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Role Expectation of Subject Matter Specialists of Selected *Krishi Vigyan Kendras* of Northern India

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ABSTRACT

The study was conducted in Punjab, Haryana and Himachal Pradesh selecting 20 KVKs proportionally. A scale was developed to measure the role expectation of SMSs of KVKs comprising 11 role segments viz. organization of trainings, on farm trials, front line demonstrations, programme planning and execution, subject matter authority, communication and feedback, evaluation, management, services and supplies, office work and reporting, and supporting activities. Findings revealed that most of the respondents were male (91.30%), in 46-52 year age category (47.83%), life members of professional societies (100%), having doctorate degree (100%), rural background (82.60%), having nuclear families (52.20%), family occupation service (65.20%) and service experience of 27-35 years (43.48%).Necessary arrangements for the successful conduct of training, selection of location specific problems, proper selection of site for demonstration, implementing or helping in implementation of plan of work, fully conversant with the agricultural situation in the district w.r.t. area of specialization, informing the insect/pest outbreaks/attacks and other calamities which need emergency reporting to concerned authorities, self-evaluation, create team spirit through cooperation and coordination, helping farmers in difficult situation e.g. pest attack, epidemics, drought, flood, preparation and timely submission of various periodic reports prescribed by University and ZPD and publishing the research/extension publications were the top ranked expected roles as expressed by respondents in different role segments respectively. Overall mean expectation score of on-farm trials was highest (4.64) and supporting activities was lowest (4.25). Majority of the respondents (56.52%) were having medium overall role expectation, twenty six per cent low and 17.39 per cent of the respondents were having high overall role expectation.

Keywords: Role Expectation, Subject Matter Specialists, Krishi Vigyan Kendra, Role Segments, Role Senders.

INTRODUCTION

Farm Science Centre which is known as *Krishi Vigyan Kendra* (KVK) is leading transfer of technology project initiated and run by the Indian Council of Agricultural Research (ICAR). It is intended to create able human resource for agriculture development of the country (Chauhan, 2011). With the consolidation of other front-line extension projects of the Council during the Eighth Five Year Plan, the mandate of KVK was enlarged and revised to take up on-farm testing, long term vocational training, in service training for grass root extension workers and front-line demonstrations on major cereal, oilseed and pulse crops and other enterprises (Venkatasubramanian *et al,* 2009). KVK can be hosted by State Agricultural Universities, Govt. Organizations or NGOs. There is a defined setup of KVKs which is uniform all over India. In this set-up, there are six SMSs of different subjects as per the requirement of a particular district. The whole working of KVK is coordinated by Programme Coordinator. The subject matter specialists (SMSs) of KVKs are responsible for successful execution of the mandate of KVKs. In SAUs run KVKs the whole work is monitored and guided by Directorate of Extension Education under the guidelines of Zonal Project Directorate of ICAR. So SMSs are at the centre position of functioning of KVKs who plays different roles for the fulfilment of KVK mandate. There are certain expectations about roles to be played by the SMSs in the minds of role senders i.e. Directors of Extension Education, Zonal Project Directors and Programme Coordinators of KVKs. Role expectation is the expected behaviour of the role incumbent (Sanghi, 2011) i.e SMSs in current context. Analysis of these expectations is very important as any gap between role expectations and role perception leads to role ambiguity. Role ambiguity

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is lack of specificity and predictability for an employee's job or role functions and responsibility (Tang and Chang 2010). It is associated with unstructured and poorly defined tasks (Schultz and Schultz, 2004), and employee's unawareness about the nature of job and his position in the organization (Drafke, 1998). So for the better functioning of KVKs in terms of achieving more role clarity the present study was undertaken with the specific objective to study the role expectations of SMSs in the existing KVK set-up.

METHODOLOGY

The study was conducted in the Punjab, Haryana and Himachal Pradesh states. There were twenty KVKs in the Punjab, eighteen in Haryana and twelve in Himachal Pradesh, totalling to fifty KVKs. Out of these, a total of twenty KVKs were selected using probability proportion to number of KVKs in each state. Eight KVKs from Punjab i.e. Jalandhar, Fatehgarh Sahib, Ludhiana, Ferozepur, Kapurthala, Amritsar, Bhathinda, Mansa, seven from Haryana i.e. Sonepat, Panipat, Jind, Kaithal, Rohtak, Kurukshetra and Faridabad, and five from Himachal Pradesh viz. Kangra, Una, Bilaspur, Kullu and Mandi were selected randomly. Scale to measure the role expectation/ perception of Subject Matter Specialists of *Krishi Vigyan Kendras* was developed bifurcating the role into 11 role segments viz. organization of trainings, on farm trials, front line demonstrations, programme planning and execution, subject matter authority, communication and feedback, evaluation, management, services and supplies, office work and reporting, and supporting activities. For determining the role expectation, Director of Extension Education of State Agricultural Universities, Zonal Project Director, Zone-I all the Programme Coordinators (total 24) were the respondents. The data were collected through mailed questionnaires and personal interview. Response was received from 23 role senders. The statistical analysis was done using tools such as mean, standard deviation, analysis of variance and Tukey post hoc test. The mean was used to classify the different variables in low, medium and high categories. ANOVA was applied to know any significant difference between different role segments and Tukey post hoc test was applied to know which two role segments differs significantly.

RESULTS AND DISCUSSION

The results have been discussed in two parts. First part deals with the socio-personal characteristics of the respondents and second part deals with role expectation of the respondents.

Socio-personal Characteristics

The perusal of data given in the table 1 clearly states that majority of the respondents i.e. 91.30 per cent was male and 47.83 per cent belonged to 46-52 year age group. Soil Science was the most prevalent (21.70%) discipline of the respondents followed by Animal/Vet. science (17.40%), whereas Agronomy, Agricultural Engineering and Fruit Science were the least prevalent disciplines having one respondent each. Among the respondents 17.39 per cent were residing at the campus whereas majority (39.13) was living within periphery of 1-17 km from office. All respondents (100%) were life members of professional societies, having doctorate education and married. Most of the spouses of the respondents were post graduate (82.60%) and working (65.20%). More than 82percent respondents belonged to rural background, majority was having joint families (52.20) and family occupation was service (65.20). As far the service experience was concerned, 43.48 percent were having 27-35 years of experience. The finding of the study was different from Singh and Kumar (2012) who reported that majority of the trainers were having 5-10 years of experience of their service, maintained nuclear type of family and were 30-40 years old. However the qualification of most of the trainers was found to be Ph.D. This may be attributed to the reason that they have taken SMSs, Training Assistants and Programme Coordinators as respondents whereas in present study only Programme Coordinators and controlling officers were respondents.

Role expectation of the respondents

Role expectation of the respondents is discussed under eleven role segments as follows:

Role expectation regarding organization of trainings

As far the role expectation regarding organization of trainings is concerned table 2 clearly indicates that respondents expected necessary arrangements for the successful conduct of training as most important (mean score 4.87) followed by delivering well prepared lecture to the trainees (mean score 4.83) and assessment of the training needs of the farmers of the district (mean score 4.78). Whereas developing skills through practical field training, arranging field trips to the demonstration sites, experiment fields and other relevant places and measuring the impact of training programmes were the least expected roles having equal mean score of 4.35. This was a very interesting outcome that measuring the impact of training programme which is a very important role was expected least by the role senders. This indicates that trainings were to be conducted as stipulated targets rather than yielding

Table 1: Distribution of the respondents according to their socio-personal characteristics

Socio-personal characteristics	Category/range	f	Percentage
Sex	Male	21	91.30
	Female	2	8.70
Age	40-46	4	17.39
	46-52	11	47.83
	above 52	8	34.78
Discipline	Agronomy	1	4.35
	Vegetables	2	8.70
	Agril. Engineering	1	4.35
	Entomology	2	8.70
	Home Science	2	8.70
	Soil Science	5	21.70
	Extension Education	2	8.70
	Pomology	1	4.35
	Animal/Vet. Science	4	17.40
Distance of residence from place of posting (km)	On-campus	4	17.39
	1-17	9	39.13
	17-33	4	17.39
	33-49	6	26.09
Membership of professional societies	Annual	16*	69.60
	Life	23*	100
Education	Ph. D	23	100
Marital status	Married	23*	100
	Widow/widower	1*	4.35
Education of spouse	Graduation	3	13
	Post-Graduation	19	82.60
	Ph. D.	1	4.35
Occupation of spouse	Service	15	65.20
	Housewives	8	34.80
Family back ground	Rural	19	82.60
	Urban	4	17.40
Family type	Joint	12	52.20
	Nuclear	11	47.80
Family occupation	Agriculture	8	34.80
	Service	15	65.20
Service Experience	1-19	5	21.74
	19 – 27	8	34.78
	27 – 35	10	43.48

*multiple response

any impact or it may be in their mind that impact analysis should be done by external agency than Subject Matter Specialists. Field visits may not be so important because in most of short duration trainings of 1-3 days it seldom put any impact. But least expectation about developing skills through practical field training may raise our eyebrows. Here it should be kept in mind that most of the farmers practising agriculture already have practical skills in most of routine agricultural operations. Mostly they are lacking in knowledge and attitude about latest recommendations. So this may be the reason about least expectation about this role. Similar results were reported by Dhillon (1975) except the delivering well prepared lecture to the trainees which was least expected.

Table 2: Distribution of role senders according to their role expectation regarding organization of trainings

S. No.	Role items	Mean Score	Rank
1	Assessment of the training needs of the farmers of the district	4.78	3
2	Developing need based curriculum	4.70	4
3	Use of proper AV aids	4.39	7
4	Necessary arrangements for the successful conduct of training	4.87	1
5	Delivering well prepared lecture to the trainees	4.83	2
6	Organizing discussion session for the better understanding of subject matter	4.52	6
7	Developing skills through practical field training	4.35	9
8	Arranging field trips to the demonstration sites, experiment fields and other relevant places	4.35	9
9	Measuring the impact of training programme	4.35	9
10	Modifying training programme on the basis of feedback received	4.65	5

Role expectation regarding On-Farm Testing

It is observed from the data presented in the table 3 that respondents expected the selection of location specific problems as most important, followed by critically observing and recording data of trials with mean score of 4.96 and 4.87, respectively. However forming appropriate research hypotheses was the least expected role under the role segment of on-farm testing with mean score of 4.26 followed by applying appropriate statistical tools to analyse the data. It is well known fact that KVKs were considered as extension institutes than research institutes. So these roles which are a core activity of research come at the bottom of the expectations. Moreover, the probable solutions to the location specific problems found by SMSs were not recommended directly. They had to send their outcome to main research system of SAUs which in result conduct research on those lines and after getting the promising results made recommendations. So in this whole process SMSs were not so motivated about forming appropriate research hypotheses and applying appropriate statistical tools to analyse the data. In similar way these roles were least expected by authorities. Different results were put forward by Dhillon (1975) perhaps due to the fact that nature of work of FASS and KVK is altogether different as far the On Farm Trials concerned.

Table 3: Distribution of role senders according to their role expectation regarding on farm trials

S. No.	Role items	Mean Score	Rank
1	Selection of location specific problems	4.96	1
2	Stating the objectives of the research clearly	4.61	5.5
3	Forming appropriate research hypotheses	4.26	8
4	Laying out the experiments properly	4.70	3.5
5	Inspection of field trials	4.70	3.5
6	Critically observing and recording data of trials	4.87	2
7	Applying appropriate statistical tools to analyse the data	4.39	7
8	Publishing the findings of the on-farm-research trials	4.61	5.5

Role expectation regarding Front Line Demonstrations

It is clear from table 4 that in the role segment of front line demonstrations, proper selection of site for demonstration and monitoring on continuous and regular basis through visits to FLD plots, recording the information pertaining to different technological interventions adopted at check plot and FLD plot to evaluate the technological gap were the most expected roles having equal mean score of 4.65. Organizing an orientation training for all the participating individuals/agencies about all aspects of technologies and methodologies to be demonstrated was least expected role interestingly followed by, conducting survey to ascertain the socio-economic conditions of farmers and farming situations under which the crop is grown (14th rank). No doubt the top expected roles are most important and integral part of the FLDs. However among least expected roles, low expectation about organizing orientation training for all the participating individuals/agencies about all aspects of technologies and methodologies to be demonstrated may be attributed to the fact that generally participating farmers were aware of the cropping practices of different crops except the new crop introductions.Any other required knowledge they get time to time from the SMSs. Further involvement of other agencies was also negligible in the FLDs programme of KVKs because of shortage of staff and their own targeted engagements. Keeping this in mind, this role may be least expected by the authorities.

Role Expectation Regarding Programme Planning and Execution

Data placed in the Table 5 reveals that implementing or helping in implementation of plan of work was the most expected role by respondents with mean score of 4.52. Preparing the technical information collected for presentation to the head of the organization for planning a programme was least expected role which came out to be at 9th position. Here also one interesting observation was come out that role senders of KVKs (a key stake holder of ATMA) placed development of Strategic Research and Extension plan of the district among least expected roles (7.5th rank) under this role segment despite the fact that ATMA, a core agency for coordinating the agricultural development of the district in present scenario, emphasizes on this (Anonymous 2014). Reason may be that the work of ATMA was still not properly channelized and there were mandated targets of KVKs which left less time for collaborative work. Results are in line with that of Dhillon (1975) with little difference. However outcome is altogether different from Kaur (1986).

Table 4: Distribution of role senders according to their role expectation regarding front line demonstrations

S. No.	Role items	Mean Score	Rank
1	Getting thorough knowledge of technologies/thematic areas on which the FLDs are to be conducted	4.43	9.5
2	Developing a comprehensive plan for organizing the demonstrations	4.61	4
3	Proper selection of site for demonstration	4.65	2
4	Participatory approach in conducting demonstrations associating farm scientists, extension workers and demonstrating farmers.	4.57	5
5	Conducting survey to ascertain the socio-economic conditions of farmers and farming situations under which the crop is grown	4.13	14
6	Conducting survey to find existing level of adoption of technologies and productivity	4.35	11
7	Organizing an orientation training for all the participating individuals/agencies about all aspects of technologies and methodologies to be demonstrated	4.09	15
8	Informing, all participating agencies/persons well in advance about the date and venue prior to the launching of the demonstrations	4.17	13
9	Supervising and guiding all important farm operations carried out by the demonstrating farmers	4.30	12
10	Organizing field day	4.48	7.5
11	Recording the information pertaining to different technological interventions adopted at Check plot and FLD plot to evaluate the technological gap	4.65	2
12	Keeping records of various expenses incurred and yields for deriving cost benefits	4.52	6
13	Monitoring on continuous and regular basis through visits to FLD plots, recording observations, getting the feedback from the farmers and extension workers.	4.65	2
14	Documenting, reporting, circulating the results of demonstration among all the concerned personnel and demonstrating farmers	4.48	7.5

Table 5: Distribution of role senders according to their role expectation regarding programme planning and execution

S. No.	Role items	Mean Score	Rank
1	Be knowledgeable about the results revealed through evaluation and field studies of the past years	4.17	7.5
2	Be knowledgeable about the steps and approaches of programmme planning	4.26	5
3	Collecting and analyzing the facts pertaining to the agricultural production problems of the farmers	4.22	6
4	Preparing the technical information collected for presentation to the head of the organization for planning a programme	3.96	9
5	Personal involvement in finding the suitable solution to the problem/need of the area	4.35	4
6	Drawing up of a suitable plan of work	4.48	2
7	Implementing or helping in implementation of plan of work	4.52	1
8	Reconsidering the plan in the light of results of evaluation of the programme	4.43	3
9	Development of Strategic Research and Extension plan of the Distt	4.17	7.5

Role Expectation Regarding Subject Matter Authority

Subject matter authority was an important aspect of KVK role. Data in table 6 clearly indicates that fully conversant with the agricultural situation in the district w.r.t. his area of specialization was most expected role (mean

score 4.70), as far the role expectation regarding subject matter authority was concerned. This was followed by serving as liaison with agricultural research in general and with his own discipline in particular (mean score 4.43) and attending refresher training courses to update the subject matter knowledge (mean score 4.35). The least expected role was attending professional meetings, conferences, seminars and workshops (mean score 4.09). Everything goes in right way as far this role segments was concerned except the mentioned least expected role. Although this is imperative to attend professional meetings, conferences, seminars and workshops to enrich the subject matter knowledge but authorities expected it least. The only possible reason may be that overburden of the work of KVKs activities and priority of other work over this may left less or no time for attending professional meetings, conferences, seminars and workshops. Findings of the study are in disagreement with that of Dhillon (1975) but quite in line with Kaur (1986)

Table 6: Distribution of role senders according to their role expectation regarding subject matter authority

S. No.	Role items	Mean Score	Rank
1	Fully conversant with the agricultural situation in the district w.r.t. his area of specialization	4.70	1
2	Serving as liaison with agricultural research in general and with his own discipline in particular	4.43	2
3	Maintaining close association/links/contacts with parent and other technical departments	4.30	4.5
4	Selecting, interpreting and making solutions to the specific problems	4.30	4.5
5	Attending professional meetings, conferences, seminars and workshops	4.09	7
6	Attending refresher training courses to update the subject matter knowledge	4.35	3
7	Reading periodicals, journals, magazines and other literature to get latest research developments	4.26	6

Role expectation regarding Communication and Feedback

Communication and feedback is soul of any extension programme, absence of which would lead to extinction. It is quite clear from the table 7 that informing the insect/ pest outbreaks/attacks and other calamities which need emergency reporting to concerned authorities was the role most expected (mean score 4.70) by the respondents under role segment of communication and feedback. However they gave least expectation to the role of giving feedback regarding cultural difficulty and attitude of farmers in adoption of new technology (mean score 4.13). All the roles under this segment go well as far as the expectations of authorities are concerned. But least ranking of giving feedback regarding cultural difficulty and attitude of farmers in adoption of new technology is really surprising. It may be due to the fact that authorities thought that SMSs may provide them wrong feedback without putting their efforts in adoption of new technology. The contrary results were revealed by Dhillon (1995) who reported informing the insect/pest outbreaks/attacks and other calamities which need emergency reporting to concerned authorities as the least expected role. These findings were also in contradiction to Kaur (1986).

Table 7: Distribution of role senders according to their role expectation regarding communication and feedback

S. No.	Role items	Mean Score	Rank
1	Identifying the key communicators	4.22	4
2	Using key communicators in the diffusion and adoption of agricultural innovations	4.35	2.5
3	Giving feedback regarding the non-availability of certain inputs which hinder the adoption of new technology	4.17	5
4	Giving feedback regarding cultural difficulty and attitude of farmers in adoption of new technology	4.13	6
5	Informing the insect/pest outbreaks/attacks and other calamities which need emergency reporting to concerned authorities	4.70	1
6	Serving as a channel of communication between university and farmers	4.35	2.5

Role expectation regarding Evaluation

Evaluation is necessary to know the impact and shortcomings of any extension project. As it is denoted in the table 8 that under the role segment of evaluation, the self-evaluation was most expected role having a mean score of 4.72, which was a surprise result. Further acquaintance with the use of results from evaluation was least expected role (7th rank). Knowledgeable about steps involved in evaluation of a programme/project was a role lies among least expected roles (5.5^{th} rank) which is otherwise could be considered as one of the important role. The reason behind occurrence of these results may be due to that authorities might be thinking that evaluation is none of the business with SMSs rather these were superiors who should do evaluation with active involvement of SMSs. However self-evaluation role goes well under this segment. Results are not in tune with that of Dhillon (1975) and Kaur (1986). Role Expectation Regarding Management.

It is absolutely evident from the Table 9 that under the role expectation of SMSs of KVKs in the role segment of management, (create team spirit through cooperation and coordination) was the role widely expected (mean score 4.78).This was followed by developing and maintaining good relations with superiors, subordinates and associates (mean score 4.65), developing contacts with progressive farmers and establishing working relationships with small, marginal farmers and financial institutions having mean score 4.57 each. However understanding and practising

Table 8: Distribution of role senders according to their role expectation regarding evaluation

S. No.	Role items	Mean Score	Rank
1	Active involvement in evaluation of programme	4.52	2.5
2	Knowledgeable about steps involved in evaluation of a programme/project	4.35	5.5
3	Acquaintance with the use of results from evaluation	4.30	7
4	Be knowledgeable about how to interpret the results	4.35	5.5
5	Self-evaluation	4.57	1
6	Evaluating the different individual activities of KVK	4.39	4
7	Impact analysis of KVK	4.52	2.5

the concept of integration of teaching, research and extension was the least expected role (10th rank). This is natural expected result that integration of teaching, research and extension might be at the bottom because SMSs were not supposed to do teaching and in depth research as nature of their work is mainly extension. Results are not in line with the findings of Dhillon (1975)

Table 9: Distribution of role senders according to their role expectation regarding management

S. No.	Role items	Mean Score	Rank
1	Understanding and practicing the concept of integration of teaching, research and extension	4.26	10
2	Observing the norms and standards set by the organization/authorities	4.30	9
3	Developing and maintaining good relations with superiors, subordinates and associates	4.65	2
4	Developing contact with progressive farmers	4.57	3.5
5	Create team spirit through cooperation and coordination	4.78	1
6	Keeping close liaison with the staff of agricultural and allied departments	4.43	5
7	Keeping informed all concerned associates about what has been decided at organizational level	4.35	7.5
8	Establishing working relationships with small, marginal farmers and financial institutions	4.57	3.5
9	Stimulating the enthusiasm of people to take up agril development on self-help basis with the needed aid from govt and other agencies	4.35	7.5
10	Effectively supervising the execution of the plan	4.39	6

Role expectation regarding Service and Supplies

The data in table 10 reveals that ensuring the delivery of technical inputs to farmers before planting/sowing season and helping farmers in difficult situation e.g. pest attack, epidemics, draught, flood, etc. were the most expected roles as reported by the respondents with mean score 4.78. Whereas procuring and supplying fruit plants, seed etc. as per the demand of the farmers was the least expected role (mean score 4.17). It was clarified by ZPD that this was not a work of SMSs of KVKs at all hence this is rightly placed at the bottom of the expectations' list. Here also important roles i.e. providing services in collecting soil and water samples and providing diagnostic services came out to be among the least expected roles (11th and 10th rank respectively). Although KVKs are well equipped with soil labs and they are supposed to come in a big way so as the soil and water testing of the district is concerned. It seems that authorities were concerned with giving trainings and technical know-how regarding how to collect soil and water samples. But SMSs themselves going to field for collecting soil and water samples was not desirable. The outcome of results is in contrary to Dhillon (1975) and Kaur (1986).

Table 10: Distribution of role senders according to their role expectation regarding service and supplies

S. No.	Role items	Mean Score	Rank
1	Ensuring supply of all agril. inputs required for demonstration, training and other purposes	4.35	6
2	Providing services in collecting soil and water samples	4.22	11
3	Providing diagnostic services	4.26	10
4	Submission of indents well in time to ensure the supply of inputs	4.30	8
5	Ensuring the delivery of technical inputs to farmers before planting/sowing season	4.78	1.5
6	Helping farmers in difficult situation e.g. pest attack, epidemics, draught, flood, etc.	4.78	1.5
7	Collaborating with other deptt such as Markfed, IFFCO, KRIBHCO, Dept of Agril. etc providing services to farmers	4.30	8
8	Launching a special programme in case of epidemic	4.52	3
9	Procuring and supplying fruit plants, seed etc as per the demand of the farmers	4.17	12
10	Joint touring with agril extension officers for the solution of agricultural problems	4.39	5
11	Providing technical guidance and other specialized services to the farmers in establishing individual projects	4.30	8
12	Visiting farmers' fields for inspection advice and guidance	4.48	4

Role expectation regarding Office Work and Reporting

The examination of table 11 reveals that under office work and reporting segment the most sought role was preparation and timely submission of various periodic reports prescribed by University and ZPD with a mean score of 4.74. This was followed by ensuring timely replies to the correspondence from superior officers, farmers and other departments and attending to visiting farmers and other visitors and dealing politely with them with a mean score of 4.70 and 4.65 respectively. However assisting the office in the preparation of budget and other day to day was the least expected role under this segment (mean score 4.17). This role was rightly placed at the bottom because assisting office in day to day work is not at all business of the SMSs however they can help the PCs in budget preparations by asserting their requirements. Findings of the study are in contrary to Dhillon (1975) and Kaur (1986)

Role expectation regarding Supporting Activities

Observations from Table 12 clearly denotes that publishing the research/extension publications was widely

Table 11: Distribution of role senders according to their role expectation regarding office work and reporting

S. No.	Role items	Mean Score	Rank
1	Preparation and timely submission of various periodic reports prescribed by University and ZPD	4.74	1
2	Preparing and submitting special reports like survey report, FLD report as per requirement	4.61	4.5
3	Keeping up-to-date record of all sorts of information related to agriculture	4.48	6.5
4	Attending to visiting farmers and other visitors and dealing politely with them	4.65	3
5	Ensuring timely replies to the correspondence from superior officers, farmers andother deptts.	4.70	2
6	Keeping the record of all offices goods which are under charge and the other day to day work	4.48	6.5
7	Having thorough knowledge of rules	4.35	8
8	Assisting the office in the preparation of budget and other day to day work	4.17	9
9	Proper use of vehicle according to instructions/guidelines	4.61	4.5

expected role as far the role segment of supporting activities is concerned which was followed by assisting the Programme Coordinators in holding SAC meetings and delivering TV/radio talks. Here we should keep in mind that publishing the findings of the on-farm-research trials was among middle of the expected roles. So it was clear that however the authorities necessarily desired that SMSs should publish the research/extension publications but avoiding on-farm-research trials publication. They may be considering that data of OFTs was quite immature to publish or involvement of main stream scientists was needed. Whereas arranging film shows for farmers were the least expected role. It was quite expected because this extension method was losing its sheen particularly in the sampled states as they were quite forward and this method performs well in backward states. But surprisingly, facilitating the formation of self-help groups, farmers' club etc. which otherwise a very important activity of the KVKs was among least expected roles (12.5th rank). Probably the involvement of SMSs in other activities was so extensive that this role didn't get time. Moreover cooperative work particularly in Punjab and Haryana does not hold any good past. Findings are in contrast with Kaur (1986).

Table 12: Distribution of role senders according to their role expectation regarding supporting activities

S. No.	Role items	Mean Score	Rank
1	Arranging Ex trainee sammelan	4.26	7.5
2	Arranging film shows for farmers	3.91	14
3	Participating in short duration training/workshops organized by different agencies	4.17	9.5
4	Holding agricultural fairs	3.96	12.5
5	Organization of exhibitions	4.09	11
6	Arranging farm tours	4.17	9.5
7	Organizing campaigns to solve the problems of masses	4.26	7.5
8	Assisting the Programme Coordinators in holding SAC meetings	4.57	2
9	Delivering invited lectures	4.39	4.5
10	Delivering TV/radio talks	4.43	3
11	Publishing the research/extension publications	4.61	1
12	Holding the special days like world food day, world environment day etc.	4.30	6
13	Organizing technology weeks	4.39	4.5
14	Facilitating the formation of self-help groups, farmers' club etc.	3.96	12.5

Difference between role expectations of different role segments

Data in table 13 depicts the overall mean score of role expectation in each role segment. It denotes that overall mean score of the role segment on-farm trials was highest (4.64) followed by organization of trainings (4.58) and office work and reporting (4.53). Whereas role segment of supporting activities was at the bottom with overall mean score of 4.25. Here front line demonstrations which is prime KVK objective, was expected at 5.5th place along with management with overall score of 4.43. To find out the difference between different role segments one way ANOVA test followed by Tukey post hoc test was performed. Outcome of the test revealed that there was significant difference between different role segments as a whole. If we compare the expectations in different role segments with each other, majority of them are equal with no significant difference except supporting activitiesdiffer significantly from organization of trainings, on-farm trials and office work and reporting, and on-farm trials differ significantly from programme planning and execution.

Table 13: Overall mean expectation score regarding different role segments

S. No.	Role Segment	Overall Mean Score	Standard Deviation	Rank
1	Organization of trainings	4.58	.212	2
2	On-farm trials	4.64	.229	1
3	Front line demonstrations	4.43	.190	5.5
4	Programme planning and execution	4.29	.179	10
5	Subject matter authority	4.35	.186	8
6	Communication and feedback	4.32	.205	9
7	Evaluation	4.43	.105	5.5
8	Management	4.47	.169	4
9	Services and supplies	4.41	.202	7
10	Office work and reporting	4.53	.182	3
11	Supporting activities	4.25	.220	11

F value = 3.81*
*Significant at 5%

Overall role expectation of the SMSs as Per Role Senders

Overall role expectation was worked out by summing up all the scores given by respondents in role expectation scale. Based on total score achieved the respondents were categorized into three categories i.e. low, medium and high. Perusal of data in table 14 which indicates about the overall role expectation of the respondents reveals that that majority

of the respondents (56.52%) were having medium role expectation, about 26 per cent were fallen under low role expectation category and more than 17 per cent of the respondents were having high expectation with regard to overall role of the SMSs of KVKs. The finding of the study are different from the Kaur (1986) who reported that expectations of members of *Mukhya Sevikas* role set were high in role segments of subject matter competency, programme planning, execution and evaluation, administrative responsibilities, record keeping and reporting, services and supplies, communication and feedback.

Table 14: Distribution of the Role senders according to overall role expectation score

Category	Role Expectation Score	Frequency	Percentage
Low	409-451	6	26.09
Medium	451-493	13	56.52
High	493-535	4	17.39

CONCLUSION

Indian Council of Agricultural Research (ICAR) has developed a strong network of *Krishi Vigyan Kendras* in the country to disseminate agricultural technologies and innovations. Analysis of the role expectation of SMSs gave the clear cut picture that what the role senders actually expected from them. Some of the roles which otherwise considered as important were least or moderately expected by them. Role of SMSs was related to 11 major role segments. Role expectations within these role segments differ significantly. The overall role expectation came out to be moderate as reported by the majority.

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