THE MODEL OF DEVELOPMENT OF AGRO-TOURISM BASED ON SOCIAL CAPITAL AT SUBAK JATILUWIH

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ABSTRACT

Subak Jatiluwih is one of the subaks located in Jatiluwih Village, Penebel District, Tabanan Regency. Subak Jatiluwih is a traditional farming system that has the potential for agro-tourism, with neat terraced rice fields that attract tourists to see its beauty. Through the development of Subak Jatiluwih agro-tourism that emphasizes the local culture in utilizing land, farmers' income can increase along with efforts to conserve land resources, and maintain local culture and technology. By reviewing from the context of social capital in developing agro-tourism, planning of it has not been carried out intentionally either by local farmers or by the government and other stakeholders. Social capital by inhabitant in agricultural activities displayed is a natural thing in accordance with the culture and characteristics of the community characterized by rural communities. The purpose of this study was to find a model of social capital-based agro-tourism development at Subak Jatiluwih. The population in this study was 537 people, and the respondents were 199 people, selected using the proportional random sampling method. The analytical method used was descriptive analysis. The results showed that the development of agro-tourism based on social capital scored 80.13% and it was considered good. These results could be considered as a basis for the model of agro-tourism development based on social capital at Subak Jatiluwih. It was expected that the agro-tourism development model based on social capital needed to be well implemented to maintain the existence of agro-tourism development at Subak Jatiluwih.

Keyword: Social Capital, Agro-Tourism Development, Subak Jatiluwih

I. INTRODUCTION

The series of agricultural activities from cultivation to post-harvest can be used as a special attraction for tourism activities. For regions that have fertile land, beautiful panoramas, developing agro-tourism will have a double benefit compared to just developing tourism with objects and the attraction of natural beauty, art and culture. Another benefit that can be learned from developing agro-tourism, which is in addition to being able to sell services from objects and the attractiveness of natural beauty, it will also reap the benefits of selling agro-cultivation. In addition to get income from the service sector, it can also be obtained from the sale of agricultural commodities.

In the era of regional autonomy, agro-tourism can be developed in each region without the need for competition between regions, considering the diverse conditions of the regions and cultures owned by Indonesian. Each region can present tourism attractions other than others. The development of agro-tourism
according to the capability, typology, and function of each land will directly affect the sustainability of land resources and the income of farmers and the surrounding community. This activity will not directly increase the positive opinions of farmers and the surrounding community about the importance of preserving the resources of agricultural land. The sustainability of resources will have a positive impact on sustainable environmental preservation. The development of agro-tourism will in turn create jobs, because this business can absorb labor from rural communities, so that it can withstand or reduce the flow of urbanization that is increasing at this time. The benefits that can be obtained from agro-tourism are preserving natural resources, preserving local technology, and increasing the income of farmers or communities around touristic sites.

Subak Jatiluwih is one of the subaks located in Jatiluwih Village, Penebel District, Tabanan Regency. Subak Jatiluwih is a traditional farming system that has the potential for agro-tourism, with neat terraced rice fields that attract tourists to see its beauty. Subak is also an institution based on Tri Hita Karana (THK). Thus, subak becomes part of cultural tourism that must be maintained. Subak Jatiluwih is a subak of upstream area and as one of the tourist destinations that presents the natural beauty of rice terraces in Tabanan regency, Bali. Subak Jatiluwih has different terrace characteristics, where the terraces are wide and high. The terrace is in slope diversity, that is, from a slope of 15-30% (incline) to >65% (very steep) (Bokings et al, 2013). The uniqueness of the natural form gives a high attraction for this Subak Jatiluwih, because there are not many subaks that have a form of terracing like it. This shows the success of making rice terraces-bench in Subak Jatiluwih. This success is certainly one of the advantages of Subak Jatiluwih in particular and any other subaks in Bali in general. That is what causes Subak Jatiluwih to be considered as a terrace model in the management of paddy fields. The way to process agricultural land that is still traditional by using cows or buffaloes to plow fields with traditional plow tools in which it attracts tourists, both domestic and foreigner to visit.

Through the development of Subak Jatiluwih agro-tourism that emphasizes local culture in utilizing land, farmers' income can increase along with efforts to preserve land resources, and maintain local cultures and technology (indigenous knowledge). In the case of developing the concept of local economic development (LED) agricultural sector or local economic development in the agricultural sector, especially in rural areas which the activities are dominated by agriculture, then social capital is a thing that needs to be known to sustain ideal economic activities based on agriculture (Fatima, 2016).

The component of trust in social capital in the subak system consists of farmers 'trust in the leadership of subak managers, farmers' trust in stakeholders and agricultural extension agents. The network components in subak are formed based on the same individual interests in irrigation water needs, sustainability of farming, and increased welfare. The subak network components include networks between subak members in groups, between subak members and subak members outside the group. The norm component about subak is included in the subak regulations in which it's known as awig-awig (written rules) and perarem (unwritten rules, but agreed at the subak meeting) (Windia et al, 2015).

By reviewing from the context of social capital in developing agro-tourism, planning of it has not been carried out intentionally either by local farmers or by the government and other stakeholders. Social capital by inhabitant in agricultural activities displayed is a natural thing in accordance with the culture and characteristics of the community characterized by rural communities. In addition, the limited knowledge of farmers in the field of agro-tourism has caused agricultural business to not be managed properly according to its objectives. Thus the social capital of the community cannot be implemented properly. The purpose of this study was to find a model of agro-tourism development based on social capital at Subak Jatiluwih. The model of agro-tourism development is a representation or a description of the concept of a model of agro-tourism development in a simple way (Soekartawi et al, 1986).

II. LITERATURE REVIEW

Subak Jatiluwih is part of the AnggaBatukaru Chess Zone as a recipient of a World Cultural Heritage nomination from the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2012. The UNESCO World Cultural Heritage Program is aimed at cataloging, giving name and preserving places a place that is very important and meaningful to humanity, so that it can become a legacy for the next generation. He admitted that subak as one of the World Cultural Heritage has a significant impact on subak itself as one of the Tourist Destination Areas (DTW) to support the economy of the community. Subak can be developed into an organization that is not only oriented to irrigation management but also on agro-tourism as a local wisdom as part of its social capital.

The approach to the development of modern and traditional culture can be synergized in the development of agro-tourism in subak. In the aspect of modernization, subak development is carried out with the introduction of various technologies, both in the aspects of production facilities, tools and machinery of agriculture, cultivation, and postharvest. While traditionally, subak agro-tourism development is carried out through an approach based on the values of social capital, such as mutual trust, norms and social networks with various parameters. Therefore, in the development of agro-tourism in the subak system, all forms of traditionalism (social, traditional and cultural) must be empowered to achieve the objectives of agricultural
development, and encourage rural development which is constantly developing in a modern way. In this study, the elements studied in each of these aspects could be seen in Table 1.

Table 1. Elements in Various Aspects of Agro Tourism Development based on Social Capital in Subak Jatiluwih

<table>
<thead>
<tr>
<th>No</th>
<th>Aspect</th>
<th>Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Trust</td>
<td>1. Trust among Subak members</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Trust in subak farmers/members of leadership Subak administrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Farmer's trust in agricultural activities</td>
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<tr>
<td></td>
<td></td>
<td>4. Farmer's trust in sacred rituals</td>
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<tr>
<td></td>
<td></td>
<td>5. Trust in government officials</td>
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<td></td>
<td></td>
<td>6. Trust in the management of traditional institutions</td>
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<td></td>
<td></td>
<td>7. Trust in travel entrepreneurs</td>
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<td></td>
<td></td>
<td>8. Trust in food stall managers</td>
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<tr>
<td></td>
<td></td>
<td>9. Trust in tour guides</td>
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<tr>
<td></td>
<td></td>
<td>10. Trust in PPL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. Trust in the Jatiluwih DTW Management Agency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12. Trust in the size of the Subak terracing area Jatiluwih</td>
</tr>
<tr>
<td>2</td>
<td>Norm</td>
<td>1. Farmer's knowledge of awig-awig</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Obedience of subak members to awig-awig and perarem Subak</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. PPL policy toward Subak Jatiluwih</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. DTW management agency's policy towards Subak Jatiluwih</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Subak rules for maintaining terracing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Interaction between Subak Jatiluwih and other Subak located in Penebel district</td>
</tr>
<tr>
<td>3</td>
<td>Social Network</td>
<td>2. Interaction with government officials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Interaction with the management of traditional institutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Interaction with travel entrepreneurs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Interaction with food stall managers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Interaction with tourism officials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Interaction with PPL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Interaction with Jatiluwih DTW Management Agency</td>
</tr>
</tbody>
</table>

III. RESEARCH METHOD

Identification and Research Location

This research was carried out at Subak Jatiluwih. The determination of the location of this study was done by using purposive sampling, which was the determination of location deliberately with certain considerations. As for these considerations were as followed:

1. Subak Jatiluwih has natural potential in the form of beauty of rice terraces and agricultural culture.
2. Subak Jatiluwih has a high level of tourist visits after being designated as a World Cultural Heritage area by UNESCO.

The Types and Data Sources

Based on the type, the data used in this study were quantitative and qualitative data.

1. Quantitative data was a data in the form of numbers or qualitative data that are ranked / quantified. Quantitative data in this study was a the results of tabulations from filling out questionnaires.
2. Qualitative data was data in the form of words, sentences, schemes and images. Qualitative data was in the form of respondents' statements and questions given in the form of answers to interview guidelines related to elements of various aspects (beliefs, norms, and social networks) in the model of agro-tourism development based on social capital.

Data Source

Based on the source, the data used in this study were primary data and secondary data.

1. Primary data

Primary data was a data obtained or collected by a researcher or a particular institution directly from the source, recorded and observed for the first time. Primary data collection in this study used the interview method with a questionnaire related to research and to respondents. Primary data in this study were data regarding the assessment of aspects of social capital, namely beliefs, norms, and social networks to respondents.

2. Secondary data

Secondary data was a data obtained from indirect sources (second sources) which were usually in the form of documentation and official files. Secondary data in this study is the monograph of Subak Jatiluwih, various kinds of publications (books, journals, results of previous studies).

Population and Samples

Population was a collection of individuals or objects of research that have characteristics that have been determined. Samples are part of a population that has characteristics that are relatively the same and were considered to represent the population (Hakim, 2004). The number of members of Subak Jatiluwih in 2017 was 537 people, spread in six temples namely (1) Tempek Uma Kayu as many as 47 members, (2) Tempek Kedamaian as many as 51 members, (3) Tempek Gunung Sari as many as 110 members, (4) Tempek Besikalung as many as 95 members, (5) Tempek Telabah Gede as many as 193 members, (6) Tempo Uma Duwi as many as 57 members and Tempek Kesambi as many as 37 members.
Determination of the sample was done by proportional random sampling technique, with consideration of the number of farmers of each tempek were different. The number of samples was determined by using Slovin theory (Sugiyono, 2004) with the following formula.

\[
n = \frac{N}{1 + Ne^2}
\]

\[
= \frac{537}{1 + (537 \times 0.5^2)} = 198.88 \text{ rounded to 199}
\]

Information:

- \( n \) = Number of samples
- \( N \) = Total Population
- \( e \) = Accuracy level (5%)

The total number of the total sample was 199 people. The largest sample distribution was located at Tempek Telabah Gede, which was 52 people. The lowest sample was located at Tempek Kesambi, which was 14 people.

**The method of Analyzing this Study**

The method of analysis used in this study was descriptive analysis. Descriptive analysis was a method of analysis that systematically described the facts and characteristics of an object or subject that was analyzed appropriately and interpreted it as it is. Each parameter observed was using a Likert scale with a score of 1, 2, 3, 4 and 5. A score of 1 or minimum (20%) indicated a very bad value for the development of agro-tourism based on social capital. A score of 5 or maximum (100%) showed a very good value for the development of agro-tourism based on social capital. The data obtained then distributed in different categories. Category parameters were based on certain interval classes using the following formula.

\[
I = \frac{\text{Distance}}{\text{Number of classes}}
\]

Keterangan

- \( I \) = Class interval
- Distance = The highest value minus the lowest value
- Number of classes = Number of categories specified

Based on the above formula the distance between the number of classes and class intervals were as followed.

\[
I = \frac{100% - 20%}{5} = 16%
\]

Based on this interval, it was categorized as the development of agro-tourism based on social capital at Subak Jatiluwih. The full percentage of score achievement in the category the development of agro-tourism based on social capital at Subak Jatiluwih was illustrated in Table 2.

**Table 2. Percentage of Achievement of Scores and Categories of the Development of Agro-Tourism Based on Social Capital at Subak Jatiluwih.**

<table>
<thead>
<tr>
<th>No</th>
<th>Achievement of Score</th>
<th>The Development of Agro-Tourism Based On Social Capital at Subak Jatiluwih</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&gt; 84 – 100</td>
<td>Very good</td>
</tr>
<tr>
<td>2</td>
<td>&gt; 68 – 84</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>&gt; 52 – 68</td>
<td>Medium</td>
</tr>
<tr>
<td>4</td>
<td>&gt; 36 – 52</td>
<td>Not good</td>
</tr>
<tr>
<td>5</td>
<td>20 – 36</td>
<td>Very bad</td>
</tr>
</tbody>
</table>

**IV. RESEARCH RESULT**

Subak Jatiluwih was part of the AnggaBatukaru Chess Zone as the recipient of a World Cultural Heritage nomination from the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2012. Subak Jatiluwih became the subak whose visit rate was the highest in Tabanan Regency. At present, Subak Jatiluwih is one of the agro-tourism areas visited by local and foreigner. The approach to the development of modern and traditional culture could be synergized in the development of agro-tourism in subak. In the aspect of modernization, subak development was carried out with the introduction of various technologies, both in the aspects of production facilities, tools and machinery of agriculture, cultivation and postharvest. While traditionally, subak agro-tourism development was carried out through an approach based on the values of social capital, such as mutual trust, norms and social networks with various parameters. Therefore, in the development of agro-tourism in the subak system, all forms of traditionalism (social, traditional, and cultural) must be empowered to achieve the objectives of agricultural development and encourage rural development that was constantly developing in a modern way.

The highest level of development of agro-tourism based on social capital at Subak Jatiluwih lied in the norm element with a value of 81.47% (good). This was because the level of adherence of the subak members to awig-awig was very high and was supported by farmers’ knowledge of the awig-awig of subak. The trust element got a value of 79.68% (good), it was because the level of trust among subak members and among fellow farmers was very high. The social network element got value of 79.24% (good), this was because the level of interaction of Subak Jatiluwih with other...
The level of development of agro-tourism based on social capital at Subak Jatiluwih could be seen in Table 3.

Table 3. Level of Development of Agro-tourism Based on Social Capital at Subak Jatiluwih

<table>
<thead>
<tr>
<th>No</th>
<th>Factor</th>
<th>Achievement Score (%)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Trust</td>
<td>79.68</td>
<td>Good</td>
</tr>
<tr>
<td>2</td>
<td>Norm</td>
<td>81.47</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>Social networks</td>
<td>79.24</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>240.39</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>80.13</td>
<td>Good</td>
</tr>
</tbody>
</table>

In relation to the elements that should be considered in preparing the development of agro-tourism based on social capital, findings could be presented on each object / region that was sampled in this study. The findings were crystallized in such a way with code + (plus), code - (min), and code +/- (plus minus), as shown in detail in Table 4.

Table 4. Findings in Agro-Tourism Areas at Subak Jatiluwih

<table>
<thead>
<tr>
<th>No</th>
<th>Aspect</th>
<th>Element Description</th>
</tr>
</thead>
</table>
| 1  | Trust   | 1. Trust among Subak members +
|    |         | 2. Trust in subak farmers/ members of leadership Subak administrator +
|    |         | 3. Farmer's trust in agricultural activities +
|    |         | 4. Farmer's trust in sacred rituals +
|    |         | 5. Trust in government officials +
|    |         | 6. Trust in the management of traditional institutions +
|    |         | 7. Trust in travel entrepreneurs +/-
|    |         | 8. Trust in food stall managers +
|    |         | 9. Trust in tour guides +
|    |         | 10. Trust in PPL +
|    |         | 11 Trust in the Jatiluwih DTW Management Agency +
|    |         | 12. Trust in the size of the Subak terracing area Jatiluwih +
|    |         | 1. Farmer's knowledge of awig-awig +
| 2  | Norm    | 2. Obedience of subak members to awig-awig and perarem Subak +
|    |         | 3. PPL policy toward Subak Jatiluwih +
|    |         | 4. DTW management agency's policy towards Subak Jatiluwih +
|    |         | 5. Subak rules for maintaining terracing +
|    |         | 1. Interaction between Subak Jatiluwih abd other Subak located in Penelber district +
|    |         | 2. Interaction with government officials +/-
|    |         | 3. Interaction with the management of traditional institutions +
|    |         | 4. Interaction with travel entrepreneurs +/-
|    |         | 5. Interaction with food stall managers +
|    |         | 6. Interaction with tourism officials +
|    |         | 7. Interaction with PPL +
|    |         | 8. Interaction with Jatiluwih DTW Management Agency +

Description: + = activities carried out; - = the activities were not carried out; +/- = activities were sometimes carried out and sometimes not implemented

From Table 4 above it could be seen that only the norm elements that carried out overall activities to support the development of agro-tourism based on social capital. Therefore, this finding might be considered as a basis for the model of development of agro-tourism based on social capital in Subak Jatiluwih. The ultimate goal was to improve the welfare of the people around it.

Agro-tourism Development Model

Soekartawi et al. (1986) stated that the model is an abstraction of reality, which is able to find various important and precise variables from that reality. Thus, in making for the model of development of agro-tourism based on social capital at Subak Jatiluwih, it was hoped that the process of developing agro-tourism would be reflected in various forms of agro-tourism development, especially in order to improve the welfare of the local community. The model of agro-tourism development based on social capital must be studied based on three aspects, namely elements of trust, norms, and elements of social networks. The model of agro-tourism development based on social capital at Subak Jatiluwih...
could be presented in the form of Figure 1, which basically started from Table 3 and Table 4.

V. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the results of the analysis and discussion which were presented in the previous chapter, the following could be concluded.

1. Overall the level of development of agro-tourism based on social capital is good. The distribution was the norms element which got a value of 81.47%, the trust element got a value of 79.68%, and the social network element got a value of 79.24%. The highest level of development was lied in the norm element 81.47%.

2. The development of agro-tourism based on social capital had three elements, namely elements of norms, elements of trust and elements of social networks. The scope of the three elements was as followed.
   a) The norm element. Farmers' knowledge of awig-awig, obedience of subak members to awig-awig subak, and subak rules to maintain terracing.
   b) Element of trust. Trust between subak members, trust among farmers/fellow subak members, and farmers' trust in agricultural activities.
   c) Element of social network. Interaction between Subak Jatiluwih and any other subaks, interaction with the government, and interaction with the Tourism Destination Management Agency (DTW)

These three elements were used to examine the model of agro-tourism development based on social capital at Subak Jatiluwih. To determine the agro-tourism development model first was by making an agreement to implement the norms that had been made. After the agreement was reached, it continued with developing trust for the development of agro-tourism based on social capital. Then proceed with an agreement relating to social networks.

Recommendations

Based on the conclusions and discussion above, things that could be suggested as followed.

1. The level of development of agro-tourism based on social capital at Subak Jatiluwih which already had good value needed to get serious attention in the development of agro-tourism based on social capital by the government and related stakeholders so that the development of agro-tourism continued.

2. The model development of agro-tourism based on social capital needed to be implemented properly to maintain the existence of agro-tourism development at Subak Jatiluwih.

REFFERENCES


Soekartawi; A.Soeharjo; J.L.Dillon; B.Hardaker.1986. Ilmu usahatni dan penelitian untuk pengembangan usaha kecil, UI Press, Jakarta.