

Empowerment in agricultural proceeds through Mushroom Cultivation – A Case Study in the villages of Durg District, Chhattisgarh, India

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Abstract

Various mushroom species have been accepted as food. Many species of mushroom are under commercial cultivation throughout the world and some species are popularly grown in India viz, White Button mushroom, Oyster mushroom, and Paddy Straw mushroom. Mushrooms are devoid of starch and are low in calories and other carbohydrates. Apart from their nutritional value, mushrooms have potential medicinal benefits; they are an ideal food for diabetics and obsessed people. The present study was carried out to assess economic empowerment through mushroom cultivation.

The sample comprised 15 randomly selected families in villages of Durg District, Chhattisgarh, India. The structured schedule was developed for data collection and also 5 case studies were collected from selected respondents. The analysis revealed that more than ninety percent of families in the Durg district believed that enhanced income due to mushroom cultivation has helped them in purchasing luxurious items and raised their standard of living. Further, it was noticed that all families were in a position to provide good education and nutritious food to their children, due to increased income through mushroom cultivation.

Keywords: Mushrooms, nutritional value, economic empowerment, case studies.

Introduction

The modern age is called an age of trade and industry. Money plays an important role in the all-around improvement of the people, society, and the nation. The spirit of India resides in the village where the maximum number of people live with minimum facilities. Poverty and unemployment are the main features of rural India. The number of job seekers increases from year to year and the government cannot afford jobs to all the job seekers in the public sector. Entrepreneurship development or way of self-employment is one of the most important measures to reduce this problem.

Mushrooms are popular for their delicacy and flavour rather than for food. However, it is a fact that they are excellent sources of vitamins and minerals. Mushrooms are of great economic importance to man; their occurrence dates back to the time of early man. Most people eat mushrooms, mostly because of their flavour, fleshy taste, and medicinal value (Adedayo and Olasehinde 2010). The edible mushroom is an extremely high-quality and popular meal that can be effortlessly grown by beginners.

Mushroom cultivation is simple, affordable, suitable for rural areas, and less labour-intensive. Mushroom growing is one agricultural activity in which rural farm women can play a pivotal role without sacrificing their household responsibilities. Women have the prime responsibility for domestic duties and food production. Both women and men contribute to agricultural production and household management; women play a larger role. The increased participation of women in mushroom production and improved knowledge sharing related to mushroom cultivation and entrepreneurial skills has provided employment and income to housewives. Commercial mushroom cultivation can ensure the enhancement of family income at low investment because it is called the vegetable of the future. There are several benefits attached

to mushroom cultivation in Chhattisgarh as its climatic conditions are conducive to its growth. It requires a minimum investment in planting materials and has maximum profit potential in the market. It is easily cultivable and requires small land holdings for cultivation without harming the environment.

The present paper is an attempt to study the necessity and possibility of creating awareness among women, a sense of belonging, and leading economic empowerment of economically weak women as many of them consider it a good option to generate additional income for the family.

Review of Literature

Mushroom production created awareness among women, created a sense of belonging, and led to the economic empowerment of landless women as many of them considered it a good option to generate additional income for the family (Singh et al., 2014).

In a study conducted in India among women farmers, it was observed that mushroom cultivation was a profitable venture and played an important role in their economic empowerment (Awasthi et al., 2015).

Yildiz et al (2016) found that the government has strongly encouraged and financially supported the farmers because of the advantages of mushroom quality and greater food safety assurance. It provides additional income to people living in rural areas particularly those working in the agriculture sector.

Ajay (2017) revealed that mushroom cultivation is a women-friendly profession. They do not need sunlight and can be grown nearly anywhere outdoors and indoors where there's a dry bottom. The most desirable locations for growing mushrooms indoors are cellars, basements, closed tunnels, sheds, pits, and greenhouses.

Mushroom cultivation will improve the socio-economic condition of farmers, and families and solve employment problems of both literate and illiterate farm women (Singh et al. 2018).

Method and observation

The study area focuses on the rainy season in different villages of the Durg district where some farmers have adopted mushroom cultivation with agriculture. The collection of information was carried out by field visits in the year 2019 and year 2020, where the Proceeds in 2019 are without mushroom production, in 2020 is with mushroom production and the result has been documented in table-1.

S.N	Villages	Farmer	Agri. land [Hectare.]	Proceeds [Rupees]	
				Year -2019	Year -2020
1.	Nikum	A	1.21	65000	84500
		B	0.20	15000	19500
		C	0.60	30000	39000
		D	0.60	35000	45500
		E	0.32	25000	32500
2.	Albaras	A	0.80	60000	78000
		B	0.60	25000	32500
		C	6.07	2,15000	279500
		D	0.20	15000	19500
		E	0.80	30000	39000
3.	Ruda	A	0.40	15000	19500
		B	1.01	40000	52000
		C	1.21	45000	58500
		D	0.40	15000	19500
		E	1.21	45000	58500

The above table-1 reveals the income status of the 15 representative families. It is revealed that there was a sound improvement in the annual income of the respondents. Based on the documentation in Table -1, we start the analysis of a case study in the year 2021 in these villages. Collection of information for the case study was carried out by semi-structured interviews and asked tabulated five questions. The informants are mostly local women of the village between the age group 40-75 years. The total respondents are 450 in different villages of Durg district, where 197 in Nikum, 150 in Albaras, and 103 in Ruda and the result has been documented in table-2.

	District - Durg [C.G.]								X ²	P- value
	Nikum		Albaras		Ruda		Total			
	R	%	R	%	R	%	R	%		
Question -1- Has their income increased by adopting improved practices?										
Yes	186	94.4%	150	100%	102	99.0%	438	97.3%	11.70	0.00
No	11	5.6%	0	0.0%	1	1.0%	12	2.7%		
Total	197	100%	150	100%	103	100%	450	100%		
Question -2- Have been they able to provide good education to children due to increased income?										
Yes	187	94.9%	150	100%	103	100%	440	97.8%	13.13	0.00
No	10	5.1%	0	0%	0	0%	10	2.2%		
Total	197	100%	150	100%	103	100%	450	100%		
Question -3- Do they get financially independent?										
Yes	188	95.4%	150	100%	103	100%	441	98.0%	11.79	0.00
No	9	4.6%	0	0%	0	0%	9	2.0%		
Total	197	100%	150	100%	103	100%	450	100%		
Question -4- Did they feel economically empowered than the other?										
Yes	185	93.9%	150	100%	101	98.1%	436	96.9%	11.08	0.00
No	12	6.1%	0	0%	2	1.9%	14	3.1%		
Total	197	100%	150	100%	103	100%	450	100%		
Question -5- Has enhanced income helped to purchase luxurious items and raise the standard of living of their family?										
Yes	185	93.9%	150	100%	103	100%	438	97.3%	15.83	0.00
No	12	6.1%	0	0%	0	0%	12	2.7%		
Total	197	100%	150	100%	103	100%	450	100%		

RESULT AND DISCUSSION -

Growing mushrooms offers increased family income for a lower investment cost. The additional benefit at the farmer's disposal is waste materials that are easily converted into nutrient-rich food materials. For rural residents, unemployed youth, landless farmers, and women, mushroom farming may be a viable source of income. Growing mushrooms is an indoor pastime that makes use of land that would otherwise be useless. It is a labor-intensive, highly profitable business that provides the impoverished with gainful work.

Table- 2 shows that more than ninety percent (94.4 %) of women in Nikum, 100% from Albaras, and 99.0 % of women from Ruda disclosed that their income had increased. Although a total of 97.3% of respondents accept that their income had increased after adopting improved practices and it helped them in increasing their savings and investments. Further, it was noticed that 94.9% of women in Nikum, 100% from Albaras, and 100 % of women in Ruda can provide good education to children due to increased income. Although a total of 97.8 % of respondents accept that were in a position to provide good education, improved health

conditions, nutritious food to their children, and increased standards of living due to increased income through mushroom cultivation.

In the table-2 the majority of women in Nikum (95.4%), 100 % in Albaras, and 100 % in Ruda have become financially independent. Although a total of 98 % of respondents accept that their families are fully financially independent due to increasing income through mushroom cultivation. More than ninety percent (93.9 %) of women in Nikum, 100.0% of women in Albaras, and 98.1 % in Ruda were feeling economically empowered due to mushroom cultivation. Although a total of 96.9 % of respondents disclosed that extension methods have been able to provide them with information that helped them to become economically empowered. Further, it was observed that 93.9 % of women in Nikum, 100 % from Albaras, and 100 % from Ruda believed that increased income helped in upgrading their economic status in society. Although a total of 97.3% of respondents disclosed that enhanced income helped them in purchasing luxurious items and raised their standard of living because of mushroom cultivation.

Conclusion

The best job for impoverished and landless farmers is growing mushrooms. For small-scale production and to help support the family, mushrooms can be grown in the confines of a farmer's home. The survey clearly shows that most women believed their income had grown after implementing better techniques and were able to adequately support the family as a result of higher income from mushroom cultivation. While women cannot free themselves from domestic duties, sharing these duties with other family members would provide them more time to establish their businesses or engage in income-generating activities. It is challenging to run a micro business or income-generating activity without the help of family members, especially the father or spouse.

According to the survey, more than 90% of women said that they had received information that had aided in their economic empowerment through the use of extension tactics. The results show that there was a significant increase in the respondents' annual income both before and after mushroom growing in conjunction with agriculture. Due to its suitability for women's lifestyles, mushroom farming is one of the most popular activities among women for generating cash. Each person's access to food and the quality of medical care declines as the world's population grows, especially for those who reside in less developed nations. A labor-intensive agro-industrial activity, mushroom farming has the potential to have a significant economic and social impact by providing jobs and income to both women and young people. As a result, mushroom farming helps many poor farmers live healthier lives and decreases their poverty.

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