



## Analysis Prospects for Future Development of Silk Sari because of Agrotourism Activities, Abiansemal, Badung

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**Abstract**—This study aims to analyze the prospects and strategies for future development of Silk Sari Segara Agrotourism, the obstacles faced. The method used was interviews with a purposive sampling approach to determine key informants, followed by the snowball method to obtain as much data and information as possible from other informants. From the results of the interview, it was then studied using a SWOT analysis and narrated in descriptive form. The results of this study revealed that the prospects and future development strategies of the Sari Segara silk agro tourism activity have the potential to be developed in the world of tourism in Bali which has a variety of businesses, especially in the process of quantity, quality of production and marketing which is carried out with traditional looms besides that it is very useful to use. Weaving processes that still use non-machine weaving tools (ATBM), namely in the form of traditional weaving tools as a superior activity of local wisdom. Thus, support from the government and the private sector are needed to help facilitate, market and support the surrounding communities. Signs are needed to prevent environmental damage and pollution. It needs to be socialized to silkworm breeders in order to maintain the balance of environment. Entrepreneurs/managers are expected to maintain harmony and culture in the community around the agro-tourism business site. The constraints faced in managing agro-tourism businesses today must be immediately addressed so that the quality of production can compete both nationally, regionally and internationally and sustainable.

**Keywords:** agrotourism; future; local wisdom; prospect; sustainable; swot analysis

### I. INTRODUCTION

Bali is a tourist destination that has a variety of unique and attractive tourism resources as a tourist attraction for tourists to come to Bali. The rapid development of tourism in Bali has contributed a lot to the development of Bali such as the growth of hotels, restaurants and other tourism support facilities. However, the rapid development has threatened the preservation of Bali's natural environment, with a variety of tourism potentials, both from the physical and cultural environment, especially the agricultural culture in Bali and changes in the structure of Balinese life. The impact of tourism on Bali's natural environment can be seen clearly

from the shrinking agricultural land. In Bali, which according to JICA reaches 100 Ha/year (Sukma, 2016). Furthermore, it was explained that rice fields in Bali were starting to be pressed by tourism needs coupled with the desire of foreigners to establish hotels, inns and restaurants in the coastal areas of Bali. The fate of rice fields in Bali from year to year is increasingly pressed by tourism interests, when Bali was designated by the Indonesian government as the entry point for international tourism in Repelita I (1969-1974) which was accompanied by the designation of Kuta and Sanur as the open tourism areas of Nusa Dua as areas. Closed tourism (exclusive) and Ubud along with other tourist villages in North and East Bali as a natural tourism area (tourism

village). Based on these negative impacts and the hope of realizing healthier and more beneficial tourism in the future, several parties have started to aggressively promote sustainable tourism development. Agro-tourism as an alternative to sustainable tourism is part of tourism that utilizes agricultural business (agro) as a tourism object that aims to expand knowledge, experience recreation, business relations in the field of agro-tourism can provide a multi-player effect through creating new jobs, improving income distribution, added value, as well as agricultural development. Agro-tourism is also able to accommodate demands for the national economy to continue to grow while at the same time fulfilling the principles of sustainable society and equity, both between individuals and between regions (Agung, et.al. 2015 ).

Segara Silk Sari Agrotourism is one of the only agro-tourism in Badung Regency which has been built since 2008 with an area of approximately 0.4 hectares. Sari Segara silk agro-tourism is an agro-tourism with a silkworm (*Bombyx mori*) which is specially developed to ensure the quality of silk fabric production. The quality of silkworm cocoons produced by hybrid silkworms is better than silkworm cocoons of Chinese and Japanese types (Deni, et.al., 2019)

As explained earlier, the importance of this research is to reduce the depreciation of agricultural land, especially rice fields which have begun to decline which is estimated to have shrunk by about 1000 Ha/year due to the need for tourism facilities in Bali, by promoting sustainable tourism development. Besides, this agrotourism can provide multi-player effects as described above and so on. In this study, it is not only researching the problem of silk cloth production as well as how it is marketed with the use of simple tools, namely traditional tools. This is supported by the statement (Adi, 2012) that the silk sari segara agrotourism, in the village Sibangkaja, Abiansemal, Badung is a worm farming business sut agrotourism which was founded in 2008. Silk sari segara agrotourism provides tours for visitors from the beginning of the management to the end. Apart from being a place for agrotourism for silkworm cultivation, silk sari segara agrotourism is also a manager for threads into clothing. Silk cloth is a product of excellence besides silk scarves, silk batik and others. From the results of observations in the field it has been found that most visitors are still dominated by students and this result is

supported by (Effendi, et.al. 2015) who say that market segmentation is still dominated by 99 percent of students are a very massive factor in their development market in Bali.

Indonesia has long been recognized by the world as a country with high culture. The abundance of traditional Indonesian diversity, one of which is silk cloth from silkworms (Murdiyanto & Jasmine, 2017). Activity agro silk sari immediately located in the village of Sibang Kaja, Abiansemal, Badung is one alternative tourism destination in Bali which has a unique agro silkworm with its many attractions ranging from the process of cultivating silkworms pupate that are ready to be processed into silk thread, in units of other silk fabric production process are treated with a unique traditional looms which is the local knowledge activities in the area which is maintained by the entrepreneur/manager as an object of tourist attraction, this phenomenon is a mainstay for the manager to try to maintain its sustainability. In other words, local wisdom resides in local culture. As has been stated by Bosch, what is important is to develop the creativity of cultural actors themselves so that they can foster " Local Wisdom " when facing the attacks of foreign cultural influences (Ajip, 2009 ). Agro-tourism activities will indirectly increase the perception of farmers and the surrounding community on the importance of preserving natural resources and the environment. The development of agrotourism in turn will create jobs, because this business absorbs labor from the surrounding community so that it can hold back and reduce the increasing flow of urbanization. The benefits that can be obtained from agrotourism are preserving natural resources, preserving local technology, namely by using traditional tools and increasing the income of farmers and communities around the agro-tourism location (Johan , 2020)

B FEW constraints faced to produce silk fabrics including silk, limited raw materials are still imported from outside Bali, in addition to the land area of feed that is still lacking. Now they work together with groups of silk farmers in Bali are already running are in the area K abupaten Jembrana and K abupaten Karangasem. But this agro an agrotourism very potential to be developed in the world of tourism in Bali has future prospects are very well supported ol er role of the community around it , because it is in the middle of residential areas with accessibility agrotourism easily dijangka u and It has a short distance

from other tourism objects, such as the Tirta Yasa Swimming Center. In addition, this agro-tourism is the only natural silk agro-tourism in Bali that uses traditional weaving tools as one of the uniqueness of local wisdom that needs to be preserved. Although the market segmentation is still less varied, it is only limited to students, but due to the increasing number of tourist visits from both domestic and foreign tourists, from the results of interviews with the operational manager, these conditions will continue to be developed towards sustainable agro-tourism. To achieve sustainable agro-tourism development, it must be environmentally sound. Apart from the high penetration of globalization, whether it is realized or not that the development which is being intensified by various parties also has serious implications for the ecological order. Sometimes, human exploitation of nature on a large scale, supported by advances in science and technology, makes the environment more damaged and degraded, thereby reducing the function and carrying capacity of the ecology. This is in fact inversely proportional to the principle of local wisdom which emphasizes environmental ethics in the development of a region. Local wisdom is one of the things that must be considered in environmental protection and management and conservation activities. In Law no. 32/2009 states that environmental protection and management includes planning, utilization, control, maintenance, supervision and law enforcement in which all activities related to environmental protection and management must pay attention to several things, including: 1) diversity of ecological characters and functions; 2) population distribution; 3) distribution of natural resource potential; 4) local wisdom; 5) community aspirations; and 6) climate change. Then in the explanation of Article 2 letter (l), it is stated that what is meant by "principle of local wisdom" is that in environmental protection and management, we must pay attention to the noble values that apply in the order of community life (Smaradus et al., 2017). In other words, environmentally sound development is a requirement that must be met so that development can be sustainable. Environmental impact analysis is one of the tools in an effort to carry out environmentally sound development (Soemarwoto, 1999).

The indicators used to discuss sustainability include the environment. It can be interpreted that the tourism industry (agro-tourism activities) must be sensitive to

environmental damage such as waste pollution, accumulated garbage, and the attitude of the population that is not friendly. In other words, environmental aspects emphasize environmental sustainability, land use, conservation of water resources, protection of the atmosphere which will affect climate change. Another aspect besides the environment is socio-culture. The emphasis in socio-culture is more on cultural resilience, social integration, local population satisfaction, security and safety, public health and economic aspects that emphasize more equal distribution of business and job opportunities, business sustainability, business competition, business profits and taxes, profit and loss, exchange. international ownership, proportion of local ownership and accountability (Utama & Junaedi, 2018).

The agro-tourism activity located in Banjar Lateng, Sibangkaja Village, Abiansemal, Badung is called Segara silk agro-tourism which is familiar to the community and is often visited by those who want to get to know silkworms more closely. This agro-tourism has been around since 2008, visitors can get to know and learn as a forum for education about the process of cultivating and making silk threads and silk fabrics using traditional weaving tools which are unique to local wisdom in the region. Many foreign tourists are interested in visiting this silkworm agro-tourism, such as foreign tourists from England, Japan, the Netherlands, India, Singapore, China and Malaysia. They are shopping for silk threads or ready-made silk fabrics. In addition, Balinese people buy silk threads for ceremonial equipment, for example used for barong hair. The need for silkworms in Bali is actually still lacking. Each month at least take up to 10 tonnes of silk thread, but until now the production of silk in Bali could only produce half of these requests and even then already benefit from the support of a group of silkworm breeder in Bali (Wiratmi, 2018).

It seems that the potential for silkworm cultivation is very promising because the craftsmen are still importing silk threads and sometimes the production of weaving stops. The businessman is trying to multiply the silkworm farmer groups. Now the company is doing socialization with the cocoon products, the company will definitely buy it, said the business owner. Other efforts on the part of the entrepreneur to expand their business, for example, cocoons are transformed into souvenirs, cut in various

shapes, colored and then stringed into hair ornaments. The obstacle that is still a problem is the seeds in the form of eggs that are still imported from Soppeng because not every cultivator can breed by themselves with the excuse of maintaining the quality from disease attacks. This company can produce eggs in small quantities. This company does not have the tools and experts to check it in the laboratory, so it still orders about 100,000 egg seeds every month.

Previous related studies have conducted similar study that examine agriculture development and the obstacles. The results study conducted by Kuznetsova et al. (2020) revealed that such a strategic planning system is needed as part of the legal framework of public administration, which would create the conditions for the formation of healthy competition of manufactured products not only domestically, but also on the world market. Meanwhile, the results study conducted by Putri et al. (2021) indicated that It takes initiation from the plantation owners and the government to make a village an agrotourism village.

Based on the background above, the purpose of this study is (1) to determine the production process of Sari Segara, Abiansemal, Badung agro-tourism silk fabrics as superior local wisdom activities, (2) to determine the obstacles faced by Sari Segara silk agro-tourism activities, Abiansemal, Badung, (3) to analyze the future prospects of Sari Segara Silk Agrotourism, Abiansemal, Badung. The importance of this research is to obtain benefits and contribution as consideration to make program of alternative development strategy of tourism destinations in Bali. In detail, the importance of this study is expected to be useful as follows: (1) as information for agro-tourism actors that agro-tourism activities are a synergy of income sources between farming and sales of tourist attractions that provide employment opportunities for local communities and conservation of natural resources and the environment; (2) as information in executive policy making regarding silkworm agro-tourism which has economic, social and environmental impacts; (3) for science contributes science and technology to the development of agro-tourism which is beneficial for the economy and the welfare of the community.

## **II. CONCEPT**

To provide a clear understanding of the

content or intent of the concept or term in question, so that the reader does not perceive it in another way. These concepts are the concept of silk agrotourism prospects Segara Sari Abiansemal, Badung.

### **Prospect**

Prospect is a picture of the continuity of a business whether there is still a chance to be successful, can still survive or risk going out of business. According to the Big Indonesian Dictionary (KBBI), the notion of prospect is possibility and hope. In simple terms, this definition means if prospects are things that might happen in a matter so that they have the potential to have a certain impact. In this case, prospects can be interpreted as things that have the potential to provide big profits so that the wheels of business can continue to spin.

### **Agrotourism**

Agrotourism or agro-tourism is defined as a form of tourism activity that utilizes agrobusiness (agribusiness) as a tourist attraction with the aim of expanding knowledge, experience, recreation and business relations in the agricultural sector. Agrotourism is part of a tourist attraction that utilizes agricultural businesses (agro) as a tourist attraction. The aim is to broaden knowledge, recreational experience, and business relationships in agriculture. Through the development of agrotourism that emphasizes local culture in utilizing land, it is hoped that it can increase farmers' income while preserving land resources, as well as maintaining local culture and technology (indigenous knowledge) which are generally in accordance with the conditions of their natural environment (<http://database.deptan.go.id>)

### **Cultivation**

Cultivation is a business that is useful and gives results (Big Indonesian Dictionary, 2002: 150). In addition, the definition of cultivation is a planned activity of maintaining biological resources carried out in an area of land to take the benefits/yields of the harvest. Cultivation activities can be considered as the core of farming. Animal cultivation (husbandry) involves raising feeders (young animals) or seeds (including fry and nener) on a certain land for a period of time and then selling, slaughtering them for meat and other body parts, taking their eggs, or milking them (dairy). The process of processing cultivation products is usually not part of the cultivation itself but is still considered a link in the livestock farming business chain.

### **III. METHOD**

This study was conducted in Segara silk agro-tourism in Sibang Kaja Village, Abiansemal District, Badung Regency. The types of data used in this study are primary and secondary data. Primary data is carried out through surveys and interviews at business locations using a questionnaire instrument. Secondary data were obtained through literature studies, relevant books, research results, and analysis related to research topics originating from electronic publications. The collected data were analyzed through qualitative data analysis. Qualitative data were obtained based on various information from respondents contained in a list of questions. The sampling technique used in this study was interviews using purposive sampling technique, which is purposive sampling of people who are thought to be able to provide answers to the questions that will be given. Determination sampel is based on its association with the object under study, by doing informant determination keys and informants supporters. Determination informant key selected Mr. Edy Mursabda as Operations Manager of agro silk sari ocean that has the following criteria: a) have a depth information about agrotourism silk sari immediately, b) has sufficient experience long according to the field and professionals in the work that occupied this time, c) accepted and respected by people who are in the environment of Sutera Sari Segara Agrotourism. Meanwhile, other supporting informants to find out the prospects for agro-tourism development in Sibang Kaja Village were obtained from visitors (Effendi, et.al. 2015). Instruments used in this research using interview guides (interview guide) and a questionnaire, a process of interaction and communication between collector of data with the respondent, so it was done by asking the respondents and the answers are recorded and recorded with the recorder. From the results of the interview then studied using a SWOT analysis and narrated in a descriptive form. Data was analyzed using qualitative descriptive analysis to derive from a clear picture and on the development of agro-silk sari soon as tourism education is very promising in the village Sibang Kaja, especially in the production process of silk fabric from the cultivation of silkworms to weaving the silk fabric made with traditional weaving tools as the flagship of local wisdom activities in the region, the obstacles faced and future prospects. In this study also using a SWOT analysis conducted to determine

alternative development strategies by: 1) identifying the strengths and weaknesses (internal factors) and opportunities (external factors) that exist in Sutera Sari Segara Agrotourism; 2) SWOT analysis, this analysis is done by determining the internal factors (strengths-weaknesses) and external factors (opportunities-threats) that exist in Sutera Sari Segara Agro Tourism; 3) conclude the results of the SWOT analysis by compiling the IFAS (Internal Factor Analysis Summary) and EFAS (External Factor Analysis Summary) tables.

### **IV. RESULTS AND DISCUSSION**

From the results of observations and observations in the field, Segara Sari silk agro-tourism is an agro-tourism that has the potential to be developed in the tourism world in Bali which has very good future prospects supported by the participation of the surrounding community because it is located in the middle of a settlement with accessibility agro-tourism which is easily accessible and has a close distance to other tourist objects, namely the Tirta Yasa Swimming Center. This statement is the result of the author's own observation survey in the field because the author also conducted a review of the Tirta Yasa Swimming Center tourism object, which is not far from Segara Sari Silk Agrotourism.

Bali is an area that is rich in nature and beautiful to look at when traveling to the Tabanan region which is famous for its terraced rice fields, Bedugul with the Candikuning Botanical Gardens, or continuing north in Singaraja to witness the expanse of clove trees owned by farmers with robusta and arabica coffee plants. If you continue combing the journey to Gianyar with Tampaksiring, continue north to Bangli which is famous for its Kintamaninya hill. Then in the Karangasem regency, tourists can see the sugar bark forest area. As a whole, it is a production center area which is one of the national developments in the agricultural sector in a broad sense. It can be concluded that the potential and opportunities for agro-tourism development in Bali Province are very large in every sub-sector that spreads in every district/city. During 2011-2015 the contribution of the agriculture, forestry and fisheries sectors continued to decline. In 2011 the contribution of the agricultural, forestry and fisheries sectors was 27.79 percent, then decreased each year and in 2015 the contribution became 25.47 percent . The growth rates of the agriculture, forestry and fisheries sectors also tend to fluctuate and are relatively slow. This

indicates that there is a tendency for the structural transformation of the economy to occur and changes or shifts in the role of the economic sector in Bali. Therefore, it is necessary to conduct an analysis of the existence seen from the role of the agricultural sector and sub-sector at present and in the future whether it is still a leading sector or will experience a change in its role to become a non-superior sector.

There are still many things that need to be done in the Sari Segara Silk Agro-tourism business in addition to the obstacles that have been felt so far. To achieve sustainable agrotourism, among others, is agrotourism that can meet present and future needs as aspired by this agrotourism manager. Then it does not damage the nature or the environment and the culture of the local community so that it can be passed on to future generations. This principle has certainly not touched the agrotourism business that has been built since 2008. The requirements have not been touched, especially for providers of mulberry feed provided by silkworm breeders who spread throughout Bali. as in K abupaten Jembrana in around D esa Banyubiru and K abupaten Karangasem at around D esa Sidemen and other places will also be planned to set up groups of silkworm breeder. In accordance with the second principle, it is hoped that it will not damage the nature / environment even though the location of the livestock is located on agricultural land which is not free from land expansion when encroaching on forest areas.

In principle, sustainable agrotourism is agrotourism that still pays attention to the balance of nature/environment, culture and economy so that agrotourism continues. Moreover, the Sari Segara Sutera Agrotourism is located in the middle of a settlement, the cultural aspects of the community must be considered.

In other words, the manager must be able to provide economic benefits for all related parties, be it the private sector government and local communities. In addition, to support sustainable agrotourism, the attitude of tourists must be responsible for the environment and culture of the areas they visit, in this case at the Sutera Sari Segara Agrotourism site. In addition, tourists must respect the customs of residents of tourist destinations, namely residents of Sibang Kaja, Abiansemal, Badung villages. It can be concluded that sustainable agrotourism must include quality, balance and environmental, cultural and human aspects.

To meet present and future needs, Indonesia still imports a lot of silk threads due to a shortage of raw materials for cloth handicrafts. This is the story of one of the efforts to survive a small unit of the magic silkworm chain (*Bombyx mori*) from egg to cloth in Badung Regency, Bali. It is interesting to see the cultivation of silkworms, which not only miraculously produces beautiful and strong silk threads, but these caterpillars teach about adaptability and the balance of life, namely new life after death.

Agrotourism Sutera Sari Segara, Abiansemal, Badung which opened in 2008, this place is often visited by school children and students as well as tourists from various regions to get to know up close the production process of silk cloth with traditional looms as a leading activity of local wisdom in the region. At first, they were invited to watch a video about silkworms which was explained directly by the management manager. After that, visitors are invited to see the silkworm cultivation located in Banjar Lateng, Sibang Kaja, Abiansemal. In the middle of a residential area that is full of their respective activities, the silk cultivation site is located in the middle of a residential area with an area of about 40 acres or 0.4 hectares which is full of mulberry plants. This garden is not visible from the outside because there are houses of the village community. The entrance gate is made of iron with balebengong which is located in the corner of the site with the gate which is always tightly closed when there are no visitors.

Upon entering the gate, you can see several blocks of animal cages such as Timor deer, turkey, and Bali Starling. The audiovisual room is at the very front, whose function is to welcome groups of students or tourists who want to start enjoying the magic of silkworms, followed by seeing this silk thread spinning business. After that, an introductory video is presented and how to cultivate silkworms starting from eggs then developing into small caterpillars turning into large cocoons then processing them from cocoons/cocoons into silk cloth.

Cultivation of silkworms is currently still on a small scale and not for production purposes. However, it will continue to be developed on a large scale in order to meet consumers both at home and abroad. Therefore, at the beginning of the Sari Segara Silk Agro Tourism, it was used as a science tour so that visitors could understand the silkworm cycle from the beginning of its

development to become silk cloth .

### **Production Process of Sari Segara Abiansemal Agrotourism Silk Fabric, Badung**

According to the agro-tourism business manager, this business is quite popular with the name Sutura Sari Segara Agro-tourism. In this silkworm cultivation tourism object, it starts from crossing butterflies to produce silkworm eggs. The eggs that hatch into small caterpillars usually take up to 11 days to develop into large caterpillars. Then, this large caterpillar is raised for 11 more days until it pupates. During maintenance, the caterpillars are continuously fed mulberry leaves. Usually on the 23rd day the caterpillars begin to turn into cocoons / cocoons. On the 28th day the new cocoons / cocoons are ready to be processed into silk thread. Kokonnya made yarn after boiling for 5-10 minutes, then *reeling* , pupanya can be used as food and droppings can digu nakan to make medicine jerawa t . The motivation of farmers in natural silk business is influenced by three factors, namely the socio-economic and cultural aspects, the availability of information and knowledge of natural silk business, and the opportunity to develop natural silk business. Farmers are motivated to carry out natural silk business because it is easy to implement and the techniques for cultivating mulberry and silkworms have been mastered, the ease of getting information from their experienced parents, and there is a great opportunity to be developed through improving the quality of silkworm seedlings ( Wahyudi et.al., 2019 ). Silkworm agrotourism is the main selling point of this agrotourism, the attractions offered are very unique because of the silkworms' life cycle (Effendi et al . , 2015). The quality of silkworm cocoons as raw material for silk thread is 38 percent determined by the quantity and quality of mulberry leaves produced by mulberry cultivation (Andikarya, 2019 ) . The quality of silkworm cocoons as raw material for silk thread is 38 percent determined by the quantity and quality of mulberry leaves produced by mulberry cultivation ( Departemen Perindustrian, 2006).

The results of field observations showed that from 10 kilograms of cocoons produced 1 kilogram of spun threads. Then, from 1 kilogram of yarn when woven it produces 8 meters of silk. In managing a silkworm business, income varies greatly in each silkworm farming business. The difference in income obtained by the keeper is due to the

difference in the number of eggs hatched and the number of harvested cocoons produced which will then be spun into yarn, the more eggs that are hatched, the higher the yield of spun threads which will make the income earned also higher (Dwijayanti, 2017) . Edy, as the manager of the agro-tourism business, said that this process does not stop at processing silkworms into threads. but she has a program to use the silk threads into ready-to-use fabrics. As for the flagship fabrics, namely the endek cloth and batik cloth. The price is quite good, starting from IDR 200,000 - IDR 400,000 per square meter for endek cloth. In addition, he also sells a set of batik cloth at a price of Rp 2.5 million - Rp 5 million. One of the causes of low production capability is low productivity. The factors that affect the productivity of silkworms include genetics and the environment. Silkworm nutrition is also an important factor influencing the growth of silkworms (Susanto, 1997) . In the silk fabric production process, technical guidance or assistance is a determinant of the success of the production of natural silk businesses ( Andikarya, 2019 ) .

The weaving threads in this place are then woven using traditional looms which are the mainstay of local wisdom activities in the area, starting from here the endek cloth and batik cloth are formed. Not only that, this Sari Segara Sutura Agrotourism also uses various silk products to become other interesting souvenir products. Such as hair clips, fans, bags and so on. Endek fabrics and batik as well as other souvenirs can be purchased by visitors who attend Sari Segara Sutura Agrotourism. In another place, the silk craftsmen in Wajo Regency process silk threads into various types of silk sarong products in traditional and modern forms, and have even developed into silk batik cloth which is very popular with middle to upper income consumers and for export (Emban et al. al., 2017).

In addition, silk threads are often bought directly by Balinese people to complete the ceremonial needs. Like for example being part of Barong's hair. Especially for the need for endek cloth in Bali, it is produced from original silk raw materials, there is no mixture with the aim that the production of endek silk cloth is still available because it is very much in demand by the Balinese people.

### **Constraints yang Faced Agro Event Sutura Sari Segara Abiansemal, Badung**

The manager of Agro-tourism Sutura Sari

Segara said that the need for silkworms in Bali is still lacking. Each month, at least up to 10 tons of silk is needed. However, until now, silk thread production in Bali can only be produced by half of the consumer's demand. That has also taken advantage of the support of farmer groups in Bali such as farmer groups in Sidemen village, Karangasem Regency and Banyubiru village, Jembrana Regency. Each group has 10 breeders.

Because it cannot meet consumer demand, the need for silkworms in Bali, this agro-tourism entrepreneur imports silk threads, especially those from China. However, Mr. Edy as the manager of this business ensures that silk thread production from Bali is still better than Chinese production. This is because the silk threads produced by Balinese breeders are really selected cocoons.

The development of natural silk has recently shown a pretty good prospect, as seen from the number of *rawsilk* production continues to decline from 55,222 tonnes / year to 52,342 tonnes / year, while world demand is 81,546 tonnes / year, this need will continue to increase along with the increasing number. population and improving economic conditions. Natural silk production continues to decline as a result of not being able to meet domestic consumer demand, so it has to import from other silkworm producing countries. The 2014 Indonesian Silk Association (ASSIA) stated that Indonesia was only able to meet the domestic supply of silk thread by 5 percent of the total demand of 900 tons / year while 95 percent was imported from China (Estetika & Enderwati, 2018).

When the silk threads are produced in Bali, they will have a soft texture and easily absorb sweat. Meanwhile, Chinese production shows the opposite. However, in terms of price, he admits that production from China is still cheaper. But if consumers want quality, then they choose the type of fabric like those produced by cultivators in Bali. The advantages of silkworm cultivation in Bali when used in a cold place it feels comfortable, feels a bit warm and in a hot place it feels cool because it easily sucks sweat, even if it is in the sun it makes the silk shiny.

The next obstacle when viewed from guest visits, guest visits are reduced after the 2019 election because the funds or fees that can usually be used for the cost of visits before the 2019 elections continue to flow, but after the 2019 election there are no more visiting

costs to tourist attractions so that tourist visits dropped dramatically, usually before the election the visit reached 1.000 people per month, but after the election the number of tourists only reaches a maximum of 100 people per month. In addition, many new tourist attractions have sprung up that require more expensive fees even though the price of admission to Sutura Sari Segara Agrotourism only requires a fairly affordable fee for children of IDR 15,000 / person, adults IDR 30,000 / person, guests for IDR 60,000 for foreign tourists / person, and the price of a visit ticket is easily accessible to all groups.

The availability of resources, facilities and infrastructure is very necessary to support the development of the silk yarn processing industry, in an area. In addition it also to support k elancaran economy including silk industry a much needed government support to make a discretion in setting up facilities and infrastructure such as driveways, electrical shops / *lods* sales hasi l production.

#### **Future Prospects of Agrotourism Activities Sutura Sari Segara Abiansema, Badung**

To fulfill the possibilities expected from the aspirations of the agro-tourism business manager, Sutura Sari Segara, of course, must fulfill the principles of sustainable agro-tourism, namely agro-tourism that can meet present and future needs, especially in terms of quantity and quality of productivity of silk fabrics for both domestic and foreign needs, then what is no less important is not to damage the nature / environment and culture of the local community so that it can be passed on to future generations. This is in dire need of government support, among others, to provide a Technical Implementation Unit (UPT), which functions to provide technical services / assistance and counseling with the development of production technology for silk thread processing industry entrepreneurs. Besides that, a silk handicraft promotion center is also needed which was established on the initiative of entrepreneurs. own industry.

Agrowisata Sutura Sari Segara is one of the school tourism destinations in Bali that can facilitate study visits, *outing classes*, *field* trips, work tours or visits to small and medium scale industry in the Bali region. As the name implies, Sutura Sari Segara Agro-tourism, the main silk education agro-tourism activity here, of course, students can learn about the process of making silk fabrics from scratch to the form of silk sheets. Products obtained from the



maintenance of silkworms that are well known to the general public are silk cloth from silk threads made from several cocoon filaments, besides that cocoons can also be used for crafts and cosmetics as a natural moisturizer (Deni et. Al., 2017). When viewed from the production process, which begins with the technique and cultivation of mulberry plants whose leaves are the main feed for silkworms, then proceed with the technique and cultivation of silkworms, starting from eggs, until they become small caterpillars that continue to develop until they become adult caterpillars which will change. become a cocoon or also known as a cocoon (Handoro, 1997) . After cocoons are available, the next process is the process of making and spinning silk threads and the last activity of this silk educational agro-tourism activity is the process of weaving threads into silk cloth using traditional looms which is a superior activity of local wisdom in the region which is very unique and needs to be preserved. . M emanfaatkan traditional techniques that contain values, norms and local

wisdom. But after the influx of technology, slowly - the land of local wisdom was shifted and the community was almost forgotten. The reason is because the technology makes all the work easier, in a short time and production be increased. Of course, this should not be allowed, because local wisdom is an instrument that makes the Indonesian nation known as a harmonious nation and respects the culture of its people (Riyon et.al., 2017).

After identifying the internal strategic factors of the Segara Sutera Sari Agrotourism, then compiling the IFAS ( *Internal Factor Analysis Summary* ) table to formulate the internal strategic factors which are then included in the *Strength* and *Weakness* framework . These internal factors will be obtained from a questionnaire of strengths and weaknesses and the results of interviews conducted with the manager of Sutera Sari Segara Agrotourism. The following table 1. Relates to the calculation of internal strategic factors for Sutera Sari Segara Agrotourism.

**Table 1.** Results of Calculation of Internal Strategy Factors / IFAS (*Internal Factor Analysis Summary*)

No	F external strategic S actor	B drug	R ating	Score Weight X Rating
K ekuatan / S trenght				
1	Accessibility of silkworm agro-tourism	0.08	4	0.32
2	The environmental security of the tourist attraction and its surroundings	0.08	4	0.32
3	Silkworm agro tourism attraction	0.05	3	0.15
4	The use of traditional technology that is still being maintained	0.05	3	0.16
5	Have a workforce that is skilled and competent in their respective fields	0.08	4	0.32
6	The uniqueness of silkworm farm agro-tourism	0.05	3	0.16
7	The effectiveness of agro-tourism land use	0.05	3	0.15
8	Bathroom amenities were sufficient and clean	0.10	4	0.40
9	Operating capital is highly guaranteed by the owner	0.05	3	0.16
10	Growing income	0.07	4	0.28
Total Strength Score				2.42
K elemahan / W eakness				
1	Market segmentation is still limited to students	0.05	3	0.15
2	Service that is still not optimal	0.03	2	0.06
3	Less parking space	0.05	3	0.16
4	Promotion by agro-tourism is still lacking	0.04	2	0.08
5	The area for feed is still insufficient	0.04	2	0.08
6	environmental Hygiene	0.05	3	0.16
7	Employee foreign language skills	0.02	2	0.04
8	Limited raw material for silk thread	0.02	2	0.04
9	There are not every day tourist visits	0.03	2	0.06
10	Quite a distance from the city center	0.02	2	0.04
Total Weakness Score				0.87
Total number		1.00		3.29

Source: Processed Data, 2020

According to the table above it can be seen weights and internal strategic factor rating Agrowisata Sutera Sari Segara the weighting it is done with the objective factor- these factors can have an impact on the strategic factor. The weighting of the strategic factors of Sari Segara Sutera Agrotourism is obtained from the weight =  $m_x / m_t$ ,  $m_x$ : mean of the factors x and  $m_t$ : mean of total internal strategic

factors. While the purpose of the rating is to provide a scale ranging from 4 to 1 based on the influence of these factors on the development of Sari Segara Sutera Agrotourism, and for the weighting score aims to obtain a total weighting score of Sutera Sari Segara Agro-tourism. This total value shows how Sutera Sari Segara Agro-tourism reacts to its internal strategic factors.

**Table 2.** Results of Calculation of External Factor Strategy/EFAS (*External Factor Analysis Summary*)

No.	Internal Strategic Factors	Weight	Rating	Score Weight X Rating
	Opportunities / Opportunities			
1	Close distance to other attractions	0.08	4	0.32
2	Community participation that supports the existence of agro-tourism	0.06	3	0.18
3	Tourist visits are increasing	0.05	3	0.16
4	It is the only natural silk tourism agro in Bali	0.08	4	0.32
5	The positive impact of agro-tourism on community income, expansion of infrastructure and environmental conservation	0.06	3	0.18
6	Establishment of a good relationship between agro-tourism and tourists	0.05	3	0.15
7	As an alternative tourism destination in Bali	0.10	4	0.40
8	Affordable prices for tourists	0.08	3	0.24
9	The establishment of government, investor and community cooperation	0.07	4	0.28
	Total Odds Score			2.23
	THREAT / THREAT			
1	Market segmentation that is still less varied	0.05	2	0.10
2	Unpredictable weather	0.03	1	0.03
3	The perception of the people who do not understand the natural silk tourism	0.05	3	0.16
4	Competition between agro-tourism in Bali	0.04	2	0.08
5	Quite a distance from the center of the crowd	0.04	2	0.08
6	The active role among stakeholders is still lacking	0.05	2	0.11
7	The fulfillment of the raw material for silk thread is still limited	0.02	2	0.04
8	The regulations regarding silk thread are still unclear from the government	0.03	1	0.03
9	Tourists who are only concentrated in the southern part of Bali	0.05	2	0.10
10	The government's promotion of non-coastal tourism is still not maximal	0.02	1	0.02
	Total Threat Score			0.75
	Total number	1.00		2.98

Source: Processed Data, 2020

One of the strategies to minimize and maximize strength is by means of a SWOT analysis. SWOT analysis is the systematic identification of various factors to formulate strategies in formulating policies. Based on calculations made through SWOT analysis, the

final values of strengths, weaknesses, opportunities and threats are obtained as shown in the following table:

**Table 3.** Recapitulation Calculation Results Strengths, Weaknesses, Opportunities, and the threat

No.	Description	Score
Internal		
1	➤•Strength	2.42
	➤•Weaknesses	0.87
External		
2	➤•Opportunities	2.23
	➤•Threats	0.75

Source: Processed Data, 2020

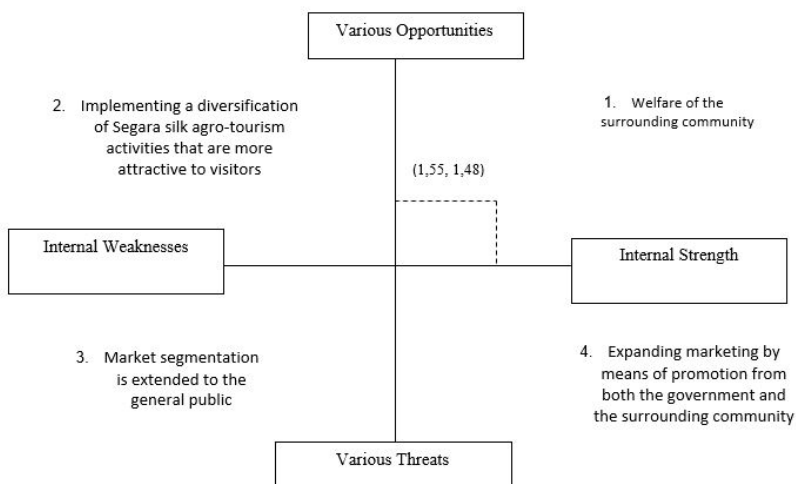
From the description above regarding SWOT analysis, that in the overall strategy framework, the basic strategy that can be planned is to use the best possible opportunity, try to anticipate and overcome threats, use strength as the basic capital of operations and make the most of it, and strive to reduce and eliminate weaknesses. which is still there. It can be seen from the results of these calculations that Sari Segara Sutera Agrotourism has a dominant strength compared to its weaknesses and a greater opportunity than the threat with the

following values:

Strengths - Weaknesses (internal factor):  
 $2.42 - 0.87 = 1.55$

Chance - Threat (external factor):  $2.23 - 0.75 = 1.48$

If these values are included in the *Grand Strategy Chart*, it can be seen that the position of the development of the tourism sector in Sutera Sari Segara Agro-tourism is in the position of Growth Strategy, which is to make optimal use of the strengths and opportunities it has.



**Figure 1.** Aggressive growth strategy agro silk s a r i s e g a r a

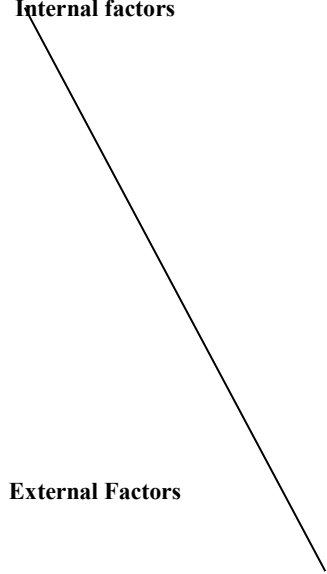
Based on Figure 1 shows that the intersection point (1.55, 1.48), in this situation can be done by utilizing the strengths and opportunities in order to increase the growth of Sari Segara Sutera Agrotourism. By increasing the growth of Sari Segara Sutera Agrotourism, it will also improve the welfare of the surrounding community.

The SWOT matrix provides a clear picture of the factors that are the strengths and weaknesses as well as the opportunities and threats that Segara Sari silk agro-tourism has. The SWOT matrix contains a combination strategy of SO ( *Strength-Opportunities* ), ST ( *Strength-Threats* ), WO ( *Weakness-*

*Opportunities* ), and WT ( *Weakness-Threats* ) (Rangkuti, 2016). From the results of the SWOT analysis, it can provide an overview of the prospects and strategies for future development of Sutera Sari Segara Agrotourism activities.

After knowing the position of Segara Sari Silk Agrotourism and obtaining a core strategy based on strengths, weaknesses, opportunities and threats, alternative strategies can be formulated. This strategy formulation is carried out using the SWOT matrix. The SWOT matrix of silk sari agro-tourism can be seen in Table 4.

**Tabel 4 .** SWOT Matrix Analysis

<p><b>Internal factors</b></p>  <p><b>External Factors</b></p>	<p><b>Strength (S)</b></p> <p>Accessibility of silkworm agro-tourism                  The environmental security of the tourist attraction and its surroundings                  Silkworm agro tourism attraction                  The use of traditional technology that is still being maintained                  Have a workforce that is skilled and competent in their respective fields                  The uniqueness of silkworm farm agro-tourism                  The effectiveness of agro-tourism land use                  Bathroom amenities were sufficient and clean  <i>Operating capital is highly guaranteed by the owner</i>                  Growing income</p>	<p><b>Weakness (W)</b></p> <p>Market segmentation is still limited to students                  Service that is still not optimal                  Less parking space                  Promotion by agro-tourism is still lacking                  The area for feed is still insufficient                  environmental Hygiene                  Employee foreign language skills                  Limited raw material for silk thread                  There are not every day tourist visits                  Quite a distance from the city center</p>
<p><b>Opportunity (O)</b></p> <p>Close distance to other attractions                  Community participation that supports the existence of agro-tourism                  Tourist visits are increasing                  It is the only natural silk tourism agro in Bali                  The positive impact of agro-tourism on community income, expansion of infrastructure and environmental conservation                  Establishment of a good relationship between agro-tourism and tourists                  As an alternative tourism destination in Bali                  Affordable prices for tourists                  The establishment of government, investor and community cooperation</p>	<p><b>SO</b></p> <p>Mempertahankan working together between government and private investors.                  Welfare of the surrounding community.</p>	<p><b>WO</b></p> <p>Implementing a diversification of fresh silk sari agro-tourism activities that are more attractive to visitors.                  Improve the quality of human resources.</p>
<p><b>Threat (T)</b></p> <p>Market segmentation that is still less varied                  Unpredictable weather                  The perception of the people who do not understand the natural silk tourism                  Competition between agro-tourism in Bali                  Quite a distance from the center of the crowd                  The active role among <i>stakeholders</i> is still lacking                  The fulfillment of the raw material for silk thread is still limited                  The regulations regarding silk thread are still unclear from the government                  Tourists who are only concentrated in the southern part of Bali                  The government's promotion of non-coastal tourism is still not maximal</p>	<p><b>ST</b></p> <p>Expanding marketing by means of promotion, both from the government and the surrounding community.                  Developing modern technology.</p>	<p><b>WT</b></p> <p>Its market segmentation is extended to the general public.                  Expanding the land for feed to meet the raw material for silk thread</p>

The strategy of developing Sutra Sari Segara Agro-tourism includes building infrastructure such as access roads, transportation means and accommodation facilities, making tourist attractions and promoting agro-tourism, developing agro-tourism products, and involving the community in agro-tourism management. If all strengths and opportunities are increased as well as minimizing weaknesses and avoiding threats that are supported by the implementation of appropriate development strategies, Sari Segara Sutra Agrotourism which is located in Sibang Kaja Village, North Kuta District, Badung Regency will be able to compete with other agro-tourism in Badung Regency. in Bali.

## **V. CONCLUSIONS**

From the results of data analysis in the study, it can be concluded that 1) the silk cloth production process begins with the cultivation of silkworms, which begins with crossing butterflies to produce silkworms. After the eggs hatched into small caterpillars, within 11 days, the small caterpillars became big then the big caterpillars were nurtured for 11 more days until they pupated. During the maintenance of the silkworms, they are continuously fed with mulberry leaves. Usually on the 23rd day the silkworms begin to turn into cocoons or cocoons and on the 28th day they are ready to be processed into silk threads. Then the final processing into sheets of silk cloth. This silk cloth production process is very useful to be used as an educational agro-tourism activity for school children and students and tourists as it has been planned since the beginning of the activity. 2) The obstacles faced in the Sari Segara Sutra Agrotourism activity are still experiencing problems, especially in the spinning process of silk threads and in the weaving process which still uses traditional looms because in addition to fulfilling the capacity of the weaving tool which is still done traditionally and also the threads are still imported from China and from outside Bali, namely from Soppeng, South Sulawesi. 3) The prospect of silk cloth production in the Sari Segara Sutra Agro tourism business is very promising because the weaving process is done traditionally which is very unique, which is a superior activity of local wisdom in the area which needs to be preserved, in addition to meeting domestic needs, especially for the needs of silk endek cloths of the Balinese people as well. for export needs to foreign countries, especially

for tourists who have visited Sutra Sari Segara Agro tourism objects such as England, Japan, the Netherlands, India, Singapore and Malaysia. The availability of resources, facilities and infrastructure at this time has not supported the development of the silk yarn processing industry such as the results of the SWOT analysis listed on weaknesses such as insufficient parking space, environmental cleanliness, limited raw materials, foreign language skills of employees.

It can be also suggested that 1) to achieve a sustainable agro prospects aspired Agro business manager Silk Sari Segara much needed support from the government, especially the local government and the private sector that helped facilitate and marketed along with the necessary support of the communities in the vicinity. 2) Signs are needed to prevent environmental damage and pollution such as "Do not throw garbage here", "Keep the environment clean and healthy", and so on. The development of the fresh silk sari agro-tourism industry in addition to absorbing labor for the surrounding community is also to increase the production of silk fabrics both in quality and quantity in order to meet business needs. With the increase in the agro-tourism sector, the linkages of local-based and environmentally sound development are increasingly playing a role in the current era, especially in the agricultural sector. In addition, to reduce depreciation of rice fields, the estimated shrinkage is 1000 Ha / year. 3) It needs to be disseminated to silkworm breeders in order to maintain the balance of nature/ environment both in providing land and in cultivating silkworms so that the natural environment remains sustainable, especially for land supply needs, not to encroach on forest areas. One of the weakness factors of the SWOT analysis is the insufficient land area for mulberry plants. 4) For employers/managers are expected to keep the harmony and cultural communities around the locations of business activity in accordance with the principle of sustainable agrotourism. 5) To be able to develop the silk thread processing industry in fresh silk agro-tourism, it is necessary to have an integrated and continuous collaboration between natural silk farmers and silk thread processing industry entrepreneurs and the government needs to strive for various policies related to problems faced regarding silk, for example repair and improvement of facilities and the supporting infrastructure needed in the development of the silk. 6) The constraints experienced in managing agro-tourism businesses today must be immediately

addressed so that the quality of production can compete both nationally, regionally and internationally. Besides local wisdom activity featured in producing silk fabric with traditional looms still retained its preservation so that more and more visitors come to enjoy the object of tourist attraction in this area.

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