Role of Women in Mushroom Cultivation: Indian Perspectives

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Women in rural and lower-middle-income societies make an economic contribution to agricultural and healthcare markets. They are the custodians of traditional knowledge that is of great significance in rural medicine. Whereas women not only retain a high and widely shared level of general knowledge about wild foods, medicinal plants, and other natural resources, they also acquire new "men's knowledge" as roles and duties change. In tribal pockets of India in general and Central India in particular, tribal women sell edible mushrooms—e. g., *Agaricus bisporus* (J. Lge) Imbach, *Termitomyces heimii* Natarajan, *Pleurotus sajorcaju* (Fr.)Singer, and *Cantharellus cibarius* Fr.: Fr. The tribal women collect these naturally growing mushrooms from the forests and sell them in local markets. This enables them to contribute to their families' income. These mushrooms are commercially important and their cultivation can be done. Some non-governmental organizations also involve tribal women in cultivation of mushrooms such as *Pleurotus sajorcaju* and *Agaricus bisporus.*

Mushroom cultivation is an income-generating activity. This, on one hand, will develop self-reliance among the rural women and save them from tiring manual labor, and on the other hand, will provide them with more opportunities for cultural, societal, and technical education in improving the quality of family and community life by income generation.

Biotechnological packages for women can be introduced in the weaker sections of the society in order to improve health avenues for livelihood and in supplementing their family income. The need-based integrated setup can be used for exploitation of resources of the region for their physicoeconomic upliftment. This would create new avenues of employment for the rural populations. Women should be involved not only in collecting edible mushrooms, but also in cultivating medicinal mushrooms.

A majority of species of edible fungi have not been successfully cultivated because it is not feasible to recreate their growing conditions in isolation from their normal environment. Advances in molecular biology help us in identifying and selecting mushroom strains and understanding their association with environmental factors and cultivation methods. Hybrid mushrooms can be generated by tinkering with their genes to produce specimens that have desirable characters in terms of nutritional value, flavor, or resistance to environmental conditions. Study of strains of certain mushroom species that have not yet been used in the neutraceutical and pharmaceutical industries and as new dietary supplements, cosmetics, and pharmaceutical products can be developed from edible mushrooms.

The main goal of the present paper is to discuss the active roles of women in cultivation of edible and medicinal mushrooms of central India as an income generation activity.