COMMUNITY BASED AGRO-TOURISM AS AN INNOVATIVE INTEGRATED FARMING SYSTEM DEVELOPMENT MODEL TOWARDS SUSTAINABLE AGRICULTURE AND TOURISM IN BALI

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ABSTRACT

Bali economic growth is based on agriculture, small-scale industry, and tourism sectors. Agro-tourism of Salak Sibetan Plantation under local authority, an existing community-based development in eastern part of Bali, is descriptive qualitatively analyzed. Based on agro-tourism typology, it is identified as a working farm passive contact agro-tourism that provides farmhouse bed and breakfast, as well as a working farm indirect contact agro-tourism that offers some attractions (e.g. visiting salak plantation and picking of fresh fruit, visiting a winery and crispy chip demonstrations and tasting). Even though it was supported by other stakeholders (government, tourism industries, NGOs, and universities) since 1995, it was gradually developed. Village Ecotourism Network in collaboration with the manager for Farmer Group of Dukuh Lestari and local guides sold these attractions, but it has few numbers of visitors. The conditions might be due to limited capacity of local community in agro-tourism, limited budget to provide many standard agro-tourism facilities, lack of adequate promotion, and limited agro-tourism landscaping. To improve agro-tourism development and contribution to sustainable Bali economic growth, appropriate capacity building programs on agro-tourism for local community, supported by government budget and/or corporate social responsibility programs will be helpful and useful.

Key words: local authority, salak sibetan, sustainable agro-tourism

INTRODUCTION

Tourism represents, for many countries, a powerful tool for social and economic development and reduction of poverty, through the provision of jobs and enterprises, infrastructure development and export earnings. Well-designed and managed tourism can not only make a significant contribution to the three dimension of sustainable development, but also has close linkages to other sectors and can create decent jobs and generate trade opportunities (Gutierrez, 2012). However, tourism cannot be self- supporting since it depends on the availability of ecosystem services (Ahmad, 2012). The economic development of Bali Province is based on primary (agriculture), secondary (small-scale industry) and tertiary (including tourism) sectors that contributes about 18.08%, 15.57%, and 66.35% respectively to the Bali economic growth in 2011 (Regional Development Plan Agency of Bali Province, 2012). In order to accelerate and expand the economic development in Indonesia between 2011 and 2025, Bali and Nusa Tenggara become the economic corridor on “The Gateway of Tourism and Supporting of National Food” due to 40% of international flights were directly to Bali, 15% of national hotels capacity were in Bali and Nusa Tenggara, and
21% of gross domestic product was contributed by the hotels (The Coordinating Ministry for Economic Affairs, 2011).

The development of Bali tourism is based on the Balinese culture, written in the Regional Regulation No 2/2012 as the improvement of Regional Regulation No. 3/1991 and Regional Regulation of Bali Province No. 3/1974 (Bali Government Tourism Office, 2012). Balinese culture, including “Balinese agriculture”, is very much based on Hindu philosophy (Ardika, 2012). The operational foundation of economic development in Bali is Tri Hita Karana (Tri = three, Hita = happiness, Karana = causes). These include: the harmonious relationship between human beings and God, as the creator of the world; the harmonious relationship among human beings themselves; and the harmonious relationship between human beings and the environment (Regional Development Plan Agency of Bali Province, 2012). Present statistics within the Bali tourism sector show that direct foreign and domestic tourist arrival to Bali in 2011 was 2.76 million persons and 5.68 million persons respectively (Bali Government Tourism Office, 2012) and a number of other tourists, indirectly come to Bali, was unidentified. About a hundred trillion Indonesian rupiah of income was gained from Bali tourism, 10% of it was spent for food and horticultural product requirement within the sector operation. However, only 2.2 trillion Indonesian rupiah of the agricultural product was produced in Bali, whereas the remaining must have been imported from outside of Bali. Even though the room occupancy rate in 2011 was only 62.15% (Bali Government Tourism Office, 2012), many fertile agricultural land in Bali such as within Badung and Gianyar Regencies as well as Denpasar City have been converted into tourism facilities. These are many challenges facing sustainable agriculture development in Bali. In this regard agro-tourism development is one of Bali tourism innovative development strategies (Bali Government Tourism Office, 2012) that integrate agriculture and tourism sectors.

There are two models of agro-tourism development namely capital based agro-tourism and community based agro-tourism. There are many capital based agro-tourism objects developed by Balinese entrepreneur such as Bagus Agro Pelaga at Pelaga Village - Badung Regency that supplies organic agricultural products like vegetables, cutting flowers, and fruits (Utama, 2007). It is supported by various facilities that consists of restaurant, bar, meeting room, supermarket, wholesale shop, children playground, tracking path, fishpond, livestock (bali cattle farming). It offers two packages of visiting organic farm attraction, package one is by IDR120,000 per person for entrance charge, welcome drink fresh strawberry juice, circling strawberry and vegetable farms, buffet lunch, traditional cake with coffee or tea, includes 21% tax and service; and package two is by IDR45,000 only per person for entrance charge, welcome drink fresh strawberry juice, circling strawberry and vegetable farms, includes 21% tax and service.

Other capital based agro-tourism destinations are Trisna Bali Agro-tourism at Penglumbaran Village - Bangli Regency (http://gourmetpigs.blogspot.com); Alam Bali Kopi Luwak and Natural Spices at Sebatu Village – Gianyar Regency (http://www.balikopi.com); Oka Agro-tourism at Susut Village – Bangli Regency (http://www.tripadvisor.com); Abian Sari Agro-tourism at Kintamani – Bangli Regency (http://www.foodspotting.com); Satria Agro-tourism at Basangambu sub village – Gianyar Regency (http://satriagrowisata.bali.klik.com); Santi Agro-tourism at Temen sub-village – Gianyar Regency (http://wensdelight.blogspot.com); Agro-tourism Bali Pulina (http://www.yukpegi.com); Buana Amertha Sari (BAS) Agro-tourism at Kintamani – Bangli Regency (http://www.cikopi.com) that essentially produce and offer Luwak coffee, processed from the red coffee beans that the Luwak (Asian Palm Civet) eats and passes through their system undigested and finally passed out of their system. The beans are then washed, lightly roasted and grounded and made into coffee powder. Visitors can taste this nice coffee by paying approximately IDR50,000 per cup. Agro-tourism of Salak Sibetan Plantation, which is managed by Farmer Group of Dukuh Lestari at Sibetan Village – Karangasem Regency, is an example of community based agro-tourism development.
At present, the information of agro-tourism contributions in many destinations above is still limited since agro-tourism is a new tourism development model. Agro-tourism contributes a lot to the improvement of economic life of the local communities. The contributions are in the form of agricultural products sales, various hand-made souvenirs or handicrafts sold to tourists, opportunities for establishment of food stalls or restaurants and certain types of accommodation such as home-stay, bungalow, villa, and hotel, as well as village development (Utama, 2007).

This paper aims to synthesize the concept of agro-tourism and its sustainability as well as describe an existing community-based agro-tourism as an innovative integrated farming system development model towards sustainable agriculture and tourism in Bali.

**METHODOLOGY**

The location of this research is “Agro-tourism of Salak Sibetan Plantation” in Sibetan Village (Dukuh sub-village), Bebandem District, Karangasem Regency, eastern part of Bali Island. The agro-tourism destination offers visiting salak plantation and picking of salak (Salacca zalacca), visiting salak cottage industries, and other supporting attractions. Primary and secondary data was collected by conducting in-depth interview with 11 key informants. The data are agro-tourism environment (area, agricultural uniqueness, number of farmer, existing institution), history of agro-tourism development (policy, stage, stakeholders contribution, supporting fund and source), requirement of agro-tourism development (location, attractions, infrastructure and facilities, marketing target), benefit, and barriers of agro-tourism development. These informants include representatives from the Food Crop Agricultural Agency of Bali Province (two persons), Culture and Tourism Agency of Karangasem Regency (one person), Agricultural Agency of Karangasem Regency (one person), Head of the village (one person), Farmer Group of Dukuh Lestari (one person), Cooperative of Banjar Adat Dukuh (one person), Culinary Group of Agro Dukuh Lestari (one person), CV Dukuh Lestari for salacca wine industry (one person), Werdhi Guna Food for crispy chips, taffy, and candy of salak industry (one person), and salak plantation package (one person). Existing literatures within the agro-tourism development context were critically reviewed. Qualitative method was used to analyze the data descriptively.

**RESULTS AND DISCUSSION**

**General Concept of Sustainable Agro-tourism**

Sustainable tourism is tourism that takes full account of its current and future economic, social, and environmental impacts, addressing the needs of visitors, the industry, the environment and the host community. Sustainable tourism as “tourism which leads to management of all resources in such a way that economic, social and aesthetic needs can be filled while maintaining cultural integrity, essentials ecological processes, biological diversity and life support systems” (UNEP and WTO, 2005). Meanwhile, SEARCA (1995) defined sustainable agriculture as a holistic farming system management that requires economically viable, ecologically sound and friendly, socially just equity and acceptable, and culturally appropriate whose overall goal is to improve the quality of life. Economically viable agricultural systems have a reasonable return on investment of labor and cost involved and ensures a decent livelihood for the farm family. Economic viability also means minimal or no cost of externalities by the farming operation. Ecologically sound agricultural systems are well integrated into the wider ecological system and the focus is on maintenance and enhancement of the natural resource base. It is also biodiversity oriented. Practices which cause negative environmental impacts are avoided. Socially just agricultural systems respect the dignity and rights of individuals and groups and treat them fairly. The system allows access to information, market and other farm-related sources, especially land. Culturally appropriate agricultural systems give due consideration to cultural values, including religious belief and traditions in the development of the agricultural system,
plans and programs. It recognizes the knowledge systems and visions of the farmers who are considered partners in the development processes.

Agricultural system based on holistic science not only view agriculture in terms of farming systems and system approach and their relationships - biophysical, social, economic, cultural and political factors, but also considers the dynamic interactions among on-farm, off-farm and non-farm including tourism activities and recognizes that these activities complement each other. Agro-tourism is an innovative agricultural activity related to both tourism and agriculture.

Agro-tourism is an alternative form of tourism in Bali. According to Joshi and Bhujbal (2012), agro-tourism is a specific form of rural tourism with close relation to nature and country side of rural areas and direct relationship to agricultural activities. The UNDP (Utama, 2007) interprets that rural tourism is any form of tourism that showcases the rural life, art, culture and heritage in a rural location, thereby benefiting the local community economically and socially as well as enabling interaction between the tourists and the locals for a more educational tourism experience which can be termed as rural tourism with essentially any activity which takes place in the country side. Rural tourism may not be designed to generate a supplemental income for the farmer, but may be a business venture of travel and tourism professionals. However, in this regard agro-tourism and ecotourism are closely related to each other. Cruz (2003) and The International Ecotourism Society (Rubuliak, 2006) define ecotourism simply as “responsible travel to natural areas that conserves the environment and improves the well-being of local people”. Ecotourism is generally provided by the tour companies, whereas in the agro-tourism farmers offer tours to their agriculture farm and providing entertainment, education and fun-filled experiences for the urban peoples (Maruti, 2009). The philosophy of agro-tourism is inspired to improve the farmers’ earnings and the quality of rural society lives which then expectedly represents opportunity to educate the societies on agriculture and ecosystems (Utama, 2007). Agro-tourism means that tourist activity whose aims is not only to familiarize oneself with farming activity and recreation in an agricultural environment (Sznajder et al., 2009) but also to help farmers to get some benefit by help of capitalization their own resources from agriculture, which is the main profit source (Mazilu and Iancu, 2006). It aims basically at providing alternative solutions towards enhancing farmers’ activities (employment opportunities for rural community) by diversifying farm operation and offering some kind of services and agro-touristic goods to visitors and finally improving farmers’ income/salaries (Dritsaki, 2009; Kuehn et al., 2000; Maruti, 2009; and Prince Edward Island Department of Agriculture and Forestry, 2000). Agro-tourism operating venues may need many more products, resulting in new markets and new income by supplying their new farm business with popular products that they do not produce themselves (Maruti, 2009).

Agro-tourist activities would have the added benefit of promoting sustainable agricultural practices (Catalino and Lizardo, 2004). Within Taiwan, approximately 8.2 million people visited leisure farms and the total revenue of such farm was estimated to exceed 4.5 billion New Taiwanese dollars (approximately 133,809,000 US dollars) (Hsu, 2005). In USA, it has been estimated that 62 million Americans visited farms one or more times in 2000, which corresponds to almost 30% of the population. Income from the agro-tourism provides farmers with approximately 800 million US dollars per year. Even though the percentage of farm with income from at the national level is only about 2%, in some Midwest States, 7% of farms receive income from this activity (Carprio et al., 2006).

Pizam dan Pokela classified agro-tourism activities into farming and non-farming activities (Hsu, 2005), whereas Wood (2006) classified them into on-farm and off-farm activities. Sznajder et al. (2009) differentiated between traditional agro-tourism and modern agro-tourism. The former is only to offer the visitors of short term accommodation and on-farm resources, and the farmer gets a small additional income. The farmers within the latter seem have more initiative to offer many more agro-touristic goods and services and they hope to get supplemental farm income significantly. Kuehn
et al. (2000) mentions that three main components of agro-tourism development: small business, agricultural events such as festival as a creative expression of the local community and farmers’ market as a tourist’s window into local community, and regional agro-tourism planning. Agro-tourism is that agribusiness activity, when a native farmers or person of the area offers tours to their agriculture farm to allow a person to view them growing, harvesting, and processing locally grown foods, such as coconuts, pineapple, sugar cane, corn, or any agriculture produce the person would not encounter in their city or home country. Often the farmers would provide a home stay opportunity and education (Maruti, 2009).

A typology for defining agro-tourism is drawn within Figure 1.

By considering activities and products systematically according to these three discriminators, five discrete types of agro-tourism can be identified. Non working farm (NWF) agro-tourism could actually be identified as generic rural tourism, realized through agricultural heritage or imagery (e.g. accommodation in the converted farm house), farm heritage attraction (e.g. horse riding), and arguably include farmers markets and farmland access (e.g. walking where the working farm is not central to tourist activity). In the working farm, passive contact (WFPC) agro-tourism, the working farm provides the context for tourism but the relationship between tourism and agriculture goes no deeper than that (farmhouse bed and breakfast; outdoor activities). Working farm, indirect contact (WFIC) agro-tourism begins to integrate agriculture on the farm with the tourism product (e.g. visiting a winery or butter-making demonstration). Working farm direct contact, staged (WFDCS) agro-tourism realized through reproduction and/or organization of agriculture for tourism (e.g. farming demonstration). Under working farm direct contact, authentic (WFDCA) agro-tourism tourists

Fig. 1. A typology for defining agro-tourism (Phillip et al., 2009)
experience physical agricultural activities first-hand, for example, pick your own facilities or participation in farm tasks (Phillip et al., 2010).

The Development of Agro-tourism of Salak Sibetan Plantation

According to Sudibya (in Utama, 2007), a number of regencies in Bali have the potential to be developed into agro-tourism destinations, for instance: (a) Bangli Regency has the potential for orange and lemon agro-tourism which can be combined with the two nearest tourism sites such as Batur Mount and Batur Lake; (b) Buleleng Regency, particularly Pancasari Village has the potential to be developed as strawberry, vegetables, and flowers agro-tourism; (c) Tabanan Regency can be intensified to develop a park named Eka Karya Botanical Garden and Horticulture which can be combined with rice field view in Baturiti, Bedugul; and (d) Karangasem Regency, exactly in Sibetan Village has the potential to develop salak (light brown snake skin fruit) agro-tourism combined with panorama and surrounding natural environment.

The Farmer Group of Dukuh Lestari was historically established from re-transplanting group which reached for second winner in 1987. The first NGO, namely Asta Dewata, was strongly concerned to develop salak sibetan as an agro-tourism destination. Within the area of 123 ha of the salak plantation which is located at Dukuh sub-village and managed by 39 farmers under the Farmer Group of Dukuh Lestari was designed as community based Agro-tourism of Salak Sibetan Plantation by the Government of Karangasem Regency since 1995. In 1997, the farmer group received supporting facilities such as salak seedling and good agriculture practices from NGO of Kehati - Jakarta. In the next two years, the NGO of Wisnu - Bali facilitated the farmer group to access fund aid in the amount of IDR50 million from Kehati, that was used to establish six packages of salak plantation, construct tracking path, salak seedling, training for processing industry, and capacity building of local farmers.

Existing Condition, Fascination, and Supporting Facility

Agro-tourism of Salak Sibetan Plantation is located in Sibetan Village (Dukuh sub-village), Bebandem District, Karangasem Regency, within coordinate point of 115°30'58"-115°31'45"(EL) and 08°26'47"-08°27'46"(SP). The village area and population are around 1,038.81 ha and 8,642 persons, respectively. It has a tropical climate, with temperature of 30°C and a rainy season from October to March and dry season from April to September. Average annual rainfall range between 1,567 and 2,000 mm, depending on the elevation of 500 to 700 m above sea level. It is close to Candi Dasa beach tourism resort and Agung Mount whose highest peak 3,142 m above sea level. The distance from the location to administrative and economic centers are: (a) three km to Bebandem district, (b) 12 km to Amlapura (the capital of Karangasem regency), (c) 29 km to Padangbai seaport, (d) 80 km to Denpasar (the capital of Bali Province), and (e) 85 km to International Ngurah Rai Airport. The access to the destination can by minibus, bus, and motorbike. It has 815.8 ha of salak (Snake Fruit) (Salacca zalacca) plantation, managed by 1,116 farmers whose production around of 209 t y⁻¹.

Presently, the main interest of the agro-tourism is direct market tourism on six packages of salak plantation. Each package of salak plantation provides approximately three hectare of productive salak trees with permanent tracking path that offers picking fruit attraction from December to March., Each visitor must pay entrance charge of IDR10,000 to IDR15,000 depend on the number of group member and he/she can u-pick two fresh salak fruit only whose directly consumed inside of the farm. He can also u-pick more and paid it by IDR5,000 to IDR8,000 kg⁻¹ depends on its available. The supporting attractions are education and experiences tourism (e.g. visiting wine processing and wine tasting by cost of IDR10,000 for domestic visitor and IDR15,000 for foreigner and package two for willing worker on wine processing by cost of IDR1,500,000 at CV Dukuh Lestari and visiting the
crispy chips, taffy and/or candy-making demonstrations at Werdhi Guna Food industry; making atte and bamboo handicraft; visiting inheritance building of Jero Dukuh Sakti who first developed the salak plantation; looking into beautiful natural mountain panorama, and staying at a farmer’s/villager’s house and recreation and event tourism (e.g. watching Bali traditional dances and playing traditional music instruments).

The supporting facilities for the agro-tourism destination are five standard homestays within villagers house, food and beverage services by Culinary-tourism Group of Agro Dukuh Lestari, hot mixed road, parking area (450 m²), tracking path, a unit of bathroom and toilet at parking area and each other public area, fresh water by Drinking Water Regional Company of Tirta Dewata, electricity, and good signal for mobile phone.

Stakeholders Contribution

The stakeholders of the agro-tourism development consist of six groups namely government, tourism industries and NGOs, local communities, tourists or visitors, and universities. They play roles differently and shall work simultaneously in applying the principles of sustainable agro-tourism development. Brief descriptions of their roles are explained as below.

Government comprises local governments at provincial and regency levels. The roles of government as stakeholders are to provide policies and site plan and other planning documents, and functioned as regulator. Bali Provincial Government through Food Crop Agricultural Agency has contribution in developing organic farming system in Sibetan. The 11 ha salak plantation managed by Farmer Group Mekar Sari in Sibetan Village was organically certified by LeSOS (registered organic certification organization in Indonesia) in 2009 (Food Crop Agricultural Agency of Bali Province, 2013). In 2012, the plantation was expanded to be 50 ha by the government. National Program for Community Empowerment (PNPM) of Tourism Autonomy in Sibetan was developed and facilitated by the Technical Team of Culture and Tourism, Karangasem Regency in 2012. Groups target as benefit receiver are Farmer Group of Agro Dukuh Lestari, Co-operative of Banjar Adat Dukuh, and Culinary-tourism Group of Agro Dukuh Lestari with supporting fund of IDR70 million (approximately USD7,179.49). The budget is allocated to improve human capacity through food & beverage and local guide trainings and to provide supporting facilities in kind of mountain bike and brochures.

Tourism industries comprise home stay/hoteliers, restaurant owners, travel agents, and other related tourism entrepreneurs. Tourism industries play role in providing investments on main and supporting tourism facilities, small-scale infrastructures, and other tourists’ demands (Utama, 2007). According to the Agro-tourism of Salak Sibetan Plantation, Werdhi Guna Food aims to produce as well as demonstrate the making of salacca crispy chips, taffy and candy. It was direct aid program by Australian Consulate – General Bali in collaboration with NGO of Kalimajari-Denpasar in 2006. It also acts as the Community Technology Centre (CTC) in Sibetan Village. The other industry is CV. Dukuh Lestari, as a registered industry to produce and demonstrate the making of salacca wine since 2006. Culinary-tourism Group of Agro Dukuh Lestari is to provide visitors many kinds of native food and beverage. Villages Ecotourism Network (JED) plays role to manage the agro-tourist market.

Local communities comprise Desa Adat (customary village legal body), farmers who own the land, and other societies residing in the area where tourism developed. Farmer Group of Agro Dukuh Lestari manages the salak plantation and Co-operative of Banjar Adat (customary sub-village legal body) Dukuh aims to serve the farmers’ requirement related to salak farming and provide visitors many kinds of souvenirs including salak fruit that they would like to purchase.
Tourists or visitors comprise domestic and foreign tourists who intend to experience a high quality of tourism activities and attractions while universities comprise Agriculture Department, Tourism Department, and Tourism Higher Schools which provide qualified human resources, research results on agriculture and tourism by issuing scientific recommendations to form new and alternative tourism development models (Utama, 2007).

**Marketing Management and Profit**

Market target of the agro-tourism is foreigners and domestic (local) tourists. Based on guest book, many countries for tourist arrival to Agro-tourism of Salak Sibetan Plantation were recorded since 2002. These were Cambodia, Philippines, Thailand, South Korea, China, Japan, Malaysia, Timor Leste, Australia, Germany, Norway, France, Belgium, Netherlands, Holland and USA. Additionally, local tourists come from Northern Sumatera, Jakarta, West Java, Central Java, Yogyakarta, East Java, East Kalimantan, Bali, Nusa Tenggara and Papua.

The number of visitors targeted to visit Salak Sibetan Plantation Agro-tourism are 300 persons of domestic tourist and 160 persons of foreigner annually (Culture and Tourism Agency, Karangasem Regency, 2012). In actuality, the number of visitor showed in Figure 2 was fluctuated during 2007 to 2012 (JED, 2012). The number of tourists who visited Salak Sibetan Plantation Agro-tourism was very few and very far from the annual targeted number. Many constraining factors faced by the agro-tourism development includes the limited capacity (competency) of villagers in agrotourism, the limited budget to provide the many standard agro-tourism facilities, the less of promotion, and the limited agro-tourism landscaping. Utama (2007) mentions that the hardest barriers of agrotourism development in Bali is inadequate infrastructure, other barriers are limited public facilities, imperfect human resource skills, scarce investments, and insufficient government supports.

![Figure 2](image)

**Fig. 2.** The number of tourists visited to agro-tourism of Salak Sibetan plantation 2007-2012

As a modification to agro-tourism household (Brscic, 2006), Figure 3 presents the demand and supply of products and services of Agro-tourism of Salak Sibetan Plantation. Based on Figure 3, Village Ecotourism Network (JED) leads the agro-tourist market. Beside Sibetan Village (Karangasem Regency), the JED also organizes three other villages i.e. Kiadan-Plaga (Badung Regency), Tenganan-Pegringsingan, (Karangasem Regency) and Ceningan at Klungkung Regency (JED, 2012). Most of the tourists who visited Agro-tourism of Salak Sibetan Plantation were served by JED. JED also made contract agreement with 14 tour operators and private tourist agencies in...
offering products and services that are potentially demanded by agro tourist market. Furthermore, JED under collaboration with Agro-tourism of Salak Sibetan Plantation manager and local guides sold salak plantation package and many other attractions. There are six packages of salak plantation that are offered by Farmer Group of Agro Dukuh Lestari. Entrance fee to visit a package of salak plantation is IDR15,000 (approximately USD1.54) per person. The more visitors, the cheaper entrance fee, and they can u-pick some fresh salak fruits. If the number of visitor group is 6-10 persons, the entrance fee must be paid by visitor is IDR12,500 (approximately USD1.28) per person; whereas a group of visitor whose member is more than 10 persons, the individual entrance fee is IDR10,000 (approximately USD1.03). If the visitors are interested in harvesting more salak fruit, the owner helps to harvest and leads the visitors to pay it at Co-operative of Banjar Adat Dukuh.

The local guide offers many other attractions such as salacca winery, crispy chips, taffy and/or candy-making demonstrations; visiting inheritance building of Jero Dukuh Sakti who first developed the salak plantation; cane and bamboo handicraft; enjoying to native (traditional) foods and beverages. The visitor who wants to stay for some days also offered to overnight on-farm bed within villager house.

Based on financial report in 2012, JED generated annual profit of IDR34,182,222 (approximately USD3,505.87) from total revenue of IDR227,833,085 (approximately USD23,367.50). The revenue was also allocated to cost all of tour packages in amount of IDR43,993,550 (approximately USD4,512.16); contribution fee to four villages (Kiadan-Plaga, Tenganan-Pegringsingan, Ceningan, and Sibetan) in amount of IDR79,690,000 (approximately USD8,173.33); and the remained cost is to pay the management fee, administration and non-

![Fig. 3. Demand and offer of products and services of agro-tourism of Salak Sibetan plantation](image-url)
operational costs. In this moment, Sibetan village has received contribution fee in amount of IDR9,600,000 (approximately USD984.62) only. The income was saved in Co-operative of Banjar Adat Dukuh as reserve funds to serve the nearest future guests, to cover additional customary ceremonies cost, to improve agro-tourism facilities.

CONCLUSIONS AND IMPLICATIONS

In concept, agro-tourism is a special form of rural tourism and it could be differentiated with ecotourism. In agro-tourism, the farmer as an innovator offers various kinds of services and agro-tourism products whereas in ecotourism they are provided by the tour companies. The agro-tourism market of *Salak Sibetan* plantation is actually managed by Village Ecotourism Network. The implementation of both concepts was synergized.

The development of community-based agro-tourism of *Salak Sibetan* plantation during 18 years seemed very slow, might be due to limited of villager capacity (community competency) in agro-tourism, limited budget to provide many more standard agro-tourism facilities, lack of promotion, the agro-tourism profit leaked to ecotourism companies, and limited agro-tourism landscaping. Nevertheless, it is potentially sustainable when sustainability criteria (economically viable, environmentally sound, socially just and culturally appropriate) are fulfilled.

To continually support the sustainable agro-tourism of *Salak Sibetan* plantation, the government should intensively and consistently facilitate the local community especially through capacity building programs related to agro-tourism development. Some corporate social responsibilities (CSRs) activities might become additional financial sources to accelerate and improve the community-based agro-tourism development, sustainably.

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