

Sustainable initiatives

An Information and Communication Technology case study

National Institute of Agriculture Extension Management (MANAGE), Hyderabad, Andhra Pradesh

Case study on Information centres for technology dissemination



Introduction

This case study has been generated as part of a research programme into Information and Communication Technology (ICT) sustainability factors. Funded by the [Department of International Development \(DFID\)](#), the research programme identified activities that sought to benefit the poor and had an ICT component. In particular it considered programmes where ICTs had enhanced ongoing development activities, the ICT activity could be replicated without sizeable investment, and there was a measure of sustainability. Sustainability was taken to be more than financial cost recovery. Drawing from lessons learned in other development sectors, sustainability involves a combination of factors including among others, clear objectives, institutional frameworks, local capacity and development benefits. While perhaps not fulfilling all the features of a strong sustainable activity, the following case was felt to hold points of interest for the wider global development community.

Description of case Study

MANAGE, the National Institute of Agricultural Extension Management, is a premier post-graduate school offering two-year courses in agribusiness management in Hyderabad, Andhra Pradesh. Their role is also to provide policy and capacity building to the whole Indian agricultural extension system. Founded in 1987, they offer 30 places a year, for which they receive some 800 applications. MANAGE is directly supported by grants of up to 60 million rupees (\$1.2 million) a year from the Ministry of Agriculture (MoA). In addition to their teaching duties, faculty members conduct consultancy work, training, research and pilot projects – such as the on-going 'cyber extension' programme described here, which provides information services to rural farmers in the so-called 'last mile' of connectivity.

MANAGE began their innovative 'cyber extension' programme in October 2000 to find out: *'are people living in village communities willing to use the computer, and willing to access the information on the systems?'* says Dr V. P. Sharma, Head of IT. *'And if so, what information are they looking for?'*

Computers were installed in 11 villages of Rangareddy District of Andhra Pradesh, some 50 to 70 km away from Hyderabad, where MANAGE is based. Each village information kiosk was equipped with a multimedia PC, a dot matrix printer, modem and UPS (uninterruptible power supply). Nine of the systems were located in the premises of Mutually Aided Co-operative Thrift and Credit Society Ltd (MACTCS; these are formed through a number of micro-finance women's groups joining together); the other two in

Gram Panchayat (village council) offices.

In Ranga Reddy district, where MANAGE piloted their cyberextension programme of village information kiosks, the Shamirpet MACTCS has built their own premises for group meetings, banking activities, and to house nine of the eleven computer centres. These are primarily dedicated to supporting the work of the women's micro-finance groups and societies – with public services (such as computer training; and printing out of exam results) providing some cost-recovery.

MANAGE created the basic information systems, and when villagers identified useful and usable information, they acted as a broker with other agricultural institutes who offered to provide the information. In some cases MANAGE provided equipment to help these other organisations digitise content.

Key Strategies

Through the introduction of computers, email and the internet to community groups increase rural farmers access to information services.



Photo 1: Training at Shamirpet MACTCS

Development benefits

The information access at the village level is putting pressure on the middle and senior level state officers for delivering the programmes and schemes in time and to the needy. They are also under constant pressure as transparency throughout the system has improved. The villagers know their eligibility for housing loans, crop loans and other schemes and they are able to inform the concerned officers about their demands with full supporting documents, very much in time, due to information availability through the websites.

Besides normal websites, the rural community in these villages is using multimedia CD learning packages for making pickles, learning about maternity and child health, importance of child education, issues regarding child labour, nutritional aspects and also expert systems on crops. A number of families have taken up pickle preparation and are taking their produce to Rythu Bazars (a Hyderabad-based supermarket) regularly. The CD on pickle preparation (which is in the local language) is a big hit in all the 11 villages

Hindrances

Technology:

Hindrances associated with accessing / utilising / maintaining ICTs have included connectivity and access to suitable content as agriculture-related information is scarce on the Internet. As well as initial problems with the lack of telephone lines to the communities.

The current network is also hindered by not allowing users to post their own information to a web site, which prevents others getting access to useful information that is already available in traditional formats. MANAGE plans to introduce an interactive web site that can be accessed by users themselves, so they can publish their own content.

Socio-economic:

In the beginning most of the women were hesitant to sit in front of the computer. After much encouragement, they are now running the kiosk and those who learnt computer created their own e-mail ID's and now they are sending and receiving e-mails independently.

What helped it Succeed

Technical:

The use of standard computer equipment enabled service and support to be access locally (within the state).

Socio-economic:

Good communications with MANAGE and user groups enabled the services to grow quickly.

The project supplied adequate training to Users.

With users quickly experiencing the benefits of the ICTs has created a willingness to take over the project after one year.

There was good timing with regards to approaching the

MACTCS just when they were starting to demand new sources of information.

Sustainability factors

Objectives

- To reach research and extension information to the farm women in fastest manner through ICT in order to meet their needs.
- To reduce the drudgery of account maintenance by providing banking software at MACTCS (mutually aided cooperative thrift and credit society) level.
- To communicate with MANAGE/District Rural Development Agency/Collectorate/ State level functionaries etc., through e-mail in the fastest manner.
- To empower the rural women through ICT



Photo 2: Sumathi Kavali, Manager of Shamirepet MACTCS

Institutional arrangements

Installed in September 2000, 11 Village Information-Kiosks work as rural cybercafe-cum-cyberoffices. Each Village Information-Kiosk provides services to about 25-30 villages, i.e. around 20,000 to 30,000 people. The Village Information-Kiosks are located on the roadside and are central villages where people normally travel.

Initially MANAGE pay the IT facilitators for one year. This is then reduced to 50% for six months with some contribution by MACTCS. The IT facilitator raises the remaining 50% through income generation activities at the Kiosk. At present the MACTCS owns the project so are responsible for paying the IT facilitators fully.

With regards to monitoring and review frequent visits are made by the MANAGE field coordinator, District Rural Development Agency (DRDA) officials to the kiosks. Review meetings are held every month at MANAGE. The Board of Directors meeting of MACTCS and Sneha Sangha meetings at federation level are held on a fortnightly basis. Frequently village level meetings at the headquarters are organised by MANAGE field coordinator.

Target groups

At present these are the women and children of the Ranga Reddy district in the state of Andhra Pradesh.

MANAGE provide "Basic IT Training" through the IT Facilitator at the Village Information-Kiosks sites to the MACTCS Manager and accountant. MANAGE also provide the service of an IT Facilitator at each of the 11 Village Information-Kiosks for a period of 6 months to ensure proper training is given to all the farmers and their families (the women, boys and girls), and also to assess the information needs at the village level.

With regards to Gender concerns have been raised about the limited access to the project by men as this is restricted to access through their wives.

Technology

Each Village Information-Kiosk is supplied with one printer, one modem and a 1 KVA UPS I leap soft ware.



Photo 3: MANAGE Self Help Group

Each kiosk is used by farmers and villagers to obtain information for their own benefit, as well as by the MACTCS manager and accountant for updating balance records, reading local newspapers check weather reports and visit specialist agricultural websites. The kiosk is also used by the IT facilitator in running a number of courses for the community to supplement his income.

Common problems have generally been highlighted by all groups to do with the internet. This includes poor internet connection and limited access to websites in the local language.

Finance

The project is initially funded by MANAGE and then is taken over by the MACTCS's.

The pilot project cost MANAGE 125,000 rupees (\$2,500) per computer centre for equipment; plus payment of 11 full-time IT facilitators who received a salary for the first year of 4,000 rupees/month (\$80), making a total project cost for the first year of 1.9 million rupees (\$38,000). With the biggest running cost being telephone call charges, typically 250-300 rupees/month (\$5-\$6), representing an average of 10-

Anecdote

Very recently, the Board of Secondary School Education, Andhra Pradesh declared its 10th class results, through their website at 11 AM on 30-04-2001. Since 11.10 AM on 30th April till May 2nd evening, the telephone numbers of all the 11 Village Information Kiosks were continuously engaged. All these kiosks were busy disseminating the results to the students, of course for a fee of Rs. 15/- per hit. The students are being given total marks list statement in printed form. The result has reached all the villages at the same time, along with the state headquarters for the first time in history! The access to internet has changed the way of life for all the people who have access to it.

Points of Interest

Despite problems with accessing information on the internet communities are willing to learn, use and take over the running of the ICT kiosks.

The discovered need for the IT facilitator's to take on the role of translating information gathered from the internet into the local language.

Using the kiosk to provide computer training to the rest of the community - a policy that reduces the costs to the MCTCS of paying an IT facilitator, as he is able to generate some income himself.

15 minutes on-line access for email and Internet per day.

The project process

The project was started by MANAGE and the district authority. They are also responsible for quality control.

Frequent monitoring of the project is carried out by the DRDA official and MANAGE field coordinator. Those who completed training are examined. Self Help Group (SHG) members and Board of Directors frequently visit the centre. The SHGs are self-monitoring.

Key linkages

MANAGE is an autonomous wing under the Ministry of Agriculture, Government of India. The SHG federations purely manage this ICT project and it is registered under Mutually Aided Cooperative Act.

MANAGE is providing continuous capacity-building support to all the presidents, board of directors, organisers, group members of MACTCS.

Other MANAGE linkages are with NGOs and private sector (Nagarjuna Group of Companies).

Intermediaries

The intermediaries are trained to use the Internet by the IT facilitator. Due to problems understanding the English language the IT facilitator is also able to help them access the information.

Capacity

The IT facilitators have completed the G-NIIT programme from NIIT (NIIT is a leading computer trainer in India). The IT facilitators operate the computer with regards to browsing internet, sending and receiving e-mails, operating society transactions through computer etc.

The staff who manage the kiosks are also given basic training in IT by the facilitators appointed by MANAGE. These people have passed their 10th or 12th grade.

Training to target groups is provided by the IT Facilitator at each of the 11 Village Information-Kiosks for a period of 6 months to ensure proper training to all the farmers and their families (the women, boys and girls), and also to assess the information needs at the village level.

Stakeholders Consulted

This case study information has been gathered through the assistance of MANAGE staff, who facilitated interviews with a range of stakeholders. Included the Manager of Shamrirpet MACTCS who now uses the internet for two hours everyday to help her in her work, an IT facilitator and a village leader whose wife visits the centre, and who sees the resource as having the potential to aid him with village planning.

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