

RESEARCH NOTE

Village Resource Centres (VRC) – A New Approach in Extension for Increased Agricultural Production

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ABSTRACT

To increase the food production and productivity one of the basic need is increased adoption of location specific technologies by farmers. For this, farmers need to be educated and should be convinced well. Interactive video conferencing through satellite is an effective means of transferring the latest technologies to farmers. Farmers can directly interact with experts from remote villages and collect latest information. Without any distortion, the message can reach the farmers in remote and rural area. One such initiative of Indian Space Research Organization is establishment of Village Resource Centres which are located in different remote villages. The study was done in Karnataka state of India to find out the effectiveness of interactive video conferencing in disseminating the technologies to the farmers. Two hundred farmers who attended the programme regularly were selected randomly for the study. Personal interview and individual case studies were conducted to know the effectiveness of interactive two way audio video conference and the results were encouraging. Interactive video conferencing had helped farmers to increase their knowledge on various agricultural technologies and made adoption of technologies easier. This proved to help farmers in seasonal planning and risk mitigation. It also resulted in increasing the confidence level of farmers as a whole. Technology transfer to farmers through this modern method of communication can empower the rural farmers in developing countries, enhance ecological and livelihood security and accelerate human development and quality of life.

Key words : Development; Interactive video conference; Information; Knowledge;

Information is wealth. Carrying message on the latest agriculture, health and concerning issues to rural people without any distortion is an important task in the process of development. In order to increase the crop production to meet the emerging food demands in tropical and subtropical countries, farm technologies, especially the modern crop production technologies, need to be taken to the farmers. The necessity of a powerful information support system which can overcome distortion of messages has become all the more important now than ever before in the view of the WTO. Farmers in particular, and rural people in general, need to be provided with the latest farm technology in the shortest time possible to ensure that farm businesses remain profitable and sustainable for them. In these circumstances, communication through interactive video conferencing through satellite has become invaluable in order to address these issues so that information reaches directly from the Expert Centre to the grass root extension personnel, local leaders and farmers

through Village Resource Centers (VRC). This is a unique two way audio video network. Falconer *et al.* (2002) stated that video-conferencing technology typically has been found to be less conspicuous, less disruptive, and less obtrusive, as well as more pedagogically sound, than are the more traditional in-person classroom observations.

With the intention of direct interaction with people in rural areas, around five hundred VRC are established all over India in association with universities, non-governmental organisations, trusts, State and Central agencies. Through VRC, farmers can interact with experts directly and get information related to land records, natural resources, improved crop production methods, drinking water wells, ground water recharge, soil types, alternate cropping pattern and waste lands.

METHODOLOGY

This study is undertaken in the Karnataka state in India where 51 VRCs are established and are used

intensively to disseminate technologies to farmers in remote and rural areas and interact with them directly. The programme on Agriculture was given to the VRCs through a two-way audio and video by the Expert Centre at University of Agricultural Sciences, Bangalore. The centre had successfully completed three years covering various programmes on improved technology in field crops, fruit crops, vegetables, flower crops, organic farming, Integrated Nutrient Management, Integrated Pest Management, fishery, poultry, sericulture, harvest and post harvest technology, value addition, bio fertilizers and weather forecasting. The effectiveness of the interactive video conferencing was analysed by interviewing farmers who attended the programme regularly at 10 different VRC. Two hundred farmers were selected randomly for information collecting. Individual interviews were conducted to understand the impact of interactive video conferencing through VRCs at micro level.

RESULTS AND DISCUSSION

Advantages of the VRC as indicated by farmers: The data collected from two hundred farmers who attended the programmes was analysed and the results are presented in Table 1.

A vast majority of farmers (94.5 %) indicated that interactive video conferencing have played a greater role in increasing the knowledge of farmers on various farming activities. A majority of farmers (88.5%) stated that interaction was more like face to face interaction which helped them to clarify their farming related questions with the experts.

Most of the farmers (84%) were happy with the system because the experts and facilitators of the programme took care to repeat the programmes on the request of the farmers. Another significant advantage expressed by the respondents is saving in expenditure and time due to less travel, as all the information they needed could be obtained from the nearby VRC through interactive mode. As farmers from different areas assembled in a VRC to participate in the interactive video conferencing, social interactions among them also increased, which helped them to share the benefits of their own farming experiences with others. The other advantages indicated by the respondents were that information about inputs are obtained through the system effectively (72%), storage pest management could be done effectively (69.5%), information about the latest cultivation practices of different crops and enterprises could be obtained (68.5%), and the best resources could be obtained irrespective of geographical location (68%).

Table 1. Advantages of VRCs as indicated by the users (N=200)

Statements	No.	%
VRC Programmes helped to increase the knowledge on various farming activities	189	94.5
Learning through VRCs is equivalent to face to face interaction	177	88.5
Important programme could be repeated on request	168	84.0
VRC Programmes helped to improve my farming	165	82.5
Substantial saving in expenditure due to saving in travel /logistics	162	81.0
Participation helped to make more social interactions	147	73.5
I could save time spend in traveling to research stations/ universities for information	144	72.0
Information about inputs is obtained through the system timely	144	72.0
VRC is a credible source of information	153	76.5
Storage pest management could be done effectively	139	69.5
Learning and communication environment is adaptable to all	137	68.5
I could obtain information about latest cultivation practices	137	68.5
Best learning resources could be availed irrespective of location	136	68.0
The information through VRC have multiplier effect	133	66.5
Timely weather forecast information helped to take decisions regarding plant protection, harvest, threshing and other management aspects	123	61.5
I could decide best crops for the season because of information from VRC	112	56.0
VRC Programmes helped to know the best markets of different crops	69	34.5
I could follow effective water management practices	62	31.0

Two third of the respondents (66.5%) indicated that the information through VRC has a multiplier effect and they also opined that weather forecast information helped them to take decisions regarding plant protection, harvest, threshing and other management aspects (61.5%). Fifty-six per cent of the respondents opined that they could decide the best crop for the season because of the information from VRC. Interactive video conferencing also helped many to find proper markets for their agricultural produce (34.5%) and follow efficient water management practices (31%).

From the above advantages mentioned by the farmers it is clear that interactive video conferencing through VRC can undoubtedly reach the farmers effectively and efficiently . The results are in line with the findings of *Ghosh (2006)* who pointed out that the tele-education on agriculture has the advantages like more awareness of innovative approaches, improved food production and seasonal planning and risk mitigation for the farmers.

VRCs can significantly change the existing farming situation by reaching more and more farmers with location specific technologies. The participants develop self-confidence as they learn to approach and interact with the modern world. People living in rural areas are empowered with information to face current challenges. Even those in the remotest of villages can feel connected to the rest of the world and benefit from its progress through exposure to new technology.

CONCLUSION

Many experiences can be quoted from the length and breadth of India wherein the direct and indirect use of video conferencing, satellite communication and multi-media are currently being implemented to reach out to farmers. This will help launch a knowledge revolution in rural India designed to enhance ecological and livelihood security and accelerate human development and quality of life by improving the productivity, profitability and sustainability of agriculture and for generating value added employment both on the farm and off the farm.

Beyond India's boundary, the Saaraketha experiment in Srilanka is also under way to equip rural farmers with tools and technology to allow them to become successful agri entrepreneurs. Similar examples are found across the world to substantiate the importance of satellite communication for the social and economic development. The successful launch of EDUSAT, the first dedicated educational satellite by India in 2004, had opened the flood gates of the concept of virtual classrooms in India, virtual classrooms solely dedicated to the farming community dotted across India and other developing countries. This would enable our world to embark upon a new era of empowerment for the farming community and a social and economic development.

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