

Constraints Faced by Researchers, Extension Personnel and Farmers in Maintenance of Linkages Under Extension Reform Programme (ATMA) in Assam

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ABSTRACT

The present study was undertaken to study the existing constraints faced by the researcher, extension personnel and farmers in maintenance of linkages under the extension reform programme Agricultural Technology Management Agency (ATMA). A total of 133 respondents were selected for the study. The constraints were studied for three linkages at the block level ATMA. In the study Krishi Vigyan Kendra (KVK) was considered as a unit of research and Block Level ATMA was considered as the extension system. The study revealed that excessive work load besides the normal work of KVK scientist, time constraints with limited resources due to large number of farmers to be contacted, KVK scientists inability to attend trainings conducted by ATMA as a resource person because of their busy schedule, lack of interest and motivation of farmers in involving in extension activities conducted by ATMA, busy schedule of Block Level ATMA members because of their involvement in other activities and presence of KVK at a distant location from the block were the major constraints faced by researcher, extension personnel and farmers in maintenance of linkages among themselves at block level.

Key words Linkage, KVK, Block Level ATMA, Farmers, Constraints

Throughout the long history of modern agriculture, research and extension have been carried out through a network of linkage arrangements which act as important catalysts for agricultural development. Mijindadi (1994) found out that there was no sufficient interaction between those concerned with the packaging and transfer of agro technologies. This finding has raised very vital questions regarding the strength and quality of manpower available in both systems for collaborative extension work. In this regard, Obibuaku (1989) noted that an effective extension service in any country is achieved through a link between collaborating research establishments and its farming communities. Linkage among research – extension – farmer can be considered as an important precursor for undertaking and implementing any extension programme at field level effectively (Rathore 2008). Sen (1984) stated that for effective transfer of technology, strong inter-organizational linkage is of vital significance because of the involvement of various organizations in the process. It is imminent that research-extension linkages ought to be

studied so that certain implications can be drawn for better research-extension-farmer linkages. World Bank (1985) pointed out that bridging the gap between research and extension (strengthening their linkages) is the most serious institutional problem in developing research and extension programmes. In this respect, the principal objective of strengthening research and extension linkages must be to cultivate greater and more effective interaction among stakeholders in the agriculture sector so as to increase agricultural productivity and thereby raise the living standard of the rural population. It is in this context the present study was taken up with the following objective to assess the constraints faced by researcher, extension personnel and farmers in maintenance of linkages in the research-extension –farmer communication triangle at the block level.

MATERIALS AND METHODS

The ATMA model being implemented in Assam is funded by two agencies viz. Centrally Sponsored Scheme (CSS) ATMA and the World Bank funded ATMA. From these two sponsoring agencies one ATMA each was selected. ATMA-Jorhat from World Bank and ATMA-Golaghat from CSS ATMA. A multistage purposive cum random sampling design was followed for selecting the respondents. In the present study, 7 KVK scientists working in KVKs of the selected district, 30 Block Level ATMA members of various disciplines viz. Agriculture, Sericulture, Horticulture and Fishery and 96 farmers were the sample selected from different sub-systems. Thus, a total of 133 respondents were selected for the study. The problems were studied for three linkages at the block level ATMA. In this study KVK was considered as a unit of the research system and Block Level ATMA was considered as the extension system.

1. Block Level ATMA (E) – KVK (R) linkage
2. Block Level ATMA (E) – Farmer (F) linkage
3. KVK (R) – Farmer (F) linkage

The constraints faced by KVK scientists, Block Level ATMA members and farmers were collected using a research schedule that was circulated to each respondent, questions were open ended. Personal interview method was also followed to collect information regarding constraints faced from the KVK programme coordinator, Block Level ATMA convener and farmers. The answers received were summarized based on similarities and categorized and ranked on the basis of percentage.

Table 1. Distribution of Block Technology Team members according to their personal characteristics (n=30)

Sl. No.	Characteristics	Range	Frequency	Mean	SD
1.	Age	Below 42 yrs	5(16.67)	47.07	4.70
		42-51 yrs	20(66.66)		
		Above 51 yrs	5(16.67)		
2.	Education	Graduate	29(96.67)		
		Post graduate	1(3.33)		

Figures in parenthesis indicate percentage

RESULTS AND DISCUSSIONS

Profile of the respondents

- (A) *Block Technology Team (BTT) members*: Table 1 depicts that two third of the BTT members (66.66%) belonged to the age group between 42-51 years, with a mean of 47.07 years. Almost all the BTT members (96.67%) were graduates.
- (B) *KVK scientists*: Regarding age, a majority of the KVK scientists (71.43%) belonged to the age group below 36 years, with a mean of 41.29 years which can be seen in Table 2. The educational qualification of all the KVK scientists were Post Graduates (100.00%)
- (C) *Farmers*: Table 3 depicts that majority of the farmers (65.62%) belonged to the age group between 36-51 with a mean of 43.56 year. Majority of the farmers (29.17%) had higher secondary level educational qualification.

Table 2. Distribution of KVK scientists according to their personal characteristics (n=7)

Sl. No.	Characteristics	Range	Frequency	Mean	SD
1.	Age	Below 36 yrs	5(71.43)	41.29	5.41
		36-47 yrs	2(28.57)		
		Above 47 yrs	0		
2.	Education	Graduate	0		
		Post graduate	7(100.00)		

Figures in parenthesis indicate percentage

Constraints faced by the KVK scientists, Block Level ATMA members and farmers in maintaining linkages

The constraints faced by KVK scientists, Block Level ATMA members and farmers were collected using a research schedule that was circulated to each respondent, questions were open ended. The answers received were summarized based on similarities and categorized and ranked on the basis of percentage.

Constraints faced by the KVK scientists in maintaining linkages with Block Level ATMA members:

The finding in the Table 4 reveals that excessive work load besides the normal work of KVK scientist is the major constraint (100.00%) faced by KVK scientist in maintaining linkages with Block Level ATMA members. The activities of ATMA in relation to the KVK were not clear cut to the KVK scientists was reported by 71.42 per cent of the KVK scientists. This was the second ranked constraint mentioned

Table 3. Distribution of farmers according to their personal characteristic (n=96)

Sl. No	Characteristics	Range	Frequency	Mean	SD
1.	Age	Below 36 yrs	14 (14.59)	43.56	4.70
		36-51 yrs	63 (65.62)		
		Above 51 yrs	19 (19.79)		
2.	Education	No education	0		
		Up to primary school level	20 (20.83)		
		Middle school level	18 (18.75)		
		High school level	27 (28.12)		
		Higher secondary level	28 (29.17)		
		Graduation	3 (3.13)		

Figures in parenthesis indicate percentage

Table 4. Constraints faced by KVK scientists in maintaining linkages with Block Level ATMA members (n=7)

Sl. No.	Constraints	Frequency	Rank
1.	Excessive work load besides the normal work of KVK scientists	7 (100.00)	I
2.	Activities in relation to KVK and ATMA were not clear to the KVK scientists	5 (71.42)	II
3.	Lack of mechanism/forum to discuss plans and actions of ATMA at block level	4 (57.14)	III
4.	Overlapping of KVK programmes and ATMA programmes create problems for KVK scientists	3 (48.85)	IV
5.	In the World bank funded ATMA, KVK is not a mandatory partner organization which is another problem for World Bank ATMA	2 (28.57)	V
6.	Technology interventions given by ATMA are not in consultation with KVK which is a necessity if technology is to be diffused quickly.	1 (14.28)	VI

Figures in parenthesis indicate percentage

Table 5. Constraints faced by KVK scientists in maintaining linkages with farmers (n=7)

Sl. No.	Constraints	Frequency	Rank
1.	Time constraint with limited resources due to large number of farmers to be contacted.	7(100.00)	I
2.	One KVK vehicle is not sufficient for scientists to make frequent visits to farmers	6(85.71)	II
3.	Less scientific staff as compared to area of coverage.	5(71.42)	III
4.	Farmers lack of knowledge about facilities available at KVK	4(57.14)	IV
5.	In some areas mobile connectivity is very poor and sometimes farmers do not respond	3(42.85)	V

Figures in parenthesis indicate percentage

by the KVK scientists. Lack of mechanism to discuss plans and actions between KVK and ATMA was another constraint faced by KVK scientist. Sometimes ATMA activities were overlapped with KVK scientists; in that case KVK scientist could not attend such programmes. In case of the World Bank ATMA, KVK was not a mandatory partner at block level which was another constraint for KVK scientists.

Constraints faced by the KVK scientists in maintaining linkages with farmers:

Table 5 reveals that time constraint with limited resources due to large number of farmers of the districts to be contacted was the major constraint (100.00%), faced by KVK scientist in maintaining linkages with farmers. Problem of insufficient KVK vehicle for scientist to make frequent

Table 6. Constraint faced by Block Level ATMA members in maintaining linkages with KVK scientists (n=30)

Sl. No.	Constraints	Frequency	Rank
1.	KVK scientists inability to attend trainings conducted by ATMA as a resource person because of their busy schedule	24(80.00)	I
2.	Communication gap between Block Level ATMA and KVK scientist about their need to maintain linkages as reported by Block Level ATMA personnel	21(70.00)	II
3.	Lack of working relationship between KVK scientist and Block Level ATMA as mentioned by Block Level ATMA personnel	20(66.66)	III
4.	KVK situated at a distant location from the block was also a problem for Block level ATMA members	19(63.33)	IV
5.	Sometimes KVK scientist were not available at the time of need due to their pre scheduled programme	18(60.00)	V
6.	ATMA and KVK are two separate programmer run under different administration set up, hence there was no platform to work together very often	17(56.66)	VI
7.	There was no provision for linkage with KVK and Block Level ATMA at the block under World Bank funded ATMA.	14(46.66)	VII

Figures in parenthesis indicate percentage

Table 7. Constraints faced by Block Level ATMA members in maintaining linkages with farmers (n=30)

Sl. No.	Constraints	Frequency	Rank
1.	Lack of interest and motivation of farmers in involving in extension activities conducted by ATMA as reported by Block Level ATMA members	21(70.00)	I
2.	Farmers wanted incentives for participating in extension activities of ATMA	20(66.66)	II
3.	Farmers were reluctant to visit Block ATMA office	18(60.00)	III
4.	Farmers lack of technical knowledge on farming	17(56.66)	IV
5.	Farmers were still very conventional and traditional in their approach	16(53.33)	V
6.	Because of financial problems, farmers were not interested in attending ATMA extension activities	15(50.00)	VI
7.	Lack of awareness of farmers about the benefits of association with ATMA projects	14(46.66)	VII
8.	Lack of cooperation from farmers	12(40.00)	VIII

Figures in parenthesis indicate percentage

visits to farmers was reported by 85.71 per cent of the KVK scientists. Only six Subject Matter Specialist (SMS) with three programme assistant are not sufficient to serve each and every corner of the district by one vehicle.

Constraints faced by the Block Level ATMA member in maintaining linkages with KVK scientists:

Findings in Table 6 reveal that KVK scientists inability to attend trainings conducted by ATMA as a resource person because of their busy schedule was the major constraint (80.00%). Also the problem of communication gap between the Block Level ATMA members and KVK scientist in maintaining linkages was reported by 70.00 per cent of the Block Level ATMA members.

Constraints faced by the Block Level ATMA member in maintaining linkages with farmers:

Table 7 reveals that lack of interest and motivation of farmers in involving in extension activities conducted by ATMA was the major constraint (70.00%) faced by Block Level ATMA members in maintaining linkages with farmers. Also the problem that farmers want incentives to participate in the extension activities of ATMA was the second major constraint (66.66%).

Constraints faced by the farmers in maintaining linkages with Block Level ATMA members:

It is observed from Table 8 that the busy schedule of

Block Level ATMA members because of their involvement in other activities was the major constraint (83.33%) faced by Farmers in maintaining linkages with Block Level ATMA members. Also the lack of working relationship among the Block Level ATMA members making it difficult for farmers to interact with Block Level ATMA functionaries was reported by 61.53 per cent of the farmers.

Constraints faced by the farmers in maintaining linkages with KVK scientists

It is observed from Table 9 that 69.23 per cent reported that the presence of KVK at a distant location from the block was the major constraint in maintaining linkages with the KVKs.

CONCLUSION

From the study it can be concluded that excessive work load besides the normal work of KVK scientist, time constraints with limited resources due to large number of farmers to be contacted, KVK scientists inability to attend trainings conducted by ATMA as a resource person because of their busy schedule, lack of interest and motivation of farmers in involving in extension activities conducted by ATMA, busy schedule of Block Level ATMA members because of their involvement in other activities and presence of KVK at a distant location from the block were the major constraints faced by researcher, extension

Table 8. Constraint faced by farmers in maintaining linkages with Block Level ATM members (n=78)

Sl. no.	Constraints	Frequency	Rank
1.	Busy schedule of Block Level ATMA members because of their involvement in other activities create problem for farmers to maintain linkage	65(83.33)	I
2.	Lack of working relationship among the Block Level ATMA members making it difficult for farmers to interact with Block Level ATMA functionaries	53(67.95)	II
3.	Shortage of Block Level ATMA members which created problem to contact large number of farmers	48(61.53)	III
4.	No sericulture officer in some blocks with whom the farmers wanted to contact	38(48.71)	IV
5.	Usually the convener was more actively involved in organizing ATMA activities	24(30.76)	V

Figures in parenthesis indicate percentage

Table 9. Constraints faced by farmers in maintaining linkages with KVK scientists (n=78)

Sl. No.	Constraints	Frequency	Rank
1.	KVK present at a distant location from the blocks	54(69.23)	I
2.	KVK conducts less extension activities in some blocks	53(67.94)	II
3.	Absence of KVK scientist for functioning at the block level	32(41.02)	III
4.	Busy schedule of the KVK scientists to cover all blocks of the district	25(32.05)	IV

Figures in parenthesis indicate percentage

personnel and farmers in maintenance of linkages among themselves.

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