

Training Need Assessment on Communication Competencies of Extensionists working in Krishi Vigyan Kendras (Farm Science Centres)

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ABSTRACT

Training need assessment has always been an important area in the designing the capacity development programme for the extensionists. It helps to make the extensionists updated, upgraded and competent in their field. Training need using Borich Need Assessment Model was carried out in the four zones of Krishi Vigyan Kendras (KVK) to assess the communication competencies of the extensionists. The zones of KVKs were selected using simple random sampling without replacement method. From each zone, 20 KVKs were selected randomly and 3 extensionists from each KVK were selected by using simple random sampling technique. The total sample size was 240. Mean weighted discrepancy score (MWDS) was used to study the training needs. The results of the study indicated that the highest level of training need was expressed in their ability to use computer (Internet) and PowerPoint presentation followed by their “ability to prepare visual aids to help deliver information” while lowest mean weighted discrepancy score was given to their ability in presenting the seminar. Kruskal wallis test was carried out to find the differences among the zones of KVK. Attention should be given to designing inservice training programmes which can adequately address the present training needs of the extensionists.

Keywords : Extensionists; Krishi Vigyan Kendra; Kruskal-Wallis test; Training Need; Borich Need Hierarchy;

INTRODUCTION

Agriculture holds an important place in the Indian economy and currently India is among the top two agricultural producers in the world. Though agriculture employs about 51 per cent of the total work force, its contribution towards Gross Domestic Product is merely 11.8 per cent (Agricultural Statistics at

a Glance, 2014). India saw remarkable progress in food production which has increased four folds in the last six decades. Policy, research and extension support are among the various drivers which helped to attain this herculean task. In agricultural development, extension and advisory services play a vital role for nutritional security, food sovereignty, and

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economic stability. In order to contribute better towards agricultural development, these extension and advisory need new capacities to confront the present challenges in agriculture.

Agricultural extension is said to be a public service for human resource development of people engaged in agriculture including farmers. Along with development of the clientele, extension professionals need to be upgraded and updated with the existing and new skills. Success of an organization is directly related to the skill of its human resource. Competent human resources are the valuable assets to the extension organization. Farm extension services have reaffirmed their essential role in agrarian development, poverty reduction and rural prosperity (Birner and Anderson, 2007). The ability of extension professionals to design, develop, deliver and evaluate extension programmes determines the effectiveness of an extension organization as they are directly responsible to the people. Their ability to perform extension tasks is generally said to be a function of their job competencies. Communication skill is an important component of the professional competencies. Communication competencies assume a greater role in agricultural extension. Extension professionals need to be efficient in communicating with the farmers so that latest technologies and information is provided to them. Communication competency may be defined as the ability

to listen and to communicate effectively orally and in writing. Effective and efficient communication of farm information is an important pre-requisite for affecting adoption of agricultural innovations. The extension workers as communicators of farm information became an indispensable element in the process of communication in implementing and securing desired change in agriculture. The development in agriculture depends on communication. Thus, there is need to understand training needs of extension personnel in communication competencies.

Competency of extension professionals can be enhanced by providing training opportunities that are focused on areas related to competency (Mitchell, 2002). Cyr (2008) showed that the extension functionaries enhanced their facilitation competency by participating in the training.

In this scenario, the present study is an attempt to identify and prioritize the communication training needs of extensionists, so that necessary measures would be suggested to develop suitable capacity building modules and conduct capacity enhancement programmes for them.

METHODOLOGY

Krishi Vigyan Kendras (KVKs) were selected purposively as an organization for the present study due to the immense importance given to them in providing

extension services to the farmers. Four KVK zones selected were

1. Zone I: Delhi, Haryana, Jammu and Kashmir, Himachal Pradesh, and Punjab
2. Zone II: Bihar, Jharkhand, West Bengal and Andaman and Nicobar
3. Zone IV: Uttar Pradesh and Uttarakhand
4. Zone VII: Chhattisgarh, Madhya Pradesh and Odisha

From each zone, twenty ICAR-KVKs and three extensionists from each KVK were selected following simple random sampling technique. Hence, the total sample size was 240. An extensionist, for the present study, was operationalized as an extension professional having acquired a specialised degree in agricultural sciences or allied sciences, working in *Krishi Vigyan Kendras* and directly in contact with the clientele/ farmers. Extensionists can be synonymously used for subject matter specialist in *Krishi Vigyan Kendra*.

Communication competency was operationalized as ability of extension professionals to delivering radio talks, establishing rapport with the farmers, visual aids preparation to help deliver information, use computer (internet) and power point presentation, convey extension messages effectively, presentation in seminars, persuade farmers to adopt technologies, write

effectively for target audience, provide feedback of researchable problems to researchers and delivering TV talks. The questionnaire comprising these ten items was administered to the sample respondents.

Training need is operationalized in this study as the difference in the skills expected or required by extensionists in their job and the actual skills possessed by them. The present study adopted the Borich Need Assessment Model (Borich, 1980) which relies on the extension agents' judgments about their own performances. A dichotomous importance *vs* possessed competency five point continuums, from least important to most important and very low to very high was developed. A score of 1 on the scale signified the least important competency/very low possession and number 5 denoted the most important competency/very high possession. The extensionists were asked to give their self-perceived responses on the identified 10 communication competency statements for both importance and possessed competency. Reliability as a measure of internal consistency was established using Cronbach's alpha and the values were 0.864 for the importance level and 0.835 for the competence level.

Discrepancy Score = I-C

Weight Discrepancy Score = I (I-C)

Mean Weight Discrepancies Scores = $\Sigma I (I-C)/n$

In the above equations, I is Importance level, C is Competency level and n is number of extensionists.

FINDINGS AND DISCUSSION

Personal Profile of Extensionists

The personal profile of the extensionists is presented in Table 1.

Table 1.
Personal Profile of the Extensionists

n=240

Sl. No.	Variables	Category	Frequency	Percentage
1.	Age	<35	48	17.5
		35-50	150	62.5
		>50	52	20.0
2.	Gender	Male	157	65.4
		Female	83	34.6
3.	Experience	1-10 years	81	33.8
		11-21 years	93	38.8
		> 21 years	66	27.5
4.	Education	Post-graduation	75	31.3
		Ph.D.	165	68.7
5.	Position	Subject matter specialist	177	73.8
		Programme coordinator	63	26.3
6.	Type of KVK	ICAR	69	28.8
		SAU	129	53.8
		NGO	42	17.5

Training Need Assessment

The results of the training need analysis for communication competencies based on mean weighted discrepancy score are depicted in Table 2. The highest mean weighted discrepancy score (5.044) was accorded to the "ability to use computer (internet) and PowerPoint presentation". This means that highest training need is in the use of computer and internet is perceived

by the respondents. As computers and ICT have become indispensable part of work culture, the extensionists felt the need to get training in these areas. Okeowo (2015) also laid emphasis on training in the field of ICT in agriculture for the extension agents. Visual aids are important tools to communicate with the rural people. It is very effective even with the illiterate masses. So, the extensionists felt the need to enhance their ability to prepare different types

of visual aids. The third rank in the perceived training need was “ability to convey extension method effectively” (MWDS 5.012). Extension professionals need to build good relationships and rapport with farmers so as to enable the later to develop trust and confidence of the extension professionals. The lowest

rank on the training need assessment was given to their ability to present a seminar (MWDS 2.659). Majority of the extensionists had Ph.D. as their highest degree and so they were well versed in their subject. It helped them to prepare and present seminar well.

Table 2.
Training Need Analysis for Communication Competencies

n=240

Sl. No.	Competencies	Level of Possession		Level of Importance		MWDS	Rank
		Mean	Std dev	Mean	Std dev		
1.	Delivering radio talks	2.966	0.683	4.179	0.514	3.601	IX
2.	Establishing rapport with the farmers	3.195	0.707	4.358	0.530	3.708	VII
3.	Ability to prepare visual aids to help deliver information	2.728	0.705	4.320	0.485	5.039	II
4.	Ability to use computer (Internet) and Power Point presentation	2.539	0.909	4.416	0.579	5.044	I
5.	Ability to convey extension messages effectively	3.1	0.707	4.725	0.456	5.012	III
6.	Ability to present in seminar	3.237	0.657	4.058	0.553	2.659	X
7.	Ability to persuade farmers to adopt technologies	3.004	0.705	4.570	0.504	4.7	IV
8.	Effective writing for target audience	2.616	0.745	4.033	0.516	3.693	VIII
9.	Provide feedback of researchable problems to researchers	3.087	0.729	4.341	0.500	3.875	V
10.	Delivering TV talks	2.929	0.690	4.212	0.680	3.760	VI

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Table 3.
Zone -wise Comparison of Training Need of Extensionists

Sl. No.	Communication Competency	Zone I n=60		Zone II n=60		Zone IV n=60		Zone VII n=60		Chi square	Prob.
		MW DS	Std Dev	MW DS	Std. Dev.	n=60	Std. Dev.	MW DS	Std. Dev.		
1.	Delivering radio talks	3.75	2.34	3.16	2.53	3.73	2.45	4.73	2.22	1.01	.541
2.	Establishing rapport with the farmers	4.25	2.18	3.21	2.58	3.60	2.36	2.51	2.79	1.52	.136
3.	Ability to prepare visual aids to help deliver information audience	3.46	2.359	3.58	2.48	4.39	2.32	4.44	2.45	38.31**	.000
4.	Ability to use computer (internet) and power point presentation	4.515	3.24	3.83	3.00	3.58	2.573	3.59	2.98	14.741	.041

n=240

Tables 3. continued...

Sl. No.	Communication Competency	Zone I n=60		Zone II n=60		Zone IV n=60		Zone VII n=60		Chi square	Prob.
		MW DS	Std Dev	MW DS	Std. Dev.	n=60	Std. Dev.	MW DS	Std. Dev.		
5.	Ability to convey extension messages effectively	5.16	2.30	5.27	2.58	4.95	2.33	3.977	2.904	6.01	.111
6.	Ability to present seminar	2.70	2.474	2.03	2.347	3.25	2.57	2.57	2.571	.454	.929
7.	Ability to persuade farmers to adopt technologies	4.57	2.31	4.98	2.80	4.76	2.37	4.44	2.703	18.97**	.000
8.	Write effectively for target audience	3.97	1.972	3.32	2.19	3.85	1.80	3.59	2.27	3.246	.355
9.	Provide feedback of researchable problems to Researchers	4.42	2.474	3.02	2.64	4.05	2.26	3.94	2.42	2.42	.524
10.	Delivering TV talks	4.085	2.692	3.07	2.32	3.59	2.21	4.22	2.385	31.41**	.000

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A comparison among the training needs of extensionists in the selected Zones of KVK was studied using Kruskal Wallis test statistics and depicted in Table 3. Out of 8 competencies statements, a significant difference was observed in training needs among extensionists in the selected Zones of KVK on the following competencies statements; Ability to prepare visual aids to help deliver information and write effectively for target audience, ability to use computer(Internet) and PowerPoint presentation (chi-square 14.741 at 0.05 level of significance), ability to persuade farmers to adopt technologies (chi-square 18.997 at 0.01 level of significance), delivering TV talks (chi-square 31.417 at 0.01 level of significance).

Training need for communication competency was assessed based on the

gender of the extension professionals (Table 4). “Ability to convey extension messages effectively” was accorded the highest MWDS for both male (MWDS 5.033) and female (MWDS 5.045) extensionists respectively. While the second rank for the perceived training need was given to “ability to persuade farmers to adopt technologies” for both male and female extensionists. “Ability to use computer (internet) and PowerPoint presentation” was ranked third (MWDS 4.117) for the female extensionists whereas it was accorded sixth rank in terms of MWDS (3.781) by the male extensionists. The third highest MWDS (3.925) for the male extensionists was delivering TV talks. The lowest rank for both male and female extensionists was their ability to present in seminars.

Table 4.
Comparison of Training Need Between Male and Female Extensionists

n=240

Sl. No.	Communication Competency	Female n=83 (MWDS)	Rank	Male n=177 (MWDS)	Rank
1.	Delivering radio talks	3.928	VI	3.417	IX
2.	Establishing rapport with the farmers	3.736	VIII	3.703	VII
3.	Ability to prepare visual aids to help deliver information to audience	4.064	IV	3.830	V
4.	Ability to use computer (internet) and power point presentation	4.117	III	3.781	VI

5.	Ability to convey extension messages effectively	5.045	I	5.033	I
6.	Ability to present in seminar	2.688	X	2.640	X
7.	Ability to persuade farmers to adopt technologies	4.700	II	4.709	II
8.	Write effectively for target audience	4.052	V	3.516	VIII
9.	Provide feedback of researchable problems to Researchers	3.829	VII	3.894	IV
10.	Delivering TV talks	3.446	IX	3.925	III

CONCLUSION

Communication being one of the core competencies is vital for overall professional competency of the extensionists. The extension professionals should be able to communicate effectively with their clientele to improve their efficiency at job. These differences in the competency levels could be attributed due to the lack of in-service training programmes. The approaches and practices of delivering extension services are consistently evolving and curriculum of training institutions being improved based on new developments. The communication training need to be further analyzed in terms of depth, content and scope for improvement. The in-service training should be systematized and regularized or at least the frequency of in-service training should be increased in the future so that communication skills of extension agents

in the field are consistently upgraded and their confidence levels on communication competencies further enhanced.

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