

case study

Agritourism in Indonesia: A goat farm option

By Caleb Coppenger and Robert O'Halloran

Introduction

Tourism plays a large role in the economy of Indonesia, especially on islands such as Bali. Bali has long been acclaimed as representing one of the most visited tourist destinations in the world (Marin, 2000, p. 21)". Indonesia and the tropics are still a mystery to Westerners "In addition to the frequently visited and predominantly Hindu island of Bali, there are many more beautiful islands farther east in the country that are less visited and predominantly Muslim (Marin, 2000, p. 21)". One of these islands in eastern Indonesia is Buton. Buton as part of Bali will be the business location of this case, utilizing agritourism which highlights the operation of a goat farm.

The agricultural output of Indonesia contains some fairly unique products; for example, agar (seaweed), patchouli, moringa, nutmeg, cloves, pepper, coconuts, cashews, cacao, and coffee, along with a variety of fruits, that could provide interesting learning points for visitors from abroad (Petroman, et al., 2016). Therefore, many farmers are looking for ways to supplement the income provided by their farm, but they are not familiar with developing a business model for agritourism (Broccardo et al, 2017). Lattanzi (2005, p. a) noted that "Agritourism is anything you do to draw visitors to your farm for the purpose of selling them products or experiences".

The remote islands of eastern Indonesia are not known for their agricultural fertility, but they do have several unique agricultural outputs that have played a major role in the history of the world. For example, trees that produce cloves and nutmeg brought Arab and European travelers to these islands for centuries (Gils & Cox, 1994). Additionally, local teakwood, sandalwood, and cashew products are popular and still command high prices. There are also a variety of unique plants inland, as well as others growing in the ocean (Karlina et al, 2018; Hakim et al, 2017; Akram et al, 2018). "Major mariculture commodities of the area are seaweed, groupers, lobsters, and winged pearl oysters (Aslan et al, 2015). There are also a variety of palm and coconut trees that are an essential part of almost all tourism centered coastal landscapes.

Mangrove swamps and the ecosystem of coral reefs are also the focus of many conservation organizations and have captured the imagination of innovators pursuing agriculture food production from the sea (seaweed, etc.). "Also, there are endemic wildlife species found

in this region in greater numbers than anywhere else on earth (Akram et al, 2018; Nugraha, 2018). The island also has large deposits of natural asphalt and oil sand (Yuniarti, 2015, Ma, 2012)."

Agritourism Development

Tourism has long been favored as a development option and officially endorsed as such across the globe. More than three decades ago the World Tourism Organization (WTO) stated that 'world tourism can...ensure the steady acceleration of economic and social development and progress, in particular in developing countries' (WTO, 1980 p. 396) and since then tourism has become fundamental to the development policies of an increasing number of countries and sub-national regions around the world (Lee & Chang, 2008). An assessment of the relationship between tourism and development should, according to Moscardo et al. (2013), be focused around capitals-defined, regarding community well-being, which necessitates an exploration of the community's perceptions of their own well-being."

Specific sectors of tourism align with tourism development projects. Indonesia is uniquely positioned to offer a variety of different types of tourism combined with ecotourism because of its extensive coastal areas, particularly rural tourism development (Hengky, 2018, Singgalen, & Simange, 2018). For example, sustainable tourism and ecotourism are concerned with experiencing nature by observing it and learning about it. Local community involvement and subsequent benefits are integral and essential to sustainable tourism development. "The implementation of ecologically sustainable tourism safeguards ecosystems and enhances local societies and economies through ecotourism initiatives (Rosyidie et al, 2018;p.158)."

Agritourism deals with observing, and becoming involved in, how mankind is cultivating land and animals to generate income. The concept of agritourism is widely considered in the literature, in particular the extent to which it may revitalize ailing rural economies and societies, yet consensus on a definition remains elusive; typically, definitions reflect particular contexts (Philip, Hunter & Blackstock, 2010). Agritourism has been defined by some as "farming-related activities carried out on a working farm or other agricultural settings for entertainment or education purposes."

"Direct forms of agritourism, where they exist, are frequently utilized as a rural development strategy to provide income (Thomas et al, 2018; p. 150)." Around the globe, agritourism activity examples include

Caleb Coppenger and **Robert O'Halloran** are affiliated with East Carolina University.

wine tasting at a vineyard, apple and strawberry picking at farms and much more. There has been a recent rise in agritourism, as well as concern for supporting “causes” throughout the world (Arroyo et al, 2013). Many of the tourists that visit Buton Island in eastern Indonesia, i.e. more rural areas, are not looking for a luxurious hotel to stay in. This is fortunate because there are no accommodations that meet international standards. Guests want to be able to experience authentic Indonesia and see how life is on small islands. There is an increasing desire for tourists to have an “authentic” experience in another country, and this includes on farms (Flanigan et al, 2014). Agritourism can also enhance the skills of local farmers in more sustainable farming practices. Studies have highlighted the contribution of agritourism to ensuring food supplies and improving organic practices, given that it provides a platform for tourists and locals to share their knowledge (Karabati et al, 2009).

Many visitors are interested in visiting and experiencing local farms and seeing where food comes from and how it is produced. “Specifically, agritourism, and the consumption of which, according to Arroyo, Barbieri, and Rich (2013;39-47), has increased significantly over the last decade. Past studies have shown the contribution of agritourism to skill development (Barbieri & Mshenga, 2008, Barbieri et al, 2008, McNally, 2001, Nickerson et al (2001), Tew & Barbieri, 2012) and in improving competency for farmers (Brandth & Haugen, 2011). Agritourism is a suitable way to increase income and assist in dispersing risks (Tao & Wall, 2009).

As Buton grows as a tourist destination, agritourism and ecotourism have the opportunity to grow hand in hand. Agritourism also provides the opportunity for some food and beverage (F&B) operations via farm to table fruits and goat milk (Corsi et al, 2018; Paciarotti & Torregiani, 2018); “Extending tourism into the agricultural sector through the development of agritourism is, in principle, both logical and potentially fruitful in enhancing the well-being of the local community (Naidoo and Sharpley, 2016;p. 19).” Tourists can be encouraged to visit and participate in such activities offered by the community which could also be

proposed in a holiday package marketed externally. This tactic may help to promote understanding of the locals’ way of life and traditions and result in meaningful learning experiences amongst hosts and guests whilst enhancing income for the members of the community offering the tourist activity (Naidoo and Sharpley, 2016).

Tourism visitation in Bali mostly has been showing growth and that should be a mean positive visitor impact for Buton generally and the Goat Farm in particular. The following tables (Table 1. Number of Foreign Visitors Arriving Directly by Global Region to Bali, 2014-2018, Table 2, Country of Origin of Bali Tourists) show positive global visitor profiles and visitors by country to Bali. The regional data show substantial growth from America’s visitors (North and South America) and a level of decline of visitors from Europe. Note: ASEAN visitors refer to those visitors from Malaysia, Singapore, the Philippines and Thailand. Oceania referring to Australia, New Zealand etc.

The visitor data by country of origin, shows the top ten countries below in Table 2, Country of Origin of Bali Tourists, shows China the leading generator of visitors followed by Australia. The goals and objectives will be to determine how to attract some of these visitors to Buton and the Goat Farm.

East Indonesian Farmer Tourism Businesses

Most of the farmers in eastern Indonesia have small farms on land typically inherited from their parents or are tenant farmers. This is similar to other parts of Indonesia, such as the more populated island of Java (Winarto et al, 2000; Marjuki et al, 2000) and therefore there are successful benchmarks available for agritourism. Farmers usually live on the farms, but the farms are not typically the main source of their income.” Farms are, however, an important supplement to a variety of other activities such as fishing, construction, and small retail operations in their homes.

Finding a variety of ways to generate income in the Indonesian market economy is a part of almost everyone’s life. Many people are

Table 1
Number of Foreign Visitors Arriving Directly by Global Region to Bali, 2014-2018

	2014	2015	2016	2017	2018
ASEAN	483,487	422,986	416,428	379,264	553,728
ASIA	1,236,816	1,424,995	1,839,892	2,193,676	2,410,620
AMERICA(S)	177,940	214,518	184,373	190,947	362,357
EUROPE	736,188	842, 436	1,151, 925	1,675,317	1,406,086
OSEANIA	1,050,422	1,042,001	1,202,805	1,062,855	1,282,886
AFRICA	18,137	27,830	8,398	7,965	7,965

(Badan Pusat Statistik Provinsi Bali (2018) <https://bali.bps.go.id/statictable/2018/02/09/27/jumlah-wisatawan-man-canegara-yang-datang-langsung-ke-bali-menurut-kebangsaan-2013-2017.html>).

Table 2

Country of Origin of Bali Tourists

No.	Country	Tourists
1	China	1,366,032
2	Australia	1,061,287
3	India	265,336
4	Japan	252,497
5	United Kingdom	240,007
6	United States	190,307
7	France	179,086
8	Germany	177,321
9	Malaysia	165,541
10	South Korea	162,857

"Bali – Statistics." Bali Government Tourism Office. 17 July 2018. Archived from [the original](#) on 7 September 2016. Retrieved 22 July 2018. IN <https://en.wikipedia.org/wiki/Bali> [Accessed 11-11-19].

living on an income that would be considered below the poverty level by the world standard. Through agritourism, the appeal and demand for local products may be stimulated (Lobo, et al, 1999), and it may help farmers to develop and maintain traditions as well as develop new techniques of farming (Malkanathi & Routry, 2011). Entrepreneurs Chase and Howard observed that Indonesians are amazing in their ability to make ends meet and maintain a positive attitude.

Business Dilemma

Current Business Scenario

Two U.S. citizens, Chase and Howard, had lived in the largest city of this island, Baubau. The uniqueness and opportunities of Indonesia originally brought Chase and Howard to the country, and after living there and working as educational consultants for several years they both individually recognized the possibility of helping to start businesses in eastern Indonesia.

Chase managed a branch of a tourism company for several years and facilitated the guiding of American guests to small islands to experience authentic island life. Additionally, he guided guests for scuba diving. He started to see how agritourism could be a nice supplement to the adventure and cultural tourism already provided. His thought was that it might also provide an opportunity for the tourism company to be involved in a corporate social responsibility (CSR) project (farm agritourism project) and positively impact a community while hopefully making profit.

For several years Chase and Howard were looking for ways to grow

their businesses, one working with an adventure tourism business (Chase), and the other working with an agriculture and animal husbandry business (Howard). Both men provided some expertise not available in the local area and the ability to make international connections to America that the locals could not. The goal was for these businesses to ultimately provide an ongoing source of income for the Indonesian owners and employees and be a catalyst to aid the development of several small villages. Chase and Howard could see the potential in tourism helping raise the income for the farm, but it was difficult to know just how tourists could help and how this could be done in a sustainable, and more specifically, financially sustainable way.

What they needed to do was generate additional demand to this rural area and or integrate recreational and agritourism activities when visitors arrived as part of their visit. The Travel Industry Association of America research noted purposes for trips to rural areas as leisure, visiting friends and relatives, outdoor recreation, entertainment, personal and or other business or pleasure. Perhaps agritourism at the farm, if developed sustainably could be part of these activities. The idea is to bridge the gap between entertainment and education, "edutainment" could be found on the farm. Table 4, Agritourism Activity Options shared by Lattanzi (2005) provides some activities for consideration.

A milk goat farm recently had been established in a place where Chase often took guests for cliff jumping, and a partnership in that area opened several opportunities. The farm is located on the coast of Buton, with the island of Muna close by, where the Strait of Buton is the narrowest. This narrowing of the ocean in front of the farm, creates a current similar to a river, that alternates flowing north and south depending on the tide, and which is suitable for a variety of recreational water activities. The goal was to integrate the milk goat farm into visitor tourist activities.

Table 3

Buton Tourism Activities, lists some of the recreational tourism activities in the area

Buton Tourism Activities
Cliff Jumping
Fishing
Hiking
Kayaking
Rock Climbing
Scuba Diving
Spelunking
Stand Up Paddle Boarding

Milk Goat Farm: Agritourism Challenge

Fresh goat milk is a perishable item and will go bad within a couple of hours if not refrigerated. Keeping it fresh is difficult in places where there is no electricity. Most milk sold is from cows and goes through a more intense homogenization process. Goat milk does not separate into cream like cow milk and is more like human milk and can be consumed by many children that are lactose intolerant (Hodgkinson, 2018). For pasteurization, the milk is heated to 165 degrees Fahrenheit for fifteen seconds to kill superficial germs, but still maintain its high nutritional content (Panchal et al, 2018). It is then rapidly cooled in a refrigerator to seal in freshness. Because it is different than cow's milk, and because of some cultural issues, goat milk is considered a type of "medicine" that Indonesians will pursue as a home remedy for certain health issues. This uniqueness and the smaller volume produced allows goat milk to command higher prices than cow milk. Goats are efficient milk producers and require less feed and water than cattle (Turkmen, 2017). Goat farms in Indonesia are usually organic in that they eat high protein forage that is cut daily, as well as the byproduct of tofu production to add protein to their diet and aid in milk production."

This goat farm provided the first fresh milk available in the province, and the goats had been imported from other parts of Indonesia, where similar agricultural projects had been successful. The farm provided milk to customers in the largest nearby city that had about 100,000 residents, but the income from these milk sales was just enough to cover the expenses of operating the farm (Khanal et al, 2014).

There is no electricity out at the goat farm so each morning and evening, immediately after the goats are milked, the milk must be delivered to a house that is about a 30-minute drive away, where the pasteurization process took place. The milk was immediately placed in a refrigerator and then transported an hour later and delivered throughout the city. The milk could stay fresh for at least three days with refrigeration. It is delivered to individuals that have ordered it in 300ml bottles, and the farm is currently producing about 3 liters a day, which is 10 bottles. This is an appropriate amount to meet the current level of demand, but there is potential to increase the daily milk supply in the future. Some additional options for the disposition of excess milk could be making goat milk soap and possibly selling the milk in the vicinity of the farm for guests to consume immediately. The process of product supply chain and product safety is vital for distribution and the success of their goat milk venture.

One of the questions that Chase and Howard are considering is whether the active parts of the goat farm should be included in a tour, or just the rural setting and possible activities around where the farm is located (Fleischer, 2018). There are hundreds of farms on Buton, farming a variety of interesting crops, but most of them are just barely making enough to get by and must supplement their income with other activities. One idea was to utilize one of the local farm assets, an animal

husbandry business, operating a goat farm to contribute to better nutrition to the island by providing fresh goat milk and integrating the goat farm with agritourism practices. Other supplies of milk sold on the island are the less nutritious Ultra-High Temperature (UHT) cow's milk, with a shelf life of several months without refrigeration (Haenlein, 2004).

Tourists were interested in spending time in the area near and on the farm. Visitors helped clear land and also enjoyed the ocean and experienced cliff jumping. Tourists expressed interest in the farm, wanted to learn more, and were willing to help the farm succeed. The adventure tourism side of the tourism business was able to turn enough profit to keep growing, but the agricultural business was just barely sustaining itself through goat milk sales in Baubau.

Tour Activity Options

Another Indonesian friend of Chase's has escorted several groups of tourists to this area, who drank from freshly picked coconuts, and grilled some fresh fish on an open fire on the coastline, in addition to swimming from the beach at the farm. There is also a little motorized raft that operates some of the time and ferries people out to a nearby island for a small fee. There are several little selfie spots on the island set up for tourists, plus good places for cliff jumping (30 feet down) into the ocean.

Several Indonesian friends that had visited the farm over the years had expressed interest in the possibility of being able to consume fresh goat milk while visiting the farm. Some tourists have been interested in the farm and others were not, and those that wanted to visit typically did not know how they could get permission to enter the farm. For hygiene reasons a sign at the farm is posted, asking people to stay back from the goat area. This is a preventative measure to protect the female goats from germs. Also, there is the possibility that unsupervised human interaction will impact the female animals, get them excited and impact milk production, especially if visitors want to feed the goats. The male goat pen is located near the entrance to the farm's compound where visitors can interact. In addition to goats, the farm has access to significant amounts of land in the immediate area, some of which has large trees that could possibly support a ropes course or zip line and other portions of land that could be used for agricultural projects.

These businesses have potential for solid growth and are creating things of value in remote areas and providing a living for several families, but the farm needs some help. The tourism company is allowing a cross-cultural conversation to take place between the residents of these islands and those from the outside. It is possible for guests to spend some time at the farm at the beginning or end of their trip when they are in the city of Baubau, while hopefully providing an additional income channel for the farm as well as more variety in their tourism activities. For any cooperation between this agricultural business and tourism business to thrive, there needs to be mutual benefit for both of them. The question is, what are some ways to integrate the

farm into the operations of this adventure tourism business whose activities currently include ecotourism and cultural tourism?

By finding ways to tie tourism with the farm and the daily lives and activities of normal Indonesians, tour operators can start to tap into almost limitless opportunities among the thousands of islands of eastern Indonesia (Jiang & Wang, 2018). Agritourism can have a role in making this happen (Schilling et al, 2014). "What are the best ways for the farm and the tourism company to partner together in agritourism to help both businesses and farmers like these get ahead financially and provide room for them to grow?"

The Task at Hand

As a consultant on this project you are being asked to develop a plan of action that will address the following questions and recommend ways to implement the plan.

1. What is the best way for tourism companies to connect international and domestic tourists to agricultural businesses in eastern Indonesia in a way that is mutually beneficial for both the tourism business and the farmers?
2. How can Indonesian farmers set up their farms so that they would be interesting for foreign tourists to come visit?
3. Should agritourists be able to participate in farming activities and sample the products at the farm, whether that be goat milk or fruits, nuts, and vegetables?
4. What is the best way to incorporate food and beverage services into the operations of a farm where the food and beverages are produced?
5. How can tourism companies and farmers ensure these agritourism efforts are being conducted in a sustainable manner?
6. Should a rural tourism development plan be driven by small businesses like those in the case study or by the local government's tourism department?
7. Finally, what role should Indonesian tourism play in the economic development of agritourism opportunities?

Conclusion

For the goat farm agritourism entrepreneurs growing the international tourist market for agritourism needs to be accomplished concurrently with a marketing effort targeting domestic tourists. Domestic tourists are more familiar with these products and might be interested in visiting the farms. Many Indonesians from larger cities are familiar with the flora and fauna of the tropics, most have never tried goat milk, and rarely get the chance to drink from young coconuts that have just been picked from a nearby tree. Indonesians visiting small and remote islands have historically been interested in activities such as grilling fish that are freshly caught and drinking coconuts that have just been picked. The milk goat farm could potentially offer these services but would need to think how to package and provide them (Barbieri,

et al., 2016). In the decision-making process they need to consider that catering to international tourists would probably provide more income per visit, but domestic tourists may provide more stable income.

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