Indian Journal of Extension Education
Vol. 51, No. 1 & 2, 2015 (84-87)

Perception of Seed technology Training among Farm Women

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ABSTRACT

In the present stud, farmwomen's perception about the importance, need and adequacy of seed technology training conducted in two different KVKs of Rajasthan state was evaluated. A total of 120 farmwomen were randomly selected for the study. Data were collected through interview schedule. Results reveal that training on use of seed culture was found to be most important and training in new improved seed production technology was needed utmost in future to increase the production. Training on depth of sowing was found to be most adequate amomg majority of the respondents. Thus, farm women needed better training in some areas of seed technology and seed treatment. Therefore, there is a need to organize training programmes to stimulate higher participation of farmwomen in seed production so that women become more economically independent and improve financial status of the family.

Key words: Ttraining need, seed technology, farmwomen.

INTRODUCTION

"The tiny seed knew that in order to grow, it needed to be dropped in dirt, covered in darkness, struggle to reach the light", Sandra Kring.

Seed has been the lifeline and source of sustenance ever since organized agriculture and came into existence. In recent times, it has also drawn the attention of the world community as a means of technological intervention in agriculture for commercial interest on one hand, and on the other, the imminent need to conserve the diversity, which is on the threat of extinction. Seeds are critical in the food chain and women's role as seed savers, and breeders have been largely responsible for keeping the biodiversity alive. So, the need of the hour is to encourage women's inherent capabilities in seed multiplication and management and establish their dominance in the fast growing seed sector. Development of new models of seed production for women enabling their access to land, skill, technology and critical inputs will go a long way in making them potential seed producers for fulfilling the need of the seed of the villages. Combined with this, a systematic seed production plan, involving farmwomen for locally adoptable cultivars, will help in the conservation of these rich germplasm. This holds the key to food and livelihood security of the people especially in the wake of climatic changes. Knowledge on labeling, packing, testing and marketing techniques will empower them in quality seed production.

Quality of seed is maintained by including various practices, like proper winnowing, drying, bagging, and storage etc. The quality seed availability at proper time determines the agriculture growth. It is a well known fact that up to 85 per cent of the seeds used by the farmers is farm saved seeds i.e. the seed protected and conserved by the farmers from their own harvest for future use. This seed is not of proper quality and not kept in the proper storage condition. Due to these reasons, the germination of seed is adversely affected, which eventually reduces the production and productivity of the crop. It is, therefore, necessary to improve the quality stock of farm saved seeds for enhancing crop production and productivity.

Hence, seed production, seed distribution and other connected aspects have to be improved and strengthened at the farmers' level. To upgrade the quality of farmer-saved seed, it is proposed to provide financial assistance for distribution of foundation or certified seed at 50 per cent cost of the seed of crops for production of certified or quality seeds only, and to provide training on seed production technology to the farming community. Adopting modern agricultural technologies could improve productivity and reduce rural poverty, but there are little evidences on the constraints that limit the diffusion of better practices. In the present study, the researchers attempted to test as to how important, adequate and needed are the subject matter items on seed technology training.

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Trainings provide an opportunity to create awareness among the farmers about the improved agricultural technologies in order to get a shift in agricultural development approach through farming enterprises. Training of farmers and farmwomen at KVKs are scheduled at appropriate time so as to impart knowledge of suitable technology before the onset of the season. Efforts are concentrated to empower them by giving them training on scientific agricultural practices.

Over half of the world's agricultural producers are women; yet, men still tend to receive more and better training, and women's training is often inappropriate. The existing low level of consciousness about the roles women play in the development of a country; the deep-rooted cultural beliefs and traditional practices that prevent women from playing their full roles in the development process of the country; lack of appropriate technology to reduce the workload of women; shortage of properly qualified female development agents to understand, motivate and empower rural women by eliminating the major constraints hindering their progress motivated the researchers to conduct this study.

METHODOLOGY

KVK, Chomu and KVK, Ajmer were selected for the present study. Two Panchayat Samitis from the working area of each KVK were selected. Then two Gram Panchayats from each Panchayat Samiti were selected. Then two villages from each Gram Panchayat were selected randomly. This contributes to eight villages from one KVK. Thus, a total of 16 (8 x 2) villages from both KVKs were selected by random sampling process to form the sample for study.

Out of the total contact farmwomen in the selected villages, 15 farmwomen from each village were selected randomly. Hence, 120 farmwomen from one KVK formed the sample for the study. Thus, a total of 240 (16 x 15) farmwomen from both KVKs were selected for this study.

For determining the importance, adequacy and need of the training, a Scale developed and tested by Mr. Ishaq Mohammed Khan (1994) was used. The data so collected were transferred on work tables and tally sheets were prepared. The data were further processed, tabulated, classified and given statistical treatments.

The appropriate tables were prepared and the data were interpreted in light of the objectives of the study.

RESULTS AND DISCUSSION

Relative Importance of different subject matter items of training in seed technology

The importance of training on seed technology was identified on the basis of responses of the farmwomen under study. In the interview schedule there were items of training about seed management. Each of the major area heads a number of specific items was referred as area of training. The farm women were asked to rank these items of training keeping in view their importance on the three point continuum. *i.e.* most important, important & less important for them in their work. There were ten items of farm women training in this group as per details given in Table 1.

Table 1: Relative importance of subject matter items of training as perceived by farm women in seed technology

Item of training	Percentage of Farm women			Means Score	Rank
	MI	I	LI		
Selection of seed	54.44	36.37	9.19	2.45	5
Seed treatment	72.96	21.44	5.66	2.67	3
Seed multiplication	41.02	32.95	26.03	2.15	7
Improved seed Production	78.15	16.66	5.19	2.73	2
Seed storage	49.26	41.85	8.89	2.40	6
Seed certification & distribution	72.59	14.52	12.89	2.59	4
Use of seed culture	84.44	10.37	5.19	2.79	1
Depth of sowing	10.00	11.93	78.07	1.31	8
Overall	**57.86**	**23.26**	**18.88**	**2.39**	

Table 1 presents the 'Relative importance of different subject matter items of training as perceived by farm women in Seed Technology'. Eight items of training for 'Seed Technology' were selected and their relative importance was observed in terms of most important, important and least important. Ranks were assigned to the items of training as per the mean score values assigned by the farm women. It is revealed from the table 1 that 57.86 per cent farm women felt training for all the eight items as most important while 23.26 per cent farm women desired training as important and it was only 18.88 per cent farm women who reported the training as less important. Thus, it can be concluded from the above table that 'Use of Seed Culture' was seen most important by the maximum number of farm women *i.e.* 84.44 per cent.

The reason being due to the fact that the fertilizer cost is very high and the farm family is interested in deducting their fertilizer cost by using seed culture. It was 'Depth of Sowing' reported most important by the lowest percentage of farm women i.e. 10.00 per cent. 'Seed Storage' the item of training was preferred important by maximum percentage of farm women i.e. 41.85 per cent

and it was 'Use of seed culture' the item of training that was reported important by lowest number of farm women i.e. 10.37 per cent. The findings are in line with Gupta (2013) who revealed in his article that for gainful employment and economic activities, the rural women can be imparted suitable trainings on various farm technologies like selection and storing of seeds, techniques for preserving healthy seeds, seed treatment technique for nursery sowing, technique of transplanting for maintenance of space between plant to plant and row to row, importance of soil testing in fertilizers recommendations and methods of their application, safe application and storage of pesticides, use of biocides and cultural methods to check various diseases and insects, significance of organic farming to save the environment from being degraded.

The above said training requirements of farm women can be designed so that their contribution to agriculture production can be enhanced. This would also add to their skilful involvement in the farming operations which would ultimately increase their income.

Relative adequacy of different subject matter items of training in seed technology

Adequacy of training was operationalized in terms of exposure of farm women to different activities of KVK for gaining knowledge of improved technology. Farm women were asked as to how they thought in terms of adequacy of these activities to acquire required know how to carry their day to day farm operation.

The farm women were asked to rank these items in terms of adequacy keeping in mind their exposure on three point continuum i.e. most adequate, adequate and less adequate for farm women in their work. There were ten items of farm women training in this group as per details given in Table 2

Table 2: Relative adequacy of subject matter items of training as perceived by farm women in seed technology

Item of training	Percentage of Farm women			Means Score	Rank
	MA	A	LA		
Selection of seed	42.22	28.52	29.26	2.12	2
Seed treatment	5.93	58.93	35.15	1.71	4
Seed multiplication	10.53	7.69	31.78	1.29	7
Improved seed production	11.48	17.41	71.11	1.40	5
Seed storage	6.67	75.55	17.78	1.89	3
Seed certification & distribution	7.78	6.30	85.92	1.22	8
Use of seed culture	5.93	22.96	71.11	1.35	6
Depth of sowing	82.22	11.48	6.30	2.76	1
Overall	**21.59**	**28.60**	**49.81**	**1.72**	

The table 2 shows the 'Relative adequacy of different subject matter items of training as perceived by farm women in Seed Technology'. Eight items of training for 'Seed Technology' were chosen for observing their relative adequacy. All the items were awarded ranks as per their mean score values.

The table clearly shows that 21.59 per cent farm women felt training for all the eight items as most adequate while 28.60 per cent farm women desired training as adequate and it was 49.81 per cent farm women who reported the training as least adequate. It can be concluded from the above table that 'Depth of Sowing' the item of training was noticed most adequate by the maximum number of farm women i.e. 82.22 per cent. It was 'Seed Treatment' and 'Use of Seed Culture' the items of training grasped most adequate by the lowest percentage of farm women *i.e.* 5.93 per cent, respectively. 'Seed Treatment' the item of training was preferred adequate by maximum percentage of farm women *i.e.* 58.93 per cent and it was 'Seed Multiplication' and 'Seed Certification & Distribution' the items of training that was presented adequate by lowest number of farm women *i.e.* 7.69 and 6.30 per cent respectively. Highest number of farm women *i.e.* 85.92 per cent observed the 'Seed Certification & Distribution' the item of training as least adequate while 'Seed Storage' the item of training was observed least adequate by the lowest number of farm women *i.e.* 17.78 per cent.

It is clear from the table that ' Depth of Sowing' the item of training was provided the first rank. The items of training 'Selection of Seed' and 'Seed Storage' were provided ranks as second and third. The item of training *i.e.* 'Seed Certification & Distribution' was realized as least adequate by 85.92 per cent farmwomen and was provided the last *i.e.* eighth rank.

From the data in the table, 'Depth of Sowing' the item of training was ranked first and the 'Seed Certification & Distribution' was ranked last by the farm women among all eight items of training of seed technology. The item of training ranked first by the maximum number of the farm women was the 'Depth of Sowing'.

Future needs of different subject matter items of training in seed technology

Eight items of farm women training were checked in terms of their needs by the respondents which have been presented in Table 3.

Table 3: Future needs of subject matter items of training as perceived by farm women in seed technology.

Item of training	Percentage of Farm women			Means Score	Rank
	MN	N	LN		
Selection of seed	37.41	33.70	28.89	2.09	6
Seed treatment	48.89	44.81	6.30	2.43	4
Seed multiplication	32.42	48.29	19.29	2.13	5
Improved seed production	69.63	22.59	7.78	2.62	1
Seed storage	34.44	18.15	47.41	1.87	7
Seed certification & distribution	73.45	14.59	11.99	2.61	2
Use of seed culture	68.99	17.41	13.60	2.55	3
Depth of sowing	7.78	13.70	78.52	1.29	8
Overall	**46.62**	**26.66**	**26.72**	**2.20**	

The table 3 shows the 'Relative need for different subject matter items of training as perceived by farm women in Seed Technology'. Eight items of training for 'Seed Technology' were selected and their relative need was seen as most needed, needed and least needed. Mean score was calculated and ranks were assigned to the items of training as per their relative need.

It is clear from the table that 46.62 per cent farm women felt training for all the eight items as most needed, while 26.66 per cent farm women desired training as needed and it was 26.72 per cent farm women who reported the training as least needed.

It can be concluded that 'Seed Certification & Distribution', 'Improved Seed Production' and 'Use of Seed Culture' the items of training were noticed most needed by the maximum number of farm women i.e. 73.45, 69.63 and 68.99 per cent, respectively. It was 'Depth of Sowing' the item of training reported most needed by the lowest percentage of farm women i.e. 7.78 per cent. 'Seed Multiplication' the item of training was preferred needed by maximum percentage of farm women *i.e.* 48.29 per cent and it was 'Seed Certification & Distribution' and 'Depth of Sowing' the items of training that were perceived as needed by lowest number of farm women i.e. 14.59 and 13.70 per cent, respectively.

A study done by Sahu *et al* (2011) revealed that farm women possessed poor knowledge of improved varieties, disease and IPM, spacing , seed treatment, weed control and fair knowledge of sowing time, harvesting and seed rate. Hence these practices can be considered while formulating training courses in vegetable production technology. These information are of immense value and will help to disseminate the factual technology to the farmers' field which will subsequently help to enhance the production & productivity of vegetables in the state & nation as well.

Kumar *et al* (2007) also showed in his study that a majority of rice growers needed trainings for seed treatment and it was ranked highest training need area.

CONCLUSION

It can be concluded that out of eight items of training in 'Seed Technology', use of seed culture was the most important whereas improved seed production, seed treatment, seed certification and distribution, selection of seed, seed storage and seed multiplication were important and the depth of sowing was the least important item of training in decreasing order of their importance as perceived by farm women. In reference to the adequacy of the training it can be said that out of eight items of training in 'Seed Technology', training exposure in depth of sowing was perceived most adequate whereas in the selection of seed, seed storage, seed treatment, improved seed production, use of seed culture, seed multiplication it was found adequate and in seed certification and distribution it was found to be least adequate in decreasing order of their adequacy. Training in improved seed production was needed most by the farm women while seed certification and distribution, use of seed culture, seed treatment, seed multiplication, selection of seed, seed storage were needed while depth of sowing was least needed item of training as perceived by farm women.

Paper received on : February 10,2015
Accepted on : February 16,2015

REFERENCES

Gupta, R.D. 2013, Farm Women and Future Strategies, Posted on 31/12/2013 by Dailyexcelsior. http://www.dailyexcelsior.com/farm-women-and-future-strategies/

Kumar, Yogesh; Singh Ummed; Bhagat, G.R. and Nain M.S. 2007, Training Needs of Rice Growers in Jammu District of J&K, *Indian Journal of Extension Education,* Vol.43, No. 1 & 2, pp.108-109.

Sahu, R.K.; Sachan, V.K.; Singh Ramanjeet and Singh Khilendra 2011,Training Needs of Farm Women in Vegetables Cultivation in Hilly Areas, *Indian Journal of Extension Education*, Vol.47, No. 1 & 2, 2011 (123-125).