

Explore the world of beekeeping <Part 2>

Traditional beekeeping and challenges in Ethiopia

The South-western part of Ethiopia where local people collect coffee from wild trees is known as the birthplace of Arabica coffee. By utilizing the biodiversity of coffee forests, traditional beekeeping has been conducted in this area. We can see some beehives hung on big trees even along the road. These traditional beehives have been made by hollowing out the inside of a tree trunk. But currently, it has become common practice to use tree bark from native trees mostly from a tree called Baya in the local parlance, which is in the Oleaceae family, and is formed into a cylindrical shape before being covered with bamboo skin. In the highlands, where bamboo grows at around 2000 m in altitude, production and sales of beehives are one of the cash incomes sources. We see many people walking about holding dozens of beehives on a local market day.

It is said that a beehive can attract bees by fumigating its inside with smoke before hanging it on a tree. Beekeepers who have the traditional right to use coffee forests often set more than 100 hives at once depending on their appointed area or the number of big trees. However, it is necessary to use ropes to hang them under the branches in order to prevent them from being destroyed by baboons and monkeys.

A preferred source of nectar is the locally named Buto tree, which is in the Araliaceae family, which provides fragrant white honey, popular in Ethiopia and also exported, even to Japan.



Traditional beehive hung on branch of a big tree

To collect honey from beehives on trees, smoke is used to calm bees even though it has not been used much in the past. That practice with smoke sometimes accidentally causes fires and deforestation. In addition, this work is often performed at night, and accidents due to falling from high trees are increasing. Those generations who practice traditional beekeeping are aging. Immature young beekeepers tend to set up unreasonable numbers of beehives in order to earn more income, and it is becoming a situation close to gambling. According to a survey conducted in the area, only 10 to 20 % of bee colonies actually enter and settle down even if many beehives are

set up. Another factor to consider is that honey production from one traditional beehive is about 5 to 10 kg while other beekeepers who practice modern beekeeping methods produce more than 10 times the amount of honey with a single box.

As long as skilled beekeepers use their knowledge and experience to produce honey in appropriate volume by using locally available materials, it would be an ideal livelihood which utilizes non-timber forest products in harmony with forest management. However, beekeeping is now the second largest source of income for the local people after coffee collection. And, even selling of traditional beehives becomes a cash focused enterprise and leads to the devastation of natural forests. It also causes forest fires, destruction of bee colonies, and carries with it the risk of injury due to falling. Under these difficult conditions, there is a demand among beekeepers for shifting from traditional beekeeping to the modern way. Actually, sometimes a beekeeper does not have any knowledge on how to use a modern beekeeping box even though he has purchased and set it up in his home garden.

As a part of the JICA's project activities, local beekeepers have been trained for practicing with a transitional beehive, called the Kenyan type, and have begun demonstrating with it. This transitional beehive is made by combining tree branches and mud, both available locally. If well managed, it is possible to expect a yield similar to that of using modern beekeeping boxes. However, appropriate management and measures need to be applied while observing the conditions of bee colonies and queen bees, and these are different to previous practices that just involved hanging hives on trees and leaving them until the time of honey collection without any management. We will support the beekeepers in learning about the transitional beehives, to increase honey production and harmonize with forest conservation by providing technical training and regular monitoring in the field.



Trainee demonstrates transferring bee colony from traditional beehive to transitional one.