

Original Research Article

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Constraints as Perceived by the Subject Matter Specialists of Selected Krishi Vigyan Kendras of Assam

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ABSTRACT

Krishi Vigyan Kendras (KVKs) plays a pivotal role in streamlining and offering an advantageous route to the increase of the agricultural zone of various regions in the country. It would be helpful to operate smoothly for the KVKs if the problems faced by the Subject Matter Specialists (SMSs) are properly addressed as they are the grass-root level functionaries of the organization. For that purpose the present study was conducted in 23 KVKs which are under Assam Agricultural University in the State of Assam. Out of 123 SMSs, 80 SMSs from 21 KVKs constituted the sample of respondents for the study. A questionnaire with structured and open-ended questions was created, and dichotomous responses were produced. The findings revealed that majority (62.5%) of the respondents belonged to the age category of 33 - 44 years, followed by 21.25 per cent who belonged to 45 - 52 years category and 16.25 per cent who belonged to 29 - 32 years category. Majority (71.25%) of the respondents were M.Sc degree holders while others (28.75%) were Ph.D degree holders. Majority (58.75%) of the respondents had 4 to 7 years of service experience. For determining the constraints six (6) different dimensions were considered in the study namely technological constraints, administrative constraints, and socio-economic constraints, input or other material constraints, personal constraints and other miscellaneous constraints. It is observed that 58.75 per cent of the SMSs expressed low economic status and social obstacles of farmers followed by overload of reports, meetings and activities apart from KVK mandated activities (57.5%), lack of proper infrastructure for better execution (46.25%), additional workload affecting social and personal life (42.5%), difficulty in disseminating complex technology (41.25%) and poor infrastructure maintenance (16.25%) as major constraints under each dimension respectively. Apart from that majority of the respondents mentioned about lack of women farmer-friendly technology, lack of location specific technology, shortage of transportation facility, shortage of manpower, lack of financial ability of farmers to accept agriculture as a business, high input cost, less opportunity of HRD training for SMS as constraints related to their field of activities.

Keywords

Constraints, Subject Matter Specialist (SMS), Krishi Vigyan Kendra (KVK)

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Introduction

In India, unique attention was paid to improvement of an agricultural research infrastructure right after Independence. The Indian Council of Agricultural Research (ICAR) acts as a repository of records and presents consultancy on agriculture, horticulture, useful resource management, animal sciences, agricultural engineering, fisheries, agricultural extension, agricultural education, community science, and agricultural communication. It has the mandate to coordinate agricultural research, development programmes and improve linkages at national and international tiers with related organizations to beautify the quality of existence of the farming community. ICAR has set up various research centres in order to meet the agricultural research and schooling desires of the country. It is actively pursuing human aid development in the area of agricultural sciences by using placing up numerous agricultural universities spanning the entire country. The Technology Intervention Programmes also create a vital phase of ICAR's agenda which establishes Krishi Vigyan Kendras (KVKs) responsible for training, research, and demonstration of multiplied technologies. Krishi Vigyan Kendras (KVKs) are grassroots 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). KVKs being a frontline extension system plays crucial role in transfer of technologies towards the rural community and are actively transferring new technologies with positive effects at the field level. In KVKs, the Subject Matter Specialists (SMSs) are the extension workers at the local level who play an important task in dissemination of technologies to the farming community and also in executing the mandates of KVKs (Dhakne, *et al.*, 2020).

Extension person i.e. SMS does not only involve in delivering information to farmers, but also attempt to make farmers creative, self-confident and competent enough to overcome their own problems and dilemmas (Sulaiman and Hall, 2003). Each KVK has a multidisciplinary team of SMS who

work fervently for the agricultural community's welfare by providing skill-oriented vocational training to keep the community and extension functionaries informed of the most recent and effective agricultural research.

They are also predicted to perform many roles associated to farmers' training, in-service trainings, on farm trials (OFT), front line demonstrations (FLDs), communication, feedback, evaluation and follow-up of trainings etc. Organizational constraints are work conditions that interfere with an employee's motivation or ability to perform (Spector and Jex, 1998). Like any other organization there are chances of presence of constraints in case of SMSs also (Bortamuly and Khuhly, 2013). However, it is also true that any organization, including KVKs, will function better if the constraints possessed by the grass-root level functionaries like SMSs are understood and taken care of by considering all the factors involved. With these considerations in mind, the current study was done to investigate the challenges SMSs confront in carrying out their responsibilities.

Materials and Methods

The present study was conducted at the KVKs functioning under the administrative control of the Directorate of Extension Education, Assam Agricultural University, Jorhat, Assam. Presently there are 23 KVKs under the administrative control of Assam Agricultural University and 2 KVKs are under the administrative control of ICAR. A multistage purposive sampling method was followed for selection of the respondents of the study. All the 23 KVKs functioning under the administrative control of the Directorate of Extension Education, Assam Agricultural University were selected purposively for the study. Scale developed by Kumar and Kaur (2014) was used to measure the role performance of Subject Matter Specialists of Krishi Vigyan Kendras. All 123 SMSs working in 23 KVKs at the time of planning the study were considered for inclusion in the sample of the study by considering the criteria of minimum 2 years of service experience as SMS. The data were collected

through mailed questionnaires as well as personal interview.

Eventually, 80 SMSs from 21 KVKs constituted the sample of respondents for the study. The statistical techniques and tests used for analysis and interpretation of data included frequency, percentage, mean, standard deviation, coefficient of variation, correlation, multiple regression analysis and “t” test. In this study, constraints referred to the items of difficulties faced by the Subject Matter Specialists while performing their roles.

The constraints were measured under six dimensions as suggested by Kumar and Kaur (2014). The six dimensions were – Technological constraints, Administrative constraints, Socio-economic constraints, Input or other material constraints, Personal constraints and other miscellaneous constraints. The respondents were asked to mention at least two most important constraints they faced in performing their roles. Constraints were then ranked based on the frequency and percentage of respondents expressing each constraint.

Results and Discussion

Socio-personal Characteristics of respondents

Majority (62.5%) of the respondents belonged to the age category of 33 - 44 years, followed by 21.25 per cent who belonged to 45 - 52 years category and 16.25 per cent who belonged to 29 - 32 years category. Regarding education majority (71.25%) of the respondents were M.Sc degree holders while others (28.75%) were Ph.D degree holders.

In case of service experience majority (58.75%) of the respondents had 4 to 7 years of service experience followed by 23.75 per cent respondents who had 8 to 14 years of service experience and 17.5 per cent had only 2 to 3 years of service experience (Table 1)

Constraints faced by SMSs of the KVKs

Technological Constraints

These are concerns associated with SMSs of KVKs

over new technology in agriculture and related dimensions due to certain technological limitations. Table 2 reveals that majority (41.25%) of the respondents felt that difficulty in disseminating complex technology followed by lack of women farmer-friendly technology (36.25%) were the major constraints in performing their roles. The least number of respondents (31.25%) mentioned about lack of location specific technology as a constraint in performing their roles.

Administrative Constraints

The procedures, methods, rules, and regulations defined by authorities along with other related limitations connected with KVKs that hinders the performance of SMSs are here referred to as administrative constraints. Table 3 reveals that majority (57.50%) of the respondents perceived that overload of reporting, meetings and activities apart from mandated activities and shortage of transportation facility (43.75%) were the major constraints in performing their roles. The least number of respondents (28.75%) mentioned about shortage of manpower as a constraint in performing their roles.

Socio-economic Constraints

Socio-economic circumstances of the farmers sometimes also poses obstacle to the SMSs of KVKs in efficient execution of various programmes and performing their mandated activities. Perusal of the data presented in Table 4 flashes that majority (58.75%) of the respondents stated that low economic status and social obstacles of farmers followed by lack of financial ability of farmers to accept agriculture as a business (41.25%), reluctance of farmers to accept scientific technology (38.75%) and orthodox nature of farmers (36.25%) were the major constraints in performing their roles. The least number of respondents (30.00%) mentioned about self-centered attitude of farmers as a constraint in performing their roles.

Input/other material Constraints

Regarding input and other constraint perceived by

the SMSs, majority (46.25%) of the respondents stated that lack of proper infrastructure for better execution and high input cost (30.00%) as major constraints in performing their roles.

The least number of respondents (17.50%) mentioned about untimely supply of quality input material as a constraint in performing their roles. The data is presented in Table 5.

Personal Constraints

As far personal constraints concerned that majority (42.50%) of the respondents perceived that additional workload affecting social and personal

life followed by difficulty in time management (27.50%) were the major constraints in performing their roles depicted in the Table 6.

Other miscellaneous Constraints

In the last dimension if the SMSs were requested to share any additional limitations that weren't listed in the aforementioned categories. As shown in the Table 7 majority (16.25%) of the respondents mentioned about poor infrastructure maintenance followed by less opportunity of HRD training for SMSs (15.00%).

Table.1 Distribution of respondents according to their Socio-personal Characteristics

Sr. No.	Socio-personal Characteristics	Category	Frequency	Percentage
1	Age	29-32 Years	13	16.25
		33-44 Years	50	62.50
		45-52 Years	17	21.25
2	Educational qualification	M.Sc	57	71.25
		Ph.D	23	28.75
3	Service experience	Short service experience	14	17.50
		Medium service experience	47	58.75
		Long service experience	19	23.75

Table.2 Distribution of respondents according to Technological constraints faced

Sl. No.	Technological constraints	Frequency	Percentage	Rank
1	Difficulty in disseminating complex technology	33	41.25	I
2	Lack of women farmer-friendly technology	29	36.25	II
3	Lack of location specific technologies	25	31.25	III

Table.3 Distribution of respondents according to Administrative constraints faced

Sl. No.	Administrative constraints	Frequency	Percentage	Rank
1	Overload of reports, meetings and activities apart from KVK mandated activities	46	57.50	I
2	Shortage of transportation facility	36	45.00	II
3	Shortage of manpower	23	28.75	III

Table.4 Distribution of respondents according to Socio-economic Constraints

Sl. No.	Socio-economic constraints	Frequency	Percentage	Rank
1	Low economic status and social obstacles of farmers	47	58.75	I
2	Lack of financial stability of farmers to accept agriculture as a business	33	41.25	II
3	Reluctance of farmers to accept scientific technology	31	38.75	III
4	Orthodox nature of farmers	29	36.25	IV
5	Self-centered attitude of farmers	24	30.00	V

Table.5 Distribution of respondents according to Input/other Constraints

Sl. No.	Input/other constraints	Frequency	Percentage	Rank
1	Lack of proper infrastructure for better execution	37	46.25	I
2	High input cost	24	30.00	II
3	Untimely supply of quality input materials	14	17.50	III

Table.6 Distribution of respondents according to Personal Constraints

Sl. No.	Personal constraints	Frequency	Percentage	Rank
1	Additional workload affecting social and personal life	34	42.50	I
2	Difficulty in time management	22	27.50	II

Table.7 Distribution of respondents according to Other miscellaneous Constraints

Sl. No.	Other miscellaneous constraints	Frequency	Percentage	Rank
1	Poor infrastructure maintenance	13	16.25	I
2	Less opportunity of HRD training for SMS	12	15.00	II
3	Difficulty in marketing of produce by the KVK assisted farmers	10	12.50	III

The least number of respondents (12.50%) felt that difficulty in marketing of produce by the KVK assisted farmers as a constraint in performing their roles. They reported that this difficulty acts as a setback to the SMSs in working with farmers while performing their roles.

A constraint is something that imposes a limit or restriction or that prevents something from occurring. Organizational constraints are situations or things that make it difficult for employees to do their jobs well despite their skills and efforts. In this study, constraints referred to the items of difficulties faced by the Subject Matter Specialists while performing their roles.

As per the data it is concluded that 58.75 per cent of

the SMSs expressed low economic status and social obstacles of farmers followed by overload of reports, meetings and activities apart from KVK mandated activities (57.5%), lack of proper infrastructure for better execution (46.25%), additional workload affecting social and personal life (42.5%), difficulty in disseminating complex technology (41.25%) and poor infrastructure maintenance (16.25%) as major constraint they face while performing their duties. The overall expansion of KVK will be hampered if the constraints SMSs confront are not handled in a timely manner.

The administrators and the policy makers need to address these issues which might influence the performance of the SMSs towards the higher authorities for overcoming the constraints so as to

enable the SMSs to perform their duties with more effective and efficient manner.

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