

Information Management Resource Kit

Module on Building Electronic Communities and Networks

UNIT 1. ONLINE COMMUNITIES: A NEW OPPORTUNITY

LESSON 4. ELECTRONIC NETWORKING IN COMMUNICATION FOR DEVELOPMENT

NOTE

Please note that this PDF version does not have the interactive features offered through the IMARK courseware such as exercises with feedback, pop-ups, animations etc.

We recommend that you take the lesson using the interactive courseware environment, and use the PDF version for printing the lesson and to use as a reference after you have completed the course.



© FAO, 2006

Objectives

At the end of this lesson, you will be able to:

- distinguish among different approaches to agriculture and rural development;
- understand the main principles of communication for development;
- be aware of the opportunities provided by Internet and computer based technologies to communication for development.



Introduction

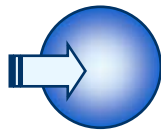


In this lesson you will see how communication technologies, specifically those based on computers and the Internet, are being used in development projects.

First of all, let's define the concept of **development** as a process of change, brought about by social action aimed at improving the quality of life for all members of a community or society.

Agriculture and Rural Development

Since the 1950s different trends and approaches have been applied to reduce poverty in developing countries.



The Diffusion Model

This was one of the most dominant approaches to development. It was based on the assumption that the "goal" of development was for people, their society and their economies to change from traditional to modern economies.



The Participatory Model

By the mid-1970s the diffusion or "trickle-down" model was challenged by development practitioners, including communication specialists. Participatory or 'bottom-up' approaches to development evolved to embrace the complexity of development, and the need for multiple actors to play a role in order for change to be successful and sustainable.

Communication for Development

The diffusion model is very attractive to those hoping to influence public opinion and behaviour, such as government, opposition parties, and advertising agencies and, for that matter, development organizations. However, the hierarchical nature and the top-down orientation of this approach is hard to deny. In general, the dominant top-down model coexists alongside more bottom-up participatory approaches to development.



In your opinion, which of the following aspects are typical of participatory approaches?

- Vertical communication
- Horizontal communication
- Self determination
- Persuasion
- Passive receivers of development
- Active and critical
- Long term / process oriented
- Short term / message delivery

Click on the answers (two or more) of your choice

Communication for Development

The table below summarizes some communication aspects of the hierarchical and participatory approaches.

 HIERARCHICAL MODELS	 PARTICIPATORY APPROACHES
Behavioural causes	Structural causes
Vertical communication	Horizontal communication
Persuasion	Self determination
Individual change	Societal change
Passive receivers of development	Active and critical
Objects of change	Agents of change
Massive diffusion	Dialogue and debate
General assumptions and prescriptive solutions	Specific and diverse negotiated solutions
Short term / message delivery	Long term / process oriented

Adapted from Gumucio (2004)

Communication for Development

Behavioural/individual and structural/social change

Sociologists who have studied peoples' behaviour have two distinct schools of thought regarding peoples' actions. This is a longstanding argument called the 'nature/ nurture' argument. Some thinkers believe that the locus of change lies with the individual and their inherent **behaviour and actions** (nature), others believe that we are greatly influenced by our **culture and environment** (nurture) and respond or act according to the situation in which we find ourselves.

For example, consider why someone steals?

Some would argue that it is because they are a 'bad' person with no sense of morals or responsibility, whilst others would emphasise that it is the environmental factors such as poverty, which lead someone to steal. The first explanation focuses on the behavioural causes of the individual whilst the second suggests that the society or the structural causes which are to blame, a society where some people are rich and others are poor.

Depending on which argument you feel best suits the situation will determine your response to the situation.

This is important for development workers, particularly in communication. If you believe that the problem is centred on the individual then your development intervention will target the individual. You want to see individual change in that person's behaviour at the end of the project. If you believe the problem is caused by society, or is a structural problem, then you will address the structural system which encourages certain actions. At the end of the project, you will want to see evidence of the structural change.

Agriculture and Rural Development

Within the participatory approach, the **role of communication** changes. The mass media in particular is seen as support for programmes and projects rather than as the driving force which could induce development.

The aim is to improve the **interaction** between development agencies and the intended beneficiaries of programmes and projects.



Communication is increasingly used for self and group development where discussions can be held, needs identified and actions taken.

In other words, initiatives are started and controlled by the beneficiaries themselves and this is considered essential for development at community level.

INTERACTION

The media and its content were still in the hands of urban based professionals. However, interactions with the audience and field testing of products were more commonplace.

As a result of increased interaction between the audiences and the experts, new methodologies such as "audience-based research" were developed.

Communication professionals learned that communities were not homogenous but were in fact comprised of diverse people with access to different resources and with very different information needs. They also had different opportunities and/or abilities to communicate their actual needs and preferences.

Communication for Development



Participatory approaches using media such as radio, audio cassettes and video are also used.

A new discipline emerges when participatory approaches are combined with specialized use of media.

Known as **Communication for Development**, this discipline is a participatory approach that uses media such as radio, audio cassettes, and video.

Communication for Development is a term used to indicate a planned communication approach that supports development programmes and projects.

What's in a name?

Communication professionals across the globe use **different terms** to indicate a planned communication approach that supports development programmes and projects.

These approaches have more common features than differences.

Some of the terms used are:

Communication for Development	Social Mobilisation
Development Communication	Participatory Approaches
Communication for Social Change	Social Marketing
Strategic Communication	Change Management

Communication for Development



Communication for development focuses on sustainability of socioeconomic changes. **Communities should be the agents of their own socioeconomic change** and master the communication process.

Emphasis should be given to promoting dialogue and building alliances rather than to persuasion and transfer of information.

Communication for development rejects the linear model of transmission of information from a central sender towards a individual receiver, and promotes a **circular process of interactions** where knowledge is shared and collective action is taken.

OTHER COMMUNICATION FOR DEVELOPMENT PRINCIPLES

- Horizontal and participatory, aims to strengthen community links and amplify the voices of the poorest; based on the notion of the appropriation of the communicational process and the development of local content.
- The participatory process should go beyond individual behaviours and take into consideration social norms, current policies, local culture and tradition, and the general context of development.
- Dialogue and participation are key to strengthen cultural identity, trust, commitment, ownership of ideas and expressions, and community organisation.

Communication for development

Let's consider, for example, the following development project.



Does it adopt the communication for development approach?

Why? (Please specify which principles of communication for development have been applied or not applied.)

Click on the image above to read the example.
Write your answer in the box below.
Then, click on Comment to read the opinion of an expert.

Comment

Using communication technologies

Today, [a variety of organizations](#) work to support and enhance communication for development focused on rural and agricultural development.



These organizations include:

- Communication for Social Change Consortium - <http://www.communicationforsocialchange.org/index.php>
- Communication Initiative - <http://www.comminit.com/index.html>
- Food and Agriculture Organization of the United Nations - http://www.fao.org/sd/kn1_en.htm
- Panos Institute - <http://www.panos.org.uk/index.asp>
- Rockefeller Foundation – www.rockfound.org
- Southbound - <http://www.southbound.com.my/index.htm>
- Technical Centre for Agriculture and Rural Cooperation - <http://www.cta.int/>
- UNESCO - http://www.unesco.org/webworld/com_media/development.html
- UN System Network on Rural Development and Food Security - http://www.rdfs.net/themes/communication_en.htm

Using communication technologies

These agencies attempt to reduce inequality by involving people in their own development, and using "appropriate" communication technologies (those that fit with local communication traditions and cultures, and can be adapted, adopted and appropriated by people working at the grassroots level).

More and more, these agencies are focusing efforts on **using computer and Internet based technologies** ([new ICTs](#)) within the context of communication for development.

New ICTs

The term ICT (Information Communication Technology) is often focused on the **new electronic media** despite the fact that the term encompasses everything from paper and pencil to blackboards and community halls.

However, we will use the term "**new ICTs**" in this lesson to specify we are referring to the computer- and Internet-based technologies.

These **new ICTs** are becoming more accessible and provide faster and better-focused access to information. Electronic mail is the most commonly used new ICT and has revolutionized the way people and organizations interact in terms of time, cost and distance.



Check the interactive lesson for access to [imark ICTs_rural_development.pdf](#)

Using communication technologies

The field of communication for development faces challenges with regard to new ICTs.

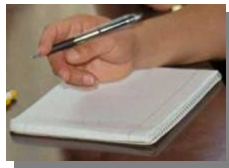
Before engaging in efforts to use these tools, it is necessary to answer the following **key questions**...



- What role will the Internet and other new ICTs play in rural and agricultural development?
- Who will benefit?
- Which sectors need to come together to provide the necessary telecommunication infrastructure and/or power sources to support new ICTs?
- Is there adequate software and hardware, and support, available in each country or region?
- What types of training, planning, and financing are required?

Using communication technologies

In addressing these questions, **key lessons learned** with regard to communication technologies, including new ICTs, in communication for development, provide some answers:



Lessons learned: basic principles of project design

Lessons learned – basic principles of programme/project design

- Local people and their needs should be the driving force behind ICT projects and not the projects, or the technology.
- ICT programme design should reflect an understanding of the different ways in which individuals and groups learn, communicate and use information. Without incorporating this understanding, programmes are likely to fail.
- Collaboration among agencies supporting traditional media and new ICTs can achieve important multiplier effects as agencies harmonize their efforts.
- Identifying and supporting local champions who support information sharing, is key to the success of communication for development efforts.

Using communication technologies



Lessons learned: working with stakeholders

Lessons learned – working with (multiple) stakeholders

- Local organizations and groups capable of acting on rural and agricultural development plans require new skills and knowledge to make informed choices about communication for development approaches and media choices. Capacity building and institutional strengthening for intermediary organizations that serve rural and agricultural development is necessary so that they can make the most appropriate and creative use of traditional media and new ICTs.
- Local organizations and groups require a voice to highlight their so then can negotiate on equal footing with external institutions, also in choices of communication for development approaches and media choices.
- Cultural and social sensitivity to the use of ICT tools for educational and informational purposes are critical. The launching of ICT projects needs to be accompanied by advocacy so that communities are aware of the purposes and people have a clear understanding of their roles, and in particular how they will be part of decision making about objects, applications, content, etc..
- External institutions seeking to enable local organizations and groups to participate in communication for development initiatives need to establish a connection with the local groups to enable a trustful, learning relationship to emerge.

Using communication technologies



Lessons learned: choice of technologies

Lessons learned – choice of technologies

- Choices of communication technologies and methods to employ them can only be determined with the participation of all relevant stakeholders.
- Before selecting a technology it is convenient to make some practical demonstrations, if possible, to let beneficiaries to be familiar with options. Farmers not exposed to a broad diversity of ICTs tend to select only the known technology (or media).
- Simpler technology often produces better results. Telephone access and use can add considerable value to the communication systems of the poor in developing countries.
- Using Internet technologies as a stand-alone communication medium is not usually a cost-effective choice for effective communication for development initiatives.
- Marry the use of new ICTs with existing technologies, especially rural radio.

Using communication technologies

The use of new ICTs in rural and agricultural development provides for several key benefits in relation to traditional media. However, ICT and new ICT projects also come with a range of weaknesses.

Potential strengths and weaknesses are listed below:



KEY STRENGTHS ↑

- a new range of additional media that can be part of the communication for development “mix” of traditional and/or appropriate media;
- where accessible, these new media have features that enable bottom-up articulation and sharing of information on needs and local knowledge;
- can increase efficiency in use of development resources because information is more widely accessible;
- can result in less duplication of activities because information is more widely accessible;
- they tend to reduce communication costs (often dramatically) in comparison to other available communication choices;
- they provide global access to information and human resources; and
- rapid speed of communication - locally, nationally and globally.



Check the interactive lesson for access to [imark_future_trends.doc](#)

Using communication technologies



KEY WEAKNESSES ↓

- can lead to technological dependence;
- capital cost of technologies and the cost of on-going access and support can be high;
- there is an inherent need for capacity building;
- lack of accessible telecommunication infrastructure in many rural and remote areas severely limits available choices of new ICTs;
- many ICT projects are characterized by poor and non-participatory planning;
- funding agencies often de-rail potentially useful projects by a continued desire for “magic bullet” solutions, or projects that showcase technologies and agency icons;
- there is a funding agency orientation to proprietary technological solutions when openly available tools and applications can yield better and cheaper results;
- funding agencies often want to showcase tangible capital projects over less tangible, but more meaningful communication processes;
- ICT projects often do not try to integrate with existing media and local communication methods and traditions; and
- ICT projects often lack involvement of all stakeholders in planning - especially women and youth.



Check the interactive lesson for access to [imark_future_trends.doc](#)

Using communication technologies

Specifically, the **new ICTs have unique features** that provide opportunities different from those provided by traditional ICTs within communication for development.

For example, which of the following features do you think is unique of new ICTs?

- They offer opportunities for two-way communication: every user, from rural communities, intermediaries and development organizations, can potentially be a sender or a receiver.
- They support self and group development allowing beneficiaries themselves to start and control initiatives, instead of being passive recipients of information.

Please select the answer of your choice

Using communication technologies

Moreover, the **new ICTs have the following unique features**. They can:

Support bottom-up expression of development needs and perceptions and facilitate the merging of global and local knowledge and information.

Support, create and strengthen interactive and collaborative networks that enable information to flow to and from rural communities and facilitate dialogue between communities, intermediaries and development organizations. These networks can also foster co-ordination of national and local development efforts. New ICTs can help overcome physical barriers to knowledge and information sharing. ICTs can also enhance the capacity of grassroots organizations for their voices to be heard. This is especially true of ICT projects that are managed by local communities, such as community-owned media and community telecentres.

Support policy and advocacy by meeting the information needs of elected officials, decision-makers, interest groups and grass roots advocacy organizations. They can be activated for social networking and mobilisation, to build up public awareness around development issues and for upward pressure on policy decisions.

Help build consensus through the provision of information on government programmes, policies, decisions and issues to advocates. Many governments are putting such information online. On the other hand, opponents can also seize the same tools for Internet campaigns to support their own agendas. Such online "checks and balances" of political agendas potentially can contribute to political debate and democratic processes.

Enhance partnership with the media. They are particularly relevant for community media that have limited human and financial resources.

Access to telecommunication infrastructure

Many prospective participants in electronic communities and networks for rural and agricultural communities live and work in rural and remote areas.

It is therefore important to examine [rural access to telecommunication services](#) in planning electronic communities and networks.



Globally there is a serious lack of data on rural telecommunication access. In planning electronic communities and networks, it is important to dig beneath available statistics to gain a true understanding of the realities of access to telecommunication services in rural areas.

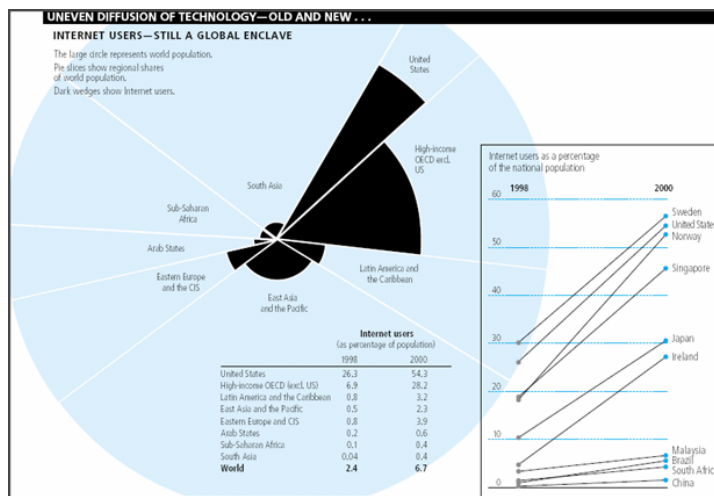
Those realities can seriously impact how you plan your initiatives!

The best way to plan to include rural and remote users in an electronic community or network is **to get in touch with them directly** to understand the telecommunication challenges and costs they will be facing. The resource section of this lesson provides some useful resources for your planning efforts.

Access to telecommunication infrastructure

Internet access gap

The Internet is spreading faster than every previous technology. But there is an immense and persistent **access gap** between rich and poor nations, men and women, urban and rural populations.



Access to telecommunication infrastructure

One way you can assist these prospective users is to get more actively involved in **rural telecommunication policy** advocacy efforts.

Evidence shows that even small efforts to put rural telecommunication policy on the national agenda can have big results. Advocacy efforts to improve telecommunication policy and bridge the digital divide in El Salvador, Guatemala, Trinidad & Tobago, Canada and Australia have yielded impressive results.

There are some [useful tools](#) to assist with these efforts.

Association for Progressive Communication – Capacity Building: Understanding ICT Policy - <http://rights.apc.org/resources.shtml>. It includes:

- **“ICT Policy: A Beginners Handbook”**. According to APC, this book “lays out the issues and dispenses with the jargon to encourage more people to get involved in ICT policy processes. It is for people who feel that ICT policy is important but don’t know much about it, e.g. a government official worried about a gap in her technical knowledge of how the internet works, a human-rights worker concerned that his need to send secure email is being challenged by national government policy, a citizen fed up with paying exorbitant rates for dial-up Internet access and ready to organize”.
- **“ICT Policy for Civil Society” Training Curriculum**. According to APC, the “ICT Policy for Civil Society training course builds the capacity of civil society organizations to understand policy and regulation related to information and communication technologies (ICT) so that they can begin to engage and influence policy processes affecting ICT adoption and implementation at national, regional and global levels.”
- **Guide to Organizing a National Consultation on ICT Policy**. According to APC, this guide “provides some useful answers to a civil society organization that has the interest and initiative to organize an ICT policy-related consultation.”

Multi-stakeholder planning

Developing electronic communities and networks often involves gaining institutional or organizational support.

The individuals involved within an organization must see **direct benefits** in applying their time and resources to a communication for development effort. This is especially true if they are being asked to support time-consuming **multi-stakeholder planning**.



Given the extensive range of networking that new media enable, dialogue with like minded agencies and agencies working to achieve similar goals, can yield many benefits (e.g. shared capital and/or costs, optimized strategies, economies of scale, and improved policies and programmes).

Multi-stakeholder planning



In multi-stakeholder planning, an organization should...

Involve telecommunication service providers, software vendors and equipment vendors

Be oriented toward open and transparent communication

Ensure that participants develop measurement frameworks

Reward the organization's leaders, managers and policymakers for the development outcomes of their projects

Provide support for access to telecommunication services and for software and hardware

Multi-stakeholder planning

Involve telecommunication service providers, software vendors and equipment vendors

Because new ICTs are generally dependent on access to telecommunication services, it is important to attempt to involve telecommunication service providers, software vendors and equipment vendors in multi-stakeholder planning for ICT projects.

Given the challenges of supporting ICT projects in rural areas, any "win-win" collaboration between development agencies and technical service providers that expands rural telecommunication services will yield multiple benefits to rural communities.

Be oriented toward open and transparent communication

Organizations must also be oriented toward open and transparent communication. People need to be able to freely, openly and creatively express and share their personal and professional goals, in ways that allow all stakeholders to learn about one another's goals.

Multi-stakeholder planning also involves internal participants and external stakeholders identifying, refining and ranking goals for improving relationships, partnerships, and networks.

Organizations with experience in multi-stakeholder planning will have an easier time supporting communication for development efforts than those that do not have this experience.

Multi-stakeholder planning

Ensure that participants develop measurement frameworks

Measurement frameworks are critical to the fostering and determining the success of any communication for development effort.

Measurement frameworks must be relevant and meaningful to stakeholders.

To be so, the measurement frameworks must be developed by the participants, and the tracking of measurement indicators must also be done with and by participants.

This will help ensure that participants take responsibility for the evolution of tools and processes that work. Again, organizations with experience in using participatory techniques to develop measurement frameworks will have an easier time supporting communication for development efforts than those that do not have this experience.

Reward the organization's leaders, managers and policymakers for the development outcomes of their projects

It is also important to recognize that organizational incentives to use communication for development approaches are often weak.

Other criteria (e.g. securing funding, rewarding supports) may be more important in determining the success of a manager or a policymaker than the outcomes of a specific communication for development project.

Organizations that tend to reward managers and policymakers for the development outcomes of their projects will be more inclined to support communication for development initiatives.

Multi-stakeholder planning

Provide support for access to telecommunication services and for software and hardware

Finally, organizations may not always provide smooth budgetary and technical support for some of the basic features of communication for development efforts that involve new ICTs.

Support for access to telecommunication services (e.g. monthly phone bills and Internet Service Provider bills), and support for software and hardware is absolutely necessary.

There is a need for budgetary planning awareness and integration of initiatives within budgetary cycles and strategic planning.

Best practices and examples

More important than the role of specific technologies or applications is to consider some **best practices** in the field of ICTs for development.

The following best practices build on lessons learned from the field of communication for development, and are focused on ICTs **for rural and agricultural development**.

Building on existing technical and organizational systems before attempting to create new ones – in other words, how can the efficient use of ICTs lubricate or enhance systems that are already working?

Multi-stakeholder governance in project management and monitoring & evaluation is crucial, because ICT projects are, by nature, multi-stakeholder projects. In other words, if an ICT project is supposed to benefit the rural poor, make sure that the beneficiaries have some stake in project governance.

Participation of the user community in the design and management of the ICT solutions that impact their livelihoods and work processes. In other words, if you are introducing information and communication technologies into an agricultural or rural system, remember that it is not only the technology that needs to communicate: project planners and implementers need to communicate and engage with user communities.

Exploiting the full range of existing media, including both "old" (e.g. rural radio) and new ICTs (e.g. Internet kiosks and personal digital assistants (PDAs)). It is always useful to look at what actually works well, and is financially sustainable, in the developed world context: newspapers, magazines, community meeting halls, coffee shops, and telephones are still the "killer" ICT applications for farm families in developed countries like Canada. There is no reason to expect that rural farm families in Thailand will leap-frog those ICTs for high-tech devices that are in infrequent use elsewhere.

It is also critical to recognize that in the context of ICTs and agriculture, women are twice as likely as men to be involved in agricultural activities and that women have principle roles in small holding subsistence farming, agribusiness, and food processing. This means **involving the full community of ICT users, not just the male half of the community of users**, in developing and implementing ICT projects.

Best practices and examples

Twelve common elements among successful communication for development efforts that involve new ICTs can be suggested, as far as...

Planning and Design

1. Preliminary participatory communication and information needs assessments with intended users
2. Awareness building campaigns designed to sensitize decision makers to the possible uses of ICT services
3. Local "champions" identified and supported
4. Involvement of the full community of users, including women and youth
5. Combination of centralized and decentralized information production, analysis and distribution

Sustainability

1. Executing agency commitment to participatory rural and agricultural development
2. Open participation of user community in design, implementation and management of communication and information services
3. Institutional and user commitment to manage and sustain ICT services
4. Ongoing provision for technical training, user support and outreach within the user community
5. Ongoing provision for technical support and system maintenance/ upgrading
6. User community financial commitment in communication and information systems (e.g. ownership of hardware, user fees, salaries, infrastructure, etc.)
7. Social service orientation of local private sector or not-for-profit (university or NGO) Internet and ICT service providers

The Functional Map below provides a detailed overview of specific project tasks common to communication for development efforts. While not specifically focused on new ICTs, the map provides an excellent orientation to a communication for development approach to planning:



Functional Map for Communication for Development and Social Change (Irigoin, Whitacre, Faulkner and Coe, 2002)

Check the interactive lesson for access to Competencies_Flow_Chart.pdf


Best practices and examples


The following three **rural and agricultural development project examples** illustrate how people are harnessing unique features of ICTs, incorporating communication for development approaches, and using sound planning approaches.


Examples are provided from the NGO sector, the government sector and the private sector. They include one or more electronic communities or networks, although the development of such communities or networks may not be the primary project goal.



 **NGO example: Solomon Islands People First Network**

 **Government example: Virtual Extension & Research Communication Network**

 **Private sector example: e-Choupal**

 **Check the interactive lesson for access to: [imark_NGO_example.pdf](#); [imark_government_example.pdf](#); [imark_private_example.pdf](#)**

Summary

Communication for development is a discipline combining participatory approaches with specialized use of media.

More and more computer and Internet based technologies (also called new ICTs) are used within the context of communication for development.

An ICT or new ICT project can be very challenging because of access and capability barriers. As a consequence, careful analysis and planning are required.

Key lessons learned in this context suggest the adoption of the following best practices:

- building on existing technical and organizational systems;
- multi-stakeholder governance;
- participation of the user community in the design and management of the ICT solutions,
- exploiting the full range of existing media; and
- involving the full community of ICT users, not just the male half of the community of users.

If you want to learn more...

ONLINE RESOURCES

Communication for development resources with a focus on rural and agricultural development (many with a focus on new ICTs) can be found on the Web sites of the following organizations:

Food and Agriculture Organization of the United Nations
http://www.fao.org/sd/kn1_en.htm

Communication for Social Change Consortium
<http://www.communicationforsocialchange.org/>

Communication Initiative
<http://www.comminit.com/>

Panos Institute
<http://www.panos.org.uk/>

Rockefeller Foundation
www.rockfound.org

Southbound
<http://www.southbound.com.my/>

Technical Centre for Agriculture and Rural Cooperation
<http://www.cta.int/>

UNESCO
http://www.unesco.org/webworld/com_media/development.html

UN System Network on Rural Development and Food Security
http://www.rdfs.net/themes/communication_en.htm

If you want to learn more...

ONLINE RESOURCES

World Telecommunication Development Report 2003
Executive Summary (contains an overview of universal access measurement issues, and a global chart of digital access index figures). http://www.jidaw.com/itsolutions/Sum_e.pdf

ITU – ICT Free Statistics Home Page
- Basic Indicators: statistic on far right column is for teledensity by country
<http://www.itu.int/ITU-D/ict/statistics/>

- Internet Indicators: by country, estimates of total number of PCs per 100 inhabitants, estimates of the number of Internet users per 10,000 inhabitants Regional indicators available for Europe, Arab States and Africa http://www.itu.int/ITU-D/ict/statistics/at_glance/Internet04.pdf

ITU Digital Access Index - <http://www.itu.int/ITU-D/ict/dai/>

If you want to learn more...

ONLINE RESOURCES

Chapman, R., Slaymaker, T., and Young, J. 2003. Livelihoods Approaches to Information and Communication in Support of Rural Poverty Elimination and Food Security. Overseas Development Institute, London. http://www.odi.org.uk/RAPID/Publications/Documents/SPISSL_WP_Complete.pdf

FAO – VERCON Pilot Project in Egypt
http://www.fao.org/sd/2003/KN10053_en.htm

Stockholm Challenge – Project Entries
<http://www.stockholmchallenge.se/>

World Resources Institute Digital Dividend. - World Resources Institute
What Works: ITC's e-Choupal and Profitable Rural Transformation – Web-based information and procurement tools for Indian farmers
http://www.digitaldividend.org/pdf/echoupal_case.pdf

International Institute for Communication and Development (IICD)
<http://www.iicd.org/>

The African Information Society Initiative (AISII)
<http://www.uneca.org/aisii/>

Population Media Center (PMC)
<http://www.populationmedia.org/>

References

Anderson, J., Van Crowder, L., et al. 1998. Applying the Lessons of Participatory Communication and Training to Rural Telecentres. In The first mile of connectivity: Advancing telecommunications for rural development through participatory communication. FAO, Rome.
<http://www.fao.org/waicent/faoinfo/sustdev/CDdirect/CDre0037.htm>

Batchelor, S. and Sugden, S. 2003. An Analysis of infoDEV case studies: lessons learned. InfoDEV.
<http://www.sustainableiccts.org/infodev/infodevreport.pdf>

Communication for Social Change Consortium. 1999. Communication for Social Change: A Position Paper and Conference Report. <http://www.communicationforsocialchange.org/pdf/positionpaper.pdf>

Communication for Social Change Consortium website. 2004.
<http://www.communicationforsocialchange.org/roots.php>

FAO, 2000. Folk and traditional media for rural development: A workshop held in Malawi. Rome.
<http://www.fao.org/sd/CDdirect/CDan0029.htm>

FAO, 2004a. Communication for Development website. Rome.
http://www.fao.org/sd/KN1_en.htm

FAO, 2004b. Women and the Green Revolution. Women and Food Security website. Rome.
<http://www.fao.org/FOCUS/E/Women/green-e.htm>

Melkote, S. 1991. Communication for Development in the Third World. Sage, India.

References

Michiels, A. and Van Crowder, L. 2001. Discovering the "Magic Box": Local appropriation of information and communication technologies (ICTs). FAO, Rome.
http://www.fao.org/sd/2001/KN0602a_en.htm

Ramirez R., and Quarry, W. 2004. Communication for Development: A Medium for Intervention in Natural Resource Management. FAO & IDRC.
<ftp://ftp.fao.org/docrep/fao/006/ad661E/ad661E00.pdf>

Ramirez, R. 1999. Communication: a meeting ground for sustainable development. In The first mile of connectivity: Advancing telecommunications for rural development through participatory communication. FAO, Rome. <http://www.fao.org/waicent/faoinfo/sustdev/CDdirect/CDre0037.htm>

Richardson, D. 1997. The Internet and rural and agricultural development: an integrated approach. FAO, Rome. <http://www.fao.org/docrep/W6840E/W6840E00.htm>

Richardson, D. 1999. Rural telecommunication services and stakeholder participation. In The first mile of connectivity: Advancing telecommunications for rural development through participatory communication. FAO, Rome.
http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/x0295e/x0295e00.htm

Rockefeller Foundation. 1997. Communications and Social Change: Forging Strategies for the 21st Century. Report on a Rockefeller Foundation Bellagio Conference, April 21-25, 1997. New York.
<http://www.communicationforsocialchange.org/publications-resources.php?id=109>

World Bank, 1999. "Impact Evaluation Report (No. 19523): World Bank Agricultural Extension Projects in Kenya." World Bank Operations Evaluation Department. Washington.