Nabanil Talukdar
Teaching Associate, Daffodil College of Horticulture, Kamrup Metropolitan, Assam, India

Pabitra Kumar Das
Professor and Head, Department of Extension Education, Biswanath College of Agriculture, Assam Agricultural University, Assam, India

Avijeet Borah
Teaching Associate, Daffodil College of Horticulture, Kamrup Metropolitan, Assam, India

Role performance of subject matter specialists of Krishi Vigyan Kendras under Assam Agricultural University

Nabanil Talukdar, Pabitra Kumar Das and Avijeet Borah

Abstract
The present study was carried out to assess the role performance of Subject Matter Specialists (SMS) of Krishi Vigyan Kendras (KVKs) under Assam Agricultural University. The Study was conducted in twenty three KVKs which are under Assam Agricultural University in the State of Assam. In order to measure the role performance quantitatively, role performance scale developed by Kumar and Kaur (2014)[5] was used. 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 followed by 23.75 per cent respondents who had 8 to 14 years of service experience. A least number of respondents (17.50%) had only 2 to 3 years of service experience. Job activities carried out by SMSs, pertaining to front-line demonstration was ranked first with the mean index score of 82.35. This means that involvement of Subject Matter Specialists in this area was recorded more. Supporting activities (71.73) was ranked last which indicated less involvement of SMSs in this area. Overall role performance was medium as majority (68.75%) of the respondents fallen under this category followed by 16.25 per cent respondents who had low level of role performance. The least number of respondents (15.00%) had high level of role performance.

Keywords: Role performance, subject matter specialist (SMS), Krishi Vigyan Kendra (KVK), areas of role performance, level of role performance, Assam

Introduction
The Technology Intervention Programmes of Indian Council of Agricultural Research (ICAR) which establishes KVKs responsible for training, research, and demonstration of multiplied technologies. KVK is a knowledge and skill offering centre from where a farmer can obtain information and help for fixing farmers' day to day agricultural associated problems. The main goal of these KVKs is to supply want primarily based virtually feasible options to the farming community, scientists and researchers. These centers act as means of transfer of today's data & techniques in the discipline of agriculture between ICAR and farmers. Beside this many organizations (Govt. and Non Govt.) use this network to communicate their achievements and programmes with the farming community. KVKs act as nodal groups of ICAR and had been playing an imperative role of implementation of cutting-edge agricultural methods and had been supporting our farmers at once or indirectly. A KVK is headed through a Programme Coordinator and assisted through six numbers of SMSs and different staff. Every scientist has to play a set role related with a role in an enterprise and so is the case with Subject Matter Specialists. SMSs are engaged from various disciplines such as Agronomy, Animal Husbandry, Fishery, Agricultural Extension, Home Science, Plant Protection, Horticulture etc., in a district specific manner. They are responsible for successful execution of the mandates of KVKs. They are predicted to perform many responsibilities associated to farmers' training, in-service trainings, on farm trials (OFTs), front line demonstrations (FLDs), communication feedback, evaluation and follow-up of trainings etc. In Assam, scientific study related to role performance of SMS is very few. Keeping in view the importance of researchable issues, the study was conducted to measure the level of role performance of the SMSs along with its possible association with their socio-personal and organizational characteristics.

Methodology
The present study was conducted at the KVKs functioning under the administrative control of the Directorate of Extension Education, Assam Agricultural University, Jorhat, Assam.

Corresponding Author:
Nabanil Talukdar
Teaching Associate, Daffodil College of Horticulture, Kamrup Metropolitan, Assam, India

Presently there are 25 KVKs functioning in the state of Assam, out of which 23 KVKs are 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)[5] was used to measure the role performance of SMSs of KVKs. 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.

The role performance inthe study has been measured through the viewpoints or opinions of the respondents on the list of role items identified under each of the eleven role segments as mentioned by Kumar and Kaur (2014)[5] namely, 'Organization of training', 'On-farm trials', 'Front-line demonstrations', 'Programme planning and execution', 'Subject matter authority', 'Communication feedback', 'Evaluation', 'Management', 'Services and supplies', 'Office work and reporting', 'Supporting activities' in the study area as being performed or not with respect to their position as Subject Matter Specialist. Thus, the role performance reflects the actual behaviour and expression of an individual occupying a role. All of the eleven role segments had 96 statements. The individual items in each segment were properly worded to suit the present study without changing the intended meaning. All the 96 items were selected for the role performance questionnaire. The questionnaire consisting of all total 96 statements for eleven role segments listed above were administered for a five point continuum ranging from 'Most Frequently', 'Frequently', 'Sometimes', 'Seldom' and 'Never' and the scores assigned were 5,4,3,2 and 1, respectively. The overall role performance of the SMSs measured on eleven different areas. The total score on this scale ranged from 96 to 480. The score was converted into the role performance index with the help of the formula given below,

$$\text{Role performance index} = \frac{\text{Actual obtained role performance score}}{\text{Maximum obtainable role performance score}} \times 100$$

Result 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)

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: Mean indices on various areas of role performance

Sl. No.	Areas of role performance	Mean index	Rank
1	Front line demonstration	82.35	I
2	Organization of training	81.43	II
3	Office work and reporting	80.42	III
4	Evaluation	79.68	IV
5	On-farm trials	79.53	V
6	Communication feedback	76.10	VI
7	Subject matter authority	75.71	VII
8	Programme planning and execution	75.46	VIII
9	Management	75.16	IX
10	Services and supplies	74.66	X
11	Supporting activities	71.73	XI

The role performance of the SMSs was measured on eleven different areas attached to their roles. The mean indices on the basis of their respective areas of role performance were worked out by collecting the mean scores of the self-ratings. The findings revealed that job activities carried out by SMSs, pertaining to front-line demonstration was ranked first with the mean index score of 82.35. This means that involvement of Subject Matter Specialists in this area was recorded more. It was followed by organization of training (81.43), office work and reporting (80.41), evaluation (79.67), on-farm trials (79.53), communication feedback (76.1), subject matter authority (75.71), programme planning and evaluation (75.46), management (75.16), services and supplies (74.66) and supporting activities (71.73). The obtained results on the different areas of role performance were depicted in Table 1.

Level of role performance as perceived by the Subject Matter Specialists
The overall role performance score was calculated by adding all role items score with respect to individual SMS. On the

basis of this overall score respondents were divided into three categories of role performance i.e. low, medium and high. A perusal of the Table 2 reveals that majority (68.75%) of the respondents had medium level of role performance followed by 16.25 per cent respondents who had low level of role performance. The least number of respondents (15.00%) had high level of role performance. The value of coefficient of variation (12.30) indicated that the respondents were relatively homogenous with respect to their level of role performance.

Table 3: Distribution of respondents according to level of role performance

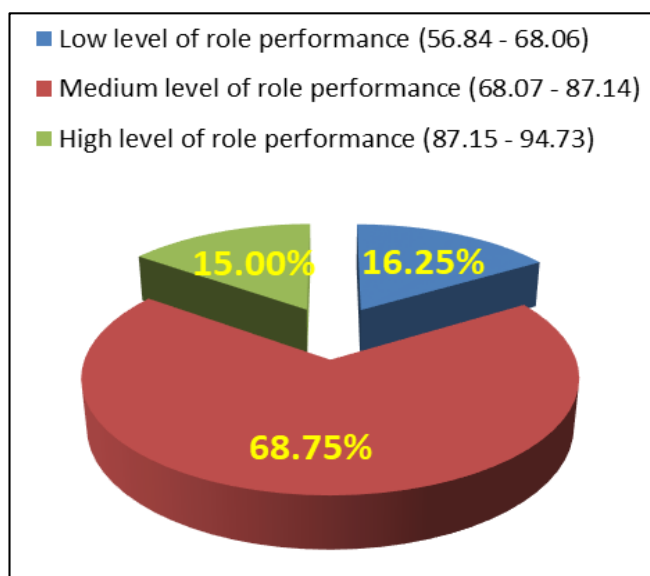| Category	Score Range	Frequency	Percentage	Mean	SD	C.V
Low level of role performance	56.84 to 68.06	13	16.25			
Medium level of role performance	68.07 to 87.14	55	68.75	77.60	9.54	12.30
High level of role performance	87.15 to 94.73	12	15.00			
Total		80	100.00			

Fig 1: Distribution of respondents according to level of role performance

Conclusion
The success of any organization relies upon on the overall performance of personnel at the grass-root level. In order to gain the goals set forth, it is necessary for the development administrators of KVKs to understand how nicely the SMSs become aware of their role in order to perform it well. Knowledge of this would assist in growing the efficiency of the field personnel in KVKs. This mainly essential from the view of making the KVKs self-assisting and self-sustaining in the lengthy run, which forever calls for sound and efficient functioning of the KVKs in rural areas. The findings on level of role performance revealed that more than 80 per cent of the respondents had low to medium level of performance. Only a small proportion of them (15%) were found with high level of role performance. Effective management strategy for organizational performance may be adopted to enhance the overall role performance by eliminating the factors standing as hindrance. Improvement in the role performance may be achieved by role analysis which brings forward the role expectation, perception and existing performance on the basis of what is required from an individual in an organization in achieving the objectives.

References
1. Abo D, Lefebo N. Factors Influencing Job Performance of Development Agents: The Case of SoroWoreda of Hadiya Zone, Southern Ethiopia. European Journal of Business and Management. 2018;10:15-31.
2. Bose R, Hossain MA, Anam MM, Hasnat M, Kabir H. Performance of sub-assistant agricultural officer as a professional leader. International Journal of Natural and Social Sciences;c2014. p.41-47.
3. Diksha P, Devi AJ, Dhondia, Sujata P, Naik P. Role performance of field extension functionaries in the transfer of dairy technology in Karnataka. International Journal of Agriculture Sciences. 2016;8(25):1492-1495.
4. Kadam MS, Pandya DR, Kolgane TB, Khogare TD. Study of relationship between role performances ofKVK experts. Asian Science. 2012;7(1):41-45.
5. Kumar P, Kaur P. A scale to measure role performance of subject matter specialists of Krishi Vigyan Kendra. Int J Farm Sci. 2014;4(3):157-164.
6. Kumar P, Kaur P. Difference in role performance of Subject Matter Specialists of selected Krishi Vigyan Kendras of Northern India. Indian Res. J. Ext. Edu. 2017;17(3):2017.
7. Levinson DJ. Role, personality and social structure in the organizational setting. The Journal of Abnormal and Social Psychology. 1959;58(2):170-180.
8. Mishra PK, Jaiswal DK, Mishra A. Factors affecting Role performance of R.A.E.Os working in Jabalpur district, Maharastra.J. ofExtn. Edn;c1988. p.231-233.
9. Sarnaik S, Bhople P, Mankar D, Kale N. Job Performance of Subject Matter Specialists Working in Krishi Vigyan Kendra. Journal of Krishi Vigyan 2019;8.183.10.5958/2349-4433.2019.00094.1