



# IMPACT OF KVK's TRAINING PROGRAMMES ON SOCIO-ECONOMIC STATUS OF FARM WOMEN

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## Abstract

To study the impact of training programmes organised by KVK's for farm women development, the study was planned to purposively selected kvk *i.e.* Krishi Vigyan Kendra, Dileepnagar, Ramabainagar. For the purpose 80 beneficiaries and 80 non-beneficiaries farm women selected randomly. Thus, the total number of respondents were 160. To assess the impact of training programmes on socio-economic status of farm women  $\chi^2$  test were applied. The significant impact was observed in age group, caste group, education level, type of family, size of family, type of houses, occupation, size land holdings, farm power, material possession, mass media exposure and social participation. Thus, it indicates that kvk impart need based and skill oriented vocational training which is helpful for the development of beneficiaries. The total beneficiaries farmers have better and improved level of socio-economic status than non-beneficiaries farmers.

**Key words :** Training, Socio-economic status, Age, Caste, Family, Occupation, Mass media, Social participation.

## Introduction

The Krishi Vigyan Kendra (Farm Science Centre) is an innovative science based institution, which undertakes vocational training of farmers, farm women and rural youth conducts on farm research for technology refinement and front line demonstrations to promptly demonstrate the latest agriculture technologies to the farmers as well as the extension workers. The KVK function on the principles and collaborative participation of scientists, subject matter specialist, extension workers, farmers, farm women and rural youth. Krishi Vigyan Kendra are grass root level vocational training Institutions designed for bridging the gap between available technology at one end allied area as both at institutional (on-campus) and non-institutional level (off-campus) training conducting method and result demonstration at institutional farms as well as on the farmers field and also organizing a large number of extension activities for rapid adoption of new agricultural technology among the farmers, farm women, fishermen and rural youth. The kvks organize composite training programme of short and long duration based on systematic study of the training needs and technology gaps by each Krishi Vigyan Kendra through a scientific survey of villages. The concept of vocational training in agriculture through KVKs grew

substantially owing to the greater demand for advancement of agricultural technology and the growing progressiveness of the farmers. They need not only knowledge and understanding, but also progressively more skill in various complex agricultural operations. This is imperative for the rapid transfer of technology (TOT). It is designed to impart need based and skill-oriented vocational training to the practising farmers, in service field level extension workers and to those who wish to go in for self-employment. The training start from fields farms, dairy units, poultry units, sheep units, goat units, pig units, workshop etc. and terminates in the discussion assembly. The training programme take into account all methods and means, which will result in skill development in trainees in the areas of their interest. It can be formal, informal and non-formal or a combination of all the three, depending upon the needs and resources of the farmers. Each kvks has been provided with a training organizers about a dozen scientific technical staff and an equal number of office and supporting staff. The discipline of agricultural extension, agronomy, horticulture, veterinary, animal science, home science and plant protection are normally represented in the KVKs. On the basis of above traits the study was conducted with following specific objectives.

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### Materials and Methods

For the study KVK Dileepnagar, Ramabainagar (U.P.) was selected purposively. Thus, the total number of respondents 160 selected randomly including 80 beneficiaries & 80 non-beneficiaries farm women. The data were collected through personal interview method with the help of structural schedule. The entire data were transformed into different categories. To assess the impact of training programmes of related on farm women, selected different independent variables of socio-economic status viz. age group, caste group, education level, size of land holding, farm power, type of family, size of family, type of houses, occupation, material possession, mass media exposure and social participation were used in mind. For measure the impact of training programmes of kvks  $\chi^2$  test were applied with the following formula :

$$\chi^2 = \sum \left\{ \frac{(O - E)^2}{E} \right\}$$

Where,

- O = Observed frequency in a cell.
- E = Expected frequency of the same cell.
- $\Sigma$  = Summation taken over all the cell.

Degrees of freedom: in a 2 x 2 table.

$$\text{d.f.} = (m-1) (n-1)$$

$$\text{d.f.} = 1$$

Where,

- m = number of rows
- n = Number of columns

### Results and Discussion

1. Age group wise participation of farm women in training programmes.

**Null hypothesis :** There is no difference of beneficiaries and non-beneficiaries farm women’s participation of training programmes on the basis of age group (table 1).

**Results :** The calculate value of  $\chi^2$  is 7.025 is greater than table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means the significant difference was observed in age group of farm women who participation in training programmes organised by kvk. Thus, the total beneficiaries were of the different age group than those of non-beneficiaries group.

2. Caste group wise participation of farm women in training programmes.

**Null hypothesis :** There is no difference between beneficiaries and non-beneficiaries farm women participation of training programmes on the basis of caste group wise (table 2).

#### Results

The calculate value of  $\chi^2$  is 4.285 is greater than table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means the total beneficiaries were of the different caste groups than non-beneficiaries.

3) Education level wise participation of farm women in training programmes.

**Null hypothesis :** There is no difference between beneficiaries and non- beneficiaries farm women participation of training programmes on the basis of level of education (table 3).

#### Results

The calculate value of  $\chi^2$  is 4.682 is greater than table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means the level of education of beneficiaries was significantly higher than non-beneficiaries.

4) Type of family wise participation of farm women in training programmes.

**Null hypothesis :** There is no difference between beneficiaries and non- beneficiaries farm women participation of training programmes on the basis of type of family (table 4).

#### Results

The calculate value of  $\chi^2$  is 4.903 is greater than table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means the type of family of beneficiaries and non-beneficiaries were different. Most of the beneficiaries were having nuclear family.

5) Size of family wise participation of farm women in training programmes.

**Null hypothesis :** There is no difference of beneficiaries and non-beneficiaries farm women participation of training programmes on the basis of their size of family (table 5).

**Table 1 :** Distribution of respondents according to their age group.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1.	Below 25 years	27 (33.75)	23 (28.75)	7.025* D.F. = 1
2.	25-50 years	42 (52.50)	32 (40.00)	
3.	More than 50 year	11 (13.75)	25 (31.25)	
	Total	80 (100)	80 (100)	

Figure in parenthesis indicates percentage value. \*Significant at 5% level of significance with 1 D. F.

**Table 2 :** Distribution of respondents according to their caste group.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1.	Forward Caste	18 (22.50)	30 (37.5)	4.285* D.F.=1
2.	Backward Caste	41 (51.25)	32 (40.00)	
3.	Scheduled Caste	21 (26.25)	18 (22.50)	
	Total	80(100)	80(100)	

Figure in parenthesis indicates percentage value. \*Significant at 5%level of significance with 1D.F.

**Table 3 :** Distribution of respondents according to their level of education.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1	Illiterate	21 (26.25)	34 (42.5)	4.682* D.F.=1
2.	Literate			
I	Can sign only	13 (16.25)	11 (13.75)	
II	Primary only	14 (17.50)	10 (12.5)	
III	Junior high school	11 (13.75)	8 (10.00)	
IV	High School	8 (10.00)	6 (7.50)	
V	Intermediate	8 (8.75)	6 (7.50)	
VI	Graduate & other	6 (7.50)	5 (6.25)	
	Total	80(100)	80(100)	

Figure in parenthesis indicates percentage value.

\*Significant at 5% level of significance with 1 D.F

**Table 4 :** Distribution of respondents according to their type of family.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1.	Nuclear	32 (40)	46 (57.50)	4.903* D.F.=1
2.	Joint	48 (60)	34 (42.5)	
	Total	80 (100)	80 (100)	

Figure in parenthesis indicates percentage value. \*Significant at 5% level of significance with 1D.F.

**Table 5 :** Distribution of respondents according to their size of family.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1.	Less than 4 members	35 (43.75)	18 (22.5)	8.153* D.F.=1
2.	4 to 10 Members	33 (41.25)	40 (50.00)	
3.	More than 10 member	12 (15)	22 (27.5)	
	Total	80 (100)	80 (100)	

Figure in parenthesis indicates percentage value. \*Significant at 5% level of significance with 1 D.F.

**Table 6 :** Distribution of respondents according to their type of houses.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1.	Kachcha	26 (32.5)	40 (50)	5.054* D.F.=1
2.	Pucca	34 (42.5)	17 (21.25)	
3.	Mixed	20 (25)	23 (28.75)	
	Total	80 (100)	80 (100)	

Figure in parenthesis indicates percentage value. \*Significant at 5% level of significance with 1D.F.

**Table 7 :** Distribution of respondents according to their family occupation.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1.	House wife	12 (15.00)	28 (35)	8.534* D.F.=1
2.	House wife + agriculture	33 (41.25)	17 (21.25)	
3.	House wife + labour	21 (26.25)	23 (28.75)	
4.	Business + house wife	7 (8.75)	6 (7.5)	
5.	Service + house wife	7 (8.75)	6 (7.5)	
	Total	80 (100)	80 (100)	

Figure in parenthesis indicates percentage value. \*Significant at 5% level of significance with 1 D.F.

**Table 8 :** Distribution of respondents according to their size land holding.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1.	Land less	10 (12.50)	32 (40)	15.624* D.F.=1
2.	Marginal (0-1 ha)	34 (42.50)	20 (25)	
3.	Small (1-2 ha)	19 (23.75)	15 (18.75)	
4.	Large (>2 ha)	17 (21.25)	13 (16.25)	
	Total	80(100)	80(100)	

Figure in parenthesis indicates percentage value. \*Significant at 5% level of significance with 1 D.F.

**Table 9 :** Distribution of respondents according to their farm power possession.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1.	No bullocks	28 (35.00)	41 (51.25)	4.306* D.F.=1
2.	Upto two bullocks	30 (37.5)	24 (30)	
3.	Tractor	12 (15)	8 (10)	
4.	Thresher	10 (12.50)	7 (8.75)	
	Total	80(100)	80(100)	

Figure in parenthesis indicates percentage value. \*Significant at 5% level of significance with 1 D.F.

**Table 10 :** Distribution of respondents according to their household material possession.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1.	Electricity	14 (17.5)	27 (33.75)	5.730* D.F.=1
2.	Radio/T.V.	19 (23.75)	20 (25.00)	
3.	Wrist watch	12 (15)	12 (15.00)	
4.	Telephone	9 (11.25)	8 (10.00)	
5.	Motorcycle	14 (17.5)	7 (8.75)	
6.	Gas cylinder	12 (15)	6 (7.5)	
	Total	80(100)	80(100)	

Figure in parenthesis indicates percentage value. \*Significant at 5% level of significance with 1 D.F.

**Table 11** : Distribution of respondents according to their mass media exposure.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1.	Radio	23 (28.75)	15 (18.75)	4.478* D.F.=1
2.	Television	14 (17.50)	9 (11.25)	
3.	News paper and magazines	8 (10)	24 (30)	
4.	Films	10 (12.5)	11 (13.75)	
5.	Audio and video	7 (8.75)	6 (7.5)	
6.	Participation in meals and exhibition	18 (22.50)	15 (18.75)	
	Total	80(100)	80(100)	

Figure in parenthesis indicates percentage value. \*Significant at 5% level of significance with 1 D.F.

**Table 12** : Distribution of respondents according to their social participation.

S. no.	Categories	Respondents		$\chi^2$ value
		Beneficiaries	Non-beneficiaries	
1.	No membership of any organization	18 (22.5)	35 (43.75)	8.153* D.F.=1
2.	Membership of one organization	28 (35)	23 (28.75)	
3.	Membership of two organization	24 (30)	15 (18.75)	
4.	Membership of more than two organization	10 (12.5)	7 (8.75)	
	Total	80(100)	80(100)	

Figure in parenthesis indicates percentage value. \*Significant at 5% level of significance with 1 D.F.

## Results

The calculate value of  $\chi^2$  is 8.153 is greater than table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means the family size of beneficiaries was better than non-beneficiaries.

6) Type of houses wise participation of farm women in training programmes.

**Null hypothesis** : There is no difference of beneficiaries and non-beneficiaries farm women on participation of training programmes on the basis of type of houses (table 6).

## Results

The calculate value of  $\chi^2$  is 5.054 is greater than

table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means the dwelling pattern of beneficiaries was better than non-beneficiaries.

7) Occupation wise participation of farm women in training programmes.

**Null hypothesis** : There is no difference of beneficiaries and non-beneficiaries farm women on participation of training programmes on the basis of occupation (table 7).

## Results

The calculate value of  $\chi^2$  is 8.534 is greater than table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means the different occupation adopted by beneficiaries than non-beneficiaries farm women.

- 8) Size of land holding wise participation of farm women in training programmes.

**Null hypothesis :** There is no difference between beneficiaries and non-beneficiaries farm women participation of training programmes on the basis of size of land holding (table 8).

### Results

The calculate value of  $\chi^2$  is 15.624 is greater than table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means the total beneficiaries class possessed higher size holding as compared to non-beneficiaries. It was due to adoption of technical knowledge from the training programme.

- 9) Farm power possession wise participation of farm women in training programmes.

**Null hypothesis :** There is no difference of beneficiaries and non-beneficiaries farm women participation of training programmes on the basis of farm power possession (table 9).

### Results

The calculate value of  $\chi^2$  is 4.306 is greater than table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means that the possession of farm power of beneficiaries were higher than non-beneficiaries farm women.

- 10) Material possession wise participation of farm women in training programmes.

**Null hypothesis :** There is no difference of beneficiaries and non-beneficiaries farm women participation of training programmes on the basis of household material possession (table 10).

### Results

The calculate value of  $\chi^2$  is 5.730 is greater than table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means that the houses material possession of beneficiaries were higher than non-beneficiaries farm women.

- 11) Mass media exposure wise participation of farm women in training programmes.

**Null hypothesis :** There is no difference of beneficiaries and non-beneficiaries farm women

participation of training programmes on the basis of mass media exposure (table 11).

### Results

The calculate value of  $\chi^2$  is 4.478 is greater than table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means the mass media exposure of beneficiaries were higher than non-beneficiaries farm women.

- 12) Social participation wise participation of farm women in training programmes.

**Null hypothesis :** There is no difference of beneficiaries and non-beneficiaries farm women participation of training programmes on the basis of social participation (table 12).

### Results

The calculate value of  $\chi^2$  is 8.153 is greater than table value 3.841 of  $\chi^2$  with 1D.F. at 5% level of significance, hence it is significant.

Thus our null hypothesis is rejected. It means the social participation of beneficiaries were better than non-beneficiaries.

## Conclusion

It is evident from the findings that KVK is able to bring about significant changes in socio-economic status of beneficiaries among different independent variables viz. age group, caste group, education level, type of family, size of family, type of houses, occupation, land holding, farm power, material possession, mass media exposure and social participation of farm women. Training guidance given to beneficiaries have played prime role influencing the technological changes viz. knowledge, skill, attitude, action, understanding and other socio-economic attributes besides management orientation. Therefore, there is need to give due importance for the above independent variables with suitable changes by staff to promote successfully function of kvk training programmes. Thus it indicates that kvk impart need based and skill oriented vocational training which is helpful for the development of beneficiaries. The total farm women beneficiaries have better and improved level of socio-economic status than non-beneficiaries farm women.

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