

Training needs of farm women in relation to post harvest technology in groundnut

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ABSTRACT

In the present study, attempt has been made to know the training need of farm women in relation to post harvest technology in groundnut in Junagadh district of Gujarat state. For this study, total 60 farm women were selected in 11 villages of 4 taluka like Mangrol, Talala, Kodinar and Veraval. The farm women selected from the training of F.T.C. and S.S.K. held Junagadh at September 2008. The personal interview techniques were used for collecting information from respondents. The collected data revealed that farm women expressed to undergo training in the areas of selling place, information regarding control measure of the insect pest, time of spraying, poison precaution of control rodents, control measure for storage pests, information regarding seed bins and threshing and winnowing are done by machinery.

INTRODUCTION

Post harvest technology has paramount importance for farmers. Groundnut growers sell their produce in market immediately after its harvest due to lack of adequate storage facilities, financial problems and lack of knowledge about post harvest technology. These results in glut of groundnut in market and thereby fall in market prices of these crops. Some times the market rates reach such a low level that it becomes difficult to the groundnut growers even to meet the transportation charges in order to avoid situation that groundnut growers should store their produce longer time to fetch fair market price and good income Bharad *et al.* (2000). Therefore, post harvest techniques must be suited to the farmers to improve their efficiency in post harvest management and minimization of losses during the appropriate stage of harvesting, various stage of handling and different type of scientific method of storage, drying and curing, sorting and grading and process. To improve the efficiency level of farmers, crucial step in proper assessment of training needs are necessary. Training is one of the effective methods of transfer of technology and plays an important role in transfer of new improved skill and knowledge to the farmers. Keeping these facts in view, the present study was conducted with the

objective: to assess the training needs of groundnut growers in relation to post harvest technology.

METHODOLOGY

The present study was undertaken in Junagadh district of Gujarat state. A random sample of total 60 respondents from 11 villages was selected. All the respondents were personally interviewed for the study, with the help of specially structured interview schedule. In order to measure the training needs of groundnut growers, a ratio scale called training need quotient that was especially developed for the study was used. The data collected were tabulated and then analyzed as per the objectives of the study using the frequencies percentage.

RESULTS AND DISCUSSION

Training need inventory consisted of 10 main items and 35 sub items were used to collect the information regarding training needs of groundnut growers. The sub items of each main item were arranged against a three-point scale. The rating given to the sub item were quantified by assigning the score 3, 2 and 1 for "most needed", "somewhat needed" and "not needed", respectively.

The training need was calculated by multiplying the frequencies with their score

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given and they were added and these added score were divided by the number of respondents (N), so that mean score was the scale value. On the basis of the scale value, the training needs were arranged in order to importance.

The overall training need was calculated by sum of the sub item to obtain, a total picture of the training need for each main item. The information collected as regard the sub item of each main item of groundnut crop is presented in Table 1.

Training needs for harvesting of groundnut crop:

As regards the training needs, an information regarding seed bins, majority of the respondents (71.67 per cent) opted for "Some what needed", 28.33 respondent opted for "Most needed" and none opted for "not needed".

As regards the training needs on information regarding time of harvesting: majority of the respondent (55.00 per cent) opted for "somewhat needed", 35.00 per cent and 10.00 per cent respondents opted for "not needed" and "most needed", respectively.

As regards the training needs in sign of maturity and picking: 40.00 per cent of respondents opined "somewhat needed", while 31.67 and 28.33 per cent of them opined as "not needed" and "most needed", respectively.

As regards the training needs in time of picking of groundnut: 63.33 per cent of the respondent opted as "somewhat needed", whereas 30.00 and 6.67 per cent of them opted as "most needed" and "not needed", respectively.

As regards the training needs in the method of picking the groundnut crop, 46.67 per cent of the respondents expressed as "not needed", while 28.33 and 25.00 per cent of them expressed as "somewhat needed" and "most needed", respectively.

Mean score for each item was calculated on the basis of which ranks were assigned to them. According to the need hierarchy, there were training in information regarding seed bins, time of picking, sign of maturity of picking, methods of picking and time of harvesting.

The data presented in Table 1 indicate that according to the needed hierarchy highest training was desired by the respondents on information regarding seed bins, which was followed by time of picking, sign of maturity of picking, methods of picking and time of harvesting. The probable reason may be that, they were still ignorant about these aspects, social backwardness, non-filtration of the programme in rural areas and small holding.

Training needs for traditional storage of groundnut grains:

As regard the training needs in scientific method of storage, 51.67 per cent of the respondents expressed as "most needed", while 35.00 and 13.33 per cent of them expressed as "somewhat needed" and "not needed", respectively.

As regard the training needs in control measure for storage pests, more than one half (71.67 per cent) of the respondents expressed as "most needed", while 28.33 per cent of them expressed as "somewhat needed" and none opted "not needed".

As regard the training needs in time of storage grain, 63.33 per cent of the respondent opted as "some what needed, while 21.67 and 15.00 per cent of them opted as "most 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 given rank first, second and third, respectively.

The probable reason may be that they were still ignorant about these aspects, social backwardness, non-filtration of the programme in rural areas and small holding.

Training needs for threshing of groundnut crop:

As regards the training needs in threshing by manually: 60.00 per cent of the respondent opted as "not needed", while 25.00 and 15.00 per cent of them opted as "somewhat needed" and "most needed", respectively.

As regards the training needs in threshing by machinery, 53.33 per cent of the respondents expressed as "somewhat needed", while 26.67 and 20.00 per cent of them expressed as "most needed" and "not needed", respectively.

As regard the training needs in time of threshing, 71.67 per cent of the respondent opted as "not needed", while 20.00 and 8.33 per cent of the respondents opted as "somewhat needed" and "most needed", respectively.

According to need hierarchy, training in threshing machinery, threshing by manually and time of threshing were ranked first, second and third, respectively. Probable reason may be that groundnut growers were ignorant of the latest machinery so training need to the groundnut growers in relation to latest machinery and increase the production.

Training needs for winnowing and cleaning of groundnut kernels:

As regard training needs of winnowing done

Table 1 : Training needs of groundnut grower in relation to groundnut crop in post harvest technology

Sr. No.	Items for training of post harvest technology of groundnut crop	Degree of training need			Mean score	Rank
		Most needed (3)	Some what needed (2)	Not needed (1)		
Harvesting of groundnut crop						
1.	Information regarding seed bins	17 (28.33)	43 (71.67)	-	2.28	I
2.	Time of harvesting	6 (10.00)	33 (55.00)	21 (35.00)	1.75	V
3.	Sign of maturity of picking	17 (28.33)	24 (40.00)	19 (31.67)	1.97	III
4.	Time of picking	18 (30.00)	38 (63.33)	4 (6.67)	2.23	II
5.	Methods of picking	15 (25.00)	17 (28.33)	28 (46.67)	1.78	IV
Traditional storage of groundnut grains						
1.	Scientific methods of storage	31 (51.67)	21 (35.00)	8 (13.33)	2.38	II
2.	Control measure for storage pests	43 (71.67)	17 (28.33)	-	2.72	I
3.	Time of storage grains	13 (21.67)	38 (63.33)	9 (15.00)	2.07	III
Threshing of groundnut crop						
1.	Threshing by manually	9 (15.00)	15 (25.00)	36 (60.00)	1.55	II
2.	Threshing by machinery	16 (26.67)	32 (53.33)	12 (20.00)	2.07	I
3.	Time of threshing	5 (8.33)	12 (20.00)	43 (71.67)	1.37	III
Winnowing of groundnut kernels						
1.	Winnowing done by manually	8 (13.33)	11 (18.33)	41 (68.34)	1.45	II
2.	Winnowing done by machinery	15 (25.00)	33 (55.00)	12 (20.00)	2.05	I
Cleaning of groundnut grains						
1.	Cleaning done by wind	-	8 (13.33)	52 (86.67)	1.13	II
2.	Cleaning done by machinery	4 (6.67)	47 (78.33)	9 (15.00)	1.92	I
Drying of grains						
1.	Information about drying	-	7 (11.67)	53 (88.33)	1.12	IV
2.	Sun drying	5 (8.33)	6 (10.00)	49 (81.67)	1.27	III
3.	Improved method of sun drying	6 (10.00)	11 (18.33)	43 (71.67)	1.38	II
4.	Time of drying	-	26 (43.33)	34 (56.67)	1.43	I
Insect causing damage to groundnut grains						
1.	Type of insect damage to different grains	46 (76.67)	14 (23.33)	-	2.77	II
2.	Nature of damage by different insect	34 (56.67)	18 (30.00)	8 (13.33)	2.43	III
3.	Information regarding control measure of the insect pest	51 (85.00)	9 (15.00)	-	2.85	I
Name of insecticide and fungicide						
1.	Information regarding the insecticide and fungicide	40 (66.67)	11 (18.33)	9 (15.00)	2.52	II
2.	Methods of spraying insecticide and fungicide	31 (51.67)	25 (41.67)	4 (6.67)	2.45	III
3.	Time of spraying	47 (78.33)	9 (15.00)	4 (6.67)	2.72	I
4.	Local name of insecticide and fungicide	22 (36.67)	33 (55.00)	5 (8.33)	2.28	V
5.	Precaution of spraying insecticide and fungicides	49 (81.67)	11 (18.33)	-	2.45	IV
Nature of damage by rodents						
1.	Method of controlling rodents	38 (63.33)	14 (23.34)	8 (13.33)	2.50	II
2.	To know nature of damage by rodents to grain	29 (48.33)	18 (30.00)	13 (21.67)	2.27	III
3.	Poison precaution of control rodents	43 (71.67)	17 (28.33)	-	2.72	I
Marketing						
1.	Selling	51 (85.00)	9 (15.00)	-	2.85	II
2.	Packing	13 (21.67)	36 (60.00)	11 (18.33)	2.03	III
3.	Selling place	53 (88.33)	7 (11.67)	-	2.88	I
4.	Mode of transportation	5 (8.33)	6 (10.00)	49 (81.67)	1.27	V
5.	Grading	9 (15.00)	43 (71.76)	8 (13.34)	2.02	IV

manually, 68.34 per cent of the respondents opted as “not needed”, while 18.33 and 13.33 per cent of them opted as “somewhat needed” and “most needed”, respectively.

As regard training needs of winnowing done by machines, 55.00 per cent of the respondents expressed as “somewhat needed”, while 25.00 and 20.00 per cent of them expressed as “most needed” and “not needed”, respectively.

As regard training needs in cleaning done by wind, 86.67 per cent of the respondents opted as “not needed”, while 13.33 per cent of them opted “somewhat needed” and none opted as “most needed”

As regard training needs in cleaning done by machinery. 78.33 per cent of the respondent opted as “somewhat needed”, while 15.00 and 6.67 per cent of them opted as “not needed” and “most needed”, respectively.

According to need hierarchy, training in winnowing done by machinery and winnowing done manually were ranked first and second, respectively and cleaning done by machinery and cleaning done by wind were rank first and second, respectively. Probable reason may be that the training need to groundnut growers in cleaning and winnowing can increase the production and quality of the grain.

Training needs for drying of grains:

As regard training needs in information about drying of grains, 88.33 per cent of the respondents opted as “not needed”, while 11.67 per cent of them opted “somewhat needed” and none opted as “most needed”.

As regard training needs in sun drying, 81.67 per cent of the respondents opted as “not needed”, while 10.00 and 8.33 per cent of them opted as “somewhat needed” and “most needed”, respectively.

As regard training needs improved method of sun drying: 71.67 per cent of respondent expressed as “not needed”, while 18.33 and 10.00 per cent of them expressed as “somewhat needed” and “most needed” respectively.

As regard training needs for time of drying, 56.67 per cent of the respondents opted as “not needed”, while 43.33 per cent of them opted as “some what needed” and none opted as “most needed”.

According to need hierarchy, training in time of drying, improved method of sun drying, sun drying and information about drying were ranked first, second, third and fourth, respectively. Probable reason may be that training need to time of drying, so that groundnut growers could preserve the product for long time.

Training needs for insect causing damage to groundnut grain:

As regard the training need in type of insect damage to different grains, more than half (76.67 per cent) of the respondents opted for “most needed”, while 23.33 per cent of them opted for “somewhat needed” and none of them as “not needed”.

As regard the training need in nature of damage by different insects, 56.67 per cent of the respondents opted for “most needed”, while 30.00 and 13.33 per cent of them opted “somewhat needed” and “not needed”, respectively.

As regard the training need in information regarding control measure of the insect pests, 85.00 per cent of the respondents expressed as “most needed”, while 15.00 per cent expressed as “somewhat needed” and none of them as “not needed”.

According to need hierarchy, training in information regarding control measure of the insect pest, type of insect damage to different grains and nature of damage by different insects the ranks given were first, second and third, respectively. The probable reason may be that groundnut growers might be lacking technical guidance and scientific know-how about integrated pest management and control measures of the insect pests.

Training needs for name of insecticide and fungicide:

As regard the training need in information regarding the insecticide and fungicide, 66.67 per cent of the respondents opted as “most needed”, while 15.00 and 18.33 per cent of respondent opted as “not needed” and “somewhat needed”, respectively.

As regard the training need in method of spraying of insecticide and fungicide: 51.67 per cent of the respondent expressed as “most needed”, while 41.67 and 6.67 per cent of the respondents expressed as “somewhat needed” and “not needed”, respectively.

As regard the training need in time of spraying more than one half (78.33 per cent) of the respondents opted as “most needed”, while 15.00 and 6.67 per cent of them opted as “some what needed” and “not needed”, respectively.

As regard the training need in local name of insecticide and fungicide 55.00 per cent of the respondents opted as “somewhat needed”, while 36.67 and 8.33 per cent of them opted as “most needed” and “not needed”, respectively.

As regard the training need in precaution of spraying of insecticide and fungicide, 81.67 per cent of the respondents expressed as “most needed”, while 18.33 per cent of them expressed “somewhat needed” and none

of them “not needed”.

According to need hierarchy, training in time of spraying, information regarding the insecticide and fungicide, methods of spraying insecticide and fungicide, precaution of spraying and local name of insecticide and fungicide were ranked first, second, third, fourth and fifth, respectively.

The probable reason may be that groundnut growers might be lacking technical guidance and scientific know-how about integrated pest management. The groundnut 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 need for nature of damage by rodents:

As regard the training need in method of controlling rodents, 63.33 per cent of the respondents opted as “most needed”, while 23.34 and 13.33 per cent of them opted as “somewhat needed” and “not needed”, respectively.

As regard the training need in to know the nature of damage by rodents to grain 48.33 per cent of the respondents expressed as “most needed”, while 30.00 and 21.67 per cent of them expressed as “somewhat needed” and “not needed”, respectively.

As regard the training need in poison precaution of control of rodents, 71.67 per cent of the respondents opted as “most needed”, while 28.33 per cent of them opted as “somewhat needed” and none of them as “not needed”.

According to need hierarchy, training in poison precaution of control of rodents, method of controlling rodents and to know nature of damage by rodent to grain were ranked first, second and third, respectively. The probable reason may be that to know the nature of damage and to control them, training to the farmwomen appeared to be essential.

Training need for marketing:

As regard the training need in selling, more than one half (85.00) per cent of the respondents opted as “most needed”, while 15.00 per cent of them opted as “somewhat needed” and none of them “not needed”.

As regard the training need in packing, 60.00 per cent of the respondents expressed as “somewhat needed”, while 21.67 and 18.33 per cent of them expressed as “most needed” and “not needed”, respectively.

As regard the training need in selling place. 88.33

per cent of the respondent opted as “most needed”, while 11.67 per cent of them “somewhat needed” and none of them as “not needed”

As regard the training need in mode of transportation, 81.67 per cent of the respondents expressed as “not needed”, while 10.00 and 8.33 per cent of them expressed as “somewhat needed” and “most needed”, respectively.

As regard the training need in grading, more than half of the respondents (71.76%) opted as “somewhat needed”, while 15.00 and 13.34 per cent of them opted as “most needed” and “not needed”, respectively.

According to need hierarchy, training need in selling place, selling, packing, grading and mode of transportation were ranked first, second, third, fourth and fifth, respectively.

Similar type of observation was carried out by Mathiyazhagan and Singh (1986) in case of training needs for banana growers.

Conclusion:

It can be concluded from the above findings that large majority of them expressed to undergo training in the areas of selling place, information regarding control measure of the insect pests, time of spraying, poison precaution of control of rodents, control measure for storage pests, information regarding seed bins and threshing and winnowing done by machinery. 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 the training in different areas.

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