	96	25	100

Table 9. Number and percentage of respondents according to the level of women's participation as a businessman in the Pujon Kidul Tourism Village

The degree of women's participation as business actors	Number (n)	Percentage (%)
No Participation	0	0
Tokenism	14	46.67
Active Participation	16	53.33
	30	100

The level of women's participation as business actors

The participation category is measured by attendance at meetings and the delivery of aspirations in meetings classified as active participation with a total of 19 women (53.33%, see Table 9). In addition, the participation category of women in tourism village development groups through Mekarsari MSMEs is categorized as tokenism or false participation (46.67%).

The degree of female participation as a business actor in a tourist village can be seen in table 4.11 based on the accumulation of participation category questions that respondents answered from the answer choices 1-8 which represent the degree of participation. The degree of women's participation in the development of the Pujon Kidul Tourism Village is classified as active participation (53.33%).

Participation in the development of Pujon Kidul Tourism Village also uses a community approach. There is high participation from citizens in decision making and implementation of actions [23]. Murdiyanto [24] which states that local communities become the part that best understands the state of the region will certainly be able to provide valuable input. Local people with their knowledge and experience become very large capital in carrying out development. It is the local community who knows what problems are faced and also the potential possessed by the region.

Women's contribution to women's income as a business actors in a tourist village

The income level consists of three categories, namely low income level (<Rp3,796,596), medium income (Rp3,796,596 to Rp16,433,268), and high (> Rp16,433,268) (Table 10). Women's income as entrepreneurs in tourist villages per

month is in the low category of 66.67 percent. This is because the scope of marketing is still around tourist villages and food bazaar, only a portion of businesses are marketing to a broad market, such as marketing via the internet. Thus, the income of every woman doing business in the Pujon Kidul Tourism Village is different from one another. Basically, what generates direct income as a business actor in a tourist village is the sale of products marketed by women entrepreneurs when tourists visit.

Women's contribution to household income

Household income contributions are grouped into three categories based on average and standard deviation. The contribution of household income by women as entrepreneurs in tourism villages is relatively high (53.37%, see Table 9). The average husband's income and other income for the female household of business actors is Rp. 2,315,000. As much as 50 percent or part of women entrepreneurs in tourism villages, the level of contribution to household income is in the high category (> 49%).

Relationship between the level of participation of women as business actors and the level of contribution to income

The results of this study indicated that women's participation as entrepreneurs in tourism villages has a strong significant relationship with their contribution to household income (Table 11). But in the table also mentioned the level of women's participation as business actors in tourism villages in the high category but its contribution to household income in the medium category was 32.14 percent. This is because, at the time of the interview, the results of the respondents' income were not as many as a few months ago due to the respondents not doing business production and marketing.

Table 10. Amount and percentage according to women's income level as perpetrators business in tourist villages in Pujon Kidul Tourism Village per month [4]

The level of women's income as business actors	Number (n)	Percentage (%)
Low (<Rp3.796.596)	20	66.67
Middle (Rp3.796.596-Rp16.433.268)	6	20
High (>Rp16.433.268)	4	13.33
Total	30	100

Table 11. Number and Percentage of women's contribution to household income in Pujon Kidul per month

Level of women's income as business actors	Number (n)	Percentage (%)
Low (<24%)	5	16.67
Middle (24%-49%)	10	33.33
High (>49%)	15	50
Total	30	100

Table 12 The number and percentage of respondents according to their level of participation as businesses in tourist villages

The level of women's participation as business actors	Level of contribution to household income							
	Low		Middle		High		Total	
	n	%	n	%	n	%	N	%
Low	0	0	0	0	0	0	0	0
Middle	1	50	1	50	0	0	2	100
High	4	14.29	9	32.14	15	53.57	28	100
Total	5	16.67	10	33.33	15	50	30	100

In addition, the results of this study found that 53.57 %of women had a high level of participation and the level of contribution to household income was high. So it can be said that women have a large role in supporting the family economy in addition to income from the husband. The results of previous studies show that along with the times, the role of women as housekeepers working in the domestic sector has experienced a shift. At present women do not only work in the domestic sector but also as main and additional breadwinners [25].

Women's participation as entrepreneurs in tourism villages has a significant relationship with their contribution to household income. As much as 66.67 percent of women's income as businesses in tourist villages per month is in the low category (<Rp. 3,796,596 per month, see Table 10). This is because, at the time of the interview, the results of the respondents' income were not as many as a few months ago due to the respondents not doing business production and marketing. But the level of contribution to household income is in the high category by 53.57% (Table 12).

This illustrates that the higher of participation of women as business people, the higher their contribution to household income. The results of previous studies also support these findings, which along with the times, the role of women as housekeepers working in the domestic sector has undergone a shift. Now, women not only work as additional income but also as the main and additional breadwinners [26].

CONCLUSION

We uncover internal factors that influence women's participation: the character of women as business actors, age, education and business period. Age has a negative influence on the development of tourism villages. While the external influencing factors consist of the

emergence of business activists, initial capital, and patriotic culture. In general, the level of participation of women in tourism villages is quite high (53.33%), and is classified as active participation. Women's contribution to culinary and souvenir businesses for family income reached 53.37%

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MANUSCRIPT SUBMISSION

FOCUS AND SCOPE

Competitiveness of destinations, products and Indonesian tourism business; Diversification of tourism products; Incentive system of business and investment in tourism; Information, promotion and communication in tourism; Tourism supporting infrastructure; Security and convenience in tourism; Tourism policy; Unique tourism community life (living culture); Local knowledge, traditions, and cultural diversity; Diversity and attractions in ecotourism; Diversity of natural attractions in ecotourism; Pluralistic diversity of ecotourism society; Diversity of ecotourism activities; Hospitality of the local resident; The quality of tourism services; Quality of HR in tourism (Standard, accreditation and competence certification); The market share of tourism and integrated marketing system; Package of tourism attraction; Development of tourism regions; Community based Eco-Tourism.

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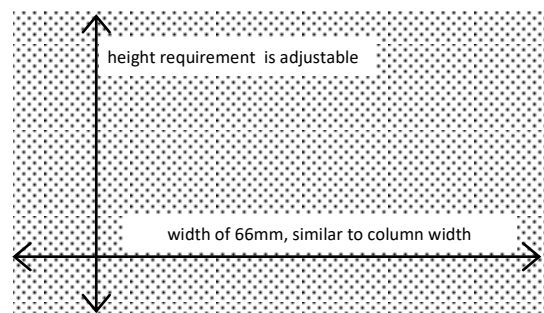


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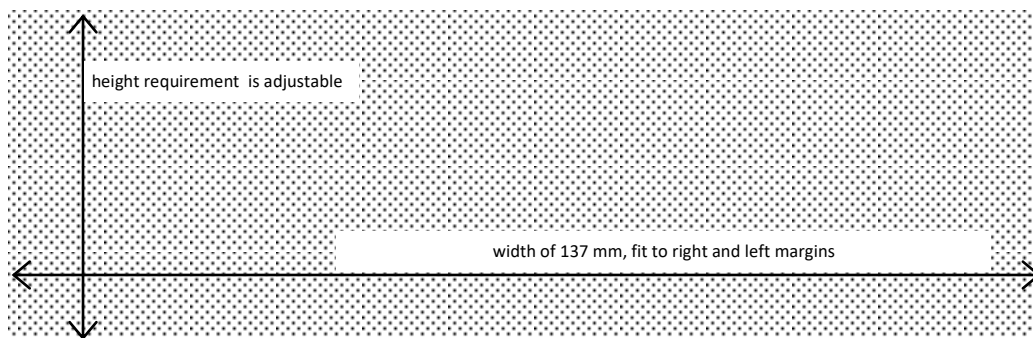


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- [4].Syafi'i, M., Hakim, L., dan Yanuwiyadi, B. 2010. Potential Analysis of Indigenous Knowledge (IK) in Ngadas Village as Tourism Attraction. pp. 217-234. In: Widodo, Y. Noviantari (eds.) Proceed-ing *Basic Science National Seminar 7* Vol.4. Universitas Brawijaya, Malang. (Article within conference proceeding)
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CONCLUSION (Calibri 10 Bold, Left, Capslock)

Conclusion of the study's findings are written in brief, concise and solid, without more additional new interpretation. This section can also be written on research novelty, advantages and disadvantages of the research, as well as recommendations for future research. (Calibri 10 Justify)

ACKNOWLEDGEMENT (Calibri 10 Bold, Left, Capslock)

This section describes gratitude to those who have helped in substance as well as financially. (Calibri 10 Justify)

REFERENCES (Calibri 10 Bold, Left, Capslock)

- [1].(Calibri 10 Justify, citation labelling by references numbering)
- [2].Vander, A., J. Sherman., D. Luciano. 2001. Human Physiology: The Mecanisms of Body Function. McGraw-Hill Higher Education. New York. (Book)
- [3].Shi, Z., M. Rifa'i, Y. Lee, K. Isobe, H. Suzuki. 2007. Importance of CD80/CD86-CD28 interaction in the recognition of target cells by CD8⁺CD122⁺ regulatory T cells. *Journal Immunology*. 124. 1:121-128. (Article in Journal)

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