

# **Original Research Article**

## **Evaluation of ICAR Schemes/ Approaches - Progressive Farmers Perception on KVKs Activities**

### **A B S T R A C T**

Krishi Vigyan Kendra, Nagaon has been full-fledged established in 2004 and the institution has been working for the betterment of the rural livelihood to date. Based on Participatory Rural Appraisal (PRA), KVK, Nagaon planned different activities according to the thrust area. Based on the requirement of the rural community, various activities like On-Farm Testing, Front Line Demonstration, and Training were conducted to test performance parameters of newly released varieties of field crops and improved technologies. To evaluate the impact of different KVK activities disseminated the study was conducted in the Nagaon district of Assam covering 40 numbers of beneficiaries. The primary data required for the study were collected from selected sample respondents through specially prepared schedules including the data relating to the profile of respondents, and the adoption of various improved agricultural practices. Various approaches by which help progressive farmers to achieve their needs and found that approach like training is the highest frequency through which farmers are getting benefitted. According to the progressive farmers, the various mode of dissemination through which the farmers are benefitted are Other Extension activities, Cluster Front Line demonstrations, Front Line Demonstration, On-Farm Testing, DFI stood 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> rank respectively, and reveals farmers perceptions towards the impact of KVK technologies amongst Progressive farmers and shows that 42 percent of the respondent had a high level of adoption followed by a medium level of adoption which was 40.50 percent. Progressive farmers suggested that KVK should emphasize location-specific dissemination of more numbers of latest technologies in agriculture and allied sector followed by steady cooperation. Mechanization, Organic farming, Market network, and Horticultural sector rank 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> respectively to increase the effectiveness of the KVK system according to them.

**Keywords:** PRA, KVK, On-Farm Testing, Front Line Demonstration, Extension Activities, Adoption

### **Introduction**

The Krishi Vigyan Kendras deal with different extension activities viz. On-farm trials, Frontline, training, Scientific awareness, a supplement of quality seed, etc. which ultimately leads to the movement of time need-based technology sources from farmers to farmers. Katole et.al (2017) concluded in their findings that the adoption level of knowledge had been

increased through among farmers and farmers were able to improve their managerial tasks, technological changes through technical guidance and training demonstrated through KVK [1]. Barman et. al (2020) stated that KMAS as an ICT tool has emerged as one of the best approaches for disseminating agricultural information dissemination through the main line extension system of Krishi Vigyan Kendras [2]. Krishi Vigyan Kendra, Nagaon has been full-fledged established in 2004 and the institution has been working for the betterment of the rural livelihood to date. Based on Participatory Rural Appraisal (PRA), KVK, Nagaon planned different activities according to the thrust area. Based on the requirement of the rural community various activities like On-Farm Testing, Front Line Demonstration, and Training were conducted to test the performance of newly released varieties of field crops and improved technologies. Prasad et. al (2018) included in their report the inclusion of various parameters along with their performance for the evaluation of KVKs to rank the KVKs [3]. Besides these other programs were organized viz., awareness program, field day, Kisan Mela, exhibition, seminar, workshop, diagnostic visit, farmers scientists' interaction to uplift rural income. Ananth et. al (2018) described in their review on the innovative extension approaches report about KVK spreading under diverse host institutions in India along with details of innovative extension standard approaches of KVK [4]. Chhodvadia et. al. (2016) reported that a total 5683 numbers of other Extension activities Amreli District of Gujarat State viz., field day, lectures, radio talk, scientist visits to farmer's fields, farmer fairs, diagnostic services, etc., and found that awareness had been increased among the farmers by 69.64% [5].

## Materials and Methods

To evaluate the impact of different KVK activities disseminated the study was conducted in the Nagaon district of Assam covering 40 numbers of beneficiaries. The primary data required for the study were collected from selected sample respondents through specially prepared schedules including the data relating to the profile of respondents, and the adoption of various improved agricultural practices. Shankar et. al (2019) analyzed the impact of interventions given by KVK between adopting and non-adopting farmers and found that there is a significant difference in knowledge score of 7 between adopters and non-adopters indicating a significant difference in the knowledge gained by adopting farmers over non-adopting farmers [6]. The entire schedule was sent by the Agricultural Technology Research Institute (ATARI), Zone -IV to Krishi Vigyan Kendra, Nagaon to measure the overall evaluation of ICAR schemes. The overall study has been divided into the following objectives. 1. Dissemination mode, technology adopted, and Impact of KVK activities 2. Best practices, Constraints in adoption of technology with a future suggestion. Further, tabular, percent, and frequency analyses with proper analytical tools were used to interpret the findings.

## Results and Discussion

Singh et. al (2021) also stated that the method and need for the certain technology affect farmers' vertical and horizontal spread of particular technology and concluded that Front line

demonstration found to be also helped in the replacement of local unrecommended practices with improved recommended practices [7]. Parameters representing farmers' opinions on technology dissemination mode, approaches, and impact of different KVK activities are analyzed below. From Table 1 It is evident that Singhal and Vatta (2017) studied the impact of Krishi Vigyan Kendra in Jodhpur district Rajasthan and found that the majority of the farmers adopted improved agricultural production at 85 percent whereas very few respondents had a low adoption rate of 15.83 percent [8]. Singh et al (2020) examined the development of KVKs along with strategies needed for future development and concluded that 20 percent of the total farmer's extension network through progressive farmers followed by media including radio, TV, newspaper (19.6%), and private commercial agents (7.4%) [9]. The data depicted in Table-1 showed that dissemination modes by social media viz., Facebook, WhatsApp are found regularly whereas dissipations of technology are highest through various demonstrations by KVK, Nagaon at 70 percent. Table 2 stated various approaches which help progressive farmers to achieve their needs and found That approach like Training is the highest frequency through which farmers are getting benefitted. According to the progressive farmers, the various mode of dissemination through which the farmers are benefitted are Other Extension activities, Cluster Front Line demonstrations, Front Line Demonstration, On-Farm Testing, and DFI stood 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> rank respectively. Table 4 reveals farmers' perceptions toward the impact of KVK technologies amongst Progressive farmers and shows that 42 percent of the respondent had a high level of adoption followed by a medium level of adoption which was 40.50 percent. Coverage of small and marginal, farmers was 50 percent which was found to be the highest among equity coverage according to the progressive farmers. Table 5 stated the different options of farmers for making the KVK system more effective and further most of the beneficiaries suggested that KVK should focus on the dissemination of the latest scientific technologies in agriculture and allied sector for the benefit of farmers followed by steady cooperation. Mechanization, Organic farming, Market network, and Horticultural sector rank 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> respectively to increase the effectiveness of the KVK system according to them.

**Table 1: Dissemination mode used by the KVK (%)**

SL. No.	Dissemination mode	Frequently	Mostly	Occasionally
1.	Visit by KVK scientist	-	37.50	62.50
2.	Demonstration	-	70.00	30.00
3.	Print Media	-	42.50	57.00
4.	Electronic media	-	15.00	85.00
5.	Social Media	12.50	37.50	50.00
6.	Any other	-	-	100.00

**Table 2. Approaches by which progressive farmers are getting benefitted**

S. No	Means of approach	Frequency (%)	Rank
1	Front Line Demonstration	11(27.50)	IV
2	On-Farm Testing	15(37.50)	V
3	Training	35(87.50)	I
4	CFLD	28 (70)	III
5	Other Extension activities	30 (75)	II
6	DFI	4 (10)	VI
7	Others	2 (5)	VIII

**Table 3: Impact of KVK activities – Farmer's Perception**

S. No	Parameters	Frequency (%)
<b>A) Training</b>		
1.	Training imparted by KVK is need-based	52.50
2.	KVK training has contributed in gain knowledge	37.50
3.	The design and content of the training are effective	45.00
4.	There is an enhancement in skill by training	25.00
5.	The time of the training is appropriate	60.00
6.	Farmers are well informed before training	77.50
7.	The mode of training is effective and easy to understand	47.500
8.	KVK interventions have enhanced our confidence	27.5
9.	Skill Development training has led to entrepreneurial development	17.50
10.	There is a positive change in attitude after the training about technology	32.00
<b>B. Frontline demonstrations</b>		
1.	Contributed to the replacement of a variety	87.50
2.	Increased production (yield)	80.00
3.	Increased income	62.50
4.	Led to crop diversification	30.00
5.	Farmer can rely on KVK for their farm needs	22.50

**Table 4: Distribution of Progressive Farmer according to different parameters [N=40]**

Sl no	Parameters		Frequency (%)
1	Relevancy of KVK Interventions	Most Relevant	30.00
		Relevant	70.00
		Not Relevant	-
2	Effectiveness for sustainable agriculture development	Most effective	20.00
		Effective	65.00
		Not effective	15.00
3	Coverage of Equity issues categories	Small and marginal get covered	50.00
		Weaker sector categories covered	25.00
		Women and farm youth covered	25.00
		Only large farmers are covered	-

**Table 5: Opinion of Progressive farmers on making the KVK system more effective (N=40)**

SL. No	Opinion	Frequency (%)	Rank
1	Emphasis should be given to more numbers latest technologies in agriculture and the allied sector	55.00	I
2	Steady cooperation in future	30.00	II
3	Should emphasize on Improved Market Networking	5.00	VI
4	Emphasis should be given to Mechanization	20.00	III
5	More awareness of Organic Farming	15.00	IV
6	More emphasis should be given to the horticultural sector	10.00	V

### Conclusion

Transferring Lab to land program for the betterment of rural life, Krishi Vigyan Kendras have been established by the Indian Council of Agricultural Research (ICAR) and hence KVK plays a major role in the motivation of farmers towards appropriate technology adoption for better productivity. Based on Participatory Rural Appraisal (PRA), KVK, Nagaon planned different activities according to the thrust area. Based on the requirement of the rural community various activities like On-Farm Testing, Front Line Demonstration, and Training were conducted to test the yield potentiality of newly released varieties of field crops and improved technologies. Transfer of technologies by social media viz., Facebook, whats app are found regularly whereas dissipations of technology are highest through various demonstrations by KVK, Nagaon at 70 percent indicating that social media plays a huge role of technology dissemination.

## Consent

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

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