



# Case Study On Mushroom And Mushroom Spawn Production For Sustainable Income Generation

<sup>1</sup>J. Bhuyan and <sup>2</sup>D. Jayapuria

<sup>1</sup>Scientist (Home Science), KVK, Mayurbhanj-I, Shamakhunta, Odisha,

<sup>2</sup>SMS(Agrl. Extension), KVK, Mayurbhanj-I, Shamakhunta, Odisha,

## Abstracts

*Mushrooms have been consumed many years ago and it is reflected in history. It was not only taken up as the food rather it was utilized as healthy and medicated food by the people from time immemorial. Romans perceived it as “food for god”, from centuries Chinese considered mushroom as “health food” and “elixir of life”. Mushrooms have been played as an important part of human civilization due to its attractive culinary properties, medicinal and nutritional values. Now a day educated and young mass are come forward for taking mushroom cultivation as a source of their sustainable income generating activities.*

*Keywords : Mushroom, cultivation, nutraceutical, treatment, fungi*

## Introduction

Mushroom cultivation is the cultivation of saprophytic edible fungi utilizing the cellulosic waste material in an efficient way. Mushroom is well known for its delicacy, aroma, nutritive and medicinal value and non conventional source of human food.(Suman B.C. et. al., 2007) More than 2000 species of different mushrooms are existing in nature but nearly 25 are widely adopted as food, few are commercially cultivated for dietary consumption and for medicines. Many pharmaceutical companies are also utilize it for its different nutraceutical properties like prevention or treatment of Parkinson, Alzheimer, hypertension and high risk of strokes. Mushrooms also act as antibacterial immune system enhancer and cholesterol lowering agents etc.

Mayurbhanj is the largest district in Odisha constituting 26 blocks, 382 gram Panchayat and 3748 number of villages. It is famous throughout the country for Bhanja rules and its rich heritage. Though it is a largest district but in considering to the production of Mushroom it still remains behind other district and the availability of mushroom in the market of this district is due to the neighboring and other districts like Balasore, bhadrak, Jajpur, Khurda and Puri. Sometimes people also collect natural mushrooms like Nada chhatu, Bali chhatu and Rutka chhatu and that's why it is available in the market. The climate of this district is quite compatible for cultivation of different mushrooms throughout the year. Mayurbhanj is a tribal dominated district with 58.72% population belongs to tribal community and 68 % belongs to small and marginal family and they can adopt mushroom as source of their livelihood.

Debendrapur is a village in Baripada block situated at a distance of 10 Km away from Krishi Vigyan Kendra, Mayurbhanj-1, Shyamakhunta. The village comprises of 150 households with total 520 numbers of population. Among them 50% are ST, 40% are OBC and rest 10% are SC. About 70% are landless agricultural labourers.

Sisir Mohanta is having qualification of MA in Political Science and LLB, was engaged as consolidated lecturer in Krusna Chandrapur College but he left the lectureship due to less payment for several years and there is less chance of getting permanent job in that college. He is struggling in his life for getting better standards of living. His family consists of 4 members including his wife and two kids. In a training programme at KVK, Mayurbhanj-1 campus he joined as participant and was in search of sustainable livelihood options. By consulting with KVK scientist he got the idea about mushroom production, it is grown out of agricultural waste and is a profitable business. So he wanted to do the paddy straw mushroom cultivation in kharif season only by looking into the demand of this mushroom in market of Mayurbhanj district.

For mushroom production he initially took the three days vocational training from Krishi Vigyan Kendra, Mayurbhanj-1. He then prepared 3beds of paddy straw mushroom per day and at the end of the season he initially got the return of Rs 9730/- from 270 beds per 3 months.

### Cost benefit for 3 months

Sl no.	Component	Quantity	Rate (Rs.)	Amount (Rs.)
1	Paddy straw	5400 bundles	1/-	5400
2	Paddy straw mushroom spawn	270 no.s		4050/-
3	Feeding material (Bengal gram flour)	27 Kg	60/- kg	1620/-
4	Labour cost	5 mandays	220/- manday	1100/-
5	Electricity	-	-	500/-
Revenue generation after computation				
Type	production	Income	Total expenditure	Net profit
Revenue from mushroom cultivation from 3months	216 kg	22400/-	12,670/-	9,730/-

By seeing the initial success then he prepared 10 beds of paddy straw mushroom per day for eight months and 10 beds of oyster mushroom bed per day for rest four months. So now he is able to produce mushroom throughout the year.

The scientist of KVK always keep in touch with Mr. Mohanta. He was also successfully completed 200hrs of ASCI Skill training programme on mushroom grower for 2018-19. Through the exposure visit he was also getting the opportunity to come in contact with successful entrepreneurs and by his interaction with them, an idea came to his mind for establishing a spawn production unit of self, by this time he is also now facing difficulties in getting good quality mushroom spawn from distant places like Bhubaneswar and Puri. So these huddles also motivated him for starting a Mushroom spawn unit.

## Cost benefit from mushroom and mushroom spawn production unit

Sl no.	Component	Quantity of Produce	Gross cost	Gross return	Net profit	B:C
1	Paddy straw mushroom bed for 8 months (10 beds/day)	2400 beds	1,44,000/-	2,88,000/-	1,44,000/-	2
2	Oyster mushroom bed for 4 months (10 beds/day)	1200 beds	36,000/-	1,08,000/-	72,000/-	3
3	Mushroom spawn (120 no.s per day for round the year)	54000 no.s	4,32,000/-	7,02,000/-	2,70,000/-	1.6
		<b>Total</b>	<b>6,12,000/-</b>	<b>10,98,000/-</b>	<b>4,86,000/-</b>	

### Asset creation

Mr Mohanta started this mushroom cultivation from his 10 decimal land and few other fixed structure of his own. Now his business is at growing stage and from this he started construction of his house.

By seeing the success of Mr. Mohanta other farmers from his village and nearby villages also inspired by this and they also started growing paddy straw mushroom on small scale basis.

### Follow up action

KVK Mayurbhanj-1 has also started the documentation of the success and tries to promote this among other young educated mushroom entrepreneurs.

### Conclusion

Mushroom cultivation along with spawn production is a profitable business but it requires practical knowledge and technical skills. Now a day due to unemployment and wide spread of this technology through mass media and easy method of cultivation process, young mass are attracted towards it.

### References

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