

**A Case Study :**

**CONSTRAINTS IN ADOPTION OF MUSHROOM CULTIVATION TECHNOLOGY**

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Accepted : February, 2008

**ABSTRACT**

The role of women in agriculture has, however changed dramatically in developed countries after the advent of science and technology. Due to the modernization in agriculture, women have now opportunities to adopt subsidiary occupation to add to household income. Mushroom cultivation being a space confined technology offers good opportunity for rural women.

The present study was carried out in Kendrapara District of Orissa. The sample consisted of 120 rural women adopted mushroom cultivation technology. The constraints as expressed by rural women are mushroom is highly perishable, lack of marketing facility, infected spawn, non-possession of technical knowledge, low risk bearing capacity, lack of technical guidance, lack of flow of information, non-availability of spawn in time, non-availability of quality straw, lack of Govt. subsidy and lack of transport facility which are to be taken care to bring women to the main stream of development. The suggestions of rural women to overcome the constraints in mushroom cultivation include availability of loan facility and subsidy, post-harvest storage facility, availability of quality spawn, marketing facility, supply of information at right times, technical guidance through skill training and reduced cost of mushroom spawn. The most important considerations are market net working, intensive training programme for mushroom cultivation and its value addition, formation of self help group may improve investment in mushroom cultivation and real empowerment of rural women.

**Key words :** Constrants, Adoption, Mushroom, Orissa

Rural women play multiple crucial roles in all spheres of development activities. They are not only involved in every stage of food production but also shoulder the responsibility of processing, storage and marketing. Studies reveal that 44 percent of world's food is produced by women (Samanta 1994; Swaminathan, 1990). Despite their substantial contribution in the field of agriculture, women continue to be marginalized, undervalued and

unrecognized. The concept of invisible hand (Singh & Vitonen, 1987) explains the point better as all the efforts of women go in the name of their male counterparts.

The role of women in agriculture has, however changed dramatically in developed countries after the advent of science and technology in farming practices. Historically, it is believed that it was the women who first domesticated crop plants and thereby initiated the art and Sciences of farming (Swaminathan, 1990), while men were out hunting in search of food. Women started gathering



seeds from the native flora and began cultivating plants for the sake of food, feed, fiber and fuel.

With the passage of time there is a growing conscious to treat women at par with man. All the five-year plans have given much importance to the development of women. Now-a-days, due to the modernization in agriculture, women have sufficient opportunity to adopt other subsidiary occupation to supplement household income. One of these activities is mushroom cultivation, that adds to household income, gives food security and uplift the status of women.

Mushroom cultivation is a space confined technology and require marginal investment. It utilizes agricultural residue as substrate for mushroom production. FAO have recognized mushroom as a commodity, which enriches the cereal diet and suggested for mushroom cultivation.



Mushrooms are also a good food supplement as they contain minerals and vitamins (Beetz and Greer 1999). Mushrooms have both a nutritional and medicinal value (Hobbs et al 1995). Men determine decisions over land use and the control over farm produce while mushroom comes within domain of women, which attracts many landless and marginal farm women to adopt mushroom cultivation technology as an income generating activity.

#### ***Situation of sample area :***

The present study has been conducted in four blocks of Kendrapara District of Orissa. It comes under East and South East coastal plain zone. The district has mainly four agro-ecological situations. They are (i) Coastal irrigated alluvium, (ii) rain fed alluvium, (iii) Coastal alluvial saline, (iv) Coastal waterlogged area. The climate is subtropical hot and humid with an average temperature of 39°C and average rainfall of the district is 1340mm. Total cultivated area of the district is 1,52,000ha. The major crops grown in the district are paddy, jute, groundnut, green gram, black gram and vegetables.

## **METHODOLOGY**

In order to find out knowledge of rural women about mushroom cultivation technology, the study was conducted with the following objectives: 87

- To find out knowledge of rural women about mushroom cultivation technology.

- To delve into the constraints faced by rural women in growing mushroom.

- To enlist suggestions expressed by rural women for overcoming constraints.

An exploratory research design is adopted for the purpose of study. The study has been undertaken in four blocks of Kendrapara district of Orissa with a randomly selected sample of 120 rural women. The selection of respondent is done on the basis of size of holding. It covers 45 landless, 68 marginal (up to 1 hecter.) small 7 (below



2 hecter.). The database of the study is drawn from a variety of secondary sources and the primary data is collected through observation and interview schedule. The information collected are analyzed and the results obtained are presented in table given below.

## **RESULTS AND DISCUSSION**

### ***Knowledge of rural women about mushroom cultivation technology :***

Rural Women are not adequately trained nor they posses sufficient knowledge about mushroom cultivation technology. Data in the Table 1 reveal that (35.83%) of rural women have knowledge about plucking technique of mushroom. This is followed by 31.66% of women treating straw with not water, which helps in eliminating competing micro organisms. A few of them (21.66%) have knowledge about raising technique of mushroom bed. About (20.83%) of respondents have knowledge about disinfection of mushroom room followed by identification of quality spawn (16.66%) which is pre-requisite for mushroom cultivation.

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Table 1: Knowledge of Rural Women about mushroom cultivation. (N = 120)

Aspects	Number	Percentage	Rank
Identification of quality spawn	20	16.66	V
Hot water treatment of straw	38	31.66	II
Raising technique	26	21.66	III
Watering technique	25	20.83	IV
Plucking technique	43	35.83	I

**Constraints faced by rural women :**

The Rural women do face a number of constraints in mushroom cultivation which are presented below:-

A glance at the Table 2 reveals that each of the respondents has identified some problem or other. The most important hurdle in mushroom production is that it is highly perishable (87.50%), which needs quick disposal. Around 79.17% of respondent expressed lack of marketing facility act as hindrance for selling of the produce. Besides this infected spawn (75.83%) also gives low yield of mushroom. Around 70.83% of rural women are of the opinion that lack of knowledge about improved cultivation technology acts as constraint for higher yield followed by lack of risk bearing capacity on the part of rural women (68.33%). About (66.67%) of rural women expressed that lack of technical guidance followed by lack of flow of information (65.83%). Rural women expressed that non-availability of quality spawn (61.67%),

Table 2: Constraints expressed by rural women

Constraints	No. of Respondent	Percentage	Rank
Non possession of technical knowledge	85	70.83	IV
Lack of flow of information	79	65.83	VII
Lack of technical guidance	80	66.67	VI
Infected Spawn	91	75.83	III
Non-availability of spawn intime	74	61.67	VIII
Highly perishable	105	87.50	I
Lack of marketing facility	95	79.17	II
Non-availability of quality straw	70	58.33	IX
Lack of risk bearing capacity	82	68.33	V
Lack of transport facility	57	47.50	XI
Lack of govt. subsidy	68	56.67	X

non-availability of quality straw (58.33%), lack of Govt. subsidy (56.67%) are the constraints for adoption of mushroom cultivation technology. Lack of transport to the nearest town (47.50%) also responsible for the distress sell of the produce.

**Suggestions to overcome the constraints :**

The suggestions of rural women to overcome the constraints in mushroom cultivation are presented in table given below.

Data in the Table 3 reveal that majority of the respondents (95.83%) expressed that availability of loan and subsidy for mushroom cultivation will help them to adopt the technology on commercial basis. About (91.67%) of rural women suggested that post-harvest storage facility is essential as mushroom is highly perishable followed by availability of quality spawn (90.00%), which is very much essential in mushroom cultivation. About (87.50%) of respondents opined that marketing facility will help to sell the produce soon after harvest so that it will give higher return to the growers within a short period. Rural women (85.00%) feel that supply of information at the time of need will help them to overcome constraints. About 81.67% expressed that technical guidance and skill oriented training is beneficial for mushroom cultivation technology. Only a few of them (58.33%) are of the view that cost of mushroom if reduced, it will attract more number of women who are landless and very poor.

**CONCLUSION**

Mushrooms are highly perishable. It needs quicker disposal. Therefore marketing network is essential.

Table 3: Suggestion of rural women to overcome the constraints.

S. N.	Suggestions	No. of respondents	Percentage
1.	Technical guidance through skill training	98	81.67
2.	Marketing facility	105	87.50
3.	Supply of timely information	102	85.00
4.	Availability of quality spawn	108	90.00
5.	Availability of loan and subsidy	115	95.83
6.	Cost of spawn may be reduced	70	58.33
7.	Post-harvest storage facility	110	91.67

Marketing of mushroom play a vital role in the production process. The efficient marketing provides higher return to the producers and greater satisfaction to the consumers by way of reduction in marketing cost.

Scientists who are working in the state governments and in Krishi Vigyana Kendra most provide effective and intensive training to the rural women to enhance their knowledge which is turn, will enable women to preserve mushroom by value addition. Dried mushroom, mushroom soup powder, mushroom pickle, mushroom Chutney ensures good source of income.

Formation of self-help group helps in getting loan from different commercial banks. The group provides the women a base for self-employment and empowerment through group activity.

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