Priority of Criteria for Agritourism Development in Bali

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Abstract: Agritourism in Bali has not been developed optimally yet. As a basis for development of agritourism, the criteria should be determined and priorities among criteria need to be set. The objectives of this research were: (i) to identify criteria for agritourism development; and (ii) to analyze the priorities for selected criteria according to the agritourism stakeholders in Bali. This research implemented Analytic Hierarchy Process (AHP) method which involved 20 key informants representing agritourism stakeholders. The finding was the priority criteria for agritourism development in Bali, namely: (1) Attractions, followed by (2) Local Community Involvement, (3) Ancillary Services, (4) Marketing, (5) Amenities, and (6) Accessibility. This kind of research has not been undertaken previously in Bali. It contributes to academic and practical implications, particularly in agritourism development planning in Bali, in which development of agritourism should be focused on the diversification of agritourism attractions supported by professional management and community participation.

Keywords: agriculture; agricultural industry; AHP; priority criteria; tourism; Bali

1. Introduction

Bali’s tourism is known for its unique culture, arts, local wisdom, and Balinese hospitality, supported by beautiful landscapes and the white sand of the island’s beaches. Bali’s tourism sector is able to stimulate the development of other sectors, in addition to increasing incomes and employment opportunities, and thus improve the welfare of the community (Wiranatha et al., 2017).

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Although the role of the tourism sector outperforms that of the agricultural sector in the development of the Balinese economy, the tourism sector cannot stand alone and is highly dependent on the agricultural sector, both in terms of availability of food for tourists and in terms of tourism attractions that are developed based on agriculture (Suryawardani et al., 2014).

So far, cultural and nature-based tourist attractions in Bali have become popular and dominate in terms of the number of visitors. This can be seen from the numbers of visits recorded prior to the Covid-19 pandemic. Examples include Tanah Lot, a tourist attraction that relies on the beautiful view of the temple standing on a boulder in the middle of a beach pounded by waves, which has recorded 3,092,434 visitors (2012), 3,497,825 (2017) and 2,797,126 (2019) (Dinas Pariwisata Provinsi Bali, 2020). Likewise, Uluwatu Temple, which is located on a cliff at a height of 97 meters above sea level, has been visited by 803,567 people (2012) and 2,236,506 (2017). In addition, the Monkey Forest Ecotourism nature-based tourist attraction located in Ubud, which highlights the conservation of sacred forest areas with the monkey community as the main attraction, has recorded 868,296 visitors (2014) and 1,221,752 (2016). Similarly, Pandawa Beach in South Kuta, a natural tourist attraction that has only been known in recent years, has been visited by 906,001 people (2016) and 1,356,321 (2017).

In contrast, however, one of the most popular agritourism attractions in Bali, Jatiluwih in Tabanan, which has been designated by UNESCO as a World Heritage Site since July 2012, has only been able to bring in 97,909 visitors (2012) and 250,153 (2017) (Dinas Pariwisata Provinsi Bali, 2020). This number of visits is still very low when compared to the numbers visiting cultural-based tourist destinations. From the above data agritourism has attracted very few tourists when compared with the cultural and natural tourist attractions. With proper agritourism development planning, however, it is expected that visits to agritourism attractions in Bali will increase significantly.

To develop agritourism destination, priorities must be set and the importance of the main criteria determined, so as to form a useful basis for development. However, no research has yet been undertaken on the formulation of such criteria for agritourism. It has been recognized that development of agritourism is faced by complex issues, which requires a systems approach to solving the problems (Suryawardani and Wiranatha, 2016). Hence, it is crucial that this research be conducted, based on the systems approach in order to provide a better understanding and thus develop agritourism in Bali in such a way that considers stakeholders view points, and various aspects of tourism destination, such as attractions, amenities, accessibility, ancillary services and participation of the local community (Mill and Morrison, 2009; McGehee, 2007; Swarbrooke and Horner, 2009). Suryawardani et al. (2021) found that marketing
aspects play an important role in the development of agritourism in Bali, and these are also focused on in this research. The objectives of this research were (i) to identify the criteria for agritourism development; and (ii) to analyze the priorities for selected criteria according to agritourism stakeholders in Bali.

2. Literature Review

2.1 Definition and components of agritourism

The term ‘agritourism’ has commonly been used in international literature. Sznajder et al. (2009) found that both ‘agritourism’ and the parallel word ‘agrotourism’ exist. The two terms have the same meaning, but ‘agritourism’ is more popular than ‘agrotourism’. Agritourism is defined as tourist activity which aims to enable the visitor to familiarize themself with farming activity and engage in recreation in an agricultural environment, such as agricultural production or an opportunity to help with farming tasks during the visit. Gladstone and Morris (2000) describe agritourism as tourism products which are directly connected with the agricultural environment and any practice developed on a working farm with the purpose of attracting visitors. Koc (2008) defines agritourism as a wide range of activities, services, and amenities offered by farmers and rural residents to attract tourists to their area, thereby generating additional income for their businesses.

Furthermore, Baipai et al. (2022) state that agritourism is a recognized approach for identifying a variety of attractions found in both on-farm and off-farm settings within agricultural destinations and closely related to agricultural activities conducted by small-scale farmers as their primary source of income. Tew and Barbieri (2012) define agritourism as a specific type of tourism in an agricultural area in which the guest accommodations are integrated into agricultural estates in such a way that visitors can take part in agricultural activities. Bhatta and Ohe (2020) found that agritourism in the form of small-scale, family or co-operative-run tourism activities were being developed in rural areas by people employed in agriculture.

Ramappa et al. (2022) and Sznajder et al. (2009) point out that agritourism consists of several activities, including: (i) agricultural education, namely recreation while learning farming activities, (ii) agricultural festivals, such as flower, fruit and vegetable festivals at agritourism sites, (iii) fun/sport activities, namely trekking and cycling or walking through agricultural or irrigation areas, (iv) healing centers, such as spas & traditional therapies that provide opportunities for visitors to stay longer in rural areas, and (v) overnight stays at agritourism locations with a quiet village atmosphere with various supporting activities, such as camping, hiking, and picnics which are combined with games and other activities for children.
Cheteni and Umejesi (2022) categorise visitors of agritourism as follows: (i) visitors looking for fresh and natural products, (ii) visitors who want to have experience in producing food, (iii) visitors seeking opportunities to engage in interactive educational activities and outdoor activities, and (iv) visitors who are interested in learning about farming culture and heritage.

Phillip et al. (2010) and Flanigan et al. (2014) studied the characteristics of agritourism and distinguished five types of agritourism, namely (1) Non-working farm agritourism: this refers to activities where a non-working farm serves only for scenery purposes (e.g. bird-watching on an old mill); (2) Working farm, passive contact agritourism: this refers to activities that do not require great interaction between the visitor and the working farm site, allowing for farmers to continue their agricultural activities without interference (e.g. attending a wedding in a vineyard); (3) Working farm, indirect contact agritourism: this comprises activities that are more directly related to farm functions, although the contact with the visitor focuses more on the agricultural products rather than the practice of farming itself (e.g. enjoying fresh produce or meals on site); (4) Working farm, direct contact, staged agritourism: this refers to activities through which visitors experience agricultural operations but through staged scenarios and predetermined tours (e.g. touring an operating cider mill); and (5) Working farm, direct contact, authentic agritourism: this refers to the direct participation of the visitor in agricultural activities (e.g. harvesting berries or milking a cow). This is an important finding in the context of the literature, as the majority of agritourism definitions suggest that a working farm is the baseline requirement for agritourism.

2.2 Agritourism in Bali

Agritourism in Bali comprises agriculture-based tourist attractions which are carried out on farms on both wet and dry agricultural land. The cultural identity that can be seen in the agritourism model is the local wisdom of the community that has existed for generations and is implemented in their agricultural activities. The agritourism in Bali are mostly subak-based attractions, such as Subak Jatiluwih in Tabanan, and Subak Sembung in Denpasar (Andayani, et al., 2024; Patricia et al., 2020; Pitana and Putra, 2013; Sarjana et al., 2021; Suryawardani et al., 2021; and Wiranatha et al., 2019). However, there are also agritourism attractions that rely on the beauty of the landscape complemented by various other agricultural practices and farming activities (such as those in Bagus Agro Pelaga, Bali Pulina, The Sila’s Agrotourism, and Alas Harum). Another type of agritourism that has developed throughout Bali is kopi luwak (civet coffee), which is not so broad in scope, but relies on the attractions of civet coffee production and products.
In the case of Bali, agritourism has been recognised to give economic benefits to the community at the agritourism destination because it provides extra incomes for farmers and their family (Patricia et al., 2020; Satriawan et al., 2012; Suryawardani and Wiranatha, 2016; and Wiranatha et al., 2019).

Agritourism has also brought positive impacts on environmental aspects, particularly in maintaining the natural landscapes in the agritourism destination because agritourism relies upon the nature view and landscape as one of main attractions (Pitana and Putra, 2013; Sarjana et al., 2021; and Suryawardani et al., 2021). It also contributes to the conservation of agricultural land from the land use transformation into other purposes such as residential houses or businesses (Andayani, et al., 2024; and Pitana and Putra, 2013). At the same time, agritourism within subak area in Bali brings positive impacts on social aspects, particularly in preservation of subak as an ancient traditional culture related to agrarian society in Bali (Pitana and Putra, 2013; and Sarjana et al., 2021). Regarding the above statements, agritourism in Bali has been in the similar directions to the concept of sustainable tourism, i.e. to be balanced and harmonious in the aspects of economy, socio-culture and environment.

However, Satriawan et al. (2012) argued that in general the main weaknesses of agritourism in Bali have been the limited quantity and quality of plant collections, poor plant management and maintenance techniques, competition for water resources, low quality of human resources, limited capital, and lack of promotion. Meanwhile, a serious challenge faced by agritourism in Bali has been the fierce competition, particularly when this has involved the paying out of very high commissions which have the potential to kill the agritourism business itself.

From the description above, it can be seen that the potential of agritourism in Bali has not been developed optimally. It is therefore necessary to develop agritourism in an appropriate, well-informed manner in order to increase its contribution to Bali’s tourism sector and thereby increase the benefits of tourism for the people in Bali’s agricultural areas. Efforts must be undertaken to manage agritourism in terms of destination quality, service excellence, hospitality, and ease of access (UNWTO, 2012). Although efforts to develop agritourism in Bali have been undertaken by the Central and Local Government, these have not in fact met with much success so far.

3. Research Method and Theoretical Approach

3.1 Use of the systems thinking approach

A systems thinking approach was used in this research. The reasons are that i) systems thinking is a holistic way of thinking in solving a problem, based on integrated and interconnected elements in the system (Senge, 1990; Sterman,
2000; Sherwood, 2002; Meadows, 2009; Seiler and Kowalsky, 2011; Eriyatno, 2012; and Eriyatno and Larasati, 2013); ii) systems thinking is effective in addressing the most difficult types of problems which involve complex issues (Henry, 2013); and (iii) agritourism development is faced by complex issues, a systems approach is required in addressing the problems. Therefore, the systems thinking approach is considered to be appropriate in formulating the criteria for agritourism development in Bali. System thinking approach applied in this research is the soft system methodology (SSM). The SSM is a qualitative method in the system thinking approach (Checkland, 1999).

3.2 Research location and time

The research was undertaken in Bali during July up to October 2019. Although agritourism is spread throughout Bali, it has been by far the quietest type of tourist attraction compared to cultural and nature-based tourist attractions in Bali. Meanwhile, Balinese society was mainly agriculture communities, therefore agritourism has been considered to be appropriate in conserving the agriculture land, and in preserving the agrarian culture (such as subak) in the middle of recent tourism booming.

3.3 Research procedure

The research was carried out as follows.

1. A literature search, to identify relevant references concerning the main criteria for the development of agritourism. The basic concept of the 4 As for developing a tourism destination (Attractions, Amenities, Accessibility and Ancillary services) put forward by Cooper (2016) was chosen as the reference for determining the main criteria.

2. One-day focus group discussion (FGD), to involve representatives of stakeholders in tourism and agriculture as key informants, with the purpose of formulating criteria and sub-criteria based on 4 As concept (Cooper, 2016). The FGD was carried out in two stages: FGD-1 to formulate the main criteria, followed by FGD-2 to formulate the sub-criteria for each of the main criteria.

3. Analytic Hierarchy Process (AHP) questionnaire was then drawn up based on the results of the preceding FGD.

4. Key informants made comparative judgements between the main criteria and also between the sub-criteria for each main criterion, using the AHP questionnaire.

5. The key informants’ responses to the questionnaire were then analyzed using Expert Choice software.
3.4 Determining experts as key informants

Attri et al. (2013) and Reza et al. (2010) state that there is no requirement regarding the number of key informants who can be involved as long as: (i) the key informants selected are experts who understand the contextual relationships between the criteria and sub-criteria implicated in the priority levels for agritourism development in Bali (Figure 1), and (ii) the key informants can communicate in a holistic sense regarding the priority level for each criterion for agritourism development in Bali. Twenty experts were selected, representing agribusiness practitioners (3 persons), agricultural industry practitioners (2 persons), tourism practitioners (5 persons), agritourism managers (4 persons), government officials (4 persons), and academicians (2 persons).

3.5 Data analysis

This research employed a soft system methodology (SSM) by implementing the Analytic Hierarchy Process (AHP) method (Saaty, 2008), to generate the priority level for each of the criteria for agritourism development in Bali. The AHP is a computer-based technique involving inter-relationships between variables, using experts’ knowledge and experience, which has been utilised in many studies related to the selection of priority criteria for a wide range of businesses, such as in agriculture (Ahdan and Suparman, 2015), in tourism (Suryawardani and Wiranatha, 2016), agriculture industry (Din and Yunusova, 2016), and regional development (Suryani et al., 2018).

3.6 Comparative Judgement

Comparative judgement was undertaken by key informants based on the relative importance of two elements at a certain level in relation to the element at the top level. This assessment is the core of AHP and it affects the order of
priority of its elements. The assessment indicates the level of interest and is expressed on a numeric scale. The criteria were compared based on the intensity of interest and were constructed as a pairwise matrix which would result in a priority scale when combined. In this research, priority was determined based on the intensity of the value given (Saaty, 2008), as can be seen in Table 1.

Table 1. Intensity of importance scale for criteria

<table>
<thead>
<tr>
<th>The Intensity Value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Both elements are of equal importance</td>
</tr>
<tr>
<td>3</td>
<td>One element is moderately more important than the other element</td>
</tr>
<tr>
<td>5</td>
<td>One element is strongly more important than the other element</td>
</tr>
<tr>
<td>7</td>
<td>One element is very strongly more important than the other element</td>
</tr>
<tr>
<td>9</td>
<td>One element is extremely more important than the other element</td>
</tr>
<tr>
<td>2, 4, 6, 8</td>
<td>Intermediate values between the two adjacent judgements</td>
</tr>
<tr>
<td>½, ⅓, etc.</td>
<td>Intensity of the value is reversed</td>
</tr>
</tbody>
</table>

Source: Saaty, 2008.

4. Results and Discussions

4.1 Main criteria for agritourism development

The criteria for agritourism development refer to the “4 A’s of tourism” concept, namely: Attractions, Amenities, Accessibility and Ancillary Services (Cooper, 2016). According to the first FGD, however, this 4A’s concept is incomplete and requires the addition of another important aspect that forms part of the Community Based Tourism (CBT) concept. According to UNWTO (2009), community-based tourism (CBT) is tourism development that places the community at the centre of tourism planning, development, and management. CBT aims to improve the residents’ quality of life by optimizing local economic benefits, protecting the natural and cultural environments, and providing high quality visitor experiences. The main idea of CBT is the local community involvement. Therefore, in agritourism which is agriculture-based attraction necessarily includes the farmers as local community (Photo 1).

Furthermore, the key informants in the first FGD also considered that it was important to attract the type of visitors who enjoy the appeal of agritourism, so it is necessary to also include marketing aspects in the ideal criteria for agritourism development. Therefore, with this in mind, the key informants agreed on the following list of 6 main criteria: 1) Attractions, 2) Amenities, 3)
Accessibility, 4) Ancillary Services, 5) Local Community Involvement, and 6) Marketing. These were further developed by creating sub-criteria for each of the main criteria.

![Photo 1. Monkey forest tourist attraction managed by local community of Padangtegal, Ubud, Bali (Photo: IND Putra, 2019).](image)

Each main criterion has sub-criteria. The second FGD resulted in some sub-criteria related to criterion of attractions, namely: (i) Pre-harvest & harvest agritourism attractions; (ii) Post-harvest agritourism attractions; (iii) View of nature (panorama); (iv) Cultural attractions; and (v) Man-made tourist attractions (games, outbound facilities, etc.). These sub-criteria of attractions include nature, culture and man-made attractions, as well as the farming activities. The variation of attractions in the agritourism area will make the agritourism more attractive to visitors. Like the main criterion of attraction, the main criterion of amenities was also described in several sub-criteria, namely: (i) Restaurant; (ii) Accommodation; and (iii) Other tourism facilities (swimming pool, bale bengong (gazebo), meeting rooms). These sub-criteria of amenities become the supporting tourism facilities that are required by some types of visitors while visiting the agritourism. The rest of main criteria were also described in more detail sub-criteria as in attractions and amenities. The detailed criteria for agritourism development based on the first FGD are as follows (Table 2).
### Table 2. Criteria and sub-criteria for the model of agritourism development in Bali

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Sub-criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Attractions</td>
<td>• Pre-harvest &amp; harvest agritourism attractions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Post-harvest agritourism attractions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• View of nature (panorama)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cultural attractions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Man-made tourist attractions (games, outbound facilities, etc.)</td>
</tr>
<tr>
<td>2</td>
<td>Amenities</td>
<td>• Restaurant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Accommodation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Other tourism facilities (swimming pool, bale bengong (gazebo), meeting rooms)</td>
</tr>
<tr>
<td>3</td>
<td>Accessibility</td>
<td>• Land transportation access</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Internet access</td>
</tr>
<tr>
<td>4</td>
<td>Ancillary Services</td>
<td>• Professional Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Souvenirs sales &amp; gifts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Banking facilities (ATM / Merchant)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Availability of Event Organizer (EO)</td>
</tr>
<tr>
<td>5</td>
<td>Local Community Involvement</td>
<td>• As employee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• As Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• As the owner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Financial contribution to community organizations</td>
</tr>
<tr>
<td>6</td>
<td>Marketing</td>
<td>• Domestic tourist market</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Foreign tourist market</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ticket prices or agritourism packages</td>
</tr>
</tbody>
</table>

Source: Research Result, 2024.

#### 4.2 Results of criteria weight determination

The next stage was the priority selection of the set of main criteria collected previously, through weighting of the criteria using AHP method. In the AHP analysis, a draft of a hierarchical structure of criteria and sub-criteria was drawn up, as summarized earlier from the thoughts of the key informants expressed during the FGD. This hierarchical structure is shown in Figure 2.

The results of the AHP analysis based upon the evaluation of AHP questionnaire by 20 key informants are shown in Table 3. The main criterion of Attractions has been given weight of 0.191 out of 1.0. It means that the importance of main criterion of Attraction in agritourism development is 19.1% of the total weight of all main criteria (100%). The main criterion of Amenities has got weight of 0.157 out of 1.0. This means that the importance of main criterion of Amenities in agritourism development is 15.7% of the total weight of all main criteria (100%). Furthermore, the main criterion Accessibility has got weight of 0.147 or 14.7%; the main criterion of Ancillary Services has got weight of 0.164 or 16.4%; the main criterion of Local Community Involvement has been given weight of 0.179 or 17.9%; and the main criterion of Marketing has been given weight of 0.162 or 16.2% of the total weight of all main criteria (100%).
Figure 2. Hierarchical structure for the ideal criteria for agritourism development in Bali (Source: Authors)

Table 3. Results of Determination of Criteria Weight

<table>
<thead>
<tr>
<th>No</th>
<th>Main Criteria</th>
<th>Weight of Criteria</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Attractions</td>
<td>0.191</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Amenities</td>
<td>0.157</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Accessibility</td>
<td>0.147</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Ancillary Services</td>
<td>0.164</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Local Community Involvement</td>
<td>0.179</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Marketing</td>
<td>0.162</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.000</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Result, 2024.

In summary, based upon the weights mentioned above that the order of priority for the main criteria is as follow: (1) Attractions (19.1%); (2) Local Community Involvement (17.9%); (3) Ancillary Services (16.4%); (4) Marketing (16.2%); (5) Amenities (15.7%); and (6) Accessibility (14.7%). The total weight of all criteria is 100%. This means that in order to develop agritourism in Bali, the first priority is given to development of attractions, followed by the involvement local community, development ancillary services, and so on, as the rank of priority mentioned above.

Next, the weights of the sub-criteria for each main criterion were also determined by the key informants through the AHP analysis. The weight of sub-criteria describes the importance of the-sub criteria within each main criterion.
For example, in developing amenities in agritourism, to build restaurant with the weight of 0.381 (38.1%) is the most priority, then followed by other tourism facilities (swimming pool, bale bengong (gazebo), meeting rooms) with the weight of 0.365 (36.5%) as the second priority. Providing accommodation with weight of 0.254 (25.4%) becomes the last priority within the agritourism development. The detail results are shown in Table 4.

Table 3. Results of Determination of Sub-Criteria Weight for each Main Criterion

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight Sub-criteria</th>
<th>Weight Main Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attractions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1a. Pre-harvest &amp; harvest agritourism attractions</td>
<td>0.246</td>
<td>0.191</td>
</tr>
<tr>
<td>1b. Post-harvest agritourism attractions</td>
<td>0.222</td>
<td></td>
</tr>
<tr>
<td>1c. View of nature (panorama)</td>
<td>0.185</td>
<td></td>
</tr>
<tr>
<td>1d. Cultural attractions</td>
<td>0.168</td>
<td></td>
</tr>
<tr>
<td>1e. Man-made attractions (games, outbound, etc.)</td>
<td>0.179</td>
<td></td>
</tr>
<tr>
<td>Total weight of sub-criteria</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>2. Amenities</td>
<td></td>
<td>0.157</td>
</tr>
<tr>
<td>2a. Restaurant</td>
<td>0.381</td>
<td></td>
</tr>
<tr>
<td>2b. Accommodation</td>
<td>0.254</td>
<td></td>
</tr>
<tr>
<td>2c. Other tourism facilities (swimming pool, bale bengong (gazebo), meeting rooms)</td>
<td>0.365</td>
<td></td>
</tr>
<tr>
<td>Total weight of sub-criteria</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>3. Accessibility</td>
<td></td>
<td>0.147</td>
</tr>
<tr>
<td>3a. Land transportation access</td>
<td>0.493</td>
<td></td>
</tr>
<tr>
<td>3b. Internet access</td>
<td>0.507</td>
<td></td>
</tr>
<tr>
<td>Total weight of sub-criteria</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>4. Ancillary Services</td>
<td></td>
<td>0.164</td>
</tr>
<tr>
<td>4a. Professional Management</td>
<td>0.315</td>
<td></td>
</tr>
<tr>
<td>4b. Souvenirs Sales &amp; Gifts</td>
<td>0.268</td>
<td></td>
</tr>
<tr>
<td>4c. Banking Facilities (ATM /Merchant)</td>
<td>0.211</td>
<td></td>
</tr>
<tr>
<td>4d. Availability of Event Organizer (EO)</td>
<td>0.206</td>
<td></td>
</tr>
<tr>
<td>Total weight of sub-criteria</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>5. Local Community Involvement</td>
<td></td>
<td>0.179</td>
</tr>
<tr>
<td>5a. As Employee</td>
<td>0.266</td>
<td></td>
</tr>
<tr>
<td>5b. As Manager</td>
<td>0.233</td>
<td></td>
</tr>
<tr>
<td>5c. As Owner</td>
<td>0.243</td>
<td></td>
</tr>
<tr>
<td>5d. Financial Contribution to Community Organizations</td>
<td>0.258</td>
<td></td>
</tr>
<tr>
<td>Total weight of sub-criteria</td>
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<td></td>
</tr>
<tr>
<td>6. Marketing</td>
<td></td>
<td>0.162</td>
</tr>
<tr>
<td>6a. Domestic tourist market</td>
<td>0.346</td>
<td></td>
</tr>
<tr>
<td>6b. Foreign tourist market</td>
<td>0.327</td>
<td></td>
</tr>
<tr>
<td>Criteria</td>
<td>Weight Sub-criteria</td>
<td>Weight Main Criteria</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>6c. Ticket prices or agritourism packages</td>
<td>0.327</td>
<td></td>
</tr>
</tbody>
</table>

Total weight of sub-criteria: 1.000

Total Weights: 1.000

Source: Research Result, 2024.

### 4.3 Discussions

The results above indicate that the most important of the main criteria for agritourism development in Bali is attractions (1st rank). It is therefore crucial that top priority be given to efforts to create and develop agritourism attractions that visitors will enjoy. This finding is consistent with studies by Mill and Morrison (2009), Cooper et al. (2008), Phillip et al. (2010) and Flanigan et al. (2014), who found that the central aspect of tourism is the attractions, and that creating an attractive environment through two universal attributes, namely scenery and uniqueness, will help ensure visitor enjoyment of agritourism. Moreover, Fleischer & Tsur (2000) state that experiential authenticity in agritourism is the important asset of agritourism that attracts visitors in terms of originality, uniqueness, and beauty of the natural scenery. All these assets can be found in agritourism in Bali, and they contribute to its competitiveness.

The types of activities that visitors enjoy are related to the five types of agritourism suggested by Phillip et al. (2010) and Leea et al. (2023). In the case of Jatiluwih agritourism, for example, these activities are as follow (Suryawardani and Wiranatha, 2016; Suryawardani et al., 2021). First is the non-working farm type of activities, which serve only for scenery purposes (Philip et al., 2010 and Flanigan et al. 2014). In this type of activities, the visitors do not in touch with the farming activities, but only sight-seeing. For example, the beautiful scenery of terraced rice fields is a well-known sight-seeing attraction in Jatiluwih, a UNESCO World Heritage site since 2012. Trekking and cycling are already popular and must be maintained to ensure sustainability of this agritourism destination (Photo 2). Several other landscape-related activities include bird-watching, visits to waterfalls and rafting can be the attractions in the non-working farm type of activities.

Second, type of activities does not require great interaction between the visitor and the working farm site, which allow farmers to continue their agricultural activities without interference. For example, visitors may enjoy watching as onlookers when farmers are planting or harvesting the rice, or when they are holding ceremonies related to the agricultural cycle.

Third, type of activities is more directly related to farm functions, although the contact with the visitor focuses more on the agriculture products rather
than the practice of farming itself. This would include the purchase of locally
grown organic rice, for example, or enjoying fresh produce and meals on site,
such as red rice tea produced by the local community in Jatiluwih. To be more
attractive, product development must be undertaken (Middleton et al., 2020;
Mill and Morison, 2009; and Kotler et al., 2017). For example, the diversification
of attractions from agriculture produces become local products by involving
postharvest technology. As agriculture produces are perishable and seasonal,
there is a need for better education and training on postharvest technology
(Suryawardani and Wiranatha, 2016). Appropriately qualified human resources
are crucially needed in the agritourism and must be supported by government,
research centres and NGOs through training and development programs.

Fourth, type of activities for visitors to enjoy the experience of agricultural
operations but through staged scenarios and organised tours. In Jatiluwih, such
activities include tours of the local subak irrigation system, demonstrations of
coffee, red rice tea and local food processing.

The fifth type is those activities through which visitors can actively
participate in authentic farming activities, including opportunities for visitors
to get involved in the farm. In Jatiluwih, visitors can actively participate in the
planting, harvesting and post-harvest processing of rice paddy. Other activities
include participation in producing red rice tea, as red rice is mainly produced
in Jatiluwih (Miura and Sarjana, 2016; Suryawardani and Wiranatha, 2016; Suryawardani et al. 2021; and Sarjana et al. 2021).

Furthermore, regarding the attractions in a destination, Fleischer and Tsur (2000), and Flanigan et al. (2014) believe that visitors are interested in educational experiences, to learn about farming systems, culture, and heritage. A good example is Bali’s traditional subak irrigation system, which can be seen in Jatiluwih. The subak has been managed and maintained by the farmers based on authentic local knowledge passed down from generation to generation ever since the time of their ancestors. This can be used to teach visitors about traditional farming, culture, and heritage. As regards agricultural products, however, it is difficult to create a wide variety of attractions based on these, due to their seasonality, bulkiness, low resistance to seasonal changes, and the ease with which they can be damaged. Such difficulties encourage agritourism destination to create alternative attractions to satisfy visitors. Planting a wide variety of seasonal crops can help to create interesting activities for visitors and thus sustain agritourism in all seasons. Such plants could include corn, strawberries, tomatoes, oranges, and a range of flowers.

It is also important to optimize the use of the attractions, by providing visitor’s activities in the evening, to encourage them to stay longer in the agritourism destination. Hence, environmentally friendly accommodation needs to be available in the agritourism area, along with the creation of interesting attractions, such as cultural and arts activities. For example, Suryawardani and Wiranatha (2016) found that Jatiluwih has evening activities, such as arts and cultural performances, as well as yoga sessions for healing. In addition, during a specific harvest time, live traditional music is performed.

Local community involvement is the 2nd rank of the priority criteria of agritourism development in Bali. The idea of local community involvement has been debated within various studies in relation to sustainable tourism development in various countries (Binns and Nel, 2002; Eshliki and Kaboudi, 2012; Flanigan et al., 2014; Sgroi et al., 2018; Sumantra and Yuesti, 2018; Tew and Barbieri, 2012; Rogerson and Rogerson, 2014; and Fun et al., 2014). However, local communities are often blamed for their lack of involvement in any development, the excuse being their lack of experience, resources, and interest in establishing successful agritourism development (Eshliki and Kaboudi, 2012; Flanigan et al., 2014; Sgroi et al., 2018; and Fun et al., 2014). They often do not even know where to begin or how to get involved in order to participate (Eshliki and Kaboudi, 2012; Sumantra and Yuesti, 2018; and Fun et al., 2014).

According to Karampela et al. (2019), local participation does not work when it is promoted by the values of outside experts or by powerful elite interests. Instead, the outcome of an initiative needs to be represented by local
interests and circumstances, particularly amongst the local community in the village who are responsible for the development of agritourism. On the other hand, research on community participation in agritourism development at Karangsari, Blitar, East Java, undertaken by Nastiti et al. (2019) found that the community participation in agritourism development activities was low because the manager of agritourism there did not give the community the chance to be involved in agritourism activities.

Other studies have found that community participation is actually one of the keys to success in the process of developing agritourism. A study by Budiasa and Ambawarati (2014) found that involvement of the local community in the development of salak farming agritourism in Bali was very important. The local community’s participation was in terms of providing many kinds of souvenirs for visitors, including salak fruit, salak crackers, etc. Moreover, research by Suryawardani and Wiranatha (2016) regarding local community participation in Jatiluwih agritourism found that the local community there have been actively participating in the development of agritourism. Such participation can be seen in their production of home-made rice tea, coffee and souvenirs offered to the visitor. They have been participated in the authentic farming activities with visitors. Local community participation is also seen in the support they provide for yoga activities for visitors who seek healing and relaxation. Nevertheless, they have been found to lack the professional entrepreneurial skills required in managing agritourism.

It is important to strengthen, nurture and encourage the community’s ability and participation in maintaining and using traditional skills. According to the principles of tourism development (UNWTO, 2012), tourism should be initiated with the help of the community, working actively with indigenous leaders to respect indigenous cultures and communities, and to preserve the indigenous cultures in the agricultural areas. Thus, education and training programs are needed to improve the community’s ability to preserve their culture and heritage. These findings concur with those from studies undertaken by Sznajder et al. (2009); Miura and Sarjana (2016); Suryawardani and Wiranatha (2016); Suryawardani et al. (2021); and Sarjana et al. (2021).

Ancillary services are the 3rd rank of the priority criteria of agritourism development in Bali. Professional management plays an important role in achieving success in agritourism businesses, in implementing both internal and external strategy (Karampela et al., 2019; and Koc, 2008). Good leadership by a professional manager can make agritourism products and services attractive to visitors through creating good networking among all the players in marketing (Suryawardani and Wiranatha, 2016; Sarjana et al., 2021). In organizing big events, the role of a professional event organizer (EO) is crucial in terms of planning, organizing and evaluation to provide excellent services that will
satisfy the visitors (Mill and Morrison, 2009; Middleton et al., 2020; and Fyall et al., 2019). It seems that many agritourism destinations in Bali do not have professional management for the destination. Each individual business (such as accommodation, restaurants, and attractions) is managed separately. Selling souvenirs and gifts also is a part of ancillary services. Souvenirs and gifts as the merchandise can also be created and sold to visitors as meaningful mementoes of their visit. To have a professional management is a must in order to communicate, coordinate and collaborate internally and externally to make the agritourism destination more competitive.

Marketing is the 4th rank of the priority criteria of agritourism development in Bali. Marketing is very crucial in tourism and hospitality industry (Fyall et al., 2019). Target market for marketing agritourism in Bali is domestic market as the priority before the foreign market. Positioning is one important aspect of marketing. Research by Sarjana et al. (2021) regarding the positioning of agritourism of Subak Jatiluwih from the visitors’ perspective shows that the positioning formulation for Subak Jatiluwih as agritourism is visitors feel relax and recharge their selves in a unique rice field landscape. Such positioning would play an important role in promoting agritourism in Subak Jatiluwih.

Promotion is also an important part of the marketing system (Contini et al., 2009; Kima et al., 2019; and Kubickova and Campbell, 2018). Promotion can be easily undertaken through internet and social media. However, this opportunity has not been optimally used. Jatiluwih agritourism, for example, has been weak in terms of promotion using internet and social media. Although Jatiluwih agritourism as a destination has a specific website, it is not comprehensive yet. It has been deficiencies regarding the content of the promotion. Moreover, the website belonging to the Ministry of Tourism and Creative Economy gives only very limited information about Jatiluwih agritourism. In addition, some of the respondents to a survey conducted by Suryawardani et al. (2021) among visitors to Jatiluwih said that there was also a language barrier in promoting the beautiful landscape. They pointed out that information must be written not only in English but also in other languages such as French, German, etc. This is very important because not all visitors understand English. Most of the visitors said that Jatiluwih agritourism performs much better than the advertisement in the existing channels would suggest.

Furthermore, amenities and accessibility are also considered to be important in supporting the development of agritourism. Restaurants, accommodation, and other tourism facilities (swimming pool, gazebo, meeting rooms) all need to be available in the development of a destination (Mill and Morrison, 2009; and Swarbrooke and Horner, 2009). Accessibility in terms of...
internet access such as a free wifi at the agritourism area becomes more important than transportation access in this millennial era. Almost all visitors love taking pictures and then instantly uploaded to their social media, or they love making video streaming at the site. However, many agritourism destinations in Bali are lack of internet access and lack of using information technology. Strong support from the government in developing technological infrastructure is therefore also crucial (Suryawardani et al., 2021). These findings correspond with those in the studies by Szajder et al. (2009).

5. Conclusion

There were six main criteria that have been considered to be important by the key informants or experts in agritourism development in Bali, namely: attractions with 5 sub-criteria, amenities with 3 sub-criteria, accessibility with 2 sub-criteria, ancillary services with 4 sub-criteria, local community involvement with 4 sub-criteria, and Marketing with 3 sub-criteria. The priorities of the main criteria based upon the importance of the criteria for the model of agritourism development in Bali are: attractions (1st rank), followed by local community involvement (2nd rank), ancillary services (3rd rank), marketing (4th rank), amenities (5th rank), and accessibility (6th rank). Based on the results of this study, the agritourism development model in Bali needs to be more focused on the diversification of community-based agritourism attractions supported by professional management and community participation with a clear target market, with the aim of increasing the number of visitors, both domestic and foreign.

This study was limited to the opinions of the key informants and did not obtain input directly from visitors. This study was undertaken in general scope of agritourism development. The implementation of these criteria with a certain regency in Bali should consider the specific potential of agriculture products within the regency itself.

The further study may be undertaken to implement these criteria in all regencies in Bali with the consideration of all potencies of the agriculture products in each regency, therefore it can be developed an integrated agritourism development in Bali with various agriculture products as well as agrotourism routes in Bali. This could become a significant agritourism development in Bali in order to support sustainable agriculture and tourism in Bali.

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Bibliography


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