

## Promoting Community Based *Apis cerana* Beekeeping Enterprise for Improving Rural Livelihoods

Honeybees are an integral part of mountain farming in Central Himalayan Region. It is a source of income, nutrition, and medicine for mountain communities. These tiny superorganisms also help in pollination of plants, which increases the productivity of crops and maintains biodiversity of the region. Even out of every three bites of food we humans eat has source in plants pollinated by bees. Traditionally, farmers in Himalaya particularly in Uttarakhand and Himachal Pradesh keep the indigenous honey bee called *Apis cerana* (endemic to Asia). It is an important resource base of mountain farming systems and offers specific advantages for developing sustainable agriculture.

**Appropriate Technology India (AT India)**, is one of the premier organizations working in the Central Himalayan Region (Uttarakhand and Himachal Pradesh), which had 'Environment and Livelihoods, of the People of Himalayas' as its core concern. AT India through its activities, such as capacity building in production activities, and services that lead to marketing of various products is present in ~1000 villages of Rudraprayag and other districts, easily one of the remotest villages of the Central Himalayan Region. It works with ~22,500 households, largely through women. The organization has developed specialization in *Cerana* bee keeping and honey marketing, tasar silk production through oaks, weaving and marketing of tasar silk clothes, dairy activities, and production of spices like turmeric, large cardamom, garlic, coriander, chilly etc. While doing so, it takes all possible measures to protect and conserve natural biodiversity.

It focuses on *Cerana* bee keeping, because this bee forages on close to 70 flowering species, hence yields a honey of high quality from organic landscapes. In the process, it has developed a kind of women-based citizen science. The *cerana* bee pollinates about 70 species so the region is benefitted by a precious ecosystem service. Then, AT India take care of maintaining biodiversity which particularly serves bees. Through its various activities, AT India contributes to women-based enterprises, and aims at restricting stress-outmigration, and resultant depopulation of mountain areas. Its long-term goal is to maintain the integrity of mountain landscapes which include village societies, biodiversity conservation, and enterprise

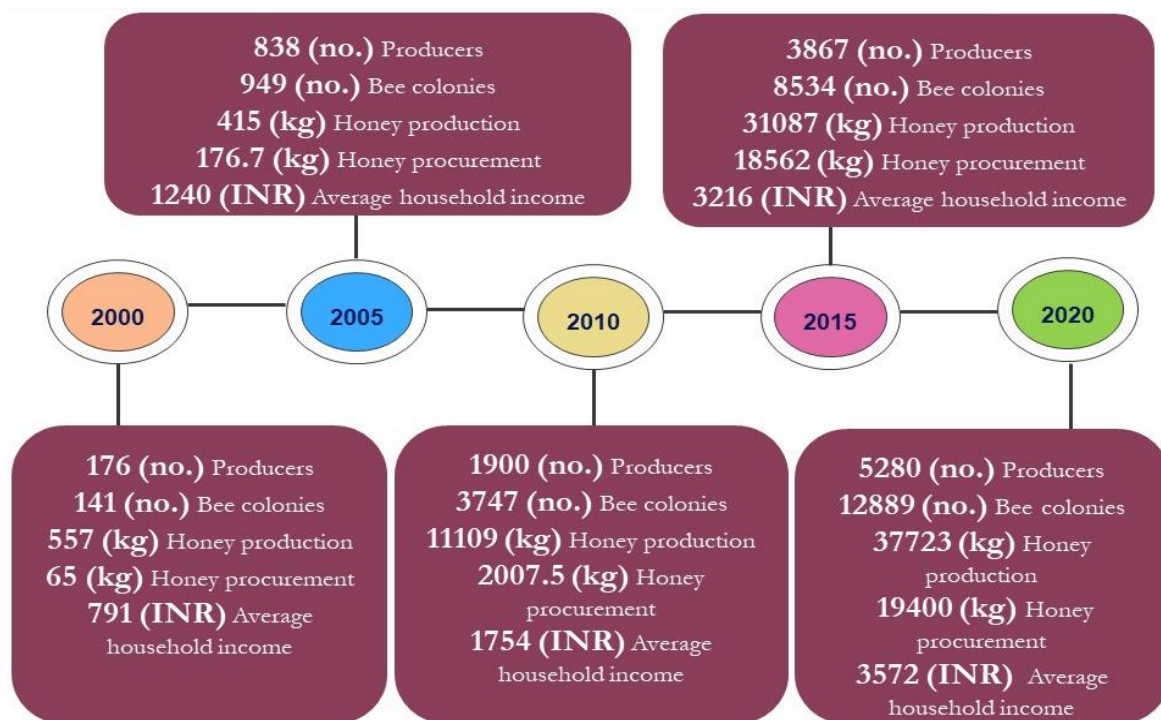


development through women. Building on the tradition base, the organization had developed *A. cerana* honey production activities involving over 5000 households of remote mountains, between 1200-2400 m, with an average



household income of INR 3572/- per year by honey extraction only. Depending on the interest taken in the initiative of ATI, a household is able to earn an average of Rs. 12,000 -15,000 per year. Enabling mountain communities interested in bee keeping as an income generation activity to live subsistently and to

make them responsible enough to use biodiversity sustainably, conserve and enhance it, AT India somehow succeeded in enhancing an average household income by 4.5 times in 2 decades.



AT India believes in the noble concept that **biodiversity should contribute to income generation for people living subsistently to make them responsible enough to use sustainably, conserve and enhance it.** The mountain communities have been dependent on nature and its resources for subsistence living since years. However, this relationship is observed to be diminishing resulting in an alienation of local community from the natural ecosystem. This is leading to erosion of age-old knowledge and relationship of communities with nature. AT India attempts to develop a strong relationship

between community and nature. This can be integrated in bee keeping and sericulture. The ATI has developed a producer-based enterprise which includes procurement, processing and marketing of honey processed from mountain farmers. The organically produced honey, is marketed with the brand name of **Devbhumi** and **Cerana** Honey. By promoting Cerana honey production, the organization also contributes to maintain a pesticide free landscape, and by making honey enterprise women centred it contribute to gender equality.

