



E-nabling India's rural

President Kalam's vision of taking urban technologies to rural areas is being realized in a number of 'digital divide' projects.

JUST TWO hours out from Bangalore on the railway main line to Chennai, Kuppam is a two-minute halt on most trains. But that is time enough for most passengers to snatch a quick look at the posters lining the two platforms, welcoming them to Kuppam's 'inclusive' or i-community.

For those who choose to alight, the contrast with other rural clusters in this southern corner of Andhra Pradesh is palpable: Neatly signposted lanes, a clean bus shelter and something one is unlikely to find any-

IT TRENDS

where else in rural India: bright red-and-yellow booths which say: 'Emergency Telephone' in Telugu and English.

They are free phones supported by a wireless (802.11b) network and connect instantly to the local police, fire and hospital services.

They can also reach two other numbers: World Corps India, the voluntary agency that has been instrumental in training local entrepreneurs to set up over 15 wireless Internet-enabled Community Information Centres (CICs) spread across the five villages or mandals of Kuppam; and Hewlett Packard, whose adoption of Kuppam as one of the first sites of its global e-inclusion programme of 'appropriate' Information Tech-

nology, has inspired the state government as well as a dozen private companies, charitable foundations and non governmental agencies to come together and co-create a sustainable future for this so-called backward area, using cutting edge technologies that have largely been the preserve of urban pockets of plenty.

Digital photography

Like digital photography. Last week was a busy time for Neelamma and 15 other local women mobile photographers to the Kuppam community. Armed with Photosmart digital cameras, they 'covered' dozens of Ganesha 'nimarjan' (immersion) ceremonies, and using the field kits loaned to them by HP, converted the shots into instant colour photos using solar-powered direct photo printers and sold them at Rs 30 a print.

On other days, they routinely cover weddings, baby 'naming' ceremonies, bus route inaugurations, accident sites or dead cattle, for insurance companies and the occasional 'rowdy sheeter' mug shots for the police... They earn anything from Rs 750 to Rs 2000 a month, and are currently moving from a model where HP supplies all the material and takes away Rs 20 for every print to a more lucrative one where they just lease the camera and buy all the consumables.

The change has come because, the sudden access to doorstep photo services in Kuppam, has created a big enough market for nearby towns to stock digital printer consumables. "We want to move away from the pappad-and-pickle stereotype of employment for rural women," says Anand Tawker, Director of HP's emerging market solutions in its e-inclusion programme, who has nurtured this initiative from day one. "We are thrilled that they are so confidently handling technology that may seem disruptive even to hardcore professionals in the metros".

In his community kiosk in Kothaindlu village, proprietor M. Kumarswamy, has just one PC and a multi-function printer. He sells toiletries and sweets to attract the local customers then offers to cast their horoscopes using special software, at Rs 30 a go.

He has also discovered a new and gainful use for the spare disk space on his PC: He calls it 'surakshita dakhalu' ('elec-

tronic safe deposit locker'). Villagers usually have a hard time preserving their precious documents: birth certificates, land title deeds or 'pattas'... from the ravages of time and weather. Kumarswamy charges a one-time fee of Rs 20 to scan and preserve the documents on his PC for as long as the customer wants. He has probably not heard the word 'demat' but his service is filling a very real need.

'Touch typewriting'

At the Mamidipudi Nagarjuna Social Welfare Residential School for Girls, 10 year olds crowd around a dozen PCs, learning 'touch typewriting' in Telugu, or browsing language software created by the Azim Premji Foundation, another partner in Kuppam's i-community. A single PC running Linux fuels four monitors which can work independently — not a particularly high tech application, but one that might be crucial in an environment where the cost of a single PC for a whole school, might be the



Weekly laptop lessons at Kuppam.



reaches

hurdle:

They are the first beneficiaries of an exclusive 2 MBPS 'pipe' provided by the state government and fed from the Software Technology Park at Tirupati, via fibre, to all five mandals of Kuppam. From here, a WiFi umbrella set up by Convergent Communications, Bangalore, unfurls over the whole community of 3.2 lakh citizens even while fuelling the community Net portal (www.kuppamhpi-community.stph.net) that is already delivering a variety of local services under the 'Yojanalu' head. Last week, a domestic gas outlet was advertising a vacancy, as were World Corps and some of the local voluntary agencies. However the nearest government employment exchange is yet to be linked to this online service.

The Web for Kuppam, is also the gateway to a range of health and educational services: telemedicine software from TeleVital which connects remote villages to the P.E.S. Speciality Hospital and Medical College and computer-aided-education steered by World Links and the America India foundation; documenting farm land productivity, using remote sensing satellite data collated by Samuha, a voluntary agency.

On Friday last, Kuppam's i-community mobile van was parked in Vasanadu village. Local residents brought soil samples for immediate testing in the field lab even as others queued up to have their eyes tested for a possible referral to the Arvind Eye Hospital. And a crowd of school children waited to take possession of a laptop computer — their weekly treat.

This was my third visit to Kuppam since the inception of the i-community project 30 months ago. The mobile lab was new this time — and so was one sight that I found most thrilling: The sight of four young local students, in a small room, each in front of a PC, editing scanned images mailed from a U.S. state's Vehicle Licensing department, filtering them through an OmniPage character recognition engine and painstakingly licking them into shape as Acrobat PDF files.

The job has been farmed out to them by Datamation, an Indian BPO player, which had the vision to share some of its work with this rural reach. The kids were proud of what they were doing: putting Kuppam on the world BPO map with its own 4-seater IT Enabled Services centre. Now, one saw why they needed 2 MBPS on the Internet backbone.

'The HP way'

The formal experiment launched by HP, comes to an end six months from now. The company long known for 'The HP Way' a less commercially motivated, more socially driven work culture, encouraged by its co-founders, has found in Kuppam a lively laboratory for its ideas of electronically driven 'inclusion'. It is very much in the spirit of Dr A.P.J. Abdul Kalam's favourite blueprint, PURA: Programme for Urban Amenities in Rural Areas. The challenge remains to sustain the 'inclusive' drive, even while striving to create hundreds of other Kuppams.

● Anand Parthasarathy