

**AWARENESS TOWARDS MUSHROOM CULTIVATION AND
THEIR FARMING PRACTICES
WITH SPECIAL REFERENCE TO THE NILGIRIS DISTRICT**

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Abstract

Mushroom holds a very important place because of its importance and advantages. They are a good source of high quality proteins and are rich in vitamins and minerals. They have medicinal properties. The objective of the study is to assess the farmers level of awareness towards mushroom cultivation, post-harvest practices and on the marketing practices. Primary data were used in the present study. Four hundred and fifty (450) sample households were randomly selected and information was collected on the awareness of mushroom cultivators through a pre-scheduled questionnaire. Weighted arithmetic mean, Likert's Summated scales and Percentage analysis were the statistical tools used. The study concluded that majority i.e. 83.78 per cent of the respondents were influenced by their friends and relatives to take part in mushroom cultivation and (40.00 per cent) of the mushroom growers has exhibited very high degree of awareness towards the mushroom harvesting. The study suggested that the mushroom cultivators need to improve their awareness levels on the nutritional, medicinal values of different kind of mushroom and crop management practices.

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Introduction

Mushroom Cultivation as an activity has been picking up in Nilgiris since 1976. The climate conditions of the Nilgiri's are most congenial for cultivation of button mushrooms. At present there are more than 600 cultivators who are functioning in the Nilgiris District. Mushroom holds a very important place because of its importance and advantages. They are a good source of high quality proteins and are rich in vitamins and minerals. They have medicinal properties. Mushrooms are capable of agro-waste degradation. Mushrooms have a huge export potential and they offer vast rural employment potential.

Objectives of the study

1. To assess the farmers level of awareness towards mushroom cultivation
2. To assess the farmers level of awareness on the post-harvest practices
3. To assess the farmer's level of awareness on the Marketing practices

Research Design

Primary data were used in the present study. Nilgiris District of Tamil Nadu was purposively selected because a large number of households are engaged in mushroom production in this region for their daily livelihood. Four hundred and fifty (450) sample households were selected based on cluster and snow-ball technique sampling and information was collected on the awareness of mushroom cultivators through a pre-scheduled questionnaire. Data were analysed using statistical methods. Weighted arithmetic mean, Likert's Summated scales and Percentage analysis helped the study in interpreting the averages of the variables like: farmers' level of awareness about mushroom harvesting and marketing.

Limitations of the Study

1. Geographical scope of the study was limited to Nilgiris district.
2. Data inadequacy is considered as one of the primary limitations faced by the study, which had hindered in making a very elaborate and detailed data analysis.

Results and Discussions

Awareness about Mushroom Cultivation

Awareness and training on mushroom production helped in income generation, nutrient supplement and in profitable marketing of farmers, farm women and youths. This study draws a detailed discussion on awareness about mushroom cultivation.

TABLE: 1

AGRICULTURIST OPINION ON THE SOURCES OF INFORMATION THROUGH WHICH THEY LEARNT MUSHROOM CULTIVATION

Sl. No	Sources of Information	No. of the Respondents	Percentage
1.	Friends & Relatives	430	95.56
2.	Government Schemes	2	0.44
3.	Internet	6	1.33
4.	Television/Radio	12	2.67
	Total	450	100

Source: Primary Data

The above table clearly depicts that 95.56 per cent of the sample subjects learned about mushroom cultivation through their friends and relatives. Followed by 2.67 per cent of the growers have said that they got awareness about mushroom harvesting through television / radio programmes. Similarly, 1.33 per cent of the respondents learned about mushroom cultivation from internet sources and the remaining 0.44 per cent of the respondents were educated by the Government agencies like agricultural department.

Hence it has been concluded that out of 450 mushroom cultivators, 95.56 per cent of the sample subjects have said that they learning about mushroom cultivation through their friends and relatives.

Table -2

Farmers' Opinion on Influences of personalised and Non-Personal Factors to start Mushroom Cultivation

Sl. No	Factors	No. of the Respondents	Percentage
1.	Friends and Relatives	377	83.78
2.	Government Agencies	1	0.22

3.	Elders	68	15.11
4.	Others	4	0.89
	Total	450	100

Source: Primary Data

The above table clearly indicates that 83.78 per cent of the respondents were influenced by their friends and relatives to take part in mushroom cultivation. About 15.11 per cent of the respondents were influenced by the elders in the family. Followed by 0.89 per cent of the respondents were influenced by others like non-government agencies, agricultural department employees etc., and the remaining 0.22 per cent of the respondents are influenced by the Government agencies.

The study concluded that majority; i.e. 83.78 per cent of the respondents were influenced by their friends and relatives to take part in mushroom cultivation.

Table -3
Farmers' level of awareness about mushroom harvesting and marketing

Variables	Very High	High	Moderate	Low	Very Low	Sum	Mean	Rank
Mushroom Harvesting								
Seasons of Harvest	51 (11.33)	176 (39.11)	221 (49.11)	2 (0.44)	0 (0.00)	1626	3.61	4
Temperature Maintenance	180 (40.00)	166 (36.89)	101 (22.44)	3 (0.67)	0 (0.00)	1873	4.16	1
Spawn Storage and Its Transport	151 (33.56)	184 (40.89)	104 (23.11)	11 (2.44)	0 (0.00)	1825	4.06	2
Raw material Availability	173 (38.44)	128 (28.44)	122 (27.11)	27 (6.00)	0 (0.00)	1797	3.99	3
Farm Design	85 (18.89)	100 (22.22)	204 (45.33)	59 (13.11)	2 (0.44)	1557	3.46	5
Varieties of Products that can be Cultivated in Niligiris	8 (1.78)	47 (10.44)	249 (55.33)	146 (32.44)	0 (0.00)	1267	2.82	8
Pest & Disease Management	17 (3.78)	101 (22.44)	197 (43.78)	126 (28.00)	9 (2.00)	1341	2.98	6
Crop Management Practices	11 (2.44)	70 (15.56)	214 (47.56)	135 (30.00)	20 (4.44)	1267	2.82	8
Nutritional and Medicinal Values	26 (5.78)	106 (23.56)	120 (26.67)	172 (38.22)	26 (5.78)	1284	2.85	7
Post-Harvest Practices								

Storage Practices	182 (40.44)	2s07 (46.00)	56 (12.44)	4 (0.89)	1 (0.22)	1915	4.26	2
Packaging	227 (50.44)	187 (41.56)	36 (8.00)	0 (0.00)	0 (0.00)	1991	4.42	1
Care Needs	90 (20.00)	197 (43.78)	150 (33.33)	13 (2.89)	0 (0.00)	1714	3.81	3
Modified Humidity Packaging	16 (3.56)	52 (11.56)	312 (69.33)	68 (15.11)	2 (0.44)	1362	3.03	4
Transportation and Logistic Practices in Hilly Region	14 (3.11)	52 (11.56)	245 (54.44)	135 (30.00)	4 (0.89)	1287	2.86	5
Value Addition to Products (Pickling, Soup Powders, Canning, Dehydration etc.)	18 (4.00)	85 (18.89)	123 (27.33)	199 (44.22)	25 (5.56)	1222	2.72	6
Marketing Practices								
Demand for Mushrooms	174 (38.67)	182 (40.44)	82 (18.22)	11 (2.44)	1 (0.22)	1867	4.15	1
Premium Price Quoted for Button Mushroom	30 (6.67)	216 (48.00)	177 (39.33)	27 (6.00)	0 (0.00)	1599	3.55	2
Category of Buyers	11 (2.44)	74 (16.44)	282 (62.67)	80 (17.78)	3 (0.67)	1360	3.02	4
Quality Standards to be Maintained	18 (4.00)	182 (40.44)	202 (44.89)	47 (10.44)	1 (0.22)	1519	3.38	3
Hygienic Certification and Marks	16 (3.56)	78 (17.33)	134 (29.78)	190 (42.22)	32 (7.11)	1206	2.68	5

Source: Primary Data

The above table discusses the respondents' level of awareness about mushroom cultivation. On an average 83.20 per cent (mean of 4.16) of mushroom growers said that they have very high level of awareness on right temperature to be maintained for effective growth of mushrooms. This variable ranked in first place. Followed by the respondents have expressed high degree of awareness towards the spawn storage of materials such as saw dust, loamy soil etc. and its transportation, these variables are ranked in second place. It has been inferred that the respondents have high level of awareness on raw material availability. This factor ranked is in third place with an average score of 3.99. Sample mushroom growers have expressed moderate level of awareness towards the seasons of mushroom harvesting, farm design and pests and disease management, these variables are rated in the fourth to sixth places, with the mean score 3.61, 3.46 and 2.98, respectively. On an average 38.22 per cent of the respondents have expressed low level of awareness towards on nutritional and medicinal value of different

varieties of mushrooms and it is ranked seventh place with an average mean score of 2.85. It has been inferred that the respondents have very low level of awareness on crop management practice; it has been ranked in the eighth place with average mean score of 2.82.

The next table clearly depicts the respondents' level of awareness in post practices of mushroom cultivation. On an average 4.42(50.44 per cent) mushroom growers said that they have very high level of awareness of post harvesting practices of mushroom. This variable ranked in first place. A batch of mushroom growers has said that they have gained high level of awareness on storage practices and care needs. These variables are ranked in second and third place with mean score of 4.26, 3.81 respectively. Further they have a moderate level of awareness towards modified humidity packaging, transportation and logistics practices in hilly region and it is ranked in fourth and fifth places with an mean score of 3.03 and 2.86. subsequently, it has been observed that the respondents have opined that they have only a low level of awareness in value addition to products such as pickling, soup powders, canning, dehydration and it is ranked in sixth place with an average mean score of 2.72.

The next table has been clearly indicates that the level of awareness about the marketing practices in mushroom cultivation. It has been inferred that the mushroom growers have high level of awareness with the demand for mushrooms and premium price quotation methods for the button type of mushrooms. These factors ranked in first and second place with an average mean score of 4.15 and 3.55 respectively. On an average of 3.38 (44.89 percent) of the mushroom growers have said that they have moderate level of awareness in maintenance of quality standards and it is ranked in third place. Followed by 3.02 on an average mean score of mushroom growers have said that they have moderate level of awareness in the category of buyers. Finally, it has been inferred that the mushroom growers has low level of awareness in hygienic certification and marks and this variable ranked in fifth place with mean score of 2.68.

Henceforth it is concluded that from the above study that majority (40.00 per cent) of the mushroom growers (mean score of 4.16 on the Likert's five-point scale) has very high level of awareness towards the mushroom harvesting, 4.42 (50.44 per cent) of the mushroom growers said that they have very high level of awareness on post-harvest practices of mushroom cultivation and 4.15(40.44 per cent) of the mushroom growers has high level of awareness

towards the marketing practices of mushroom harvesting. Moreover there should be in need of post management projects which are related to pack house, Refer – van, retail outlets, primary processing etc., since mushrooms are highly nutritive food and have certain medicinal properties marketed as fresh, dried and preserved.

FINDINGS

The study found that out of 450 respondents, 95.56 per cent of the farmers have said that they learned about mushroom cultivation through their friends and relatives. Majority; i.e. 83.78 per cent of the mushroom growers were influenced by their friends and relatives to take part in mushroom cultivation.

Majority (40.00 per cent) of the mushroom growers (mean score of 4.16 on the Likert's five-point scale) has exhibited very high degree of awareness towards the mushroom harvesting, 4.42 (50.44 per cent) of the mushroom growers are highly aware on post-harvest practices of mushroom cultivation and 4.15(40.44 per cent) of the mushroom growers are also well aware of marketing practices of mushroom harvesting.

SUGGESTIONS

Mushroom cultivators need to improve their awareness levels on the nutritional, medicinal values of different kind of mushroom, crop management practices, varieties of products that can be cultivated in Nilgiris,value Addition to Products like (Pickling, Soup Powders, Canning, Dehydration etc.), Hygienic Certification and Marks.

The study found that the farmers are asked to develop their skills for effective mushroom cultivation to minimise the risk of loss.

CONCLUSION

The study found that majority (40.00 per cent) of the mushroom growers (mean score of 4.16 on the Likert's five-point scale) exhibited very high level of awareness towards the mushroom harvesting and 99.11 per cent of the farmers are interested in cultivating button type of mushrooms.

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