Commentary

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INITIATIVES IN ICT FOR RURAL DEVELOPMENT:

AN INDIAN PERSPECTIVE

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Abstract*: Various initiatives in the recent past portrayed the significant role that the I.C.T plays in the realm of rural development. Several projects have reduced the costs, and it also has increased transparency. A large number of rural e-Governance applications, developed as pilot projects were aimed at offering easy access to citizen services and improved processing of government to citizen transactions. This paper presents a brief review of the innovative projects in Information and communication technologies for rural development and how far it has contributed. The other aim is to ponder over the achievements and the failures of ICT in the sustainable development march. The analysis also indicates communication related initiatives and projects for development before media liberalization and post media liberalization.*

Keywords*: Rural Development, Information and Communication Technologies, e-Governance, kiosk, Online Transaction Processing.*

Introduction

ICTs are those technologies that can be used to interlink information technology devices such as personal computers with communication technologies such as telephones and their telecommunication networks. The PC and laptop with e-mail and Internet provides the best example. Michiels and Van Crowder (2001) have defined ICTs 'as a range of electronic technologies which when converged in new configurations are flexible, adaptable, enabling and capable of transforming organisations and redefining social relations'. The range of technologies is increasing all the time and 'there is a convergence between the new technologies and conventional media' (Michaels and Van Crowder, 2001:8). This rapid and ongoing convergence

means that devices such as digital cameras, digital video cameras and players, personal digital assistants, slide projectors and mobile telephones are also compatible with more traditional media such as radio (digital, satellite),television (cable, digital, satellite). Thus most devices can now be linked to others to share and exchange information and allow it to be used in such a way that they can also be categorised as ICTs. Even books are being incorporated into ICTs either through the potential for informal web publishing or more formal digital book publishing with designated readers or 'e-books'. ICTs, therefore, are an expanding assembly of technologies that can be used to collect, store and share information between people using multiple devices and multiple media.

There is no proper definition for rural development. But logically, it means development for rural areas, to empower the voiceless, reduce exploitation. One of the major driving forces for rural development is communication.

In recent times, ICT is playing a role of catalyst in rural development. It is used in every aspect of information, management and governance of development.

ICT means application of innovative way to facilitate information and communication technologies in the rural domain. The advancement in ICT can be utilized for providing relevant information and service to the farmers, thereby facilitating an environment for more rewarding agriculture. Farmers of rural areas can be educated with modern means of cultivation through ICT.

How ICT can facilitate rural development:

- Efficient services for Health Care and Education
- Access to vast Education in content for improving literacy
- Help farmers with value based information to improve their productivity and provide timely information to traders, artisans etc
- Entertainment through broadcasting and multimedia services at doorsteps in rural areas.
- Relevant News at one's door-step.

ICT enabled programmers

Post Independence, the Government took upon itself the major responsibility of development in rural domain. Many projects were implemented. As the access to radio was supreme during that period, the use of radio for rural development was conceived first. It came to be known as Radio rural forums. The expedition was carried out from February to April 1956 in five districts of Maharashtra state by All India Radio (AIR). The researchers indicated a positive knowledge gain among the listener. All genres of

rural segments were part of the radio programmed. However the radio rural forum for rural development did not continued for long.

SITE (Satellite Instructional Television Experiment)- is considered to be one of the biggest technological experiments in education and rural development. The one year experiment (august 1975-july 1976) aimed to provide direct broadcasting of instructional and educational television in 2400 villages in the states of Andhra Pradesh, Bihar, Karnataka, Madhya Pradesh, Orissa and Rajasthan. Over 500 conventional television sets spread over 335 villages in knead district, Gujarat was also part of SITE. The expedition did not discriminate between rural poor and urban rich for information and communication.

In Post media liberalization phase, Government of India, announced the policy for Community Radio Broadcasting. Community radio is expected to focus on issues relating to health, education, environment, agriculture, rural and community development.

Country's first community radio station became operational on February 1, 114 on Anna University, Chennai. Another cable community radio station, named as Name Dwain or our voices was set up earlier in Body kola, Karnataka. The villagers believe that "this radio station is ours because it speaks about us and in our dialect". It addresses their most development needs.

On 16 November 2006, the Government of India notified new Community radio guidelines which permit NGOs and other civil society organizations to own and operate community radio stations. About 4,000 community radio licenses are on offer across India, According to Government sources. By 30 November 2008, the Ministry of Information & Broadcasting, Government of India, had received 297 applications for community radio licenses, including 141 from NGOs and other civil society organizations, 105 from educational institutions and 51 for 'farm radio' stations to be run by agricultural universities and agricultural extension centers ('Krishi Vigyan Kendras'). Of these, 107 community radio stations have been cleared for licensing through the issue of Letters of Intent. 13 Grant of Permission Agreements (GOPA) has been signed with license applicants under the new scheme.

By 30 November 2008, there were 38 operational community radio stations in the country. Of these, two are run by NGOs and the rest by educational institutions. The first community-based radio station, licensed to an NGO (as distinct from campus-based radio) was launched on 15 October 2008, when 'Sangham Radio' in Pastapur village, Medak district, Andhra Pradesh state, was switched on at 11.00am. Sangham Radio, which broadcasts on 90.4 MHz, is licensed to Deccan Development Society (DDS), an NGO that works with women's groups in about 75 villages of Andhra Pradesh. The

community radio station is managed by 'General' Narsamma and Algole Narsamma. The second NGO-led community radio station in India was launched on 23 October 2008 at 'TARAgram' in Orchha, Madhya Pradesh state. Named 'Radio Bundelkhand' after the Bundelkhand region of central India where it is located, the radio station is licensed to the Society for Development Alternatives (DA), a Delhi-based NGO. Radio Bundelkhand also broadcasts on 90.4 MHz for four hours a day, including two hours of repeat broadcast.

According to the Ministry of Information & Broadcasting, 47 community radio stations were operational in India by 1 November 2009, including 45 campus-based stations and two CRS run by NGOs. By December 2009, the number of CR stations run by civil society groups had probably gone up to seven, including Sangham Radio (Pastapur, Medak District, Andhra Pradesh), Radio Bundelkhand (Orchha, Madhya Pradesh), Mann Deshi Tarang (Satara, Maharashtra), Namma Dhwani (Budikote, Karnataka), Radio Mattoli (Wayanad, Kerala), Kalanjiam Samuga Vanoli (Nagapattinam, Tamil Nadu) and Barefoot (Tilonia, Rajasthan). “kunyal panje kutchi’ also focused on capacity building for elected women in Panchayats on development issues.

For the last few years back the State Government, NGOs and some innovative companies have tried to overcome technologically barrier by developing pilot projects in a Rural Setting. Kiosk based approaches to deliver e-governance have received considerable attention and finance. Bhoomi is a kiosk based project of Karnataka and holds millions of records of land ownership. The system called E-Seva in the Ranga Reddy district of Andhra Pradesh, including twin cities of Hyderabad and Secunderabad , is also very successful with thousands of citizens using the system for paying bills , getting permits and licenses . Another innovative project such as CARD (Computer aided administration of registration department) achieved success in Andhra Pradesh. The information kiosk installed by different entrepreneurs with help from the state governments helped citizens make payment of electricity bills, get birth certificates and contact police stations by e-mail. Another important rural information project is Gyandoot in Dhar district of Madhya Pradesh, where every village has an information kiosk that facilitate information related to seeds, crops, resources etc. many e-governance projects have been implemented in various states, like the U.N.D.P supported Jana Mitra Scheme in Rajasthan, Choice in Chattisgarh , Lokmitra in Himachal Pradesh, Lokvani in Uttar Pradesh., Jai Kishan in Uttranchal. The Government of West Bengal has taken up a project of setting up about 1500 community library and information centre in the villages for providing normal library services relating to career and vocational opportunities.

In this direction southern African Tele centre network (SATNET) undertook a trip to India. The main purpose was to have face to face meetings with technology providers,

private sectors and relevant NGOs. Among organizations visited include the centre for development and advance computing runs the India development gateway (InDG), an initiative supported by the government of India focuses on reading the unreached rural communities with six sectors for Rural Development namely agriculture, health, primary education, social welfare, rural energy and e-governance. InDG catalyses the use of information, communication technology for collaboration and knowledge sharing among stakeholder representations from government, NGOs and private sector.

An innovative project was launched in India's drought prone state Rajasthan, called "Jal Chitra" (The Water Picture) is being used by the villagers to identify water resources in the desert.

Craftswomen use ICT to sell handicrafts today women is relying extensively on the internet to perform their business activities. They are using the net to negotiate fair prices for their products without an intermediary.

Initiative programmes for sustainable development

Sristi, the society for research and initiatives for sustainable technologies and institutions, is facilitating the use of ICT for strengthening the capacity of grassroots inventors, innovations and entrepreneurs engaged in conserving bio-diversity and developing eco-friendly solutions to local problems. Honey Bee , Gian etc are motivating the spirit of innovations, encouraging experimentation at grass roots of knowledge rich economically poor people by converting the innovators in to products.

Samuha is setting up a pilot project to use ICTs and GIS technology for a networked HIV/AIDS intervention and awareness program in devadurga Taluka of Koppal district in North Karnataka. Cash (community access to sustainable health) is a media lab Asia project for investigating how I.T can be used to improve rural healthcare in an economically sustainable manner.

The Infodev sponsored project trained low income women with several handicaps like limiting language and communication skills for ICT enabled sector. Under this project small batches of selected trainees were given intensive hands on computer training based on real life experiences using MS Office 2000. Tel nek , a telenetworking project by Suvidya and Anchorage based in Bangalore, aims to empower rural and semirural women in the age group 18-35 years of Ramanagram Taluk, Bangalore district.

The Grassco project is aimed at bringing threefold connectivity – Phones, Internet and transport. Under the Grassco scheme over 5,000 young men on bicycles will carry mobiles phone equipped with CDMA wireless local loop in to 5000 West Bengal villages.

The Indian Railways is also employing innovative facilities by the use of technology. The Railways use a facility called Online Transaction Processing (OLTP) whereby the seats in various trains can be easily reserved by the customer in real time. This reduced to considerable level the allocated quota and corruption that prevailed in the Railways at one time. Railway passenger whether rich or poor, connected or non connected can easily get a berth for his journey. The Karnataka Government is planning to set up computerized Raita Mitra Kendras (Farmers Outreach Center) at all 35 hobli-s, or mandala-s, of Belgaum district in North Karnataka. The Raita Mitra Kendra will to act as an interface between public and private sector technologies. It will also provide information on crop production, on market prices of agri-products, and on soil conditions. It will facilitate provision of fertilizers and pesticides to the famers at subsidized rates.

In India the farmers in the state of Punjab are selling their produce through online auctioning at farmerbazaar.com. Here the farmer is informed of the best price throughout the country before clinching a deal, thus the middlemen who used to make a lot of money has given way to farmers getting the profits. The Warna Wired Village Project in Maharashtra, India is another such project. This project serves the information needs of the farmers for different crop cultivation practices of major crops, sugarcane cultivation practices, pest and disease control, marketing information, dairy and sugarcane processing information upto the village level. Amul in Anand District of Gujarat is another success story. Dhan Foundation is experimenting with ICTs for use in its Microcredit activities. Another micro finance company, SKS is using 'smart cards' as part of its work. They are currently expanding their micro-finance and micro-enterprise program to reduce poverty by reaching out to 25,000 poor families in 1,000 villages of rural Medak District of AP, where they have 4 branches. Online Marketing and CAD of Artisanal Goods by AsCent, a Bangalore-based NGO, is working with several state agencies to implement Computer Aided Design (CAD) systems in sections of northern Karnataka, to enhance the artisanal production of 'Kolhapuri' style of chappals. The India Agriline Project, by the EID Parry enterprise of the Murugappa group, is aimed at enhancing e-Commerce in the agricultural sector. As part of this project, it has built an agriportal, www.indiagriline.com. Karshaka Pragati is a project launched by CoOptions Technologies in rural Andhra Pradesh. It is aimed at providing convenient banking, trade and agricultural services to farmers, including village banking and trade, procurement of production and investment credit, information on fertilizers, pesticides, and other agri-products market prices. TAFE Ltd. has launched its portal ww.jfarmindia.com in order to make J-Farm's agri-information available to farmers across several states in their regional languages. The portal will also provide information on research and field tests of crops conducted on the J-Farm premises by various universities. The website has bilingual browsing facilities in English and in Tamil. Karnataka Microfinance Project The project helps a NGO to track farmer loans across 124 centres spread over 110 villages. Tribal Monsoon is a project aimed at preserving the creative cultural heritage by connecting

artisan communities from the Indian Subcontinent with arts/crafts enthusiasts worldwide. The website tribalmonsoon.com connects global demand for eastern decorative arts to the supply of cottage industries of South Asia and beyond. e-Choupal, the unique web based initiative of ITC's International Business Division, offers the Farmers of India all the information, products and services they need to enhance farm productivity, improve farm-gate price realization and cut transaction costs.

Conclusion

Today Urban and semi urban areas are blessed with different modes of media which has virtually changed their lifestyle. In the rural arena, various successful e-governance initiatives, the improvement of it infrastructure and many ICT projects for development are giving hope to abolish the digital divide in India. We can only say that it is just the beginning; we have to walk miles to reach our goal. But, we have to continuously monitor the requirements to sustain various initiatives and projects. To eradicate the digital divide between the rich and poor, we require adequate financial support , support of the government, industry, community participation, encouraging private partnerships, massive campaign on e-governance involving rural people. Many technologies are developed for the literate class but we need to build technologies for the masses.

Rural information systems have traditionally focused on supplying information to the Rural poor and supplying information about rural areas to policy makers, but it is now recognized that past systems have been largely ineffective in addressing the needs of the rural poor. The extension of agricultural information in particular is evolving beyond merely transmitting messages (although this is still important). It is becoming more open, more participatory and more demand driven, involving interactivity, negotiation and two-way information exchanges. There is a new emphasis on the acquisition of information and enabling the rural poor to request information specific to their particular livelihood needs. Communication specialists increasingly recognize the enormous potential of ICTs to support and enhance these changes.

References:

1. Agawam, Bind C. (1981). SITE Social Evaluation : Research Experiences, and Implications : Space Application Centre,Ahmedabad
2. Agrawal , Binod (2006) c. Communication Technologies and Rural Development in India : Promises and Performances. Indian Media Studies Journal . Vol 1.july-dec. www.satishserial.com/issn0972-9348/finaljournal01.pdf

3. Bagga K.R, Keniston Kenneth & Mathur Raj (2005), The State , IT and Development.
4. Bhoomi computerizing land records from http://www.revdept-01.kar.nic.in/bhoomi/home.html)
5. Bhoomi computerizing land records from http://www.revdept-01.kar.nic.in/bhoomi/faq.html
6. Bist, Singh Rajinder.(2007). ICT enabled Development and Digital Divide:- An Indian Perspective. shodhganga.inflibnet.ac.in/dxml/handle/1944/1455
7. Community radio- Wikipedia .www. communityradio.in
8. Department of telecommunication , The Government of India , New Delhi.
9. Gupta , S.D .(2006) . How IT is changing Rural India . Rediff. Com news .
10. Gyandoot: The purveyor of knowledge . http://gyandoot.nic.in
11. ICT in Agriculture . www.e-krishinaip.in
12. Karnik , Kiran , Jagdish Nazareth & Arup .(1995). The Information Pagdandi ,summary of a proposal for Agricultural Information and Communication under the National Agricultural Technology Project. A World Bank NATP- AIC Report .
13. Kumar , Rajendra(2005) . Bridging the Rural Digital Divide . The Hindu , April 12.
14. The National Bureau of Asian Research (2008). Leveraging Information and Communication Technologies for Sustainable Development in Rural India : A Case study on India's Rural Technology and Business Incubator (RTBI) .
15. MS Swaminathan Research Foundation. http://www.mssrf.org
16. Neurath ,Paul (1960) Radio Farm Forum in India , Delhi, Government of India Of Press.www. jstor.org/stable/1151978
17. Rama Rao,T.P, ICT and E-Governance for Rural Development. www.iimahd.ernet.in/.../ict-and-egovernance-for-rural-development
18. Sharma , Chetan : ICT initiatives in India. www.datamationindia.com/gk_ictinitiatives.php
19. Shukla ,Snehalata & kuldip kumar (1977). Satellite instructional Television experiment – impact of SITE on primary school children . Bangalore Indian Space Research Organization. <http://undp.org.in/news/press2004PRESS277. HTM> 10.10.05
20. Sustainable access in Rural India . http://www.tenet.res.in/rural/sari html