



IMPACT OF FRONT LINE DEMONSTRATION (FLD) IN ADOPTION OF WHEAT PRODUCTION PRACTICES IN SITAPUR DISTRICT OF UTTAR PRADESH

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ABSTRACT: *Frontline demonstration (FLD) was started in wheat to generate production data and feedback information to various development agencies, which are engaged in dissemination of technological advances through researchers to the farmer's fields. Agricultural development means increasing the productivity and improving the economic condition of the farmers. This, to a certain extent, depends upon the level of knowledge and skills of the farmers. Frontline demonstration is one of the important activity of the KVK's and it is organized every year for testing and verifying the latest agricultural technologies in the farmer's condition and identifying the production constraints. The study was conducted purposively in selected Gondlamau block of Sitapur district, Uttar Pradesh. The objective of the study was to assess the impact of frontline demonstrations on wheat farmers in terms of knowledge gained and level of yield in relation to the improved practices of wheat cultivation. Three villages where FLDs were conducted by Sitapur KVK as treated villages and three villages where no such demonstrations were conducted by Sitapur KVK as control villages were selected from purposively selected Gondlamau block of Sitapur district for the purpose of this study. Two types of respondents were selected from these villages: (i) Beneficiaries FLD farmers and (ii) non-beneficiaries FLD farmers. The FLD farmers were those on whose field FLDs on wheat was conducted and non-FLD farmers were those on whose field FLDs on wheat was not conducted. From each group, 60 farmers were randomly selected. The total sample, therefore, consisted 120 respondents' farmers in both the groups for collection of data. The data were collected with the help of structured schedule by personally interviewing the respondents. The collected data were statistically analysed by using appropriate statistical tools like percentage, mean, standard deviation. The results of the study are expected to be useful to the extension personnel and the administrators to know the impact of front line demonstration adoption level of wheat growers and also the results could.*

Keywords: *Socio economic profile, Extent of adoption, wheat growers.*



INTRODUCTION

Wheat is an important and strategic cereal crop for the majority of world's populations. It is the most important staple food of about two billion people (36% of the world population). It exceeds in acreage and production of every other grain crop (including rice, maize, etc.) and is therefore, the most important cereal grain crop of the world, which is cultivated over a wide range of climatic conditions. Wheat offers ease of grain storage and ease of converting grain into flour for making edible, palatable, interesting and satisfying foods. Wheat is the most important source of carbohydrate in a majority of countries. Wheat also contains a diversity of minerals, vitamins and fats (lipids). With a small amount of animal or legume protein added, a wheat- based meal is highly nutritious. The major Wheat producing States are Uttar Pradesh, Punjab, Madhya Pradesh, Rajasthan, Bihar, Maharashtra, Gujarat, Karnataka, West Bengal, Uttaranchal, Himachal Pradesh and Jammu & Kashmir. These States contribute about 99.5% of total Wheat production in the country. Remaining States namely, Jharkhand, Assam, Chhattisgarh, Delhi and other North Eastern States contribute only about 0.5 % of the total Wheat production in the country. Among food grains, Wheat stands next to Rice, both in area and production. The share of Wheat in total food grain production is around 35.5%.

Frontline demonstration (FLD) was started in wheat to generate production data and feedback information to various development agencies, which are engaged in dissemination of technological advances through researchers to the farmer's fields. Agricultural development means increasing the productivity and improving the economic condition of the farmers. This, to a certain extent, depends upon the level of knowledge and skills of the farmers.

The FLD aimed at achieving this twin objective by bringing about the change in knowledge and adoption behaviour of farmers. The frontline demonstration is the important mandate to Krishi Vigyan Kendra. It aims to demonstrate the production potentialities of newly developed crop production technologies of pulses and oilseeds on farmer's fields. FLDs educate farmers through results obtained in terms of higher yields and also provide an effective learning situation as farmers see the crops and participate in the discussion to getting maximum production.

Therefore, the present study "Impact of front line demonstration (FLD) in adoption of wheat production practices in Sitapur district of Uttar Pradesh." was planned with the following specific objectives.

- To determine the extent of adoption of wheat production practices of beneficiaries and non-beneficiaries.

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farmers in terms adoption of wheat production practices and level of yield in relation to the improved practices of wheat cultivation. Three villages where FLDs conducted by Sitapur KVK as treated villages and three villages where no such demonstrations conducted by Sitapur KVK as control villages were selected from purposively selected Gondlamau block of Sitapur district for the purpose of this study. Two types of respondents were selected from these villages: (i) Beneficiaries FLD farmers and (ii) non- beneficiaries FLD farmers. The FLD farmers were those on whose field FLDs on wheat was conducted and non-FLD farmers were those on whose field FLDs on wheat was not conducted. From each group, 60 farmers were randomly selected. The total sample, therefore, consisted 120 respondents' farmers in both the group for collection of data. Pre-tested interview schedule was used for the collection of data. Appropriate tools were used to interpret the data.

The present study was confined to descriptive research design. The independent variable were measured by using suitable scale and procedure adopted by various researcher in past with due modification.

RESULTS AND DISCUSSION

Extent of level of adoption of beneficiaries and non-beneficiaries as respondents:

. The extent of adoption of respondent about wheat production practices, the scores were divided in to three categories viz. Not adopted, partially adopted and fully adopted. The data in table 1 depicted that majority of the farmers (46.67%) possessed partial adopted of total whet production technology considered in the study followed by (33.33%) farmers had full adopted and (20.00%) farmers had Not Adopted about wheat production technology respectively. In case of non-beneficiaries of frontline demonstration of wheat growers, the majority of farmers (43.33%) possessed partial Adopted of total whet production technology considered in the study followed by (35.00%) farmers had fully adopted and (21.67%) farmers had Not Adopted about wheat production technology respectively.

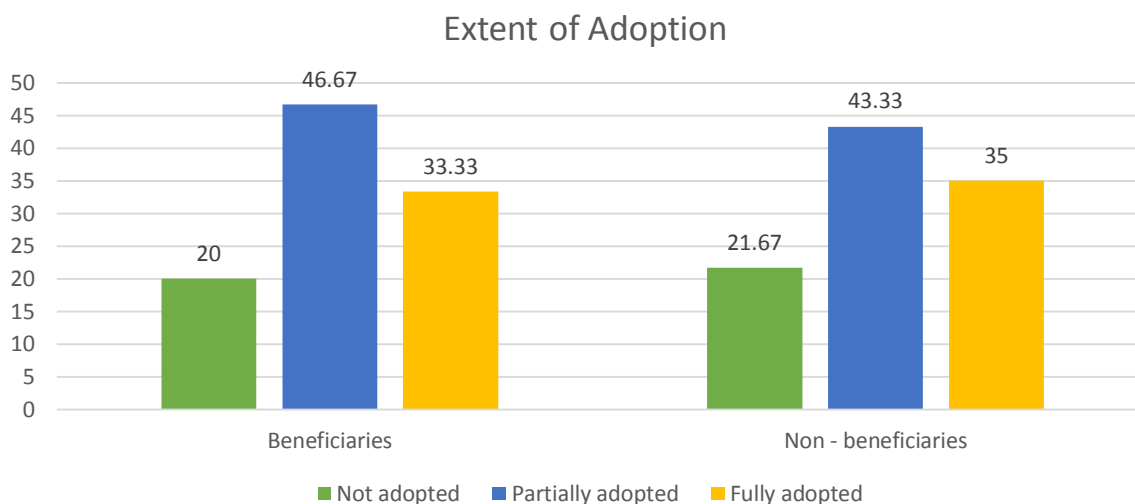
Table 1: Distribution of the respondents according to their extent of adoption of improved wheat production practices.

S.No.	Categories	Beneficiaries (n=60)	Non-beneficiaries (n=60)	Total (n=120)
1.	Not Adopted(less than 15)	12(20.00)	13(21.67)	25(20.83)
2.	Partially Adopted (16 to 21)	28(46.67)	26(43.33)	54(45.00)
3.	Fully Adopted (above 22)	20(33.33)	21(35.00)	41(34.17)
	Total	60	60	120

This finding is corroborated with the findings of Singh *et al.* (2011), Solanki (2012).



Fig. 1: Distribution of respondent according to their Extent of adoption.



Find out the influence of selected independent variables on dependent variables.

Correlation coefficient:

Correlation speaks about the relationship between the two attributes and the strength of relationship is measured in terms of correlation coefficient, whose limit range from minus unit to plus unit. In the increase in one variable results in the increase of the other variable, the relationship is positive and if it results in decrease of other variable the relationship is negative. The two variable are not correlated if the increase or decrease of one variable do not affect the other variable. Zero order correlation between socio-economic profiles about adoption were estimated and presented in table2.

Age, Education, Family type Occupation, Annual income, Economic motivation, Extension participation, social participation and level of knowledge were positively and significantly at 0.005 per cent level related to extent of adoption about wheat production practices of the respondents respectively. Thus, it can be concluded that all above characteristics of the respondents were found to be positively and significantly correlated with extent of adoption of wheat production practices, indicating that higher in frequency of socio economic profile of the respondents results higher extent of adoption about wheat production practices. The socio economic profile namely Land holding and source of information were found to positively but non-significant related to extent of adoption of the respondents respectively. Thus, it can be concluded that with the increases of all socio- economic profile and attributes of extent of adoption of the respondent in the study areas will also be increased simultaneously.



Table 2: Relationship between socio-economic Characteristics and adoption behaviour of wheat production practices:

Sr. no	Characteristics	'r' value	
		Beneficiaries	Non- Beneficiaries
1	Age	0.133*	0.123*
2	Education	0.215*	0.165*
3	Family type	0.494*	0.364*
4	Occupation	0.315*	0.215*
5	Annual income	0.215*	0.245*
6	Land holding	0.015 ^{NS}	0.004 ^{NS}
7	Economic motivation	0.274*	0.262*
8	Extension Participation	0.321*	0.366*
9	Source of information	0.018 ^{NS}	0.016 ^{NS}
10	Social participation	0.286*	0.222*
11	Knowledge	0.164*	0.122*

* = Significant at $p = 0.005$

CONCLUSION

Present study tries to identify the prevailing gaps in farmers' practices and recommended cultivation practices. The analysis of socio-personal, socio-economic, socio-psychological and communicational factors may substantiate the presence of gaps to a considerable extent. The identified gaps may help to give directions to the field level workers to manipulate the appropriate factors so as to increase the adoption level. An attempt has also been made to study the problems faced by the wheat growers, there by the efforts can be made to eliminate those problems in order to increase their adoption level of recommended wheat production technology. Based on the results of the present study, it is suggested that the field functionaries and core team of scientists of KVK should motivate the farmers to become more involved so that there is more awareness and conviction among the farmers and ultimately there is increase in the level of learning among the farmers of both FLD and non-FLD farmers groups regarding wheat production technology. Since the present study indicates that frontline demonstration trials of Krishi Vigyan Kendra had remarkable influence on the farmers regarding use of improved practices of wheat cultivation. Hence, it is suggested that frontline demonstration trials are to be used as a transfer of technology tool for adoption of improved wheat cultivation technology. There was highly significant difference in the level of knowledge between FLD farmers and non-FLD farmers in relation to improved practices of wheat cultivation. It May be concluded that in case of beneficiaries farmers, majority of



the respondent were in partial level of adoption followed by full and low category respectively regarding adoption of wheat production practices and in case of non-beneficiaries farmers, majority of the respondent were in partial level of adoption followed by full and low category respectively regarding adoption of wheat production practices.

REFERENCES

- [1]. **Anonymous. (2009).** Socio-economic profile of vegetables growers of Meghalaya. Annual report, (2008-09) ICAR, Research complex for N.E.H. region, ICAR, Umiam-793103, Meghalaya. pp-108.
- [2]. **Badhe, D. K., Saiyad, A. S. and Nehete, N. C. (2011).** Adoption of recommended production technology of brinjal by brinjal growers, *Agricultural Science Digest*. **31**(3): 223-225.
- [3]. **Chowdhury S. and Ray P. (2010).** Knowledge level and adoption of the integrated pest management (IPM) techniques among the vegetable growers of Katwa sub-division.
- [4]. **Deshmukh, P. R., Kadam, R. P. and Sindhe, V. N. (2007).** Knowledge and adoption of agricultural technologies in Marathwada. *Indian Res. J. Extn. Edu.*, **7**(1): 40-42.
- [5]. **Singh, P.K., Barman, K.K. and Varshney, J.G. (2011).** Adoption behaviour of vegetable growers towards improved technologies. *Indian Res. J. Ext. Edu.* **11**(1): 62-65.
- [6]. **Solanki, D. (2012).** Impact of ATMA on knowledge and adoption of maize (*Zea mays* L.) production technology by the farmers in Bhilwara district of Rajasthan and, M.Sc. (Ag). Thesis (unpublished) SKRAU, Bikaner.