A pilot project is bringing the Information Age to rural Indian villagers in the form of communal telephone and Internet access. Based on the experiences to date of a half-dozen local 'information shops' in southern India, another 12 villages have requested their own information shops, if funding can be found.

"We have a mix of caution and optimism," says project director, Venkataraman Balaji of the M.S. Swaminathan Research Foundation. The Foundation is funding Internet, voice, and database access to rural villagers in the Pondicherry area of India, to find out whether they would accept and use the technology. The International Development Research Centre (IDRC) is supporting the project financially.

Pondicherry is a former French colonial area in southern India, on the Bay of Bengal. The region's official languages are English, French, and Tamil. Because Tamil is the main language of rural people, the personal computers placed in each village information shop feature Windows 95 and Microsoft Office 97 software with Tamil fonts developed by the Government of India.

Technical challenges

When the project began in 1998, the technical challenges included a 'shoestring' budget, an almost total absence of modern telephone infrastructure, and a three-to-five year wait for standard telephone lines. Engineers skirted this latter problem by setting up telephone and Internet access through an unconventional combination of modems and VHF radios. A central base picks up the radio signals from each village and feeds them into the Indian telephone network. To supplement the sporadic power available in rural areas, the computer, printer, and radio found in each telecentre all have solar power backup. The final result doesn't move data quickly, but it serves users' purposes.
At first, the project team was unsure whether rural Indians would be interested in Internet service — in the project area, there were only 12 public telephones serving 22,000 people. But the team found that for every phone, there were 20 to 40 televisions, many with cable TV service.

Supplying useful information

"We realized that the local people have a capacity to absorb new technology," says Dr Balaji, adding that the aim was to supply information that rural villagers regard as useful. The question was, "can people get the information they want in the way that they want?"

A survey by the Swaminathan Foundation showed that community members have a genuine thirst for information — provided it is locally or personally relevant. Villagers want access to daily weather reports and news that have an impact on their lives. And while rural Indians are interested in agricultural and fishing information, at the top of their wish list is bulletins about government programs and information releases.

Participation criteria

Before setting up the information shops, the Foundation required participating villages to agree to certain criteria. Each centre must stay open for several hours per day, guard equipment against vandalism or tampering, guarantee access to members of the Dalit population (formerly known as 'untouchables'), and ensure that at least half of the trained volunteer operators are women.

Administrators took pains to lower barriers to access in other ways. Some villagers are illiterate, so information such as weather reports was downloaded as RealAudio files, which can be played over speakers located in front of the information shops. Under traditional circumstances, only men of higher caste would have controlled the information flow, so an IDRC expert helped ensure gender sensitivity in both volunteer staffing and database content.

Information requests

Over a six-month trial period, farmers requested dynamic information on the costs and availability of agricultural inputs such as seeds, fertilizer, and pesticides — and on grain prices in different markets throughout the Pondicherry area. This information was also of interest to female agricultural workers, who receive part of their wages in grain.

Women primarily used the information shops to obtain information about family income supplements and public welfare schemes, low-cost insurance, and health issues — especially child bearing and rearing. Through the centres, they also accessed a previously confidential government list of families eligible for low-income assistance. Some women have also explored ways to start up new family enterprises, such as manufacturing incense sticks.

Local databases

Over time, project volunteers in the villages have built their own databases. These locally generated information sources now include details of approximately 130 government programs for low income rural families; local market prices for grain; local farming input prices; a directory of insurance plans for both crops and families; pest management plans for rice and sugar cane; a directory of local hospitals, medical practitioners and their specialties; a regional timetable for buses and trains; and a directory of local veterinarians, cattle, and animal husbandry programs. In one village, fishers are using U.S. Navy ocean wave-height forecasts downloaded from the Internet to identify which parts of the Bay of Bengal they should avoid in their small boats.
According to Dr Balaji, statistics kept by each centre indicate that between 34% and 50% of users are women, depending on the village. Around 16% of all users have incomes below the poverty line, in an area of India in which 21% of the total population is below the poverty line. And in an area where education is not yet universal, some 60% of all users visit the information centres to conduct business by telephone.

Reliable system

The information these centres provide seems to have bred a hunger for ever more detailed information, which is not always available. "What this shows is that the system is seen as very reliable and stable, and therefore different types of demands are coming up," he concludes.

Keane J. Shore is an Ottawa-based writer and editor. (Photo: M.S. Swaminathan Research Foundation)

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Latin American Telecentres: The Community Networking Pilot Project, by Kelly Cryderman

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