

## Perception and Adoption Behaviour of Farmers about Front Line Demonstration under Krishi Vigyan Kendra, Gwalior (M. P.)

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### ABSTRACT

The study was conducted in KVK Gwalior, MP selected purposively. All respondents were 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 obtain from the KVK, the FLD was adopted in there 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 (63.45%), literate (63%), general caste (44.20%), joint families (88.31%), families size of 6-12 members (53.62%) and size of land holding medium farmers (73.21%) respectively. Agriculture was observed as main and subsidiary occupations with (88.26%) and (11.74%) respectively. The maximum (54.72%) respondents were found such show had participation in one social organization, 68.91% respondents were found such who had earning annual income of (Rs.70000-350000) and majority of respondents (76.81%) were observed in medium category (28-44) of overall materials possession. Mobile phone (100%), T.V. (96.50%) and radio (32.42%) was found as main communication media with the respondents. In information sources use pattern of respondents, the maximum contact was observed with gram pradhan (64.56%) under formal sources, friends (63.86%) and progressive farmers (36.14%) under informal and mobile (25.39%) under mass media exposure. The maximum number of respondents was found in high level of economic motivation, risk orientation with (35.41%), (48.31%) and maximum number of respondent was found in low level of scientific orientation (44.31%) respectively. The maximum number of respondents was found in medium level of overall Knowledge about Front-Line Demonstration with (69.07%). The maximum number of respondents was found in medium level of overall Adoption level of Front-Line Demonstration with (65.23%) respectively.

**Key words:** FLD, Adoption and Time monitoringetc.

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## INTRODUCTION

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. Frontline 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.

## MATERIAL AND METHODS

The study was carried out in KVK, Gwalior, M P purposively in the year 2016. Selection of

farmers obtain from the KVK, the FLD was adopted in there 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 obtain from the KVK, the FLD was adopted in there farmers field in different crop and season. 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 was analyzed by using percentage, mean, standard deviation, correlation coefficient.

## RESULTS AND DISCUSSION

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. That among all 14 statements knowledge about FLDs (Table-1). The majority of the respondent's has cent percent knowledge in, "Have you listen about the FLD" and got the rank I and "Do you know that KVK provides the knowledge about the FLD", "Do you know where conducted FLD programmed" had ranked II and "Do you know Farmers receive yield of FLD crop" stand on III rank as far as knowledge possessed by the respondents was concerned followed by 97.24% respondents know about "Do you know FLD's are different than the normal demonstration conducted by the extension functionaries" at rank IV, 93.57% respondents know about "Do you know about only critical input and training are provide from the scheme budget and remaining inputs are supplied by the farmers themselves" at rank V, 78.90% respondents know about the "Do you know FLD provide higher crop yield" at rank VI. 76.14% respondents know about

the “Do you know FLD technology very beneficial than traditional technology” at rank VII, 68.80% respondents know about the “Do you know FLD motivated toward adopt new variety of crop” at rank VIII, 63.30% respondents know about the “Do you know FLD provide detail information about adopt new released variety” at rank IX, 40.40% respondents know about the “FLD technology low costly than other technology” at rank X, 32.11% respondents know about the “Do you know FLD is to demonstrate newly released crop production and protection technology” at rank XI, 17.43% respondents know about the “Do you know maximum FLD’S conducted on road side” at rank XII and only 2.75% respondents know about the “Do you know who funded FLD’S programme” at rank XIII respectively. The overall knowledge about the FLD was 69.07% respectively. 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. 86.23% respondents were agree “After adoption FLD Farmers increase economic status” at got the rank I as far as adoption possessed by the respondents were concerned followed by 80.73% respondents were agree “FLD technology very beneficial” at got the rank II, 81.65% respondents were agree “FLD farmers increase farm production” at got the rank III, 80.73% respondents were agree “After adoption FLD you gain good result” at got the rank IV, 68.80% respondents were agree “After adoption FLD farmers make awareness about new varieties” at got the rank V, 50.46% respondents were agree “After adoption FLD Farmers take good decision in selection of crop Variety” at got the rank VI, 36.61% respondents were agree “After adoption FLD Farmers make self-confident” at rank VII and 33.02% respondents were agree “FLD technology low costly” at got the rank VIII

respectively. The overall adoption level about the FLD was 65.23% respectively. It can be calculated that the extent of adoption level about FLD seems to be satisfactory.

Statistical analysis: Table-3 focuses that out of 15 variables studied. The only seven variables i.e. education, social participation, material possession, extension contact economic motivation, scientific orientation and risk orientation was 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 were not have any corelation with knowledge extent about FLD. The one variable size of family is 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 were also increase. Table-4 focuses that out of 15 variables studied. The only seven variables i.e. education, land holding, social participation, extension contact, scientific orientation, risk orientation and economic motivation was found highly significant and positively correlated with adoption extent about FLD. The variable like age, cast, housing pattern, land holding, occupation, annual income were not found positively correlated with adoption extent about FLD. The two variables type of family and size of family is 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 were also increase.

**Table 1: Knowledge about Front-Line Demonstration**

S. No.	Statement	No. of Respondents	Percentage	Rank
1.	Have you listen about the FLD?	109	100	I
2.	Do you know that KVK provides the knowledge about the FLD?	108	99.08	II
3.	Do you know where conducted FLD programme?	108	99.08	II
4.	Do you know Farmers receive yield of FLD crop?	107	98.15	III
5.	Do you know FLD is to demonstrate newly released crop production and protection technology?	35	32.11	XI
6.	Do you know FLD motivated toward Adopt new variety of crop?	75	68.80	VII
7.	Do you know about only critical input and training are provide from the scheme budget and Remaining inputs are supplied by the farmers themselves?	102	93.57	V
8.	Do you know maximum FLD'S conducted on road side?	19	17.43	XII
9.	Do you know FLD'S are different than the normal demonstrationconducted by the extension functionaries?	106	97.24	IV
10.	Do you know FLD provide detail information about adopt new releasedvariety?	69	63.30	IX
11.	Do you know FLD provide higher crop yield?	86	78.90	VI
12.	Do you know FLD technology very beneficial than traditional technology?	83	76.14	VII
13.	FLD technology low costly than other technology?	48	40.40	X
14.	Do you know who funded FLD'S programme is?	3	2.75	XIII

**Table 2: Adoption level of Front-Line Demonstration**

S. No.	Statement	No. of Respondents	Percentage	Rank
1.	After adoption FLD Farmers increase economic status.	94	86.23	I
2.	After adoption FLD Farmers take good decision in selection of crop Variety	55	50.46	VI
3.	After adoption FLD you gain good result.	88	80.73	IV
4.	After adoption FLD Farmers make self-confident	41	36.61	VII
5.	After adoption FLD farmers make awareness about new varieties.	75	68.80	V
6.	Through FLD farmers increase farm production.	89	81.65	III
7.	FLD technology low costly	36	33.02	VIII
8.	FLD technology very beneficial	92	84.40	II
	Overall Percentage		65.23	

**Table 3: Correlation coefficient (r) between Independent variables and Knowledge about Front-Line Demonstration**

S. No.	Variables	Correlation Coefficient
1.	Age	0.014
2.	Education	0.366**
3.	Caste	0.0714
4.	Type of family	-0.199*
5.	Size of family	-0.0186
6.	Housing pattern	0.0678
7.	Land holding	0.002
8.	Occupation	0.110
9.	Annual income	0.118
10.	Social participation	0.417**
11.	Material possession	0.392**
12.	Extension contact	0.267**
13.	Economic motivation	0.310**
14.	Scientific orientation	0.0651**
15.	Risk orientation	0.165**

\*\* Significant at 0.01% probability level 0.257

**Table 4: Correlation coefficient (r) between Independent variables and Adoption extent in Front-Line Demonstration**

S. No.	Variables	Correlation Coefficient
1.	Age	0.0283
2.	Education	0.261**
3.	Caste	0.0308
4.	Type of family	-0.066
5.	Size of family	-0.075
6.	Housing pattern	0.186
7.	Land holding	0.105**
8.	Occupation	0.072
9.	Annual income	0.157
10.	social participation	0.272**
11.	Material possession	0.373
12.	Extension contact	0.256**
13.	Economic motivation	0.241**
14.	Scientific orientation	0.033**
15.	Risk orientation	0.178**

\*Significant at 0.05% probability level 0.197

\*Significant at 0.05% probability level 0.197

\*\* Significant at 0.01% probability level 0.257

### 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, and adoption increases, the extent of knowledge. That among all 14 statements Knowledge about FLDs. The majority of the respondent's cent percent 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,II, II, and III as far as knowledge possessed by the respondents was concerned respectively followed by 97.24% respondents know "Do you know FLD's are different than the normal demonstration conducted by the extension functionaries" at rank IV, 93.57% respondents know "Do you know about only critical input and training are provide from the scheme budget and remaining inputs are supplied by the farmers themselves" at rank V respectively. That among all 8 statements about Adoption level about Front-Line Demonstration i.e. 86.23% respondents were

agree "After adoption FLD Farmers increase economic status" at rank I as far as knowledge possessed by the respondents were concerned respectively followed by 80.73% respondents were agree "FLD technology very beneficial" at rank II, 81.65% respondents were agree "FLD farmers increase farm production" at rank III respectively.

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