

Oyster mushroom cultivation for resource poor tribal farmers

Oyster mushroom cultivation with four model mushroom production units was introduced under the Farmer FIRST Programme among the tribal people in the Kasdol block of Chhattisgarh to help the farm women and rural youth in the area to have a sustainable livelihood. Hands on training on mushroom production was provided with the help of IGKV, Raipur. The paddy straw waste after the harvest was used for mushroom cultivation which requires huge quantity of straw and thereby prevents leaving and burning practice prevalent among the farmers of the region by making effective use of the waste. The farmers obtained maximum production by harvesting the mushroom in all the four mushroom units.

MUSHROOM is a wholesome food for all age groups because of its nutritional and medicinal properties. Rich in protein, dietary fibre, vitamins and minerals, it can be used to serve the nutritional needs of the rural poor. Chhattisgarh has a great scope for commercial mushroom cultivation by recycling paddy waste for higher income generation. It can cater to the growing food demand; solve unemployment issues and environmental pollution to a significant extent.

Further, mushroom husbandry can help the farming community by generating additional income by utilizing the farm waste. The substrate remains after cultivation of mushroom is more readily digestible and palatable to livestock. Additionally, it can be exploited as a source of manure, and mulch for soil and others. Mushroom

cultivation consumes huge quantity of organic wastes and degrades complex organic pollutants and thus helps to maintain clean environment.

Focus area

Farm women, rural youth, resource poor, landless, small and marginal tribal farmers.

Challenges

Lack of alternative livelihood option and employment for the farm women and rural youth, leaving and burning of the paddy straw at the field are the major challenges. Resource poor and subsistence farming, and low awareness level are the other challenges faced.





Utilization of paddy straw waste for mushroom cultivation

Extension activity followed

During the baseline survey, it was found that farmers burn the paddy straw in their field after the harvest. To make use of the paddy straw and generate alternate income from waste, oyster mushroom production was introduced. Hands on training and farmer visits to mushroom



Training organised under Farmer FIRST Programme

maximum production in all the four units. They were also linked to various markets for sale of mushroom.

Performance Indicators

| Technical observation | Before | After |
|----------------------------|---|--------|
| Yield | First time Introduced | 280 kg |
| Economic indicators | | |
| Cost of cultivation (₹/ha) | | 12000 |
| Net income (₹/ha) | | 44000 |
| B:C ratio | | 3.6 |
| Farmer's reaction | <ul style="list-style-type: none"> • Farmers are excited to see the mushroom production technology at remote tribal villages • Best utilization and income generation from waste paddy straw • Employment generation for farm women and rural youth • Highly nutritive and good market price. | |

Impact and lessons learnt

Within the month of mushroom production, 60 kg mushrooms were harvested from each unit and sold to the local market. The farmers expressed interest in mushroom production due to its low investment and management. To ensure regular and sufficient availability of the mushroom, spawn production unit are intended to be started soon in the villages under the FFP.

Economics: About ₹ 2800 income was generated per family in two months.

SUMMARY

production units at the Department of Pathology, IGKV, Raipur were undertaken. Based on the farmer's interest, four model mushroom production units were established at the villages covered under the Farmer FIRST Programme by forming four groups including farm women and rural youth. Under the FFP, paddy straw cutter was also provided to each group to ensure regular straw availability for mushroom production.

Training and other capacity building programme were organized at the village level and the farmers were guided in mushroom production for alternate income generation and nutritional security. They received

Training on mushroom cultivation helped the farmers in the remote tribal villages to have a sustainable income. The programme also helped in the better utilization of the waste paddy straw and also overcome the environmental damage caused due to leaving and burning of paddy straw. The farmers fetched better market prices for mushrooms due to its low investment and management.

For further interaction, please write to:

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