

Raitha samparka kendras and their role in agro-information delivery

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Abstract: The demand driven extension system in India has experienced major conceptual, structural, and institutional changes since the late 1990s to meet the needs of increased production. The earlier Extension Systems including Training and Visit system are gradually replaced by agricultural extension centers at hobli level called Raitha Samparka Kendras (RSKs) as terminal linkage to the farmers to meet the needs of agrarian community for agriculture based technology and information. The study focused on information delivery mechanisms of the RSKs located in Southern Karnataka has revealed that 25 percent of technical and 20 percent of para-technical staffs in many RSKs and fractured information delivery mechanism in these RSKs require adequate training to keep up the pace with development. Farmers are less aware about the structure and functioning of RSKs and are using RSKs mainly as a government retail outlet for subsidized agricultural inputs. The officials at RSKs are found to be over burdened with more administrative work than real extension work and are unable to deliver the required technical information on agriculture and allied aspects. There is a strong need for RSKs to mould and adopt to emerging extension methods such as ICT enabled approaches to cater the needs of farmers and sustaining agriculture development in future.

Key words: Level of awareness, Population, Raitha mitra, Technical people

Introduction

Developing country like India is carrying forward nationwide programmes of modernizing agriculture with a view to achieve food security and to bring about socio-economic changes among farming community since majority of population in the country depends on agriculture for their livelihood. Karnataka's agriculture, as in the rest of the country, has been making impressive strides, since mid 60's. Out of the total population, rurality contributes to about 76 percent and most of them are engaged in agriculture and allied activities. According to the census report of 2001, the contribution of agriculture and allied activities accounts to 49 percent of the state income, and is a reflection of the prominence of agriculture in the state (Anon., 2001).

Considering the importance of the need to provide effective extension services to the farmers, *Raitha Mitra Yojane*, a demand driven Agricultural Extension System was initiated in Karnataka state in 2001, replacing the earlier extension system by establishing agricultural extension centers at *hobli* level called *Raitha Samparka Kendras* (RSKs). So far in Karnataka state, 745 *Raitha Samparka Kendras* (Agricultural Extension centers) are established at *Hobli/Sub-block* level in 176 taluks (Anon., 2000). These RSKs located in proximity to the farming community are aimed at addressing wide range of local issues related to agriculture. They also act as a common platform and creating a terminal linkage to the farmers to access and interact about agriculture based technology and information at the grass root level.

These Kendras are intended to provide technical information on crop selection, crop production, and crop protection related know-how, market and weather information etc., to the farmers. They are also intent to provide primary seed and soil testing facilities locally and facilitate on site provision of critical inputs like seeds, bio-fertilizers, plant protection chemicals etc. Besides these, RSKs provide a forum for on farm demonstration on new technologies developed by both public and private sector and

act as an interface for public and or private sector technologies and inputs.

In this backdrop, the main objective of this study is to understand the existing functioning of RSKs and their role in supporting the agricultural information delivery mechanism in Southern Karnataka. Besides this, the perception of farmers is also ascertained to understand the user perspective about the RSKs.

Materials and methods

The agro-climatic regions coming under the jurisdiction of University of Agricultural Sciences, Bangalore spread over 17 districts in Southern Karnataka were the areas of focus for this study which was undertaken in the year 2010. A total of 61 RSKs (spread over distinct geographical conditions) which are functioning under own infrastructures of the Karnataka State Department of Agriculture were considered for the study, which consists of three types of building structures. The Type 1 building with only ground floor in it is the most widely adopted structure (43 percent). The alternative form, the Type 2 building which is duplex in nature is also used (20 percent), especially in the locations where there is lack of sufficient space to build Type 1 building. The RSKs (38 percent) at *Kasaba hobli* are located attached to the office of respective Assistant Director of Agriculture (ADA).

Each RSK was personally visited and information was collected using a questionnaire on the staff position, information dissemination mechanism adapted, problems associated and so on. The functionaries in the RSKs and 122 farmers (frequently visiting two farmers for each RSK) were selected randomly and interviewed during the study to collect the relevant information. In addition, personal observations were also made regarding the functioning and general conditions and situations in RSKs. Awareness of the farmers about the structure and functioning of RSKs was ascertained by classifying the respondents into the categories of High, Medium and Low level of awareness based on their responses to the specific questions.

Results and discussion

Staff strength in RSKs is a reflection of the capacity of the department to provide adequate service required by the farmers at grass root level. While the technical staff can be of help to address the technical problems in agriculture production, the para-technical staff plays an important role in assisting and implementing the works of the RSKs besides providing technical information on limited subjects. The Technical staff includes Assistant Director of Agriculture (ADA) and Agriculture Officer (AO) who possess technical agriculture graduation. The Assistant Agriculture Officer (AAO) and the Agriculture Assistant (AA) come under para-technical staff, and have undergone stipulated training on agriculture. The staff strength in each RSKs should be one Agriculture officer, two Assistant Agriculture officer and Agriculture Assistant to each gram panchayats coming under its jurisdiction, which varies from place to place. In reality the staff strength in RSKs is not uniform across the sampling area. About 21 per cent of the RSKs did not have any technical staff and 56 percent of them had only one technical staff, while 18 percent had two technical staff, only five percent had three technical staff. It was interesting to note that the para-technical staff position is also weak in the RSKs. About 10 per cent of the RSKs did not have any para-technical staff and 46 per cent had the support of only one para-technical staff. Para-technical staffs play an important role in reaching out to large number of farmers, at least in a situation where already there are very few technical staff. Thus, weak and variable situation of both technical and non-technical man power across RSKs is a hindrance for providing uniform and effective extension service for the farming community.

Among the overall staff, AAOs and AOs form a major proportion of the RSK staff with 40 percent and 30 percent respectively, while only 19 per cent are Agriculture Assistants. About 11 per cent of the staffs (not directly connected to RSKs) were ADAs, who were present in Kasaba RSKs.

As farmers are the ultimate beneficiaries of these centers, selected farmers were interviewed regarding its utility. Table 1 indicates as per their profile is concerned farmers who are visiting

Table 1. Farmers profile/socio economic characteristics in sampled raitha samparka kendras

Variables		(n=61)	
		Numbers	Per cent
Age (years)	>60 (old)	25	41
	20-60 (middle)	20	33
	<20 (young)	16	26
Education level	Degree	2	3
	Puc	4	7
	sslc	13	21
	primary	18	30
	illiterate	24	39
Extension participation level	High	12	20
	Medium	31	51
	low	18	29
Mass media usage level	High	18	30
	Medium	19	31
	low	24	39

the sampled RSKs were categorized based on their age as old, middle and young with the age of above 60 years, 20 to 60 years and less than 20 years respectively. About 4 per cent of farmers attained degree level of education. Whereas 6 per cent, 20 per cent and 30 percent were having education level of puc, sslc and primary school respectively. About 40 per cent were illiterate. Extension participation level of farmers were categorized as high, medium and low level with the respective percentages of 20, 50 and 30. Mass media usage levels among farmers were high, medium and low with percentage of 30, 30 and 40 respectively.

Usefulness of information sources is very important to make informed to take decisions about current events. As the scenario in the agriculture sector is dynamic, it is imperative that the Department of Agriculture to modify and adopt its extension approaches to suit to the emerging needs of the farming community. The information deliver support system determines the efficiency with which timely, relevant and location specific information can be disseminated.

The information delivery support systems in RSKs have been assessed based on various communication gadgets present and functioning in each location. In this respect, as indicated in Table 2, it was found that 41 per cent of the RSKs possessed computers and these locations also includes RSKs attached to the office of ADA (38 % of the sample). Hence, in real sense, only three percent of the independent RSKs have computer facility. The land line telephone connectivity was present in 61 percent of the RSKs of which surprisingly only 28 percent were in working condition. However, almost all the RSK officials possessed mobile phones and were used for personal as well as official work. Only 30 percent of the RSKs have updated visual aids such as charts, posters, models and the usage of audio aids (1%) whereas audio visual aids (8%) was very little in the RSKs. However, only one RSK at Antharasanthe village, Piriapatna taluk of Mysore district had one way interactive video conferencing facility which was occasionally used for the information delivery to the farmers through Abdul Nazirsab Institute for Rural Development.

This infers that the RSKs neither effectively using the traditional methods of extension such as audio visual aids, nor are able to adopt the latest and emerging extension methods such as ICT enabled services.

Information delivery mechanisms are the modes through which the information is delivered to the beneficiaries. A combination of several approaches can be very effective in information dissemination and methods such as farm and home visits, group meetings, farmers training, method demonstration

Table 2. Information delivery support systems used by the officials in raitha samparka kendras

Facilities	(n=61)	
	No. RSKs having the facilities	Per cent
Computer	25	41
Telephone (land line)	37	61
Visual aids	18	35
Audio aids	1	1
Audio visual aids	5	8
Interactive video conferencing facility	1	1

Table 3. Information delivery mechanism at raitha samparka kendras (n=61)

Particulars	Number of RSKs using the mechanism	Per cent
Filed visits	12	20
Training programs	13	21
Updated Visual aids in the RSK	18	30
Farm literatures	10	16
CDs	5	8

have been popularly used by the extension person in the past as well (Natikar, 1983; Kumar Arvind, 1985; Reddy *et al.*, 1987, Reddy *et al.*, 1987). The information delivery from the RSKs at the field level has been noticeably insignificant. Only about 20 percent of the officials of RSKs made field visits and conducted training programs (21%). Nearly 35 per cent of them had updated visual and about 16 percent had published farm literatures on some topics in agriculture (Table 3). Due to inadequate usage of information delivery sources, the RSKs are unable to provide technical information to the farmers effectively.

The information seeking behaviour of the farmers is a reflection of the way RSKs are being used by the farmers and to know if the RSKs are serving the intended purposes. The interaction with the farmers has revealed that (Table 5) buying seeds (93 %) and fertilizers (56 %, which includes bio-fertilizers as well) are the prime reasons for the farmers to visit RSKs. Pesticides (53 %) and implements (30 %) are also bought by the farmers from the RSKs. While only 22 per cent of the farmers sought farm literature, about 35 per cent of the farmers used RSKs to obtain various non-technical informations and the technical information seeking behaviour was little among the farmers (16 %).

This is evidently indicating that RSKs are used more as material hub than knowledge hub for agriculture in rural areas. With poor adoption of information delivery mechanism, as observed in the table 4, most of the farmers are primarily using RSKs just as a government retail outlet to buy subsidized agro-inputs rather than a technical agriculture information, thus defeating the primary objective of establishing RSKs.

The officials of the department of agriculture in several states had favorable attitude towards Training and Visit system of extension (Kalahari, 1980; Rath, 1992) Understanding the perceptions of the stake holders gives insights into the critical problems of a system from different perspectives.

Table 4. Information seeking behaviour of farmers

Particulars	n = 122	
	Number of respondents	Perc ent
Seeds	114	93
Fertilizers and manures	68	56
Pesticides	65	53
Implements	36	30
Training programmes	06	5
Farm literatures	27	22
Technical advise	19	16
Other non technical information (Schemes and programmes)	43	35

Multiple responses ascertained from each respondent

Table 5. Problems of the officials about the functioning of raitha samparka kendras

Particulars	n = 61	
	No of respondents	Per cent
Too much of administrative work	58	95
Lack of back staffing	53	87
Lack of training to staff	44	70
Poor conveyance and mobility	29	48
Poor building structure	15	25
Lack of contingency funds	15	25
Political interference	11	18
Additional responsibilities	08	13

Multiple responses ascertained from each respondent

Officials play an important role in disseminating farm information through RSKs. Referring to Table 5, the opinion of the RSK officials regarding the functioning of RSKs varies considerably. Majority of the RSK officials (87%) have indicated that lack of back staff has been an important hurdle in delivering technical information effectively, because many of them (95 %) feel that technical people are more burdened with administrative work than actual advisory and field level agriculture related work. Majority are also of the view (70 %) that limited training to the RSK staff about the recent updates in the filed of agriculture has also reduced their competence. Poor conveyance and mobility facilities in the remote areas have been hampering the performance of many RSK staff (48 %).

Further, poor building infrastructure and lack of contingency funds to meet out the regular operational expenditure and hospitality of the farmers are also sighted as important problems faced in the officials of RSKs (25 %). Local political interference is seen in 18 per cent of the RSKs, which has led to lack of independence to the officials to carry out their duties. Addition responsibility like in-charge of more than one location is also quoted as one of the reasons for decreased working efficiency of the RSK officials (13 % of the respondents).

Earlier Training and Visit System was a popular and effective system for the agriculture extension (Manjunath *et al.*, 2000). In the current study (Table 6), it is revealed that farmers face multiple constraints while availing the services of RSKs. Many of the farmers (88 %) are of the opinion that the RSK officials are mostly confined to RSKs and minimum interaction with them in field level about the problems of agriculture and 77 per cent

Table 6. Opinion of the farmers about the functioning of raitha samparka kendras

Particulars	Note: n = 122	
	No of respondents	Per cent
Officials confined to RSKs	107	88
Updated and full information is not available	94	77
Scarce information on allied aspects	57	47
Absence of scientists in RSKs	42	34
Inconsistent functional timings of RSKs	28	23
RSK location is not ideal	24	20
Insufficient training to the farmers	113	93

of them also feel that updated and full information relevant to the local agricultural problems are not available at the RSKs. Farmers are also of the opinion that the RSK officials are not able to provide information related to important allied areas other than agriculture such as horticulture, animal husbandry and so on (47%). Absence of scientists in RSKs and inconsistent functional timings of RSKs are also sighted as important constraints and few locations of RSKs which are in inconvenient accessibility to farmers is also hurdle in the functioning of RSKs.

In the view of sustaining agriculture sector further, Raitha Samparka Kendras, which are the grass root level functioning units of the Karnataka State Department of Agriculture needs immediate focus and strengthening. The primary objective of the establishment of RSKs under the demand driven *Raitha Mitra Yojane* is to provide technical and weather information on crop selection, crop production and crop protection related know-how, market information etc., to farmers and to provide facilities such as seed and soil testing. On the contrary, information delivery mechanisms and its infrastructure in the RSKs are very weak and there is minimum information dissemination on any aspects of agriculture and allied activities. Nearly 80 per cent of the RSKs are functioning under rented buildings. This has resulted in lack of incentive and hindrance to take up long-term strategic projects and investments in RSKs.

In order to answer the question of what works, where, and why in improving the performance of the agricultural extension system, performance assessments, evaluations, and monitoring

have to become inherent components of any research and extension program (Raabe Katharina, 2008). Due to the weak link between research and RSKs, the RSKs are being used by the farmers more as a government retail outlet to buy agricultural inputs such as seeds and fertilizers. Further the policies should focus on weaning away RSKs as selling points and develop them as information hub backed with adequate technical expertise. There has to be more recruitment of both technical and non technical staff to reduce the crunch of the field level functionaries. As pointed out by Cidro and Radhakrishna (2007), the extension agents and staff should be trained in developing educational materials using electronic technology, including Geographic Information System (GIS) and other multimedia.

Hence, the emphasis should be more on reducing administrative and paper works and increased field orientation focussing on the emerging challenges in the field of agriculture. As the farmers are less aware about the structure and functioning of RSKs, there is a strong need to adopt effective outreach initiatives to familiarise the benefits of the RSKs. In future days, RSKs should be developed as hub of information/knowledge at the grass root level and it is necessary that they tune in to the emerging trends in agriculture extension by adopting ICT based connectivity such as interactive video conferencing, toll free telephone, information kiosks, CD/DVD repository on agriculture and allied aspects etc. In the current globalised scenario, information has become the key for development. Molding of RSKs according to the present needs will help in providing timely, accurate and location specific relevant information to the farmers and help them in facing the emerging challenges in agriculture and compete in the global economy.

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