



**“Integrating Modern and Traditional Information and
Communication Technologies for Community Development”**

**An International Seminar addressing the digital divide
in some of the poorest communities of the developing world**

**January 22 – 27, 2001
Kothmale, Sri Lanka**

**Organized by UNESCO, the Ministry of Information and the Media of the
Government of Sri Lanka and the Sri Lanka Broadcasting Corporation
in association with
The Kothmale Internet Project of the Kothmale Community Radio**

Kothmale: an innovative venue for a ground-breaking meeting

Due to the strong interest shown world-wide in Radio Kothmale's use of the Internet with community broadcasting, its pioneering "radio-browsing" programmes and its multimedia community database for development, this event is being held within a development project environment, at a conference facility near the village of Kothmale itself. The experience of Kothmale in extending the reach of the knowledge infrastructure by making use of community radio is an innovative response to the challenges of the digital divide.

In large parts of the developing world, radio is the only communication media to which most people have access. Using the radio as an interface between the community and the Internet helps raise awareness of a hitherto unknown range of information sources, including new ICTs, among those who do not have access to computers and connectivity. The Kothmale experiment demonstrates the effectiveness of involving small community radio stations because community radio is exceptionally well geared towards the promotion of active community participation within small target areas.

The Kothmale "Radio Browsing of the Internet" programme has demonstrated radio's potential for overcoming language barriers to accessing information available on the Internet. Moreover, being a participatory radio programme, "Radio Browsing of the Internet" has taken into account the desires of rural communities to assimilate knowledge collectively, in contrast to the prevailing mode of individual access to the Internet. More importantly, it also enables the community to produce knowledge collectively and to package and disseminate it in an appropriate manner to meet immediate community needs and priorities.

<http://www.kothmale.net>

The Digital Divide

In the era of the knowledge society and the knowledge economy, access to the infrastructure to share information and knowledge is paramount for social and economic development. It is evident that the traditional forms of knowledge acquisition are insufficient to foster an inclusive knowledge society. People and communities in the developing world need access to the mechanisms that provide multiple sources of rapid information – and information exchange - which traditional ways of accumulating and exchanging knowledge cannot deliver. The Internet and associated technologies are pivotal to the new means of knowledge acquisition. However, disparities of access, language barriers, low literacy levels, the cost of the technologies and of connectivity are creating a growing digital divide which hampers vital access to new knowledge resources for many in the developing countries. As a result, the knowledge revolution is actually resulting in relative knowledge poverty for most of the world's population.

Why is there a need to address the digital divide at the community level in the developing world?

Efforts to eradicate poverty through development that is endogenous, bottom-up and community-driven are increasingly hinging on the harnessing of information and communication, now seen by many as the “missing link” in the development process. In other words, information and communication are no longer seen as the prerogative of national governments and international development experts, but as the basic tools of the poor in their own efforts to improve their lives. Participants at the Global Knowledge Partnership Action Summit in Kuala Lumpur in March 2000 argued forcefully that the people of the most marginalised communities in the developing world must become recognised actors in the process of developing knowledge. This echoes the findings of many baseline studies on people's needs: members of the poorest communities often identify the deficit in communication and information as one of their most acute problems.

At the same time as this new paradigm is emerging at community level, global efforts to address the digital divide, notably through the Global Knowledge Partnership (GKP) and the G-8 DOT Force Initiative, are leading to the development of strategies at the international and national levels. It is essential that the bottom-up effort at community level should link to, complement and be reinforced by national policies. This is because the appropriation of knowledge through information and communication is a human development issue and while it needs *support* from the top, it is not a technical or material resource issue that can be *handled* at the top. Information and communication technologies (ICTs) are not a solution or a goal in themselves: they offer the means for communities to identify and implement their own solutions leading to their own goals in the field of human, social, cultural and economic development. It is therefore essential to expand the concept of access from the right to receive information to include the notion of greater access to the means of content production. Governments and development partners can and should be supportive of this process, but the driving force is to be found within communities themselves.

Why is there a need to integrate new and traditional technologies for community development?

The reason for this focus on the integration of technologies is a straightforward one: only when the Internet and other "new" ICTs are combined with "traditional" community radio, can all members of a community – irrespective of languages spoken or level of learning – be fully included in the process of accessing, identifying, producing and exchanging information relevant to their needs. Radio is far from being solely a vehicle for reaching out to audiences with information gathered from the Internet: it is also a vehicle for creating contents, for gathering and shaping information which can then be disseminated through new technologies. The individual user model of access to ICTs in Western consumer societies is clearly inadequate for poor communities in the developing world. Even collective community ownership, management and use of these technologies are costly. Their integration with radio enables this relatively high investment to reap maximum returns by reaching the entire community and not only those who would make individual use of ICTs. This puts a different perspective on the problematic issues of sustainability and public subsidy.

An International Programme for Community Multimedia Centres

The Community Multimedia Centre offers ordinary people a gateway to the global knowledge society. It combines local radio (or television) by local people in local languages with information and communication technology (ICT) applications in a wide range of social, economic and cultural areas. This ensures that the ICTs are genuinely enabling technologies for all members of the community. At its most basic, the centre offers the simplest portable radio station, plus a single computer for Internet browsing, e-mail and basic office, library and learning applications. At its most developed, the centre is a major infrastructure, offering a full range of multimedia facilities, linking up to the local hospital for telemedicine applications, down-loading and printing national newspapers for local circulation and so forth. In countries where broadcasting laws do not yet permit community radio to go on air, initiatives such as Internet radio and cassette radio can provide an alternative. In villages without electricity or telephones, where Internet cannot be accessed directly, solar energy and satellite technology can enable the delivery of multimedia information and distance learning material and can offer low-cost asynchronous data exchange via e-mail. Given the importance of long-term economic sustainability, solar or other forms of renewable energy should be used whenever possible, to reduce recurrent costs.

It is clear from the above that centres can vary greatly, both in scale and in nature, according to local circumstances. However, in all cases, the Community Multimedia Centre pre-supposes that ICTs will be oriented towards collective community use, while also being available for individual access. But in addition, in the interest of sustainability and range of services, a community multimedia centre may offer a combination of public and privately run facilities, with services such as telephone, fax and e-mail possibly offered on a commercial basis alongside not-for-profit access to other facilities. The creation of the infrastructure is only a first step. The key to the

success of these centres is their ability to collect, interpret, produce, exchange and disseminate relevant contents for the development needs of individuals, target groups such as women and young people and for the community as a whole.

UNESCO is proposing to initiate and champion an international programme to promote community empowerment through Community Multimedia Centres, in close cooperation with international partners, national authorities and local communities. This programme will be based on concerted efforts to:

- sponsor pilot projects in representative communities in developing countries
- document and exchange experience of communities world wide
- develop best practices and incorporate them into local, national and regional training and sensitisation activities
- encourage the national "roll-out" of community multimedia centres, networks and programmes, through appropriate policies and regulatory environments.

The components of such a varied and complex programme should be developed progressively according to the needs of the particular communities. However, two essential elements, outlined below, are the integration of community broadcasting (most commonly, radio) in multimedia centres and the systematic involvement of women, minorities and excluded populations at every stage.

The Rationale for Combining Community Radio and Telecentres

Community radio is low-cost, easy to operate, reaches all segments of the community through local languages and can offer information, education, entertainment, as well as a platform for debate and cultural expression. As a grass-roots channel of communication, it maximises the potential for development to be drawn from sharing the information, knowledge and skills already existing within the community. It can therefore act as a catalyst for community and individual empowerment. However, community radio usually operates in a self-contained world within a very limited broadcast radius. To access and exchange information with the rest of the world, links via telephone, Internet, e-mail, fax, satellite, television and newspapers are required.

By itself, a Multipurpose Community Telecentre (MCT) overcomes the technological barriers to communication, access and exchange of information with the rest of the world. Through training schemes and the presence of facilitators, it can offer to a wide range of people, and not only the best educated, the possibility of using its resources individually or in small groups. Moreover, the use made of the MCT by certain members of the community - teachers, health workers, etc - can be of great benefit to whole segments of that community: their students, patients etc. However, an MCT cannot serve a mass public, measured in several thousand individuals in the context of community development programmes. Moreover, it can only overcome the obstacles of illiteracy or lack of knowledge of national or international languages through the introduction of specially designed software. To reach a mass public swiftly, in local languages and through the spoken word, the linkage of the MCT with community radio is essential.

Community radio and MCTs are clearly complementary and can function in parallel in the same community, offering a broad spectrum of distinct services. However, when their traditional and innovative technologies are actively combined, they can offer far greater possibilities for engaging a community in its own development. The possibilities generated by the combination of the two are not confined to quantity or range; the qualitative nature of those possibilities also changes. This is because of the particularly dynamic relationship between communication and information, between contact and content. The combination of a grass-root public platform with access to information highways promotes the public debate and public accountability that are essential for strengthening democracy and good governance. The combination of local radio with a community database developed by local people, building up a store of relevant data for educational, informational and developmental requirements, provides a solid knowledge base for the illiterate and the literate alike. This is a transfer of technology, which encourages rather than diminishes the cultural self-confidence of its users.

The specific “added value” which is offered by the community multimedia centre derives from the unbroken continuum it establishes between different types of information, between people with different levels of learning and between the different levels of contact both within a community and between that community and the rest of the world. The community multimedia centre, as an inclusive, “info-rich” force for development, not only meets identified learning and information needs, but also creates a new demand for learning, information and knowledge.

Gender and Minority Mainstreaming

As ICTs increasingly impact on core social and economic activities, the fact that the poorest and most marginalised, including ethnic and linguistic minorities, are excluded from contributing to and benefiting from them becomes an ever-greater deprivation. Predominant among those currently excluded from the ICT revolution are women. This makes gender mainstreaming an essential component of every community multimedia project.

From the preliminary stages of project discussion and design, through the ensuing stages of implementation and evaluation, a gender perspective has to be built into plans, policy and practice. Community radio can be a remarkably effective gateway for women in disadvantaged communities to approach the new information technologies. The self-confidence and skills gained with low-tech radio offer a bridge for these women to the high-tech of ICTs. It is often the women who experience the greatest communication deficit prior to the introduction of community radio. Their motivation and sense of empowerment are, consequently, particularly high when they learn to use local broadcasting. The participatory approach of community radio (collective ownership, listening groups, etc) provides a supportive framework for women as they go on to tackle the challenges posed by the effective use of ICTs. This participatory approach maximises the literacy and language skills available within the group, needed even more for computer use than for radio. These skills can be pooled to select, translate and disseminate information throughout the entire group, so that even the illiterate women within the group are fully involved in defining information

needs, benefiting from information gathered, interpreting and imparting information to others.

The necessary steps taking women, minorities and other marginalised groups from community radio to the computer screen are likely to include the following:

- literacy classes (including on air)
- radio programmes which demonstrate the practical uses of written material and multimedia material available with ICTs
- the use of women and minority trainers for ICT skills
- the encouragement of women's and minority perspectives and productions (oral history archives, culture and handicrafts, traditional knowledge) in multimedia form
- consultation with and training for women, minorities and other excluded groups which aims to develop their capabilities for evaluating, selecting and making creative use of the service applications in the multimedia centre
- a focus on video, voice-operated and touch screen computer software

The International Seminar

The international seminar is organised into two consecutive parts:

22-25 January: a technical Workshop bringing together project co-ordinators and managers of community telecentres and radios to discuss and develop common strategies,

26-27 January: a Round Table bringing together international, national and local partners to formulate approaches for an international co-operative programme.

Workshop Themes

Workshop participants will present their own project experience, strategies and techniques for the successful integration of new and traditional communication and information technologies for community development. From these presentations, the group as a whole will endeavour to identify common sets of problems and solutions relevant to the different types of community facilities (radio, telecentre, combined radio and telecentre, Internet-radio, networks, etc.) and to identify strategies for expanding the integration of technologies beyond the existing components to the most complete and appropriate range, according to the project context: social, economic, geographical, level of infrastructure etc.

The following set of core themes can be expected to feature in all presentations:

The People

- 1) Priority groups (women and girls, youth, the elderly, etc.): how to target, involve them and meet their needs.
- 2) Resource persons (teachers, traditional leaders, health, social and agricultural workers, students, etc.): how to mobilise them, make best use of their input and meet their needs.

- 3) The whole community (farmers, traders, students, youth, women, unemployed, handicapped, etc.): how to ensure that “community-managed” means managed by *all* the community, not by a replication of existing power structures.
- 4) The staff and volunteers: how to balance remuneration/motivation/sustainability; training needs, etc.

The Structures

- 1) Management and Steering Committees/Boards of Governors: how to achieve full representation of all social groups; how to ensure accountability and good management practices, etc.
- 2) The mission statement, founding charter, statement of aims , etc.
- 3) Relations with the administration: authorisations, licenses, fees and service charges, etc.
- 4) Networks: how to build a network; how to motivate network partners for active exchange, sharing contents and pooling resources, etc.

The Contents

- 1) Training needs for contents production, adaptation, dissemination, etc.
- 2) Partners for contents: resource persons, institutions, NGOs
- 3) Sourcing existing contents
- 4) Offline contents, e.g. audio-visual and CD-ROM based information
- 5) Information packaging and repackaging
- 6) Organizing feedback and follow-up on contents
- 7) Outreach activities linked to contents

The Inputs

- 1) Project development (data, expertise, manuals, consultancy, etc.)
- 2) Infrastructures, equipment and information resources
- 3) Training (trainers, the public, target groups, staff, etc.)
- 4) Funding sources
- 5) Income generation

The Challenges

- 1) Connectivity
- 2) Choosing appropriate technology
- 3) Maintenance and technical expertise
- 4) Sustainability
- 5) National policy and regulatory orientation
- 6) Autonomy and independence

The Partners

- 1) Finding the right partners for the right level and phase of the project (local, national, international, governmental, NGO, etc.)
- 2) Forging local and national “coalitions”
- 3) The community radio/telecentre as a partner in other projects

The Round Table

Following directly on from the workshop sessions, the two-day Round Table will engage the project managers in discussions with international development partners on models of best practice and strategies for identifying priorities in project development and partnerships.

On the basis of these discussions, the Round Table will formulate targets, recommendations and guidelines for the following:

- Ensuring full community access to and appropriation of integrated ICTs across a broad spectrum of models (large-scale, small-scale, with/without connectivity)
- Achieving the greatest possible degree of sustainability within each model
- Making full use of community networks
- Fostering policy, regulatory and network readiness
- Encouraging initiatives to exploit the full potential of non-network delivery systems
- Promoting the inventorying, evaluation and exchange of experience at the national and international levels
- Forging effective co-operation partnerships

*

*

*

The findings of the Kothmale seminar can be expected to provide the impetus for a new international co-operative initiative to empower and network disadvantaged communities through the integrated use of modern and traditional ICTs. This particular focus and approach must be seen within the vast global effort to address the digital divide that is underway. The seminar comes within the framework of the collective efforts of the Global Knowledge Partnership, which is now undertaking the DOT Force consultative process, at the request of the G8. As a contribution to this consultative process, UNESCO will ensure that the seminar report will be widely circulated on the Internet, via the GKP and DOT Force networks and through the participating community radios and telecentres and their respective networks.