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IMPACT OF FRONTLINE DEMONSTRATION ON THE LEVEL OF KNOWLEDGE- A STUDY IN ARARIA DISTRICT

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ABSTRACTS

The present investigation was done by Krishi Vigyan Kendra, Araria to know the level of knowledge of the beneficiaries enhanced of the wheat crops under FLD which has been conducted on the farmer's field. Sample for the present study comprised of 80 selected farmers of the district. Out of which 40 beneficiaries selected were those farmers on whose field FLD was conducted on wheat during the years 2008-09 and 2009-10 and the other 40 farmers were randomly selected non beneficiaries. Improved seed of wheat was supplied by the KVK under FLD programme. Before conducting FLD, through meeting and training, the respondents were made abreast with the latest recommended package of practices of wheat. It was found that beneficiary and non-beneficiary both possessed maximum knowledge regarding time of sowing and high yielding varieties of wheat crop. In the same way, they possessed less knowledge regarding the physiological of wheat cultivation. The mean percent scores of the knowledge of beneficiary farmers varied from 51.51 to 93.93, while in case of non-beneficiary farmers, the mean percent scores varied from 39.39 to 89.39. This indicates a little gap of knowledge between respondents of beneficiary and non-beneficiary. When difference was observed between beneficiary and non-beneficiary, it was found that level of knowledge of beneficiary farmers regarding different practices of wheat production was higher than non-beneficiary farmers ranging from 1.52 MPS of harvesting/threshing and storage to 15.16 MPS of Seed Rate and Spacing. The overall difference in knowledge level of beneficiary and non-beneficiary farmers was only 7.70. Thus, there was positive impact of FLDs conducted by KVK, Araria on knowledge of the wheat production technology.

Key words : *FLD, Impact, and level of knowledge.*

Frontline demonstration (FLD) is one of the most powerful tools of extension because farmers, in general, are driven by the perception that '*Seeing is believing*'. The main objective of Front-Line Demonstrations is to demonstrate newly released crop production and protection technologies and its management practices in the farmers' field under different agro-climatic regions and farming situations. While demonstrating the technologies in the farmers' field, the scientists are required to study the factors contributing higher crop production, field constrains of production and thereby generate production data and feedback information. Agricultural activity in Araria district is by and large confined to traditional cultivation. The district receive abundance of rainwater as a result of which the water table is high in the region means there is sufficient water available for crops in Rabi season. KVKs are grass root level organizations meant for application of technology through assessment, refinement and demonstration of proven technologies under different 'micro farming' situations in a district (Das, 2007). Although, soybean has emerged as a main oilseed crop of the country in short span of time and attained a vital status in agriculture and oil economy of India still, a vast gap exist between potential yield and yield under real farming situations in all the soybean growing agro ecological zones (Bhatia *et al*., 2006). Front Line Demonstration (FLD) is considered one of the most powerful tools for transfer of technology, as it establishes production potential of various crops and enterprises on farmers field through "Learning by doing and Seeing is believing". While demonstrating the technologies in the farmers' field, the scientists are required to study the factors contributing higher crop production, field constrains of production and thereby generate production data and feedback information. Due to different limiting factors prevailing in the district and use of traditional seeds of wheat, farmers often fail to achieve the desired potential yield of new wheat varieties. Keeping these in view, FLDs of improved production technology on wheat were conducted to enhance the yield and economic returns of wheat crop.

MATERIALS AND METHODS

The present investigation was done by Krishi Vigyan

Table-1 : Level of knowledge of respondents about improved wheat production technology.

S. No.	Wheat Production	Maximum Beneficiary Farmers					Non Beneficiary Difference Technology Farmer
		Score	MPS	Rank	MPS	Rank	
1.	High yielding varieties	08	84.85	II	80.30	II	4.55
2.	Field preparation	03	72.72	V	66.66	IV	6.06
3.	Soil treatment	03	71.21	VI	62.21	VI	9.00
4.	Seed treatment	03	56.02	X	48.48	IX	7.54
5.	Time of sowing	03	93.93	I	89.39	I	4.54
6.	Seed rate and spacing	03	62.12	VII	46.96	X	15.16
7.	Fertilizer application	07	59.09	IX	54.54	VIII	4.55
8.	Irrigation management	02	77.27	III	65.15	V	12.12
9.	Weed management	04	60.60	VIII	56.06	VIII	4.54
10.	Plant protection measures	14	54.54	XI	43.93	XI	7.58
11.	Physiological practices	14	51.51	XII	39.39	XII	15.15
12.	Harvesting / threshing and	02	74.24	IV	72.72	III	1.52
Mean			68.18		60.48		7.70

Kendra, Araria to know the level of knowledge of the beneficiaries enhanced of the crops under FLD which has been conducted on the farmer's field. Sample for the present study comprised of 80 selected farmers of the district. Out of which 40 beneficiaries selected were those farmers on whose field FLD was conducted on wheat during the years 2008-09 and 2009-10 and the other 40 farmers were randomly selected non beneficiaries. Improved seed of wheat was supplied by the KVK under FLD programme. Before conducting FLD, through meeting and training, the respondents were made abreast with the latest recommended package of practices of wheat. Time to time monitoring of FLD plots were carried out by the KVK scientists and farmers were advised to carry out different operations. The data were collected through personal interview by designing a questionnaire. The data were collected, tabulated and analysed by employing appropriate statistical tools like frequency and percentage to draw the inferences.

RESULTS AND DISCUSSION

Level of knowledge of beneficiary and non beneficiary farmers about wheat production Technology : It is assumed that the knowledge of a respondent to large degree depends upon the extent of exposure given to him about the technology. The front line demonstrations conducted on wheat crop by Krishi Vigyan Kendra, Araria was supposed to have imparted knowledge of wheat production technology to the farmers, where the FLDs were conducted on his farm. Therefore, efforts were made to assess the knowledge level of beneficiaries as well as non-beneficiaries regarding improved wheat production technologies. The knowledge of the respondents with regard to improved package of practices were measured in terms of mean percent scores (MPS). Here twelve practices were included to assess the knowledge as given in Table-1.

The data in Table-1 indicates that beneficiary and non-beneficiary both possessed maximum knowledge regarding time of sowing and high yielding varieties of wheat crop. In the same way, they possessed less knowledge regarding the physiological of wheat cultivation. The mean percent scores of the knowledge of beneficiary farmers varied from 51.51 to 93.93, while in case of non-beneficiary farmers, the mean percent scores varied from 39.39 to 89.39. This indicates a little gap of knowledge between respondents of beneficiary and non-beneficiary.

The data in the table also reveals that knowledge of beneficiary respondents in terms of mean percent score regarding irrigation management, harvesting/ threshing and storage, field preparation, soil treatment, seed rate and spacing, weed management, seed treatment and plant protection measures were found to be 77.27, 74.74, 72.72, 71.21, 62.12, 60.60, 56.02, 59.09 and 54.54 respectively. While in case of non-beneficiary respondents, the Mean Percent Score of knowledge regarding harvesting/threshing and storage, field preparation, irrigation management,

soil treatment, Weed Management, fertilizer application, Seed rate and spacing, Seed Treatment and plant protection measures were found to be 72.72, 66.66, 65.15, 62.21, 56.06, 54.54, 48.48, 46.96 and 43.93 respectively. When difference was observed between beneficiary and non-beneficiary, it was found that levelof knowledge of beneficiary farmers regarding different practices of wheat production was higher than non-beneficiary farmers ranging from 1.52 MPS of harvesting/threshing and storage to 15.16 MPS of Seed Rate and Spacing.

The overall difference in knowledge level of beneficiary and non-beneficiary farmers was only 7.70. The finding is in accordance with the findings of Singh and Sharma (2005) Asiwal *et. al., (*2008) and Kumawat (2008) who also reported that the average knowledge of beneficiary respondents was found to be higher than the non-beneficiary respondents. The reasons for non-significant difference in the present study might be due to the fact that other than KVK interventions, there were many other means like communication media used by farmers for obtaining information about recommended wheat production technology to them, resulting in increase of knowledge not only to beneficiary farmers but non-beneficiary farmers also.

CONCLUSSIONS

From the above facts mention, it could be inferred that there was positive impact of FLDs conducted by KVK, Araria on knowledge of the wheat production technology. FLDs are playing important role in motivating the farmers for improved agriculture technology resulting in increasing their yield and profits. Keeping in view of importance in transfer of technology, FLDs should be designed and conducted carefully and effectively and provisions should be made for other supportive extension activities such as field days, interaction meeting, etc. for speedy dissemination of demonstrated technology among farming community. Therefore, it is expected that the findings of this study has been of much helpful and will provide feedback to the programme planners, entrepreneurs, scientists and the extension personnel related with the dissemination of new knowledge.

REFERENCES

1. Asiwal, B.L., Singh, S and Khan, I.M. (2008). Knowledge level of beneficiary and non-beneficiary farmers of FLDsregarding improved mustard production technology in Sikar district of Rajasthan. *Raj. J. Extn. Edu. 16:* 119-23.
2. Bhatia V.S., Singh P., Wani S.P., Kesava Rao A.V.R. and Srinivas K. (2006) Yield Gap Analysis of soybean, groundnut, pigeon pea and chickpea in India using simulation modeling. *Global Theme on Agroeco-systems Report. International Crops Research Institute for the Semi-Arid Tropics (ICRISAT).* 156 pp.
3. Das, P. (2007). Proceedings of the Meeting of DDG (AE), ICAR, with Officials of State Departments, ICAR Institutes and Agricultural Universities, NRC Mithun, Jharmapani; Zonal Coordinating Unit, Zone-III, Barapani, Meghalaya, India. Quoted by V. Venkatasubramanian, Sanjeev M. V. and A. K. Singha in Concepts, Approaches and Methodologies for Technology Application and Transfer- a resource book for KVKs IInd Edition. pp.6.
4. Kumar, Deleep, Kalla, P.N. and Dangi, K.L. (2006). A study on attitude of farmers towards various activities of KVK,Sirohi, Rajasthan. *Raj. J. Extn. Edu.* 14:106-8.
5. Kumawat, S.R. (2008). Impact of frontline demonstration on adoption of improved caster production technology. *Raj. J.Extn. Edu.* 16:143-47.
6. Lakhera, J.P. and Sharma, B.M. (2002). Impact of frontline demonstration on adoption of improved mustard productiontechnology. *Raj. J. Extn. Edu.* 14: 43-47.
7. Singh, N and Sharma, F.L. (2005). Impact of FLD on gain in knowledge about mustard production technology amongfarmers of Bharatpur district. *Indian Res. J. Extn. Edu.* 5 (1): 41-43