

Constraints encountered by the KVK beneficiaries of Manipur and their suggestions

Abstract

The main purpose of Krishi Vigyan Kendra (KVK) is to impart learning by 'work experience' and they tailor the training and programs according to the needs of the farmers of the specific region. They organize trainings for the capacity development of the farmers by methods of 'teaching by doing' and 'learning by doing'. North East India consists of eight states where agriculture serves as the predominant occupation within the region, supporting more than 80 per cent of the population either directly or indirectly. The study reveals that unawareness of govt. subsidy programmes (62.5%), seeds of recent varieties are not available at KVK (45%) and recent release varieties are not included in frontline demonstration (39.2%). Constraints like the terms/concepts used in training programmes are scientific and hence difficult to understand (7.5%) and less emphasis on practical (Skill training) (5.8%) were the least challenges faced by the respondents. It is also suggested that more information should be provided on available govt. subsidy programmes (68.3% and 88.3%). KVK should arrange a greater number of training programmes on allied activities, i.e., poultry, goatry, and food processing (53.3% and 68.3%), Newly released varieties should be included in FLD (55% and 63.3%) and Inputs should be provided by KVK itself (46.7% and 51.7%).

Keyword: *Constraint, KVK, Beneficiary, Farmer, Suggestion and Manipur*

Introduction

Krishi Vigyan Kendras (KVK) are grass root level institutions designed for the rapid transfer of technologies to the farmer's field on a continuous basis. It was introduced by the Indian Council of Agricultural Research (ICAR) to aid the poor socio-economic conditions of youths, women and farmers residing mostly in rural areas by improving the employment, income generation and productivity of farms by introducing them to new and innovative technologies generated at research stations. They act as the centers for transfer of technology and aim to lessen the gap between the generation of the technologies and their transfer to the farmers. These institutes test, train and transfer novel and innovative technologies to the farmer's field for their advancement. The main purpose of KVK is to impart learning by 'work experience' and they tailor the training and programs according to the needs of the farmers of the specific region.

They organize trainings for the capacity development of the farmers by methods of ‘teaching by doing’ and ‘learning by doing’ (Nath, 2016).

On the recommendation of The Education Commission during the year 1964-66, ICAR proposed the idea of establishing innovative institutions to provide vocational training to rural youth, self employed farmers and extension functionaries known as KVKs or Farm Science Centers. The first KVK was established in Pondicherry in 1974 on pilot basis and was managed by the Tamil Nadu Agricultural University, Coimbatore (Jadhav, 2019). The Govt. of India fully finances the KVK scheme and sanctions the KVK to ICAR institutes, Agricultural Universities, Non-Government Organizations (NGOs) and Government Departments working in the Agriculture sector. For the testing of new agricultural technologies, a KVK must own about 20 hectares of land. The KVK is managed by a variety of host institutions including ICAR Institutes, State line departments, Agricultural Institutes, NGOs and other educational institutions (kvk.icar.gov.in). The KVK operates upon three core principles: firstly, prioritizing agricultural production as the primary objective; secondly, utilizing work experience (learning by doing) as the primary approach for delivering training and education; and thirdly, emphasizing support for the underprivileged segments of the rural population. The primary objective of KVK is Technology Assessment and Demonstration for wider Application and Capacity Development (TADA-CD) (Nath, 2016).

North East India consists of eight states, viz.; Meghalaya, Assam, Arunachal Pradesh, Sikkim, Nagaland, Tripura, Mizoram and Manipur. Agriculture serves as the predominant occupation within the region, supporting more than 80 per cent of the population either directly or indirectly. The majority of the farmers in this region belong to the category of small and marginal farmers [9,10]. The first KVK in the region was established in Kolasib district of Mizoram in February 1979, during the rolling year (1978-1980). Its primary mission was to offer training to equip farmers with the necessary skills and knowledge for implementing advanced agricultural and allied practices. Over time, as the number of KVKs increased, their scope expanded to include additional responsibilities like organizing frontline demonstrations, conducting on- farm trials, and delivering training to various stakeholders. During the ninth plan period, there were only 13 KVKs in the region, most of which were administered by ICAR. Currently, the North Eastern region boasts 90 KVKs distributed across its eight states (icarzcu3.gov.in). The eight states are

divided into two zones, Zone VI and Zone VII. ICAR-ATARI (Agricultural Technology Application Research Institute) Zone-VI, Guwahati, Assam comprises three states Assam, Arunachal Pradesh and Sikkim while ICAR-ATARI (Agricultural Technology Application Research Institute) Zone-VII Umiam, Meghalaya comprises five states Meghalaya, Nagaland, Manipur, Mizoram and Tripura. Presently there are 47 sanctioned KVKs operating in the three states under the ICAR-ATARI, Zone- VI, Guwahati and 43 sanctioned KVKs operating in the five states under ICAR-ATARI, Zone-VII, Umiam (icar.gov.in).

Methodology

At present (2024), there is a total of 9 KVKs in the state of Manipur under different managerial control. Out of the 9 KVKs, 2 are under the control of NGOs, 5 are under the control of ICAR, 1 is under the control of CAU and 1 is under the control of the State Department of Agriculture (icarzcu3.gov.in). There are a total of 9 KVKs in Manipur under different managerial control at present. Out of the 9 KVKs; 2 are under the control of NGOs, 5 are under the control of ICAR, 1 is under the control of CAU, Imphal and 1 is under the control of the State Department of Agriculture. KVK, Imphal East is managed by Central Agricultural University, Imphal while KVK, Senapati and KVK, Bishnupur are managed by the NGOs, *viz.*; FEEDS (Foundation for Environment and Economic Development Services) and Utlou Joint Farming cum Pisciculture Cooperative Society Ltd. respectively. KVK, Imphal East was selected under CAU, Imphal, and KVK, Senapati was selected under NGO purposively for the study. After consultation with KVK experts and reviewing the annual report of the KVKs, the participants who attended training on mushroom cultivation technology from the respective KVKs were considered. A list of all the trainees of mushroom cultivation technology from last three years (2020-21, 2021-22 and 2022-23) was collected from both the KVKs. From the list of total trainees, 60 respondents were selected from each KVK randomly, thus making the total sample size of 120 respondents.

Constraints encountered by the beneficiaries of KVKs and suggestions

Constraints refer to the limitation or hindrances perceived by the beneficiaries of KVK, Imphal East and KVK, Senapati. After reviewing relevant literature and consultation with experts, a semi-structured schedule was prepared consisting of constraints encountered by the beneficiaries of KVKs. Under the constraints, a number of problem statements were set and

asked to be responded by the sample beneficiaries. Their responses were recorded as 'Yes' or 'No' with corresponding scores of 2 and 1 respectively. The total score was determined by summing up the scores of the response 'Yes' against each statement. Based on the responses obtained, frequency and percentage were calculated for each of the constraints faced by them. Ranking was done based on the total score obtained accordingly.

An open-ended section was also provided to record the constraints encountered by the beneficiaries of the selected KVKs of the study excluding those provided in the schedule. The respondents were also asked to indicate suggestions on how to solve the constraints faced by the respondents which were recorded systematically in the schedule. Data was collected from the selected respondents using survey schedule, prepared in view of the objectives and variables of the study and reviewing relevant literature related to the study. Two types of data, viz.; primary and secondary were collected for the present study. The primary data was collected through personal interviews using a pretested structured survey schedule from the selected respondents.

Results and Discussion

Constraints encountered by the beneficiaries of KVKs and suggestions for future improvement

A. Constraints encountered by the beneficiaries of KVKs

Data presented in Table 1 reveals that unawareness of govt. subsidy programmes (62.5%), seeds of recent varieties are not available at KVK (45%) and recent release varieties are not included in frontline demonstration (39.2%) were the most encountered constraints by the respondents of both the KVKs i.e., KVK, Imphal East and KVK, Senapati; Whereas, constraints like the terms/concepts used in training programmes are scientific and hence difficult to understand (7.5%), less emphasis on practical (Skill training)(5.8%) and KVK staff/scientists are untrained/inexperienced(0%) were the least encountered constraints by the respondents. A perusal of the constraints encountered by the beneficiaries of the two KVKs reveals that the beneficiaries of KVK, Senapati faced more constraints comparatively than KVK, Imphal East. Thus, it could be deduced that KVK, Imphal East managed by CAU, Imphal has better infrastructural facilities, resources and financial status. The possible reason for more constraints faced by the beneficiaries of KVK, Senapati could be due to remote location, poor road connectivity and therefore lack of resources. The findings were in agreement with the findings of

Ranjan *et al.* (2019).

Table 1: Distribution of respondents according to the constraints encountered

N=120

SN	Constraints	KVK, Imphal East		KVK, Senapati		Total (F)	Total (%)	Rank
		F	%	F	%			
1	Non-availability of required inputs	8	13.3	12	20	20	16.7	XI
2	Lack of practical exercise during the training programme	6	10	7	11.6	13	10.8	XV
3	Less emphasis on practical (Skill training)	4	6.6	3	5	7	5.8	XIX
4	Lack of coordination with other agencies	21	35	23	38.3	44	36.7	IV
5	Inadequate demonstration facilities	11	18.3	15	25	26	21.7	IX
6	Inadequate boarding and lodging facilities during training programmes	18	30	6	10	24	20	X
7	Lack of transport facilities	24	40	11	18.3	35	29.2	VI
8	The terms/concepts used in training programmes are scientific and hence difficult to understand	4	6.6	5	8.3	9	7.5	XVI II
9	Inability to purchase input recommended by KVK due to higher cost	15	25	18	30	33	27.5	VII
10	The training programmes are not need-based	3	5	9	15	12	10	XVI I
11	Inconvenient training place of training programmes	8	13.3	7	11.6	15	12.5	XIV
12	Training programmes are not conducted at the proper time	7	11.6	11	18.3	18	15	XII
13	The written material was not provided at the time of training programmes	13	21.6	19	31.6	32	26.7	VIII
14	Training programmes on allied activities other than agriculture are not conducted regularly by KVK	17	28.3	26	43.3	43	35.8	V
15	The KVK staff/scientists are untrained/inexperienced	0	0	0	0	0	0	XX
16	Lack of awareness regarding the ICT use for educational and agricultural purpose	5	8.3	10	16.6	15	12.5	XIII
17	Training programmes are not followed by practical	2	3.3	11	18.3	13	10.8	XVI

18	Recent release varieties are not included in front-line demonstration	26	43.3	21	35	47	39.2	III
19	Seeds of recent varieties are not available at KVK	24	40	30	50	54	45	II
20	Unawareness of govt. subsidy programmes	33	55	42	70	75	62.5	I

B. Suggestions given by the beneficiaries of KVKs

It is observed from Table 2 that, the beneficiaries of KVK, Imphal East and KVK, Senapati mostly suggested that more information should be provided on available govt. subsidy programmes (68.3% and 88.3%), KVK should arrange a greater number of training programmes on allied activities i.e. poultry, goatry, and food processing (53.3% and 68.3%), Newly released varieties should be included in FLD (55% and 63.3%) and Inputs should be provided by KVK itself (46.7% and 51.7%). Other suggestions made frequently by the beneficiaries of KVK, Imphal East was logistic arrangement to attend the training programme should be provided by KVK, whereas the beneficiaries of KVK, Senapati suggested provision of spawns. One of the major suggestions given by most of the beneficiaries for both the KVKs in the open ended section was organizing trainings for the common diseases and their management. The findings were in conformity with the findings of Rachna and Sodhi (2013).

Table 2: Suggestions given by the beneficiaries of KVKs

N=120

SN	Suggestions	KVK, Imphal East		KVK, Senapati		Total F	Total %
		F	%	F	%		
1.	Training programme language should be simple to understand by the beneficiaries.	0	0	0	0	0	0
2.	Inputs should be provided by KVK itself.	28	46.7	31	51.7	59	49.2
3.	Proper written material should be provided at the time of training programme.	10	16.7	15	25	25	20.8
4.	More staff or vacant staff of KVK should be filled.	0	0	0	0	0	0
5.	Conduct the training programme at proper time.	5	8.3	8	13.3	13	10.8
6.	Need-based training programmes should be organized by KVK.	11	18.3	17	28.3	28	23.3

7.	Newly released varieties should be included in FLD.	33	55	38	63.3	71	59.2
8.	FLD should be conducted on cluster bases on more than 50 ha area.	21	35	27	45	48	40
9.	More practicals should be included in training programme.	7	11.7	11	18.3	18	15
10.	Logistic arrangement to attend the training programme should be provided by KVK.	39	65	13	21.7	52	43.3
11.	KVK should arrange more number of training programmes on allied activities i.e. poultry, goatry, and food processing.	32	53.3	41	68.3	73	60.8
12.	FLD field should be approachable for every farmer.	9	15	6	10	15	12.5
13.	More number of farmers should be involved in FLD programme.	30	50	37	61.7	67	55.8
14.	More information should be provided on available govt. subsidy programmes.	41	68.3	53	88.3	94	78.3
15.	KVK scientists and staff should be trained and experienced.	0	0	0	0	0	0

Conclusion

To efficiently execute this mandate and raise awareness about enhanced agricultural technologies, each KVK is envisioned to undertake the following activities, viz., Conducting on-farm trials to evaluate the suitability of agricultural technologies within diverse farming systems and specific geographical contexts, Organizing frontline demonstrations to showcase the potential production outcomes of technologies directly in farmers' fields, Enhancing the capacity of farmers and extension professionals through training programs to enhance their understanding and proficiency in contemporary agricultural technologies, Functioning as a hub of knowledge and resources for agricultural technologies & voluntary sectors to enhance the agricultural economy within the district, Offering agricultural advice to farmers through Information and Communication Technology (ICT) and other media platforms, encompassing a wide array of topics relevant to their interests.

It was revealed that unawareness of govt. subsidy programmes, non availability of seeds of recent varieties at KVK and recent release varieties are not included in frontline demonstration were the major constraints encountered by the beneficiaries. Creating awareness about Govt. subsidy programmes, arrangement of transport facility etc could help them to avail better technology.

Disclaimer (Artificial intelligence)

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

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