

DYNAMICS OF COLLABORATION IN THE ACTIVITIES OF KRISHI VIGYAN KENDRAS

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Introduction

Agricultural extension is a professional communication intervention deployed by organisations / institutions. Regardless of how it is provided, Agricultural Extension has been an essential component of agriculture and rural development process. It is often seen as a linker between technology generation and technology utilisation and hence research-extension linkages are only emphasized for its success. While the importance of knowledge input in the success of extension cannot be discounted, the support of other organisations engaged in providing supply and services to the farming community cannot be underestimated .

Extension cannot happen in isolation as it is a function of Agriculture Knowledge and Information System (AKIS). The AKIS has number of functions performed by several actors with multiple roles for each of them depending on the situation (Roling and Jiggins, 1997). Among the major extension systems in India, first line extension education system of Indian Council of Agricultural Research (ICAR), implemented mainly through Krishi Vigyan Kendras (KVKs), is very close to both technology generation and utilisation systems. KVKs have acquired greater importance in the backdrop of emergence of farming as an agribusiness and the changing socioeconomic trends within rural areas necessitating well trained, specialized and technically competent workers. As per the revised mandate (Chowdhary, 1999), the KVKs have to

1. Conduct on farm testing for identifying technologies in terms of location specific sustainable land use systems

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2. Organise training to update the extension personnel with emerging advances in agricultural research on regular basis
3. Organise short and long term vocational training courses in agriculture and allied vocations for the farmers and rural youths
4. Organise frontline demonstration on various crops to generate production data and feedback information.

Each KVK has an operational area of a district and is expected to cover the area phase by phase. However, even this phased coverage would be a herculean task considering the larger number of farmers, farm youth, farmwomen and landless labours practicing wide ranging enterprises in varied resource endowment and under diverse and risk prone situations. At the same time, the declining resource allocation, increasing complexity in the agribusiness in rural areas and the urgent need to equip the target clients to face the emerging situations under WTO is putting huge pressure on these KVKs in particular and rural development organisations in general.

As learning and the process of capacity building are continuous processes, farmers training for their capacity building cannot be a one-time affair. Capacity building as a means to achieve the super ordinate goal of agriculture and rural development is a mammoth exercise because each family has to be reached through more than one kind of programmes and through several contacts with different kinds of supports like knowledge, critical inputs, financial, marketing, administrative, and organisational. It would be impossible for any single organisation to provide all the support and services required by the heterogeneous farm families.

In addition to KVKs, several organisations are currently working in every district, in varying strengths, serving the cause of agriculture and rural development. Rasheed and Sadamate (2000) have identified 13 major types of organisations and a host of other small organisations providing extension service in rural India. Many of these organisations co-exist in a single territory, engage themselves in the activities not so different from each other, and yet without systematic collaboration. While, working with a wide variety of organisations increases

the chances of reaching a wide spectrum of people (Crisovao et.al., 1997), collaboration could avoid duplication of efforts, increase the extension efficiency and the scarce resources are put to efficient use.

Thus arises the need for collaboration among the extension agencies, which is referred here as Extension-Extension collaboration. Collaboration is defined in terms of a person/s or organisation working with another person/s or organisation/s for the attainment of a common goal. The common goals, which are important to all the organisations and which cannot be achieved by any single organisation are super ordinate goals (Pareek, 1981). Accelerating agriculture production and income generation through farmers' empowerment as a means to achieve agriculture and rural development could be a super ordinate goal for all the organisations working for the purpose.

Meaningful, purposeful and functional collaboration could be a panacea for most of these problems. However, it is easy said than done. People are found comfortable working individually than in association because of several difficulties. It has also been found that collaboration exists for some kind of activities with some kind of organisations, thereby disallowing any kind of generalizations. Hence this study has been undertaken with the following objectives.

Objectives of the Study

1. To understand the status of collaboration in the KVK activities
2. To analyse the preferences of KVKs for collaboration
3. To analyse the collaborators' perception of KVKs
4. To understand the dynamics of collaboration through matrix analysis of KVKs' preferences – existing collaboration and collaborators' perception

Methodology

The study was conducted on the KVKs of Zone VIII and their collaborators in the four states namely Karnataka, Kerala, Goa and Tamilnadu and U.T. of Pondicherry. A pretested questionnaire, having two parts (Part I was to be filled up by the Training Organisers of each KVK and Part II

was meant for collecting responses from agencies/organisations that are collaborating with KVKs) was used to collect the responses. The responses for Part I were received from 24 KVKs. Eight KVKs from Karnataka, five from Kerala, ten from Tamilnadu and one from Pondicherry constituted the 24 KVKs that responded for the study. Out of these 24 KVKs, 11 belonged to Non-Government Organisations and the remaining 13 belonged to Government Organisations like SAU, ICAR and State Department of Agriculture (SDA). For Part II, 220 officers/ representatives collaborating with 22 KVKs responded. The 220 officials represented 17 types of organisations. Forty-four of them belonged to department of agriculture, 26 represented local administration, 22 from NGOs and another 20 from department of animal husbandry. These four organisations constituted 50 percent of the respondents. The other major organisations were SAUs/ICAR Research Institutes (18), Input agencies (15), Cooperatives (14), Financial organisations (11), and publicity media (9).

The information was collected during February - September 2001 and the information was pertaining to the activities conducted in collaboration during 1998-2000.

Operationalising & Measuring the Collaboration Effectiveness Index

Collaboration effectiveness has been measured by using the data on number of organisations with whom the KVKs are collaborating (x), number of programmes the KVKs conducted during 1998-2000 (y) and the participation in such programmes (z). Collaboration Effectiveness Index has been operationalised as the function of the three dimensions (x, y and z) of collaboration for each KVK. To combine these three dimensions, the actual scores for each KVK were converted into unit scores by using the range and variation within each dimension.

Unit score (U_{x_i}) = (' x_i ' - minimum ' x ') / (maximum ' x ' - minimum ' x ')
Where, x_i = no. of organisations being collaborated with i^{th} KVK

The unit score (U_{x_i}) for dimension ' x ' of i^{th} KVK was calculated by dividing

the variation ('x_i' - minimum 'x') by the range (maximum 'x' - minimum 'x') within the dimension. Similarly, the unit scores for 'y' and 'z' dimensions were calculated. In the present study, minimum values were 7, 13 and 12 for the three dimensions 'x', 'y' and 'z' respectively. The range values for the three dimensions were 32 (39-7) for 'x', 122 (135-13) for 'y' and 88 (100-12) for 'z'. Averages of the three unit scores was multiplied by 100 to get collaboration effectiveness index for each KVK.

Collaboration Effectiveness Index (CEI) = $\{(Ux_i + Uy_i + Uz_i) / 3\} \times 100$
The collaboration effectiveness index values were calculated for 22 KVKs as two KVKs did not furnish full details and the values ranged from 17.3 to 82.3.

Operationalising & Measuring the Perception Index

Collaborators' perception of KVKs was measured with the help of six statements, out of which, three were positive statements and the other three were negative statements. The responses were collected on a three-point continuum namely, 'agree', 'neutral' and 'disagree' and were given a score of 2,1, and 0 respectively for positive statements and 0,1, and 2 for negative statements. Thus, the maximum possible score for each statement was 440 (2 x 220). When considered for the two category of KVKs, as there were 115 respondents for Govt. KVKs and 105 respondents for NGO KVKs, the respective maximum possible score was 230 and 210 respectively.

The perception index for each group of organisation were worked out by dividing the total score of the six statement for all the respondents from each organisation by the maximum possible score (n x 2 x 6), where n = no. of respondents from each organisation.

$$\text{Perception Index} = \frac{\text{Total Score for each Statement}}{\text{Maximum Possible Score}} \times 100$$

Other statistical tools like frequency, percentage and ranking were used as found appropriate to interpret and draw inferences from the data.

Results and Discussion

Relative Status of the KVKs in the existing Collaboration

As Table 1 suggests, the existing collaboration was not all that satisfactory, as the average collaboration index was only 43.4. Out of 22 KVKs, 12 KVKs were below average and the least collaboration index was as low as 17.3. KVK Erode stood first with a collaboration index of 82.3 due to its greater number of programmes as well as better participation in each programme.

There are a few KVKs with extensive contact with collaborating organisations like KVK Trivandrum, Hassan and Calicut with 39, 37 and 34 organisations as collaborators respectively in their districts. But it is not adequate if they do not conduct more number of programmes by using this collaboration. On the other hand, KVK Gadag conducted good number of programmes (126) but with lesser number of collaborators (29). Some of the KVKs like KVK Chickmagalur and KVK Bidar do not have wide contact (only 19 & 20 collaborating organisations respectively) and also did not conduct many programmes (only 25 & 40 programmes respectively), but attracted better participation in each programme (83 and 82 participants per programme respectively).

It can be seen from the table that there is wide scope to improve collaboration in all the three dimensions. Half of the KVKs have used less than 20 organisations for collaboration purposes, 8 KVKs have collaboration with 20-30 organisations and only 3 KVKs have collaboration with more than 30 organisations. The scenario is slightly better with regard to number of programmes as majority KVKs (13) have conducted more than 70 programmes in collaboration during 1998-2000. But, as many as 5 KVKs conducted less than 30 programmes (below average), in collaborative mode during the same period.

The situation is also not encouraging in terms of participation in those programmes. The average participation in each programme was 45 and only nine KVKs had better participation whereas the remaining 13 KVKs had poor participation (less than 45 participants per programme). Though it is

essential that skill building activities like training and method demonstrations have to be conducted with smaller groups, the extension activities have to be conducted with widest possible coverage and reach, by involving not only number of farmers but also representatives of all the organisations of that area.

Table 1. Relative Status of Collaboration in the Activities of the KVKs of the Zone

Sl. No	KVK	Collaborated Organisations		Programmes Conducted in Collaboration		Participants per Programme		Collaboration Effectiveness Index
		No.	Unit Score	No.	Unit Score	No.	Unit Score	
1.	Erode	22	0.47	135	1.00	100	1.00	82.3
2.	Trivandrum	39	1.00	125	0.92	54	0.47	79.6
3.	Hassan	37	0.94	102	0.73	62	0.57	74.7
4.	Gadag	29	0.69	126	0.93	35	0.26	62.7
5.	Kasaragod	25	0.56	87	0.61	59	0.51	56.0
6.	Calicut	34	0.84	73	0.49	36	0.27	53.3
7.	Mysore	26	0.59	89	0.62	40	0.32	51.0
8.	Raichur	24	0.53	80	0.55	51	0.44	50.3
9.	Bidar	20	0.41	40	0.22	82	0.80	47.6
10.	Nilgiris	17	0.31	81	0.56	57	0.51	46.0
11.	Coimbatore	19	0.38	61	0.39	58	0.51	42.7
12.	Chickmagalur	19	0.38	25	0.09	83	0.81	42.6
13.	Dindigul	18	0.34	71	0.48	36	0.27	37.3
14.	Kollam	23	0.50	72	0.48	23	0.13	37.0
15.	Cuddalore	16	0.28	73	0.49	33	0.24	33.7
16.	Salem	18	0.34	68	0.45	20	0.09	29.3
17.	Belgaum	21	0.44	28	0.12	35	0.26	27.3
18.	Pondicherry	14	0.22	57	0.36	25	0.15	24.3
19.	Sivagangai	7	0.00	89	0.62	12	0.00	20.7
20.	Coorg	16	0.28	29	0.13	27	0.17	19.3
21.	Tiruvannamalai	14	0.22	23	0.08	37	0.28	19.3
22.	Idukki	14	0.22	13	0.00	36	0.27	17.3
	Average	21		70		45		43.4

Organisational Preference of KVKs for Collaboration

The organisations have been ranked by the KVKs for their preference to collaborate (Table 2). The preferences of KVKs belonging to Government and Non-government organisations have been given separately apart from the combined ranking. Overall, developmental departments and agricultural universities/research stations are the most preferred organisations followed by voluntary organisations and input agencies. Crop specific commodity boards (eg. Coffee Board), is the least preferred organisation followed by welfare departments and publicity media. The top two rankings for most preferred organisations did not change when the preferences were considered separately for Government and Non-Government KVKs. However the third preference of NGO KVKs was for local/district administration (village panchayat, Zilla panchayat), followed by other voluntary organisations and welfare departments. Contrarily input agencies and financial institutions were more preferred by Government KVKs than NGO KVKs.

Table 2 . Organisations Preferred by the KVKs for Collaboration

Groups of organisations	Average Ranks Assigned by KVKs		
	SAU / ICAR KVKs (n=13)	NGO KVKs (n=11)	All KVKs Together (N= 24)
Development Departments	1	1	1
SAUs / ICAR Research Institutes	2	2	2
Non Government Organisations	5	4	3
Input Agencies	3	7	4
Financial Institutions	4	6	5
Local / District Administration	7	3	6
Publicity Media	6	8	7
Welfare Departments	9	5	8
Commodity Boards	8	9	9

Existing Strength of Collaboration

Data available in Table 3 depicts the strength of existing collaboration in major KVK activities, like Training, Extension activities and Frontline Demonstrations. Development departments were the main collaborating organisations for many KVKs in all kinds of activities. In conducting training programmes, the agricultural universities / research stations and voluntary organisations (NGOs) played key supporters. For conducting extension activities, apart from development departments, village panchayat and zilla panchayat (the major institutes of local/district administration) and other NGOs in the area provided major support. Similarly, agricultural universities/research stations and input agencies provided significant contribution towards conducting Front Line Demonstrations by KVKs.

As a result, the developmental departments occupied the top position based on the strength of collaboration. The agricultural universities/ research stations occupied the second position, input agencies were in 3rd position and the fourth position was occupied by non-government organisations.

Table 3. Existing Strength of Collaboration in KVK Activities

Groupsof organisations	No. of KVKs Reporting Collaboration			Ranking based on existing collaboration
	Training	Extension	Front Line Demonstra- -tions	
Development Departments	18	14	19	I
SAUs / ICAR Research Institutes	10	5	14	II
Input Agencies	7	8	12	III
Non Government Organisations	10	9	7	IV
Local / District Administration	9	9	6	V
Commodity Boards	8	4	4	VI
Welfare Departments	7	3	3	VII
Publicity Media	5	4	3	VIII
Financial Institutions	5	2	2	IX

Responses from Collaborating Agencies

Collaborators' Perception of KVKs

These officials perceived KVKs on six aspects namely the uniqueness of KVK activities, technical qualification of KVK staff, KVK as a source of latest technologies, acceptance of KVK technologies by the clients, popularity of KVK among the public and need for collaboration (Table 4).

Out of the maximum possible score of 440 (2 x 220 respondents) for each statement, statement no.2 got the highest score of 398, thereby indicating a very high perception of the KVKs for their technically qualified staff.

The staff qualification at the time of analysis of the data (October 2001) perfectly support this perception as about 95.2 percent of the staff were technically qualified with 14.2% doctorates, 53.5% postgraduates, 21.9% graduates and 5.6% diploma holders. Cadre-wise analysis reveals that, all the Training Organisers and most of the Training Associates (83.2%) were Postgraduates. Even in Training Assistant cadre, 25 percent of them were postgraduates and about 50 percent of them were graduates. All these figures stand testimony to the perception of the collaborating agencies that KVKs have technically qualified staff.

Table 4. Perception of the KVKs by the Collaborating Agencies

Sl. No.	Statement Agree	No. of Responses			Total
		Neutral	Disagree	Score	
1.	KVK activities are <u>no way different</u> from the activities of the developmental departments	69	56	95	246
2.	KVK has technically qualified staff who are capable of solving many a field problems	184	30	6	398
3.	KVK is a source of latest developments in the field of agriculture and allied fields	174	39	7	387
4.	KVK services /products /technologies are very well received by the farmers.	152	61	7	365
5.	Existence of the KVK is <u>not known</u> to many people for whom the KVK is meant	37	73	110	293
6.	KVK <u>need not</u> have linkage with other agencies/organisations/individuals for achieving their mandate and to serve their clients effectively	11	22	187	396

The respondents also strongly perceived that (Perception score of 396) collaboration is must for KVKs to achieve their mandate and to serve their clients effectively. KVKs were also perceived favourably as sources of latest developments in the field of agriculture (score of 387).

The KVKs were perceived poorly on two aspects, namely unique nature of KVK activities (statement no.1 with a total score of 246) and the popularity of the KVK among the farming community (statement no.5 with a total score of 293). The collaborating agencies perceived that KVK activities were not different from that of their own activities. This shows that KVKs are expected to be innovative, creative, trend setters and to be models for others. KVKs were also perceived low for the awareness they have created among the client system about their activities and existence. Half of the respondents could not deny the fact that the existence of the KVKs is not known to many people for whom the KVK is meant. KVKs definitely need wide publicity of their own existence. The KVKs normally provide publicity of the programmes being organised but not on the services / technologies and the products available with them. Apprehension on the inability to meet the extra demand may be coming in the way large-scale publicity of the KVK services.

Differences in Perception of Government and NGO KVKs

The responses were categorized for two types of KVKs, namely, Government hosted KVKs and NGO KVKs (Table 5). There were 115 respondents for Government KVKs and 105 respondents for NGO KVKs. It is very clear that the Government KVKs were perceived better for their technically qualified staff (Perception Index of 92.5 as against 88.0 for NGO KVKs), as sources of latest technologies (89.0 for Govt. KVKs and 86.5 for NGO KVKs), and also for their different nature of activities (58.0 for Govt. KVKs and 53.5 for NGO KVKs).

On the other hand, NGO KVKs were perceived better for their services (perception index of 87.0 as against 79.0 for Govt. KVKs). These KVKs were also perceived as having created better awareness in the client system. The Government KVKs have to improve their services so that their products and technologies are better accepted/received by the client system. The

collaborating agencies also perceived that NGO KVKs need to have more collaboration than the Government KVKs (index value of 91.5 as against 88.0 for Govt KVKs) The results also strongly point to the need for Govt KVKs to strive hard for creating awareness among the client system (index value of 60.5 as against 73.5 of NGO KVKs).

Table 5. Differences in the Collaborators' Perception of Govt and NGO KVKs

Sl. No.	Statement	Average Perception Index		
		Govt KVKs	NGO KVKs	All KVKs
1.	KVK activities are <u>no way different</u> from the activities of the developmental departments	58.0	53.5	56.0
2.	KVK has technically qualified staff who are capable of solving many a field problems	92.5	88.0	90.5
3.	KVK is a source of latest developments in the field of agriculture and allied fields	89.0	86.5	88.0
4.	KVK services /products /technologies are very well received by the farmers.	79.0	87.0	83.0
5.	Existence of the KVK is <u>not known</u> to many people for whom the KVK is meant	60.5	73.5	66.6
6.	KVK <u>need not</u> have linkage with other agencies /organisations/individuals for achieving their mandate and to serve their clients effectively	88.0	91.5	90.0

Differences in the Perception of KVKs among different Collaborators

As the data in Table 6 suggests, there was wide difference in the collaborators' perception of KVKs. Commodity Boards perceived KVKs very favourably as indicated by the perception index of 95.2. The local administration (village and zilla panchayat) also exhibited favourable perception of KVKs with a perception index of 85.2. Among the collaborators who perceived KVKs poorly, input agencies and voluntary organisations occupied the last positions with perception index of 72.4 and 74.7 respectively.

Table 6. Ranking of Collaborators based on their Perception of KVKs

Groups of organisations	Perception Index	Ranking based on Perception Index
Commodity Boards	95.2	1
Local / District Administration	85.2	2
SAUs / ICAR Research Institutes	83.8	3
Development Departments	79.0	4
Financial Institutions	78.5	5
Publicity Media	75.0	6
Non Government Organisations	74.7	7
Input Agencies	72.4	8
Welfare Departments	N.A	N.A

Matrix Analysis of KVKs’ Preferences, Existing Status of Collaboration and the Collaborators’ Perception of KVKs

Comparison of KVKs’ preferences, the existing collaboration and the collaborators’ perception of KVKs (Table 7) provide a clear view of the similarities and contrasts.

KVKs’ Preferences vs. Existing collaboration. The comparison of preferences and the existing collaboration reveals that the developmental departments and agricultural universities/ research stations have matched the KVKs’ preferences by collaborating to a great extent. However, the big contrast is evident in case of financial institutions, which have been placed at 5th position for preferences but stood at 9th position when it came to actual collaboration. Similarly, the publicity media also have been collaborated with KVKs less than the preferred extent. Crop/commodity boards have actually performed better in reality even through they are placed last in the preference. Considering the fact that these boards are area and crop specific, it is obvious that some KVKs may not prefer them, but wherever they are existing, KVKs are very well served by these boards as indicated by their sixth ranking in the existing collaboration.

KVKs' Preferences vs. Collaborators' perception. Comparison of the KVKs preferences and the Collaborators' perception of KVKs show lot of mismatch. Development departments, which are the most preferred organisations for collaboration by the KVKs, perceived KVKs rather low as indicated by their 4th position with a perception index of 79.0. Similarly, the non-government organisations and input agencies, which have higher preference by KVKs, do not reciprocate the same as they have very low perception of the KVKs.

Existing collaboration vs. Collaborators' perception of KVKs. Input agencies and non government organisations (voluntary agencies) have better collaboration, but have very poor perception of the KVKs. It indicates as if the existing collaboration may be out of the compulsions of the respective organisations and not due to the strengths and potential of the collaborating organisations. It is important that the KVKs work towards enhancing their image and the way they are being perceived by these organisations by projecting their strengths and potentials in an appropriate manner. On the other hand, local administration (village and Zilla panchayat) and commodity boards had lesser collaboration but have better perception of KVKs. It is necessary that the collaboration with these organisations may be enhanced further to harness their very good perception of KVKs

Table 7. Preference - Status - Perception Matrix in the Extension – Extension Collaboration of KVK Activities

Organisations	Ranking based on		
	Preferences of KVKs	Existing Collaborators'	Collaboration Perception of KVKs
Development Departments	1	1	4
SAUs / ICAR Research Institutes	2	2	3
Input Agencies	4	3	8
Non Government Organisations	3	4	7
Local / District Administration	6	5	2
Commodity Boards	9	6	1
Welfare Departments	8	7	N.A
Publicity Media	7	8	6
Financial Institutions	5	9	5

The results point out the underlying dynamics that exists in the process of collaboration. While KVKs have preference for some organisations, the same has not been reflected in the actual collaboration (as in case of financial institutions). In some cases (input agencies), the preferences of the KVKs and the perception held by the collaborators run in opposite direction. Open communication between KVKs and the collaborating agencies will reduce such a difference and help in enhancing the collaboration effectiveness.

Summary

Krishi Vigyan Kendras operate with the motto not only to make the good people better but also the poor ones good, by empowering the illiterates and school drop-outs to be gainfully employed or to increase income from their present occupations through technical literacy. The KVKs also have the mandate to constantly refresh the extension functionaries on the technological advancements in agriculture and allied activities. Thus KVKs have the difficult responsibility of reaching diverse category of clients (illiterates to technocrats, already employed to those who are going-to-be employed), under the entire gamut of agriculture and rural development through wide ranging activities like training, extension, demonstration, on farm testing, farm development etc.

Harnessing the underlying huge potential of KVKs as an effective step towards acceleration of agriculture and rural development in each district could be hastened through systematic and meaningful integration of the strengths of each of the organisation serving the cause of rural communities. Hence, this study was undertaken to analyse the status of existing collaboration, and the underlying dynamics.

1. Overall, there is huge potential for collaboration as reflected by moderate status of existing collaboration, a function of number of collaborated organisations, number of collaborated programmes and the participation in such programmes.
2. The Development Departments and the Agricultural Universities / Research Institutes were the most preferred organisations for

collaboration purposes. The existing collaboration match with the preferences, as the development departments and the agricultural universities were the most collaborated organisations in the KVK activities. However, the existing collaboration was less than the desired level in case of financial institutions and publicity media. Contrarily, the collaboration with input agencies, local administration and commodity boards was better than the expectations of the KVKs.

3. Majority of the collaborating officials perceived KVKs as having technically competent staff and as sources of latest technologies. There was unanimity among the collaborators that collaboration is a must for KVKs to achieve their mandate. Collaborators also perceived that KVKs activities are no way different from that of theirs own, and the KVKs are not well known among the people for whom the KVKs have been established. Government hosted KVKs were perceived better for their technically qualified staff and as the sources of latest technologies. On the other hand, NGO KVKs were perceived better for their services, and for the awareness created among the clients.
4. There are differences in the way the KVKs have been perceived by different organisations with whom the KVKs are collaborating. Development departments are the most preferred organisations by KVKs and also have better collaboration. But, they do not perceive KVKs as favourably as commodity boards and that of local administration. Input agencies and voluntary organisations also have less favourable perception of KVKs but have better collaboration. Mutual appreciation of strengths is a must for long-lasting and sustainable collaboration. Each organisation involved in the agriculture and rural development must aim towards achieving this mandate to reach the rural communities with the unfailing commitment.

Implications

1. There is wide difference among the KVKs in the number of organisations being collaborated, number of programmes being conducted and the participation in such programmes. Some KVKs have collaboration with

large number of organisations, but the same is not effectively used to organise more programmes and to reach large number of farmers. Some KVKs conduct many programmes with repeated involvement of same organisations. Few other KVKs used the limited collaboration for a few programmes to achieve maximum participation. All these aspects reveal the wide scope for collaboration. Diversifying the nature of activities, extending the collaboration network and meaningful utilisation of collaboration to reach larger client groups are to be attempted earnestly by KVKs as well as the other organisations involved in agriculture and rural development.

2. KVKs preferences for organisations, the actual collaboration and the way the collaborating agencies have perceived KVKs match only partially. The differences and the causes for these gaps have to be sorted out to improve the collaboration effectiveness. Communicating each other's strengths for the common cause of capacity building of rural communities should be the top most priority of every organisation.
3. Currently, collaboration is largely restricted to a few activities with limited purpose and through fewer organisations. Major collaboration is in the form of receiving trainees or mobilizing participation, exchanging resource persons and to share expenditure. Collaboration has not been effectively used to provide backward and forward linkages, to analyse the needs and the impact of the programmes, to conduct systematic follow-up activities and to get feedback on the KVK programme activities.
4. There is an immediate need for the policy makers to ensure proper directions to all the agencies and organisations involved in agriculture and rural development to improve collaboration with KVKs as a means to achieve each other's goals.

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