

## Success Story of Beekeeping - Sentetfiang village

### Village Background:

Sentetfiang is a medium size village located in Sangau Block of Lawngtlai district, Mizoram with total 70 families with about 400 populations residing presently and Sentetfiang village has lower literacy rate compared to Mizoram. Sentetfiang has a pleasant climate. It is generally cool in summer and not very cold in winter. The region is characterized by the hilly rugged terrain, the ridges show serrated tops, which are highly dissected and separated by intervening 'V' shaped narrow valleys. The hill side slopes are steep to very steep and escarpment are common.



The original settlers of Sentetfiang were from Pangrang Village, as the Government has declared the area as a National Park, the whole village was shifted to Sentetfiang area and thus the village was named thereof in 1993 with only 7 houses. Due to this Sentetfiang village does not have any Farm lands and has to depend on Sangau farm lands which was under another Village Council (Panchayat). Due to limited Farm lands, in the Year 1995 Mr Rokhama collect bee swarms from the forest and kept it in a hollow box (traditional system) and started rearing bees. He started generating money from the honey and ultimately told other to take up beekeeping and then Beekeeping became the main occupation for the people of Sentetfiang. As most of the villagers practice Bee Keeping much is done for protection of Forest areas in and around the village as the forest generate income to the villagers through Honey Bees. SIRD has given assistance to these Bee Keepers in 2013-2015 in terms of Bottling, wood for bee box but without any technical knowledge.

### Technology Intervention:

Beekeeping is not new to sentetfiang village and they have a very good experience in traditional method of beekeeping. In traditional beekeeping bees are reared in a hollow box and whenever they harvested honey they killed many larvae and harvested honey also unhygienic due to squeezing of honey along with bee egg, pollen and small larvae. They also did not have proper marketing outlet because of that they could not sell honey properly. Some of the farmers from Sentetfiang village used to attend KVK training programme on modern beekeeping method and from that time onward a link existed between KVK Lawngtlai and Sentetfiang bee farmers. They were very much in need of learning modern beekeeping method to save bee population and to produce hygienic honey.

Sentetfiang village has a well-established Bee Keepers Society. All of the beekeepers within the community are enrolled in the society. KVK Lawngtlai District has a good connection with the society and has conducted a number of apiary training and research within the area from 2015 till date. In 2019, KVK Lawngtlai also proposed and conducted a project from NABARD successfully on modern beekeeping method for Sentetfiang beekeepers for their economic upliftment of farmers from poverty. The honey produced by the members of the society is currently marketed under technical guidance of KVK Lawngtlai District. Bee farmers were provided all the necessary equipments for smooth functioning under modern beekeeping method. They were fast learners and attended training and other practical demonstration of modern beekeeping methods for multiple times so that they will have confidence in them.

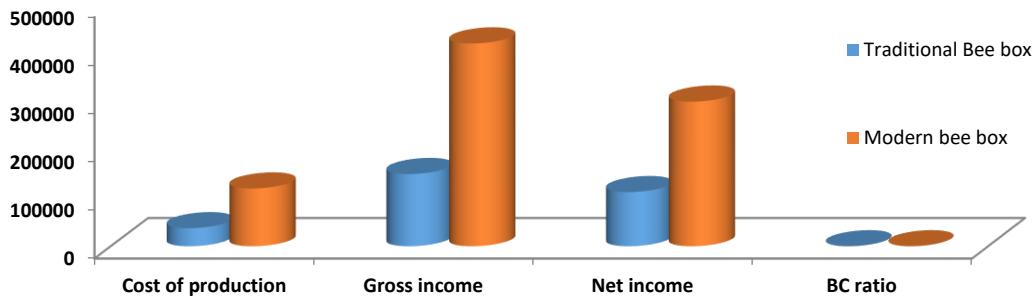
### **Output of Intervention:**

The intervention of KVK through different activities yielded a positive result in the achievement of beekeepers at Sentetfiang village. They were given advice whenever required to perform scientifically resulting timely control of pest and diseases and proper management of other necessary activities. After the involvement of KVK they gained very good practical experience in the management of beekeeping. The amount of honey produced per box increased from 3 kg from traditional bee box to average production of 3.5 kg per box from modern bee box. In case of traditional bee boxes honey can be harvested once or twice (average 5 kg/box/year) in a year but in case of modern bee boxes honey can be harvested 3-5 times in a year depending upon the sources from the environment. The productivity of modern bee box is Rs 14000 (average 3.5 kg/box x 4 times harvest @ Rs 1000/kg) which is handsome amount for bee farmers in a village from a single bee box. Each 30 bee farmers received 5 boxes under NABARD all together 150 modern bee boxes were distributed and used. So, depending upon the number of boxes they have most of the bee farmers will be able to increase their income to support family expenses.

There is no marketing problem in selling of honey anywhere in Mizoram even within Lawngtlai district because the demand for honey is always high due to its nutritional and medical value. Bee farmer could harvest honey in a year with no marketing problems and still they always got enough time in other profession. Before KVK intervention they used to rear traditionally which was lower income and unhygienic comparing to modern method of beekeeping. The economic analyses between before and after KVK intervention were given in the table below:-

<b>Economic parameters</b>	<b>Before Intervention (traditional bee box)</b>	<b>After Intervention (modern bee box)</b>
Cost of production (Rs.)	37500/-	120000/-
Gross Income (Rs.)	1,50,000/-	4,20,000/-
Net Income (Rs.)	1,12,500/-	3,00,000/-
BC Ratio	4	3.5

**Table1. Comparison between traditional bee box and modern bee box from 30 boxes**



**Figure 1: Graphical representation on benefit of Modern Bee box**

#### Feedback from Farmer with Scope for horizontal spread in the community:

Sentetfiang beekeepers have learned the method of using modern bee box easily because they already have very good experiences in traditional method of beekeeping. After using modern bee boxes they have a lot of improvement in beekeeping. During harvesting of honey they never killed bee larvae like they did before when they used traditional bee box which saved many bee population. The honey they produced also improving and they extracted honey by using honey extractor which is very pure and clean so, they stop squeezing honey comb to extract honey. After using modern bee box farmer could harvest honey more than 4 times in honey harvesting season which was limited to 1-2 times only in case of traditional bee box. The gross income also increases with average BC ratio 3.5 which was quite satisfactory for beekeepers. It is said that customers are also more attracted to farmers when they got extracted honey which is clean and pure. It is also found that bee multiplication is easier in case of modern bee box. Many beekeepers are still determined to use more number of modern bee boxes due to multiple advantages.

The horizontal spread of uses of modern bee boxes are more extended to other villages after the successful utilization of modern bee boxes by Sentetfiang beekeepers. More number of beekeepers is attracted to use modern bee boxes due to more honey productivity and most of the beekeepers from different village are already replacing traditional bee boxes with modern bee boxes. KVK Lawngtlai organized training programs for local farmers about modern technique of beekeeping methods and its management. Leaflets, Brochures and other information materials related to beekeeping are also distributed to many farmers during training and farmers visit to KVK for wider dissemination of knowledge and skill of beekeeping.

## Action Photos:

