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Identifying the constraints related to the enhancement of Krishi Vigyan Kendra's (KVK) efficacy towards augmenting farmers' income.

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ABSTRACT

A study was conducted in Kalimpong district during 2019-20, to find out the constraints perceived by the farmers' related to KVK's activities and to suggest strategic intervention for the enhancement of Krishi Vigyan Kendra's (KVK) efficacy towards farmers' welfare. The district Kalimpong was selected purposively and respondents were selected randomly. Total hundred respondents were taken for the study. The data were collected during October, 2019 to March, 2020 with the help of structured schedule through personal interview method. Data were collected related to constraints perceived by the farmers regarding KVK activities and programmeslike transfer of technology, physical training etc.Rank Based Quotient (RBQ) Method was used along with SPSS software to draw conclusion. The study found 'less provision for learning by doing activities'as the first constraint. Regarding Agricultural technology "lack of related literature' was found to be the major constraint. In case of physical training 'inadequacy of lodging and boarding facilities in KVK premises was mentioned as an important constraint. Whereas, 'too much flexibility about training schedule' was also mentioned by majority of the respondents as a constraint. These constrains associated with KVK activities and programmes perceived by the farmers are very definite and complex in nature and needs immediate intervention from the KVK functionaries.The study recommends strengthening the KVKs with adequate knowledge, infrastructure, technical backstopping as well as appropriate extension provisions to implement learning by doing approaches to make the agricultural innovations more vibrant and acceptable to farmers. The study also recommends need for specific and practical oriented training for farmers.

1. Introduction

Agriculture is the prime mover of Indian economy which provides food and nutritional securities as well as employment and livelihoods opportunities to the rural masses. Agriculture plays a critical role in employment generation in the Indian economy, wherein nearly half of the Indian population being dependent on agriculture and allied activities for their livelihood. Over the years, Indian agriculture has made tremendous progress due to the contributions of agricultural science through the development of improved seeds and planting material, pre and post-harvest technologies, disease control and plant protection, irrigation and soil conservation techniques and the use of farm machinery in agriculture. However, the shortage of quality food grains production in farmers' field in proportion to the changing population pattern, climate change, non remunerative agricultural products in the country are the matter of concern at present. Agricultural innovations and diffusion of new technologies are key drivers to attain food security in the country besides providing farmers a competitive edge over traditional farming, thus facilitating better standards of living.

In the changing social era, the agricultural extension had played a pivotal role in optimally utilising the available

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agricultural information within a rural social system for inculcating sustainable livelihoods during the green revolution and post green revolution era. In this context, the Government of India through Indian Council for Agricultural Research (ICAR) has established a wide network of Krishi Vigyan Kendra's (KVKs) in all the rural districts of the country. These KVKs under the aegis of the National Agricultural Research and Education System are the real carriers of front-line technologies and they impart knowledge and critical input support to the farmers. The first KVK was established during 1974 (Pondichery) and has grown as a largest network in the country. At present (July, 2020) the total number of KVKs in the country is 721.

Rural farmers in different disadvantaged areas of our country are facing a challenge of knowledge embedded information scarcity and the skill to apply that knowledge in their own situation for enhancing their income. To make the agriculture society more knowledge vibrant and information enriched and income resilient, the KVK led agricultural advisory services for income augmentation may be used as the situation specific solution for the sustainable livelihood of rural peasants. They have less access to credit and less access to inputs, information and they are less likely to benefit from other services. But still the role of farmer is marginalized, undervalued and unrecognized. Hence the study focuses to identify the constraints perceived by the farmers and to suggest the strategic intervention related to the enhancement of Krishi Vigyan Kendra's (KVK) efficacy towards farmers' welfare.

2. Methodology

The multistage, purposive and random sampling technique was followed in case of selecting the area and the respondents of the present study. The district Kalimpong has been selected purposively. The Kalimpong block-I, Kalimpong block-II from the selected district were also selected with the help of purposive sampling procedure. Out of seventeen (17) Gram Panchayats under Kalimpong block I the Bong and Sindibong Gram Panchayats and out of twelve (12) Gram Panchayats under Kalimpong block II the Kagey and Siakiyong were selected for the present study with the help of simple random sampling procedure. Respondents were selected randomly to achieve the delineated purpose of the study. A total of one hundred (100) respondents in the study area constituted the sample for the present study.

The data were collected during **October**, 2019 to **March**, 2020 with the help of the schedule constructed for the study through personal interview method. Data collected included constraints related to programme perceived by the farmers about KVK activities, constraints related to training perceived by the farmers about KVK activities, constraints related to agricultural technology perceived by farmers, constraints related to physical training facility perceived by farmers and oranizational constraints perceived by farmers.

Rank Based Quotient (RBQ) Method were conducted to draw a definite conclusion for the present study.

- Formula

$$RBQ = \sum \frac{(Fi) \times (n+1-i)}{N \times n} \times 100$$

- Fi = Frequency of the farmers for the i^{th} rank of the attribute
- N = Number of farmers contacted for factor identification
- n = The maximum number of ranks given for various factors.
- i = Rank of the attributes
- The factors with highest RBQ score will be ranked first and hence considered the most important factor by the farmers.

3. Results and Discussion

To find out the various constraints associated with the accessibility of the services from KVK perceived by the farmers, the "Rank Based Quotient" (RBQ) method was used (Sabarathnam, 1988).

Table 1. Constraints related to programme perceived by the Farmers about KVK activities

Sl. No	Statement	RBQ	Rank
1	Duration of training is not appropriate	7.8	VIII
2	Course contents of training are not related too much with felt need	12.5	IV
3	The timing of the training is not suitable	9.6	VII
4	Less provision for learning by doing	27	I
5	Over loaded information (Too much information in short time)	18.6	IV
6	Absence of field visit on successful demonstration during training	13.3	V
7	Less time for group discussions	19.2	III
8	Improper use of A.V aids	2.0	X
9	Locations of FLD and OFT are not well thought of	6.4	IX
10	Selection of beneficiary is not unbiased	26	II

Table 1 depicts the constraints related to programme perceived by the farmers in the study area. The less provision for learning by doing is ranked first among the constraints perceived by the farmers. The second constraint according to the farmers is the not unbiased selection of beneficiary. Third constraint is provision of less time for group discussions for the farmers. There are other constraints as well which included over loaded information (too much information in short time), absence of field visit on successful demonstration during training, course contents of training are not related too much with felt need, the timing of the training is not suitable, duration of training is not appropriate, locations of FLD and OFT are not well thought of and improper use of A.V aids. The appropriate extension provisions should be created by the KVK functionaries for enhancing the efficiency of learning by doing approach to make the agricultural innovation more vibrant and acceptable by the beneficiaries.

Table 2. Constraints related to training perceived by the Farmers about KVK activities

Sl. No	Statement	RBQ	Rank
1	Lack of technical knowledge related to subject matter	9.2	V
2	Lack of training skills (competence)	15.6	IV
3	Training is not given in local dialect	29.4	III
4	Lack of ability to find the solution of problems	38.4	II
5	More emphasis on theoretical aspects	54	I

Table 2 depicts the constraints associated with training perceived by the farmers in the study area. The first constraint perceived by the farmers is more emphasis on theoretical aspects in the training programme organized by KVK. The second constraint perceived by them is lack of ability to find the solution of problems and the third constraint perceived by the farmers is the training not given in local dialect. Other constraints perceived by of Farmers about KVK activities include lack of training skills (competence) and lack of technical knowledge related to subject matter. The training would be imparted in near future by the KVK must be need specific and practical oriented.

Table 3. Constraints related to agricultural technology perceived by Farmers

Sl. No	Statements	RBQ	Rank
1	Not suitable to the area	32	III
2	Not provided significant economic gains	6.5	VI
3	High cost technology advocated by trainers	19	IV
4	Recommended technology is not applicable to real life situation	16	V
5	Lack of related literature	54	I
6	In appropriate to input supply system of the area	38.3	II

Table 3 depicts the constraints associated with the agricultural technology perceived by the farmers in the study area. The first constraint perceived by the farmers is lack of related literature. The second constraint perceived by the beneficiaries is inappropriate to input supply system of the area and the third technology constraint perceived by the farmers is technology not suitable to the area. The other technology constraints involve high cost technology advocated by trainers, recommended technology was not applicable to real life situation and not provided significant economic gains. The future intervention should be taken by the KVK to supply the appropriate and suitable literature in favour of agricultural technology to be disseminated as take home material.

Table 4. Constraints related to physical training facility perceived by Farmers

Sl. No	Statements	RBQ	Rank
1	Inadequacy of lodging and boarding facilities	31	I
2	Poor transport and communication facilities	28	II
3	Place of trainings	27.6	III
4	Sitting arrangements was not proper	16	IV
5	Facilities regarding breakfast, lunch deinking water and light etc were not up to date	7.8	V

Table 4 depicts the constraints related to physical training facility perceived by the farmers in the study area. The first constraint perceived by them is inadequacy of lodging and boarding facilities in KVK premises. The second constraint is poor transport and communication facilities and the third constraint is place of trainings. There are other constraints perceived by the Farmers involve the improper sitting arrangements insufficient breakfast, lunch, drinking water and light facilities. The KVK functionaries should take into account about the aforesaid constraints in near future and create good physical facilities for the beneficiaries during conduction of training in the KVK premise.

Table 5. Oranizational constraints perceived by Farmers

Sl. No	Statements	RBQ	Rank
1	Too much flexibility about training schedule	55	I
2	Lack of feedback	33	II
3	Poor input supply	12.7	IV
4	Provision of minimum stipend to the trainees	19.5	III

Table 5 depicts the organizational constraints perceived by farmers in the study area. The first and foremost constraint is too much flexibility about training schedule. The second constraint is lack of feedback and the third constraint perceived by the farmers is provision of minimum stipend to the trainees and the fourth organizational constraint perceived by farmers is poor input supply. In near future during conduction of training the KVK should train the beneficiaries on the basis of prefixed schedule without any alteration and develop a good feedback mechanism for dissemination of new agricultural technology to uplift the income status of the Farmers.

4. Conclusion

The major findings in the present study justify the greater role played by the Kalimpong KVK in increasing and empowering the rural Farmers, by making them economically strong. The constrains associated with KVK activities perceived by the beneficiaries are very definite and complex in nature which needs immediate intervention from the KVK functionaries to cope the challenges for increasing the income of the KVK beneficiary farmers.

Few recommendations could be made for the enhancement of Krishi Vigyan Kendra's (KVK) efficacy towards farmers' welfare as in strengthening the KVKs with adequate knowledge, infrastructure, technical backstopping of agriculture and agri-preneurship should be the need of the hour, the appropriate extension provisions should be created by the KVK functionaries for enhancing the efficiency of learning by doing approach to make the agricultural innovation more vibrant and acceptable by the farmers and The need specific and practical oriented training would be imparted in near future to the farmers.

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