# HOW PASSION FOR MUSHROOM TURNED INTO A PROFITABLE VENTURE

## Profile of the farmer/ group

Name of the grower/group : Mrs. Lalnuntluangi Village : Ramthar Veng

Block : Lunglei
District : Lunglei
Enterprise : Mushroom

Name of the Centre : KVK Lunglei District

## **Background information of the grower**

Mrs. Lalnuntluangi is a dedicated mushroom farmer hailing from Ramthar Veng, Lunglei District, located in the state of Mizoram. She is also a dedicated housewife and helps in taking care of the family. Her passion for farming and innovative approach has made her a prominent figure in the local agricultural community.

Born and raised in Lunglei District, Mrs. Lalnuntluangi developed an early interest in agriculture. After completing her education, she decided to pursue her passion for farming and chose mushroom cultivation as her focus. She started cultivating mushroom in 2017 with 20 blocks of mushroom in her home to help her family earning. She then recognized the potential of mushrooms as a nutritious food source and a profitable agricultural venture.

### Technology/process intervened

Despite facing initial challenges, including limited resources, low production and scientific knowledge in mushroom cultivation, Mrs. Lalnuntluangi persevered and acquired the necessary skills through training programs like Scientific mushroom production technology and hands-on experience conducted by KVK Lunglei District through Attracting and Retaining Youth in Agriculture (ARYA) Project in the year 2018. Through the project she received support to construct low cost mushroom house in her backyard. KVK also helped her in supplying good quality mushroom spawn and other assistance in kind such as polybags, hand compression sprayer, plastic container for storing of harvest and other assistance were also given. She then established her mushroom farm and began to expand her enterprise which now has a capacity to hold 150-200 blocks of mushroom.

#### **Effect of the technology /process**

The intervention of technology and processes by KVK Lunglei District in mushroom cultivation has had several significant effects including higher production and

productivity. By introducing improved cultivation techniques, Mrs. Lalnuntluangi has increased her production from only 30kg to 300kg of mushroom per cycle. She sold her produce mostly in the local market @Rs. 350-400/kg depending on market fluctuation.

## **Production/Productivity/Economic Gains:**

Year	No. of bags (per cycle)	Avg. Yield (kg)	Cost of Production (Rs.)	Gross Return (Rs.)	Net Return (Rs.)	BC Ratio
2020-21	80	120	32,000	48,000	16,000	1.5
2021-22	100	180	38,000	72,000	34,000	1.9
2022-23	150	300	45,000	1,20,000	75,000	2.7

KVK Lunglei District promotes sustainable mushroom cultivation practices, including integrated pest management, organic farming methods, and resource conservation techniques. By adopting these practices, Mrs. Lalnuntluangi plays a part in minimizing the environmental impact, reduce input costs, and ensure the long-term viability of mushroom cultivation system.

### Suitability and adaptability in the existing farming systems

Mrs. Lalnuntluangi's mushroom cultivation under KVK Lunglei District is proved to be suitable and adaptable in existing farming systems due to its low space requirement and ability to utilize agricultural waste. Her approach and dedication to quality have earned her recognition within the farming community. She employs sustainable farming practices, prioritizing organic methods and environmental conservation. Her farm serves as a model for sustainable agriculture, inspiring other farmers in the region to adopt similar practices.

## Acceptance of technology/process in terms of views of the farmers

Local farmers from Mrs. Lalnuntluangi's community express enthusiasm for mushroom cultivation due to its simplicity and profitability, leading to widespread adoption. They appreciate the minimal space requirement and the ability to utilize agricultural waste, making it accessible to farmers with limited land resources.

#### **Outscaling of technology (Horizontal spread)**

KVK Lunglei District facilitates horizontal spread by organizing farmer training programs, demonstrations, and exchange visits. As successful farmers like Mrs. Lalnuntluangi share their experiences, more farmers are motivated to adopt mushroom cultivation, leading to widespread adoption across the district.

#### **Substitution or replacement of commodities**

Mushroom cultivation replaces or complements traditional crops like maize or vegetables, offering higher returns per unit area. Farmers like Mrs. Lalnuntluangi find mushrooms particularly lucrative, leading to a shift in cropping patterns towards more profitable ventures.

#### **Socio-economic impact**

Beyond farming and cultivating mushrooms, Mrs. Lalnuntluangi is also actively involved in community development initiatives. She conducts workshops and training sessions to share her knowledge and expertise with aspiring farmers, empowering them to pursue sustainable livelihoods through agriculture.

Mrs. Lalnuntluangi's success story highlights the potential of agriculture as a means of livelihood and community development in rural areas. Her commitment to innovation, sustainability, and community engagement has made her a respected figure in Lunglei District and beyond.

#### Marketing network established

KVK Lunglei District assists farmers in establishing marketing networks through linkages with local markets, cooperatives, and traders. Mrs. Lalnuntluangi and other farmers sell their mushrooms through these channels, ensuring a steady demand and fair prices for their produce.

### **Establishment of process/units**

KVK Lunglei District supports the establishment of mushroom cultivation units through technical assistance, training, and provision of necessary infrastructure such as spawn production facilities and mushroom houses. Mrs. Lalnuntluangi's success inspires other farmers to set up similar units, leading to the establishment of numerous mushroom farms across the district.

### Linkage with technology/development organizations

Linkages between farmers like Mrs. Lalnuntluangi and technology/ development organizations, including research institutions and agricultural universities are assisted by KVK Lunglei District. Collaboration with government agencies and NGOs enables the farmer to access funding, resources, and expertise to support mushroom cultivation initiatives. Also, linkages with Agriculture Department, Horticulture Department, ATMA, SAMETI etc. enable Mrs. Lalnuntluangi to access new technologies, improved cultivation practices, and ongoing research findings, enhancing the efficiency and productivity of mushroom cultivation in the district.



Mushroom cultivation unit under ARYA



**Incubation of Mushroom** 



Fresh Harvest

#### **BUZZING BUSINESS: THE JOURNEY OF A BEEKEEPING ENTERPRISE**

#### Profile of the farmer/ group

Name of the grower/group : Mr. F Lalramnghinglova

Village : Theiriat
Block : Lunglei
District : Lunglei
Enterprise : Beekeeping

Name of the Centre : KVK Lunglei District

## **Background information of the grower**

Mr. F. Lalramnghinglova is a distinguished figure from Theiriat Village, Lunglei District, Mizoram, renowned for his remarkable success as a beekeeper. Born and raised in the lush landscapes of Mizoram, Mr. Lalramnghinglova developed a deep passion for beekeeping from an early age, influenced by the rich biodiversity and cultural heritage of his region.

With a keen interest in apiculture, Mr. Lalramnghinglova embarked on his journey as a beekeeper, initially starting with a modest setup and a few bee boxes. Over the years, through dedication, perseverance, and innovative approaches, he transformed his beekeeping venture into a thriving enterprise.

#### **Technology/process intervened**

KVK Lunglei District has intervened with several technology and processes to support Mr. Lalramnghinglova's beekeeping enterprise through different projects and provided several trainings on modern hive management techniques, including hive construction; hive placement, and maintenance practices. KVK Lunglei District also promoted sustainable beekeeping practices, including organic beekeeping and habitat conservation. These practices minimize the use of agrochemicals, promote biodiversity, and protect bee colonies from environmental stressors, leading to healthier bees and higher honey yields.

KVK Lunglei District's interventions through different projects and demonstrations have equipped Mr. Lalramnghinglova with the necessary knowledge, skills, and technologies to enhance his beekeeping enterprise's productivity, sustainability, and profitability.

#### Effect of the technology /process

The technology and processes introduced by KVK Lunglei District have had a transformative effect on Mr. Lalramnghinglova's beekeeping enterprise. His dedication to adopting modern beekeeping techniques, such as improved hive management, honey extraction methods, and queen rearing, has led to increased productivity and quality in his honey production. He has also embraced sustainable practices, such as organic beekeeping and habitat conservation, to protect bee colonies and enhance honey yield.

Mr. Lalramnghinglova initially started his enterprise like a hobby with only 4 bee boxes where he was able to harvest around 10 kgs of honey. Later on, with the intervention of KVK, he is now having 100 bee boxes where he is able to produce 280 kgs of honey annually. Besides having an apiary, he also made bee boxes and sold his bee boxes @Rs 2500 per boxes.

#### **Production/Productivity/Economic Gains:**

Year	No. of bee box	Avg. Yield (kg)	Cost of Production (Rs.)	Gross Return (Rs.)	Net Return (Rs.)	BC Ratio
2020-21	60	135	65,000	1,58,500	93,500	2.4
2021-22	75	188	72,000	2,05,300	1,33,300	2.8
2022-23	100	280	85,000	3,30,000	2,05,000	3.8

#### Suitability and adaptability in the existing farming systems

Mr. Lalramnghinglova's beekeeping enterprise, supported by KVK Lunglei District, seamlessly integrates into the existing farming system due to its low space requirement and compatibility with traditional agricultural practices. The flexibility of beekeeping allows it to complement other farming activities, providing pollination services that enhance crop yields without requiring significant changes to existing farming practices. This adaptability makes beekeeping a suitable and valuable addition to the farming system, contributing to agricultural productivity and sustainability in Lunglei District.

#### Acceptance of technology/process in terms of views of the farmers

Farmers view Mr. Lalramnghinglova's beekeeping enterprise positively, recognizing its low investment requirements, environmental benefits, and potential for supplemental income. They appreciate the simplicity and sustainability of beekeeping practices, leading to widespread acceptance and adoption. Seeing Mr. Lalramnghinglova's success, farmers are inspired to adopt similar techniques, recognizing the potential for supplemental income and the ecological advantages of beekeeping.

Overall, there is widespread acceptance and eagerness among farmers to incorporate beekeeping into their farming systems, viewing it as a valuable and sustainable

## **Outscaling of technology (Horizontal spread)**

KVK Lunglei District facilitates the horizontal spread of beekeeping technology by organizing training programs, workshops, and farmer exchange visits. Through these initiatives, successful beekeepers like Mr. Lalramnghinglova share their experiences, knowledge, and best practices with other farmers in the district. Additionally, KVK collaborates with local organizations and institutions to disseminate information and provide technical support, further promoting the horizontal spread of beekeeping technology in Lunglei District.

#### **Substitution or replacement of commodities**

Beekeeping does not necessarily substitute or replace existing commodities in agriculture. Instead, it complements traditional farming practices by providing pollination services that enhance crop yields. The honey and beeswax produced through beekeeping serve as additional commodities that diversify farmers' income streams. Therefore, rather than replacing commodities, beekeeping adds value to existing agricultural activities, contributing to the overall sustainability and profitability of farming systems in Lunglei District.

#### **Socio-economic impact**

Mr. Lalramnghinglova's beekeeping enterprise has significant socio-economic impacts, uplifting livelihoods and fostering rural development. It generates employment opportunities, empowers marginalized communities, and enhances food security through increased crop yields. Additionally, beekeeping contributes to biodiversity conservation and environmental sustainability, promoting ecological resilience and socio-economic well-being. Overall, Mr. Lalramnghinglova's beekeeping enterprise has a positive socio-economic impact, driving economic growth, improving livelihoods, and promoting environmental stewardship in Lunglei District.

#### Marketing network established

Mr. Lalramnghinglova has established a robust marketing network for his bee products, including honey and beeswax. Through partnerships with local markets, cooperatives, and online platforms, he ensures a steady demand and fair prices for his products, enhancing profitability and market access.

#### **Establishment of process/units**

Mr. Lalramnghinglova has successfully established beekeeping units across the district, serving as model units for other farmers. Through KVK support, he has implemented efficient processes for hive management, honey extraction, and product packaging. These units demonstrate the feasibility and profitability of beekeeping, inspiring others to replicate his success.

#### Linkage with technology/development organizations

Mr. Lalramnghinglova's beekeeping enterprise is linked with technology and development organizations, including KVK Lunglei District, ATMA and Horticulture Department. Through collaboration, he accesses training, technical assistance, and market linkages, enhancing his knowledge and skills in beekeeping. These linkages enable continuous improvement and innovation, ensuring the sustainability and resilience of his enterprise. KVK facilitates access to resources such as beekeeping equipment, hive materials, and bee colonies. This ensures that Mr. Lalramnghinglova has the necessary tools and resources to maintain his beekeeping operations efficiently.



Mr. Lalramnghinglova's Apiary



**Honey produced** 



**Honey Comb**