BEEKEEPING WITH PERUM PERHUTANI

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Abstract

Perum Perhutani covers the entire state owned forest in Java and Madura (2.9 million hectars) within the Provinces of West Java, Central Java, East Java and Banten. Perum Perhutani is charged with the service for social welfare and profit earning simultaneously based on the business economical principles. To achieve this effort, Perum Perhutani has many programs that are agroforestry, sericiculture and apiculture.

Perum Perhutani manages the beekeeping activity for rural development. Forest serves its activity as the bee forage and apiary area. People uses the opportunity to assist themselves in better hive, management and products.

Introduction

Perum Perhutani is the forest owned state corporation which manages the forest resources based on teak (*Tectona grandis*). Many problems are faced in the field due to the lack of exact border between rural area and the forest. The obligation from the government is how to manage the forest in a sustainable manner, but so many people that surround the forest need to pay more attention to them.

We introduce the forest management system according to the prosperity and security approach. The apiary is the part of the prosperity approach showing how to take care of the rural people in increasing income generated from the bees. The side effect from its activity is to increase their responsibility to preserve the forest.

From time to time, the model for development is changed around because of their need. In the early stage we introduced a simple beekeeping program. Since the knowledge of beekeeping has improved, we took it in the site, from a small number of involved rural people, so then many people are participating in it. Small beekeeper became widespread and some of them became bigger and bigger.

The organization is also changed: from forest field officer, the leader became professional apiarist who was well trained.

Historical view

Perum Perhutani introduced the beekeeping program with *Apis cerana* officially in 1974. Since the *Apis mellifera* was introduced, we also try to share it with people.

Apis cerana traditionally has been kept in hollow logs or let them hung under the roof. People got about 1 kg of honey per colony per year. When the *Calliandra challothyrsus* (red calliandra) was introduced as rehabilitation plant, it produced more honey. It can be collected about 5 kg per colony per year. It was started in Sukabumi, West Java, which is today acting as a beekeeping subcenter named Gunungarca (last decade of 1970's).

In early decade of 1980's, in Central Java was discovered the best honey source, namely Kapok Randu (*Ceiba pentandra*). The location was very attractive and today is acted as beekeeping subcenter in Pati named Regaloh.

In East Java, we found that the *Apis cerana* is rather different than in other places. It is bigger and brighter. From the reference we know that people indicated as in Nongkojajar as better local honeybee. We took some and managed in a small area where was enough bee forage as red calliandra. It has produced about 17 kg honey per colony per year. Its place was established as beekeeping subcenter named Tretes.

The collaboration in establishing of a beekeeping center was signed by FAO-UNDP in 1986. The location was promoted namely Parungpanjang where today the beekeeping program is produced. It is located in Bogor District, West Java, (near Jakarta).

Organization

It is described above that Perhutani is the technical organization which has responsibility in Java through Indonesia. Beekeeping Center of Parungpanjang, Bogor, is the organization body which is responsible for all of beekeeping activity. Three subcenters are in the organization branch which are responsible for the provinces.

The beekeeping center is at the same level with the forest district which in certain districts manages the beekeeping subcenter. No direct line is from beekeeping center to the beekeeping subcenter. But the beekeeping center has the guide lines that has to be done by subcenters.

Activities

The beekeeping stations have many activities to implement from the knowledge to be in the field. The range of activities has proved that the responsibilities are not only for people but also for the government.

The activities are described as below:

1. *Research and Development*. The research is based on the applied research. It consists of bee forage, breeding, pest control, hive management, feed supplement, quality control, etc.
2. *Training*. The training is especially for rural people that is by government.
3. *Promoting bees*. We promote people to have hives of *Apis cerana* or *A. mellifera*. It will increase their income and their health.
4. *Reengineering Equipment.* The equipment was designed by us and it was given to people to have and use it.
5. *Quality control.* Due to the high humidity of the climate, reasonably the honey water content is often higher than it is permitted. We control the beekeeper to keep the quality as good as possible.
6. *Extension.* We publish the beekeeping information as extension forum. It was also done by visiting people to the field.
7. *Processing*. Due to the high water content, we devised a small machinery to reduce it.

Problems

Since the beekeeping stations have been established, many problems can be solved. It was the problem of the high production of honey in certain honey seasons. We bought the honey from the beekeeper, and it was processed to reduce water content and to inactivate the yeast. It was sold in the market.

The problem of enriching the bee forage is solved by introducing bee forage sources such as red calliandra, *Acacia mangium* and exploring the indigenous species that are available in many areas.

The problem of the mite invasion (*Varroa jacobsoni*) in 1993/1994 is solved by introducing chemical mite control. Today are also introduced many ways based on the biological control.

The problems that have not yet solved are low rate feed supplement, foulbrood of *Apis cerana*, low rate queens with high quality.

Conclusion

The beekeeping station has the responsibilities not only in public service but also on profit making. When it makes only the service, the real need of the people can not be felt. In accordance with the establishing it in the developing countries, it must be considered what happens in the field by acting beekeeper in the business view. If it can be made as profit, people can easily follow to have the hives.