

Explore the world of beekeeping <Part 1>

Introduction

Beekeeping is a traditional form of agriculture that has been practiced by humankind since ancient times. Apparently, a kind of beekeeping has been depicted in a mural, which was created 10,000 years ago, found in a Spanish cave. Apiary has been practiced in ancient times in Egypt, Greece, India, and China. Even though beekeeping seems to be categorized as a livestock activity because it manages living bees to harvest honey and beeswax, it has very different characteristics from other agricultural activities such as livestock breeding and farming rice or vegetables.

Bees collect pollen and nectar within a few kilometers of their nest, regardless of whether flowers are wild or cultivated. Therefore, beekeeping can be started wherever there is the minimum space required for placing a beekeeping box or a beehive. Furthermore, the land does not need be flat, another significant difference from other agricultural activities such as crop cultivation, in which production amount and work efficiency increase as farmland becomes larger and more accessible. Honey is also a major non-timber forest product and has traditionally been practiced by people living in forested areas as an activity utilizing forest resources. For these reasons, beekeeping can be a small and easy-to-start income generation activity for smallholders, women's groups and those who do not possess farmland.



A beekeeper starting to practice beekeeping using a modern method

Honeybees are also important actors as pollinators. For production of apples, plums, and strawberries, honeybees can be used for pollination. To take one example during strawberry cultivation using greenhouses in Japan, it is common to purchase honeybees and pollinate during the flowering period. Some beekeeping farmers specialize in renting bee boxes as a business. Even for beekeeping in the field, the pollen and nectar collected by honeybees are unused resources that are not utilized for other agricultural activities. Therefore, beekeeping can coexist without

competing with other agricultural activities. In addition, honeybees are closely related to the natural environment such as the pollinated flowers and forests in which they exist. So, it would be possible to raise awareness and knowledge of people on environmental protection through beekeeping activities. Even though beekeeping, by itself, can be a business, it is a very multifaceted agricultural activity which is closely related to horticultural crop production and forest ecosystems.

On the other hand, some challenges are observed in traditional beekeeping practices in forest areas in Asia and Africa. In the case of traditional beekeeping in an area of Ethiopia, beehives formed like wooden barrels are tied to tree branches waiting for a queen to naturally enter the beehives and build a nest. Then, the beehives, mostly made of native tree bark, will be used only once and destroyed when honey is harvested. Destroying beehives in this way places a burden on forest resources and the honey productivity is very low compared with modern beehives. Besides that, these traditional practices are very risky since workers have to climb up and down tall trees holding wooden beehives. There is also a danger of wildfire due to careless handling of the smokers used to manipulate honeybees by calming them down.

This series focuses on beekeeping methods in various places for both traditional beekeeping, which is still practiced in eastern Africa, and modern methods using beekeeping boxes.



Traditional beehives hung on native trees