

Impact of Farmer Field School (F.F.S.) on Knowledge and Adoption Level of Wheat Crop in Sanwer Block of Indore District Madhya Pradesh, India

¹ Mr. Rajeev Raghuvanshi, ² Dr. Sandhya Choudhary, & ³ Dr. V. K. Swarnakar

¹M.Sc. Extension Education Final Year Student 2012

² Associate Professor Extension Education, College of Agriculture, Indore

³ Professor & Head Extension Education, College of Agriculture, Indore

Abstract

A farmer field school is a school without walls. A group of farmers gets together in one of their own fields to learn about their crops and things that affect the system of working. They learn how to farm better by observing, analyzing and trying out new ideas on their own fields. Farmer Field School Approach (FFS) is based on the concepts and principles of people centered learning, and were the answers for themselves. That means the farmers can develop solutions to their own problems and developed as an alternative to the conventional top-down test and verification of the old extension approaches. The present study was conducted at Sanwer Block in Indore district M.P. India. Sanwer block with 120 respondents. The majority of respondents had low level of adoption in respect of wheat production technology followed by medium and high level of adoption of wheat production technology on their field respectively.

Key Words, Farmer Field School, Wheat Production Technology, Adoption of Production Technology

Date of Submission: 21, November, 2012  Date of Publication: 30, December 2012

General principles of agriculture were laid down through various researches in various zones of agriculture and in India as whole. These principles were converted into practices and extended towards farmers not only for sustainability of agriculture but also for better production and socio-economic growth of the farmers. As a result of combined efforts of research and extension, these practices were widely adopted by the farmers. With context to above Indian agriculture has witnessed a sequence of technological changes in crop production since the inception of green revolution. But the impact of improved technological have not been so prominent in various region of India as well as in Madhya Pradesh particularly in area where non adoption of improved production technology practicing an in wide range. Many research results stated that if such yields could be realized by all the farmers then the present level of wheat production can be increased by more than 30 per cent. Verma and Rajendran (2007) studied Farm Field School (F.F.S.) is a successful approach for Integrated pest management (I.P.M.) training. It is said that the fundamental problem of non adopter of improved wheat production technologies farmers who depressed the agricultural growth is of due to low education. Vekaria *et.al.* (1993) reported that the knowledge of the farmers positively and significantly related with adoption of modern agricultural technology.

Mallah and Korejo (2003) studied Farmer field school (FFS) activities were carried out in Pai Farm Sakrand (Sindh, Pakistan) during 2003 with the objective of achieving sustainable, profitable and environmentally-sound production of cotton through the development, promotion, and practice of integrated pest management (IPM) by farmers. There is a need of education through farmer's field school for agricultural development in general and wheat production in particular because wheat is a main staple food grain in the world. The need of farmers' education and extension activities is higher for the low technological adopter farmers particularly to non progressive farmers, because these farmers play a pivotal role in agriculture. The Farmer Field School (FFS) is a participatory and interactive approach to social learning. It is an approach that puts together set of principles and techniques meant to systematically enhance farmers' abilities to investigate, analyze, innovate and learn improved farming practices. Singh and Rajput (2000) from their finding led to conclude that lack of irrigation facility, low price for farm produce, lack of communication, lack of capital and high prices of fertilizer were the major constraints faced by farmers in adoption of wheat production technology.

Adoption activity tends to be specific to particular innovation, individuals, and environment. Farmer's incentives and disincentives to adopt particular technology are determined by his personal belief about its value and permissiveness of his environment. So adoption of an innovation varies not only from area to area but also from farmer to farmer. Taking the view of above statement the present study was taken up to study the "Impact of Farmer Field School (F.F.S.) on knowledge and adoption level of wheat crop" with the following detail objectives

Objective:

- To find out the impact of Farm Field School on knowledge and adoption of farmer about wheat crops.
- To observe the constraints and suggestion given by farmers.

Methods and Material

The present work was conducted at Sanwer Block in Indore district M.P. Sanwer block consists three F.F.S. that Badod Ajul, Varnagai and Gudibadvai. Out of these two FFS villages were selected randomly. From the selected each F.F.S village all 30 trained farmer were selected as respondents. Thus the total 60 respondent were selected purposively for these two F.F.S villages. Where as 60 non trainees of these villages was selected randomly for the sample of the study, therefore 120 respondents was covered in the sample.

The data were collected through a well-structured and pre-tested interview schedule. The researcher personally met the respondents and explained to them about the purpose of this study. The data were collected and recorded in the pre tested and well structured with maintain the face validity and pre tested reliability interview schedule.

Result and Discussion.

Impact of FFS on knowledge and adoption of farmers about wheat crops.

To compare the level of knowledge and adoption of farmers among beneficiaries and non beneficiaries under Farmers Filed School (FFS) their exiting knowledge and adoption pattern was calculated in the form of mean score and are presented in table 1.0 and 1.1 table

Table-1.0 Impact of FFS on knowledge of improved wheat production technology

Level of knowledge					
Beneficiaries		Non- beneficiaries		Additional score obtained by beneficiaries over non- beneficiaries	
Category	Mean Score	Category	Mean Score	Absolute	Percentage
Low	0.30	Low	0.36	-0.06	-16.67
Medium	0.63	Medium	0.70	-0.07	-10.00
High	1.15	High	0.85	+0.3	+35.29
Total	2.08	Total	1.91	+0.17	+8.90

It is apparent from the above table that there is clear variation in mean score obtained by (beneficiaries) and (non beneficiaries) farmers in respect of knowledge about wheat production technology. It is evident that beneficiaries-farmers fetched higher total mean score of knowledge (2.08) than non beneficiaries mean score (1.19). On the basis of above figure, it can be say that there was additional (+0.17) mean score of knowledge was obtained by beneficiaries-farmers over non beneficiaries farmers. In other word, it can be said that (8.90%) beneficiaries-wheat grower have higher knowledge regarding wheat production technology over non beneficiaries-farmers and it was due to Farmers Field School (FFS).

Thus, it is concluded that the persons having low knowledge regarding wheat production technology was found to less (16.67%) in beneficiaries group over to non beneficiaries group followed by having medium knowledge was less (10.00%) in beneficiaries group over non beneficiaries and having high knowledge was more (35.00%) in beneficiaries group over non beneficiaries respectively.

It is common observation that in many parts of the State, the majority of farmers does not adopt the improved technology and has not been able to harvest the modern technology as expected. The one of the main reasons for low adoption or poor preferential adoption and non adoption of the improved technology was due to lack of technological knowledge. Under such circumstances, the one objective of present study was to findout the level of knowledge regarding wheat production technology received by farmers through Farmers Field School (FFS).

Table-1.1 Impact of FFS on adoption of improved wheat production technology.

Level of adoption					
Beneficiaries		Non- beneficiaries		Additional score obtained by beneficiaries over non- beneficiaries	
Category	Mean Score	Category	Mean Score	Absolute	Percentage
Low	0.30	Low	0.41	-0.11	-26.83
Medium	0.70	Medium	0.63	+0.07	+11.11
High	1.05	High	0.80	+0.25	+31.25
Total	2.05	Total	1.84	+0.21	+11.41

It is apparent from the above table that there is clear variation in mean score obtained by (beneficiaries) and (non beneficiaries) farmers in respect of adoption of wheat production technology. It is evident that beneficiaries-farmers fetched higher total mean score of adoption (2.05) than non beneficiaries mean score (1.84). On the basis of above figure it can be say that there was additional (+0.21) mean score of adoption was obtained by beneficiaries-farmers over non beneficiaries farmers. In other word, it can be said that (11.41%) beneficiaries-wheat grower have higher adoption of wheat production technology over non beneficiaries-farmers and it was due to Farmers Field School (FFS).

Thus, it is concluded that the persons having low adoption of wheat production technology was found to less (26.83%) in beneficiaries group over to non beneficiaries group followed by having medium adoption was more (11.11%) in beneficiaries group over non beneficiaries and having high adoption was more (31.25%) in beneficiaries group over non beneficiaries respectively. This prompt result was due to only Farmers Field School (FFS) only.

The term adoption has been applied in present study “to signify the acceptance and use of improved technology and practices in the field of wheat production”. The data showed that in case of (beneficiaries) wheat growers, the majority of the respondents (35.00) had medium and high level of adoption in respect of wheat production technology followed by (30.00%) respondents had low level of adoption of wheat production technology on their field respectively.

Constraints faced by farmers in adoption of improved wheat production technology & practices.

During investigation, the farmers expressed many reasons due to which they could not use recommended technologies on their farms. These factors or causes were termed as constraints in this study and are expressed in the given table

Table: 1.2 Constraints Perceived By the Farmers in Adoption of Improved Wheat Production Technology.

S.No.	Constraints related to	No of farmers (N=120)	Rank
1	Unavailability of improved seed variety	36	XIth
2	Unavailability of seed at time	49	IXth
3	Unavailability of loan at time	60	Vth
4	Lack of proper resources and capital	55	VIIth
5	Lack of knowledge and information about recommended practices	62	IVth
6	Lack of knowledge regarding improved technology	45	Xth
7.	Lack of training program regarding improved agriculture practices	50	VIIIth
8	Inadequate irrigation facilities	70	IInd
9	There is no visiting program of agricultural personnel in time to time	72	Ist
10	High cost of agricultural resources	65	IIIrd
11	Lack of marketing facilities	59	VIth

The data regarding constraints in adoption of recommended wheat farming practices by farmers are presented in table. The data illustrated in table revealed the various constraints and impediments faced by the farmers in adoption of wheat farming technology. Hence opinions of members on constraints in adoption of improved practices have been obtained and their rank order is presented in the table. The data showed the distribution of members according to the constraints perceived in adoption of improved wheat production technology/ practices.

Suggestions given by farmers to remove the constraints.

The suggestions confronted by farmers to remove constraints in non adoption of improved wheat production technology are presented in following table

Table 1.3- Suggestions as given by the farmers to overcome the constraints

S.No.	Suggestions	No. of farmers (N= 120)	Rank
1	Improved seed variety should be provided at right time	54	V
2	Loan should be available easily and at low rate of interest	63	II
3	The fertilizer and other inputs should be available at time	67	I
4	Trainings programme should be organized in time to time regarding technical knowledge.	61	III
5	Information regarding plant protection manures should be available at right time.	38	VIII
6	There should be regular field visit of agricultural personnel in time to time	58	IV
7	The irrigation should be available at time	48	VII
8	The input should be provided at low cost to poor and small farmers.	51	VI
9	There should be proper marketing system in the area	35	IX

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