

Digital GMS

The Digital GMS Conference addressed the issue of the Greater Mekong Subregion (GMS) nations lacking essential information and communication technology and its applications to economic and social development and various factors that continue to foster such digital divide. It tried to compare the scenario of the industrialized countries, where technological advances have vastly improved the quality, reliability and versatility of ICT and its applications for development, with the developing nations that are still struggling to take the ICT to the masses.

The conference covered the following sub-themes:

- Remote sensing and GIS applications for sustainable development
- Wireless and mobile technology
- Internet and information technology for GMS business
- Distributed learning and education

Its main objective was to disseminate the latest developments in Information and Communication technology, and its applications to economic and social development as they relate to the development of the GMS. The participants were from academics, industry, government agencies, international organizations and NGOs.

The conference was being organized by GMSARN with support from the ASEAN Foundation through the project Comprehensive Capacity Building for Sustainable Development in the Greater Mekong Subregion (JFA-ASEAN-GMS). GMSARN is an initiative geared towards building self-reliance among GMS countries by developing a strong service-oriented science and technology present in the region. GMSARN is composed of nine academic institutions: the Asian Institute of Technology (GMSARN directorate office), Hanoi University of Technology, HCM City University of Technology, Institute of Technology of Cambodia, Khon Kaen

University, Kunming University of Science and Technology, National University of Laos, Thammasat University, and Yangon Technological University.

Since its establishment in 2001, GMSARN has organized human resource development activities in the form of workshops and seminars addressing its priority concerns in the GMS. The Regional Conference on Digital GMS was one in its series of activities and was organized to help ensure that the benefits of information and communication technology are made available to all people in the region in support of their sustainable development.

The inaugural speech was given by Prof. Jean-Louis Armand, President, Asian Institute of Technology, Thailand.

Keynote Sessions

On the opening day the keynote speeches addressed the following issues:

- ICT for Poverty Reduction by Dr. Thaweesak Koanantakool, Director, NECTEC, Thailand summarized some of the work programs in Thailand that use ICT for two main purposes: i) to raise the standards of living of people and ii) to ensure the rights of information access through the use of ICT. The projects covered were: SchoolNET Thailand, Agricultural Information Network, Community access telecentres, Data warehouse project for community products, and the development of rural telephone services.
- ICT Development Trends and Needs for Its Further Growth in GMS by Mr. Siva Thampi, Director, Information and Communication and Space Technology Division, UN-ESCAP was an effort to highlight the study undertaken by UNESCAP with the objectives to enhance IT awareness among the business community and related organizations, develop human resources for



advanced IT management and build capacity of stakeholders for private sector development. The participating countries in the study were Cambodia, Lao PDR, Myanmar, Thailand and Vietnam.

- Participatory GIS for Sustainable Development in DAN (Digital Asia Network) by Prof. Hiromichi Fukui, Chair Professor, Geo-Informatics Program, Graduate School of Media and Governance, Keio University, Japan discussed the initiatives Digital Asia Network, that provides people and community with easy access to geo-spatial information and share the GIS and RS data among all the countries of Asia by using Web-based GIS. Participatory GIS was one of the attempts to utilize Digital Earth (DE) and GIS technology in the context of needs and capabilities of local communities.
- The last speech in the keynote session was Advanced Internet Technology for the Educational Infrastructure by Dr. Keiko Okawa, Director, School of Internet, WIDE Project, Japan.

On the closing day, the keynote speeches were as follows:

- ASEAN Foundation Projects on ICT and Reduction of the digital divide in the Region by Dr. Ruben C. Umaly, Executive Director, ASEAN Foundation spoke about various projects related to ICT like “Strengthening ICT in Schools and School Net Project in ASEAN Setting”, “the ASEAN ICT 4D Collaboratory” that are being supported by ASEAN Foundation and aims to reduce the gaps in the accessibility of ICT facilities and their applications within certain sectors of a country and among member countries of ASEAN.
- E-Commerce and the Greater Mekong Subregion: Opportunities, Ob-

stacles and Implications for Development by Mr. Will Keenan, UNCTAD Chief Technical Advisor, Pakistan Trade and Transport Facilitation Project. The presentation considered e-commerce initiatives within and around the GMS, identifying some of the constraints and discussed the alternatives for public and business sector actions to encourage the expansion of e-commerce.

- Another speech the closing keynote session was GIS application for Sustainable Development by Mr. Wu Guaoxing, Chair, Space and Technology Section, Information, Communications and Space Technology Division, UN-ESCAP.

Special Meeting Digital Asia Network

The opening session was on Digital Asia and Open GIS Technology. In this session 4 presentations were made on:

- Introduction of Digital Asia
- Introduction of DAN, Digital Asia, its technical aspects – Interoperability in DA: Standards, Issues and Solutions
- The summary of OGC
- Open Source Software Solutions and its Potential for Spatial Data Infrastructure Development

The first session was on Technology for Digital Asia that included the following papers

- Forest Monitoring Prototype System Using Web Mapping Technology.

- Implementing Spatially Enabled Bibliographic Database using Open Source Software.
- Sharing Spatial Data through Information Integrated Management System (IIMS).

The second session focused on Database for Digital Asia that included presentations on:

- GIS-Based Species Suitability mapping
- AVHRR 10-day Mosaic Composite Image for the Asian Region.
- A GIS database for Environmental planning and management in the Hai Phong/Ha Long Coastal area (Vietnam).
- Digital atlas for the Greater Mekong Sub region.

Third session focused on potential application

- An E-Mail Robot for Collecting Data and Application in Water Resources Inventory System.
- The use of web-based GIS in the Flood and other Disasters Prediction. The simulation Model. Experience of Vietnam in Applying GIS in Disaster Medicine.

The discussion session was chaired by NASDA and it focused on the ways to promote the DAN concept in the GMS region and the future direction. More than 60 participants attended the Digital Asia special session at Digital GMS. Some of the recommendations included:

- Data policy and open data license policies need to be discussed with ESCAP and other institutes.

- Local training and workshops can cooperate with ICIMOD etc. to identify local points of contact.
- Many web mapping software packages were introduced and these prototypes can be looked as a test bed for Digital Asia in the future.
- Digital Asia needs to study and define the applications field in cooperation with international organizations (e.g. ADB, UNEP/ESCAP) to deploy use case.

Finally, DAN expressed appreciation for NASDA/RESTEC/ACRoRS/Digital GMS support for holding the DAN special session meeting.

Dr. Peter Haddawy, a faculty member of AIT's School of Advanced Technologies, chaired the Regional Conference on Digital GMS.

Other Sessions were on Remote sensing and GIS, Distributed learning, IT for GMS Business, Wireless & Mobile. Workshops and tutorials were organized on Distributed Learning, Internet and IT for GMS Business. The Proceedings of the Regional Conference on Digital GMS contains 73 papers and abstracts, representing contributions from 23 countries and international organizations. This conference had more than 160 participants and 75 presentations.

This conference was a good initiative taken by AIT, Thailand to bring the benefits of ICT in the Greater Mekong Subregion (GMS). The latest statistics of the International Telecommunication Union (ITU) indicate that there is a large and widespread digital divide between the GMS countries and other least developed, advanced developing and developed countries of the region, which threatens to marginalize the former in this age of ICT revolution. In order to bridge such a digital divide among the countries of the region and within the GMS community, this conference has been an ideal concerted effort to provide the community with the means to develop a level of ICT appropriate to their development so that they can reap the benefits of the opportunities brought about by new and advanced technologies.

▶ BANGALORE, 3 – 4 MARCH 2003

The Indian development experience

Is Information and Communication Technology the ticket to India's development? Or an impediment to overall growth? Can the enormous growth and prosperity of ICT continue? Or will success vaporize - moving on to China or another country – leaving only hopes for transformation in its wake?

Thirty-five worldwide leaders in academia and business debated these questions, accompanying issues and solutions for three days, March 3-5, at the workshop, "Learning from the Indian Development Experience" in Bangalore. Co-sponsored by the School of Public Policy of George Mason University of Fairfax, Virginia, USA, and the Department of Management Studies, Indian Institute of Science, the workshop sought to determine how Indian ICT has developed, what the consequences – intended and unintended – are, and what implications for the future may be.

The prevailing question throughout the workshop was: "What must happen next to keep India on a trajectory toward development?" Results of the research and workshop discussions will be far-reaching, affecting business strategy, evaluation of social programs, public policy and educational planning.

Discussion Themes of the Workshop

- India's Development in ICT Sector.
- Labor Market implications and Institutional arguments.





- Making a Technopolis and utilizing immigration regulations as competitive advantage.
- ICT & Decoupled Development, India's service economy & role of IT.
- IT clusters, role of FDI & Challenges of Digital Capitalism.
- Export-driven entrepreneurship & knowledge replication.
- Software Industry development & Inimitability of Network Resources.
- Determinants of organizational founding rates & opportunities for competitiveness.
- Organisational Externalities, Perils of export-oriented growth strategy of ICTs & the social economy.
- IP in the Indian Software industry, replicability of software success to biotechnology & bioinformatics.
- ICT: A means to a developed end, e-government.
- IPR approach to protect Indian ICT, IT diffusion.
- Factors of growth of IT sector, Institutional support for investment in new technologies.

Recommendations

Some of the recommendations made during the workshop

- An optimal blend of simple and complex technologies needed.
- India is strong in software but it needs to focus in hardware.
- Need to reconcile the shift in skill sets demanded by IT industry and the response by the country's educational infrastructure.
- Government has a pivotal role to play as an active promoter of ICT and should take up strategic entrepreneurial leadership.
- Bring in sustainable competitive advantage through innovation, self-re-

liance and dispersion.

- Immigration regulation can be used as a business advantage.
- Conscious and well-concerted effort to develop India's ICT is the need of the hour.
- Need to create more IT clusters – to improve productivity, to expediate and direct innovation and to stimulate new venture formation.
- Participative learning, innovation and adaptation critical for creation of knowledge communities and easy access to networks (Capability replication).
- A clear-cut ICT diffusion policy is required.
- ICT needs to be integrated with all sectors of economy.
- ICT needs encouragement of public-private partnerships.

Key Learnings

The theme of India's development in ICT Sector highlighted that there is a need for an optimal blend of simple & complex technologies, India is strong in software, but weak in hardware and India's balanced & independent approach is a critical success factor.

Business Strategies

India's software and services industry has developed quickly with a model that is repeatable by companies and worthy of replication. But India's future success in ICT lies at a crossroad – of maintain-

ing excellent business services for multinational companies or moving up the value chain through innovation and entrepreneurship. In order to sustain growth, innovation in the Indian ICT industry is a must.

Social Programs

Computers – providing long-distance healthcare for rural villages, methods of registering complaints and a means of sharing agricultural information from one village to another – are having an effect on India's rural populations. Information technology is reducing corruption, improving quality of life and proving to be a worthy investment.

Public Policy

According to researchers, government must take the role of active promoter of ICT, and establishing policies conducive to investment, playing the role of incubator.

Education Planning

As educators seek to ensure the necessary talent for sustained growth and development they need to focus on providing students with more than just skills and subject matter. Social capital - the networks, relationships and trust to gain clients, investors and business partners - must be present for companies to move up the value chain and to take leadership roles worldwide.

ICTs for Development

The working group consultation on ICT for development and cross media partnerships had, as its focus, community radio, eGovernance and public private partnerships, access to information. It aimed at bringing various experiences from these areas to a common platform.

Introduction

As part of the United Nations Development Programme's (UNDP) initiative to widen the debate and dialogue on the relevance of Information Communication Technology for grassroots development, a two-day working group consultation was held in Bangalore on 11-12 March 2003 in partnership with the Indian Institute of Management, Bangalore (IIMB).

Partners from diverse sectors, including the Government of India, community-based organisations, the corporate sector and the media participated in the consultation. The working group consultation on ICT for development and cross media partnerships had, as its focus, community radio, e governance and public private partnerships, and access to information, and aimed at bringing various experiences from these areas on to a common platform.

In the context of community radio, the purpose was to allow for experience sharing from the grassroots and arrive at insights about the medium. The workshop also was an occasion to discuss opportunities that have arisen following the recent government guidelines on the community radio and deliberate upon issues critical to making community radio a reality in India.

The consultation also sought to examine the potential of different public private partnerships in IT supported initiatives - tele-medicine in delivering health care, and e-governance in delivering services to citizens within the larger

framework of right to information. Recognizing the significance of public private partnerships as central for improving efficiency and reducing costs of service delivery, the workshop explored possibilities for synergy between the government and the private sector in e-governance.

Looking at the ways in which civil society has engaged with institutions of governance for claiming their right to access information was also an important part of the agenda for the consultation.

Objectives of the Consultation

Broad Objectives

- To showcase ICT for development experiments in the country, with specific focus on community radio, as well as on e-governance and public-private partnerships within the framework of the right to information.
- To bring together a range of voices and interests to explore the possibilities for partnerships in the arena of ICTs for development.
- To explore ways and means to strengthen a pro-poor ICT for development agenda.
- To build partnerships with the media in an effort to establish the centrality of the role of advocacy in popularising ICTs for development

Specific Objectives

- To share experiences from the grassroots
- To consolidate lessons from best/good

practices as well as explore what has not worked.

- To look at the way partnerships have worked in existing best practices.
- To use the platform to build public-private partnerships specifically in the area of e- governance.
- To focus on bottlenecks, challenges and procedural issues.
- To arrive at a set of action points or recommendations
- To respond to the guidelines that the government has issued in respect of community radio.

The key issues about ICTs Flagged at the Consultation

The Hope in ICTs

Considerable faith is being vested in the capacities of ICTs to transform the quality of development through new opportunities - by reaching services to people; enabling participation in decision-making etc. The potential of ICTs for impacting the quality of life of the poor is evident in the inroads that ICT experiments have made. For instance, small farmers have access to agricultural information; information about entitlements is available to the poor through information kiosks; remote diagnosis has made possible long distance advice on crop diseases. Also, scope for use of ICTs towards development is increasing with reducing costs of the technologies and in the potential that free software has for developing countries.



The Need for an Ethical Basis

The ICT domain, as it exists today, predominantly represents interlocking interests that exclude the majority from being producers of information. The paradigm of consumption of information has a bias towards a science and technology regime that is not compatible to sustainable development needs of people in developing countries. The New Information order poses challenges for information equity. The mass media in India, have become the class media eroding spaces for traditional media. This is increasingly silencing less privileged communities who do not have the wherewithal to express themselves.

Unless the notion of ICTs for development recognizes that equity, access and participation are cornerstones, the digital divide will perpetuate. For UNDP, a pro-poor thrust in the ICT for development discourse is vital. This assumes an approach enabling improved access of information to the poor (about services, public information etc.), the enjoyment by the poor of the right to information (legal information, information about entitlements etc), the right of the poor to participate in governance, thus moving beyond the right to information towards a participatory democracy.

Community Radio

The Context

The power of community radio lies in its participatory nature, as both its content and technology are people-oriented. It is an affordable means of communication, where people themselves raise issues and identify their own priorities. The medium has demonstrated a huge potential to fulfill the information and entertainment needs of the community.

A number of NGOs and development organizations have been exploring the power of community radio without any legal framework underlying its use. They have creatively used the infrastructure of All India Radio or narrow-casting to address the unique cultural needs of their project locations. Each project, therefore, has a rich trajectory of experiences.

The Government of India has recently opened access to community radio for communication to well-established educational institutions recognized by the Central or State Governments. These will include universities and institutes of technology/management and residential schools. Examining the opportunities that these guidelines bring in and also placing the scope of community radio as defined by the guidelines vis-à-vis the experiments in the country was seen as an important task for the consultation.

The first day of the consultation was earmarked to deliberate upon the community radio initiatives in India, bringing various experiences to a common platform. The Consultation also discussed in detail, the legal framework with respect to community radio, the issues of content, tech-

nology and sustainability and experiences from within the South Asian region.

Insights from Experiments on Community Radio

The consultation brought together four models being steered by

- Kutch Mahila Vikas Sangathan (KMVS) in Kutch, Rajasthan;
- Deccan Development Society (DDS) in Medak, Andhra Pradesh;
- VOICES, in Boodikote, Karnataka
- Alternatives for India Development (AID) in Daltonganj, Jharkhand.

Presentations from these organizations were made by grass root reporters and workers, focusing on the nuances of their respective approaches. Assessments of the KMVS and AID projects were also presented. Several important insights emerge from the presentations on community radio. These have been highlighted below.

The Appropriateness and Versatility of the Medium

Community Radio is a catalyst for social development and has proven to be the most obvious and sometimes the only choice to respond to the *cultural* and *in-*

formation needs of remote, illiterate and marginalized communities, under-served by mainstream media. It is closest to oral cultures and has a huge potential for communication.

Radio provides support to poor women seeking to reclaim their autonomy vis-à-vis their agriculture and food production in the context of globalisation, loss of sovereignty and pressures to mainstream. It helps their struggle towards autonomous markets, by promoting horizontal communication and allows a legitimate space for discussing issues that mainstream media may not be interested in.

Several NGOs have used community radio as both a communication tool and to extend the reach of their work. The Decan Development Society (DDS) has used radio for discussing its development strategies, ecological practices of people, nutritional superiority of local crops etc.

The UNDP funded Kutch Mahila Vikas Sanghatan (KMVS) experience has highlighted the potential of radio for creating and keeping alive intangible communities in the overall socio-economic context of the erosion of geographic communities. It uses the Kutchi language, which All India Radio does not.

The Drishti Media Collective provided early technical support to the KMVS team. KMVS feels that their radio experience has revitalized debates on culture and identity, through carefully researched and packaged content and has helped foster a sense of 'Kutchi' identity.

Experiments demonstrate People's capabilities

The presentations of the four models by community radio practitioners were a testimony to the technical and managerial capabilities of the poor and the marginalized to use the medium of community radio. With the support of NGOs committed to the cause of an autonomous communication medium for the poor and the marginalized, communities in different parts of the country have used the radio to voice their aspirations, grievances, and demands.

Role of NGOs

Capacity building has been a fundamental agenda for NGOs that have trained communities to use the radio. VOICES,

for instance, has used participatory processes to train women from self-help groups in station management and content production. It has set up a management committee for community mobilization and for assessment of the programmes. The training by NGOs spans not only technical dimensions of programme production but also includes attention to perspective building about gender, art and culture etc. The perspective that informs programme production by women in DDS is heavily influenced by the development priorities that have emerged through their association with DDS. Considerable focus is given to indigenous knowledge about agricultural practices.

Models

The actual modus-operandi of the different initiatives has been varied. KMVS and AID buy time on All India Radio. VOICES and DDS have their own production centre and narrow-cast recorded programmes through tape recorders. The VOICES project in Boodikote has received funding from UNESCO and is in the process of setting up a cable audio network to enable every household to receive programmes, overcoming the limited reach associated with tape-recorders.

The centrality of community participation in the production of content is a crosscutting non-negotiable in each of these initiatives. Also, the experience of the different groups iterates that technology is only a tool and what is central is the larger social process.

Content

The AID experiment and the KMVS experiment, which use AIR as a platform, have successfully used the radio as a medium to address governance issues, focusing on issues such as accountability or lack of responsiveness on the part of the administration. The programme content, in the case of KMVS reflects the aspirations of people associated with the organisation – the field workers, and the villagers.

Namma Dhwani, initiated by VOICES has used community radio to address local information needs about government schemes, sericulture, and has even linked up with the school in the area to enable children to make their own programmes.

A cable connection has been laid between the audio center and the school. Teachers have used the medium to make model lessons. They have partnered with the Resource Centre of MYRADA, an NGO working in the Boodikote area, to build the capacities of women's self-help groups and build a process that focuses on the priorities of women in these groups.

For the UNDP supported KMVS, making the programme content entertaining and reflective of the needs and aspirations of the community has assumed central importance given the extent of their reach. Their explorations in packaging content, charts a course that has seen a shift from a drama to a magazine format. This shift has coincided with an emphasis on moving towards direct community participation through segments like *Lok Math* (people's opinion), *Parda Farsh* (Expose) and *Charcha* (debate). The challenge has been to keep listenership alive in 950 villages in Kutch. Also, the team has been grappling with complex questions in transforming cultural-specific content to suit programming needs.

The KMVS team also feel that newer media can give traditional art and culture a new lease of life, by engaging with traditional forms and creating new more sustainable, hybrid forms of expression and communication. For instance, *Musafari* is one of the key dimensions of their magazine, which resurrects Kutch history, art and culture and tries to reinterpret them in the contemporary context. Spaces have been created within these slots to feature dying art forms such as *Vai* singing. KMVS also believes that their approach has been to constantly ask questions, even of traditional legends, and thus the medium has been a platform to argue with traditions as well as modernity.

Outcomes and Impact

Today, in the case of KMVS, women leaders of *sanghatans*, who are part of the radio experiment feel that they have acquired legitimacy among their counterparts working on other development issues, such as watershed development. Many communities have expressed confidence in being able to run radio stations on their own, having acquired the requisite skills through their involvement in NGO-supported processes.

The radio has been used as a medium to reinforce ethnic identity and promote community cohesion during times of religious tension. During the Gujarat riots, KMVS called upon the people of Kutch through the radio to invoke the values of tolerance and plurality embedded in their Kutchi identity. Community radio has also supported NGOs like AID in their mobilization and conscientisation efforts in extremely tough contexts such as the remote parts of Daltonganj in Jharkhand where access to basic rights and services has been an uphill task for people. The AID project is supported by the National Foundation for India (NFI).

Community radio has brought agendas about women's socio-political rights to the public domain. Various radio experiments across the country have used the medium as a platform to address women's participation in the political process, women's right to education, dowry deaths, violence against women, female foeticide, etc. All initiatives have recognized the need to structure spaces for women's participation. For instance, the Namma Dhvani project is almost completely run by women members of the self-help groups associated with MYRADA's Community Resource Centre.

Research on impact has been useful to KMVS. The relevance and need for such research has also been felt by VOICES who have begun a well planned study based on quantitative and qualitative methods.

What the Assessments Tell us

A review of the AID initiative indicates that the listeners feel a greater sense of identification with the programme differentiate it from All India Radio.

A preliminary review of KMVS indicates that people repose faith in the transformative potential of the radio. Both reviews also testify a wide listenership. Community autonomy in production of programmes and content has meant flexibility to respond appropriately and quickly to community crises. Post-earthquake programming by KMVS has been a platform for exchange of ideas.

Women who have volunteered to be part of community radio initiatives feel the process has empowered them considerably. However, socio-cultural barriers at the

community and household levels affect women's listenership negatively, a fact that was borne out in the evaluation of the AID and KMVS experiences. A challenge for KMVS has been to enhance women's sense of ownership vis-a-vis the programme.

Hybrid Models

Experiments from other parts of the world also suggest that Internet and CD-based resources can make a contribution to community radio initiatives. The cable television network also allows for innovations in technology.

The Legal Framework

While the development philosophy in India has empowered mass media, state control continues to be a critical issue. The demand by communities currently using the radio as an autonomous medium is to be understood as a claim in a participatory democracy to manage, and control their own communication medium. For the voluntary sector, it can serve as a resource towards their development efforts.

The government, for the first time, has opened a window to community radio. Recent guidelines allow application for licenses by education institutions. While this may create spaces for partnerships and collaboration between the development sector and the education institutions, this cannot substitute for a community-owned media, which will recognise the right of the people, specifically the poor, to be producers of information.

The guidelines specify that licenses will be granted to recognized educational institutions. Programme content can address issues of education, health, environment, and rural development, but cannot be used for commercial advertising or for programmes on news or current affairs. The transmitter power should be not more than 50 watts, covering 5 to 10 kms. A public notice in the first week of February invited educational institutions to apply.

Participants at the consultation raised questions regarding the operationalisation of the guidelines, particularly the scope for community participation and the issue of sustainability. Given that the guidelines prohibit advertising, there are questions about how initiatives will raise revenue. Connected to revenues is the

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aspect of sponsorships about which the guidelines are unclear. Whether sponsorships from the Ministry of Environment or from other sources for making programmes on environment, gender, rural development would be allowed was raised as a specific issue. There were also questions about what the spectrum fee would constitute.

Current financial models

In the case of India, the issue of sustainability is linked to the need for a legal framework that will give the current initiatives their legitimacy.

The radio experiments indicate that production of content per se requires low recurrent costs. The initial capital costs in the case of AID has been no more than Rs. 2.5 lakhs. The organization spends annually 5 to 6 lakhs on its staff, which



Radhika Kaul Batra and Surekha Subarwal from UNDP with Umesh Anand from Times of India

Examining E-Governance

The Context

The challenge for many countries today is to develop institutions and practices that are responsive to the needs of ordinary citizens, particularly the poor. E-governance is seen by the UNDP as an important part of this process, given the potential that it has for delivering information and government services. E-governance is being used by governments to strengthen their electoral and legislative systems, improve access to justice and public administration, and develop a greater capacity to deliver basic services to those most in need.

During the last few years, the Central and State governments in India have launched many e-governance initiatives. The gamut of areas that IT seeks to impact include health and education; social services like pension, registration of licenses, granting of certificates; rural services like provision of land records; services in the agricultural sector that include weather forecasts and information on market prices; redressal of public grievances etc. To overcome the constraints posed by lack of finances to implement e-governance initiatives, governments are increasingly partnering with the private sector. Public-private partnerships (PPPs) can increase competition and efficiency in service provision, expand coverage, and reduce delivery costs.

E-governance facilitates open and transparent governance, supporting people's right to know. It is therefore an important tool for citizens' access to information. The

right to information is being accepted as a necessary adjunct to participatory democracy the world over. In India, the right to information movement has resulted in eight states introducing legislation to support this. At the national level, the Parliament recently passed the Right to Information Act.

The consultation sought to locate e-governance and the role of PPPs in delivering services to citizens through IT-supported initiatives within the larger question of access to information. Experiments initiated by the government as well as civil society were discussed.

Tele-medicine and Public-Private Partnerships

The case of Narayana Hrudayalaya was presented to discuss how the potential of tele-medicine can be realised through partnerships.

The presentation emphasized how reaching tertiary health care to remote areas can be made possible by the training of medical doctors in these remote areas in basic diagnostics and by linking these areas with a speciality hospital through the aid of ICTs. This link in the form of on-line connectivity will allow for communication between the health care seekers and specialists, bringing down costs involved in diagnosis and treatment (except in the few instances where speciality hospital based care is required.)

The Narayana Hrudayalaya experience demonstrates the possibilities of tele-medicine in coronary care. Tele-medicine however requires high investment – a high bandwidth connectivity is imperative for enabling the patient at one end to 'see' and interact with the specialist at the other end. The success of Narayana Hrudayalaya is rooted in its partnership with the government health system, as also a tie-up with a cutting edge technological government set-up like the Indian Space Research organization, which provides the connectivity solution for the endeavour.

A shift towards Tele-health

While tele-medicine addresses speciality health care and curative aspects of health, the high investment it calls for raises questions about opportunity costs. Given the pressing need for primary and preventive

comprises 16 reporters, one technical person and one programme coordinator. The weekly slot on AIR costs them Rs.2500, per slot. The models presented at the Consultation are all invariably built on the motivation and energies of community based volunteers, and the sustenance of the programme, depends almost wholly on sustaining this involvement.

While there are models (such as the Lumbini experiment from Nepal based on the cooperative model) that demonstrate financial viability, replication may be difficult and any adaptation will have to account for local specificities. Examples from other parts of the world show that collection of subscriptions and fund raising events can be sources of revenue. The Madan Pokhara initiative in Nepal also has used extremely innovative methods like rice-collection drives for mobilizing finances. The support of donors is also important. The Namma Dhvani project has explored linkages with many institutions to address sustainability. For training and capacity- building the project has been supported by the All India Radio; the local Panchayat has given some space for running the project; the project has obtained techno-managerial support from CECI.

health care, in a country like India, a shift towards tele-health (which focuses on preventive aspects of health rather than curative) seems a more cost-effective approach. The Narayana Hrudayalaya experiment perceives its forays into coronary care, which emphasizes speciality care, as a strategic way to gain access to the rural health care network of the government, and then gradually move towards preventive health care. The initiative started with coronary care since this area of health care is currently unavailable to most people in remote areas within the Primary Health Care system and since the government's acquiescence could therefore be easily bought in. The initiative is moving towards other health care areas and sees a role for itself in areas like paediatrics.

Another aspect of the discussion pertaining to this presentation was about the need to look at health insurance for the poor as crucial to accessing health care, given that mobilizing finances for accessing care is the single-most significant bottleneck in the realm of health care.

E-governance – Government Initiatives

Presentations about the UNDP funded Saukaryam project - in Andhra Pradesh, the West Godavari e-seva project - also in Andhra Pradesh, and Bhoomi – in Karnataka, provided the background to discuss the scope of partnerships in e-governance (primarily between the private sector and the government) and to raise issues impacting development and democracy.

How Partnerships have worked in Saukaryam and E-seva

The Saukaryam and West Godavari models showcase the possibilities to enable the provision of civic services through the aid

of information technology. The Saukaryam initiative sees connectivity as bringing government services closer to citizens. Launched by the Visakhapatnam Municipal Corporation, the project delivers a host of civic services online. The Saukaryam model has seen the deployment of ICTs in a context where the Municipal Corporation of Vishakhapatnam had no resources for computerization.

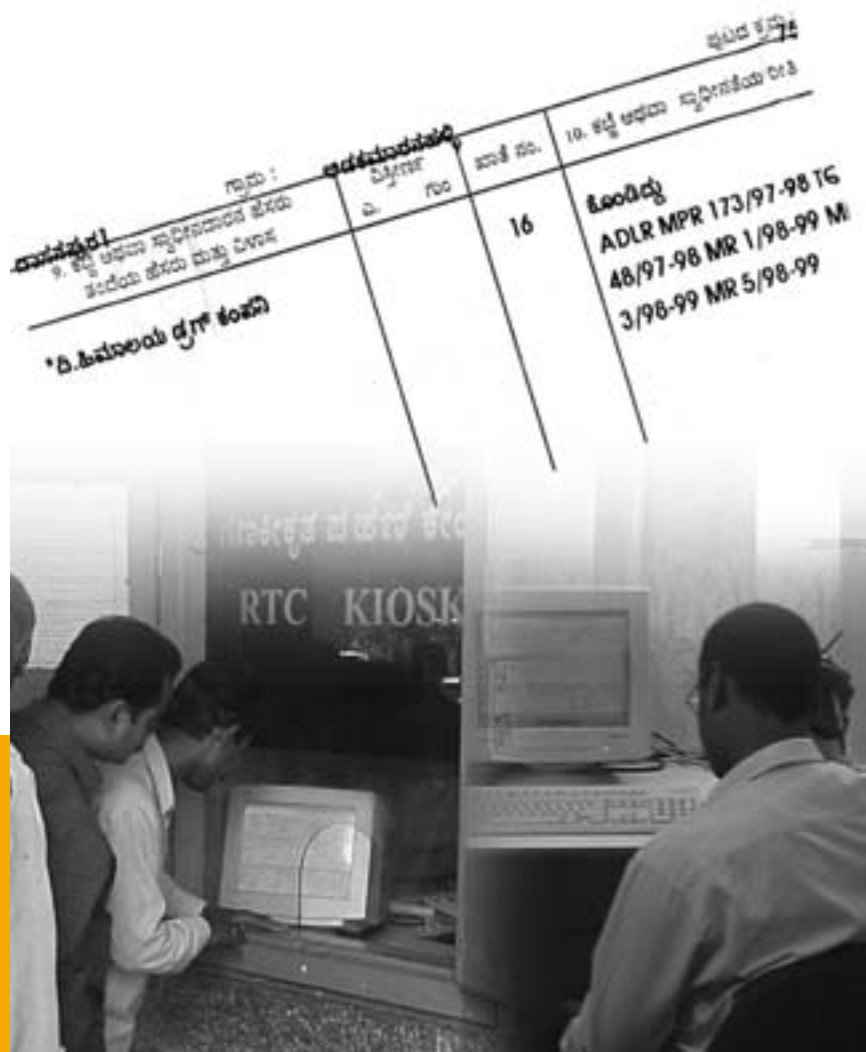
While the data entry and updation was carried out by the corporation staff themselves, the software and programme development was taken up as a joint exercise between the in-house software wing and a private site developer willing to bring in stakes in the project. The networking across the city was done by a private bandwidth supplier (cable operator) in lieu of which the firm was offered rights to run the line for other commercial applications

in the city. Most of the citizen centers were opened in the local bank branches that invested in the provision of necessary hardware. In lieu of this banks were allowed to retain collected funds for a fixed period giving them liquidity advantage.

The involvement of multiple stakeholders enabled the completion of the project in three months without putting any additional burden on the resources of the corporation. Building on the Saukaryam experience, the West Godavari initiative has tapped on unused money under the self-employment schemes of the government, roping in the DRDA, and the SC Corporation.

Bhoomi – Looking for Private Sector Involvement

The Bhoomi project is based on a computerised database allowing farmers to access



The Bhoomi project revolutionized delivery and maintenance of land records.

Photo source: www.revdepi-01.kar.nic.in/Bhoomi



Maurice Dewulf, Senior Deputy Resident Representative, UNDP, addressing the meet

and update land records through kiosks. Legacy data has been captured by the project, covering 200 lakh records in 1 billion data fields. Bhoomi has successfully placed land records in the public domain. Currently there are 177 Bhoomi kiosks covering 27000 villages. Bhoomi sells 7 lakh records every month and earns Rs. 1 crore on these transactions and is an example of a revenue-earning model.

Bhoomi is faced with certain challenges at this juncture. Given the abolition of the manual system, which operated out of 10000 delivery points, farmers now have to travel great distances to obtain a land record. Up-scaling the project has now become a dire necessity but the government does not have the wherewithal to expand the project. Also, expansion brings with it the need to provide adequate support in terms of maintenance and networking.

The Bhoomi project is keen on private sector involvement. The government wants to keep Bhoomi alive and take it to many more delivery points at sub-district levels, by positioning the land records database as a 'killer-application' which will ensure kiosk operators a minimum income of Rs.3000 a month. This advantage, it is hoped will see a convergence of interests of both government and private players in the information kiosk business. The project is already exploring partnerships with the private sector for 'retailing'. The franchisee model is already working in Mandya with the partnership of n-Logue.

E-Governance: Some Insights

- Technology has been innovatively used

in the West Godavari case to bring down costs. The networking solution allows for the e-seva site to synchronise only twice in the day with the district server and work offline for the entire day.

- In the case of Saukaryam, e-seva and Bhoomi, government records have now been placed in the public domain. Bhoomi has also gone a step further and invalidated the manual system, effectively addressing corrupt practices and exploitation.
- Putting out tax related documents in the public domain as in the case of Vishakapatnam, has also meant for the corporation, better collection of tax dues.
- The e-governance initiatives also demonstrate innovative ways in which citizen to citizen interactions can happen.
- The potential for replication is being realised with the cities of Ahmedabad, Delhi, Indore, Guwahati etc. emulating the Vishakapatnam model.
- The partnership approach has made it possible for the Saukaryam model to achieve sustainability. Although the initiative owes its conception and design to a government official, the onus of keeping it going is a shared responsibility; other stakeholders are keen to keep the service going in view of the money they have brought in.
- Models that are financially viable are usually dependent on one core application that will guarantee the information kiosk delivering services, a dependable minimum income. In the case of West

Godavari, where there are 50 kiosks, electricity bill payments provide this core revenue; the electricity department pays the government Re1 per transaction and this amounts to an earning of Rs.3000 per month per kiosk.

- There is a considerable demystification in government circles about e-governance. Many corporations around the country have realised that putting up a website need not be a very costly affair.

Issues concerning E-Governance Can Panchayats be at the Core of E-governance?

The exclusion of the Panchayat system in the design of e-governance is a critical gap in the paradigm. The computerization of Village Panchayats is seen as a Herculean task by the government and lack of funds is also cited as a stumbling block.

Also, both officials who presented the Andhra Pradesh and Karnataka initiatives at the Consultation were of the firm opinion that creating a parallel ICT driven system managed by the private sector / entrepreneur was the only way to bring in reform in governance, since government-owned kiosks would in all likelihood run into trouble, putting the sustainability of the venture to risk. Also, the huge investment warranted by IT initiatives is impossible to make given the various development priorities for governments.

Revenues from E-governance

There are public interest issues arising from government partnerships with the private sector for delivery of e-governance based services. One question is about whether it is ethical for the government to profiteer out of service charges. Implied in this is also the question about how surpluses from running e-governance based services will be ploughed back for benefiting the citizen in general and the poor in particular.

Marketisation of Information

There are inherent paradoxes in getting ICTs to the realm of governance that is illustrated in the Bhoomi example. For instance, if the database of the land records as in the case of Bhoomi is made available to the many government departments that a citizen usually interacts with, then the citizen will only need to submit his/her record number or identification number instead of paying for and availing a new authenticated record each time he/she is required to transact with the government.

However, for the government this would mean lower revenues, posing a problem for the government administration – if revenues come down, how will data updation, maintenance and expansion be undertaken? Today, the absence of outlays in the government for e-governance projects mean that costs are transferred to the citizen in the name of a more efficient and more transparent system.

Civil Society Engagement with Institutions of Governance

The sessions in the Consultation which explored citizen-government partnerships in governance focused on case studies of The Bangalore Agenda Task Force (BATF) and Public Record of Operations and Finance (PROOF), which looked at challenges for civil society in engaging with government institutions.

Bangalore Agenda Task Force

In 1999, the state government of Karnataka appointed a task force to improve the city of Bangalore. The BATF is a private sector partnership with the government, which has resulted in the creation of a platform for citizen-government interactions. Seven stakeholders, including, the head of the city corporation, the police, the Bangalore Development Authority and the water supply department meet the citizens at bi-annual summits, which the BATF calls the accountability platform. At the summits the heads of these organizations declare their plans for the next 6 months and also present their achievements for the previous six months. This mechanism has worked towards enabling government structures to set realistic goals and deliver on time.

In the case of BATF, unlike typical partnerships where private enterprises make money, the focus has been on public good, wherein the government has empowered certain professionals and individuals, to act for larger public good. There is no commerce involved. The primary contribution of the BATF has been in improving the financial accounting and information systems in the Bangalore City Corporation (BCC) through the setting up of a fund-based accounting system, in place of the traditional single entry accounting system. Over the last three years, the BATF has put in place a government enterprise planning system where all transactions go through a revamped accounting system. Based on what is known from the domain of globally recognized good accounting practices, technology has been used to set up this accounting system.

This has created for the government, the basic capability, which it hitherto lacked to make information available in a granular way. For instance, information tracked by the system helps get an idea of money spent on infrastructure and maintenance on a specific road by heads such as asphaltting, garbage removal etc. The system is able to deliver information, and from the BATF-BCC perspective, a solution is now in place for anyone to access information. The city council has now mandated that the fund based accounting system will be officially adopted.

In a traditional model, even if the government was willing to part with data, it's methods of accounting incapacitated it from being able to give it. As a citizen initiative, the BATF has, by setting up a new method of accounting, strengthened the government's (supply side) capacity to engage with citizens who seek information. This capacity to make available information when demanded by citizens becomes a pre-cursor for demand-side participation.

Public Record Of Operations and Finance (PROOF)

PROOF is a citizen (demand-side) effort that has seen the coming together of four organizations – Janagraha, VOICES, Centre for Budget and Policy Studies, and Public Affairs Centre. It is a citizen-end response to the city corporation's information capabilities to engage with citizens and

PROOF seeks to ask the basic question – where is the money of the government going and what value are we getting out of the money being spent?

share information. Given that the plumbing was in place with the efforts of the BATF, there was a need to now open the taps, by getting citizens involved in actively engaging with the corporation.

PROOF is an advocacy campaign that uses the quarterly statement of the corporation as a tool to take information about the financial performance of the corporation to citizens. It seeks to bring multiple stakeholders together in an exercise to track financial statements of the government, develop performance indicators for different expenditures, and create a space for management discussion. It seeks to ask the basic question, where is the money of the government going and what value are we getting out of the money being spent.

The work of PROOF has enabled questions to be raised about the assets owned by the city corporation, the way in which these assets are being used, and also the examination of whether development expenditure, like in education, is giving value for money. For example, if the cost of delivering education is Rs. 17,000 per student per year in a government run school, then what is the quality of education that we should expect and what in effect, is it really?

Two quarterly reviews have taken place in August and December 2002, and the space that PROOF has sought to create for constructive engagement with the government is getting legitimized and information is being provided. Training programmes to equip citizens to develop a comfort level to understand financial documents and raise questions are being



Women kiosk operator. ICT enabling gender equality among rural communities in business operations.

held. Five hundred citizens have been trained in English and Kannada and the mayor has agreed to announce the training module developed by PROOF as a programme for elected representatives. PROOF sees itself as having to deal with the enormous challenge of involving people in taking the effort ahead so that it is an effort of not merely the four intermediary organizations, but something that is owned by people. The process of socializing the concept has seen many activities, including a programme on the radio.

Performance indicators are being developed for three priority areas including education. In 7 months, PROOF has held 7 workshops on performance indicators in which the city corporation has been involved. Data has been collected on 42 indicators from all schools in Bangalore and this has helped identify the weakest schools. The initiative has brought in Akshara Foundation that has expertise in the field of education, to take its performance indicators work to forward. Akshara, backed by an MOU with the corporation, will design and implement interventions for 7 schools. In the area of health, PROOF is in the data collection phase.

PROOF is currently supporting poor communities to document the information needs of the poor. An important part of their work is the 'PROOF of the poor' component. In an interesting exercise, PROOF demonstrated how the contribution of the poor to the government in the form of sales tax, cesses etc. is Rs. 50 to Rs. 70 crores, whereas the

state spends only Rs.40 crores through subsidies on the poor.

Key Learnings from Citizen Efforts to Engage with Governance

- For PROOF, the key challenge has been in enhancing the involvement of citizens and getting people in the city of Bangalore to own the campaign. A community communications approach is being used to involve citizens and to encourage them to own the idea. The campaign is being taken to student groups, and CBOs in slum areas of Bangalore. There is also a weekly radio programme made by citizens called PROOF Puttanna that is part of the communications strategy of PROOF.
- The people associated with the campaign are now feeling that the process of engaging with the government and demanding accountability is throwing up challenges. Raising questions about transparency has not been easy for PROOF. This has meant taking on the senior officials in the government and the need, apart from collaborative engagement for a more critical approach.
- CBOs have had fundamental difficulties supporting the Campaign. They feel that their involvement in demanding services like sanitation might actually dilute their larger struggle for land rights. However, they are willing to support PROOF

on the need for transparency and feel equally strongly about citizen participation in decision-making.

Civil Society Struggles for Access to Information

The discussion about the right of the poorest to information pertinent to their struggles was pegged around the experiences of Mazdoor Kisan Shakti Sanghatan (MKSS) in rural Rajasthan and of Parivartan working with the urban poor in Delhi.

The Struggle for Access to Information

The right to information is seen by the MKSS, Rajasthan, as integral to their livelihood struggles and demand for minimum wages. MKSS has used public hearings as a key tool, for demanding transparency and accountability. The approach has been rooted in the philosophy of people's participation. Among the various outcomes of the right to information movement, as the struggles have come to be known, has been the enactment of the legislation on right to information, passed now in eight states and the Centre. The movement has brought out the contradictions used by the system as excuses for not bringing about change. Also, by bringing the notion of transparency centre-stage, the movement has forced a debate on transparency in the NGO sector.

Public hearings in rural and urban areas have now moved into a social audit mode. The movement has seen legitimacy being accorded to ward sabhas in rural areas to question decisions of the Panchayat. Public Hearings in urban areas have had a different politic. The experience of Parivartan suggests that in a city like Delhi, there are many more disruptions since everyone is affiliated to a political party; in the case of rural areas, the village pancha-

yat is directly responsible for its various works but in cities the corporation gives out contracts; there is no mechanism of a ward or gram sabha for face to face democracy in an urban area; and the sense of community in a city is very different. There are challenges in getting people to come and testify. However, citizens are now getting together and forming mohalla samitis (resident associations) for social audits.

The struggles of people are faced with some questions: How does one enforce accountability? How can power be put into people's hands so that action on fraud is taken? How does one work out the institutional procedures for a social audit? How do you build in safeguards to move beyond majoritarianism so that the poorest are heard and so that participation and democracy are rooted in ethics?

Insights from People's Struggle for Access to Information

- The Right to Information Movement iterates the need to develop the right perspective about technology: technology can help managerial issues but given that the fundamental question is political, technology can only support the larger political process. It can sometimes generate political questions by offering opportunities.
- The Right to Information Movement began with Panchayats but has moved on to address questions of policy. Through this process, people have asked questions about rations, land use, right to food, PDS and food exports, connecting their demands with governance at a larger level.
- The Legislation has been a big success for the Movement, and has given them a sense of hope. However, it is not enough.
- The Movement has also shown that by asking questions, the poor are creating the space for transfer of power and a share in governance.

Some insights on Civil Society and Access to Information

The consultation underscored the following:

- The centrality of a legal framework for community radio and for civil society access to public information.

- The key role played by civil society in demanding access to information – either through an active engagement with institutions of governance, or through political processes that demand accountability from these institutions.
- The importance of recognizing that ICTs can only facilitate and enable individuals and groups to access information
- The significant role of the media in using the Right to Information Act and in representing development issues towards enabling experience sharing. This will support replication and up-scaling of efforts so that the wheel is not reinvented and resources can be optimally used.

Recommendations and Action Points emerging from the Consultation

The Consultation provided an opportunity for the group to seek clarifications from the Deputy Secretary, Information and Broadcasting Ministry. Several ambiguities in the guidelines were highlighted by the group: the spectrum fees payable and the duration of its validity are not specified; mechanism for overseeing content is not elucidated; whether sponsorship programmes may be allowed is not clear, back-up of content required to be kept is for too long a time period, whether extension centres of universities will constitute campus premises has not been addressed. The Deputy Secretary from the Information and Broadcasting Ministry agreed at the Consultation to consider recommendations from organizations and individuals favouring licenses for community radio if a note outlining the key issues is sent to him. The group conveyed the urgency for setting aside fears about misuse of the medium and appealed for a legal framework that will support NGO and CBO efforts to use community radio. Many action points emerged during the course of the two days. It was felt that:

- There is a need to move beyond a best practices oriented approach to studying initiatives so that the not so good practices are also documented. This will enable the institutionalization of access to practices.
- A handbook on Community Radio will

be a useful resource.

- There is a need for the groups demanding such a legislation to think about the regulations that will be needed, so that retrograde social forces that may have a capacity to reach out to people under the guise of being voluntary organizations do not hijack the progressive agenda of groups currently working with the radio.
- There is a need for partnerships between ground-level initiatives to formulate criteria and submit applications for licences.
- Alliances that will enable the coming together of initiatives working on right to information and the right to communicate are important at this juncture.
- A website on Community Radio for sharing and learning from experiences will be a useful resource.
- The media need to play an important role in studying and critiquing existing models and initiatives in the ICT for Development sphere. This will help consolidate the learning from various approaches. There is an important role for the media in also promoting a transfer of learning about citizen initiatives like BATF and PROOF. The media also has to use the Right to Information Act for supporting people's access to information.
- The exercise undertaken by corporations in Brazil to rank their cities on the Human Development Indicators are a good means to make relative performances of cities on critical issues visible. This may be a useful direction for India as well.
- There is scope for synergies between dynamic initiatives at the supply end (like the Saukaryam project) which seek to make services efficient and information transparent and the demand end which work towards creating capacities for better and more citizen-friendly information systems in government.
- Issues pertaining to Free Software (and its relevance in the context of the larger Intellectual Property discourse), GIS and its significance for development planning as well as the role of the media in relation to ICTs for Development could be key themes for subsequent consultations organized by UNDP.