

## TRAINING NEEDS OF FARM WOMEN IN RELATION TO POST HARVEST TECHNOLOGY IN LEGUMES CROP

Chandravadia Kiran<sup>1</sup>, S. R. Patel<sup>2</sup> and Kumbhani Sandip<sup>3</sup>

1 Assistant Professor, College of Agriculture, AAU, Jabugam

2 Officer on special duty, College of Agriculture, AAU, Jabugam

3 Assistant Extension Educationist, DEE, NAU, Navsari - 396450

Email : kuchandravadia@aau.in

### ABSTRACT

*In the present study, an attempt has been made to know the training needs of farm women in relation to post harvest technology in legumes. For this study total 60 farm women from 4 talukas of Junagadh district viz. Mangrol, Talala, Kodinar and Veraval who participated in the trainings conducted by F.T.C. and S.S.K. at Junagadh were selected. The personal interview technique was used for collecting information from respondents. The collected data revealed that farm women need training in control measure of storage pest, information regarding control measure of the pest, poison precaution of control rodents, selling place, information regarding control measure of the insect pest, time of harvesting and time of drying.*

**Keywords:** training need, post harvest technology for farm women

### INTRODUCTION

Agriculture is a family occupation. The women in these families are partners in crop and food production as managers, decision makers and skilled farm workers. They are actively involved in almost all operations of agriculture.

Legumes are the important crops in our country and are the main source of vegetable protein as far as ordinary Indian is concerned. Pulses form an important part of Indian dietary. More than half of Indian population is vegetarian for whom pulse are the major source to fulfil their protein requirement. Hence, it becomes essential to have enough production of legumes and pulses. Further, post harvest aspects in legumes also hold significance as the losses are higher during storage. In consideration with this, it was felt necessary to study the training needs of farm women in relation to post harvest technology in legumes.

### OBJECTIVE

To study the training needs of the farm women in relation to post harvest technology in legumes crop

### METHODOLOGY

The study was conducted in Junagadh district of Gujarat state. For this study total 60 farm women from 4 talukas of Junagadh district viz. Mangrol, Talala, Kodinar and Veraval who participated in the trainings conducted by F.T.C. and S.S.K. at Junagadh were selected. The personal interview technique was used for collecting information from respondents. Frequency, percentage and mean weighted scores were used to analyze data statistically.

Training need inventory consisted of main items and sub items was used to collect the information regarding training needs of legumes growers. The sub items of each main item were arranged against a three point scale. The respondents were asked to place each sub item in any one of these response categories, viz., "Most needed", "Somewhat needed" and "Not needed". The rating given to the sub items were quantified by assigning the score of 3, 2 and 1 for "most needed", "somewhat needed" and "not needed", respectively.

**Training needs for harvesting of legumes**

Data pertaining to training needs for harvesting of legume crops, more than half (63.33 percent) of the farm

women opted “not needed” training in information regarding seed bins, while 21.67 and 15.00 percent of them opted for “somewhat needed” and “not needed”, respectively.

**Table: Training needs of farm women with respect to harvesting of legumes crop**

n=60

Sr No.	Training need	Most needed	Some what needed	Not needed	Mean score	Rank
<b>A</b>	<b>Harvesting of legumes</b>					
1	Information regarding seed bins	09(15.00)	13(21.67)	38(63.33)	1.52	II
2	Time of harvesting	25(41.67)	11(18.33)	24(40.00)	2.02	I
3	Sign of maturity of picking	09(15.00)	13(21.67)	38(63.33)	1.52	III
4	Time of picking	07(11.67)	10(16.67)	43(71.67)	1.40	V
5	Methods of picking	05(8.34)	20(33.33)	35(58.33)	1.50	IV
<b>B</b>	<b>Storage of legumes</b>					
1	Methods of storage	48(80.00)	12(20.00)	-	2.80	II
2	Control measure for storage pests	52(86.67)	08(13.33)	-	2.87	I
3	Time of storage grains	41(68.33)	10(16.67)	9(15.00)	2.53	III
<b>C</b>	<b>Winnowing of legumes</b>					
1	Winnowing is done by manually	-	06(10.00)	54(90.00)	1.20	II
2	Winnowing is done by machinery	10(16.67)	47(78.33)	3(5.00)	1.95	I
<b>D</b>	<b>Drying of legumes</b>					
1	Information about drying	11(18.33)	12(20.00)	37(61.67)	1.56	II
2	Sun drying	-	12(20.00)	48(80.00)	1.20	III
3	Improved method of sun drying	-	09(15.00)	51(85.00)	1.15	IV
4	Time of drying	12(20.00)	38(63.33)	10(16.67)	2.03	I
<b>E</b>	<b>Insect causing damage to legumes</b>					
1	Type of insect damage to different grains	48(80.00)	12(20.00)	-	2.80	II
2	Nature of damage by different insect	31(51.67)	18(30.00)	11(18.33)	2.33	III
3	Information regarding control measure of the insect pest	50(83.33)	10(16.67)	-	2.83	I
<b>F</b>	<b>Name of insecticide and fungicide</b>					
1	Information regarding the insecticide and fungicide	38(63.33)	13(21.67)	09(15.00)	2.33	I
2	Methods of spraying insecticide and fungicide	11(18.33)	41(68.33)	8(13.33)	2.05	V
3	Time of spraying	21(35.00)	27(45.00)	12(20.00)	2.15	II
4	Local name of insecticide and fungicide	15(25.00)	38(63.33)	7(11.67)	2.13	III
5	Precaution of spraying insecticide and fungicides	18(30.00)	28(46.67)	14(23.33)	2.06	IV
<b>G</b>	<b>Nature of damage by rodents</b>					
1	Method of controlling rodents	13(21.67)	38(63.33)	09(15.00)	2.06	III
2	To know nature of damage by rodents to grain of legumes	19(31.67)	41(68.33)	-	2.31	II
3	Poison precaution of control rodents	48(80.00)	09(15.00)	03(5.00)	2.75	I
<b>H</b>	<b>Marketing</b>					
1	Selling	48(80.00)	08(13.33)	04(6.67)	2.73	I
2	Packing	-	09(15.00)	51(85.00)	1.15	III
3	Selling price	03(5.00)	15(25.00)	42(70.00)	1.35	II
4	Mode of transportation	-	09(15.00)	51(85.00)	1.10	IV

Note : Figures in parenthesis indicate percentage

As far as the training needs in time of harvesting, 41.67 percent of the farm women categorized under “most needed”,

while 40.00 percent and 18.33 percent of them categorized under “not needed” and “most needed”, respectively.

It is evident from the Table 1 more than half (63.33 per cent) of the farm women opined a training “not needed”, while 21.67 and 15.00 percent of them opined as “somewhat needed” and “most needed”, respectively.

Further, in case of training needs in time of picking, 71.67 percent of the farm women opted as “not needed”, whereas 16.67 and 11.67 percent of them opted as “somewhat needed” and “most needed”, respectively.

It can be concluded from the Table, that the training needs in the method of picking the legume crop, 58.33 percent of the farm women expressed as “not needed”, while 33.33 and 8.34 percent of them expressed as “somewhat needed” and “most needed”, respectively.

The data presented in Table, indicated that according to the needed hierarchy highest training was desired by the farm women in time of harvesting ranked first followed by information regarding seed bins and time of picking ranked second and third, respectively. The probable reason may be that (i) they were still ignorant about these aspects (ii) social backwardness, (iii) no filtration of the programme in rural areas and (iv) small holding.

#### **Training needs for traditional storage of legumes grains**

From data in Table 1, it can be observed that the great majority of the farm women (80.00 percent) opined for the training on scientific method of storage as “most needed” while 20.00 percent of them opined “somewhat needed” and none of them “not needed”.

With respect to the training needs in control measure for storage pests, 86.67 percent of the farm women expressed as “most needed”, while 13.33 percent of them expressed as “somewhat needed” and none opted “not needed”.

Data depicted in Table 1, revealed that the training needs in time of storage grain, 68.33 percent of the respondent opted as “most needed”, whereas 16.67 and 15.00 percent of them opted as “somewhat needed” and “not needed”, respectively.

According to need hierarchy, control measure of storage pests, training in method of storage and time of storage grains were rank first, second and third, respectively.

The probable reason may be that (i) they were still ignorant about these aspects (ii) social backwardness, (iii) no filtration of the programme in rural areas and (iv) small holding.

#### **Training needs for winnowing of legumes kernels.**

Data in Table 1, regarding training needs of farm women for winnowing revealed that the great extent, 90.00 percent of the farm women were categorized under “not needed” while 10.00 percent of them categorized under “somewhat needed” and none of them “most needed”.

As regard training needs winnowing is done by machinery, 78.33 percent of the farm women expressed as “somewhat needed”, while 16.67 and 5.00 percent of them expressed as “most needed” and “not needed”, respectively.

According to item wise training need, training in winnowing is done by machinery and winnowing is done by manually were ranked first and second with mean score 1.95 and 1.20, respectively.

The probable reason may be that the training need to farm women in cleaning and winnowing increase the production and quality of the grain.

#### **Training needs for drying of grains**

It can be concluded from the Table 1, training needs in information about drying, more than three-fifth (61.67 percent) of the farm women opted as “not needed”, while 20.00 and 18.33 percent of them opted “somewhat needed” and “most needed”, respectively.

Data depicted in Table 1, revealed that training needs in sun drying, vast majority (80.00 percent) of the farm women opted as “not needed”, while 20.00 percent of them opted as “somewhat needed” and none of them “most needed”.

With respect to training needs in improved method of sun drying, 85.00 percent of respondent expressed as “not needed”, while 15.00 percent of them expressed as “somewhat needed” and none of them “most needed”.

From the Table, it can be concluded that the training needs in time of drying, more than half (63.33 percent) of the farm women opined as “somewhat needed”, while 20.00 and 16.67 percent of them opined as “most needed” and “not needed”, respectively.

According to item wise training need, training in time of drying ranked first with mean score 2.03 followed by information about drying (1.56), sun drying (1.20) and improved method of sun drying (1.15) were ranked second, third and fourth, respectively.

Probable reason may be that training need to time of drying. So farm women are preserve the product at long time.

#### **Training needs for insect causing damage to legumes crop**

The data presented in Table, revealed that vast majority (80.00 percent) of the farm women opted “most needed” training in type of insect damage to different grains, while 20.00 percent of them were opted for “somewhat needed” and none of them as “not needed”.

With regards training needs in nature damage by different insect, it was found that more than half (51.67 percent) of farm women opted for “most needed”, while 30.00 and 18.33 percent of them opted “somewhat needed” and “not needed”, respectively.

It could be seen from the data presented in Table, that vast majority (83.33 percent) of the farm women need training in information regarding control measure of the insect pest express as “most needed”, while 16.67 percent expressed as “somewhat needed” and none of them as “not needed”.

Overall observation on training need, training in information regarding control measure of the insect pest ranked first with mean score 2.83 followed by type of insect damage to different grains and nature of damage by different insect was rank second and third with mean score 2.80 and 2.33, respectively.

The probable reason may be that legumes grower might be lacking technical guidance and scientific know-how about integrated pest management and control measures of the insect pest.

#### **Training needs for name of insecticide and fungicide**

The data presented in Table shows that 63.33 percent of the farm women opted as “most needed” training need in information regarding the insecticide and fungicide, while 21.67 and 15.00 percent of respondent opted as “somewhat needed” and “not needed”, respectively.

As far as the training need in method of spraying insecticide and fungicide, more than half (68.33 percent) of

the farm women expressed as “somewhat needed”, whereas 18.33 and 13.33 percent of the respondent expressed as “most needed” and “not needed”, respectively.

Further, in case of the time of spraying, more than two-fifth (45.00 percent) of the farm women opted as “somewhat needed”, while 35.00 and 20.00 percent of them opted as “most needed” and “not needed” respectively.

It is evident from the Table, the training need in local name of insecticide and fungicide, 63.33 percent of the farm women categorized under “somewhat needed”, while 25.00 and 11.67 percent of them categorized under “most needed” and “not needed” respectively.

With regard to precaution of spraying insecticide and fungicide, it was found that 46.67 percent of the farm women expressed as “somewhat needed”, while 30.00 and 23.33 percent of them “most needed” and “not needed”, respectively.

According to need hierarchy, training in information regarding the insecticide ranked first with mean score 2.33 followed by time of spraying (2.15), local name of insecticide and fungicide (2.13) and precaution of spraying insecticide and fungicide (2.06) were ranked second, third and fourth, respectively.

The probable reason may be that legumes grower might be lacking technical guidance and scientific know-how about integrated pest management. The legumes growers using pesticide haphazardly which leads them to high cost or cultivating in addition to these farmers did not know appropriate selection of pesticides. Therefore they feel more need for training on name of insecticide and fungicide.

#### **Training needs for nature of damage by rodents**

With regards the method of controlling rodents from data presented in Table 1, it is observed that majority of the farm women(63.33 percent) were grouped in “somewhat needed”, while 21.67 and 15.00 percent of farm women were categorized “most needed” and “not needed”, respectively.

With respect to training need in to know nature of damage by rodent to grain, more than half (68.33 percent) of the farm women expressed as “somewhat needed”, while 31.67 percent of them expressed as “most needed” and none of them “not needed.”

Data depicted in Table 1, revealed that the training need in poison precaution of control rodents, vast majority

(80.00 percent) of the farm women opted as “most needed”, whereas 15.00 and 5.00 percent of them opted as “somewhat needed” and “not needed” respectively.

With respect to item wise training need, training in poison precaution of control rodents ranked first followed by to know nature of damage by rodent to grain and method of controlling rodents were ranked second and third, respectively.

The probable reason may be that to know nature of damage and control them to given training to the farm women.

### Training needs for marketing

The data presented in Table 1, it is observed that vast majority (80.00 percent) of the farm women were grouped in “most needed” training in selling, while 13.33 and 6.67 percent of them opted as “somewhat needed” and “not needed”, respectively.

With respect to training need in packing, 85.00 percent of the respondent expressed as “not needed”, while 15.00 percent of them expressed as “somewhat needed” and none of them “most needed”.

Data depicted in Table, it can be concluded that, 70.00 percent of the farm women opted as “not needed”, training in selling place, while 25.00 and 5.00 percent of them “somewhat needed” and “most needed”, respectively.

As regard the training need in mode of transportation, vast majority (85.00 percent) of the farm women expressed as “not needed”, while 15.00 percent of them expressed as “somewhat needed” and none of them “most needed”.

According item wise training need, selling ranked first with mean score 2.73 followed by selling price (1.35) and packing (1.15) were ranked second and third, respectively.

The probable reason may be that lower training need to farm women in these aspects and possesses sufficient knowledge and skill of marketing.

### CONCLUSION

It can be concluded from the above findings that a large majority of farm women were expressed to undergo training in control measure of storage pest, information regarding control measure of the pest, poison precaution of control rodents, selling place, information regarding control measure of the insect pest, time of harvesting and time of drying. It is essential to formulate a need based training content so that it may serve as a guide line to fix up the priority while conducting training in different areas.

### REFERENCES

- Bharad,N.D., B.R. Karkar and B.N.Kalsariya (2000). Training Needs of Rural Groundnut growers. *Guj. J.Ext.Edu. & X XI: 52-53*
- Chauhan, N.B. (2008). Capacity building of farmers through training on organic farming practices in surendranagar district of Gujarat State. M.Sc.(Agri) Thesis (Unpublished). Junagadh Agricultural University, Junagadh
- Chothani, S.G. (1999). Tainting needs mango orchard growers of Junagadh district, Gujarat state. M.Sc. (Agri) Thesis (Unpub.). Gujarat Agricultural University, Anand
- Kanani, P.R. (1982). Training need of the tribal farmers in raltion to maize crop at dohad taluka of panchmahals district in Gujarat state. M.Sc.(Agri) Thesis (Unpub.). Gujarat Agricultural University, Anand
- Mathiyazhagan, T. and Singh,R.P. (1986). Training Needs of Banana Growers. *Indian J. Extn.Edu. 22(1&2): 40-46*

---

Received : August 2016 : Accepted : October 2016