

An Evaluation of Extension Activities Organized Under FLD on Oilseeds and Pulses in KVKs of Punjab and J&K States

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ABSTRACT

Various extension activities were organized by the KVKs of J&K and Punjab states to maintain linkage with the farmers, research and developmental agencies. The linkages help in continuous refinement of technology and provide feedback to research system. A sample of 200 FLD farmers were selected randomly on proportional allocation from two states of northern india i.e. J&K and Punjab covering two KVKs from each states. The FLD farmers were personally interviewed with the help of pre-structured schedule. The results revealed that overall percentage of farmers attended field days in Punjab was 80.82 as against 47.69 per cent in J & K, whereas Kisan Mela is concerned, 79.94 and 70.81 per cent of farmers participated in Punjab and J & K respectively. In case of printed literatures, only 20.54 per cent farmers in J & K and 36.43 per cent in Punjab reported that printed materials were distributed to FLDs farmers. It was also observed that 61.49 per cent farmers in Punjab and 47.69 per cent in J & K attended trainings and group discussions conducted during FLD programme. Thus it may be concluded that more number of farmers in Punjab had participated in extension activities organized under FLD programmes such as field days, Kisan Melas, trainings and group discussions as compared to J & K.

Keywords: KVKs, FLD, field -days, kisan mela, trainings.

INTRODUCTION

The main purpose of FLD is to disseminate latest technologies among the farmers to show the genetic production potential of the newly improved varieties of crops, improved agricultural practices and also the important plant protection measures on farmers' field and to get direct feedback informations from the field, so that the performance of new technology could be further improved (Shukla, 2000). The various extension activities carried out under FLD programmes by the KVKs are to accelerate the process of technology transfer and getting first hand feedback of the problems coming in the adoption of newer technologies. The main aim is to increase the productivity on sustainable basis and creating opportunities for greater economic opportunities in agricultural business. Scientists of the KVKs identify the technological needs of the farming community and endeavor to meet these needs through multifarious activities like organizing training programmes, demonstrations, agricultural exhibitions, field days, campaigns and publication of extension literatures.

Various extension activities were organised by the KVKs to maintain live and intimate links with the

research departments on one hand, development agencies and farmers on the other hand. This linkages help in continuous refinement of technologies and provide feedback to research system. Extension activities are not merely meant for the diffusion of the improved practices to the farmers, rather it also means to activate the farmers to a level where they can understand the implications of each recommendations and are able to make necessary adjustments of these applications at their own farms. The present investigation focuses on how far the beneficiary farmers have been able to reap full benefits of these extension activities carried out under FLDs programme. The main objective of the investigations were to evaluate the extension activities carried out under FLDs Programmes organized by KVK's on Oilseed and Pulses in selected districts of J & K and Punjab.

METHODOLOGY

The present study was conducted in two states of northern india viz. J&K and Punjab. Two KVKs from each states were selected. KVK Gurdaspur and KVK Ferozpur from Punjab and KVK Pulwama and KVK Jammu from J&K were selected purposively being the oldest KVKs in these states. Out of 751 farmers covered

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under FLD programme, a sample of 200 farmers were selected randomly on the basis of proportional allocations. The researcher personally interviewed the farmers with the help of pre-structured schedule and the qualitative data was quantified by using various statistical tools for the study.

RESULTS AND DISCUSSION

Various extension activities like field days, Kisan Melas (farmer's fairs), extension literature, trainings and group discussions were carried out under FLDs programme on oilseeds and pulses to accelerate the process of technology transfer and getting first hand feedback information from the farmers regarding their field problems.

Participation of FLD farmers in various extension activities

The overall percentage of farmers participation in field days were observed as 80.82 per cent in Punjab and 47.69 per cent in J&K, Kisan Melas 79.94 per cent in Punjab, 85.51 per cent in J&K, Printed Extension literatures 36.43 per cent in Punjab and 20.54 per cent in J&K. The overall percentage of farmers participated in various field activities like field days, extension Literatures and trainings were higher in Punjab then J&K, whereas in Kisan melas participation of farmers were higher in J&K than the Punjab State.

The participation of the farmers in various extension activities, were higher in KVK Gurdaspur with 82.05 per cent followed by KVK Ferozpur (79.95%), KVK Jammu (51.28%) and KVK Pulwama(44.11%) in field days, whereas participation in Kisan mela is concerned, the maximum participation was in KVK Pulwama (94.11%) followed by KVK Gurdaspur (88.46%), KVK Jammu (76.92%) and KVK Ferozpur (71.42%). The printed materials provide to the farmers were found maximum in KVK Ferozpur (40.81%) followed by KVK Gurdaspur (32.05%) in Punjab and in J&K, KVK Pulwama placed at first (20.58%) followed by KVK Jammu (20.51%) printed on various concerned technologies during FLD Programme, which were less than Punjab, when compared. Whereas training programmes are concerned, the overall percentage of farmers attended the trainings pertaining to FLD programmes were maximum in Punjab (61.49%) in compulsion to J&K, which was only 47.69 per cent (Table 1). The overall participation of the farmers in various extension activities were more in Punjab than J&K state. Extension activities organised for the beneficiaries under FLD programmes have been discussed as under.

Table1: Extension activities attended by the farmers under front line demonstrations (FLD)

Extension activities	Percentage of FLD farmers									
	KVK Gurdaspur		KVK Ferozpur		Overall % age	KVK Jammu		KVK Pulwama		Overall % age
	farmers	%age	farmers	%age		farmers	%age	farmers	%age	
Field days	64	82.05	39	79.59	80.82	20	51.28	15	44.11	47.69
Kisan Melas	69	88.46	35	71.42	79.94	30	76.92	32	94.11	85.51
Printed Literature received	25	32.05	20	40.81	36.43	8	20.51	70	20.58	20.54
Trainings attended	45	57.69	32	65.30	61.49	20	51.28	15	44.11	47.69

Field days

KVK scientists organised field days at selected sites where Front line demonstrations on newer farm technologies were conducted. These field days helped a large number of farmers to adopt the new technology based on the principle of "seeing is believing". The activity aimed to update the knowledge and skills of the farmers for further dissemination of technology horizontally. Kalarani et al. (2010) reported that in field days, FLD farmers were well explained about drought management practice followed for ground nut and experiences also shared among the farmers. Table 2 indicates that more than fifty per cent FLD farmers in Punjab reported that field days were conducted regularly and in J&K comparatively lesser number of farmers (33.93%) reported the same. In KVK Gurdaspur and Ferozpur, all the farmers(100%) reported that local language was used by the scientists while delivering the lectures, whereas in J&K, it was only 84.05 per cent. In KVK Jammu, only 51.28 per cent farmers reported that they were allowed to raise the questions, whereas in Gurdaspur, Ferozpur and Pulwama the percentage were 70.51, 65.31 and 64.70 per cent respectively. Majority of the farmers (73.53%) in Pulwama followed by KVK Gurdaspur (57.69%), KVK Ferozpur (55.10%) and KVK Jammu (38.46%) reported that the answers were provided to the point. In KVK Jammu and KVK Pulwama in J&K observed that involvement of local leaders in field days were low as compared to Gurdaspur in Punjab (Table 2). In Punjab, 56.20 per cent of the farmers reported that field days were held on farmers field whereas only 20.17 per cent reported in J&K state. Nyabundi and Kiprono (2011) reported that 99.7 per cent of the respondents found field days to be useful and informative, 95 per cent admitted to having learnt something new in the field day attended. It was concluded that field days are effective tool for disseminating technologies on tea production. Newman (1990) reported that, 85 per cent of participants responded to the information received at the field day applied by modifying some parts of spraying equipments or

application methods, whereas Kumar *et al* (2010) reported that all the respondents visited Kisan Melas and attended demonstrations followed by 52.50 per cent who attended field days regularly. Kisan Melas

A majority (71.43%) of the farmers in KVK Ferozpur, followed by KVK Gurdaspur (64.10%) in Punjab reported that Kisan melas provided farm related informations, whereas in J&K, only 36.87 per cent of the farmers reported the same. Exposure to newer technologies and interaction with scientists and other farmers through Kisan melas was reported by 85.68 and 40.34 per cent of the farmers in Punjab and J&K respectively. Punjab farmers (59.60%) reported that the exhibits were explained properly, whereas in J&K only 41.29 per cent farmers agreed with the statement. The feedback information were recorded properly, in only 19.37 per cent of farmers agreed in Punjab and J&K (21.11%) Whereas KVK Pulwama 29.41 per cent farmers agreed followed by KVK Firozpur (22.45%), KVK Gurdaspur (12.82%) and KVK Jammu (12.82%). Wagh *et al.* (2011) reported that majority of cotton growers (65.00%) faced major constraints in agriculture services like Kisan Mela / exhibition were not arranged frequently, whereas Singh *et al.* (2008) suggested to increase the level of adoption of improved goat rearing practices (IGRP) apart of other extension activities, Kisan mela must be regularly organised for the empowerment of socially and economically disadvantaged farmers.

Printed material

A large number of extension literatures and popular articles were published by the KVKs for the benefit of farmers, development departments and other users. Table 2 reveals, that in KVK Gurdaspur (41.03%) followed by KVK Firozpur (40.82%), KVK Pulwama (29.41%) and KVK Jammu (20.51%) of the farmers reported that literatures provided to them contained credible and accurate information, and 40.94 per cent of farmers in Punjab and 24.96 per cent in J&K reported that the literatures were clear and in simple language whereas only 11.51 per cent and 9.72 per cent farmers reported that economics of the technologies were also covered in Punjab & J&K states respectively. Timely supply of literatures 17.89 per cent and 10.82 per cent, literatures supplied were relevant to the technology 46.63 per cent and 52.15 per cent literatures were of good quality and readable 39.64 per cent and 23.76 per cent and covered all related topics 25.30 per cent and 24.96 per cent farmers reported from Punjab and J&K respectively. Sehgal and Rampal (2013) observed that majority of the fruit growers used newspapers as a source of information while very

few of the fruit growers used farm magazines as source of information regarding the technology.

Group discussion

Group discussions for the farmers were also conducted to solve the common problems of FLDs. Group discussion changes the knowledge, skill and attitude of the farmers towards farm practices and develops self confidence among the participants.

In Punjab, 60.76 per cent of the farmers reported that group discussions were started well on scheduled time, whereas in J&K, 47.70 per cent reported the same. Scientists introduced the topic for discussion as reported by 54.35 per cent and 47.70 per cent of the farmers and farmers were allowed to interact with each other were reported by 40.80 and 33.93 per cent of the farmers in Punjab and J&K respectively, where as the previous discussions were also reviewed as reported by 34.65 and 24.58 per cent of the farmers in Punjab and J&K. More than fifty per cent (67.76%) of the farmers in Punjab and less (33.03%) farmers in J&K reported that favourable climate was created to understand the problem of the farmers and 41.68 and 42.57 per cent of farmers in Punjab and J&K respectively reported that discussions were held in depth. Kumar *et al.* (2010) reported that majority of the respondents attended group discussions regularly and 92.50 per cent contacted officials of Punjab State Farming Commission (PSFC) once in a month and only 7.5 per cent contacted once in a season time for the purpose.

Table 2: Extension activities carried out by KVKs of Punjab & J&K under front line demonstrations (FLD) on oil seeds and pulses

Extension activities	Gurdaspur		Ferozpur		Jammu		Pulwama		Overall %age	
	farmers	% age	farmers	%age	farmers	%age	farmers	%age	Punjab	J&K
	n=78		n=49		n=39		n=34			
Field Days										
Brief about the purpose of field days	60	76.92	40	81.63	20	51.28	25	73.53	79.27	62.40
Field days organized on regular basis	50	64.10	25	51.02	15	38.46	10	29.41	57.56	33.93
Discussion on related topics	70	89.74	30	61.22	15	38.46	15	44.12	75.48	41.29
Friendly conversations	78	100.00	40	81.63	30	76.92	30	88.24	90.81	82.58
Use of local language as communication	78	100.00	49	100.0	30	76.92	31	91.18	100.00	84.05
Allow audience to pose questions	55	70.51	32	65.31	20	51.28	22	64.70	67.91	57.99
Answer by scientists to the point	45	57.69	27	55.10	15	38.46	25	73.53	56.39	55.99

Other farmers are invited to attend field days	35	44.87	20	40.82	10	25.64	35	102.94	42.84	49.58
Involvement of local leaders	43	55.13	15	30.61	05	12.82	10	29.41	42.86	21.11
Scientists explain practices	65	83.33	40	81.63	20	51.28	18	52.94	84.48	52.11
Field days are held at farmers field	40	51.28	30	61.12	10	25.64	05	14.71	56.20	20.17
Exhibition organized on field days	55	70.51	30	61.22	15	38.46	10	29.41	65.86	33.93

KisanMela

Kisan mela provides more information	50	64.10	35	71.43	15	38.46	12	35.29	67.76	36.87
New agricultural related items introduced	22	28.21	20	40.82	6	15.38	05	14.70	34.51	15.04
Exposure to new technologies	70	89.74	40	81.63	20	51.28	10	29.41	85.68	40.34
Interaction with non-adopted farmers	21	26.92	35	71.43	18	46.15	20	58.82	34.51	52.48
Exhibits are explained properly	20	64.10	27	55.10	15	38.46	15	44.12	59.60	41.29
Feedback informations recorded	10	12.82	11	22.45	05	12.82	10	29.41	19.37	21.11

Printed Material

Material provided contained credible and accurate information	32	41.03	20	40.82	8	20.51	10	29.41	40.92	24.96
Literature was clear and in simple language	40	51.28	15	30.61	8	20.51	10	29.41	40.94	24.96
Economics of the technology were covered	10	12.82	05	10.20	03	7.69	04	11.76	11.51	9.72
Timely supply of literature for the programme	12	15.38	10	20.41	05	12.82	03	8.82	17.89	10.82
Literature provided were relevant to the technology	25	32.05	30	61.22	12	30.77	25	73.53	46.63	52.15
Literatures were of good quality and readable	30	38.46	20	40.82	8	21.05	9	26.47	39.64	23.76
Covered all related topics	14	17.95	16	32.65	8	20.51	10	29.41	25.3	24.96

Group Discussion

Group discussions conducted in scheduled time	55	70.51	25	51.02	20	51.28	15	44.12	60.76	47.70
Scientists introduced topic for discussion	45	57.69	25	51.02	20	51.28	15	44.12	54.35	47.70

Members were allowed to interact with each other	35	44.87	18	36.73	15	38.46	10	29.41	40.80	33.93
Previous discussions reviewed	27	34.62	17	34.69	10	25.64	08	23.53	34.65	24.58
Favourable climate was created to understand the problem	50	64.10	35	71.43	12	30.77	12	35.29	67.76	33.03
Discussions were held in depth	30	38.46	22	44.90	16	41.03	15	44.12	41.68	42.57

Farmers' trainings

Training programmes were a regular and the most important activity organised by the KVKs for the farmers. These trainings are conducted as per the convenience of the target group and on the principle of “Teaching by doing” and “Learning by doing” so as to make them interactive.

A majority of the farmers in Punjab, reported that trainings were informative (69.66%), increased the knowledge (69.66%) and enough time was provided for the trainings (41.44%). Similarly in J&K also, majority of the farmers indicated that the trainings were informative (72.65%), increased the knowledge (65.30%), enough time was provided for the trainings (47.70%). About suitability of training season, farmers were not satisfied, as only 22.38 and 30.09 per cent in Punjab and J&K respectively agreed. A very small percentage of the farmers (15.04%) in J&K and in Punjab 35.76 per cent reported that literatures were provided in the trainings. About 49.84 per cent of the farmers in Punjab and 64.97 per cent in J&K reported that some new relevant techniques of crop production were learnt. The farmers of Punjab and J&K also reported that there is need of pre-season training for crop production (62.64 and 80.01% respectively), trainers deal politely during training session with the farmers, (54.35 % and 80.01 % in Punjab and J&K respectively), trainers teach with interest in Punjab and J&K, as reported by 69.66 per cent of the farmers in Punjab and slightly lower, in J&K (33.93 %). Singh *et al.* (2008) observed that to increase the level of adoption of IGRP, proper training, demonstrations and other extension means must be regularly organised by the organizations working for the empowerment of socially and economically disadvantaged farmers, whereas Grag *et al.* (2014) reported that organizing more number of extension programmes like trainings, kisan mela and other programmes is required on regular basis on farmers field. Similarly Biswas *et al.* (2011) reported that Dakshin Dinajpur KVK has started Backyard Poultry improvement programme through trainings, FLD and monitoring. The study revealed that majority of

respondents amongst trained farmers had medium knowledge (60%) and adoption (58.3%) about sugarcane production technology. Education was found very important factor in determining the knowledge and adoption of both trained and untrained farmers (Badodiya *et. al.*,2013).

Table 3: Evaluation of training programmes carried out by various KVKs under frontline demonstrations on oil seed and pulses

Training activities	Gurdaspur		Ferozpur		Jammu		Pulwama		Overall %age	
	farmers	%age	farmers	%age	farmers	%age	farmers	%age	Punjab	J&K
	n=78		n=49		n=39		n=34			
Trainings were informative	45	57.69	40	81.63	28	71.79	25	73.52	69.66	72.65
Increased the knowledge	45	57.69	40	81.63	28	71.79	20	58.82	69.66	65.30
Enough time for training	36	46.15	18	36.73	20	51.28	15	44.12	41.44	47.70
Suitable season for training	19	24.36	10	20.41	12	30.77	10	29.41	22.38	30.09
Literature distributed in trainings	16	20.51	25	51.02	06	15.38	05	14.71	35.76	15.04
Farmers satisfaction	15	19.23	20	40.82	17	43.59	08	23.53	30.02	33.56
New techniques learnt	30	38.46	30	61.22	22	56.41	25	73.53	49.84	64.97
Need of pre season trainings	42	53.85	35	71.43	28	71.79	30	88.24	62.64	80.01
Trainers deal politely	45	57.69	49	100.00	28	71.79	30	88.24	54.35	80.
Trainers imparted trainings with interest	45	57.69	40	81.63	15	38.46	10	29.41	69.66	33.93

CONCLUSION

Based on the results of the study, it can be concluded that the extension activities conducted by KVKs of Punjab and J&K states during FLD Programmes, updated the knowledge and skill of the farmers for further dissemination of technology and getting first hand feedback of the field problems. The percentage of farmers participation in extension activities under FLD programme such as field days, Kisan Melas, trainings and group discussions were more in Punjab than J&K state. The extension activities have resulted in developing a sound relationship between farmers and scientists and to build confidence among the farmers. So more emphasis should be laid for organizing these activities to inculcate more better skills for crop production and productivity among the farmers.

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