BUSINESS OPPORTUNITIES OF PROFITABLE HONEY BUSINESS FROM SWING VILLAGE, BALI

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ABSTRACT

The main purpose of this community service is to get a honey business opportunity in Ayunan Village. The method used through the application of cultivation techniques that have been developed in the community through media counseling, training, and demonstration of product manufacturing. The Result of Business Activities of honey cultivation is a very profitable business, cultivation technology with extraordinary use can increase the production of honey bees. This cultivation production can increase farmers' income every month to reach Rp1,500,000.

Keywords: honey bee, stup, business, honey, breeder

I. INTRODUCTION

Ayunan Village is an area of agricultural development, creative economy and tourism village development, located in the northern part of Badung Regency which has agricultural land, 1,673 residents as farmers, facing problems of frequent crop failures, low rice productivity of 4-5 tons / hectare, waterways irrigation is polluted by farmers directing livestock waste / waste into irrigation channels, in Ayunan Village there is a museum, but visitors / tourists are still relatively small, so efforts are needed to increase agricultural land productivity by empowering the community, to increase their income through activities farming, as well as from non-agriculture (creative economy), the development of the Ayunan village as a tourist village, because it has a museum, supported by a stretch of agricultural land and a circular tracking road in the area of agricultural land, there is a group of honey bee farmers who need to be empowered to become a culinary center based on group products ok honey bee farmer that can be a culinary characteristic of Ayunan Village.
Honey bee cultivation is a very profitable business opportunity for the community, but this business has not been carried out optimally, so this business needs to be managed properly. The community conducts honey bee cultivation in a simple way and each group member has two to three honeycombs which are still very simple as shown in Figure 1. Honeycomb nests are usually made with the rest of the trunk made round about 50 cm in length with a diameter of 20 cm, inside there is a hole as a nest, then in both ends of the hole will be closed with a coconut shell / or other material filled with a small hole as a place for entry and exit of worker bees.

Honey bee farmers usually harvest every 20 to 25 days by taking honey bees (tale) that already have honey by squeezing the hive, so that the hive is damaged and cannot be returned to confinement. Similarly, when farmers take a hive (tale) containing bee larvae to be used as a culinary ingredient in Bali, namely as a vegetable (lawar), automatic tale as a place of honey will be reduced and honey production will decrease, so that the honey bee business will not be able to develop properly. Likewise, farmers do not provide honey bee food and only depend on the natural conditions around them, for example, it only depends on coconut flowers, durian, palm sugar, coffee and forest plant flowers around Ayunan Village.

According to Aek Nauli, (2019) The development of beekeeping today is very rapid. Until now, several beekeepers who have successfully developed bees as producers of honey, propolis, royal jelly, and so on. The success of beekeeping is inseparable from the availability of feed which is the main source for bees to produce honey and propolis. Therefore, efforts should be made to increase the business opportunities for swing bee culture.

II. METHOD

The activity to increase honey bee business opportunities is carried out at Sarwa Pala farmer groups in Ayunan Village, Abiansemal District, Badung Regency. The natural condition of the village is very supportive of this activity. coffee and some shrubs as nectar providers.

Approach Method

The approach taken to increase the productivity of honey bees is a problem for partner groups. The approach taken is through the application of practical cultivation techniques that have developed in the community through extension media, training, and demonstration of product manufacturing. The approach is expected to increase business opportunities that benefit honey bee cultivation in Ayunan Village.

Partner Contribution

The partners involved in the beekeeping are honey bee farmers with relatively long experience, the Sarwa Pala farmer group. Representing the beekeeping business partners involved in this activity were Mr. I Wayan Alit Nardiayana. Assistance to farmer groups in the manufacture of Stup cultivation containers (boxes) helps move the bee colonies into containers. Meanwhile, the role of the peasant group partners is to organize the participation of the farmers so that they can participate in the cultivation of more honey.

III. RESEARCH RESULT

Result
Observations on the location of honey bee development in Ayunan village show good prospects in the beekeeping business. Types of bee food are trees and plants that flower and produce 3 main elements, namely nectar, pollen, and resin. The average type of bee cultivated is Apis cerana as a honey producer. The source of feed of Apis Cerana is dominated by coconut trees which are mostly found in plantations in Ayunan Village. The nectar and pollen needs of the flower still need to be considered to meet the needs of honey so that the bees can remain in the hive provided. For this reason, it is needed a strategy to manage the bee feed area that can fulfill the three main elements throughout the year per month.

Efforts to plant flowers under the stands of village forest trees can be a solution for the availability of bee food. One alternative species composition that can be used in Ayunan is planting durian and mangosteen, this has a double impact, namely as a source of honey bee food, can also function as a village forest, producer of local fruits as a supporter of the Ayunan Village development plan as a village tour. Can also be planted with various types of flowers such as the bride's daughter, sunflowers.

Making Honey Bee Honeycomb
Efforts that can be made to increase the production of madi bees in Ayunan Village are by making box-shaped nests, hereinafter called Stup. Stup is made from sheets of board measuring 40 cm x 30 cm with a height of 25 cm. Inside the box are given rectangles (combs) rectangular where honeycomb bees are attached. As an example for the development of honey bees in Ayunan Village, 10 stupas have been made as demonstration plots. As shown in Figure 1

Picture 1 Honey Beehive Box (Stup)

With the use of bee hives, it is easier to control, where honey bees make nests as shown in Figure 2. So that each honeycomb harvest (tale) is not damaged, and only the honey is taken by using a honey picker as shown in Figure 3.

Figure 2. Honey Beehive Stup

In Figure 2, a honeycomb appears attached to a box-shaped comb inside which is filled with string strings to attach the honeycomb (tale). To harvest the honeycomb containing honey taken from the
box then sliced the honey cover then put into the extractor is a tool for extracting honey from the hive as shown in Figure 3 below.

![Figure 3. Extractor (honey separator from honeycomb tool)](image)

**Discussion**

The transfer of honey bees from the colony to the stup is still done simply, which is to move the colony from the nest owned by the farmer to the stup, so that to duplicate the colony owned by the farmer is still very low. Though there is a more practical way to double the colony, which is as follows: take the newly hatched larvae and put in a piece of royal jelly. Then enter the royal jelly that still contains the larvae into the stup. After that, leave it for 11 days or until the bee becomes a cocoon. After that, move the would-be queen to a box containing a bee colony (but not a queen). Later if it has been 13 daily, this cocoon will be appointed queen by its colony. Next after a week the queen will produce eggs.

An entrepreneur of honey beekeeping ideally has 100 colonies. Ayunan village does not have that much, so efforts can be made to increase the number of colonies (boxes) by (1) placing honey bees in locations that provide a lot of feed. In this way the queen can lay more eggs and its workers will be more active in making nests (2) prepared prospective queens as the method mentioned above (3) separated colonies that are already too dense and place prospective queens there.

Honey bee farmers in Ayunan Village, are not accustomed to tending honey bees, but keep the nest in their place, which is usually on the porch of a house or on a tree branch on a dry field. Whereas honey bee farmers are already professional, usually in May to September, honey beekeepers tend their honey bees to plantations that have feed for honey bees. Farmers on the island of Java usually feed their honey bees to rambutan, orange, mango, longan, coffee, cotton and other plantations. The aim is to produce honey in accordance with the types of flowers that exist in the plantation. The essence of various types of flowers will produce honey containing bee pollen and royal jelly. Meanwhile, after September, usually honey beekeepers in Java will feed honey bees to corn plantations. From the corn extract, the bees will produce honey with corn bee pollen and royal jelly.

Usually the honey harvest process is carried out 1-2 weeks after the flower season, can find out the honey that is ready to harvest by looking at a thin waxy coating on the comb. The first step, set aside bees from the comb by fumigation. After that, remove the comb from the box, and peel the honey from the comb using a knife. The peeled comb is then extracted in a honey extractor. Then, honey is filtered. Store honey indoors at room temperature to remove air bubbles. The final step is to package honey in a container. Based on the results of beekeeping activities in Ayunan Village after using honey harvest stup can be done every 15 days, honey production increases, namely from four stup obtained one bottle, and the price of one bottle of honey is Rp. 300,000. - This means the production of honey each stup every 15 days Rp. 75,000, and Rp. 150,000 / month, so that annually Rp.1800,000, - and the cost of making stup is only Rp.400,000, and the economic life of the stup is estimated to be 10 years, so the annual shrinkage costs of Rp.40,000.- Until the profits received by farmers each year are Rp. 1,760,000, - if each farmer has 10 stup, then the profit received each year is Rp. 17,600,000, - or every month Rp. 1,466,667.

**How to Store Honey in a Bottle**
Honey bee farmers in Ayunan Village do not have a special way of storing honey, and honey usually does not last long, because usually every harvest has been taken by the consumer. According to some scientists, honey has no expiration date. So if the honey is authentic, it won't experience this forever. Then why when buying bottles there is still an expiration date? This is intended to be in case the predictions miss. So indeed the safest here is to buy real honey. There is something interesting that must be understood by entrepreneurs honey bee farming, namely the Clear Cloud technique. This means removing the honey foam before being put into a bottle so that it lasts longer. As we know, Indonesia has a different climate with tropical rainforest types, so that the water content is high. Therefore, when allowed to stand, honey will experience fermentation and have a lot of foam. This fermentation affects the taste of honey (it becomes more acidic). But if adults like this taste.

Honey Beekeeping Cultivation Business
Things to watch out for in the management of honey bees is CCD (Colony Colapse Disorder). Recently the world was shocked by the disappearance of millions of honey in Europe. Until finally carried out in-depth research about the disappearance of this honey. It turns out that after research, the loss of bees is caused by pesticides. This pesticide is sprayed on various plants and flowers which incidentally becomes the main food of bees. This results in fatal chaos because the bees no longer find their hives after searching for food due to memory disorders. Must remember, bees are intelligent animals that can travel many kilometers without having to get lost when returning to the hive. And this pesticide really messed up the colony. Therefore, honey beekeepers in the Ayunan Village in conducting honey beekeeping, try to plant various plants that are sources of bee food. Without pesticides, of course, to help the honey bee business develop quickly.

V. CONCLUSIONS AND RECOMMENDATIONS
Conclusions

The honey bee cultivation business is a very profitable business, cultivation technology using stup can increase honey bee production. This aquaculture production can increase farmers' income every month to reach almost Rp1,500,000.

Recommendations

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