

# Community Empowerment in Improving Agriculture and Tourism Integration to Support Village Tourism Development

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**Abstract.** The shift in interest in visiting tourists who initially looked for trips with the three S concept, namely Sun, Sea and Sand, is now changing to the three L concept, namely Landscape, Lore and Leisure. Agriculture areal with the panoramic beauty, the life of the people who are still traditional and the products of agriculture that is offered will create a strong demand for traveling to rural areas. On the other hand, the potential for agricultural resources has not been exploited optimally, as is the arrangement of the area. Optimizing the potential of agricultural resources and human resource potential through community empowerment is an alternative. The aim of empowerment is to optimize the potential of human and natural resources to be more effective and efficient through assistance and support for supporting infrastructure in developing tourist destinations based on culture of agricultural in Subak Lepud. The implementations methods include : a) socialization at the beginning of the activities and each time execution ; b) Training and mentoring ; c) Focus Group Discussion (FGD). The results of the activity shows that the provision of English language training can improve the knowledge and abilities of tour guides; 2) Agricultural integration through assistance in cultivating crops, livestock and fish can increase farmer's understanding and ability to optimize agricultural resources; 3) Donation of facilities and infrastructure such as assistance for the entrance gate to the subak trekking route, arranging selfie photo spots and arranging tracking routes can add the beauty and attractiveness of the Lepud Subak area.

Keywords: Empowerment, Agricultural, Integration, Tourism, Baha

## 1 Introduction

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The agricultural sector is Bali's leading sector after the tourism sector. These two sectors occupy very strategic positions in determining economic growth [1], capable of accelerating community welfare, boosting local revenue and creating jobs [2, 3].

On the other hand, even though tourism has been recognized as a stimulator to drive the economy, mass tourism also hides several things that are rarely disclosed and calculated so that it is very difficult to trace their role or loss [4]. The reduction in paddy fields and at the same time influencing the existence of Subak is a side effect [5], as well as indirectly affecting food availability [6] and decreasing biodiversity [7].

Realizing this fact, many countries that rely on the tourism sector have begun to look at tourism development that is small in terms of quantity but has good quality in terms of local communities and in terms of tourists, known as alternative tourism. Alternative forms of tourism such as ecotourism and agrotourism who are able to protect the environment and maintain the culture in it so that it is not damaged or extinct [8].

Nowadays, there is a massive shift from the usual tourist recreational trips to educational trips. The concept of the three common "S" ("Sun-Sea-Sand) is changing to the concept of three "L" (Landscape-Lore-Leisure"). Therefore, there is a strong demand of traveling to rural areas, where the urban residents are surrounded by agricultural and green landscapes, traditional rural lifestyle with pets and natural products [9]. Therefore, it is necessary to empower the community so that the development of tourism villages can be sustainable [10, 11]. Community empowerment is essentially to prepare the community so that they are able and willing to actively participate in every development program and activity aimed at improving the welfare of the community, both in terms of economic, social, physical and mental, [12, 13, 14, 15].

Realizing the integration of sustainable agriculture and tourism through the de-clearing of tourist villages, a tourism village development concept is needed which is compiled based on precise planning so that impacts can be controlled. In addition, the existence of an integrated tourism village development concept is expected to be able to change the ego-sector mindset of tourism village development, which tends to be partial and temporary. The hope of developing and developing tourist villages is not only to increase the economic income of the community in the short term which focuses on the potential attractiveness of one area, but also for the purpose of conserving resources and in the framework of developing sustainable tourism villages [2, 3, 17].

Baha Village is a tourist village that was first introduced by the Badung Regency Government in 1992. It has historical, sociological and geographic potential to support the development of a tourist village. Visiting Baha Tourism Village, tourists will be presented with the beauty of the village area which is supported by its agricultural culture [16]. Tourists can enjoy trekking along Subak Lepud, located among several other tourist destinations such as the Taman Ayun and Bedugul tourist routes, between Taman Ayun tourism destination and Ubud and between Taman Ayun destinations and Sangeh tourist destinations [11, 12, 16]. However, until now, Baha Village has not developed optimally to become a Tourism Village.

The main problems in developing the tourism village in Baha village are: 1) Stagnation in the development of attractions and attractions, due to the limited innovation in attraction development. The subak lepud tracking route as a natural tourist attraction has not been of interest to visitors because it has not been developed as a tourist attraction by the local community along the route; 2) Agricultural products (rice, vegetables, fish) have not been managed optimally by using chemicals either in the form of fertilizers or pesticides.

The purpose of this activity is to encourage community involvement in developing tourism so that people with their culture can become a tool for improving welfare and preserving local cultural and customary values.

## 2 Method

The location of the activity is in Baha Village, Mengwi District, Badung Regency, Bali Province, located at  $8^{\circ} 30'34.52''$  LS -  $8^{\circ} 32'1.81''$  latitude and  $115^{\circ} 10'41.13''$  east longitude -  $115^{\circ} 11'52.37''$  east longitude.

In accordance with the agreement with the three parties between the PPDM Team of Mahasaraswati Denpasar University, the Head of Baha Village, and three partner groups (pekaseh subak Lepud, Chair of the Dewi Group and Bumdes Ayu Bagia), the three main programs will be carried out to realize the integration of agriculture and tourism into development tourism village, namely: a) Produce a product healthy and environmentally friendly agriculture both as a livelihood for farmers and as an agro-tourism-based attraction for tourists. b) Revitalizes attraction, accessibility, empowerment of tourism village actors. c) Capacity Building for existing institutions to support tourism villages to be able to work synergistically.

The approach method consists of several stages, namely: a) Socialization is carried out at the beginning of the activity and every time it is implemented; b) Training is carried out repeatedly until most of the partners are skilled in making or doing activities; c) Assistance in every activity. d) Focus Group Discussion (FGD) is carried out whenever necessary in various matters related to activities.

## 3 Results of Empowerment and Discussion

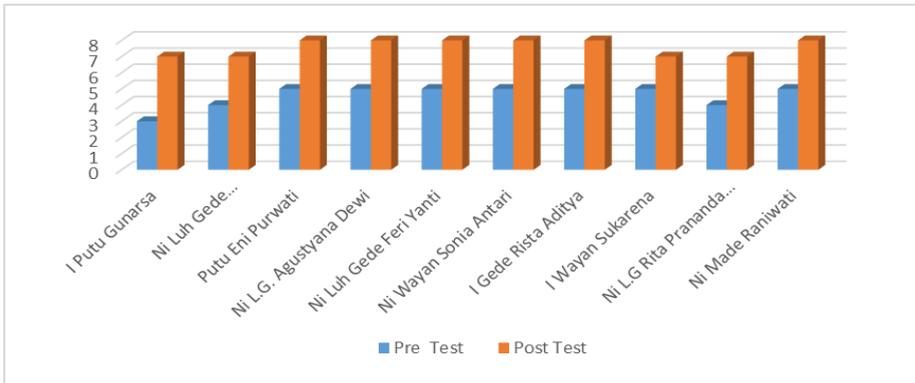
### 3.1 English Language Training and Management of Baha Village Tour Guide

This training is conducted online using the zoom cloud meeting application. This is to prevent the spawning of Covid-19 disease. The online training was conducted for eight days starting from June 24, 2020 to July 2, 2020, then continued with field practice for one day on July 5, 2020 and submitting certificates. The training materials consist of: 1) Greeting and Welcoming Tourist and Leave; 2) Taking, Asking for, giving information, and; 3) compliment [Asking for, giving information, and compliment; 4) Describing Tourist attraction; 5) Describing Places. 6) Ethics at works and 7) Professional Tour Guide.



**Fig. 1.** Online English language training

From the results of the evaluation, it was found that there was an increase in mastery of English (from the aspects of Pronunciation, Fluency and Intonation) and the pre-test evaluation showed an average score of 4.6 and post-test an increase to 7.6 (Figure 2)



**Fig. 2.** The pre-test and post-test scores for the aspects of Pronunciation, Fluency and Intonation in English

### 3.2 Integrated farming

Efficient rice farming will be achieved if crop management is integrated with livestock, especially cattle, in paddy fields. The technology package introduced in the crop life stock (CLS) research is a holistic technology package, in accordance with the existing farming system in the research location.



**Fig. 3.** Efficient use of in organic fertilizers

Each cattle weighing about 250-270 kg, each day can produce wet manure about 10 - 11 kg (+ 4% of live weight) and after processing the compost yield is about 45-50%, or about 4.5 - 5 kg / head / day. Manure is collected through a collection system from the pen and is not removed for more than 3 weeks before being transferred to the compost plant. Animal manure mixed with probiotics as much as 2.5 kg for each ton of fertilizer, 2.5 kg of lime and 2.5 kg of TSP / SP36 which are stacked as high as 1 m. The ingredients are allowed to stand for 3 weeks and are reversed every week.

The results of the activity show that farmers are able to make their own fertilizers, but they are constrained by the transportation costs of fertilizing and this method is considered impractical so that it is necessary to make practical fertilizer packaging and to be trained in making practical liquid fertilizers. In this empowerment, a 2-hectare semi-organic rice demonstration unit was made by involving 13 farmers. The technology package introduced to farmers is shown in Table 1.

**Table 1.** The demonstration plot package for the efficiency of inorganic fertilization in lowland rice cultivation

Technological aspects	Treatment
Variety	<ul style="list-style-type: none"> <li>labeled ciherang variety</li> </ul>
Nursery	<ul style="list-style-type: none"> <li>Wet nursery, seed treatment</li> </ul>
Number of seeds	<ul style="list-style-type: none"> <li>transplanting: 10-20 kg / ha</li> </ul>
Age of seeds	<ul style="list-style-type: none"> <li>8-15 days</li> </ul>
Number of seeds / clump	<ul style="list-style-type: none"> <li>1- 2 sticks</li> </ul>
Method of planting and irrigation	<ul style="list-style-type: none"> <li>Transplanting with a spacing of 25 cm x 25 cm, or 30 cm x 30</li> <li>Give water intermittently as needed</li> </ul>
<b>Fertilization Technology</b>	<ul style="list-style-type: none"> <li><b>a. Cow Manure Fertilizer 100%</b> (2000 kg) + 25% In-organic Fertilizer ( 50 kg Urea + 50 Phonska)</li> <li><b>b. Cow Manure Fertilizer 100%</b> (2000 kg) + 50% In-organic Fertilizer (100 kg Urea + 100 Phonska)</li> <li><b>c. Cow Manure Fertilizer 100%</b> (2000 kg) + 75% In-organic Fertilizer (150 kg Urea + 150 kg Phonska)</li> <li><b>d. Full In-organic package:</b> (200 urea + 200 kg of Phonska)</li> </ul>
	Organic fertilizers are given as basic fertilizers, while inorganic fertilizers are given half part when the plants and the rest when the tillers are active

The results of the semi-organic farming demonstration plot were not yet harvested, but in terms of vegetative growth, there was no difference in the number of tillers and leaf color..

### 3.3 Cultivating fish in fresh water

Increasing income and the diversity of farming is carried out by training of freshwater fish farmers. The cultivation introduction given is the provision of complete feed packages which are rarely used by farmers. The number of participating farmers in the pilot activity is 6 people with the help of 4000 carp fish . The results of the assistance showed that the farmers were very intense in this activity and the fish they raised grew rapidly and none of them died



**Fig.4.** Fish seed assistance

### **3.4 Marry Gold flower and vegetables cultivation**

Gumitir (merry gold) flower cultivation is a very attractive commodity after water henna. This plant is in great demand by farmers because it has market prospects. In this empowerment, farmers are introduced with packages: a plant population of 300 plants per 10m<sup>2</sup>, Urea, Ponska and compound NPK each 1 kg per 10m<sup>2</sup>, and organic fertilizer 20.00 kg / 10 m<sup>2</sup>. The results of the activity showed that the plants thrived and had produced flowers. The participating farmers were very enthusiastic about cultivating this plant.



**Fig. 5.** Merry gold flower cultivation assistance

The vegetable demonstration plot consisted of chili and bitter melon vegetables. The area of the demonstration plot for these two communities is 0.5 hectares and involves two farmers. Chili plants are still in vegetative growth, while the bitter melon plant has been harvested 2 times



**Fig. 6.** Vegetable cultivation assistance

### 3.5 Making the entrance of the trekking path

People's interest in visiting a tourist area really depends on the attractiveness and impression given by an object. For this reason, the subak area is structured, especially by making gates to enter and exit the area. Through PPDM activities on the trekking route, 2 doors are installed and a selfie spot is built in the form of a stage bale.



Fig. 7. Entrance of the Subak Tracking Path

### 3.6 Focus Group Discussion (FGD)

FGD activities were held to solve common problems between the perpetrators and the steak holders. The first FGD was held on August 9, 2020, by presenting the Head of the Community and Village Empowerment Service (KaPMD) Badung Regency and staff, the Head of Baha Village and Staff, the Tourism Village Group, Pokdarwis, BUMDes, Pekaseh Subak Lepud and Kelian Munduk, and Lecturers and Graduate Student of Mahasaraswati Denpasar University. From the results of the meeting (FGD), several things that need to be followed up include the need to increase the cooperation of ABG (Higher Education, Entrepreneurs and Government) in accelerating the development of tourism villages, and between area management and the need to make joint rules between Dinas Villages, Traditional Villages,

FGD 2 activities on October 11, 2020 by presenting resource persons from the Badung Regency Environment, Living and Cleanliness Service (DLHK) who were given directly by the Head of the Service, along with the Section Head (Cleanliness, Environment) of Baha Village Workshop and Staff, Bendesa, Awareness Group Tourism, Pekaseh and community leaders. At the meeting it was agreed that maintaining the cleanliness of the tourist village requires community awareness and participation. It is necessary to make joint regulations that are binding both from the official village, customary village and subak.

Partners participate actively during activities because the pattern that is carried out is empowerment by fully involving community group members in all areas of activity. In addition, participants help prepare the training venue, prepare materials for training, prepare meals, and coordinate with all group members and village officials and stakeholders involved. In addition, village participation is to prepare funding that is budgeted for in the amended APBDes in the form of funding to make 50 units *sanggah catu* along the Munduk Busana tracking route, the installation of trash bins in realizing *saptapesona* along the tracking route, and the installation of banners. The apparatus and community are active and care in maintaining cleanliness through clean Friday activities.

The constraint in the implementation of empowerment is the determination of the COVID-19 pandemic by the government since March 15, 2020 with restrictions on human

contact both socially and physically making PPDM activities unable to run optimally, especially between March-June because the village is so strict in accepting or giving permission to leave. for the community with the aim of preventing the transmission of the covid19 virus. Therefore, the implementation team carried out activities online and carried out more activities that could be done from home, for example writing articles related to the target village.

The driving factor in the implementation of the activity is the cohesiveness of the PPDM implementation team and the participation of the community as well as officials in the village government and community organizations very responding positively to this activity so that almost most of the work programs can be carried out.

## 4 Conclusion

1. The provision of English language training can improve the knowledge and abilities of tour guides.
2. Agricultural integration through assistance in cultivating crops, livestock and fish can increase farmer's understanding and ability to optimize agricultural resources.
3. Donation of facilities and infrastructure such as assistance for the entrance gate to the subak trekking route, arranging selfie photo spots and arranging tracking routes can add the beauty and attractiveness of the Lepud Subak area.

Several things need to be done for the development of the Baha tourist village:

1. The development of a tourism village needs to be made joint rules between Traditional Villages (*Desa Adat*), Dinas Villages (*Desa Dinas*) and Subak in the management of natural resources and human resources.
2. It is necessary to intensify the collaboration of ABG (Academics, Entrepreneurs and Government) to empower the potential of natural resources and human resources in building villages.
3. Developing the potential of local wisdom to produce unique tourism products and attractions and strengthening institutions through the formation of joint business unit institutions with mutually binding and mutually beneficial rules

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