

RESEARCH ARTICLE :

Analysis on perception and adoption level of farmers about front line demonstration under Krishi Vigyan Kendra, Badwani (M.P.)

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SUMMARY : The study was conducted in KVK Badwani, MP selected purposively. All respondents were selected from the KVK those have adopted FLD for the year 2016-17. A total number of 109 respondents were selected through a list of farmers obtain from the KVK, the FLD was adopted in the farmers field in different crop and season. The results of the study depicted that the majority of the respondents were found in various socio-economic profile characters like, age category of 37-51 years (61.45%), literate (53%), general caste (42.20%), joint families (85.32%), families size of 6-12 members (48.62%) and size of land holding medium farmers (64.22%). Agriculture was observed as main and subsidiary occupations with 93.58% and 19.27%, respectively. The maximum (56.88%) respondents had participation in one social organization, 66.97% respondents were found who had earning annual income of (Rs.70000-350000) and majority of respondents (77.99%) were observed in medium category (28-44) of overall materials possession. Mobile phone (100%), T.V. (94.50%) and radio (81.65%) were found as main communication media with the respondents. In information sources use pattern of respondents, the maximum contact was observed with Gram Pradhan (4.56%) under formal sources, friends (3.56%) and progressive farmers (1.66%) under informal and mobile (5.39%) under mass media exposure. The maximum number of respondents was found in high level of economic motivation, risk orientation with (38.53%), (46.79%) and maximum number of respondent was found in low level of scientific orientation (42.20%), respectively. The maximum number of respondents was found in medium level of overall knowledge about front-line demonstration with 70.64% and maximum number of respondents was found in medium. The maximum number of respondents was found in medium level of overall. The maximum number of respondents was found in medium level of overall adoption level of front-line demonstration (66.05%).

KEY WORDS :

FLD, Adoption, Time monitoring

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BACKGROUND AND OBJECTIVES

Front-line demonstration is the new concept of field demonstration evolved by the

Indian Council of Agricultural Research with the inception of the Technology Mission on Oilseed Crops during mid-eighties. Front-line

demonstrations are conducted under the close supervision of the scientists of the National Agriculture Research System comprising of ICAR Institute, National Research Centers, Project Directorates, Krishi Vigyan Kendras, and the State Agricultural Universities and its regional Research Stations. Only newly released technology or those likely to be released in near future are selected for the front-line demonstration. Front-line demonstrations are organized in a block of two to four hectares involving all those farmers whose plots fall in the identified demonstration block. Only critical inputs and training are provided from the scheme budget, remaining inputs are supplied by the farmers themselves. Training of the farmers associated with the front-line demonstrations is a prerequisite for conducting such demonstrations. The target audience of the front-line demonstration is both farmers and the extension officers. The purpose is to be convincing extension functionaries and farmers together about the potentialities of the technology for further wide scale diffusion. Front-line demonstration are used as a source of generating data on factors contributing higher crop yields and constraints of production under various farming situations. Front line demonstration is a form of applied research through ICAR/SAUs system on latest notified/released varieties along with full package of practices on selected farmers' fields with a view to demonstrate the potentiality of the technologies to (a) participating farmers (b) neighboring farmers and other agencies; (c) to analyze the production (d) performance of the technologies for scientific feedback.

RESOURCES AND METHODS

The study was carried out in KVK, Badwani, MP purposively in the year 2016. Selection of farmers obtained from the KVK, the FLD was adopted in the farmers field in different crop and season. All respondent selected from the KVK, they have adopted FLD for the year 2016-17. A total number of 109 respondents were selected through a list of farmers obtained from the KVK, the FLD. The relevant variables were selected after reviewing the literatures available and the works done in the field prior to the present investigation *i.e.* knowledge, income and employment. A well-structured and pretested interview schedule was used for data collection through personal interview method. The data were analyzed by using percentage, mean, standard deviation and correlation co-efficient.

OBSERVATIONS AND ANALYSIS

The findings and inferences drawn with respect to the specific objectives of the study on the basis of analysis by using relevant statistical techniques have been presented in this chapter. Among all 14 statements of knowledge about FLDs (Table 1). The majority of the respondents had cent per cent knowledge *i.e.*; “have you listen about the FLD”, “do you know that KVK provides the knowledge about the FLD”, “do you know where conducted FLD programme” and “do you know farmers receive yield of FLD crop” got the ranks orders I(a), I(b), I(c) and I(d) as far as knowledge possessed by the respondents was concerned followed by 98.16% respondents know about “do you know FLD’s are different than the normal demonstration conducted by the extension functionaries” got rank II, 96.33% respondents know about “do you know about only critical input and training are provided from the scheme budget and remaining inputs are supplied by the farmers themselves” got rank III, 79.82% respondents know about the “do you know FLD provide higher crop yield” got rank IV. 74.31% respondents know about the “do you know FLD technology very beneficial than traditional technology” got rank V, 66.97% respondents know about the “do you know FLD motivated to adopt new variety of crop” got rank VI, 60.55% respondents know about the “do you know FLD provide detail information about adopt new released variety” got rank VII, 46.78% respondents know about the “FLD technology less costly than other technology” got rank VIII, 30.27% respondents know about the “do you know FLD is to demonstrate newly released crop production and protection technology” got rank IX, 16.51% respondents know about the “do you know maximum FLD’S conducted on road side” got rank X and only 4.59% respondents know about the “do you know who funded FLD’S programme” got rank XI. The overall knowledge about the FLD was 69.59%. It can be calculated that the extent of knowledge about FLD seems to be satisfactory. It is obvious from the Table 2, that among all 8 statements about adoption level about FLD *i.e.* 84.40% respondents were agree “after adoption FLD, farmers increase economic status” got the rank I as far as adoption possessed by the respondents were concerned followed by 83.48% respondents were agree “FLD technology very beneficial” got the rank II, 82.52% respondents were agree “FLD farmers increase farm

production” got the rank III, 81.65% respondents were agree “after adoption FLD you gain good result” got the rank IV, 69.72% respondents were agree “after adoption FLD farmers make awareness about new varieties” got the rank V, 51.14% respondents were agree “after adoption FLD farmers take good decision in selection of crop variety” got the rank VI, 35.78% respondents were agree “after adoption FLD farmers make self-confident” at rank VII and 34.86% respondents were agree “FLD technology less costly” got the rank VIII. The overall adoption level about the FLD was 65.45%. It can be calculated that the extent of adoption level about FLD seems to be satisfactory (Ahmad *et al.*, 2008; Chauhan *et al.*, 2013 and Dalvi *et al.*, 2004).

Statistical analysis :

Table 3 focuses that out of 15 variables studied, only

five variables *i.e.* education, social participation, material possession, extension contact and economic motivation were found highly significant and positively correlated with knowledge extent about FLD. These variables like type of family were found significant and negatively correlated. The variable like age, cast, housing pattern, land holding, occupation, annual income, scientific orientation, and risk orientation were found positively correlated with knowledge extent about FLD. The one variable size of family gave negative response knowledge about FLD. Those variables which showed the highly significant and positive relationship had direct influence over knowledge extent about front-line demonstration. It means that if the values of these variable increases, the knowledge extent about FLD also increased. Table 4 focuses that out of 15 variables studied, only five variables *i.e.* education, social participation, material

Table 1 : Knowledge about front-line demonstration

Sr. No.	Statements	No. of respondents	Percentage	Rank
1.	Have you listen about the FLD?	109	100	I(a)
2.	Do you know that KVK provides the knowledge about the FLD?	109	100	I(b)
3.	Do you know where conducted FLD programme?	109	100	I(c)
4.	Do you know Farmers receive yield of FLD crop?	109	100	I(d)
5.	Do you know FLD is to demonstrate newly released crop production and protection technology?	33	30.27	IX
6.	Do you know FLD motivated to adopt new variety of crop?	73	66.97	VI
7.	Do you know about only critical input and training are provided from the scheme budget and remaining inputs are supplied by the farmers themselves?	105	96.33	III
8.	Do you know maximum FLD'S conducted on road side?	18	16.51	X
9.	Do you know FLD'S are different than the normal demonstration conducted by the extension functionaries?	107	98.16	II
10.	Do you know FLD provide detail information about adopt new released variety?	66	60.55	VII
11.	Do you know FLD provide higher crop yield?	87	79.82	IV
12.	Do you know FLD technology very beneficial than traditional technology?	81	74.31	V
13.	FLD technology less costly than other technology?	51	46.78	VIII
14.	Do you know who funded FLD'S programme?	5	4.59	XI

Table 2 : Adoption level of front-line demonstration

Sr. No.	Statement	No. of respondents	Percentage	Rank
1.	After adoption FLD farmers increase economic status.	92	84.40	I
2.	After adoption FLD farmers take good decision in selection of crop variety	56	51.14	VI
3.	After adoption FLD you gain good result.	89	81.65	IV
4.	After adoption FLD farmers make self-confident	39	35.78	VII
5.	After adoption FLD farmers make awareness about new varieties.	76	69.72	V
6.	Through FLD farmers increase farm production.	90	82.57	III
7.	FLD technology less costly	38	34.86	VIII
8.	FLD technology very beneficial	91	83.48	II
	Overall percentage		65.45	

Table 3 : Correlation co-efficient (r) between independent variables and knowledge about front-line demonstration

Sr. No.	Variables	Correlation co-efficient
1.	Age	0.011544
2.	Education	0.328126**
3.	Caste	0.072275
4.	Type of family	-0.22044*
5.	Size of family	-0.01956
6.	Housing pattern	0.057438
7.	Land holding	0.002841
8.	Occupation	0.110629
9.	Annual income	0.117616
10.	Social participation	0.416889**
11.	Material possession	0.429149**
12.	Extension contact	0.268892**
13.	Economic motivation	0.286223**
14.	Scientific orientation	0.062748
15.	Risk orientation	0.159175

* and **indicate significance of value at P=0.05 and 0.01, probability level 0.197 and 0.257, respectively

possession, extension contact and economic motivation were found highly significant and positively correlated with adoption extent about FLD. The variable like age, cast, housing pattern, land holding, occupation, annual income, scientific orientation, and risk orientation were found positively correlated with adoption extent about FLD. The two variables type of family and size of family gave negative response adoption about FLD. Those variables which showed the highly significant and positive relationship had direct influence over adoption extent about front-line demonstration. It means that if the values of these variable increases, the adoption extent about FLD also increased (Anuranjan *et al.*, 2008; Behera and Sahoo, 2000 and Dayaram *et al.*, 2010).

Conclusion :

On the basis of the study, it may be concluded that the caste, housing pattern, social participation, extent of contact with information sources, material possession, land holding, scientific orientation, general knowledge about enterprises and adoption increases, the extent of knowledge. Among all 14 statements knowledge about FLDs, majority of the respondents had cent per cent knowledge *i.e.* “have you listen about the FLD”, “do you know that KVK provides the knowledge about the FLD”, “do you know where conducted FLD programmed” and “do you know farmers receive yield of FLD crop” and got the ranks orders at I(a), I(b), I(c)

Table 4 : Correlation co-efficient (r) between independent variables and adoption extent in front-line demonstration

Sr. No.	Variables	Correlation co-efficient
1.	Age	0.02945
2.	Education	0.265301**
3.	Caste	0.03858
4.	Type of family	-0.06622
5.	Size of family	-0.074625
6.	Housing pattern	0.183956
7.	Land holding	0.000615
8.	Occupation	0.073912
9.	Annual income	0.152347
10.	Social participation	0.272538**
11.	Material possession	0.37378**
12.	Extension contact	0.259166**
13.	Economic motivation	0.268241**
14.	Scientific orientation	0.033721
15.	Risk orientation	0.175338

* and **indicate significance of value at P=0.05 and 0.01, probability level 0.197 and 0.257, respectively

and I(d) as far as knowledge possessed by the respondents was concerned followed by 98.16% respondents know “do you know FLD’s are different than the normal demonstration conducted by the extension functionaries” got rank II, 96.33% respondents know “do you know about only critical input and training are provided from the scheme budget and remaining inputs are supplied by the farmers themselves” got rank III. Among all 8 statements about adoption level about front-line demonstration *i.e.* 84.40% respondents were agree “after adoption FLD farmers increase economic status” got rank I, as far as knowledge possessed by the respondents were concerned followed by 83.48% respondents were agree “FLD technology very beneficial” got rank II, 82.52% respondents were agree “FLD farmers increase farm production” got rank III.

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REFERENCES

- Ahmad, M., Kalra, R.K. and Bansal, M.L. (2008). Adoption of recommended practices of gobhisarson (oilseed) under front line demonstration programme. *J. Interacademia*, **12**(3) : 369-378.
- Anuranjan, Singh, R.P. and Jha, B.K. (2008). Constraints in adoption of improved wheat production technologies. *J. Res.*,

Birsa Agric. Univ., **19**(2): 225-231.

Behera, C. and Sahoo, M.S. (2000). Impact of national demonstration on adoption of agricultural practices. *Indian J. Extn. Edu.*, **2** (1&2) : 32-35.

Chauhan, P.S., Dangi, K. and Meena, D.K. (2013). Impact of front line demonstration on the farmers in adoption of scientific technologies of soybean cultivation. *Environ. & Ecol.*, **31**(3A) : 1419-1423.

Dalvi, Mahajan, S.T., Wakle, B.S., Shinde, P.K., Sukase, S.V. and Kadam, A.S. (2004). Constraints by farmers in adoption of improved cultivation of soybean in Marathwada region M.A.V., Parbhani. *Indian J. Soils & Crops*; **14**(1) : 55-57.

Dayaram, Prasad, A., Misra, B.P., Kumar, M. and Kar, G. (2010). Correlates of improved wheat production technology. *Indian Res. J. Extn. Edu.*, **10**(1) : 62-64.

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