

## **Rural Knowledge Centers as Facilitators of New Learning Opportunities for the Rural Families: a case study**

Dileep Kumar Guntuku

*Department of ICT For Agriculture, DA-IICT, Gandhi Nagar*

Sreenath Dixit

*Division of Resource Management, CRIDA, Hyderabad*

Balaji Venkataraman

*Knowledge Management and Sharing Group, ICRISAT*

### **Abstract**

There are various names and descriptions for rural knowledge centers, but their main role is facilitate the access to managed or direct information services for rural families. India is home to a very large number of pilot projects in this sector over the last about ten years. The number of internet-connected rural knowledge centers varies but is believed to be close to 10000 as of mid-2006. The recent decision of the Government of India to establish about 1,00,000 Common Service Centers has generated altogether new possibilities and opportunities to design and make available a wide range of information services for the rural poor in India.

Earlier studies indicated that the access to government information, and information on education were the two priority information demands. A number of projects include provision of governance-related information as a key service. Education mostly relating to IT literacy is offered on many projects although systematic efforts to measure the importance and impact of such information are not yet available.

One of the significant challenges that India faces is the recurrence of disasters that lead to large scale disruption of economic and development activities and causes considerable distress among the victims. Over a period of time, relief measures have become affordable in many situations but the cumulative losses are staggering. The Disaster Management Authority of India has identified drought and earthquakes as among the phenomena that can cause deep and lasting distress among the victims while generating massive economic losses to the system as a whole. There is a need to identify new systems that combine early warning arrangements with access for appropriate support services.

Over the last two years, ICRISAT has made an effort in partnership with CRIDA to study the possible use of rural knowledge centers in enhancing drought preparedness at the micro-regional level among the rural families. The pilot is premised on the assumption that a country such as India has reasonable arrangements for early warning communication in a top-down manner. International experience shows that such top-down flow of important information must combine with a bottom-up process for its rapid and effective use by the intended recipients, namely the rural families. The rural knowledge centers, operating in an interactive hub-and-spokes model for local value-addition and dissemination and capture, could provide the right interfaces to generate such blended communication.

ICRISAT and partners started out with a detailed information needs assessment process covering all the villages in the Addakal Mandal, Mahbub Nagar District of AP State. The information needs assessment revealed that there were significant gaps in the availability of and access to natural resource management information by the rural families. There was striking level of lack of awareness about the general extent and consequences of drought, and most families had assumed that out-migration was the only easy option. Thus, as part of the drought preparedness information system, opportunities for learning about NRM issues at a basic level needed to be available.

ICRISAT's Virtual Academy for the Semi Arid Tropics ([www.vasat.org](http://www.vasat.org)) attempts to combine the advantages and power of contemporary process in technology-mediated open and distance learning to provide such education-based communication arrangement in Addakal Mandal. The principal local partner is a community-based NOGO called the Adarsha Mahila Samaikhya, which is a federation of village-level micro-credit groups in the mandal. The coverage extends to all the villages while the federation has a membership of about 6000 individuals, all women (as of September 2006). The AMS has provided good quality space and furniture and electricity for the rural knowledge centers in three villages while its own premises act as the local hub that has access to the Internet. The village access centers act as channels for two-way communication between the hub and the rural families. The hub itself is supported by an online content management system, modification of a standard learning management system hosted by ICRISAT. The CMS allows questions from the rural families to be logged for viewing by ICRISAT and CRIDA-based experts.

Over a period of time, we found that it took an average of seven days for a farmer to receive a response that he considered satisfactory. This was entirely due to the way the questions were phrased and experts often sought more information prior to developing a solution. This resulted in cycles of information flow prior to a solution being delivered. ICRISAT scholars conducted a study with the AMS women volunteers and helped them learn the essentials of pest management using technically simple, literacy-imparting modules. The learning process took place over a period of 18 hours spread over almost a week. The process facilitator used CDROM-based modules. The lessons learnt were evident in the way the quality of questions changed. More information that describes the context was added to every question by the AMS volunteer, and this resulted in dramatic reduction in the time taken to deliver a useful solution. The average time now is about one day, often solutions being delivered within the same day.

This experience has led us to design a larger learning process that involves rural knowledge center facilitators in many other parts of India, in collaboration with the M S Swaminathan Research Foundation through their Virtual Resources Centers project. In the initial trials, a two-way video-conferencing facility was used, and we found that the quality of both expert-farmer and farmer-farmer interactions was appreciable. In the second set of trials, we have started online learning process for the Addakal volunteers on groundnut cultivation with video-conferencing as an important tool. The process is continuing and the initial results show that with sufficient literacy imparted, the rural knowledge center volunteers of the AMS are able to decide on the aspects of learning modules that should be localized.

Thus, it emerges that rural knowledge centers can facilitate local learning provided adequate efforts are made to generate such material. Learning capacity even outside

a classroom milieu is considerable if flexible methods are followed and learning is delivered as granules. Technology-mediated learning is thus a possibility for rural families in their quest to find more sustainable resource management options.

We are grateful to the ICT-KM program of the CGIAR for partial financial support.