



CONVERGENCE OF EXTENSION SERVICES AND CLIENTS INVOLVEMENT NEEDED AS PERCEIVED BY EXTENSION PERSONNEL IN PUBLIC EXTENSION ORGANIZATIONS

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ABSTRACT

The study was conducted to know the convergence of extension services and clients involvement needed as perceived by extension personnel in public extension organizations in purposively selected districts namely Raichur, Gulbarga, Bidar, Yadgir, Koppal and Bellary of Karnataka state during 2013-14. Expost-facto research design was used in the present investigation. The extension personnel working in Krishi Vigyan Kendras (KVKS) coming under the jurisdiction of UAS Raichur and extension personnel working in Raita Samparka Kendras (RSKs) were selected purposively. From each organization 38 extension personnel were selected. The data was collected from the extension personnel by personally distributing interview schedule. The results of the study revealed that, providing extension services and Panchayat level were the important areas of convergence needed as expressed by the extension personnel of both extension organizations. With regard to activity wise implementation, selection of beneficiaries was the important area of convergence required as perceived by the extension personnel of Krishi Vigyan Kendras. Sharing benefits was the important area of convergence required as perceived by the extension personnel of Raita Samparka Kendras. Both public and private extension organizations had strong linkages with agricultural universities, agricultural research organizations, input supply agencies and district or local government agencies.

KEY WORDS: Convergence, Client involvement, Expost-facto, Extension personnel, Krishi Vigyan Kendras and Raita Samparka Kendras.

INTRODUCTION

Agricultural extension is a function of providing situational and need based knowledge and skills to rural people who are involved in traditional agriculture in non-formal situation. Agricultural extension is an educational process which aims at bringing desired positive changes in the behavior of the farming community. Agricultural extension involves offering advisory services, helping farmers to identify their problems and opportunities and sharing information with them. The role of extension is very important for sustainable development of agriculture which is moving from mere production oriented towards an export and commercial oriented one. A variety of organizations are involved in providing agricultural extension services to farming community in India. Over the years, the number of organizations providing agricultural extension services is rising and these organizations vary greatly in their activities and approaches depending on their goal, finance and manpower. The agricultural extension service providers in India include state and central government agencies, agribusiness companies, agripreneurs, input dealers, manufacturing firms, NGOs, farmers organizations, progressive farmers and print and electronic media. Extension continues to be funded as part of central and state level schemes/programmes without much operational

freedom at the local level, though the strategic research and extension plans (SREP). Most of the organizations including the public sector departments continue to work in isolation. While the farmers require a wider range of support to address the emerging challenges, extension mainly functions as an agency for technology dissemination. There is duplication of efforts with multiplicity of agents attending extension work without convergence (Venkatasubramanian *et al.*, 2009).

In general, convergence is a coming together of two or more distinct entities or phenomena. It can also be defined as the process that brings in shared values, shared responsibilities, in supplementary and complementary manner to achieve a common objective so as to obtain mutual benefits to the converging partners around targeted programme/beneficiaries.

Bringing all the stakeholders involved in providing agricultural extension services under one roof through convergence and active involvement of clients in extension programme planning and implementation is the need of the hour for efficient and effective extension services. Keeping above fact in mind, the present study was undertaken with an objective to know the perception of extension personnel towards convergence and area of client involvement in extension programme planning and implementation.

METHODOLOGY

The present study was conducted in Raichur, Gulbarga, Bidar, Yadgir, Koppal and Bellary districts of Karnataka state during 2013-14. Expost-facto research design was used in the present investigation. The extension personnel working in *Krishi Vigyan Kendras* (KVKs) coming under the jurisdiction of UAS Raichur and extension personnel working in *Raita Samparka Kendras* (RSKs) were selected purposively. From each organization 38 extension personnel were selected. The sample size was restricted to 38 because of availability of extension personnel in KVKs at the time of investigation was 38. Extension personnel from RSKs were selected from six districts using proportionate random sampling. Thus the sample for the study constituted 76 extension personnel. The data was collected from the extension personnel by personally distributing interview schedule. The collected data was analyzed using appropriate statistical tools and techniques.

RESULTS & DISCUSSION

Management authority in public extension system as perceived by extension personnel

It was clear from the results presented in table 1 that, state level (I rank) was the primary management authority of the *Krishi Vigyan Kendras* as perceived by the extension personnel followed by district level (II rank) and national level (III rank). Primary management authority relates to

their operational area mandate of the organization. That is, if the mandate was for the regional level, then the primary management authority would be at that level, policies and important decisions for most organizations are made at their head office, implying that most of the organizations are operating in a top-down mode. The *Krishi Vigyan Kendras* are operating at district level under the control of state agricultural universities and the ICAR at national level is the primary authority for administrative and personnel matters.

But, extension personnel of *Raita Samparka Kendras* perceived that the primary management authority of the organization was at district level (I rank) followed by state level (II rank) and block level (III rank). The *Raita Samparka Kendras* working under Karnataka state department of agriculture in which agriculture ministry at state level is the management authority and joint director of agriculture at district level is the management authority for taking decisions. The *Raita Samparka Kendras* are located at hobli level catering services to meet the needs of the farming community at villages. The decisions regarding preparation and execution of programmes and schemes are taken at state level and decisions regarding implementation and activities to be conducted are taken at district level. These may be probable reasons for the above findings.

TABLE 1: Management authority in public extension system as perceived by the extension personnel n=76

Sl. no.	Particulars	UAS- KVK (n ₁ =38)			KSDA- RSK (n ₂ = 38)		
		Mean score	Index	Rank	Mean score	Index	Rank
1	National level	1.10	55.26	III	0.64	32.05	IV
2	State level	1.39	69.74	I	1.67	83.33	II
3	District level	1.26	63.16	II	1.69	84.62	I
4	Block level	0.76	38.16	IV	1.21	60.26	III

TABLE 2: Subject matter covered by the public extension organizations n=76

Sl. no.	Area	UAS- KVK (n ₁ =38)			KSDA- RSK (n ₂ = 38)		
		Mean score	Index	Rank	Mean score	Index	Rank
1	Major cereal crops	1.47	73.68	II	1.58	78.95	II
2	Major pulse crops and oil seeds	1.53	76.32	I	1.87	93.42	I
3	Horticultural crops	1.21	60.53	III	0.21	10.53	IX
4	Livestock and fisheries	0.58	28.95	X	0.08	3.95	X
5	Agricultural marketing and farm management	0.71	35.53	IX	0.42	21.05	VI
6	Natural resource management (soil, water and forestry)	1.00	50.00	VII	0.97	48.68	III
7	Organic agriculture	1.18	59.21	IV	0.92	46.05	IV
8	Processing and value addition	1.08	53.95	V	0.45	22.37	V
9	Environment and climate change	0.89	44.74	VIII	0.26	13.16	VII
10	Rural development and organizing self help groups	1.05	52.63	VI	0.24	11.84	VIII
Mann - Whitney u test		KVK vs. RSK 0.000**					

**Significant at 1 per cent level

*Significant at 5 per cent level

Masangano and Mthinda (2012) reported that, 58.60 per cent of the extension personnel working the organizations expressed that the head office had primary responsibility for program planning and extension priority setting, while

27.6 percent mentioned branch offices. It can be concluded that for almost all the organizations, primary management authority relates to their operational area mandate. That is, if the mandate is for the regional level,

then the primary management authority is at that level, which is their head office.

Subject matter covered by the public extension organizations

It was evident from table 2 that, major pulse crops and oil seeds (I rank) was the major subject matter area covered by the extension personnel of *Krishi Vigyan Kendras* followed by major cereal crops (II rank), horticultural crops (III rank), organic agriculture (IV rank) and processing and value addition (V rank). In case of *Raita Samparka Kendras*, major pulse crops and oil seeds (I rank) was the major subject matter area covered followed by major cereal crops (II rank), natural resource management (III rank) and organic agriculture (IV rank).

Mann – Whitney U test also exhibited significant difference in the subject matter area covered by the extension personnel of *Krishi Vigyan Kendras* and *Raita Samparka Kendras*.

Cereals and pulses were the major crops cultivated by farmers and they form the staple food crops of majority of the population. Generally, farmers need information on cultivation practices of major cereals and pulses from the extension agencies. These might be probable reasons for the above findings. It was revealed while data collection that, paddy, redgram and sorghum were the important

cereals and pulses cultivated by the farmers in the study area.

Extension methods used by the extension personnel in public extension organizations

It could be observed from the results presented in table 3 that, regular field visits to individual village-level farmers (I rank) was the common extension method used by the extension personnel of *Krishi Vigyan Kendras* followed by conducting demonstrations, workshops and field days for farmers (II rank), conducting on farm and off farm training programmes for farmers (II rank) and meeting with farmers at the field extension office (III rank). Regular field visits to individual village-level farmers (I rank) was the common extension method used by the extension personnel of *Raita Samparka Kendras* followed by conducting demonstrations, workshops and field days for farmers (II rank), meeting with farmers at the field extension office (III rank), conducting on farm and off farm training programmes for farmers (IV rank) and regular field visits to producer groups (V rank).

Mann – Whitney U test analysis showed significant difference in extension methods used by the extension personnel of *Krishi Vigyan Kendras* and *Raita Samparka Kendras*.

TABLE 3: Extension methods used by the extension personnel in public extension organizations

n=76

Sl. no.	Method	UAS– KVK (n ₁ =38)			KSDA– RSK (n ₂ = 38)		
		Mean score	Index	Rank	Mean score	Index	Rank
1	Regular field visits to individual village level farmers	1.95	97.37	I	1.84	92.11	I
2	Regular field visits to producer groups	1.26	63.16	V	0.63	31.58	V
3	Conducting demonstrations, workshops and field days for farmers	1.76	88.16	II	1.50	75.00	II
4	Meeting with farmers at the field extension office	1.58	78.95	IV	1.42	71.05	III
5	Conducting on farm and off farm training programmes for farmers	1.76	88.16	II	1.32	65.79	IV
	Mann – Whitney U test	KVK vs. RSK 0.000**					

**Significant at 1 per cent level

*Significant at 5 per cent level

Regular field visits to individual village-level farmers, conducting demonstrations, workshops and field days for farmers and conducting on farm and off farm training programmes for farmers are the common extension methods used in general by the extension personnel of both public and private extension organizations. Farmers lack time to visit the extension organization for getting information as they will be preoccupied in day to day agriculture related activities. Besides, conducting demonstrations and training programmes will help the farmers to acquire first hand information on latest agricultural technologies. These might be the probable reasons for the above findings.

Masangano and Mthinda (2012) also reported that, commonly used extension methods by the extension organizations in Malawi are field visits to individual farmers, meetings, workshops, and field visits to farmer groups.

Strength of institutional linkages of public extension organizations with other institutions as perceived by the extension personnel

It could be seen from table 4 that, the extension personnel of *Krishi Vigyan Kendras* perceive that strength of linkage is strong with agricultural universities (I rank) followed by agricultural research organizations / stations (II rank), NGOs involved in extension activities (III rank), district or local government agencies (IV rank), private sector input supply firms (V rank), cooperative /consumer organizations (VI rank), other extension/advisory service providers (VII rank), banks and credit institutions (VIII rank) and private sector markets or exporters (IX rank).

Whereas, the extension personnel of *Raita Samparka Kendras* perceive that the strength of linkage is strong with agricultural universities (I rank) followed by private sector input supply firms (II rank), district or local government agencies (III rank), banks and credit institutions (IV rank), NGOs involved in extension activities (V rank), cooperative /Consumer organizations

(VI rank), agricultural Research Organizations / stations (VII rank), other extension/advisory service providers (VIII rank) and private sector markets or exporters (IX rank)

Mann – Whitney U test analysis exhibited significant difference in strength of institutional linkages of public extension organizations with other institutions as perceived by the extension personnel between *Krishi Vigyan Kendras* and *Raita Samparka Kendras*.

TABLE 4: Strength of institutional linkages of public extension organizations with other institutions as perceived by the extension personnel

n=76

Sl. no.	Institutions	UAS– KVK (n ₁ =38)			KSDA– RSK (n ₂ = 38)		
		Mean score	Index	Rank	Mean score	Index	Rank
1	Agricultural Research Organizations / stations	4.32	86.32	II	3.03	60.51	VII
2	Agricultural Universities	4.50	90.00	I	4.56	91.28	I
3	Private sector input supply firms	3.55	71.05	V	4.46	89.23	II
4	Private sector markets or exporters	2.95	58.95	IX	2.54	50.77	IX
5	NGOs involved in extension activities	3.82	76.32	III	3.21	64.10	V
6	District or local government agencies	3.79	75.79	IV	3.97	79.49	III
7	Cooperative /Consumer organizations	3.39	67.89	VI	3.15	63.08	VI
8	Banks and credit institutions	3.11	62.11	VIII	3.26	65.13	IV
9	Other extension/advisory service providers	3.32	66.32	VII	2.72	54.36	VIII
Mann - Whitney U test		KVK vs. RSK 0.035*					

**Significant at 1 per cent level

*Significant at 5 per cent level

It is clear from the above results that, both extension organizations had strong linkages with agricultural universities, agricultural research organizations, input supply agencies and district or local government agencies. Agricultural universities and agricultural research organizations are the agencies involved in developing latest agricultural technologies. The extension personnel of both organizations contact the scientists of agricultural universities and agricultural research organizations for clarification of doubts and also for obtaining information on latest agricultural technologies. Strong linkages with the agricultural universities, agricultural research organizations, input supply agencies and other agencies is very much required for serving the interests of farming community. These might be the probable reasons for the above findings.

The results of the study conducted by Rathore *et al.* (2008) revealed that, large proportion of the scientists were having liaison with the State Department of Agriculture and the research institutes functioning in the zone. Jeeva *et al.* (2013) reported that, majority of fishery extension personnel in Kerala and reported that, an equal (35.00 %) percentage of the respondents had strong and moderate linkage with research and clientele groups and 30.00 per cent of them had weak linkage.

Areas of convergence as perceived by the extension personnel in public extension organizations

Area of convergence

It was clear from table 5 that, extension (I rank) was the important area of convergence as perceived by the extension personnel of both extension organizations followed by technology (II rank) and inputs (III rank).

Agricultural extension being a function of providing situation and need based knowledge and skills to rural people involved in agriculture in non-formal manner. Agricultural extension is an educational process which aims at bringing positive changes in the behavior of the

rural population. Various organizations are providing agricultural extension and advisory services to the farming community. Still it is difficult to cover each and every farmer spread across the geographical area. Hence, convergence in extension area can make it possible to reach each and every farmer spread across the country. Venkatasubramanian *et al.* (2009) also reported that, fruitful convergence of various extension systems operation with a common goal not only save precious resources but also ensures effective utilization of various facilities created at the grass root level including the human resources and time required for achieving the target.

Involvement in planning

With regard to involvement in planning area of convergence, panchayat level (I rank) was the important level of convergence area as perceived by the extension personnel of both extension organizations followed by block level (II rank) and district level (III rank).

Panchayat level is the critical level that matters most and to obtain greater mobilization and participation of the beneficiaries, to share common development concerns and to obtain greater impacts on the fields convergence at panchayat level is most important. Panchayat level is the grass root level in the democratic set up. Bringing convergence of all the stake holders at panchayat level make it easier and effective for carrying out extension activities. These might be the probable reasons for the above findings. According to Venkatasubramanian *et al.* (2009), convergence at grass root level saves precious resources and also ensures better utilization of resources created at grass root level including human resources.

Activity wise implementation

With regard to activity wise implementation, selection of beneficiaries (I rank) was the important area of convergence required as perceived by the extension personnel of *Krishi Vigyan Kendras* followed by sharing

benefits (II rank), monitoring and supervision (III rank), sharing of infrastructure (IV rank) and sharing of responsibilities (V rank).

In case of *Raita Samparka Kendras* extension personnel perceived sharing benefits (I rank) was important area of convergence required followed by monitoring and supervision (II rank), sharing of responsibilities (III rank), selection of beneficiaries (IV rank) and sharing of infrastructure (V rank).

Multi-stakeholder involvement would supplement and complement the efforts and obtain community partnership and involvement. All the extension organizations concentrate on the farming community only and government organizations work for non profit reason and private organizations work for profit basis and are commercial in nature. Bringing them under convergence makes it possible for effective implementation and effective advisory services. These may be the probable reasons for the above findings.

TABLE 5: Areas of convergence as perceived by the extension personnel working in the public extension organizations
n=76

Sl. no.	Particulars	UAS– KVK (n ₁ =38)			KSDA– RSK (n ₂ = 38)		
		Mean score	Index	Rank	Mean score	Index	Rank
1	Area of convergence						
	Inputs	3.08	76.97	III	2.84	71.05	III
	Technology	3.45	86.18	II	3.00	75.00	II
	Extension	3.55	88.82	I	3.26	81.58	I
2	Involvement in planning						
	District level	3.16	78.95	II	2.68	67.11	III
	Block level	3.16	78.95	II	2.84	71.05	II
	Panchayat level	3.32	82.89	I	3.58	89.47	I
3	Activity wise implementation						
	Selection of beneficiaries	3.68	92.11	I	3.11	77.63	IV
	Sharing of infrastructure	3.24	80.92	IV	2.95	73.68	V
	Sharing of responsibilities	3.18	79.61	V	3.21	80.26	III
	Monitoring and supervision	3.29	82.24	III	3.26	81.58	II
	Sharing benefits	3.32	82.89	II	3.45	86.18	I

Area of client involvement needed as perceived by the extension personnel of public extension organizations

It could be observed from table 66 that, encouraging farmer-to-farmer extension activities (I rank) was the important area where client involvement is needed as perceived by the extension personnel of *Krishi Vigyan Kendras*. Other important client involvement areas preferred were involvement in programme planning (II

rank), assessing extension programme (III rank), helping to set extension priorities (IV rank) and influencing extension policy (V rank). This might be due to the fact that, farmers believe the information when it is disseminated by the other farmer who has adopted and got benefited by it. Another reason is that, farmer to farmer extension helps in fast and effective dissemination of information among the farming community.

TABLE 6: Area of client involvement needed as perceived by the extension personnel of public extension organizations
n=76

Sl. no.	Particulars	UAS– KVK (n ₁ =38)			KSDA–RSK (n ₂ = 38)		
		Mean score	Index	Rank	Mean score	Index	Rank
1	Involvement in setting extension agenda						
	Influencing extension policy	3.05	76.32	V	2.55	63.82	V
	Helping to set extension priorities	3.26	81.58	IV	2.63	65.79	IV
2	Involvement in programme planning	3.42	85.53	II	3.24	80.92	I
3	Involvement in programme implementation						
	Assessing extension programme	3.29	82.24	III	2.92	73.03	III
	Encouraging farmer-to-farmer extension activities	3.50	87.50	I	3.13	78.29	II
	Mann - Whitney U test	KVK vs. RSK 0.002**					

**Significant at 1 per cent level

*Significant at 5 per cent level

Involvement in programme planning (I rank) was the important client involvement area as perceived by the extension personnel of *Raita Samparka Kendras*. Other important areas of client involvement needed as perceived by them were encouraging farmer-to-farmer extension activities (II rank), assessing extension programme (III rank), helping to set extension priorities (IV rank) and

influencing extension policy (V rank). Client involvement in programme planning makes the programme more client need based and also programme developed by such involvement makes it suitable to the overall farming situation and socio-economic condition of the farmers. These might be the probable reasons for the above results.

Mann – Whitney U test analysis exhibited significant difference in area of client involvement needed as perceived by the extension personnel of *Krishi Vigyan Kendras* and *Raita Samparka Kendras*.

Masangano and Mthinda (2012) also revealed that, encouraging farmer-to-farmer extension activities is the important role played by the farmers groups in Department of Agricultural Extension Services (DAES) extension organization in Malawi and influencing extension policy, specifying extension programs, helping set extension priorities, assessing extension performance and encouraging farmer-to-farmer extension activities are the important roles played by farmers in farmers union of Malawi.

CONCLUSION

It could be concluded from the study that, providing extension services was the important area of convergence needed as expressed by the extension personnel of both extension organizations. Panchayat level was the important level of convergence area as perceived by the extension personnel of both extension organizations. With regard to activity wise implementation, selection of beneficiaries was the important area of convergence required as perceived by the extension personnel of *Krishi Vigyan Kendras*. Sharing benefits was the important area of convergence required as perceived by the extension personnel of *Raita Samparka Kendras*. Both public and private extension organizations had strong linkages with agricultural universities, agricultural research organizations, input supply agencies and district or local government agencies. Hence, convergence at panchayat level by extension service providers through involvement

of all the stakeholders in planning and implementation of programmes is essential and to be considered on priority by policy makers and administrators and others for effective planning and implementation of developmental programmes. There is a need to strengthen linkages of both public and private extension organizations with other institutions like private sector markets or exporters, banks and credit institutions, other extension/advisory service providers and cooperative / consumer organizations for improved public private partnerships.

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