

IMPACT OF MUSHROOM TRAINING PROGRAMMES ON RURAL WOMEN IN CHHATTISGARH STATE

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ABSTRACT

The study was conducted to estimate the impact of training on knowledge, adoption and diffusion of mushroom production technology among rural women. Two blocks of Raipur district namely Dharsiwa and Arang were purposively selected with 60 (Sixty) rural women who received the training. The results of the study indicated that there was significant impact of training on knowledge, adoption and diffusion of mushroom production technology among the rural women, to generate additional income. Most of the independent variables were showed positive and significant relationship with the knowledge, adoption and diffusion regarding mushroom production after the training.

INTRODUCTION

The Government of India has given much attention to the developmental projects and supportive services to motivate rural woman to become an important player in socio-economic development. A large number of Indian women lives in rural areas and majority of them are engaged in farm and home activities. The printed media are not of much use to these rural women, having very little education. They can be taught better by training and demonstrating the new farm technology in their farming situation. Hence, they should be given vocational and other useful training, so that their abilities may be developed to harness maximum potential of the enterprise.

Training is one of the most effective media for dissemination of agriculture and other subsidiary occupation like dairy, poultry, fisheries and mushroom cultivation technology among women. The mushroom production has tremendous potential as an

income generating activity. It requires less space and makes use of vertical space too and hence it is of great importance for landless and marginal landholders. Keeping in view the small holdings of the farmers, cultivation of mushroom can become an important source of additional income. The IGAU, Raipur provides training to the rural women on various aspects of mushroom cultivation technology. Keeping this in view, the present study was undertaken with the following objectives:

1. To study gain in knowledge of the selected mushroom production technology by the rural women as a result of training programs.
2. To measure the extent of adoption of the selected mushroom production technology by the trained rural women.
3. To know the extent of knowledge diffused by the trainees in the villages.

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Table 1. Distribution of respondents according to extent of knowledge of mushroom production technology n = 60

Level of Measurement	Extent of Knowledge			Chi-square
	Low	Medium	High	
Before training	19(31.67)	35(58.33)	6(10.00)	21.1**
After training	10(16.67)	41(68.33)	9(15.00)	33.1**

Figures in parenthesis indicates per cent ** Significant at 1 % level of probability

4. To study the relationship between independent variables with knowledge, adoption and diffusion of mushroom production technology.

METHODOLOGY

Two villages namely Tarra from Dharsiwa and Chatoud from Arang block of Raipur district were selected purposively for the study, since maximum farm women were planned to be trained from these villages. From each village 30 rural women were randomly selected for the study. Thus a total of 60 rural women were selected for the investigation.

The independent variables namely age, education, caste, family size, family type, social participation, size of land holding, family background, occupation, annual income, innovativeness, cosmopolitaness of the respondents were considered for this study. Opinion towards mushroom production technology, sources of information, contact with agriculture scientist, contact with subject matter specialist and mass media exposure were also sought. The dependent variables under consideration were (a) knowledge of rural women about mushroom production technology (b) adoption of mushroom production practices and (c) diffusion of knowledge about practices of mushroom production.

The data were obtained through personal interview before and after the training

programme with the help of interview schedule. Analysis of data was made with frequency count and computing average. The correlation and multiple regression analysis were also done to know the relationship of independent variables with dependent variables.

RESULTS AND DISCUSSION

Gain in Knowledge

Data presented in Table 1 indicate that out of 60 trained rural women only 10 per cent of them had high knowledge, while, respectively, 58.33 and 31.67 per cent had medium and low knowledge about mushroom production technology before training. Considerable change in extent of knowledge was observed after training. It was noticed that 15.00, 68.33 and 16.67 per cent of the rural women had high, medium and low knowledge, respectively; about mushroom production technology.

Level of Adoption

In case of adoption, the data in table 2 indicate that of rural women, 10.00 per cent had high level of adoption, while, respectively, 41.67 and 48.33 per cent had medium and low level of adoption of mushroom production technology prior to training. However, as a result of training, the level of adoption has increased. It was noticed that 11.67, 76.66 and 11.67 per cent of the rural women had high, medium and low level of adoption, respectively; about mushroom production technology.

Table 2. Distribution of respondents according to extent of adoption of mushroom production technology n = 60

Level of Measurement	Extent of Knowledge			Chi-square
	Low	Medium	High	
Before training	29(48.33)	25(41.67)	6(10.00)	15.1**
After training	7(11.67)	46(76.66)	7(11.67)	50.7**

Figures in parenthesis indicates per cent

** Significant at 1 % level of probability

Relationship of independent variables with knowledge and adoption of mushroom production technology

It is clear from Table 3 that the variables like education, social participation, annual income, cosmopolitaness, contact with subject matter specialist and mass media exposure showed positive and highly significant relation with knowledge before training. The variables education, caste social participation, family background, cosmopolitness and mass media exposure increases the level of significance after training. Although, most of the variables which showed significant relationship with the knowledge before training remained significant after training. In case of adoption, the variables like age, education, caste, social participation, innovativeness, contact with subject matter specialist and mass media exposure established positive significant correlation after training which were failed to establish significant relationship before training. Other variables did not show any significant relationship in either pre or post training period.

In case of diffusion, the variables like education, caste, social participation, family background, cosmopolitaness, contact with agriculture scientists and contact with subject matter specialist exhibited significant correlation before training. Some of these variables viz., education and family background further increased the level of

relationship after training of mushroom production technology. Other variables like annual income, opinion towards mushroom production technology and mass media exposure showing significant correlation after training of mushroom production technology were non-significant before training. The variables age, family type, innovativeness and sources of information family size, size of land holding and occupation were failed to establish any significant relationship with the diffusion of mushroom production technology.

Data presented in Table 3 revealed that the coefficient of determination (R^2) for 17 selected variables jointly explained the extent of 59.14 percent variation on the knowledge. It has been further revealed that the regression coefficient was significant only in case of two variables namely annual income and contact with subject matter specialist, the other 15 variables were found to be non significant. This shows that the two variables had significant influence on the knowledge of rural women towards mushroom production technology before training. The coefficient of determination (R^2) from 17 variables was jointly predicted to the extent of 67.09 per cent on the knowledge. It is also revealed that the regression coefficient was significant only in case of one variable namely education. The other 16 variables were found non-significant to contribute the prediction of knowledge after training. This

Table 4 Multiple regression analysis of independent variables with knowledge adoption and diffusion of mushroom production technology by the rural women

Sr.	Independent variables	Multiple regression			
		b'	t	b	T
1.	Age	1.262	1.819	2.003*	2.573
2.	Education	1.830**	2.919	1.361	1.936
3.	Caste	1.303	1.094	-0.614	0.460
4.	Family size	-0.967	1.062	0.519	0.500
5.	Family type	-1.283	0.903	0.219	0.137
6.	Social participation	0.487	0.574	0.838	0.880
7.	Size of land holding	-0.154	0.276	0.086	0.137
8.	Family back ground	0.064	0.022	1.058	0.318
9.	Occupation	1.248	1.221	1.936	1.687
10.	Annual income	0.010	0.632	0.002	0.090
11.	Innovativeness	1.096	1.192	1.379	1.336
12.	Cosmopolitaness	0.257	0.226	-0.426	0.334
13.	Opinion towards mushroom production technology	-1.114	0.862	-0.805	0.556
14.	Sources of Information	1.448	1.242	1.137	0.869
15.	Contact with agriculture scientist	0.521	0.516	1.167	1.031
16.	Contact with subject matter specialist	1.584	1.536	3.098**	4.788
17.	Mass media exposure	1.415	1.185	0.381	0.285

shows that the variable education had highly significant influence on the knowledge of rural women towards mushroom production technology.

Table 3 also revealed that on adoption the strength of the linear relationship (R^2) of 17 selected variables was 48.56 per cent. It is further revealed that the regression coefficient was significant only in case of one variable namely contact with subject matter specialists. Other 16 variables were found non-significant. This shows that the variable contact with subject matter specialist had significant influence on adoption of mushroom production technology, before training. After training, the coefficient of determination (R^2) has been increased up to 55.86 per cent. It is also revealed that the regression coefficient was significant only in case of two variables namely age and contact with subject matter specialist. Non significant contributions were found by

the other 15 variables. This shows that the two variables had significant influence on the adoption of rural women towards mushroom production technology.

In case of diffusion the data shows that coefficient of determination (R^2) for 17 selected variables jointly explained on predicated to the extent of only 65.11 per cent. It is also revealed that the regression coefficient was significant only in one variable namely social participation. The other 16 variables were found non-significant. This shows that the variables social participation had significant influence on diffusion of mushroom production technology by the rural women, before training. Further, the (R^2) has been increased to 70.70 per cent based on the same 17 selected variables, after training. It is also revealed that the regression coefficient was significant in case of four variables namely education, annual income, contact with

Table 3. Relationship between independent variables with knowledge and adoption of mushroom production technology after training

Sr.	Independent variables	Correlation coefficient(r value)	
		Knowledge	Adoption
1.	Age	0.0316	0.2650*
2.	Education	0.6274**	0.3067*
3.	Caste	0.4087**	0.2756*
4.	Family size	-0.1140	0.0371
5.	Family type	-0.0655	-0.1418
6.	Social participation	0.3953**	0.4187**
7.	Size of land holding	-0.2095	-0.0771
8.	Family back ground	0.3897**	0.1524
9.	Occupation	-0.1273	0.0385
10.	Annual income	0.3223**	0.1906
11.	Innovativeness	0.2672*	0.2546*
12.	Cosmopoliteness	0.5092**	0.2394
13.	Opinion towards mushroom production technology	0.2686*	0.1345
14.	Sources of Information	0.1661	0.0902
15.	Contact with agriculture scientist	0.2691*	0.3405**
16.	Contact with subject matter specialist	0.3367*	0.4899**
17.	Mass media exposure	0.5528**	0.2789*

** Significant at 1% level

* Significant at 5% level

subject matter specialist and highly significant for age. The other 13 variables were found non-significant. This shows that the variable education, annual income, contact with subject matter specialist and age had significant influence on the diffusion of mushroom production technology by rural women.

CONCLUSION

A significant impact of training on rural women was observed regarding knowledge, adoption and diffusion of mushroom production technology.

The variables viz., education, caste, social participation, family back ground, annual income innovativeness, cosmopoliteness, opinion towards mushroom production technology, contact with agriculture scientist, contact with subject matters specialist and mass media exposure were found to be positive and significantly correlated with knowledge.

In case of adoption, the variables like contact with subject matter specialist was found positively and highly significant relationship with adoption before training whereas, age, education caste, social participation, innovativeness contact with agriculture scientist, subject matter specialist and mass media exposure were also found to be positive and significantly related with adoption after training.

In case of diffusion the variables education, caste, social participation, family background, cosmopoliteness, contact with agriculture scientist and contact with subject matter specialist were found positive and significantly related with diffusion, before training whereas, all these variables along with annual income, opinion towards mushroom production technology and mass media exposure were also found to be positive and significantly related with diffusion after training.

Like wise, when multiple regression equation was fitted to the variables, the independent variables (annual income and contact with subject matter specialist) were found to be positive and significant with knowledge before training. In case of after training, the variable education was found positive and highly significant with knowledge. In respect of adoption, only contact with subject matter specialist was found to be significant whereas the variables age and contact with subject matter specialist were found to be positively significant with adoption, after training.

In case of diffusion the variable social participation was found significant with diffusion before training where as, the variables age, education, annual income and contact with subject matter specialist were found positive and significant with diffusion of mushroom production technology, after training.

IMPLICATION

The above findings clearly indicated that in case of knowledge the variable like education, in case of adoption the variables age and contact with subject matter specialist and in case of diffusion the variables age, education, annual income and contact with the subject matter specialist were the important variables contributing positively and significantly in increase of knowledge, adoption and diffusion of mushroom production technology among the rural women.

Knowledge is the pre-requisite for the adoption and diffusion of mushroom production technology, hence the facility of women education and training should be increased in rural areas of Chhattisgarh

state. So that they may increase their knowledge which will help them in generating additional income through mushroom production.

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