

**A REVIEW :**

# Constraints faced by small, medium and large farmers in mushroom cultivation

■ Ashima Moyal, Gayatri and Gyanendra Sharma

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**SUMMARY :** Mushroom cultivation is one of the most economical ways of upgrading income of the farmers other than field crops, which ultimately increase human resource directly or indirectly. Mushroom cultivation as a self-employment venture is now being promoted by various Government Department, State Agricultural Universities, and National Research Centre of Mushroom (NRCM) and NGOs. But, in this venture various risk are also involved which must be considered. This paper observes the major constraints faced by mushroom growers during various stages of mushroom cultivation such as awareness regarding procurement of raw material, lack of physical facilities like cold storage and infrastructure, financial constraints like difficulty in borrowing loans and lack of proper marketing channels etc.

**KEY WORDS :**

Mushroom,  
Mushroom  
cultivation, Self-  
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Constraints

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## **BACKGROUND AND OBJECTIVES**

India has a tremendous potential for the growth of agro-based industries and presently one of the focus-segment is production and processing of mushroom. The demand for mushroom is increasing because of its high nutritive value. Mushroom has been recognized as a richer source of protein, than most of the other forms of cereals, pulses and fruits. Mushroom cultivation is an ideal complementary enterprise for poultry farmers since it can be grown within a limited space and short interval (Sawant *et al.*, 2001). Mushroom as an edible fungus is grown worldwide for its palatability. Out of 2000

species of prime edible mushrooms, only 4-5 species are grown on commercial scale throughout the world having an annual production of 3.763 million metric tons (Paul *et al.*, 2001). The diversity in soil and climatic conditions in India allows production of a variety of mushrooms in different parts of the country. This provides vast potential for the cultivation of mushroom due to ample availability of raw material and favourable climatic conditions.

Mushroom cultivation is one of the most economical ways of upgrading income of the farmers other than field crops, which ultimately increase human resource directly or indirectly. Mushroom cultivation as a self-

Author for correspondence :

**Ashima Moyal**  
Department of  
Extension Education  
Institute of Agriculture  
Sciences, Banaras Hindu  
University, Varanasi  
(U.P.) India

See end of the article for  
authors' affiliations

employment venture is now being promoted by various Government Department, State Agricultural Universities, and National Research Centre of Mushroom (NRCM) and NGOs. The main objective of this venture is to improve the socio-economic condition of the poor (Verma, 2007). To enhance the livelihood security of marginal and landless farmers, mushroom farming is a better option along with other agricultural activities. Even though government is putting various efforts in promoting mushroom farming, very less number of farmers is able to implement it on the realistic basis. Mushroom cultivation is a reliable and effective way for resource poor cultivators to grow nutritious food in a short space of time. It also provides an opportunity to generate a highly tradable commodity, thereby contributing to income generation. But, majority of the farmers fails to make profits out of their mushroom production activity due to the poor marketing strategy (Shirur and Shivalingegowda, 2015). It is because they might facing various challenges or constraints which are restricting them to adopt mushroom cultivation as a venture. And also those farmers who priory adopt this practice were force to leave because of these constraints.

#### **Raw material and their sources for mushroom cultivation:**

The initial challenges which mushroom growers have to face include determining the most suitable mushroom to grow and identifying a spawn supplier, organizing available resources to develop a growing system and assessing requirements for supplying different marketing outlets. Non-availability of spawned mushroom bags in required quantity was the for most problem being faced by mushroom growers followed by incidence of insect pest and diseases for which services of techno-crats are extensively required to keep intact reasonable benefits. The nearby public units preparing spawn compost could not meet the demand of growers (Marshall and Nair, 2009). For improving productivity, the adequate supply of quality spawned compost bags at the doorsteps of growers at appropriate time and reasonable prices in addition to encouraging them to grow at least two crops in a year (Kangotra and Chauhan, 2013).

#### **Physical facilities and infrastructure:**

Physical facilities like availability of proper space, cold storage and skilled labour were needed for the mushroom cultivation this is also a major concern which

mushroom growers are confronting (Deshmukh *et al.*, 2001). Vashist and Sashi (2007) studied acceptability of mushroom production technology by farm women of the district of Jhajjar in Haryana revealed that reasons for non-adoption were the shortage of space in the home, lack of time, highly perishable nature of mushroom, lack of co-operation and marketing problems.

#### **Marketing of mushroom:**

Mushroom cultivation is a reliable and effective way for resource poor cultivators to grow nutritious food in a short space of time. It also provides an opportunity to generate a highly tradable commodity, thereby contributing to income generation. But, majority of the farmers fails to make profits out of their mushroom production activity due to the poor marketing strategy (Shirur and Shivalingegowda, 2015). Marketing of mushrooms in India is not yet organised. It is the simple system of producers selling directly to retailer or even to consumer, which has its own limitations. The production of mushrooms, mainly seasonal, has also exacerbated its marketing problems. There have been frequent reports of gluts in north Indian States during the winter months forcing the distress sale of the mushrooms. This reinforces that effort to increase the production without solving its marketing problems, would be counter-productive (Sharma *et al.*, 2017). Production of mushrooms, especially of the white button mushroom, in India has gone up in the last few years but it has also exacerbated its marketing problems. Despite the changing currents, there is not yet much market for the processed foods and basically fresh vegetables and fruits were preferred in this country. The major problems with mushroom marketing are:

Fresh mushrooms have very short shelf-life, cannot be transported to long distances without refrigerated transport facility and are sold in localised markets in and around production areas. Farmers face the consequences of over-saturated market and are forced to sell their produce at highly unremunerative prices. Private processors, rather than coming for rescue, get tempted to avail of the situation for their benefit (Singh *et al.*, 2011).

Irrespective of the category of a mushroom farm, were non-availability of a proper agency to purchase mushroom, more distance to sell the mushroom and malpractices adopted by purchasing agencies (Singh *et al.*, 2011; Khatkar *et al.*, 2005 and Vashisht and Shashi, 2007).

### Awareness regarding mushroom cultivation:

There is the need of creating awareness regarding:

- Availability of crop loan for mushroom growing among marginal and small farmers,
- Training needs of growers for disinfection of mushroom growing sheds,
- Need of mechanized compost preparation plant, canning and refrigeration facility and
- Creating awareness among masses about nutritional importance of mushrooms to increase its consumption.

### Conclusion:

Mushroom cultivation has vast potential and scope in increasing farmers' income. The impacts of the mushroom business on livelihood and poverty reduction are significant and wide spread. Despite its importance there are some challenges that force farmers to not to adopt the mushroom cultivation practice. Some of the major constraints are borrowing loans, lack of information, marketing of mushroom, no availability of spawned mushrooms, lack of training of farmers for disinfestation of mushroom growing sheds, mechanized compost preparation plant, canning and refrigeration etc.

### Application of review:

The reviews will help for understanding the major issues related to mushroom cultivation. Such as poor marketing strategies, lack of proper information, financial supports and many more. These constraints inhibit farmers to go for mushroom cultivation. The paper would help the extension agents and policy makers to take some steps to rectify these problems.

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Authors' affiliations :

**Gayatri and Gyanendra Sharma**, Department of Agricultural Communication, College of Agriculture, G.B. Pant University of Agricultural and Technology, Pantnagar, U.S.Nagar (Uttarakhand) India

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