

# **BEE KEEPING IN SIKKIM**

## **1. BACKGROUND**

Bee-keeping is the rearing of bees for the purpose of obtaining honey. Honeybees live together in a highly organized group called a colony. When bees are managed in hives, each hive houses a single colony. Professionally it is taken up under management practices for obtaining not only honey but also for other hive products like bee wax, pollen, royal jelly and bee venom, which has many industrial uses with high market demand.

## **2. INTRODUCTION**

- A. Beekeeping is a significant sustainable, and environmentally sound activity involving integration of forestry, social forestry and agricultural supporting activity since it provides nutritional, economic, and ecological balance, while providing employment and income. India has a good potential for beekeeping and to become a major honey exporting nation.
- B. Beekeeping is a rewarding occupation yet yields profits from the 1<sup>st</sup> year of operation. It is a skill industry having the potential to offer direct employment to lakhs of people especially hill dwellers, tribal and unemployed youth and farmers. It offers a way for those with very few resources—especially poor and landless farmers and women. Sustainability of this industry is therefore vital to the country's economic wellbeing and development.
- C. Beekeeping has been carried out across many generations in India. It plays a vital role in the livelihoods of the rural communities in five dynamic ways :-
  - 1. It is an income generating activity;
  - 2. It provides food and medicine - value of honey and other hive products are invaluable;
  - 3. It supports agricultural activities through cross pollination and increase in yield of crops;
  - 4. It contributes immensely to forest conservation;
  - 5. It provides supplementary income to farmers/ Tribal etc.

## **3. ROLE OF BEE-KEEPING IN AGRICULTURE AND THE ECO-SYSTEM**

Bees and beekeeping not only yield direct and tangible benefits but also play a paramount role as essential pollinators for agriculture and natural ecosystems. While gathering nectar and pollen for honey production, bees engage in cross-pollination, contributing to over 90% of the world's flowering plants. This positions them as nature's foremost agriculturists and invaluable allies to farmers. Beyond bolstering productivity, bee pollination supports forestry conservation, maintains biodiversity, and ensures ecosystem functionality. The reduction in pollination can lead to the local extinction of plant species, a decline in fruit and seed-eating animals, loss of vegetation cover, and, ultimately, the deterioration of a healthy ecosystem and its services. Bees also actively combat soil degradation by enhancing the replenishment cycle: increased pollination results in more seed production, more plants, more biomass returned to the soil, thereby reducing soil erosion, minimizing flooding, and creating a more conducive environment for sustainable living.

#### **4. PRESENT SCENARIO OF HONEY PRODUCTION :**

- India is among the major honey exporting countries. The major markets for Indian honey are Germany, USA, UK, Japan, France, Italy, Spain etc.
- India is at 8th position in the world for honey production.
- Honey production is estimated at 35,000 MTs for 2005-06 which has now increased to the estimated 95000 MTs in 2017-18.

Most of the Indian beekeepers engaged in beekeeping activity are primarily doing the extraction of raw honey from the bee colonies maintained by them. Very few beekeepers are extracting wax & pollen .

The Raw honey extracted by beekeepers are procured by Beekeeper Cooperative Society/Beekeeping NGO/Honey Traders/ Pharmaceutical Companies etc. and in turn sent for processing through Honey Processing Plant and finally the processed honey gets packaged with suitable brand name for its sale to customers.

#### **5. BEE-KEEPING IN THE CONTEXT OF SIKKIM**

Sikkim, primarily an agricultural state, has a deeply rooted tradition of beekeeping, especially within rural households, where it has been practiced for generations as a supplementary occupation. The sight of one or several bee colonies housed in carved hollow logs and wooden boxes is a common occurrence, underscoring the time-honoured legacy of beekeeping in Sikkim.

The state's rich floral resources and large forest coverage area and it having a predominantly agro-based rural economy gives ample scope for bee-farming to be taken up on a large scale.

In recent times, there has been a notable resurgence of interest in beekeeping, driven by the growing recognition of honey as an organic product with a niche and premium market. The state's unique geographical and ecological features contribute to the production of high-quality honey, positioning it as a sought-after commodity in the market. As Sikkim continues to leverage its agricultural heritage and embrace organic principles, beekeeping emerges not just as a traditional pursuit but as a promising avenue for economic growth, environmental conservation, and the promotion of premium organic products.

#### **6. ROLE OF SKVIB IN DEVELOPMENT OF BEEKEEPING PROGRAM :**

SKVIB plays a pivotal role in the advancement of beekeeping programs aimed at enhancing the propagation of wild honey. The organization is actively involved in conducting awareness programs, providing beekeeping training. Additionally, SKVIB is committed to the manufacturing , sales and distribution of bee boxes across all districts , contributing to the widespread adoption of beekeeping practices.

Despite these efforts, the production of local honey and wild honey remains relatively low, hindering their availability on a commercial basis. The demand for honey, however, is high. It is evident that there is a gap between the demand

and the current production levels. One notable observation is the limited presence of large-scale bee farms utilizing modern techniques in Sikkim.

## **7. OBJECTIVES**

- Utilization of available natural resources
- Creating sustainable employments
- Providing supplementary income for farmers
- Adopting scientific Bee Management practices
- Creating awareness about Honey and other Hive Products
- Creating awareness about the benefits of beekeeping in cross pollination
- Developing linkages with like minded organizations.

## **8. ACTIVITIES CARRIED OUT BY THE SKVIB**

- a. Conducting Awareness Program:- Officers of SKVIB (Sikkim Khadi & Village Industries Board) engage in conducting awareness programs within rural communities. The primary objective of these initiatives is to impart knowledge and raise awareness among the local populace about the significance of beekeeping. Through these programs, the officers strive to educate people on the value of beekeeping, its potential benefits, and its role in sustainable livelihoods. By disseminating information in rural areas, SKVIB aims to empower communities with the understanding needed to appreciate and adopt beekeeping practices for economic and environmental sustainability.
- b. Training :- "The training phase involves the strategic placement of applicants in various institutions, supported by the provision of stipends, daily allowances, and comprehensive coverage of their accommodation costs. Additionally, the organization undertakes the responsibility of paying their training fees, ensuring a conducive learning environment for the applicants to acquire the necessary skills and knowledge."
- c. Opening of a bee farm in Aho-Yangtam Centre in order to implement best practices and providing practical training to farmers and others.
- d. Manufacture of modern Bee-boxes using suitable local timbers and extractors..
- e. Sales of Beekeeping equipment like Bee-boxes, extractors and other key tools.
- f. In addition to these efforts, a noteworthy contribution comes in the form of a handbook on beekeeping presented during the seminars. This handbook, crafted in the Nepali language, imparts knowledge on modern and scientific techniques of beekeeping. By providing essential information in the local language, the handbook becomes an invaluable resource, further enhancing the accessibility and applicability of advanced beekeeping practices among the diverse audience attending the seminars. This comprehensive approach underscores the commitment to both practical knowledge dissemination and the cultural context of the community involved in beekeeping activities.