



E-ISSN: 2278-4136

P-ISSN: 2349-8234

[www.phytojournal.com](http://www.phytojournal.com)

JPP 2020; Sp 9(4): 70-72

Received: 01-05-2020

Accepted: 03-06-2020

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## Gender analysis on adoption of recommended practices in mushroom cultivation in Puri district of Odisha state of India

**Kajal Srichandan and Anshuman Jena**

**Abstract**

A study was undertaken in the Delanga and Nimapara block of Puri district of Odisha covering four villages (two villages from each block) namely Arisal, Beraboi, Khelar, Garapada. Sample respondents of 120 mushroom growers including 60 farm women and 60 men farmers were selected following a multistage randomized sampling technique. The farmers were personally interviewed through a structured schedule for studying the perception and adoption behavior of men farmers and farm women towards improved recommended technology of mushroom cultivation. From the findings, it was observed that the farmers and farm women had better attitude towards superior quality spawn, recommended bed preparation and use of good implements. The farmers had poor knowledge on chemical treatment of the straw and maintenance of temperature and humidity of the room whereas the female farmers were lacking knowledge on good standard feed materials. The level of knowledge and attitude are positively and significantly associated with the adoption of superior quality spawn among the farm women and use of improve implements among the male farmers.

**Keywords:** Knowledge level, attitude and adoption

**Introduction**

Mushrooms are more relevant to predominantly vegetarian India. The production of straw mushroom is very popular in Odisha. One of the attractive factors towards mushroom farming is the short time period between cultivation and harvesting where not require much more initial investment and can be grown with locally available resources (Celik and Peker, 2009). Many researchers have been conducted and technology developed for boosting up the mushroom production. But the yield achieved so far is not encouraging as against the expectation. Unavailability of improved package of practices in one side and behavioural aspects of the farmers in other side inhibit the acceptance of technology. The behavioural components like knowledge level, attitude and adoption behavior of the farmers differ from person to person and place to place. Even among the farmers and farm women, there is a clear cut difference in standard behavioural components. In present study an attempt is made to find out the perception and adoption behavior of the farmers and farm women towards the recommended practices of mushroom cultivation.

**Material and Methods**

The study was undertaken in Puri districts of Odisha. Four villages namely Arisal, Beraboi, in Delanga blocks and Khelar, Garapada in Nimapara block has been selected following a random sampling technique. Sample respondents i.e. farmers and farm women were selected through proportionate sampling from each village.

Six aspects of modern mushroom cultivation namely, superior spawn quality, chemical treatment of the straw, recommended bed preparation good standard feed materials, maintenance of temperature and humidity and use of improved implements were selected as the area of the study for finding out the perception and adoption behavior of the respondents.

A structured questionnaire schedule was prepared, pretested, modified and information was collected from 120 farmers, 60 from each category. The collected information are analysed and presented below.

**Results and Discussion**

Knowledge and attitude of the farmers towards a practice is the basic requirement for the adoption or rejection of the same. In the present study, an attempt was made to study the knowledge level of the respondents which is presented in table 1.

**Table 1:** Knowledge level of farmers and farm women towards recommended practice of mushroom cultivation

Practices	Farm women		Farmers	
	AMS	Ranks	AMS	Ranks
Superior spawn quality	0.68	II	0.83	II
Chemical treatment of the straw	0.56	III	0.58	VI
Recommended bed preparation	0.72	I	0.79	III
Good standard feed materials	0.35	VI	0.89	I
Maintenance of temperature and humidity of the room	0.39	V	0.68	V
Use of improved implements	0.55	IV	0.77	IV

AMS= Average mean score

The table 1 indicated that the level of knowledge also varied with in men farmer and farm women. Male farmers were found to possess higher knowledge on different aspects of mushroom cultivation than the farm women. The farmers are using good standard feed materials irrespective of the gender for the mushroom cultivation. The female farmers were having higher knowledge on techniques of bed preparation (AMS=0.72) followed by superior spawn quality (AMS=0.68) and chemical treatment of straw (AMS=0.56) whereas male farmers had better knowledge on quality feed materials (AMS=0.89) followed by superior spawn quality (AMS=0.83)

and recommended bed preparation (AMS=0.79). The farmers had poor knowledge on chemical treatment of the straw (AMS=0.58) and maintenance of temperature and humidity of the room where as the female farmers were lacking knowledge on good standard feed materials (AMS=0.35) as compared to the other aspects of mushroom cultivation. Further an attempt was made to find out the level of attitude, as a behavioural component of the farmers and farm women towards the recommended practices of mushroom cultivation and the tabulated information from Table 2.

**Table 2:** Level of attitude of farmers and farm women towards recommended practices of mushroom cultivation

Practices	Farm women		Farmers	
	AMS	Ranks	AMS	Ranks
Superior spawn quality	3.63	I	4.26	I
Chemical treatment of the straw	3.26	IV	3.70	V
Recommended bed preparation	3.48	II	4.06	II
Good standard feed materials	3.45	III	3.91	IV
Maintenance of temperature and humidity of the room	3.14	V	4.01	III
Use of improved implements	3.01	VI	3.43	VI

AMS = Average mean score

Following a five point scale, the information in table 2 revealed a poor attitude of both farmer and farm women towards use of improved implements due to strongly abide of traditionalism. The lower attitude towards chemical treatment of the straw was might be due to their poor economic standards or absence of intention for investment. However, a relatively favourable attitude of the farmers and farm women were found towards the use of superior spawn quality and

recommended bed preparation. A wide gap in attitude was also found in between the farmers and farm women. Adoption of practices is the end point in the hierarchy of the adoption stages. In the present study attempt was also made to find out the level of adoption of adoption of the new practices in mushroom cultivation. The analyzed information is presented in Table 3.

**Table 3:** Adoption level of farmers and farm women towards recommended practices of mushroom cultivation

Practices	Farm women		Farmers	
	AMS	Ranks	AMS	Ranks
Superior spawn quality	0.52	I	0.67	I
Chemical treatment of the straw	0.29	IV	0.50	IV
Recommended bed preparation	0.41	II	0.60	II
Good standard feed materials	0.21	VI	0.33	VI
Maintenance of temperature and humidity of the room	0.22	V	0.38	V
Use of improved implements	0.30	III	0.56	III

AMS = Average mean score

Along with the socio-economic standards, knowledge and attitude level usually influence the adoption level of recommended practices. Attempt was made in the study to work out the extent of association of knowledge and attitude

of both categories of farmers with the level of adoption of recommended practices of mushroom cultivation. The data are presented in Table 4 and 5.

**Table 4:** Association between knowledge and adoption behavior of farm women and farmers.

Practices	Farm Women	Farmer
Superior spawn quality	0.578**	0.476*
Chemical treatment of the straw	0.790**	0.456*
Recommended bed preparation	0.501*	0.462*
Good standard feed materials	0.372	0.235

Maintenance of temperature and humidity of the room	0.560*	0.459*
Use of improved implements	0.543**	0.221

\*, \*\* = Significant at 5% and 1% level, respectively

A perusal of table 4 revealed that knowledge and adoption were positively and significantly associated for all the practices except the use of good standard of feed materials, which usually involves higher economic condition and use of improved implements for male farmers. The degree of

association was higher in case of practices viz. chemical treatment of the straw followed by superior spawn quality in case of farm women and higher association in aspects of superior spawn quality followed by recommended bed preparation in case of male farmers.

**Table 5:** Association between attitude and adoption behavior of farm women and farmers

Practices	Farm Women	Farmer
Superior spawn quality	0.675*	0.500*
Chemical treatment of the straw	0.483*	0.461*
Recommended bed preparation	0.480*	0.532*
Good standard feed materials	0.468*	0.450*
Maintenance of temperature and humidity of the room	0.478*	0.486*
Use of improved implements	0.533*	0.559*

\*, \*\* = Significant at 5% and 1% level, respectively

The figure in table 5 indicated a positive and significant association between attitude and adoption of all recommended practices among all the categories of the farmers. However, the degree of association was much stronger in case of superior spawn quality among the farm women and use of improved implements among the male farmers.

### Conclusion

Male farmers exhibited higher value with respect to acquisition of knowledge, favourable attitude and better adoption of recommended practices in mushroom cultivation in comparison to farm women. The female farmers were having higher knowledge on techniques of bed preparation as compared to male farmers' knowledge on quality feed materials and superior spawn quality. Knowledge and attitude have better influence on adoption of good quality spawn and use of improved implements in case of male farmers than other practices. The degree of association was higher in case of practices viz. superior spawn quality, chemical treatment of the straw, recommended bed preparation and use of improved implements in case of farm women. The level of knowledge and adoption were positively and significantly associated for all the practices except the use of good standard of feed materials, which usually indicates towards lower investment. The level of knowledge and attitude are positively and significantly associated with the adoption of superior quality spawn among the farm women and use of improve implements among the male farmers.

### References

1. Celik Y, Peker K. Benefit/cost analysis of mushroom production for diversification of income in developing countries. *Bulg. J Agric. Sci.* 2009; 15:228-237.
2. Sarah Stankorb. *BUSINESS up cycling's Upshot: How Urban Mushroom Farmers Turned Scavenging into a Business*, Mexico City, 2014, 25.
3. UNDP. *Human Development Report*. UNDP, New York, 2016.