

A success story on Mushroom Cultivation by a Farm Woman of Dhalai, Tripura

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Name of the farmer and address:

Smt Shubharani Debbarma

Occupation – Farming, also associated with SHG

Address – West Dalucherra, Dhalai, Tripura.

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Introduction & Challenges Faced:

Mushrooms are eukaryotic, spore-bearing organisms, macro-fungi lacking chlorophyll, and grow on the dead decomposed matter as saprophytes. They derive nutrients through their mycelia. This mycelium forms the fleshy structures, the fruit bodies, which are generally called mushrooms. There are more than 10,000 varieties of mushrooms out of which only 200 varieties are identified as edible variety.

Smt. Shubharani Debbarma, a resident of West Dalucherra, District Dhalai, Tripura, started cultivating Oyster mushrooms after getting spawns and other related items from KVK Dhalai in 2021. Before that, she was reluctant about where to get good-quality spawns and other items. They have not trained also properly. The temperature was also not favourable all the time. They have received proper training from KVK Dhalai on Mushroom cultivation. After that, good quality Oyster mushroom spawns were distributed to some farmers, which were bought from Horticulture

Research Centre (HRC) Nagicherra, Agartala. 50 packets of spawn were given to each farmer.

Initiative:

Dhalai district has great potential and demand for mushrooms, especially Oyster mushrooms. However, most of the farmers are not aware of its health benefits and they don't have sufficient resources to undertake the cultivation process. Also, most of them also don't know the proper cultivation technique. Mushrooms are one of the most diverse organisms on earth and since primitive times have played a vital role in human welfare. Its major role is in the conservation of natural resources as well as increasing the recycling of agro-waste including agro-industrial waste. Mushroom cultivation is a highly profitable and sustainable enterprise for small and marginal agricultural laborers. Farmers who are not getting good returns from agriculture are also keen to adopt other agriculture-related activities to enhance their income and mushroom cultivation is one of them, which provides extra income to the farmers other than field crops in two to three months duration. Since mushroom cultivation does not require big land and can be grown in houses or small huts, people with limited or no land are also showing interest in starting mushroom cultivation as an income generation venture. The medicinal value of mushrooms was made understood by the farmers, which they were not aware at first.

Mushrooms have been shown to promote immune function; boost health; lower the risk of cancer; inhibit tumor growth; help balance blood sugar; ward off viruses, bacteria, and fungi; reduce inflammation; and support the body's detoxification mechanisms. Increasing recognition of mushrooms in complementing conventional medicines is also well known for fighting many diseases.

1. Good for the heart
2. Low-calorie food
3. Prevents cancer
4. Anti-aging property

5. Regulates digestive system
6. Strengthens immunity
7. Improve anemia
8. Remove constipation
9. Improves IQ
10. Good protein source for diabetic & TB patients.

Key result:

We can grow four varieties of mushrooms depending on the climatic conditions of Tripura. Oyster Mushroom (Sept-April), Paddy Straw Mushroom (May-Sept), Milky Mushroom (Sept-April), and Button Mushroom (Nov-Feb).

Here Smt. Shubharani Debbarma has cultivated Oyster mushrooms. Flowering was an average of 2 kg per packet or 100 kg in total. The selling price was Rs 150 to Rs 200 per kg in the local market, depending upon the market locations of Dhalai. Overall, she was happy after getting the spawn and other related items from KVK. Her household income has increased and she is also looking forward to receiving good-quality spawn from here again.

Room size = 25ft x 15ft x 8ft

Capacity = 400 bags (at a time)

Crop duration = 2 months

Total no of bags produced in a year = $400 \times 6 = 2400$ bags

Production per bag = 2 kg

Total production in a year = $2 \times 2400 = 4800$ kg

Considering 5% production loss = 240 kg

Net production = $4800 - 240 = 4560$ kg

Selling price @Rs.150 per kg (Raw)

Total selling price = $4560 \times 150 = \text{Rs.}6,84,000/$

Total expenditure = Rs.99700/

Total profit (yearly) = $(684000 - 99700) = \text{Rs.}584300/$

Benefit : Cost = 2.6 : 1

Impact:

Tripura has tremendous potential for mushroom production and all commercial edible and medicinal mushrooms can be grown. There is increasing demand for quality products at a competitive rate both in the domestic and export markets. Though the growth of mushrooms will depend on increasing and widening the domestic market in the coming years, the export market will be equally attractive. To succeed in both domestic and export markets, it is essential to produce quality fresh mushrooms and processed products devoid of pesticide residues and at a competitive rate. It is also important to commercially utilize the compost left after cultivation to make manure, vermi- compost, briquettes, etc. for additional income and total recycling of agro waste. After cultivating mushrooms in a wide range, slowly the perspectives of farmers and farm women are changing and they are deeply and seriously thinking to market their products outside the local market in the capital city. Their behaviour is gradually changing towards mushroom consumption and cultivation. With some help from our KVK, they are willing to market their products both online and offline.

Now more than 100 farmers are motivated by the income of Smt. Debbarma and started growing mushrooms in large scale.

Lessons Learned

1. What did you learn in this process? What was difficult or challenging?

- Process of mushroom cultivation and also how to increase one's livelihood and income. The most difficult part was getting motivated.

2. How did you overcome the challenges faced?

- Through proper training and also by coming forward ourselves.



Fig. 1- Training on Mushroom cultivation



Fig. 2- Training on Mushroom cultivation



Fig. 3 – Visit to Farmers Field to monitor their activities after getting trained



Fig. 4 – Visit to Farmers Field to monitor their activities after getting trained



Fig. 5 – Preparation of Mushroom bed by Farm Women



Fig.6 – Flowering of Mushroom