Project on mushrooms brought extra income generation to farmers

In 2-3 years after mushrooms cultivation, money generation was seen

Farming community across Tripura was compelled to take paddy crops twice a year. Moreover, intermediate meager vegetable output further aggravated livelihood increment options. However nutritional security has not even been touched, the widely acclaimed notion was to earn extra money apart from taking aforesaid crops. Comparing with exiting situations prevalent across many villages in the state, mushrooms cultivation paved way for the livelihood increment & nutritional safeguard thereafter.

Primary aim

Two clusters namely Balaram & Maracherra of Dhalai districts were identified with less irrigation facility coupled with low cropping intensity 158% fit the aforesaid title of poor livelihood. The clusters have been operating with nine units at hand and another nine in pipeline in the state since than on. Here the local farmers bound to have paddy as the solo crop twice a year with intermittent vegetable outputs that did not do well in raising extra income generation. Therefore, mushrooms cultivation was started off as an extra livelihood generation amongst the farmers by the ICAR in close collaboration with regional center Tripura, under the NAIP project “livelihood improvement”.

Nutritious value of mushrooms

A Mushroom, biologically speaking, brimming with protein, B vitamins, & minerals, is fungi unlike plants, animals & bacteria in the most important features of plants: the ability to use energy from sun directly through chlorophyll. Thus mushrooms depend upon organic materials (fallen leaves, animal droppings and stumps of dead wood) for food & nutrition, are rather used as a good soil conditioner after the harvest. Presently, 3 mushrooms: white mushrooms (Agaricus bisporus), paddy-straw mushrooms (Volvariella vovvacea) and the oyster mushrooms (Agaricus bisporus) are popularly cultivated in the country, though A. bisporus is the most popularly grown & economically sound strain cultivated globally. Their life cycle starts with spores settle down in a suitable environment through forming a mycelium. Later on, the two sexually compatible mycelia unite; they produce secondary mycelium capable of forming fruiting bodies. However, mushrooms production through tissue culture is also followed.

Net profit under mushrooms Cultivation at Dhalai district

Mushrooms cultivation was first initiated through an in-situ training cum live demonstration in all the six Self Help Groups (SHGs), along with the fifty-fine beneficiaries in May 2008. The six SHGs were Abachanga, Khabaksha, Sharda, Pohor, Bodol, and Loknath. Till December 2010, 216 farmers have had started mushrooms cultivation. According to the NAIP-III sources, farmers produced 2062 kg of fresh oyster mushrooms at the expenditure cost of Rs. 46492; @Rs. 12 for a poly bag filling. The farmers sold fresh oyster mushrooms at Rs 80/kg to the local markets and earned Rs. 165045. The net profit resulted in Rs. 118509. Besides, increase in employment is registered to 1185 mandays. Furthermore, farmers used 882 & 889 mushroom spawns (each 150g) and produced 560.30 & 559.00 kg of fresh oyster mushroom (Pleurotus sajor-caju) in Balaram and Maracherra villages during April 2009 to March 2010, respectively.

Convincing farmers in adjacent villages

Most of the restaurants menus have button mushroom dishes, Chinese Bhel, Malai Mushroom Curry, Mushroom Biryani, and Mushroom Gravy as the famously served mushroom items. "Iam very happy to listen that my mushrooms are being served across various reputed hotels in & around the state”, says Bimal Debnath from Balaram village. “By selling oyster mushroom (Pleurotus sajor-caju) at Rs 80/kg at local market was like a distant dream that appearing coming true slowly but surely with the technical and timely help provided the ICAR,” says Rebika Sangma, a woman farmer from Balaram village. “Since the
demand of mushrooms are surging both nationally & internationally, production technologies should be applied accurately with sufficient technical inputs. There are many farmers who are coming forward to adopt this as business”, says Principal Investigator of the National Agriculture Innovation Project-III Dr G.C. Munda, ICAR Barapani.

**Affordability & Sustainability**

“Mushrooms cultivation ensured enhancement of family income at cost of less investment. Waste materials easily deposed into food materials enriching with nutrition is the extra benefits at farmers’ hand. Sustainability depends upon regular construction of new sheds in order to increase mushrooms production amongst interested beneficiaries, however continuous mushrooms spawns supply poses a challenge that can sufficiently manage through improved techniques of spawn (seeds) production”, says Senior scientist Subrata Biswas, Tripura Centre.

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