COMMUNICATION AND SUSTAINABLE DEVELOPMENT

Selected papers from the 9th UN roundtable on communication for development

COMMUNICATION AND SUSTAINABLE DEVELOPMENT

Selected papers from the 9th UN roundtable on communication for development

Research and Extension Division
Natural Resources Management and Environment Department

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Rome, 2007

ISBN 978-92-5-105883-1

Contents

About this book

The 9th UN Roundtable on Communication for Development (ComDev), addressed key issues about the use of communication for sustainable development. This book presents selected keynote papers that were used as background documents for the Roundtable:

The paper ***"Communication and Sustainable Development"***, prepared by *Jan Servaes and Patchanee Malikhao* presents the evolution of the theory and practice of Communication for Development applied to sustainable development.

In the paper ***"The Context of Communication for Development"***, *James Dean* sets the scene on emerging trends and challenges in the field of ComDev towards the implementation of the Millennium Development Goals.

The document ***"Communication for Development in Research, Extension and Education"***, written by *Niels Röling*, provides valuable reflections for applying ComDev to enhance agricultural innovation systems and to support research and extension institutions.

"Facilitating Dialogue, Learning and Participation in Natural Resource Management. Participatory Development", prepared by *Guy Bessette*, explores the key role of participatory communication approaches and methods for sustainable natural resource management.

In her article ***"Communication for Isolated and Marginalized Groups. Blending the Old and the New"***, *Silvia Balit* highlights a way forward in using ComDev to address equity issues providing a series of concrete recommendations for mainstreaming into development initiatives at different levels.

A special thanks goes to the authors of the papers and to Mario Acunzo, Communication for Development Officer at FAO, who supervised the preparation of this publication.

For further information about this publication please contact: ComDev@fao.org

Foreword

Communication for Development is about dialogue, participation and the sharing of knowledge and information among people and institutions. It takes into account the needs and capacities of all concerned in the development process. The importance of Communication for Development in achieving the Millennium Development Goals (MDGs), and especially those related to sustainable development, is being increasingly acknowledged by international agencies, government and NGOs.

The United Nations Inter-Agency Roundtable on Communication for Development is an informal forum convened every two years under the leadership of UNESCO for UN agencies, donors and practitioners to share progress, harmonize approaches and develop partnership arrangements in this field. The 9th UN Roundtable (Rome, September 2004), was hosted and organized by FAO in collaboration with UNESCO, the World Bank, CTA, IDRC, and the Government of Italy and was attended by some 150 participants. The Roundtable focused on *"Communication and Sustainable Development"* and addressed three key inter-related themes that are central to this issue: Communication in Research, Extension and Education; Communication for Natural Resource Management; and Communication for Isolated and Marginalized Groups. The selected papers presented in this publication provided the background to the working sessions of the Roundtable offering views and perspectives that contributed greatly to its results.

The 9th UN Roundtable marked a turning point in the advancement of Communication for Development to meet the challenges of the 21st century, through increased collaboration and networking among the UN agencies and partner institutions. It reaffirmed that Communication for Development is a worthy approach to respond to the needs of people and development institutions promoting knowledge, information and participation in an integrated manner.

We hope that the papers presented in this publication will inspire reflection on applications of communication to key issues related to the MDGs on sustainable development.

Isabel Alvarez
Director
Research and Extension Division

Communication and sustainable development

Jan Servaes & Patchanee Malikhao

INTRODUCTION

All those involved in the analysis and application of communication for development - or what can broadly be termed "development communication" - would probably agree that in essence development communication is the sharing of knowledge aimed at reaching a consensus for action that takes into account the interests, needs and capacities of all concerned. It is thus a social process. Communication media are important tools in achieving this process but their use is not an aim in itself—interpersonal communication too must play a fundamental role.

In this paper we attempt to summarize:

- The contribution of communication to sustainable development
- Definitions of sustainable development from a 'Western' versus 'Eastern' perspective
- Current trends, challenges and priorities
- The current debate on globalization and localization and its consequences for research on communication for sustainable development
- Sustainable development at a community level
- Priority areas for communication organizations and practitioners in relation to sustainable development
- Research and policy challenges facing communication for sustainable development
- The possible impact of Communication for Development on the Millennium Development Goals, especially those set by the World Summit on Sustainable Development (Johannesburg, 2001) and the World Summit on the Information Society (Geneva, 2003).

1. AN OVERVIEW OF THE CONTRIBUTION OF COMMUNICATION TO SUSTAINABLE DEVELOPMENT

The above basic consensus on development communication has been interpreted and applied in different ways throughout the past century. Both at theory and research levels, as well as at the levels of policy and planning-making and implementation, divergent perspectives are on offer.

1.1. Different origins, different perspectives

1. Development communication in the *1958-1986 period* was generally greeted with enthusiasm and optimism: "Communication has been a key element in the West's project of developing the Third World. In the one-and-a-half decades after Lerner's influential 1958 study of communication and development in the Middle East, communication researchers assumed that the introduction of media and certain types of educational, political, and economic information into a social system could transform individuals and societies from traditional to modern. Conceived as having fairly direct and powerful effects on Third World audiences, the media were seen as magic multipliers, able to accelerate and magnify the benefits of development." (Fair, 1989)

Three directions for future research were suggested: (a) to examine the relevance of message content, (b) to conduct more comparative research, and (c) to conduct more policy research.

2. In the *1987-1996 period*, Lerner's modernization model completely disappears. Instead, the most frequently used theoretical framework is participatory development, an optimist post-modern orientation, which is almost the polar opposite of Lerner who viewed mass communication as playing a top-down role in social change. Also vanishing from research in this latter period is the two-step flow model, which was drawn upon by modernization scholars.

3. *Both periods* do make use of theories or approaches such as knowledge gap, indirect influence, uses and gratifications. However, research appearing in the years from 1987-1996 can be characterized as much more theoretically diverse than that published between 1958 and 1986.
In the 1987-1996 study, the most frequent suggestion was "the need to conduct more policy research, including institutional analysis of development agency coordination. This was followed by the need to research and develop indigenous models of communication and development through participatory research" (Fair & Shah, 1997:19). Therefore, today almost nobody would dare to make the optimistic claims of the early years any longer.

However, *the implicit assumptions on which the so-called dominant modernization paradigm is built do still linger on and continue to influence the policy and planning-making discourse of major actors in the field of communication for development, both at theoretical and applied levels*.

1.2. From Modernization, over Dependency, to Multiplicity

1. After the Second World War, the founding of the United Nations stimulated relations among sovereign states, especially the North Atlantic Nations and the developing nations, including the new states emerging out of a colonial past. During the cold war period the superpowers—the United States and the former Soviet Union—tried to expand their own interests to the developing countries. In fact, the USA was defining development and social change as the replica of its own political-economic system and opening the way for the transnational corporations. At the same time, the developing countries saw the 'welfare state' of the North Atlantic Nations as the ultimate goal of development. These nations were attracted by the new technology transfer and the model of a centralized state with careful economic planning and centrally directed development bureaucracies for agriculture, education and health as the most effective strategies to catch up with those industrialized countries.
This mainly economic-oriented view, characterized by endogenism and evolutionism, ultimately resulted in the *modernization and growth* theory. It sees development as an unilinear, evolutionary process and defines the state of underdevelopment in terms of observable quantitative differences between so-called poor and rich countries on the one hand, and traditional and modern societies on the other hand.

2. As a result of the general intellectual 'revolution' that took place in the mid 60s, this Euro- or ethnocentric perspective on development was challenged by Latin American social scientists, and a theory dealing with *dependency and underdevelopment* was born. This dependency approach formed part of a general

structuralist re-orientation in the social sciences. The 'dependistas' were primarily concerned with the effects of dependency in peripheral countries, but implicit in their analysis was the idea that development and underdevelopment must be understood in the context of the world system.

This dependency paradigm played an important role in the movement for a New World Information and Communication Order from the late 1960s to the early 1980s. At that time, the new states in Africa, Asia and the success of socialist and popular movements in Cuba, China, Chile and other countries provided the goals for political, economic and cultural self-determination within the international community of nations. These new nations shared the ideas of being independent from the superpowers and moved to form the Non-Aligned Nations. The Non-Aligned Movement defined development as political struggle.

3. Since the demarcation of the First, Second and Third Worlds have broken down and the cross-over centre-periphery can be found in every region, there is a need for a new concept of development which emphasizes *cultural identity and multidimensionality*. The present-day 'global' world, in general as well as in its distinct regional and national entities, is confronted with multifaceted crises. Apart from the obvious economic and financial crisis, one could also refer to social, ideological, moral, political, ethnic, ecological and security crises. In other words, the previously held dependency perspective has become more difficult to support because of the growing interdependency of regions, nations and communities in our globalized world.

   From the criticism of the two paradigms above, particularly that of the dependency approach, a new viewpoint on development and social change has come to the forefront. The common starting point here is the examination of the changes from 'bottom-up', from the self-development of the local community. The basic assumption is that there are no countries or communities that function completely autonomously and that are completely self-sufficient, nor are there any nations whose development is exclusively determined by external factors. Every society is dependent in one way or another, both in form and in degree. Thus, a framework was sought within which both the Centre and the Periphery could be studied separately and in their mutual relationship, both at global, national and local levels.

More attention is also being paid to the content of development, which implies a more normative approach. Another development questions whether 'developed' countries are in fact developed and whether this genre of progress is sustainable or desirable. It favours a multiplicity of approaches based on the context and the basic, felt needs, and the empowerment of the most oppressed sectors of various societies at divergent levels. A main thesis is that change must be structural and occur at multiple levels in order to achieve these ends.

1.3. Diffusion versus Participatory Communication

1. The above more general typology of the so-called development paradigms (for more details, see Servaes 1999) can also be found at the communication and culture level. The communication media are, in the context of development, generally used to support development initiatives by the dissemination of messages that encourage the public to support development-oriented projects. Although development strategies in developing countries diverge widely, the usual pattern for broadcasting and the press has been predominantly the same: Informing the population about projects, illustrating the advantages of these projects, and recommending that they be supported. A typical example of such a

strategy is situated in the area of family planning, where communication means like posters, pamphlets, radio, and television attempt to persuade the public to accept birth control methods. Similar strategies are used on campaigns regarding health and nutrition, agricultural projects, education, and so on.

This model sees the communication process mainly as a message going from a sender to a receiver. This hierarchic view on communication can be summarized in Lowell's classic formula, -- 'Who says What through Which channel to Whom with What effect?' --, and dates back to (mainly American) research on campaigns and diffusions in the late 40s and 50s.

The American scholar Everett Rogers (1983) is said to be the person who introduced this diffusion theory in the context of development.

Modernization is here conceived as a process of diffusion whereby individuals move from a traditional way of life to a different, more technically developed and more rapidly changing way of life. Building primarily on sociological research in agrarian societies, Rogers stressed the adoption and diffusion processes of cultural innovation. This approach is therefore concerned with the *process of diffusion and adoption of innovations* in a more systematic and planned way. Mass media are important in spreading awareness of new possibilities and practices, but at the stage where decisions are being made about whether to adopt or not to adopt, personal communication is far more likely to be influential. Therefore, the general conclusion of this line of thought is that *mass communication is less likely than personal influence to have a direct effect on social behaviour*.

Newer perspectives on development communication claim that this is a limited view of development communication. They argue that this diffusion model is a vertical or one-way perspective on communication, and that development will accelerate mainly through active involvement in the process of the communication itself. Research has shown that, while groups of the public can obtain information from impersonal sources like radio and television, this information has relatively little effect on behavioural changes. And development envisions precisely such change. Similar research has led to the conclusion that more is learned from interpersonal contacts and from mass communication techniques that are based on them. On the lowest level, before people can discuss and resolve problems, they must be informed of the facts, information that the media provide nationally as well as regionally and locally. At the same time, the public, if the media are sufficiently accessible, can make its information needs known.

Communication theories such as the 'diffusion of innovations', the 'two-step-flow', or the 'extension' approaches are quite congruent with the above modernization theory. The elitist, *vertical or top-down orientation* of the diffusion model is obvious.

2. The *participatory model*, on the other hand, incorporates the concepts in the framework of multiplicity. It stresses the importance of cultural identity of local communities and of *democratisation and participation at all levels*—international, national, local and individual. It points to a strategy, not merely inclusive of, but largely emanating from, the traditional 'receivers'. Paulo Freire (1983:76) refers to this as the right of all people to individually and collectively speak their word: "This is not the privilege of some few men, but the right of every (wo)man. Consequently, no one can say a true word alone—nor can he say it for another, in a prescriptive act which robs others of their words".
   In order to share information, knowledge, trust, commitment, and a right attitude in development projects participation is very important in any decision-making process for development. Therefore, the International Commission for the Study of Communication Problems, chaired by the late Sean MacBride, argued that

> "this calls for a new attitude for overcoming stereotyped thinking and to promote more understanding of diversity and plurality, with full respect for the dignity and equality of peoples living in different conditions and acting in different ways" (MacBride, 1980:254). This model stresses reciprocal collaboration throughout all levels of participation.

Also, these newer approaches argue, the *point of departure must be the community*. It is at the community level that the problems of living conditions are discussed, and interactions with other communities are elicited. The most developed form of participation is self-management. This principle implies the right to participation in the planning and production of media content. However, not everyone wants to or must be involved in its practical implementation. More important is that participation is made possible in the decision-making regarding the subjects treated in the messages and regarding the selection procedures. One of the fundamental hindrances to the decision to adopt the participation strategy is that it threatens existing hierarchies. Nevertheless, participation does not imply that there is no longer a role for development specialists, planners, and institutional leaders. It only means that the viewpoint of the local groups of the public is considered before the resources for development projects are allocated and distributed, and that suggestions for changes in the policy are taken into consideration.

2. DIFFERENT DEFINITIONS OF AND PERSPECTIVES ON SUSTAINABLE DEVELOPMENT

In addition to the above basic distinctions between three historical development perspectives (1.2.) and two models on communication for development (1.3.) different perspectives on sustainable development are on offer. At least two opposing ones are worth mentioning: A 'Western' perspective represented by the Brundtland Commission, and an 'Eastern' Buddhist perspective as presented by the Thai philosopher and monk Phra Dhammapidhok. However, the question needs to be raised whether there is a meeting point?

2.1. A 'Western' perspective: the Brundtland Commission

In 1987, the World Commission on Environment and Development (WCED), also known as the Brundtland Commission, defined sustainable development as "*development which meets the needs of the present without compromising the ability of future generations to meet their own needs*" (Elliott, 1994: 4).

Core issues and necessary conditions for sustainable development as identified by the WCED are:

- Population and development
- Food security
- Species and ecosystems
- Energy
- Industry
- Urban challenge.

Pursuit of this kind of sustainable development requires:

- A political system that secures effective citizen participation in decision-making
- An economic system that provides for solutions for the tensions arising from disharmonious development
- A production system that respects the obligation to preserve the ecological base for development
- A technological system that fosters sustainable patterns of trade and finance

- An administrative system that is flexible and has the capacity for self-correction
- A communication system that gets this organized and accepted by all parties concerned at all levels of society.

2.2. An 'Eastern' perspective: Phra Dhammapidhok

Phra Dhammapidhok (Payutto, 1998), a famous Buddhist monk and philosopher, points out that sustainable development in a Western perspective lacks the human development dimension. He states that the Western ideology emphasizes 'competition'. Therefore the concept of 'compromising' is used in the above WCED definition. Compromising means lessen the needs of all parties. If the other parties do not want to compromise, you have to compromise your own needs and that will lead to frustration. Development will not be sustained if people are not happy.

He consequently reaches the conclusion that the western perception of and road to sustainability, based on Western ethics, leads development into a cul-de-sac.

From a Buddhist perspective, *sustainability concerns ecology, economy and evolvablity*. The concept 'evolvability' means the potential of human beings to develop themselves into less selfish persons. The main core of sustainable development is to encourage and convince human beings to live in harmony with their environment, not to control or destroy it. If humans have been socialized correctly, they will express the correct attitude towards nature and the environment and act accordingly. He argues that:

"A correct relation system of developed mankind is the acceptance of the fact that human-being is part of the existence of nature and relates to its ecology. Human-being should develop itself to have a higher capacity to help his fellows and other species in the natural domain; to live in a harmonious way and lessen exploitations in order to contribute to a happier world." (Payutto, 1998: 189)

This holistic approach of human relates to cultural development in three dimensions:

- Behaviours and lifestyles which do not harm nature
- Minds in line with (Eastern) ethics, stability of mind, motivation etc., to see other creatures as companions
- Wisdom includes knowledge and understanding, attitude, norm and values in order to live in harmony with nature.

2.3. Interdependency for a start?

It may be relevant to emphasize that the above perspective is not 'uniquely' Eastern as it has been promoted in other parts of the world as well. For instance, in the late seventies, the Dag Hammerskjold Foundation in its journal 'Development Dialogue' advocated three foundations for *'another' or sustainable development*: (a) Another Development is geared to the satisfaction of needs, beginning with the eradication of poverty; (b) Another Development is endogenous and self-reliant; and (c) Another Development is in harmony with the physical and cultural ecology.

More recently, the World Commission on Culture and Development, chaired by Javier Pérez de Cuéllar (1995), started from similar assumptions. It argued that development divorced from its human or cultural context is growth without a soul. This means that culture cannot ultimately be reduced to a subsidiary position as a mere promoter of economic growth. The report goes on by arguing that "governments cannot determine a people's culture: indeed, they are partly determined by it" (De Cuéllar, 1995:15).

The basic principle should be "the fostering of respect for all cultures whose values are tolerant of others. Respect goes beyond tolerance and implies a positive attitude

to other people and a rejoicing in their culture. Social peace is necessary for human development: in turn it requires that differences between cultures be regarded not as something alien and unacceptable or hateful, but as experiments in ways of living together that contain valuable lessons and information for all" (De Cuéllar, 1995:25).

More is at stake here than attitudes. It is also a question of power. Policy-makers cannot legislate respect, nor can they coerce people to behave respectfully. But they can enshrine cultural freedom as one of the pillars on which the state is founded. *Cultural freedom* is rather special. It differs from other forms of freedom in a number of ways. First, most freedoms refer to the individual. Cultural freedom, in contrast, is a collective freedom. It is the condition for individual freedom to flourish. Second, cultural freedom, properly interpreted, is a guarantee of freedom as a whole. It protects not only the collectivity but also the rights of every individual within it. Thirdly, cultural freedom, by protecting alternative ways of living, encourages creativity, experimentation and diversity, the very essentials of human development. Finally, freedom is central to culture, and in particular the freedom to decide what we have reason to value, and what lives we have reason to seek. "One of the most basic needs is to be left free to define our own basic needs" (De Cuéllar, 1995:26).

Therefore, in contrast with the more economical and politically oriented approach in traditional perspectives on sustainable development, the central idea in alternative more culturally oriented versions is that there is *no universal development model which leads to sustainability at all levels of society and the world*, that development is an integral, multidimensional, and dialectic process that can differ from society to society, community to community, context to context.

In other words, each society and community must attempt to delineate its own strategy to sustainable development. This implies that the development problem is a relative problem and that no one society can contend that it is 'developed' in every respect. Therefore, we believe that *the scope and degree of interdependency must be studied in relationship with the content of the concept of development*. Where previous perspectives did not succeed in reconciling economic growth with social justice, an attempt should be made to approach problems of freedom and justice from the relationship of tension between the individual and the society, and limits of growth and sustainability are seen as inherent to the interaction between society and its physical and cultural ecology.

The so-called Copenhagen Consensus project is worth mentioning in this context. Though still dominated by economic perspectives and researchers (some of them Nobel prize-winners), the panel of experts evaluated a large number of development recommendations, drawn from assessments by UN-agencies, and identified ten core challenges for the future:

1.Civil conflicts
2. Climate change
3.Communicable diseases
4.Education
5.Financial stability
6.Governance
7.Hunger and malnutrition
8.Migration
9.Trade reform
10.Water and sanitation

The major challenge identified by this panel was the fight against HIV/AIDS. For more details, see a number of reports in The Economist, April-June 2004; or visit www.copenhagenconsensus.com).

3. CURRENT TRENDS, CHALLENGES AND PRIORITIES

To take the above perspectives to a more applied level, we perceive a number of changes in the field of communication for sustainable development, which may have considerable *consequences for communication policy and planning-making.*

3.1. The Growth of a Deeper Understanding of the Nature of Communication Itself

The perspective on communication has changed. As explained above, early models in the 50s and 60s saw the communication process simply as a message going from a sender to a receiver (that is, Laswell's classic S-M-R model). The emphasis was mainly sender- and media-centric; the stress laid on the freedom of the press, the absence of censorship, and so on. Since the 70s, however, communication has become more receiver- and message-centric.

The emphasis now is more on the process of communication (that is, the exchange of meaning) *and on the significance of this process* (that is, the social relationships created by communication and the social institutions and context which result from such relationships).

'Another' communication "favours multiplicity, smallness of scale, locality, de-institutionalisation, interchange of sender-receiver roles (and) horizontality of communication links at all levels of society" (McQuail, 1983:97). As a result, the focus moves from a 'communicator-' to a more 'receiver-centric' orientation, with the resultant *emphasis on meaning sought and ascribed rather than information transmitted*.

3.2. A New Understanding of Communication as a Two-Way Process

With this shift in focus, one is no longer attempting to create a need for the information disseminated, but rather *disseminating information for which there is a need*. The emphasis is on information exchange rather than on the persuasion in the diffusion model.

The 'oligarchic' view of communication implied that freedom of information was a one-way right from a higher to a lower level, from the Centre to the Periphery, from an institution to an individual, from a communication-rich nation to a communication-poor one, and so on. Today, the interactive nature of communication is increasingly recognized. It is seen as fundamentally two-way rather than one-way, interactive and participatory rather than linear.

3.3. A New Understanding of Culture

The cultural perspective has become central to the debate on communication for development. Culture is not only the visible, non-natural environment of a person, but primarily his/her normative context. Consequently, one has moved away from a more traditional mechanistic approach that emphasized economic and materialistic criteria to a more *multiple appreciations of holistic and complex perspectives* (see section 4 as well).

3.4. The Trend towards Participatory Democracy

The end of the colonial era has seen the rise of many independent states and the spread of democratic principles, even if only at the level of lip service. Though often ignored in practice, democracy is honoured in theory. Governments and/or powerful private interests still largely control the world's communication media, but they are more attuned to and aware of the democratic ideals than previously. At the same time, literacy levels have increased, and there has been a remarkable improvement in people's ability to handle and use communication technology. As a consequence, *more*

and more people can use communication media and can no longer be denied access to and participation in communication processes for the lack of communication and technical skills.

3.5. Recognition of the Imbalance in Communication Resources or the Digital Divide

The disparity in communication resources between different parts of the world is increasingly recognized as a cause of concern. As the Centre nations develop their resources, the gap between Centre and Periphery becomes greater. *The plea for a more balanced and equal distribution of communication resources can only be discussed in terms of power at local, national and international levels.* The attempt by local power-elites to totally control the modern communication channels—press, broadcasting, education, and bureaucracy—does no longer ensure control of all the communication networks in a given society. Nor does control of the mass media ensure support for the controlling forces, nor for any mobilization around their objectives, nor for the effective repression of opposition.

Some may argue that thanks to the new ICTs, especially the Internet and www, one has to re-address the debate on the digital divide. However, others remain sceptical and less optimistic.

3.6. The Growing Sense of Globalization and Cultural Hybridity

Perhaps the greatest impetus towards a new formulation of communication freedoms and the need for realistic communication policies and planning have come from the realization that the international flow of communication has become the main carrier of cultural globalization. This cultural hybridity can take place without perceptible dependent relationships (see section 4 as well).

3.7. A New Understanding of What is Happening Within the Boundaries of the Nation-State

One has to accept that "internal" and "external" factors inhibiting development do not exist independently of each other. Thus, in order to understand and develop a proper strategy one must have an understanding of the class relationships of any particular peripheral social formation and the ways in which these structures articulate with the Centre on the one hand, and the producing classes in the Third World on the other. To dismiss Third World ruling classes, for example, as mere puppets whose interests are always mechanically synonymous with those of the Centre is to ignore the realities of a much more complex relationship. The very unevenness and contradictory nature of the capitalist development process necessarily produces *a constantly changing relationship*.

3.8. Recognition of the 'Impact' of Communication Technology

Some communication systems (e.g., audio- and video-taping, copying, radio broadcasting, and especially the internet) have become *cheap* and so simple that the rationale for regulating and controlling them centrally, as well as the ability to do so, is no longer relevant. However, other systems (for instance, satellites, remote sensing, transborder data flows) remain *very expensive*. They are beyond the means of smaller countries and may not be 'suitable' to local environments.

3.9. From an Information Society to Knowledge Societies

Information has been seen as the leading growth sector in society, especially in advanced industrial economies. Its three strands – computing, telecommunications and broadcasting – have evolved historically as three separate sectors, and by means of digitization these sectors are now converging.

Throughout the past decade a gradual shift can be observed away from a technological in favour of more socio-economic and cultural definitions of the Information Society. The term Knowledge Societies (in plural as there are many roads) better coins this shift in emphasis *from ICTs as 'drivers' of change to a perspective where these technologies are regarded as tools which may provide a new potential for combining the information embedded in ICT systems with the creative potential and knowledge embodied in people:* "These technologies do not create the transformations in society by themselves; they are designed and implemented by people in their social, economic, and technological contexts" (Mansell & When, 1998: 12).

True knowledge is more than information. It includes the meaning or interpretation of the information, and a lot of intangibles such as the tacit knowledge of experienced people that is not well articulated but often determines collective organisational competence. Knowledge is the sense that people make of information. Knowledge in society is not objective or static, but is ever changing and infused with the values and realities faced by those who have it.

Meaning is not something that is delivered to people, people create/interpret it themselves. If knowledge is to be effectively employed to help people, it needs to be interpreted and evaluated by those it is designed to help. That requires people to have access to information on the issues that affect their lives, and the capacity to make their own contributions to policy-making processes. Understanding the context in which knowledge moves - factors of control, selection, purpose, power, and capacity - is essential for understanding how societies can become better able to learn, generate and act on knowledge.

3.10. A New Understanding towards Integration of Distinct Means of Communication

Modern mass media and alternate or parallel networks of folk media or interpersonal communication channels are not mutually exclusive by definition. Contrary to the beliefs of diffusion theorists, they are *more effective if appropriately used in an integrated fashion, according to the needs and constraints of the local context*. The modern mass media, having been mechanically transplanted from abroad into Third World societies, enjoy varying and limited rates of penetration. They are seldom truly integrated into institutional structures, as occurs in some Western societies. However, they can be effectively combined, provided a functional division of labour is established between them, and provided the limits of the communication media are recognized.

3.11. The Recognition of Dualistic or Parallel Communication Structures

No longer are governments or rulers able to operate effectively, to control, censor, or to play the role of gatekeeper with regard to all communications networks at all times in a given society. *Both alternate and parallel networks, which may not always be active, often function through political, socio-cultural, religious or class structures or can be based upon secular, cultural, artistic, or folkloric channels.* These networks feature a highly participatory character, high rates of credibility, and a strong organic integration with other institutions deeply rooted in a given society.

4. GLOBALIZATION AND/OR LOCALIZATION: THINKING OUTSIDE OF THE (MEDIA/TELEVISION) BOX

1. Discussions on globalization and localization have challenged old ways of thinking about sustainable development. In Lie and Servaes (2000) we adopted a convergent and integrated approach in studying the complex and intricate *relations between globalization, social change, consumption and identity*. Such an approach would allow problems to converge at key crossings or nodal points. Researchers then are rid of the burden of studying linear processes in totality,

e.g., production and consumption of global products and their relevance from a sustainable perspective, and instead are allowed to focus on the nodal points where processes intersect.

Several such nodal points were identified, including production, regulation, representation, consumption, action and local points of entry into the communications flow. The nodal points approach highlights the richness of globalization as an area of research and policy-making. However it is also important to note that all these dimensions do rest on certain axial principles. They do point out important features of the world cultural industries that converge on several points, and that may severely constrain if not obstruct sustainable development.

This argument was further developed in Lie (2003). In this purported era of global communications, culture remains an important factor (as emphasized in 3.3. and 3.6. above), either facilitating the transnationalization of national or local cultural industries, or impeding further growth of global media. Global media may be largest in terms of coverage. However their size shrinks significantly if measured in terms of viewing and 'impact' rate. In many regions of the world the most important development in the communications industry has not been the further dominance of global media, but the emerging of cultural-linguistic media (mainly television) markets. As the influence of transnational television tends to rest on a quite superficial level of cultures, no global culture or global identity—not in the fullest sense of the words—has been fostered.

2. As Stuart Hall (1997) and his colleagues at the London Open University indicate, it is human nature to want a place to which one feels he or she belongs; however, it is perhaps also human nature to want to reach out to the strange unknown world outside of this *place*. Audiences may prefer home programs, but these are not all they watch. While some national programs are successful because of their distinct cultural characteristics, others may achieve similar success by promoting foreign values. It is the capitalist nature of the industry that made American products available everywhere. But this capitalist character failed to make them accepted everywhere.

It is difficult still to determine if communications has helped to offer a "place," as suggested by Featherstone (1990), where cultures meet and clash, or has in fact enhanced the cultural context in which individuals find the "place" that they feel attached to. Perhaps a closer analysis will show that here again, *communication media serve as a double-edged sword*; and which of the two roles becomes more prominent will be extremely variable, from situation to situation.

The danger here is treating culture and language as another set of powerful, determining factors in communications studies, thus undermining the importance of others. In fact, *no single factor, nor a group of factors, can fully explain what has, is, or will, take place.* Globalization may be inadequate to describe the current process of change, but neither would localization nor regionalisation suffice. As co-production further blurs distinctions between the global and the local, it is important to note that the two are dialectically opposed conceptually, but not necessarily in reality.

3. In sum, Rico Lie (2003) presented the following arguments to advocate a change in research and policy-making.

(1) Interdisciplinarity

Because of the complexity of societies and cultures, especially in a 'world-system' perspective, the future of the social sciences seems to lie in interdisciplinarity. Theory on the impact of culture on globalization and localization has become a truly

interdisciplinary academic field of study. Marxists, anthropologists, philosophers, political scientists, historians, sociologists, economists, communication specialists and scholars in the field of cultural studies are attempting to integrate the field. It is these united attempts that can provide fruitful insights and shed new light on old and new emerging problems.

(2) The power of culture in homogeneity and diversity

Culture has long been regarded as only *context*, but more and more culture is becoming *text*. At the same time it looks as if culture is also the concept that constitutes the common interests of the different disciplines and is as such responsible for interdisciplinarity. Robertson (1992) termed this increasing interest in culture 'the cultural turn.'

(3) A new form of modernization?

Globalization represents a new form of modernization that no longer equals westernization. Nevertheless, again it portrays a linear perspective and an end state of the world order. Therefore, although the process is less American oriented, it does not *fundamentally* change the thinking that the world has a modern end state that is determined by external forces.

(4) Nation-states and national cultures

Nation-states are seen by most scholars, especially Marxists, as the basic elements in a world system and the main actors in the process of globalization, but is this also true for cultural globalization? Does the globalization thesis automatically imply that national cultures are the main elements or actors in a 'global culture?' Are the nation-states and national cultures the central points of convergence and main actors in globalization?

(5) Linking the global and the local

Globalization and localization are seen as interlinked processes and this marks *a radical change in thinking about change and development*. Potentially, it integrates global dependency thinking, world-system theory and local, grassroots, interpretative, participatory theory and research on social change.

5. SUSTAINABLE DEVELOPMENT AT A COMMUNITY LEVEL

In view of the above expressed need to start at a localized or community level, we would like to present the Thai double-tiered so-called *TERMS model of Rural Community Self-Reliance* (Sanyawiwat, 2003), as an interesting integrated framework. TERMS stands for **T**echnology, **E**conomic, Natural **R**esource, **M**ental and **S**ocio-cultural.

This model is the result of extensive research, which the Thai National Research Council commissioned to the Science and Technology Institute. More than 50 academics, from governmental bureaus, universities, the private sector, and community leaders from five villages (Khiriwong—Nakhornsrithammarat, Phodhisricharoen—Suphanburi, Takoh—Nakornrachasima, Nongsaeng—Mahasarakham and Thung-Yao—Lampoon) were involved. It took them more than seven years to arrive at what now is being called the *Thai concept of community development*.

This model views self-reliance of a community as a goal of community development. Self-reliance of a community can be established if the following dimensions are taken into account:

1. **T**echnology, **E**conomic, Natural **R**esource, **M**ental and **S**ocio-cultural (TERMS) factors.

2. A development and self-reliant process based on Balance, Ability, and Networking (BAN). These three factors run together with the balance of each element in TERMS and community management
3. Participatory Action Research (PAR) as the process in which the facilitators and villagers collaborate through discussion, planning, evaluation or research at all times.
4. A re-socialization and conscientization process (in Thai: Khit pen) which makes the people turn to value Thainess, Thai identities, Thai culture and folk wisdom to benefit the Thai style of living.

The functional matrix of these factors is made visible in the following table:

Self-reliance	Technology	Economic	Resource	Mental	Socio-cultural
Technology	-Appropriate in the rural environment -Modern & controllable -Researched & developed indigenously	-Production base -Factors of production -Increase competency in competition -Firm development base	Add value to resources -Conserve environment -Revive resources	Build up scientific consciousness -Increase quality of human resource in science & technology	Social development base -Balance of social change factors and social stability -Preserve social stability & solidarity
Economic	-Choice of technology -Support technological progress -Support self-reliance in technology -Distribution of technology	-Create an equilibrium state -Continuous development -Ability to compete with outsiders -Able to save and invest -Cooperate in production & marketing	-Use of local resources -Increase value added to resources -Use resources efficiently and in balance -Revive and recycle	-Create consciousness in: * Quality of life * A fair society * Savings & appropriate investment	-Create jobs & incomes - Solidarity & social balance base -Create stable & fair economy -Integrate economic profits
Resources	-Technological development base -Create multiplicity in the use of technology -Create technological innovations	- Production & appropriate entrepreneurship base -Factors of production - Sustainable development base	-Ecology -Recyclable & reviving resources	-Create consciousness in ecological balance -Create consciousness in economic development -Support quality of life	-Create social groups - Preserve and inherit traditions & culture base -Create disciplines in resource allocations -Social solidarity base
Mind	-Create capability of using technology -Control & monitor the use of technology	-Labour production factor -Entrepreneurs -Consumers know how to economize products -Use economic opportunities -Creator of economic organizations	-Understand & know how to use resources -Know how to conserve resources -Capable of reviving resources - Nature-loving consciousness	-Consciousness in self-reliance -Have capacity to develop oneself -Knowledge-able & capable to apply -Possess quality -Not involve in intoxicants & gambling -Diligence	-Consciousness of membership -Participate in social activities -Motivate oneself to progress -Creator of social organizations -United-ness
Society	-Assess need of technology -Support & develop appropriate technology -Determine type and form of technology	-Create: *Demands for products & services *Social organizations *Values & economical norms for economic self-reliance -Administrate production & marketing	-Help share & conserve resources -Help revive resources -Help conserve environment, communities & the peripheries	-Create: *Orders & disciplines *Consciousness of united ness *People who aim at social benefits -Hold on to disciplines & social rules	-High level of leadership -Social solidarity -Social organizations -Knowledge & up-to-date information

6. PRIORITY AREAS FOR COMMUNICATION ORGANIZATIONS AND PRACTITIONERS IN RELATION TO SUSTAINABLE DEVELOPMENT

Communication has become an important aspect of development initiatives in health, nutrition, agriculture, family planning, education, and community economics.

6.1. Three general perspectives on communication for development

A first perspective could be of *communication as a process*, often seen in metaphor as the fabric of society. It is not confined to the media or to messages, but to their interaction in a network of social relationships. By extension, the reception, evaluation and use of media messages, from whatever source, are as important as their means of production and transmission.

A second perspective is of *communications media as a mixed system of mass communication and interpersonal channels*, with mutual impact and reinforcement. In other words, the mass media should not be seen in isolation from other conduits.

One could, for instance, examine the role and benefits of radio versus the Internet for development and democracy. Both the Internet and the radio are characterized by their interactivity. However, if, as many believe, better access to information, education, and knowledge would be the best stimulant for development, the Internet's primary development potential is as a point of access to the global knowledge infrastructure. The danger, now widely recognized, is that access to knowledge increasingly requires a telecom infrastructure that is inaccessible to the poor. Therefore, the digital divide is not about technology, it is about the widening gaps between the developed and developing worlds and the info-rich and the info-poor.

While the benefits offered by the Internet are many, its dependence on a telecom infrastructure means that they are only available to a few. Radio is much more pervasive, accessible and affordable. Blending the two could be an ideal way of ensuring that the benefits accruing from the Internet have wider reach.

Another perspective of communication in the development process is from an *inter-sectoral and interagency concern*. This view is not confined to information or broadcasting organizations and ministries, but extends to all sectors, and its success in influencing and sustaining development depends to a large extent on the adequacy of mechanisms for integration and co-ordination.

6.2. Different approaches and strategies at UN agency, governmental and NGO levels

Distinct devcom approaches and communication means used can be identified within UN agencies, governmental and non-governmental organizations. Some of these approaches can be grouped together under the heading of the diffusion model, others under the participatory model. The major ones could be identified as follows:

- Extension/Diffusion of Innovations as a DevCom Approach
- Network development and documentation
- ICTs for development
- Social marketing
- Edutainment (EE)
- Health communication
- Social mobilization
- Information, Education and Communication (IEC)
- Institution building
- Knowledge, Attitudes and Practices (KAP)
- Development Support Communication (DSC)
- HIV/AIDS community approach
- Community participation

These approaches are further documented in annex where we briefly identify the strengths and weaknesses of each approach from the perspective of sustainability at a number of levels. We also supplement a number of case studies as illustration.

7. COMMUNICATION STRATEGIES FOR THE IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT

As discussed during the 8th Roundtable on Communication for Development (Nicaragua, November 2001) communication strategies for the implementation of sustainable development could be identified at three levels:

1. Behaviour change communication
2. Advocacy communication
3. Communication for social change.

We prefer to use the term 'communication for structural and sustainable change' for the latter level.

At each level different perspectives on the role and place of information and communication for sustainable development may apply. In general, the following issues could be addressed on a case-by-case basis:

- Interpersonal communication versus mass media use
- 'Old' versus 'new' media
- The role and place of community media
- The role and impact of ICTs, etc.

7.1. Behavioural Change Communication

This category can be further subdivided in perspectives that explain:

(1) *Individual behaviour*
(2) *Interpersonal behaviour*
(3) *Community or societal behaviour* (Knapf, 2003; McKee et al., 2000 and 2003)

1. **The *Health Belief Model* (HBM)** is based on the premise that one's personal thoughts and feelings control one's actions. It proposes that health behaviour is therefore determined by internal cues (perceptions or beliefs), or external cues (e.g. reactions of friends, mass media campaigns, etc.) that trigger the need to act. It specifically hypothesises that individual behaviour is determined by several internal factors:

a) Belief about one's chances or risk of getting an illness or being directly affected by a particular problem or illness (perceived susceptibility)
b) Belief or one's opinions about the seriousness of a given problem or illness (perceived severity)
c) Belief about the efficacy of an action to reduce risk or severity (perceived benefits) compared to one's opinion about the tangible or psychological risks or costs for proposed action (perceived barriers).

This model further explains that before deciding to act, individuals consider whether or not the benefits (positive aspects) outweigh the barriers (negative aspects) of a particular behaviour.

Other theories explaining individual behaviour are the Theory *of Reasoned Action* (TRA) and *Personal Behaviour* (TPB) (see McKee et. al, 2000 & 2003 for more details).

2. **Some theoretical frameworks that explain interpersonal behaviour** are the *Social Cognitive Theory* (SCT), the *Social Experience Model* (SEM), the *Social Network* and the *Social Support Theory.*

The Social Network theory explains the mechanisms by which social interactions can promote or inhibit individual and collective behaviour. An understanding of network theory enables programmers to better analyse how friends, families and other significant people might impact on the same individuals and groups that they are trying to influence.

The Social Support Theory, on the other hand, refers to the content of these relationships – i.e. what is actually being shared or transmitted during different interactions. As such, assistance provided or exchanged through interpersonal and other social relationships can be characterised into four types of supportive action: Emotional support, instrumental support such as tangible aid or services, appraisal support such as feedback and constructive criticism, and informational support in the form of advice or suggestions etc. (see McKee et. al, 2000 & 2003 for more details).

3. **The best-known theoretical framework that explains Community or Societal Behaviour** is the already referred to *Diffusion of Innovations* (DOI) approach (Rogers, 1983).

There are others as well, such as the *Conceptual Model of Community Empowerment* (see McKee et. al, 2000 & 2003 or the annex for more details).

7.2. Advocacy Communication

Advocacy communication is primarily targeted at policy-makers or decision-makers at national and international levels. The emphasis is on seeking the support of decision-makers in the hope that if they are properly 'enlightened' or 'pressured', they will be more responsive to societal change. A general definition of advocacy is:

"Advocacy for development is a combination of social actions designed to gain political commitment, policy support, social acceptance and systems support for a particular goal or programme. It involves collecting and structuring information into a persuasive case; communicating the case to decision-makers and other potential supporters, including the public, through various interpersonal and media channels; and stimulating actions by social institutions, stakeholders and policy-makers in support of the goal or programme." (Servaes, 1993)

Advocacy is most effective when individuals, groups and all sectors of society are involved. Therefore, three main interrelated strategies for action can be identified:

(a) Advocacy

Generating political commitment for supportive policies and heightening public interest and demand for development issues;

(b) Social support

Developing alliances and social support systems that legitimize and encourage development-related actions as a social norm;

(c) Empowerment

Equipping individuals and groups with the knowledge, values and skills that encourage effective action for development.

For more details, see Fraser & Estrepo (1992 & 1998) and Servaes (1993 & 2000).

7.3. Communication for Structural and Sustainable Change

Behavioural change communication and advocacy communication, though useful in itself, will not being able to create sustainable development. This can only be achieved in combination with and incorporating aspects of the wider environment that influences (and constrains) structural and sustainable change. These aspects include:

- Structural and conjunctural factors (e.g. history, migration, conflicts)
- Policy and legislation

- Service provision
- Education systems
- Institutional and organisational factors (e.g. bureaucracy, corruption)
- Cultural factors (e.g. religion, norms and values)
- Socio-demographic factors (e.g., ethnicity, class)
- Socio-political factors
- Socio-economic factors
- Physical environment.

In summary, there are a variety of theoretical models that can be used to devise communication strategies for sustainable development. However, as each case and context is different, none of these have proven completely satisfactory in the field of international development. Therefore, many practitioners find that they can achieve the greatest understanding by combining more than one theory or developing their own conceptual framework.

8. GRASPING THE OPPORTUNITIES OFFERED BY ICTS TO ARCHIEVE THE MILLENIUM DEVELOPMENT GOALS (2015)

The World Summit on the Information Society (WSIS, Geneva, December 2003) adopted a Plan of Action based on internationally agreed development goals, including those in the Millennium Declaration. Indicative targets to be achieved by 2015 are:

- To connect villages with ICTs and establish community access points;
- To connect universities, colleges, secondary schools and primary schools with ICTs;
- To connect scientific and research centers with ICTs;
- To connect public libraries, cultural centers, museums, post offices and archives with ICTs;
- To connect health centers and hospitals with ICTs;
- To connect all local and central government departments and establish websites and email addresses;
- To adapt all primary and secondary school curricula to meet the challenges of the Information Society, taking into account national circumstances;
- To ensure that all of the world's populations have access to television and radio services;
- To encourage the development of content and to put in place technical conditions in order to facilitate the presence and use of all world languages on the Internet;
- To ensure that more than half the world's inhabitants have access to ICTs within their reach.

During the conference organised by the European Consortium for Communications Research (ECCR) on 1 March 2004 the WSIS targets and millennium goals were discussed and evaluation by representatives from different international, regional and national organisations, among them the World Bank (Braga, 2004) and the European Commission (Johnston, 2004).

One of the outcomes of the discussion suggested that implementation of ICTs will lead to a mature and desirable Information society only if certain conditions can be met, and challenges be faced, not in discourse but in facts:

- ***Bridging the digital divide (1)***
  Access to ICTs should be made possible not necessarily to everybody indistinctively, but to those who can benefit from them.

- ***Bridging the digital divide (2)***
  Giving access to technologies is worthless unless a matching effort is undertaken in education so as to level up the users' skills and ability to make efficient and responsible use of these technologies.
- ***Internet governance***
  Although the Internet embodies a certain vision of freedom, the Information Society cannot be left to the law of the strongest, nor can particular interests regulate it, be they of a nation or an industry.
- ***Enhancing democracy***
  The emerging technologies must determinedly serve the advent of democracy and, in already democratic regimes, feed a process of modernisation and revival of political institutions and citizens' participation beyond mere governmental web sites or fancy e-voting.

The conference therefore concluded that more *research* and better *education* are priorities:

"Research is excessively concentrated in the areas of technological innovation and market development, both areas feeding each other in a circular relationship, with a prevailing priority on short term return on investment and industrial applications. Meanwhile there is an endemic and massive deficit of research aiming at solutions to identified problems within a broader societal perspective. As a result, there is an urgent need for a sizeable effort to undertake or revitalise research in neglected areas.

Education efforts are to be developed dramatically. Current initiatives are meagre and concentrate on the acquisition of computer skills with an overwhelming focus on tasks oriented tools and procedures, falling short of providing even the minimal foundation needed to orient oneself in the Information Society in the making. The severe deficit of adequate education leads to a new form of illiteracy which entails societal risks comparable to that of illiteracy of the past centuries."

9. BY WAY OF CONCLUSION: "SHAPING INFORMATION SOCIETIES FOR HUMAN NEEDS"

1. The following is an excerpt from the Civil Society Declaration to the World Summit on the Information Society, unanimously adopted by the WSIS Civil Society Plenary on 8 December 2003:
   "We aspire to build information and communication societies where development is framed by fundamental human rights and oriented to achieving a **more equitable distribution of resources, leading to the elimination of poverty** in a way that is non-exploitative and environmentally sustainable. To this end we believe technologies can be engaged as fundamental means, rather than becoming ends in themselves, thus recognising that bridging the Digital Divide is only one step on the road to achieving development for all. We recognise the tremendous potential of information and communications technologies (ICTs) in overcoming the devastation of famine, natural catastrophes, new pandemics such as HIV/AIDS, as well as the proliferation of arms.
   We reaffirm that communication is a fundamental social process, a basic human need and a foundation of all social organisations. Everyone, everywhere, at any time should have the opportunity to participate in communication processes and no one should be excluded from their benefits. This implies that every person must have access to the means of communication and must be able to exercise their right to freedom of opinion and expression, which includes the right to hold opinions and to seek, receive and impart information and ideas through any media and regardless of frontiers. Similarly, the right to privacy, the right to access public information and the public domain of knowledge, and many other

universal human rights of specific relevance to information and communication processes, must also be upheld. Together with access, all these communication rights and freedoms must be actively guaranteed for all in clearly written national laws and enforced with adequate technical requirements.

Building such societies implies involving individuals in their capacity as citizens, as well as their organisations and communities, as participants and decision-makers in shaping frameworks, policies and governing mechanisms. This means creating an enabling environment for the engagement and commitment of all generations, both women and men, and ensuring the involvement of diverse social and linguistic groups, cultures and peoples, rural and urban populations without exclusion. In addition, governments should maintain and promote public services where required by citizens and establish accountability to citizens as a pillar of public policy, in order to ensure that models of information and communication societies are open to continuing correction and improvement.

We recognise that no technology is neutral with respect to its social impacts and, therefore, the possibility of having so-called 'technology-neutral' decision-making processes is a fallacy. It is critical to make careful social and technical choices concerning the introduction of new technologies from the inception of their design through to their deployment and operational phases. Negative social and technical impacts of information and communications systems that are discovered late in the design process are usually extremely difficult to correct and, therefore, can cause lasting harm. We envision an information and communication society in which technologies are designed in a participatory manner with and by their end-users so as to prevent or minimise their negative impacts."

2. In addition we would like to highlight some of the main conclusions and recommendations of an International Expert Meeting on Communication for Development, organized by UNESCO in Delhi, September 2003:
   1- A re-definition of communication for development is necessary within the context of the 21st century, bearing in mind the new political and media landscape. This includes listing and defining its various domains, such as project-related and community communication, development journalism, development communication in the mainstream media, educational communication, health communication, environmental communication, social marketing and social mobilization.
   2- Culture is central to development and deserves greater emphasis in communication for development programmes. Cultural studies is now a recognized field of study in itself and the importance of culture should be reinforced in communication for development.
   3- There is a need to influence policy on communication for development through advocacy, not only with governments but also within development agencies and other partners, for communication for development to be successful.
   4- There is a need for effective and convincing evaluation models and data to show evidence of the impact of communication for development. Sustainability indicators based on qualitative dimensions of development need to be emphasized, involving the potential of ICTs to collect feedback interactively. Research should also be reinforced in order to better identify communication needs.
   5- It is crucial to encourage the production of diverse local content in local languages for the media and ICTs, *bearing* in mind the potential of interactive technologies to carry multimedia content.
   6- Communication for development is multi-faceted, multi-dimensional and participatory, and should be seen in its socio-political, economic and cultural

contexts to be relevant for people. We should focus on small-scale projects (pilot projects) and set benchmarks.

7- New partnerships are necessary with the media, development agencies, universities and governments. It is important to identify possibilities for convergence and for complementing existing work and to coordinate and document such work among development agencies.

8- Universities are a significant knowledge, information and training resource for communities, particularly for the effective use of emerging community multi-media centers. UNESCO should encourage further research on the potential role of universities and other similar actors in this field.

9- Training of development professionals needs to be supported in order to empower professionals and further professionalise the field.

10- Communication for development should not be technology driven. It should be based on social issues and concerns. Technology is at best a facilitator and a tool.

11- UNESCO should explore the possibility of supporting an International Journal on Communication for Development and of launching a clearinghouse to exchange information in this field.

REFERENCES

Braga C.P. 2004 *Information Society: Implications for Developing Countries*, Paper Conference 'Deconstructing WSIS', European Consortium for Communications Research (ECCR), March 1.

Colle R. 2003 "*The Extension Thread"* in SERVAES, J. Approaches to Development Paris: UNESCO, pages 32-37

Elliot J. 1994 *An Introduction to Sustainable Development,* London: Routledge, pp.4-5.

De Cuellar J.P. 1995, *Our Creative Diversity. Report of the World Commission on Culture and Development*, Paris: UNESCO.

Fair, J.E. 1989. 29 *Years of Theory and Research on Media and Development: The Dominant Paradigm Impact,* Gazette, 44:129-150.

Fair, J.E. & SHAH, H. 1997. Continuities and Discontinuities in Communication and Development Research since 1958*, Journal of International Communication*, 4(2):3-23.

FAO (2004), *Revisiting the 'Magic Box'. Case studies in local appropriation of ICTs*, Rome: FAO.

Featherstone, M. (ed.) 1990, *Global Culture: Nationalism, Globalization and Modernity*. London: Sage.

Fraser, C. & Restrepo-Estrada, S. 1992 *Putting politicians under pressure. A case study of advocacy and social mobilization for children linked to decentralization and elections in Colombia*, Rome: FAO, paper.

Fraser, C. & Restrepo-Estrada, S. 1998. *Communicating for Development. Human Change for Survival*, London-New York: I.B. Tauris Publishers.

Freire, P. 1983. *Pedagogy of the Oppressed*, New York: Continuum.

Hall, S. (ed.) 1997, *Culture, Media and Identities***,** London: Sage (series of 6 books).

Johnston, P. 2004 *Towards a Knowledge society and sustainable development: Deconstructing the WSIS in the European policy context*, Paper Conference 'Deconstructing WSIS', European Consortium for Communications Research (ECCR), March 1.

Knapf (2003), *Handbook interpersonal communication*. London: Sage.

Lie, R. & SERVAES, J. 2000, Globalization: Consumption and Identity, in G. WANG, J. SERVAES & A. GOONASEKERA *(eds.) the New Communications Landscape. Demystifying Media Globalization*, London and New York: Routledge.

Lie, R. 2003. *Spaces of Intercultural Communication. An interdisciplinary Introduction to Communication, Culture, and Globalizing/Localizing Identities*. IAMCR Book Series, Creskill: Hampton Press.

MacBride, S. (ed.) 1980. *Many Voices, One World: Communication and Society. Today and Tomorrow*, UNESCO: Paris.

Mansell, R. & When U. (ed.) 1998, *Knowledge Societies. Information Technology for Sustainable Development*. Oxford: Oxford University Press.

Mckee, N., Manoncourt, E., Saik Yoon, C. & Carnegie, R. 2000, *Involving People Evolving Behaviour*, Penang: Southbound & UNICEF: Penang.

Mckee, N., Manoncourt, E., Saik Yoon, C. & Carnegie, R. 2003, Involving People Evolving Behaviour, in SERVAES, J. 2003. *Approaches to Development. Studies on Communication for Development*, Paris: UNESCO.

McQuail, D. 1983. *Mass Communication Theory*, London: Sage.

Mody, B. (ed.) 1997. Communication and Development: Beyond Panaceas, *The Journal of International Communication*, 4(2), 138 pp.

Payutto, P. 1998 *Sustainable Development*, Bangkok: Buddhadham Foundation.

Rogers, E.M. 1983 *Diffusion of Innovations*, 3rd Ed., New York: The Free Press: New York.

Sanyawiwat, S. 2003 *Theories and Social Development Strategies* Bangkok: Chualalongkorn Publishing House, pp.99-104

Servaes J. 1993, *Development Communication in Action: Report of the Inter-Agency Meeting on Advocacy Strategies for Health and Development*. WHO Conference, Geneva, 9-13 November 1992, Geneva: WHO, 36 pp.

Servaes J. 1999**.** *Communication for Development. One World, Multiple Cultures*, Creskill: Hampton Press.

Servaes J. 2000, Advocacy Strategies for Development Communication, in SERVAES J. (ed.), *Walking on the other side of the information highway. Communication, Culture and Development in the 21st Century*, Penang: Southbound, Penang, pp.103-118.

Servaes J. 2003. *Approaches to Development. Studies on Communication for Development*, Paris: UNESCO.

UNESCO 2003 *International Experts Brainstorming Meeting on Development Communication* (New Delhi, 1-3 September 2003), Paris: UNESCO.

UNFPA 2002, *Communication for Development Roundtable Report of the Communication for Development Roundtable, November 26-28, 2001, Managua, Nicaragua*, New York: UNFPA.

W.AA. 1997. Development Communication: What the 'Masters' Say (special issue), *The Journal of Development Communication*, 8(2), 179 pp.

W.AA. 2003 *"Shaping Information Societies for Human Needs"***.** Civil Society Declaration to the World Summit on the Information Society, Unanimously Adopted by the WSIS Civil Society Plenary on 8 December 2003

ANNEX

1. Extension/Diffusion of Innovation as a DevCom Approach

The Extension/Diffusion of Innovation Approach is based on the modernization paradigm and Ev Rogers' diffusion theory. Extension is concerned with the staged process of technology transfer in a top-down fashion from researchers/experts (or other producers of innovations) to potential users of these research results. The conventional scope of extension remains in the agricultural field but the contemporary one has broadened to a wide range of subjects such as environmental issues, or small business enterprise trainings. Therefore, the clientele served can be urban people as well. This approach is to inform the audience or to persuade a behavioural change in a predetermined way. The contemporary variation re-examines the messages, the needs of the audience, the initial knowledge of the audience and the agenda setting between the researchers and the farmers/clientele. *(See Box 1).*

2. Network Development and Documentation

The dominant approach requires networking through computerized satellite telecommunication links as a basic infrastructure. The provision of analytical and contextualized flows of information regarding development events and issues together with the telecommunication services are designed, implemented and researched to support the process of development. This kind of networking allows journalists from the less developed world to voice their views and exchange news events from their perspectives to counterbalance the mainstream traffic of the data and information flows from the developed countries. Not only this approach allows the peripheral-to-center flow in the world system context, it also supports those in the peripheral-to-center flow within the peripheral arenas itself. New actors are thus identified. They are women, rural people and children in the developing world. By remaining technological independent, the network aims to execute programs for training, information exchange and the establishment of alternative networks. *(See Box 2).*

3. ICTs for Development

Information and Communication Technologies (ICTs), such as computer and telecommunication technology, especially the Internet, is used to bridge the information and knowledge divide between the *haves* and the *have-nots*. Having access to the digital hi-ways helps improve access to education opportunities, increase transparency and efficiency in government services, enhance direct participation from the *'used-to-be-silent public'* in the democratic process, increase trade and marketing opportunities, enhance community empowerment by giving a voice to voiceless groups (e.g. women) and vulnerable groups (e.g. people living with HIV/AIDS), create networking and income opportunities for women, access to medical information for isolated communities and increase new employment opportunities.

In developing countries, the local appropriation of ICTs is a telecenter or multi-media community center consisting of desktop publishing, community newspaper, sales or rentals of audio and videocassettes and DVDs, book lending, photocopying, faxing and telephone services. The access to the Internet and World Wide Web can be optional. The use of the mobile and satellite telephony can help the small entrepreneurs and the rural farmers get access to the information needed.

This approach supports the assumption that the Internet is a powerful tool for sharing information, but it cannot solve the development problems caused by the underlying social, economic and political issues, nor can it change the existing power structures as the information available is not necessarily knowledge. In order to become knowledge, the information has to make sense to the villagers who receive this information. *(See Box 3).*

4. Social Marketing

Social marketing is the application of commercial marketing techniques to solve social problems. It is also a multi-disciplinary approach because it concerns education, community development, psychology and communication. Roy Colle stated that it is

" a process that assumes that what made McDonald's and Coca-Cola world class success can also have a dramatic impact on the problems of high blood pressure, AIDS, child mortality in developing nations, and other circumstances related to pattern of behaviour."

(Colle, 2003)

The process involves the planning, implementation and monitoring of programs to persuade the acceptance of social ideas. The basic elements of the process lie on product, price, place, and promotion. The product concept may be an object, idea or behavioural change in a favorable way. The price concept is comparable to that of the commercial sector but it is conceived in the social cost terms, such as missed opportunities, deviation from the established cultural norm etc. Place refers to the channels through which the ideas or the product will be transmitted. Promotion refers to the use of mediated or interpersonal communication to make the product known among the audience or target groups.

Social marketers commit themselves to people's health and well-being; are not profit-oriented and are seeking a larger market share than the commercial marketers. *(See Box 4).*

5. Edutainment

Entertainment Education (EE) or the edutainment approach is a hybrid of participatory communication strategies and the diffusion model of communication. It combines the attraction of entertainment with educational messages to help educate, inform and encourage behaviour change to achieve development and social progress. This approach can employ traditional or indigenous media such as puppet shows, music and dance to promote issues in healthcare, literacy programs, environmental protection and introducing agricultural practices.

These forms of communication can be integrated with media such as radio, television, video and audiocassettes. The important point is that the programs are produced locally to appeal to the local audience. Another offshoot of this approach is applying the social marketing strategies to help embed the development issues in melodramatic soap operas for radio and television, which use real or fictional "social models" to promote changes in lifestyles. These programs are adapted to local cultural contexts and integrate entertainment with awareness raising and education. It is often used in the raising of awareness in complex issues such as HIV/AIDS. It brings particular health issues such as sexual practices in a private manner to the people's home. *(See Box 5).*

6. Health Communication

The best representative of the Health Communication approach is the World Health Organization (WHO). WHO has tended to employ development communication strategies based on the social marketing approach and diffusion theory, current plans are centered on bottom-up, grass-roots, and more participatory models of communication in a mixed media approach.

WHO employs three main health strategies: Advocacy, empowerment and social support.

- **Advocacy** aims to foster public policies that are supportive of health such as the provision of biomedical care, e.g. treating illness, and prevention, e.g. immunization, safe water, sanitation, maternal/child health and promoting of healthy life-styles. Mass media and traditional media can play a strong advocacy role in creating public awareness and in bringing about action for health. Media often target decision-makers as well as interest groups who in turn press for suitable policies. The effectiveness of their advocacy role, however, depends on the freedom the media enjoy and the influence they carry with the national political system and the public.

- **Empowerment** emphasizes the role of the community members in planning and managing their own healthcare. Furthermore, there has been increasing realization that knowledge alone is not enough for behavioural change. Empowering people aims not only at fostering healthy lifestyles but also at enabling them to mobilize social forces and to create conditions including health supportive public policies and responsive systems, that are conductive to healthy living.

- **Social support:** Since acceptance of new practices and favourable behavioural change need social approval, there is a need for building alliances between and networking with the many groups and agencies that work for and influence health and welfare. WHO organizes activities to train media professionals in health and in health education by running health promotion campaigns in all regions and workshops at all levels. Intensive courses are organized to improve the planning and production of mass media programs on priority health development subjects. WHO, furthermore, collaborates with UNESCO, UNICEF and other organizations on information exchange.

The new paradigm for health is people-oriented: A bottom-up process that pays due attention to the individual, the family and the community, but especially to the underprivileged and those who are at risk, such as women and children and the elderly.

Adopted from:

UNESCO *Profiles: United Nations Agencies: WHO* in **Approaches to Development Communication: An Orientation and Resource Kit** eds. Mayo, J. & Servaes, J. Paris 1994, pp. 1-16.

7. Social mobilization

Social mobilization, an approach associated with UNICEF, is a process of bringing together all feasible and practical inter-sectoral social partners and allies to determine felt-needs and to raise awareness of, and demand for, a particular development objective. It involves enlisting the participation of such actors, including institutions, groups, networks and communities, in identifying, raising, and managing human and material resources, thereby increasing and strengthening self-reliance and sustainability of achievements. It is a planned process that relies heavily on communication. At the policy level, advocacy is used to assure the high level of public commitment necessary to undertake action by fostering a knowledgeable and supportive environment for decision-making, as well as the allocation of adequate resources to attain the campaign's goals and objectives.

At the grassroots level, the primary aim is to inform and motivate community members through multiple channels, and to sustain the latter's active participation. *(See Box 7).*

8. Information, Education and Communication (IEC)

Information, Education and Communication (IEC) are three essential components designed to promote awareness and understanding of population issues. The information component brings facts and issues to the attention of an audience in order to stimulate discussion. It also concerns the technical and statistical aspects of development. Population information program strategies in the future gear towards improving data bases and research, linking population to environmental and other development issues, identifying the role of women in population and development, reiterating the case for family planning, maintaining media attention and political commitment and applying new technology to population information programs. The education component fosters knowledge and thorough understanding of problems and possible solutions. The formal and non-formal education subcomponents are to strengthen human resources by curriculum design and training to sensitize awareness and foster critical thinking of development issues and facilitate life-long educational goals. The communication component is to influence attitudes, disseminate knowledge and to bring about a desired and voluntary change in behaviour.

For several decades IEC has been associated with population and family planning programs around the world. UNFPA was among the first to use the term IEC in 1969 in labeling its communication activities. Specifically, IEC has referred most frequently to the use of information, education and communication to promote adoption of contraceptives or other practices to limit births. In 1994, the IEC approach was linked with the concept of reproductive health. The focus on the use of condoms in males has shifted to the focus on gender inequality as males often decide on behalf of women. IEC has become a close tie with advocacy in developing reproductive health communication strategies and in other development communication contexts. *(See Box 8).*

9. Institution building

The Institution-building approach provides developing nations with organizations, skills and facilities to carry out development communication. There are many national and international institutions that use this approach such as the Ford Foundation, FAO, USAID, and the Canadian Government. However, the UNESCO is the UN-agency closely associated with this approach.

The Ford Foundation and FAO institution building took place at the G.B. Pant University of Agriculture and Technology in Uttar Pradesh State in India in the late 1960s and 1980s respectively. The work consisted of both training the staff abroad to upgrade the communication competence and providing facilities for the university to produce radio programs and other resources for reaching the farm and rural population. In 1970s, the USAID assisted the Guatemalan Government in building two radio stations that were dedicated to supporting agricultural, nutrition, and health activities in rural communities. In the 1980s, the Canadian Government supported Indonesia to institutionalize special units in most major broadcast stations that were especially focused on development issues.

UNESCO has been one of the most consistent agencies that support institution building for development communication. Alan Hancock explains the work of UNESCO as follows: "Some of the earliest UNESCO programmes emphasized professional training (initially in film, then in radio and television), following a model of basic training at local and national levels, intermediate skills training at regional levels, and advanced training through overseas attachments and study tours. The tradition is still very strong, although it has been modified over the years by a rising emphasis on community-based media practice, and the use of adapted, or appropriate media technologies" (Hancock, 2000: 62). *(See Box 9).*

10. Knowledge, Attitudes and Practices (KAP)

Development communicators work to bring about change in the behaviour of people reached in the projects they undertake. Knowledge and attitude are internal factors that affect how human beings act. There are also other internal factors such as perceived social pressure/norms, gender etc. An enabling environment such as education system, policy and legislation, cultural factors, service provision, religion, socio-political factors, physical environment and organizational environment can also influence the knowledge and attitudes of the target groups

Knowledge is internalized learning based on scientific facts, experiences and/or traditional beliefs. Experience shows that knowledge is necessary but not sufficient to produce behaviour change, which occurs when perceptions, motivation, skills and the social environment also interact.

Attitudes are feelings, opinions or values that an individual holds about a particular issue, problem or concern

Adopted from:

McKee, N., Manoncourt, E., Yoon, C.& Carnegie, R. *Involving People, Evolving Behaviour: The UNICEF experience* in **Approaches to Development**, Servaes. J. ed., UNESCO: Paris, 2003, chapter 12. p.6.

Carnegie, R., McKee N., Dick, B., Reitemeier, P., Weiss, E. &Yoon, C. *Making change possible: Creating and enabling environment* in **Involving People Evolving Behaviour**, eds. MacKee, N., Manoncourt, E., Saik Yoon, C. & Carnegie, R., Southbound Penang and UNICEF: Penang 2000, p. 158.

11. Development Support Communication

The Development Support Communication (DSC) approach is the systematic utilization of appropriate communication channels and techniques to increase people's participation in development and to inform, motivate, and train rural populations, mainly at the grassroots level. This concept is one of the central ones in FAO's approach to communication for development. The DSC Branch is one of a sub-program within FAO's Rural Development Program. It is putting communication into practice by utilizing the DSC process model as follows:

- Needs assessment/information gathering
- Decision making/strategy development
- Implementation
- Evaluation

It emphasizes the multi-media approach especially the integration of traditional and popular media and campaign strategy. There are two major lines of actions. A majority of DSC field interventions still deal with communication components that support a variety of rural development but increasing DSC operations has become stand-alone projects. A new line is the support to national institutions in an effort to build an in-country capacity to deal with all aspects of communication for development: From policy advice to appropriate communication research, from the definition of national communication policies and strategies to the development of multi-media approaches and the choice of culture-specific media mixes. *(See Box 11).*

12. HIV/AIDS Community Approach

The HIV/AIDS pandemic is cause and consequence of underdevelopment. For the past two decades of its existence, there appears to be growing consensus that focusing on the risky behaviours of individuals is insufficient when not taking into account the social determinants and deep-seated inequalities driving the epidemic. The UNAIDS

framework was published in December 1999 following an intensive process of detailed consultation in Asia, Africa, Latin America and the Caribbean. Its conclusions were that:

- The simple, linear relationship between individual knowledge and action, which underpinned many earlier interventions, does not take into account the variation among the political, socio-economic and cultural contexts that prevail in the regions.
- External decision-making processes that cater to rigid, narrowly focused and short-term interests tend to overlook the benefits of long-term, internally derived, broad-based solutions.
- There is an assumption that decision about HIV/AIDS prevention is based on rational, volitional thinking with no regard for more true-to-life emotional response to engaging in sexual behaviour.
- There is an assumption that creating awareness through media campaigns will necessarily lead to behaviour change.
- There is an assumption that a simple strategy designed to trigger an once-in-a-lifetime behaviour, such as immunization, would be adequate for changing and maintaining complex, life-long behaviours, such as consistent condom use.
- There is a nearly exclusive focus on condom promotion to the exclusion of the need to address the importance and centrality of social contexts, including government policy, socio-economic status, culture, gender relations and spirituality.
- Approaches based on traditional family planning and population programme strategies tend to target HIV/AIDS prevention to women, so that women, rather than men, are encouraged to initiate the use of condoms.

There are five interrelated factors in communications for HIV/AIDS preventative health behaviour: Government policy, socio-economic status, culture, gender relations, and spirituality. These domains formed the basis of a new framework that could be used as a flexible guide in the development of HIV/AIDS communications interventions. Individual health behaviour is recognized as a component of this set of domains, rather than primary focus of health behaviour change. The UNAIDS/OCHCR (Office of the UN High Commissioner for Human Rights) 2002 guidelines stress the importance of "coordinated, participatory, transparent and accountable approaches". They emphasize that community consultation occurs in all phases of HIV/AIDS policy design, program implementation and evaluation as well as protection for civic society and community groups. The importance of HIV information is recognized, with "adequate HIV prevention and care information" presented as a human rights issue.

13. Community Participation

Development communication rests on the premise that successful rural development calls for the conscious and active participation of the intended beneficiaries at every stage of the development process; for in the final analysis, rural development cannot take place without changes in attitudes and behaviour among the people concerned.

Media used in participatory communication are among other things: Interactive film and video, community radio and newspaper. The main theme is empowering people to make their own decisions. The conscientization approach of Freire (1983) showed how people will galvanise themselves into action to address their priority problems. *(See Box 13).*

Box 1 **Extension case: Barefoot Doctors in China**

Main focus	To train peasants to diagnose and treat common diseases without professional assistance. This is to establish a new rural medical service in China.
Place	Every village in the Peoples' Republic of China
Beneficiaries	The rural people who need medical care
Funding	The Chinese government
Media	Personal media

Description

The barefoot doctors are peasants who got trained briefly to act as part-time doctors to provide diagnosis and common disease treatments without professional assistance in their own village. They also perform as homeopaths and acupuncturists. They will refer difficult cases to the community hospital and they get short-term training courses to boost up their medical skills. The program got started in 1965 and right now every village has its barefoot doctors. There are 1.8 million barefoot doctors in China. The doctors act as change agents in primary health care in the rural areas.

Background and context

In the Mid 1970s, Chairman Mao Zedong criticized the Chinese Ministry of Health for its poor performances in primary health care in the rural areas because most of the medical doctors clustered in the cities. He then launched a pilot project called 'barefoot doctors' in a commune near Shanghai. The word barefoot was chosen because it helps reckon that these people are peasants who often work barefoot in the rice fields of South China. In fact, most of them wear shoes, but the term implies that the change agents have a close social status to the people they serve. After the evaluation of the project had been proven favorable, he made the concept known in the popular newspaper, People's Daily, in 1968. The barefoot doctors facilitate change in the village by giving advice and primary treatments and established rapport and credibility in their own village. This project serves the purpose of low cost primary health care.

Media and method

The doctors are personal media who inform the people about vaccination, family planning and traditional health care by herbal medicines. The doctors also spend part of their time farming and tending their herb gardens. That enhances their credibility to the farmers because manual work is still highly regarded in the political and rural context of China.

Aspects of social change

The program helps alleviate the poor medical services in the rural areas. Even though the quality of the service is low and the barefoot doctors may make mistakes due to a lack of professional supervision, but China has at least a low cost primary health care service. The information on family planning or vaccination, or treatments has been well received among the peasants because of the similar social background between the agents and the audience.

Adapted from: Rogers, E.M. **Diffusion of Innovations,** 3rd Ed., The Free Press: New York, 1983, pp. 326-328 and Colle, R. The Extension Thread in **Approaches to Development**, Servaes. J. ed., UNESCO: Paris, 2003 pp. 32-3

Box 2 **Network Development and Documentation Case: Inter Press Service (IPS)**

Main focus	Strengthening the South-South and South-North development information as being a non-profit international Third World news agency, which covers about 100 countries. Apart from providing its subscribers and users with news about the Third World, it is improving on Third World communication and information structures by offering professional training and technical support.
Place	The head office of IPS is in Rome, Italy. Its regional desks are in Harare (Zimbabwe) for Africa, Manila (Philippines) for Asia, Kingston (Jamaica) for the Caribbean, Rome for Europe, San Jose (Costa Rica) for Latin America and New York (USA) for North America.
Beneficiaries	Journalists in the so-called Third World and new 'actors' in the development context such as women, rural populations and youngsters.
Funding	By its members, UN-agencies and NGOs
Media outlets	Print media, radio and television services

Description

IPS is the largest news agency for so-called developmental and alternative news. It is a non-profit making cooperative of Third World journalists with administrative centre in Rome and editorial offices in many regions in the world. It has news exchange agreements with national news agencies in over 40 Third world countries, and 15 such agencies in the industrialized world. It produces an independent international news and feature service on processes and issues of development in the Third World. It is a go-between the transfers of know-how's of the North to the specific needs of the South and upgrades the telecommunications in the Third World through diverse projects. At the same time, it offers programs for journalist training, information exchange and the establishment of alternative networks.

Background and context

IPS was founded in 1964 as an international cooperative of journalists with the aim to bridge the information divide between Latin America and Europe. Later on during 1968-1997, it gradually emerged as an international Third World news agency. In 1977-1982, it provided technical and journalistic services to facilitate the exchange of news between and among Third World countries (South-South communication) and at the same time it started activities to promote the South-North communication by expanding and computerizing its telecommunications network and services.

Media and method

IPS casts news daily via radio and TV stations and services in many languages. It publishes special bulletins on development issues such as agriculture, petroleum, mineral resources and environments. It also exchanges information via computerized telecommunication networks, and provides training to journalists.

Aspects of social change

IPS network and services has a major impact on the counter-stream flow of the news and information from the developing countries. By facilitating training and services to journalists, NGOs and the new actors it provides forums for information and data exchange, together with ideas and concepts regarding development issues at both local and global levels.

Adopted from: UNESCO *Case Studies IPS* in **Approaches to Development Communication: An Orientation and Resource Kit** eds. Mayo, J. & Servaes, J. Paris 1994 pp. 1-16
Updated information provided by IPS-Belgium.

Box 3 **ICTs case: Gyandoot-Web-based Ambassador of Knowledge**

Main focus	Internet-based network
Place	Dhar district of Madhya Pradesh, India
Beneficiaries	The villagers in the area
Funding	FAO
Media	Interpersonal, group training, Internet

Description

Gyandoot (Hindi for 'Ambassador of Knowledge') is an internet-based network linking villages in the Dhar district of Madya Pradesh, India. Established in 2000, the project had a high level of community participation in the planning process. Young, previously unemployed high school graduates were selected and trained by each village council to run Internet kiosks for their own income. They pay a service charge to the council, which use the money to fund more kiosks. New private institutions opened for computer and IT training. The network has helped the farmers with information on potato crops, and to voice their problems in the community. More money was allocated to set up kiosks in more than three thousand schools for e-education.

Background and context

The Gyandoot network provides hundreds of villages in the remote area with information on market prices, land records, law, training opportunities and education that was previously only available through expensive and often corrupt brokers. The network is also connected to the Dhar District hospital, providing specialist medical service and referral service to remote villages.

Media and method

The people are connected via e-mail and get access to necessary information via the Internet. Training on IT and computers helps increase the awareness about computers and IT.

Aspects of social change

The farmers can keep track of their produce rate via the Internet and they can sell their produce with better profits. The villagers participate in the planning of their own Internet base such as the site of the kiosks, the people who run the kiosks etc. The people can give feedback on problems related to community service directly to the district officials. The success of this project affected the political decision-making in resource allocation for e-education.

Adapted from:
FAO ***"Revisiting the "Magic Box": Case Studies*** in **Local Appropriation of Information and Communication Technologies (ICTs) pp.10-11**
Communication for Vulnerable and Marginal Groups: Blending the Old and the New pages 11-15 n.d.

Box 4 Social Marketing Case: The Oral Rehydration Therapy (ORT) for the treatment of infant diarrhea

Main focus

To strengthen the health education capacity of cooperating countries through the systematic application of the health communication model and to prevent and treat acute diarrhea in infants that caused child mortality due to dehydration in isolated rural areas of both countries.

Main strategies are the analysis of current health practices, audience segmentation, instructional design, and extensive formative evaluation of media channels materials.

Place	Honduras and the Gambia
Beneficiaries	Families with infants in both countries
Funding	USAID
Partners	Honduras's Ministry of Health, Stanford University's Institute for Communication Research
Media	Radio, interpersonal communication

Description

To fight against infant deaths caused by diarrhea in Honduras and Gambia, one of the social marketing 'products' in Honduras was a package of Oral Rehydration Solution (ORS) powder which is meant to be dissolved with one-half or one liter of clean water. In Gambia, due to the problematic distribution system and no capacity to manufacture ORS, the concept of 'home-made mixture' became one of the products. The other products are the concept of taking fluids while having diarrhea, good feeding practices for sick children, the importance of breastfeeding, the importance of feeding solid foods during and after diarrhea, and keeping the family compound free from faeces. Comprehensive mediated campaigns were launched. Radio and pictorial print media were carefully planned to reach the illiterate target groups. Interpersonal communication in the form of community volunteers, traditional birth attendants, community health workers, and midwives is also effective.

Background and context

A 1977 report from the Ministry of Health in Honduras indicated 24% infant mortality as a result of dehydration of diarrhea patients. In The Gambia, 21.3% of child deaths in Banjul, its capital, were results of gastroenteritis and malnutrition. It was found that dehydration associated with severe diarrhea is the major cause of the deaths. The oral rehydration therapy was a new alternative for people who hardly have access to traditional rehydration, hospitals or health clinics.

Media and method

The packet of ORS (a.k.a. Litrosol) is a mixture of sodium, glucose, potassium and bicarbonate. Researchers in Honduras responded to the preference of the audience for strong medicine for diarrhea treatment by giving the ORS packet an official design. A radio actor posing as a doctor did the promotion. In Honduras, short spots were more effective than instructional messages aired on the popular radio soap opera. Radio and pictorial explanations were proven to be effective. There was also a concept of the "happy lottery" to learn the public of the ORS mixing instructions.

Aspects of social change

This project was designed to tackle the unfavourable behaviour regarding health care in the time of diarrhea, such as the withholding of liquids for the treatment. Awareness and knowledge of the cause of the disease, healthy nutrition, the adoption of the ORS, and the acquisition of new skills such as measuring, mixing, and administering a correct amount of liquid, had a great impact on the audience that had no familiarity with these concepts and practices.

Adapted from: Colle, R. ***The Social Marketing Thread*** in Approaches to Development. Servaes. J. ed., UNESCO: Paris, 2003, chapter 6. pp. 51-52.
UNESCO ***Case Studies Social Marketing*** in Approaches to Development Communication: An Orientation and Resource Kit eds. Mayo, J. & Servaes, J. Paris 1994, pp. 1-12.

Box 5 Edutainment Case: Soul City

Main focus:	To conduct HIV/AIDS communication via TV-fiction, radio drama and print material in order to raise the awareness, promote insight and change of attitude and behaviour of the audience regarding this issue.
Place	South Africa
Beneficiaries	South Africans and people from neighboring countries
Funding	Different sources such as UNICEF, European Union
Partners	Communication Initiative
Media	Radio, television and print media

Description

Soul City is conceived as an on-going vehicle, recurrent and building up a quality brand around the name of Soul City. Soul City applies a multi-media strategy, combining TV-series with radio programs in numerous languages, newspaper, booklets, adult education material, etc. The project emphasizes substantial formative research as well as summative research. It promotes community activism and enhancing strategic partnerships. It develops materials and courses, training and education, in the issues of concern. It works with advocacy both at community and national level.

Background and context

The idea behind using narrative and melodramas as edutainment vehicle is that it articulates emotional engagement. All productions circle around an imaginative township called Soul City. The characters communicate to the audience how they tackle the moral dilemmas in health issues such as smoking and sexual practices in the prevention of HIV/AIDS. The drama of everyday life in many South African families and communities affected by the HIV/AIDS pandemic can be displayed fictitiously on screen. These radio drama and television series have been shown since 1994 and have obtained high ratings.

Media and method

Radio, television and print media are used to reinforce the same messages to the audience. Broadcasting radio dramas and television series, together with the same stories published in daily newspapers in an entertaining way tactfully bring about delicate issues into the public interest and debate.

Aspects of social change

The Soul City has had an impact on massive awareness and change in behaviour, social mobilization, public debate in the media, and influence on legislation. It helps people define themselves as part of their community. It has developed into an innovative and important agent in the poverty oriented work around health, HIV/AIDS, women's and children's rights in South Africa.

Adapted from:
Bouman, M. **The turtle and the Peacock. The entertainment Education strategy on television,** PhD Wageningen University, Wageningen, 1999, chapter 2, pp. 23-38.
Tufte, T. *Edutainment in HIV/AIDS Prevention. Building on the Soul City Experience in South Africa* in Approaches to Development, Servaes. J. ed., UNESCO: Paris, 2003, chapter 13, pp.1-12.

Box 7 Social mobilization Case: Juanita and the Mayoral Elections

Main focus	On setting a new political agenda on children's problems by using multi-media campaigns and activities to sensitize the candidates in the mayoral elections in 1988 to take the demands of the children into account.
Place	Bogota, Colombia
Beneficiaries	The children in Colombia
Funding	UNICEF Colombia and the National Federation of Coffee Growers
Partners	The Corporation for the Promotion of Municipal Communities (PROCOMUN)

Media and method

Media used are print media, radio and television. Newspapers, direct mails and magazines are used to deliver the campaigned messages to the audience. At the same time discussion on these issues took place, interviews and news on the issues were radio broadcasted. TV spots were also produced to reinforce the messages from the children to the general public.

Description

The multi-media campaigns focused on a primary-school girl named Juanita who wrote a letter to express her concern about the children's problems in Colombia during the time of the mayoral electoral campaign. Leaflets that bear Juanita's letter were produced to be sent to each mayoral candidate. At the same time, a 30-second TV spot on Juanita, her voice on the radio, news on children in Colombia and discussions about the problems were broadcasted to form the public awareness, and pressure each candidate at the community level to take the children policy into account in his/her election campaign.

Background and context

Juanita, who is a pupil, wrote a letter to the future mayor of her village informing him about the problems the children are facing: shortage of schools, clean water, food, health etc. She ended the letter with a punch line saying, "I cannot give you my support yet, but you yes you can give me yours." This punch line became the slogan for the campaign and was reproduced and accompanied by the motif of the campaign which was: 'The children of Colombia: a great responsibility for mayors and communities."
The strategic trust of the Juanita campaign was to enter into competition with the mayoral election contest, using instruments and media similar to those designed and used by the candidates themselves. With this strategy, the mayoral candidates would find themselves confronting another competitor, the children group personified by Juanita, who would also attract the attention of the general public. While remaining message senders in running their own campaigns, they would also find themselves as a target audience for a campaign by children.

Aspects of social change

The Juanita campaign aroused the public awareness and united the public debate on five children issues: Mortality of infants in their first year, malnutrition, pre-school child care, access to primary education, and children and youth in particularly difficult circumstances. The mayors were sensitized address the children's issues and to incorporate it in future policies.

Adapted from: MacKee, N. *Motivation to act: Effective communication* in Involving People Evolving Behaviour, eds. MacKee, N., Manoncourt, E., Saik Yoon, C. & Carnegie, R., Southbound Penang and UNICEF: Penang 2000, pp. 108-109. UNESCO *Profiles: United Nations Agencies: UNICEF* in **Approaches to Development Communication: An Orientation and Resource Kit** eds. Mayo, J. & Servaes, J. Paris 1994, p. 8.
Fraser, C. & Restrepo-Estrada, ***S. Putting Politician Under Pressure: A Case Study of Advocacy and Social Mobilization for Children linked to Decentralization and Elections in Colombia*** draft Sep 1992. pp. 3-15.

Box 8 **IEC case: Family Planning in Thailand**

Main focus	Family planning by multi-media approach
Place	Thailand
Beneficiaries	Thai population
Funding	The Thai government
Partners	The Population and Community Development Association

Media and method

Interpersonal, mediated campaigns by using folk media emphasizing humour and fun components of Thai culture to tackle the embarrassment of talking about sexual practices and family planning issues.

Description

The family planning program in Thailand has been very successful thanks to the combination of mediated campaigns and handing out condoms in a fun and humorous way. Through humour and jokes, which are part of Thai culture, Mr. Mechai Viravaidya and his colleagues set up unconventional campaigns to spread the family planning messages nationwide. The activities involved condom-blowing contests, family planning carnivals, vasectomy festivals on the King's birthday, etc.

The Population and Community Development Association runs a restaurant called 'Condoms and Cabbages'. They hand out condoms to customers when they leave the restaurant.

Background and context

Mr. Mechai Viravaidya launched a project called the Community-based Family Planning Services to complement the family planning efforts of the government. His Community-based Services grew into the Population and Community Development Association, which has about 12,000 volunteers working with about a third of the country's people, and it is involved in a range of community development initiatives.

Aspects of social change

Thailand has achieved major advances in family planning. There was a break down of the social taboos of talking about it and at the same time of drawing widespread attention to it.

Adapted from:
Fraser, C. & Restrepo-Estrada, S. *Of 'Condoms and Cabbages': Communication for Population and Family Planning* in **Communication for Development** I.B. Tauris & Co Ltd: New York 1998, pp. 184-185.
Colle, R. **The Population IEC and Health Communication Threads** in **Approaches to Development**, Servaes. J. ed., UNESCO: Paris, 2003, chapter 6. pp. 44-51.

Box 9 Institution building case: Tambuli Community Radio Project

Main focus	To set up a bottom-up strategy involving participation of the local people to organize and manage interactive community radio stations in different locations
Places	The Batanes Island, Laurel in Batangas Province, Ibajay town on the Panay Island, Mabuhay in the Olutanga Island, The Philippines
Beneficiaries	The rural people in the transmission radius of the stations
Funding	UNESCO, DANIDA, the Philippines Government, and the local people's annual fees
Partners	The Rural Broadcasters' Foundation of the Philippines and the Community Media Council, Community Media and Training Centre (CMTC), Local Development Foundation.

Media and method

Community-produced radio programs that allow the listeners to participate in discussions or debate on development issues. This is done by empowering the people to manage, organize, control and produce their own programs that respond to the need of the community.

Description

Tambuli's interactive communication system consists of many local radio stations located in remote areas in a networking system. These stations are run and program-produced by the local volunteer staff members in a participatory approach. It has its own Community Media Council, whose members are the local people. UNESCO and DANIDA funded the hardware installation and software production. The listeners also pay their annual subscription to the stations. The system transmits the local's information they need such as new technology, provide a forum for discussions about possible income-generating ideas, identify sources of inputs, help build economic units such as cooperatives, inspire communities, to spread and exchange beneficial concepts and experience. Furthermore, it established a local development foundation to provide several types of support via their Livelihood Assistance component (e.g. capitalization through an interest-free loan), training, and bringing technical information to the community.

Background and context

The city-based commercial media create unnecessary needs for consumer goods for the poor people in the rural areas. These media create demands but do little to help rural people satisfy those demands through inspiring or motivating them to improve their production or engage in profitable enterprises. The analysis emphasized that a cause of rural inertia could well be lack of information about opportunities and the lack of communication with leaders, in the sense of dialogue, rather than the usual top-down imposition of demands and admonitions. The creation of localized information network that would link villagers to development resources and knowledge, and also establish two-way communication with leaders would be a solution to the problem.

By setting up local radio stations or newspapers and means to achieve community development, the locals learn to organize themselves socially. The local radio stations and newspapers should be non-commercial and non-profit making base run by volunteers. The tambuli is the traditional carabao horn or sea conch used by the baranggay (village) chief to call the people for an assembly. It is used only for serious matters, particularly for gathering villagers to make important decisions. For this reason, the tambuli invariably commands respect and authority. The name Tambuli has also been turned into an acronym in Filipino, which in English means 'Voice of the Small Community for the Development of the Underprivileged'.

Aspects of social change

The interactive local radio service enables the locals to express their grievances. This has a community watchdog effect that has made officials more conscious of their public responsibilities. The project helps to promote moral rectitude both for the staff members and the people in the community.

Adopted from: Colle, R. *The Institution-Building Thread* in Approaches to Development, Servaes. J. ed., UNESCO: Paris, 2003, chapter 6. pp. 55-59.
Fraser, C. & Restrepo-Estrada, S. *Tambuli: The Electronic Carabao Horn* in Communication for Development, I.B. Tauris & Co Ltd: New York 1998, pp. 190-218.
Hancock, A. UNESCO's contributions to Communication, Culture and Development. Servaes J. (ed.) Walking on the other side of the Information Highway. Communication, Culture and Development in the 21st century, Southbound: Penang, 2000.

Box 11 **Development Support Communication case: Community Audio Towers**

Main focus	Community development
Places	Tacunan, Maragusan, Floryda (CATs), and Nagbukel, Pinagdanglayan Dolores, Concordia, Tulungatong Development and Support Communication projects), The Philippines
Beneficiaries	Around 4,000 in each community
Funding	FAO/UNDP, UNICEF, Department of Agriculture
Media and method	Cone speakers mounted on towers

Description

In the late 1980s, FAO started the CATs (Community Audio Towers) and UNICEF, the ComPAS (Community Public Address System), in the late 1990s. Both are similar communication strategies based on community audio towers. At the heart of both projects is the support for rural communities to use this narrowcasting technology for community communication and social development. The local communication system aims to raise and discuss local issues and mobilize community members on children's right, health and nutrition, child protection, education, livelihood, agriculture, etc. A Community Media Council may vary from one place to another, but generally include from its inception a very equilibrated representation from farmers, women, elderly people, youth, health workers, educators, local authorities, religious leaders and so on. It is important to note that women make up half of the representatives at the CMC, and are very active as broadcasters.

Background and context

The Philippines has experienced a rapid growth of mass media over the last two decades due to the technology revolution, more liberal economic policies, the return of democracy, deregulation of telecommunications and decentralization. The result is the growth of provincial media, mainly commercial radio and television. There are approximately 328 AM and 317 FM radio stations covering 90 percent of the population through 25 million radio receivers. Even television is growing due to expanded rural electrification: About 128 stations are currently operating. Profit, Propaganda, Power and Privilege or PPPP reigns the vast majority of the population, except in those communities where community radio or community audio tower have been set. The idea of community audio towers has been tried before to support social and economic development in poor and marginalized rural communities in third world countries such as in Ethiopia, Thailand and Mozambique in the 1980s. Community radio towers have served the purpose of stimulating community organization around issues of social development and the strengthening of cultural identity.

Aspects of social change

According to the villagers the Community Audio Tower was instrumental in addressing agricultural problems, infrastructure problems and so on.

Adopted from: UNESCO *Profiles: United Nations Agencies: FAO* in **Approaches to Development_ Communication: An Orientation and Resource Kit,** eds. Mayo, J. & Servaes, J. Paris 1994, pp. 2-11. Gumucio Dagron, **A. Making waves: participatory communication for social change**, the Rockefeller Foundation: New York, 2001, pp.121-124.

Box 13 Community Participation Case: The Fogo Process

Main focus	The use of inexpensive video for dialogue between communities and policy-makers
Place	The Fogo Island, off Newfoundland, Canada
Beneficiaries	The fishermen and their families who live on the island
Partners	Memorial University's Extension Education Department and the National Film Board of Canada
Media and method	Using film footage of the fishermen to spark dialogues concerning the problems

Description

The Government wanted to move the fishermen and families onto the mainland. With the assistance of the Memorial University and the National Film Board of Canada, the fishermen began a process of reflection and debate concerning their values, sense of community and their future. Film footage of themselves was used as a "mirror" to spark such debate in the community. Seeing themselves on camera, talking about their problems, gave the community a sense of self-esteem not experienced before. Some of the same footage was used to start a dialogue by showing film of the islanders and then recording the reactions of policy-makers who came to see that the objects of their resettlement plans were thinking, feeling people. After much dialogue and planning, the resettlement plan was scrapped and a fishing cooperative, and other community initiatives, was founded.

Background and context

In the 1960s, the Canadian Government wanted to resettle unproductive fishermen and their families onto the mainland, to cut down on the cost of social services. The people then started to discuss and debate their resettlement plans.

Aspects of social change

Empowerment and community identity were aroused in the participatory process.

Adopted from: Colle, R. The Community Participation Thread in Approaches to Development, Servaes. J. ed., UNESCO: Paris, 2003, chapter 6. p. 37.
McKee, N. Motivation to act: Effective communication in Involving People Evolving Behaviour, eds. MacKee, N., Manoncourt, E., Saik Yoon, C. & Carnegie, R., Southbound Penang and UNICEF: Penang 2000, pp. 104-105.

The context of communication for development, 2004

James Deane

"…..if development can be seen as a fabric woven out of the activities of millions of people, communication represents the essential thread that binds them together.
On the one hand, communication as dialogue and debate occurs spontaneously in any time of social change. The increased freedom of expression in recent times has been almost simultaneous with changes in the global political structure.
On the other hand, it is communication as a deliberate intervention to affect social and economic change that holds the most interesting possibilities. A development strategy that uses communication approaches can reveal people's underlying attitudes and traditional wisdom, help people to adapt their views and to acquire new knowledge and skills, and spread new social messages to large audiences.
The planned use of communication techniques, activities and media gives people powerful tools both to experience change and actually to guide it. An intensified exchange of ideas among all sectors of society can lead to the greater involvement of people in a common cause. This is a fundamental requirement for appropriate and sustainable development."

Communication: a key to human development,

Colin Fraser and Jonathan Villet, FAO, 1994

INTRODUCTION

The importance of communication in the development process has been acknowledged for many years by the development community. FAO has spent at least thirty years pioneering and promoting - both in thinking and practice - the centrality of communication in development. The most essential ingredient of good communication – putting people at the centre of the communication process - has similarly been understood and documented for many years.

Despite this, the 2004 Communication for Development Roundtable takes place against a background where resources for communication activities continue to be difficult to mobilize, where strategic thinking and implementation of communication in development are going through a period of some confusion, including within several bilateral and multilateral agencies, and where development organizations continue to find it difficult to put people at the centre of the communication process.

It also takes place at a time when the arguments for effective, professional and people-centred communication strategies have arguably never been as compelling.

This paper seeks to provide a brief overview of the context of development communication, particularly in terms of some key trends and events since the last Roundtable on Communication for Development in 2001, as well as a contextual link between the 2001 and 2004 roundtables. It does not claim to be comprehensive, and has sought to avoid duplication with some of the other papers prepared for the 2004 Roundtable. It falls into four sections.

First, it examines the development context, particularly focusing on the principle strategies now being deployed to meet the Millennium Development Goals, and the relevance of communication to these strategies. It also outlines some of the other key development challenges where particularly strong arguments can be made for the centrality of communication, with a focus on the subject of the last Roundtable, HIV/AIDS communication.

Second, it examines the changing communication environment and looks at some of the implications of these changes for current debates on communication.

Third, it briefly examines the context of funding and resources available for communication initiatives.

Finally it seeks to identify some of the main obstacles which need to be tackled if communication for development is to receive a substantially higher priority in international development strategies

The specific issues of communication and sustainable development which form the main focus of the Roundtable are covered in detail in other papers prepared for this event and are only lightly covered in this paper. The views expressed in this paper are those of the author and should not necessarily be taken as the views of FAO.

1. THE DEVELOPMENT CONTEXT

1.1. From globalization to global security

One dominant global event since the last Roundtable has shaped almost everything else – the attack on the US on September 11 2001. Never before has communication across boundaries and between cultures been more important, and never before has global security depended on the existence of channels that promote such communication. Arguably those channels have rarely been more fragile.

The prevailing context for much development discourse work before September 11 was focused on globalization and the associated interdependence and interconnectedness of all peoples, a process fundamentally dependent on and shaped by increasingly rapid flows of information around the world. The events of and following September 11 heralded a marked shift in international political attention away from globalization, a shift accompanied by an increased parochialism in communication channels.

This was most clearly demonstrated in media reporting of the ensuing conflicts, especially in Iraq. Several major western media organizations (including the New York Times, the Washington Post and CNN) have publicly questioned their own coverage of the run up to the Iraq war. These events saw the increasing credibility of new media players such as Al Jazeera who have, amidst controversy, constituted a major challenge to the dominance of western based news networks. In the US the emergence and rapid popularity of other new players such as Fox TV, explicitly more patriotic in its news values in coverage of the war on Iraq and the war on terror, has reinforced a trend towards a more fragmented media industry. These are among many developments that suggest a growing fragmentation mainstream media reporting at a time of international crisis.

At a time when the international community is so divided, these trends might have been expected to prompt an increase in support for organizations seeking to foster informed public discourse and communication at national and international levels. Much evidence suggests that the contrary has happened.

At the international level, many of the main international NGOs dedicated to generating perspectives from developing countries and broader information flows across boundaries and cultures have suffered substantial uncertainty in funding. At the national level, decisions by many donor organizations to provide budget support to governments has often resulted in a shift of resources away from civil society organizations, many of them dedicated to fostering informed dialogue in society.

Some donor trends in the field of communication are detailed in Section 4 but at this point it is worth noting how difficult it is to discern a significant strategic response post-September 11 among donors and development actors, particularly in relation to building communication bridges and conversations across cultures. Global terrorism and the war on it are events where the communication community has a critically important role in making the world a less dangerous place. And yet, as Section 4 suggests, there appears to be a general and puzzling trend towards disinvestment in such communication.

1.2. Millennium Development Goals and Poverty Reduction Strategy Papers: The central role of communication

The principal strategic reference points for the global development community are the Millennium Development Goals (MDGs). Nearly all bilateral funding agencies, most multilateral agencies and many NGOs have explicitly aligned their medium- and long-term priorities to meeting the MDGs (see box).

UN International Development goals By 2015:

1. Eradicate extreme poverty and hunger	Reduce by one half the proportion of people living on less than a dollar a day
	Reduce by half the proportion of people who suffer from hunger
2. Achieve universal primary education	Ensure that all boys and girls complete a full course of primary schooling
3. Promote gender equality and empower women	Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015
4. Reduce child mortality	Reduce by two thirds the mortality rates for infants and children under five
5. Improve maternal health	Reduce by three4 quarters the maternal mortality ratio
6. Combat HIV/AIDS, malaria and other diseases	Halt and begin to reverse the spread of HIV/AIDS
	Halt and begin to reverse the incidence of malaria and other major diseases
7. Ensure environmental sustainability	Integrate the principles of sustainable development into country policies and programmes, reverse the loss of environmental resources
	Reduce by half the proportion of people without sustainable access to safe drinking water
	Achieve significant improvement in lives of at least 100 million slum dwellers, by 2020
8. Develop a global partnership for development	Open trading system, special needs of least developed countries (LDCs), debt, employment, access to medicines, ICTs

The goal given the highest priority and around which many of the others are focused is to halve the proportion of people living on less than a dollar a day by 2015. The principal strategy adopted by the international community to achieve this goal is the development of poverty reduction strategy papers (PRSPs), a process initially promulgated by the World Bank and increasingly being used by most bilateral development agencies.

At the heart of the PRSP process, and indeed a founding principle informing all the MDGs and allied processes such as the New Economic Partnership for African Development (NEPAD), is the principle of ownership. The World Bank has repeatedly argued that unless there is a genuine process of ownership of these strategies within countries, and real participation and dialogue with all sections of society in drawing them up, they will fail.

Achieving such ownership requires, as the Bank itself argues, a major focus on communication. "Participation, the keystone of PRSPs, relies on accurate, consistent and continuous communication that provokes response and encourages debate and dialogue leading to better understanding, the application of issues to ones own circumstances, and participation in all phases of a PRSP", argues the World Bank in its PRSP source book on communication.[1]

[1] *Strategic Communication in PRSP*, Masud Mozammel and Barbara Zatlokal, World Bank, 2003

PRSPs (and their earlier incarnation, Comprehensive Development Frameworks) started to be developed in 1999. While billions of dollars of spending have now been shaped by PRSP processes, repeated criticisms have been expressed over inadequate participation in their design, particularly by civil society,[2] and the lack of public awareness and ownership of the process. Criticism was also expressed by the lack of public discourse of PRSPs, particularly through the media, with surveys suggesting that very often few journalists or editors were even aware of PRSP processes being developed in their countries.[3]

The publication by the World Bank of a sourcebook on communication for PRSPs in 2003, which was itself compiled through a consultative process with communication NGOs and other organizations, marked a major acknowledgement by the Bank of the importance of communication in the PRSP process.

A frequent complaint made by the communication community over many years is that communication strategies are designed as an afterthought (rather than integrated from the start into development strategies), are accorded too few resources and implemented with insufficiently trained personnel. Certainly the central development strategy designed to meet the primary development objective of our times – halving poverty by 2015 – appears to back up the complaint. The evidence of the last five years suggests that the level of ownership, participation and public discourse required for PRSPs to be successful requires a fundamental reassessment and reprioritization of the role of communication in meeting the MDGs.

1.3. Beyond Nicaragua: The continuing HIV/AIDS communication debate

1.3.1. A shift in the HIV/AIDS communication debate

The last Communication for Development Roundtable, held in Nicaragua in 2001, focused explicitly on the theme of HIV/AIDS communication, the success of which is fundamental to meeting the MDG of halting the spread of HIV by 2015. The Roundtable welcomed the revitalized energy and funding being devoted to the HIV/AIDS pandemic and issued a declaration designed to capture the main conclusions of the meeting. Roundtable participants were both explicit and candid in their assessment that communication strategies had, for many various reasons, failed in preventing the HIV/AIDS pandemic. In particular the declaration argued that:

"Existing HIV/AIDS communication strategies have proved inadequate in containing and mitigating the effects of the epidemic. For example, they have often:

- treated people as objects of change rather than the agents of their own change;
- focused exclusively on a few individual behaviours rather than also addressing social norms, policies, culture and supportive environments;

[2] Many examples exist of such criticisms by international and national NGOs and others. One example is *Structural Adjustment in the name of the poor: the PRSP experience in the Lao PDR, Cambodia and Vietnam* by Jenina Joy Chavez Malaluan and Shalmali Guttal, Focus on the Global South, 2002

[3] *Reducing Poverty: Is the World Bank's strategy working?* by Kitty Warnock, Panos, 2002 and *Hearing the voices of the poor: encouraging good governance and poverty reduction through media sector support,* Dr Ann Hudock, World Learning Foundation, 2003

- conveyed information from technical experts rather than sensitively placing accurate information into dialogue and debate;
- tried to persuade people to do something, rather than negotiate the best way forward in a partnership process.

Progress in slowing the epidemic will require a multi-sectoral response and use of communication to tackle the behaviours related to the spread of the epidemic and to address its causes (inequality, prejudice, poverty, social and political exclusion, discrimination, particularly against women)." [4]

The Roundtable brought together a wide range of organizations and marked a decisive recognition that success in achieving sustained behaviour change on a scale required to tackle the pandemic was fundamentally dependent on social change and that communication strategies needed to focus on both.

Since the last Roundtable the response to HIV/AIDS has continued to develop rapidly and its influence is clearly discernible in several important developments. Unicef has been pioneering a new communication for social change (also known as communication from a human rights perspective) programme in Eastern and Southern Africa, particularly in Ethiopia and Zambia. The Rockefeller Foundation decided in 2003 to take forward its work in this field by supporting the establishment of the Communication for Social Change Consortium. The Panos Institute published a major appraisal of communication programming entitled *Missing the message: 20 years of learning from HIV/AIDS* – the report has been downloaded more than 100,000 times from the Panos website, indicating a massive interest in the field. Dozens of other examples exist of a move towards more social change approaches to communication in relation to HIV by a broad spectrum of organizations.

Despite this, there remains a significant sense of strategic confusion related to HIV communication. Much of the debate at the last Roundtable focused on the need for long-term strategies which integrated both behaviour and social change approaches, and a shift towards developing communication strategies that provide people with a voice as well as sending them a message. While there are important statements and expressions of intention by funding agencies, there is only occasional evidence that funding patterns and expenditure of resources have decisively altered to reflect this shift.

Recent intense discussions at the XV International Conference on AIDS in Bangkok on the US government's insistence that its funds be focused on promoting an ABC approach (abstinence, being faithful, using a condom) demonstrated the continued disagreement on the most effective prevention and communication approaches to HIV/AIDS.

There has nevertheless clearly been a significant change of emphasis in the discourse on communication strategies related to HIV/AIDS, a shift clearly reflected in a new Dfid strategy on HIV/AIDS published in July 2004.

"Mass media campaigns, using appropriate communication strategies and locally appropriate idioms, are an essential element [of our strategy]. Top-down information campaigns are rarely as effective as more inter-active media such as soap opera and theatre, where complex issues and differing views and perspectives can be

[4] *Communication for Development Roundtable Report: Focus on HIV/AIDS Communication and Evaluation*, UNFPA, UNESCO, Rockefeller Foundation, Panos, 2002

fully explored and public debate encouraged …. Behaviour change, and other communication programmes, supported by a positive policy environment, can be an effective part of HIV control strategies and should be properly integrated into national HIV/AIDS control programmes. They need a coordinated approach to communication involving government, local and national media and civil society." [5]

1.3.2. ARVs and an integrated communication approach

HIV/AIDS strategies themselves have shifted strongly over the last two years with the availability of substantially more resources, and the rapid development and falls in prices of anti-retroviral treatments (ARVs). The decisive shift in focus to providing treatment for the millions infected with the virus, exemplified by WHO's 3 X 5 initiative (providing ARVs to three million people by the end of 2005) has led to some concerns within the communication community of a remedicalization of the AIDS pandemic and a deprioritization of communication and prevention strategies.

WHO itself however has emphasized strongly the importance of an integrated approach bringing together both treatment and prevention, and a set of communication strategies that can promote both behavioural and social change. In May 2004, WHO and UNAIDS co-hosted a major consultation of international agencies and developing country communication experts focused on producing an integrated communication strategy.

Even as the issue of treatment provision increasingly dominates the response to HIV/AIDS, informing and empowering people affected by HIV/AIDS remains the principal challenge in slowing the spread of the virus. A central argument stressed in the WHO/UNAIDS meeting for increasing treatment provision is the opportunity it also presents for communication and prevention (especially by normalizing and de-stigmatizing the disease, by providing an incentive for people to know their status and by providing a catalyst for in-country civil society and advocacy action around HIV/AIDS and allied issues). The report, *HIV/AIDS Communication and Treatment Scale-Up: Promoting civil society ownership and integrated approaches to communication,*[6] is expected to available at the Roundtable.

1.3.3. Who is coordinating the HIV/AIDS communication response?

An increasingly urgent issue for communication practitioners and thinkers on HIV/AIDS, when change is so rapid and debate so intense around different communication and prevention approaches, is that there is so little coordination internationally of communication approaches. There has been very limited coordination capacity on communication within UNAIDS for several years, and coordination capacities of other UN bodies on HIV/AIDS have also been reduced at headquarters level. Many important lessons of communication have been learned over 20 years in the response to HIV/AIDS, but these lessons are arguably not being applied as well as they could because there exists so little focus on communication coordination.

---

[5] Taking Action: the UK's strategy for tackling HIV/AIDS in the developing world, Dfid, July 2004 (www.dfid.gov.uk)

[6] Published by WHO and Panos

2. THE MEDIA AND COMMUNICATION ENVIRONMENT

2.1. Information and communication technologies

2.1.1. The World Summit

The paper prepared for the 2001 Roundtable focused heavily on the increasing international attention being given to the potential of ICTs in development, highlighting in particular international reports, initiatives and meetings.

These included the UNDP Human Development Report of 2001, the Global Knowledge Conference in Kuala Lumpur in 2000 and subsequent action plan, the G8 DOT Force (Digital Opportunities Task Force) and the UN ICT Task Force. The Millennium Development Goals make a specific reference to ICTs, committing the international community, "In cooperation with the private sector, [to] make available the benefits of new technologies—especially information and communication technologies."

The most important event since the last Roundtable – and perhaps the largest meeting ever held on communication and development – was the World Summit on the Information Society (WSIS) held in December 2003. WSIS, and its preparatory committee meetings, created an opportunity for a major debate on the role of information and communication technologies in tackling poverty. The greatest challenge for the Summit, according to the official declaration, was to "harness the potential of information and communication technology to promote the development goals of the Millennium Declaration."

WSIS was a major event bringing together more than 11,000 people and it was preceded by three preparatory committee meetings and an intercessional meeting, five regional conferences and a series of other parallel meetings. The preparatory process to the Summit was characterized a strong engagement from developing countries, but the meeting suffered from a series of constraints.

The first was the credibility of the Summit process itself among important potential stakeholders, particularly donors and private sector organizations. The Summit itself (with particularly important support from the Swiss Development Cooperation agency) attracted a large number of people, many from developing countries, and consisted of a remarkable exhibition of innovation in using ICTs in the public interest and alleviating poverty, and a high energy series of parallel meetings (including the World Electronic Media Forum). But while the Summit resulted in a formal declaration and the adoption of a 7,000 word plan of action, criticisms were made that the official declaration amounted to a lowest common denominator of agreement among the participating parties.

Pre-summit debates were often preoccupied with issues of protecting existing freedoms, particularly on content and media rather than decisively moving the field forward. An attempt to create a new Digital Solidarity Fund received a lukewarm response from donors and the Summit received little international public attention compared to similar UN summits. The whole concept of an "information society", defined principally in technological rather than social terms, remains contentious. A second stage of the summit process is to be held in Tunis in 2005. While the plan of action from the Geneva process is shaping the work of organizations such as the International Telecommunication Union, there is limited evidence that the conclusions of the Summit have decisively influenced broader development policy. The engagement of the private sector in the WSIS process was very limited.

Question marks surround the extent to which the declaration of the WSIS represents a fundamental breakthrough and clear multi-stakeholder consensus. The critical ingredients for the success and credibility of global policy processes, particularly a

dynamic interplay between government, private and civil society sectors, is lacking, and limited concrete consensus exists among governments, particularly between Northern and Southern governments.

In principle a major two stage summit process sponsored by the United Nations whose theme is the global information society might be expected to dominate, or at least substantially influence, the agendas and debates of all organizations focused on communication for development, but there is little evidence that this is currently happening.

Key Recommendations and Conclusions from the Official Declaration of the World Summit of the Information Society, 2003

1. The Declaration recognizes that ICTs are an essential foundation for an inclusive Information Society and embraces the idea of universal, accessible, equitable and affordable ICT infrastructure and services as a key goal of all stakeholders that will help build it.
2. Boosting trust and confidence in ICTs including information and network security, authentication, privacy and consumer protection have been underscored as a prerequisite for the development of the Information Society.
3. ICTs are also important tools for good governance. The Declaration stresses the need to create an enabling environment at the national and international level based on the rule of law with a supportive, transparent, pro-competitive, technologically neutral and predictable policy and regulatory framework.
4. If universal access is the foundation of a true Information Society, capacity building is its motor. The Declaration acknowledges that only by inspiring and educating populations unfamiliar with the Internet and its powerful applications will the fruit of universal access ripen.
5. They also recognize that resources must be channeled to marginalized and vulnerable groups, to ensure adoption and empower them.
6. Indeed, the Declaration reaffirms the universality and indivisibility of all human rights as fundamental freedoms in the Information Society, along with democracy and good governance.
7. On the question of Intellectual Property, the Declaration underlines the importance of both encouraging innovation and creativity and the need to share knowledge to spur such innovation and creativity.
8. Key principles also include the respect for cultural and linguistic diversity as well as tradition and religion. On the Internet in particular, that translates to multilingual, diverse and culturally appropriate content.
9. As for Internet management, involving all stakeholders and intergovernmental organizations to address both technical and public policy issues has been underscored. But, overall, the global Internet governance issue was too complex to resolve in detail. Agreement was therefore reached to set up an open and inclusive working group on Internet governance to investigate and make proposals for action prior to the second phase of the Summit in 2005.
10. The principles of freedom of the press, independence, pluralism and media diversity are also upheld.
11. And finally, the Declaration expresses an unconditional support and commitment to close the Digital Divide through international cooperation among all stakeholders.

From WSIS website

The second major constraint facing the Summit process was the debate over the engagement of civil society itself, with increasing frustration felt by civil society organizations at the lack of access to and interaction with the governmental process. In the end, civil society organizations produced their own declaration from the Summit[7] stating that after engaging for two years in the preparatory process to the Summit that "our voices and the general interest we collectively expressed are not adequately reflected in the Summit documents."

A third set of debates, which divided civil society, centred on the question of communication rights and demonstrated the continuing difficulties of holding formal debates over the roles and responsibilities of the modern media. This is described in more detail in Section 2.1.4.

2.1.2. ICTs: How wide is the divide?

The digital divide, the main issue designed to be addressed by WSIS, remains stark but its character is changing. According to a recent report from the ITU,[8] "sub-Saharan Africa has about 10 percent of the world's population (626 million) but 0.2 percent of the world's one billion telephone lines. Comparing this to all low income countries (home to 50 percent of the world's population but only 10 percent of its telephone lines), the penetration of phone lines in sub-Saharan Africa is about five times less that than in the average low income countries ... fifty percent of the available lines are concentrated in capital cities where only about 10 percent of the population lives."

The same report however suggests a little more optimism in moving towards the MDG on ICTs. "ICTs can alleviate poverty, improve the delivery of education and health care, make governments more accessible and accountable to the people and much more." Target 18 of Goal 8 [of the MDGs] calls upon the Declaration's adherents to, *"in cooperation with private sector make available the benefits of new technologies, specifically information and communications ..."*

Of all the different MDG targets, number 18 is the most open-ended (raising the questions of which ICTs should be made available, to whom and by when), but it is also the one where most progress was made during the 1990s. "All of the developing sub-regions of the world have grown their fixed and mobile telephone networks (total teledensity) to greater extent since 1990 than the entire period before that date", says the report.

The spread of mobile telephony has been extraordinarily rapid. In Uganda, the number of mobile phone users has multiplied 131 times in six years – although most of this growth has been in urban areas.[9] Taking Africa as a whole, last year more than 13 million people were added to the mobile phone network. The 2003 World Telecommunication Development Report of the ITU also argues that existing statistics almost certainly underestimate access to both mobile telephony and Internet in developing countries and new surveying techniques are suggesting substantially greater access to new technologies than had previously been supposed.

"Most references to the digital divide and the information society revolve around access to the Internet. Yet it is remarkable how little we know about the true

[7] This declaration, together with the formal Summit declaration, can be found at www.itu.int/wsis.

[8] World Telecommunication Development Report, ITU, 2003

[9] *Completing the revolution: the challenge of rural telephony in Africa*, by Murali Shanmugevelan and Kitty Warnock, Panos, 2004

extent of Internet access, particularly in developing countries … A number of other countries that have started to carry out surveys have found that they had hitherto been underestimating the number of people who access the Internet. An Internet survey carried out in Jamaica in January 2003, for example, found that there were almost 675,000 users in the country, more than twice the figure suggested by previous estimates. A similar phenomenon occurred in Peru, with a November 2000 survey finding twice as many Internet users in the capital (Lima) alone, than had been previously estimated for the entire country (Figure 2.3). Surprisingly perhaps, these findings suggest that the digital divide may not be as wide in some places as is assumed."

The same report also argues that "radios increasingly fall into the category of having achieved universal service … Televisions too are on the way to being ubiquitous in many countries. The biggest stumbling block to penetration of these ICTs in the lowest income nations appears to be electricity." [10]

However, there is a very long way to go for new ICTs to even begin to approach a level of universal service or access. Even the radio remains a minority medium in some countries. The Hoot website in India,[11] a respected and often irreverent commentator on media and communication issues in the country, claimed recently that:

"Using data from Census 2001, a survey concludes that India may be shining but 81 percent of rural households in our country still cannot afford to buy even a black and white television set. And 68 percent of rural households do not own a radio or transistor set. In all the states in the east and northeast India rural television ownership is very low. In West Bengal one out of seven and in Orissa one out of ten rural households are lucky to possess a television set. In Bihar just one out of 18 rural households has managed to buy a television set. So while TV may give a lot of coverage at election time, millions of voters will not see any of it." [12]

Considerable excitement and interest continues to surround the potential of ICTs. This large and complex field is the subject of many conferences and reports – strategic trends are accordingly difficult to summarize but a number have emerged:

- The steady dissolution of the distinction between old and new technologies: increasingly the focus of debate on ICTs has moved towards assessing the importance of new technologies alongside existing communication technologies, particularly radio, and other communication channels. Development agencies and practitioners on the ground are increasingly assessing the whole range of new and old ICTs in the context of whether they meet the information needs of and provide a voice for the poor, and there is particular focus on the potential synergies between new and old technologies. There are many examples of this approach, but FAO, for example, produced an important book in 2003 on the interaction between radio and new technologies.[13]
- Translating words into action: after an intensive programme of meetings, conferences, action plans and declarations at the international level over the last five years, questions surround the extent to which words are being translated into action. Significant resources have been mobilized for deployment of ICTs and

[10] World Telecommunication Development Report, 2003, ITU

[11] http://www.thehoot.org

[12] The media and the verdict of the election of 2004, Hoot Editorial, 13/5/2004, http://www.thehoot.org/story.asp?storyid=Web210214207237Hoot73925%20PM1176&pn=1&section=S1

[13] *The One to Watch: Radio, New ICTs and interactivity*, Ed: Bruce Girard, FAO and Friedrich Ebert Stiftung, 2003

many donors have prioritized ICTs, but questions remain about the sustainability of many ICT projects, and the connection between action plans and action.

- A growing focus on the broader policy and social environment, and creating a healthy environment for ICTs and other communications to flourish is apparent: this complements approaches to directly invest in specific projects such as telecentres etc.

The digital divide remains real but its character is perhaps beginning to become as much one between rural and urban, and rich and poor within countries as between countries. The bottom line is that interpersonal communication even in some of the poorest countries is proliferating exponentially and both Internet and mobile telephony are contributing to profound social change within countries - perhaps even faster than we thought.

2.1.3. Media in developing countries

The briefing for the last Roundtable[14] focused on the role of the media in some detail. While debates over the impact and potential of new communication technologies and the digital divide have dominated international discourse on communication in the international arena over recent years, another information revolution has been developing. For the almost 3 billion people on the planet who earn less than US$2 a day, it is the structure, ownership, content and reach of the media that is having the most profound impact. The most important trends shaping the media landscape over the last five years have been threefold.[15]

First, a thoroughgoing liberalization and commercialization of media over the last decade in many parts of the world has led to a much more democratic, dynamic, crowded and complex media landscape. This is opening up new spaces for public discourse and civic engagement, particularly in the field of radio; and to a more commercial, advertising-driven media where information and power divides within developing countries and between rich and poor, urban and rural are growing.

Second, growing concentration of media ownership - at the global, regional and national levels - is squeezing out independent media players and threatening to replace government-controlled concentration of media power with a commercial and political one.

Third, developing countries are increasingly reliant on powerful northern news providers, such as the British Broadcasting Corporation (BBC), Reuters and Cable News Network (CNN), for their international news and information, particularly on stories of globalization, trade and international politics In newly democratic countries in the South, and particularly within civil society, there is growing frustration at the Southern media's dependence on what are perceived to be partial, biased or at least fundamentally Northern-centric news organizations for international coverage and the setting of news agendas.

This is a complex, contradictory revolution marking an extraordinary transformation over little more than a decade. New freedoms, a blossoming of public debate, a resurgent community radio movement, a proliferation of channels and titles across

[14] http://www.comminit.com/roundtable2

[15] These arguments have been substantially expanded by this author and others in the Global Civil Society Yearbook 2002 published by the London School of Economics (www.lse.ac.uk/Depts/global/Yearbook) and updated more recently in *The other information revolution: media and empowerment in developing countries,* by James Deane with Fackson Banda, Kunda Dixit, Njonjo Mue and Silvio Waisbord in *Communicating in the Information Society, Ed Bruce Girard and Sean O'Siochru,* UNRISD, 2003: http://www.unrisd.org/unrisd/website/document.nsf/(httpPublications)/5DCA28E932BB8CFDC1256E240029A075?OpenDocument

all media, a dynamic interplay between old and new technologies, the increasingly globalized nature of information and communication industries and connectivities and the loosening of government control over information have all characterized this revolution.

Despite this, when viewed from the perspective of communication for development, a growing crisis may be emerging marked by a collapse of public interest media. The new market-driven media has brought innovation, dynamism and often greatly enhanced democratic debate. But evidence is growing that, as competition intensifies, content is increasingly being shaped by the demands of advertisers and sponsors, and an increasingly intense focus on profitability. The result is a more urban-biased, consumer-oriented media which has diminishing interest in or concern for people living in poverty.

Uganda provides an example of the complexities of this revolution. Little more than a decade ago the country had two radio stations both based in Kampala. Today it has almost 100, mostly commercial, FM radio stations across the country. Talk shows and particularly the Ekimeeza – hugely popular talk shows where as many as 400 people gather to take part in broadcast debates – have provided some of the most compelling programming. However, early enthusiasm for these developments is being tempered by growing fears of both political and economic interference. Newspaper editors have come under increasing pressure from the government when publishing unpopular stories, a draconian new anti terrorism law was passed in the wake of September 11 making it a capital offence to publish material deemed to be promoting terrorism, and earlier this year several radio stations suspended broadcasting when the government clamped down on non-payment of license fees. Moreover, overall there is an increasing focus across the sector on profitability.

Communication for development organizations and practitioners are beginning to adjust to the new environment. DJs are becoming as important as journalists in bringing development issues to public attention. Indeed, journalism as a profession is dramatically changing and concepts such as "development journalism" are arguably under siege. Journalists themselves who want to explore and investigate development stories - particularly issues affecting those from outside the capital - are finding it more and more difficult to get either resources or attention from their editors.

Never a rewarding and always a difficult profession, investigative journalism is arguably becoming steadily less attractive and there is decreasing inclination among many journalists to focus on development issues since this is a poor career move. With no paying market for poverty-related content, incentives for journalists, editors, publishers and owners to prioritize it are also declining. Journalism training is also under pressure, particularly with a public interest remit, and journalism schools in some developing countries are finding that graduates are as often snapped up by the public relations and advertising industries as they are by news organizations.

The former state monopoly broadcasters and media organizations, which retain the greatest capacity to reach rural and marginalized populations, are facing intense competition from commercial organizations as governments reduce budgets. As a consequence many are in crisis. As well as a shift to more commercial content, there are reports of cutting of language services, particularly minority languages, and of transmitter capacity. In this sense the digital divide is being reflected in a much broader, deeper and perhaps more fundamental information divide between urban and rural, rich and poor.

Communication strategies are changing in other ways too. A decade ago it was often possible to reach an entire population through a partnership with one monopoly government broadcaster, enabling the widespread dissemination of messages on development issues, as well as soap operas and agricultural extension programmes.

An increasingly crowded and fragmented media environment, together with the cuts in budgets and other pressures facing many former monopoly broadcasters, mean that such dissemination is more difficult.

Many development agencies are responding to the new commercialized media market by actively entering it, and some of the most consistent customers for some radio stations are development organizations and donors. Income from development organizations – in the form of payment for spots or sponsorship of programmes - is becoming an increasingly critical component of some broadcast organizations' income, but fears are growing that an artificial market is being created and that public are receiving information determined by whatever organization – development or otherwise - has the most money, rather than through any journalistic or public interest criteria.

The two revolutions – in ICTs and in media – are offering important new opportunities as well as new and complex challenges. Above all else, the new environment demands a new approach to communication for development, one that reaffirms and builds on long-held principles of participatory communication advocated by FAO, but also adapts to and develops new approaches which take full advantage of the opportunities of the new communication environment. In communication environments that are so increasingly networked, communication practitioners are decreasingly focused on disseminating messages and increasingly focused on catalyzing public and private dialogue so that communities can act collectively to develop solutions to their own problems.

The Changing Communication Environment	
Traditional	**New**
• Vertical communication – from government to people	• Horizontal communication – from people to people
• Unipolar communication systems	• Communication networks
• Few information sources	• Many information sources
• Easy to control – for good (generating accurate information to large numbers of people) and ill (government control and censorship)	• Difficult to control – for good (more debate, increased voice, increased trust) and ill (more complex, issues of accuracy)
• Send a message	• Ask a question

2.1.4. Media, freedom and poverty: A difficult debate

The trends and issues highlighted here over the relationship between media and the public interest, including in developing countries, are poorly researched and receive little attention in discussions on communication for development.

The role of the media in the modern information society received scant attention at the World Summit on the Information Society compared to new communication technologies. This is unsurprising given the sensitivities and concerns both of media and a broad cross section of civil society of governmental interference in the media. Debates over the connection between media and poverty seem unlikely to progress substantially within the context of the next phase of the WSIS, and the opportunities of drawing the mainstream media itself into such a debate appear slim.

However if, as this paper suggests, some of the most urgent issues facing the communication for development field is the growing uninterest of much mainstream media in issues of poverty (a phenomenon common both to developing and industrialized countries), new ways of engaging in a dialogue with mainstream media organizations are increasingly urgent.

The long-standing problems associated with the role of the media in relation to development surfaced prominently in the approach to WSIS, as many information and communication NGOs had come together with a central vision "grounded in the Right to Communicate, as a means to enhance human rights and to strengthen the social, economic and cultural lives of people and communities."

This grouping, Communication Rights in the Information Society (CRIS), was highly effective both in assembling a large number of civil society and media advocacy organizations working on issues of information, and in engaging positively and highly efficiently in the WSIS preparatory process. However, criticisms were expressed by some media freedom organizations, most notably by the World Press Freedom Committee and Article IXX, over some articulations of this right to communicate. They feared that successful establishment of such a right could lead to the imposition of controls over an independent media (further information can be found at http://www.crisinfo.org; http://www.article19.org/docimages/1512.doc and a particularly strongly worded attack by the World Press Freedom Committee published on the US State Department website, http://www.state.gov/e/eb/rls/othr/20101.htm).

The sometimes bitter debates, redolent of those of the New World Information and Communication Order in the 1980s, exemplified the continuing challenge of opening up a serious international public debate of the role of the media in the 21st Century. While social advocacy organizations are increasingly concerned with the power and lack of accountability of concentrated and consumer oriented media, media freedom organizations remain concerned about any formal attempt to erode hard-won media freedoms.[16]

The intimate connection between public discourse through the media and poverty has been highlighted for many years, but open and constructive discussion of this and other issues of social concern has often proved difficult. The rapidly changing communication environments in some of the poorest countries and the growing importance of communication for alleviating poverty suggest that new ways of discussing these issues, with the central inclusion of mainstream media and affiliated organizations, is becoming increasingly urgent.[17] Currently however, credible fora which can bring together mainstream, alternative and social advocacy organizations, as well as government and development decision-makers on these issues are in short supply. Given the experience over the years such a debate would almost certainly need to be led by non governmental (particularly media) actors.

3. THE CONTRADICTORY FUNDING PICTURE

As this paper has sought to indicate, there is no shortage of compelling arguments why communication for development is becoming increasingly critical to the MDGs. Trends on bilateral and multilateral policy on communication have, with important exceptions, rarely been more difficult to discern.

[16] In an attempt to reconcile some of these arguments, the Panos Insitute organized a symposium on *Media, Freedom and Poverty* at the Rockefeller Foundation's Bellagio conference centre in October 2003 consisting of people expressing different perspectives on these issues. A statement from the meeting, one of a series focused on issues relevant to communication for social change, reflected a new level of consensus on this issue: http://www.panos.org.uk/files/Bellagio%20statement%20on%20media%20freedom%20and%20poverty1.doc.

[17] Such issues have been highlighted, particularly in relation to the promotion of alternative media, at the Our Media Conferences, most recently held in Porto Alegre in July 2004. More details can be found at http://www.ourmedianet.org.

Those organizations which have gone through a detailed strategic discussion on the role of communication in development have tended to increase both funding and staffing for it. The UK Department for International Development (DFID) is the most prominent example of this. Five years ago, DFID had little historical interest or expertise in communication for development. After a series of discussions and reviews, it came to a strategic conclusion that the role of communication had become essential to its overall development objectives.[18]

DFID has substantially increased its investment in the area, has sought to work in structured partnerships with other donors, has substantially increased its staffing and in-house expertise and has supported and helped initiate a series of large scale programmes including the Catalysing Access to Information and Communication Technologies in Africa (CATIA) programme and Building Communication Opportunities. Perhaps most importantly it has substantially reorganized its internal structure to reflect both the importance of and the multi-sectoral character of communication for development programming and support. Creating an Information and Communication for Development (ICD) team (a deliberate shift away from the earlier ICT or technology focused) team, the organization brings together in one structure expertise on ICT and media programme support, HIV/AIDS communication, knowledge management, research and external communication functions. DFID is developing partnerships with other donors to support information and communication for development activities.

However, officials in many other bilateral organizations, particularly in Europe, highlight a rapidly diminishing strategic engagement in communication with several reports of decreases in funding and policy confusion in relation to communication[19]. There are several reasons for this:

- Diminishing budgets. Budgets are under increasing pressure, including for example in the Netherlands Foreign Ministry, one of the most prominent and experienced supporters of media and communication in development, where overall development budgets have been substantially reduced.[20]
- Budget support in countries and reduction in internationally allocated budgets: There has been a rapid shift among many donors toward spending money through budget support to governments and through country level missions. This has often meant that strategic policy on issues such as communication, and global spending on communication, has diminished, sometimes very rapidly. Some of the Nordic governments in particular, all of whom have been among the most prominent, sustained and pioneering donors of media and communication for more than 20 years appear to be substantially reducing their commitment in the field. In Sida for example, many programmes have been reduced in 2004 as a result of a reallocation of budgets from global to country missions.
- A diminishing interest in communication for development. There is little evidence of this, with many organizations attaching a new priority to communication for

[18] See in particular *The significance of ICTs*

[19] These conclusions are derived from a presentation by the author at a Communication Initiative meeting of November 2003 based on interviews and informal discussions with bilateral staff. They are not the product of a rigorous survey and should not be taken to reflect the official position of any of the donors mentioned. Descriptions of policy are those made by the author, not necessarily those of the donors concerned.

[20] However, an overall reduction in development assistance budgets can no longer be seen as the generic trend that was established during the 1990s, particularly since the 2002 Financing for Development Summit in Monterrey, Mexico where donors pledged an additional US$16 billion in development assistance. See Reality of Aid report 2004 for more detailed mapping of trends of development assistance over the last decade, including severe criticism that neither the amount of aid nor development policies is sufficient to meet the Millennium Development Goals. http://www.realityofaid.org.

development. Reductions in funding to this field do not appear to have come about as a result of any considered strategic decision making related specifically to communication for development.

- Results-based management. There is a trend towards results-based management and a growing need to highlight benefits of development assistance for the spending country. Communication interventions can take a long time to achieve substantial and sustained benefits and these are often difficult to quantify. However, as several reports have suggested over recent years,[21] impact measured over short (three to five year) project timelines is often not sustained in development projects, particularly in communication, whereas sustained impact on poverty over a period of 10 or 15 years can sometimes only be demonstrated through evaluation over that time. This creates problems for results-based management which is, according to some critics (including within donor organizations) sometimes more interested in products and outputs measurable over the project cycle than it is with lasting impact.
- Rapid staff turnover within many development agencies. Communication is a complex field in need of clear, long-term strategies and strong institutional memory. Policy is often weakened by rapid staff turnover.
- While donor organizations have become increasingly committed to listening to the voices of the poor, there can still be a real reluctance to surrender control of the communication process.

Part of the solution to these problems lies with the communication community, particularly the need for a clearer articulation of why communication is essential to meeting the MDGs, and for more effective evaluation mechanisms appropriate to new communication environments.

Nevertheless, given the institutional expertise of many European bilateral agencies and the growing recognition of the relevance of communication to meeting today's challenges it is incumbent on major donors to undertake a much clearer strategic analysis of communication for development issues.

Multilateral agency communication strategies and funding will be discussed at the Roundtable meeting.

4. CONCLUSION: A FRESH URGENCY IS NEEDED

Recent debates, and much of this paper, have been preoccupied with different models of and approaches to communication such as diffusion, participation and advocacy.

There is increasing evidence that communication programmes that tend to attract the most resources – particularly those that promise to deliver concrete, quantifiable changes in individual behaviours over limited time frames – are too often unsustainable, insufficiently rooted in the cultures in which they operate, have limited lasting impact and run up against more fundamental social barriers to change. On the other hand, more participatory, bottom-up models of social change communication sometimes fail to attract more resources because impact is so difficult to evaluate in the short term and because they are often difficult to programme at scale.

Such debates over different approaches to communication have been taking place for some time. The Roundtable process has concluded repeatedly that communication for development should be rooted in and dominated by the perspectives of people who have most to win or lose from the development process. The increasingly complex and horizontal communication environments in which development strategies

[21] See Missing the Message for example, ibid.

are currently deployed, the ever increasing focus on the importance of ownership, as well as the failures of mainly vertical and top-down communication strategies – particularly in substantially mitigating the HIV/AIDS pandemic - all strongly reinforce this perspective.

The increasing marginalization of the poor from public discourse at a time when such voices are so critical, the pivotal role of communication in conflict, the enormity of the HIV/AIDS and other public health catastrophes, the importance of creating more knowledge-based societies, the challenges of making globalization work for the poor – these and other communication challenges prompt fundamental questions: Why does communication still attract comparatively few resources? Why are resources mainly made available for short–term, difficult-to-sustain interventions? And last, but not least, how well equipped is the communication for development community to answer a simple question – what really works well now?

There is mounting evidence that a huge amount works well now. As the Communication Initiative website demonstrates[22] there are an extraordinary range and number of high quality and innovative communication interventions being implemented across the world by thousands of organizations. This is one of the most dynamic fields in the development arena. The problem, in terms of investment and funding policy, is its very richness; the true impact of the best communication is rooted in its character as a complex mosaic of diverse local interventions.

One of the continuing central challenges is to find more effective ways of directing resources to such communication in ways that it can be supported even by large organizations at scale.[23] Communication for development suffers because of the difficulties of replication and taking to scale, and there have been only a limited number of attempts to review the best of communication for development experiences and apply the lessons and best practices more systematically.

Linked and underpinning all this is the continuing need (and resources) to develop better evaluation mechanisms and tools (including participatory evaluation) to assess the real impact of the best communication without undermining the central value of the participatory communication approach.

There has probably never been a greater number of communication for development activities being carried out across the world than now. The arguments for the importance of communication for development have never been more compelling. Despite this, and with important exceptions, leadership and strategic cohesion at the international level are not keeping pace with communication for development in meeting the MDGs.

[22] http://www.comminit.com

[23] Soul City is one example of this: http://www.soulcity.org.za

Communication for development in research, extension and education

Niels Röling (PhD)

PREAMBLE

(1) Innovation can most usefully be seen as an outcome from concerted action or synergy among multiple actors or stakeholders in some theatre of innovation. Development Communication seeks to understand, foment, facilitate and monitor the process by which a set of actors moves towards synergy. It focuses on the participatory definition of the contours of the theatre, the composition of the actors in it, their understanding of their complementarity and interdependence, their linkages, interaction, conflicts, negotiated agreements and collaboration.

(2) It is *not* useful to consider innovation the outcome of transfer or delivery of results of scientific research to 'ultimate users' or farmers. Hence it is *not* useful to consider Development Communication as the tool to improve the delivery mechanism.

I have devoted a good part of my professional life to making these two points, so far without much success. Even my AKIS concept gets retranslated in terms of the linear model. Is this a unique case of the regiment being out of step with the single soldier, or have I wasted my time? Please make up your mind on the basis of the arguments I present below.

INTRODUCTION

The very title of my paper could mean different things to different people. Take a student in a US Land Grant University; some of us have been in that position. To this person, Research, Extension and Education reflect the Land Grant ideology that regards the integration of these tasks, coupled to independence from policy, as the source of success and power, if not superiority of American universities, and the secret behind the efficiency of American agriculture. For the average agriculturalist in Europe, Research and Extension refer to services that have been the responsibility of the state but are now increasingly privatised. They have been widely used as policy tools to bolster agricultural productivity and the competitive position of national agricultural industries. The word Education invokes qualification and competence building especially of farmers and their sons (Mulder, 2004). Members of the IPM Farmer Field School (FFS) movement, and we might well have some of them in our midst, could, upon seeing the title, think of the lack of impact of Research on FFS, and of the fight with the World Bank about whether FFS represent a 'fiscally unsustainable form of extension' (Quizon et al et al, 2000), or an empowering and transformational form of adult education (e.g., Pontius et al, 2002; Eveleens, et al, in press[1]). In most developing

[1] Unfortunately, the Eveleens et al overview of the history of IPM in Asia which gives voice to many of the key players in that remarkable social development has for two years been on someone's desk in FAO and is losing relevance.

countries, finally, the words Research, Extension and Education are not necessary linked. Research and Extension usually are the responsibilities of different directorates of the Ministry of Agriculture, while Education is the responsibility of another Ministry. Thoughts would not immediately turn to *agricultural* education. What the three have in common is not immediately clear.

In all, my subject is like the proverbial word 'dog'. Depending upon the experience of the sense maker, 'dog' can elicit meanings all the way from a loveable, cuddly 'best friend' to a fearsome, bloodthirsty, growling police weapon. But it is good fishing in murky waters. Nothing better than a Babylonian confusion to promote one's own view.

The Agricultural Knowledge and Information System (AKIS)

In my perspective, my subject is AKIS, the Agricultural Knowledge and Information System (Röling, 1988, Röling and Wagemakers, 1998), a concept that I developed based on the work of Nagel (1980) and Swanson and Peterson (1989, Swanson, 1990), especially using the Soft Systems notion of Checkland (1981 and with Scholes, 1990). Engel and Salomon (1997) played key roles in further elaborating the concept and in developing a powerful methodology called RAAKS based on it.

AKIS has struck a cord. The notion has been widely adopted… again with very different meanings. A brief review of some of them allows me to emphasise what I consider unhelpful developments of the concept.

For McDowell (2004 and 2001) a professor at Virginia Tech (USA), AKIS 'generates and conveys the new knowledge needed to address problems affecting agriculture'. I would no longer define AKIS as if it were an actor itself with an agency of its own, for it is people, not systems that have agency (Röling and Leeuwis, 2001). How would an AKIS know what the problems in agriculture are?

Other interesting alternative definitions are presented in an overview by ISNAR (Chema et al, 2003). FAO and the World Bank (2000) define AKIS as follows:

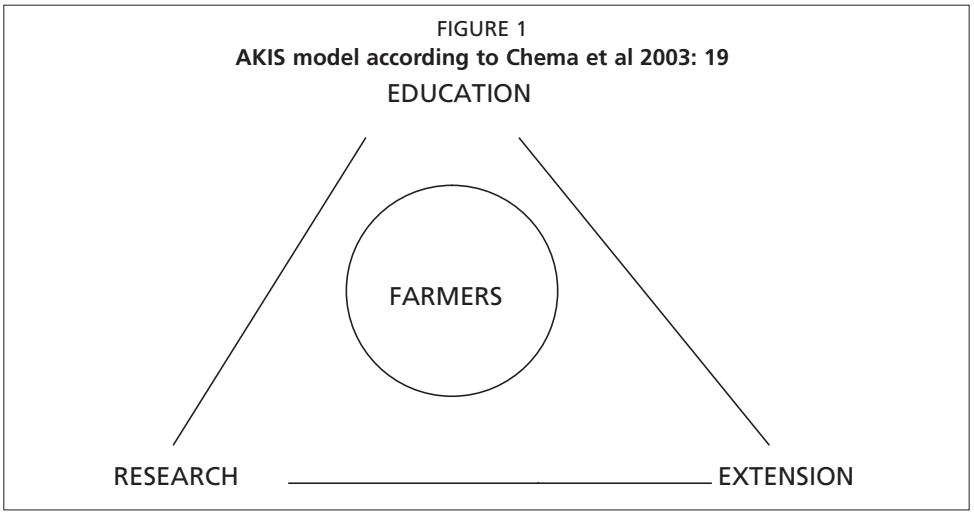
> 'An AKIS links people and institutions to promote mutual learning and generate, share and utilise agriculture-related technology, knowledge and information. The system integrates farmers, agricultural educators, researchers and extension personnel to harness knowledge and information from various sources for better farming and improved livelihoods'.

This definition conforms to my original intention. It considers the AKIS as a system made up of people. But the definition also has two aspects that I no longer agree with, reason why I am glad that my 1988 book is out of print. (1) In the definition by FAO and the World Bank, the components of the system, i.e. farmers, educators, researchers and extension personnel, are *given*. I have learned that, depending upon the situation the key players in an AKIS can include businessmen, informal leaders, priests, and many others. Defining the components *a priori* creates important blind spots before one has even started and takes away from the need to come to an agreements as to who the important players are in 'the theatre of innovation' (Engel, 1995). Defining the components *a priori* removes the need for stakeholder analysis. (2) In the definition by FAO and the World Bank, the AKIS is considered an entity that exists in the world. As will become clear below, for me the key point about the concept of AKIS is that it holds promise that a set of complementary actors gel into a synergistic system once they begin to see themselves as a system. Making that happen is a key role for development communicators. But I am running ahead of my story.

Chema et al (2003) themselves provide the AKIS model presented in Figure 1. This model again pre-determines the components of the system. But they go further, and

emphasise the *national character* of the AKIS in making a distinction between the National Agricultural Research System (NARS), the AKIS and the National System for Innovation (NSI).

FIGURE 1
AKIS model according to Chema et al 2003: 19

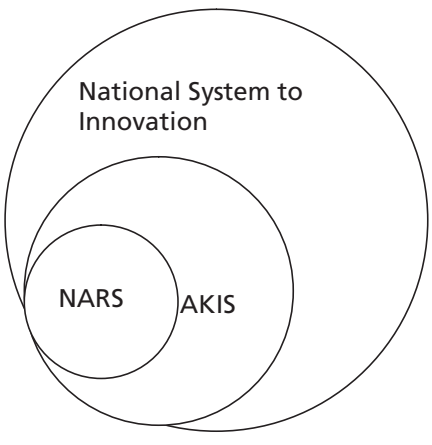


The NSI is defined as:

> '… that set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and which provides the framework within which governments form and implement policies to influence the innovation process. As such it is a system of interconnected institutions to create, store and transfer the knowledge, skills and artefacts, which define news technologies. The element of nationality follows not only from the domain of technology policy but from elements of shared language and culture which bind the system together, and from the national focus of other policies, laws and regulations which condition the innovative environment' (Metcalfe, 1995).

Figure 2 shows the presumed relationship among NARS, AKIS and NSI. Note that 'the NARS is no longer seen as the epicentre of innovation but one of a variety of sources' (Chema et al, 2003).

FIGURE 2
Linking NARS, AKIS and NSI (source: Chema et al, 2003:21)



If one thinks of the AKIS in terms of research, extension and education and limited to the generation of technical innovations, it makes sense to distinguish it from a NSI. Anyone familiar with the West African scene, for example, would agree that with their *given* knowledge and technology, local farmers would be able to greatly increase their productivity if they were given an opportunity to sell their products at a reasonable price (Hounkonnou, 2001; Röling et al, in press). Hence knowledge, information and even tested technologies are not in the minimum; what is lacking are the institutions, marketing chains and conducive policies at the scale level above the farm. I would agree, therefore, that achieving innovation requires more than an AKIS, if AKIS is defined as a *national* system that *exists in the real world*, is *composed of given actor categories* (farmers, research, extension and education), and serves to generate *technical* knowledge. Point is, I do not agree with any of these assumptions about the AKIS.

Why is an AKIS not a National system?

An AKIS, in my mind, does not stop at national boundaries. In our era of globalisation, multi-national companies peddle their technologies across the globe, the production of BT cotton in China has undermined small farmers' mainstay in West Africa, and the global treadmill, of which more later, ensures that many of the world's farmers operate on a global diffusion curve (Rogers, 1995). This does not mean that local, regional or national actors could not gel into an effective AKIS. What it does mean is that the boundaries of an AKIS cannot be considered as given. Like, the boundaries of any soft system, they are arbitrary and depend on the configuration of actors in a given 'theatre of innovation' (Engel, 1995).

Not Existing in the Real World. Here we come to a difficult aspect of AKIS that I nevertheless consider crucial, if we are to use Soft Systems Thinking (Checkland, 1981) for understanding and enhancing AKIS. A system is a construct. One can look at a bunch of elements and processes and usefully consider them a system. One can then reify one's construct and act as if that system really exists, even though it is a figment of one's imagination. That is perhaps useful if the system considered is an automobile or a Cow Pea plant. This position is not useful, however, when we are dealing with sets of linked actors, such as farmers and researchers. In such situations, the effect of systems thinking only emerges *when the actors involved see THEMSELVES as forming a system and are aware of their mutually complementary roles with respect to a synergistic outcome.* This perspective on the AKIS as a *reflexive device* is crucial for effectively looking at the role of development communication, as we shall see.

Why is an AKIS not composed of given actor categories?

Just as the geographical boundary of an AKIS is arbitrary and negotiated, so is the composition of its elements. Who is or is not part depends on the sense making of the actors involved. Their perspectives might be widely different. For example, us men have been reluctant or even resistant to see women farmers as an important element in an AKIS. The example shows that the composition of the AKIS often is contested. We glibly say that 'farmers' are a component of the AKIS. But we all know that farmers are not a homogeneous category, and reaching the hard-to-reach, i.e. effectively making them part of the AKIS, is a task that has largely eluded public sector attempts to alleviate poverty. One cannot *a priori* limit an AKIS to extension agents, agricultural scientists and teachers. In some theatres of innovation, local leaders play a crucial role, in others NGO workers or private companies make indispensable contributions. In all, the composition of the AKIS is arbitrary and must, in the end, depend on agreement as to which categories of actors are required go achieve synergy with respect to supporting innovation in a specific context.

Why is an AKIS not only technical knowledge?

We assume all too easily that development of agriculture is a question of technologies, miracle seeds, fertilisers, chemicals, machinery, natural enemies, ways to enhance Mycorrhiza, and so forth. Without even being aware of it, this thinking in terms of component technical innovations that enhance agricultural productivity deeply prejudices our ability to be open-minded about what is required. In my own part of the world, for example, one of the main problems is that agriculture has become so productive that food is relatively very cheap (less than 10% of the consumer Euro goes to food and beverage of which only a fraction reaches primary producers), that farmers find it hard to maintain a livelihood from agriculture, while the externalisation of the costs of intensive modern agriculture has become intolerable and requires increasingly Draconian legal frameworks to control. In my part of the world, an AKIS is, therefore, not so much about technology to produce more of the same, but about a fundamentally new social contract for agriculture.

My notion of AKIS has to do with networks of multiple stakeholders, with learning and with interaction. It has to do with the way we make sense of the future and of the opportunities that are available. An AKIS *is* not a predefined construct; it emerges from interaction (usually temporary) between actors who mutually complement one another's contributions. The actors are aware of the fact that they form a system and do their best to maintain it. They talk a lot about their system. In my experience it is possible to facilitate the emergence of such an AKIS.

In this broad sense, AKIS has everything to do with innovation. In fact, innovation can be called the emergent property from the interaction of multiple stakeholders who consider themselves as an AKIS and who can play complementary roles with respect to realising the innovative potential of a situation. Facilitating, and creating the framework conditions for, the emergence of AKIS in this sense is the challenge for Development Communication.

With that I close the definition of the area of discourse for this paper. The rest of the paper is designed as follows. First I must, again, spend time on the three interlocking dominant narratives that continue to dominate our area of discourse. It proves extremely hard to get rid of this outdated trio. I will then present by way of example, the context for West African agriculture to show that the three narratives do not apply and that we need an alternative way of approaching agricultural development. I then formulate a number of principles for development communication in research, extension and education. I end with a few conclusions.

1. THREE INTERLOCKING BUT INDESTRUCTIBLE NARRATIVES

Our area of discourse is underpinned by three indestructible narratives that have emerged from the experience in the Mid-Western States of the US. In the early forties, farms in these States became homogeneous populations of small firms, all operating on the same commodity markets, all producing the same products, while they were not, individually, able to affect the price. Therefore it was most rational for them to produce as much as possible against the going price, although the collective effect of this practice is a slight over-production, and given the inelasticity of demand for food, a continuous pressure on farm gate prices. This situation can be called a 'treadmill' (Cochrane, 1958) in which all farmers try to be as efficient as possible and in which they are in fact continuously competing with each other. In these conditions, innovations, such as hybrid maize (Ryan and Gross, 1943), diffuse rapidly (Rogers, 1995), and a relatively small investment in public extension, research and education has a very high rate of return in terms of increased productivity, falling food prices, and reduced employment in agriculture (Evenson et al, 1979). In all, this American experience, after the Second World War replicated across Europe and in Green Revolution areas,

especially in Asia, has in our area of discourse led to the dominance of the following three interlocking and indestructible narratives, which are familiar to most of you:

i. The Diffusion of Innovations (Rogers, 1995);
ii. The Agricultural Treadmill (Cochrane, 1958);
iii. Technology Transfer based in an effective knowledge system (e.g., Havelock, 1986).

1.1. Diffusion of Innovations

This one is perhaps the best-known narrative. The basic notion is that innovations, novel ideas, autonomously diffuse among members of a relatively homogeneous population after their introduction from outside, either through a change agent, through people who straddle the local and external worlds, or through other media. This diffusion process usually starts slowly and then gathers steam, so that the 'diffusion' curve marking the rate of adoption of the innovation by individuals over time typically has the shape of a growth curve. One can distinguish people who adopt fast and people who are slow to follow. Endless studies have been carried out to identify the discriminating characteristics. This has led to a rather circular argument: research shows that 'progressive' farmers (i.e. those with large farm sizes, education, access to outside agencies, etc.) are the ones who are early to adopt. Therefore, extension efforts should focus on these farmers to achieve rapid diffusion. But these farmers were early to adopt partly because extension agents already pay a lot of attention to them. Diffusion studies often have provided the rationale for what can be called 'the progressive farmers strategy'.

The popularity of the diffusion of innovations narrative can be explained by the fact that empirical studies of cases where an innovation diffused to a large proportion of the farmers in a population in a very short time have created an expectation that technologies, once introduced to few farmers through extension and research efforts, will diffuse rapidly on their own and multiply the public sector effort. 'Diffusion works while you sleep'.

At one time, diffusion of innovations research was the most popular form of social science research with literally thousands of surveys of diffusion processes published. And it must be said that it is an exciting area. Many questions arise with respect to such issues as the nature of the individual adoption process, the sources of innovation, collective innovation, diffusion across geographical space, the nature of leadership in innovation processes, diffusion as a creator of inequity, etc. The original American work has been replicated in virtually every country in the world. And when rural sociologists get tired of it, agricultural economists rediscover it and start afresh. The whole narrative has been beautifully written up by Rogers (1995[2]).

Diffusion research has had a tremendously important imprint in our circles. The narrative has reinforced the following assumptions, even if these assumptions have been explicitly rejected by the research. One of the characteristics of a narrative is that, once it has become widely accepted, it become impervious to correction.

1. Innovations come from outside, usually are developed by scientists and then introduced into rural communities, groups of doctors, consumers or other populations. The possibility that innovations emerge locally is not emphasised;
2. Innovations tend to be looked upon as technical component technologies that diffuse on their own, without paying much attention to the farming system into which they are adopted. They are like silver bullets. In actual practice, farmers

[2] This is the last version the author is aware of. But knowing Everett Rogers, there probably is a newer and even better version available by now, and if not, it is about to be published. The basic textbook 'Diffusion of Innovations' has been updated every ten years since 1961.

usually spend a great deal of time on adapting innovations. What is more, the focus on technical innovations that enhance productivity detracts from a focus on system innovations to improve the sustainability of a farming system. Yet innovation in the area of resource management increasingly is becoming a condition for improving rural livelihoods.

3. All adopters are on the same development path, except that some are ahead and others behind. The Dutch rural sociologist Van der Ploeg (1994) has shown that this assumption of a single development path is erroneous. Given the same economic and technological conditions, farmers tend to follow very different development paths. What stands out is diversity and ability to act autonomously.
4. The community in which an innovation diffuses is homogeneous in that all farmers are assumed to benefit from the innovation. In actual practice, innovations tend to be differentially relevant, depending on access to inputs, land, labour, credit, and so on. Adoption of innovations by some might pre-empt others from benefiting.
5. Technical innovation is a good thing. In actual practice, one can imagine situations where innovation is not good at all. For example, the adoption in Europe of hormones to enhance productivity of dairy cows by 10 % would put tremendous pressure on the price of a commodity that is already cheap. It would leave cows with a more miserable life and would mean a sharp drop in the number of farms that are able to survive. Yet, once introduced, a farmer could ill afford not to adopt the technology. And that brings us to the treadmill.

1.2. The Agricultural Treadmill

Table 1 shows briefly how the treadmill works (based on Cochrane 1958):

TABLE 1

Key elements of the Agricultural Treadmill

- Many small farms all produce the same product;
- Because not one of them can affect the price, all will produce as much as possible against the going price;
- A new technology enables innovators to capture a windfall profit;
- After some time, others follow ('diffusion of innovations'(Rogers, 1995));
- Increasing production and/or efficiency drives down prices;
- Those who have not yet adopted the new technology must now do so lest they lose income (price squeeze);
- Those who are too old, sick, poor or indebted to innovate eventually have to leave the scene.
  Their resources are absorbed by those who make the windfall profits ('scale enlargement').

This is a coherent and well-known story indeed. And policy based on the treadmill has positive outcomes. For one, the advantages of technological innovation in agriculture are passed on to the customer in the form of cheap food. For example, in my country an egg still has the same nominal value as in the sixties. The very structure of agriculture makes it impossible for farmers to hold on to rewards for greater efficiency (Hubert, et al, 2000). Meanwhile, labour is released for work elsewhere. One farmer can now easily feed a hundred people. When the treadmill runs well at the national level in comparison with neighbouring countries, the national agricultural sector improves its competitive position. Furthermore, an important advantage is that speech making farmers do not protest against the treadmill. They only profit from it. A farmer on the treadmill can only make a good living if he is ahead of the pack. Unlike industrial workers, farmers collectively usually do not claim rewards for greater labour

productivity. A final advantage is that the treadmill will continue to work on the basis of relatively small investments in research and extension. These have a high rate of return (Evenson, et al, 1979).

All in all, it is very understandable that policy makers have grasped the treadmill as the fundament for agricultural policy. It represents market forces in optimal form. According to WTO we must work towards a global treadmill. For example, the four million small farmers in Poland must leave the scene quickly so that Polish agriculture can become 'competitive'. A competitive agriculture, that is the key slogan, also for global agriculture.

However, the Treadmill also has a number of negative aspects that are increasingly less acceptable (Table 2).

TABLE 2

The negative consequences of the Agricultural Treadmill

- It is not consumers but input suppliers, food industries, and supermarkets who capture the added value from greater efficiency. Large corporations are well on their way to obliterate competition in agriculture. Only farmers are squeezed.
- The advantages of the treadmill diminish rapidly as the number of farmers decreases and the homogeneity of the survivors increases. The treadmill has a limited life cycle as a policy instrument.
- Eventually, the treadmill is unable to provide farmers with a parity income. That becomes clear from the subsidies we must give our farmers. We want to reorient that flow of subsidies, but do not as yet have a good alternative. At the time of writing, the European Commissioner for Agriculture was working on it. In the meantime, recent research shows that 40% of farm incomes in the Netherlands are already based on activities other than primary production (Oostindie et al, 2002).
- The competition among farmers promotes non-sustainable forms of agriculture (use of pesticides and hormones, loss of bio-diversity, unsafe foods, etc.). The treadmill is contradictory to nature conservation, drinking water provision, landscape conservation, and other ecological services.
- The treadmill leads to loss of local knowledge and cultural diversity.
- A global treadmill unfairly confronts farmers with each other who are in very different stages of technological development, and have very different access to resources. Although the costs of labour in the North are many times those in the South, labour productivity in agriculture in the North is still so much greater that small farmers in developing countries do not stand a chance (Bairoch, 1997). The global treadmill prevents them from developing their agriculture and denies them purchasing power at the same time. This effect is only acerbated by export subsidies paid to farmers in the North to overproduce.
- The Treadmill leads to short-term adaptations that can be dangerous for long-term global food security. I think for example of the possible and much disputed disappearance of arable farming from the Netherlands. In the US, one now speaks of the 'Blank Hypothesis'; agriculture in the US will disappear by 2030 because food can be produced more cheaply elsewhere (Blank, 1998). The new American subsidies might prevent this for a while. But it does become evident that the treadmill does not support the contribution to global food security of the most productive agricultural areas in the world. There are those who say that organic agriculture cannot feed the world. I think it is more appropriate to say that one cannot feed the world as long as the treadmill is in operation.

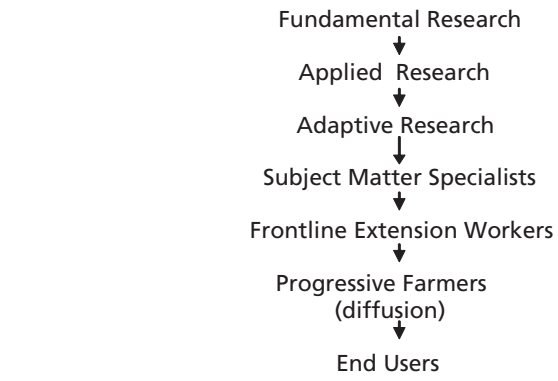
I conclude that within the self-imposed boundaries of treadmill thinking there is no way to solve some of the more important challenges that now confront us, especially in countries and situations where conditions are different from those in the Midwestern States of the USA in the forties. But the same goes in my own country. To continue with treadmill policies, as the farmers want us to do, means further reducing the fraction of our incomes that goes to primary production at ever-greater externalised costs. The treadmill does not fit our age. We have to re-invent agricultural economics and the major pressure is for us to get off the treadmill and to imbed land use in other social and economic mechanisms.

1.3. Transfer of Technology

The third narrative is the transfer of technology. Science is the growth point of human civilisation. It develops the technologies that help us escape from what the Bible calls the 'vale of tears'. Science ensures progress. Extension *delivers* these ideas to *users*. Science is good, but stupid people do not always appreciate it. If farmers do not adopt the scientists' ideas, chances are that they are backward and don't know what is good for them. Or the culprit might also be extension. After all, many extension workers have been badly trained. A third possible reason can be a 'fatal gap' in the linear flow from science to farmers, for example because subject matter specialists are missing (McDermott, 1987).

Transfer of Technology assumes a one-way and uninterrupted flow of technologies from fundamental scientists, to ultimate users via various intermediaries and delivery mechanisms (Figure 3). It therefore is also called the linear model is (Kline and Rosenberg, 1986; Chambers and Jiggins, 1987).

FIGURE 3
Transfer of Technology (also called 'The Linear Model')[3]



This is the typical thinking behind technology transfer. It is an important ideology

By way of example, we present the difference between two situations: (1) the transfer of knowledge, and (2) the co-creation of knowledge. In the first situation, an expert, such as an agricultural extension agent or a medical specialist, seeks acceptance of, or compliance with, his way of looking at the world or of solving a problem. In the second situation, a group of stakeholders with different and often complementary experiences or knowledges agree on ways forward to improve their shared problem (Table 3).

The column 'Co-creation of Knowledge' shows that totally different and equally credible narratives do exist to the more familiar 'Transfer of Technology'. However, it is my feeling that especially in public agencies for agricultural research, extension and policy-making, and also in many agricultural universities, the three dominant narratives described in this chapter inform decision making about agricultural development.

To my mind, any discussion about development communication must start with reflection on the three narratives. It is my conviction that they reflect certain historical

[3] Confusion exists in our field in the use of TOT. In some publications, such as those by Robert Chambers, it refers to Transfer of Technology. In publications that have an IMP background, TOT refers to Training of Trainers, a key ingredient in the quality of Farmer Field Schools (FFS).

conditions and a phase of agricultural development that is not necessarily ubiquitous or very relevant from a development communication perspective. In the next section I provide an example of a different context.

FIGURE 4

Comparing Transfer of Technology and Co-creation of Knowledge on a few key aspects

Key Factor	**Transfer of Knowledge**	**Co-creation of knowledge**
Nature of problem	Lack of productivity or efficiency	Lack of concerted action
Key actors involved	Expert and target audience	Interdependent stakeholders in a contested resource or shared problem
Desirable practices	Target audience uses improved component technologies	Stakeholders agree on concerted action (e.g., integrated catchment management)
Desirable learning	Target audience adopts technologies developed by expert. In best situation: diffusion of innovations among members of target audience. Learning of expert is not relevant in this situation	Through interaction, stakeholders learn from and about each other. They try out ways forward in joint experimental action that allows discovery learning. They become able to reflect on their situation and empowered to deal with it
Facilitation	Expert demonstrates, persuades, explains, promotes	Trained facilitator brings together stakeholders so as to allow interaction. He/she creates spaces for learning and interaction (platforms). He/she manages the process, not the content.

2. EXPLORING THE CONTEXT FOR AGRICULTURAL INNOVATION IN WEST AFRICA[4]

However poor and miserable some West African farmers might be, all have *veto power* when it comes to accepting the results of agricultural research: there is no way that one can force autonomous farmers to adopt technologies. It proves very hard to get this veto power on the retinas of some agricultural researchers and administrators as an inescapable framework condition for effective research.

A typical example is an important and highly regarded international agricultural research agency in West Africa. Its concern is with soil fertility management. After excellent research, it had come to the conclusion that improving soil fertility in West Africa is a question of soil organic matter first and nutrients second. This research showed that planting, and ploughing under, the luxurious growth of the velvet bean (*Mucuna spec*.) is the most efficient way to increase soil organic matter. When this thinking was made public, it predictably drew some criticism. After all, Mucuna has been tried time and again. Invariably farmers complain that one cannot eat the beans, that it is hard and painful to incorporate the vegetative matter into the soil, that the bean occupies the land for two seasons during which food production is impossible, etc. Nowhere in West Africa has Mucuna been taken up as a green manure. Undaunted, the representative of the agency proclaimed that this was not his but the farmers' problem and that if they wanted to escape from the vicious circle of land degradation and poverty they should plant Mucuna. As a scientist he knew what worked, acceptability by farmers was not his problem. This approach is a typical example of linear thinking. The scientist is right and his lack of impact is the farmers' problem.

But the lack of impact of agricultural research in West Africa cannot be blamed on lack of innovativeness on the part of the farmers. West African farmers can be considered among the most innovative in the world. Their indigenous systems represent sustainable, resilient and intelligent forms of agriculture that have supported

[4] Based on a section of Röling et al, in press.

expanding communities over the centuries. They took up maize, Phaseolus beans, cassava, tomatoes and many other current staple crops that originate from Latin America in fairly recent historical times. West African farmers have coped with the rapid population increase during the last twenty years and have adapted their farming systems to deal with new problems such as declining soil fertility, declining rainfall and weed emergence. Gold Coast tribesmen of old have made cocoa Ghana's major export crop without any government assistance, a development that only came to a halt when excessive taxation virtually killed the goose that laid the golden eggs.

Our favourite example of West African farmer innovativeness is the development, by farmers on the Adja Plateau in Benin, of a new farming system based on an oil palm fallow that deals with extremely high population pressure on the land, 'comatose' soils, and the weed *Imperata cylindrica,* and that is profitable to boot, through the production of *Sodabi*, an alcoholic drink distilled from the palm wine that is harvested when the palm fallow is cut down (Brouwers, 1993).

Enough said. Small-scale farmers in West Africa are amazingly innovative. Perhaps village levelling mechanisms and fear of jealousy-inspired black magic lead to some reluctance of farmers to stick their head above the parapet, but on the whole, one cannot blame stagnant agricultural productivity in West Africa on the traditionalism or conservatism of farmers. Hounkonnou (2001), who for 12 years has surveyed the West African development scene has come to the conclusion that the only thing that 'works' in rural West Africa is 'rural dynamics', the continuous innovative struggle of rural people to improve their lives

The question then is: why has it not been possible for agricultural research to link into this rich lode of innovativeness? We believe it is too easy here to place the all the blame on the disciplinary myopia of some researchers and the linear transfer of technology paradigms that international and national science & technology institutions have been following. However serious an impediment this is. After all, for years now West Africa has been the scene of sensitive efforts of various actors to use participatory approaches (e.g., Defoer, 2002; Van Paassen, 2004). Below we explore three factors: (1) farmers' lack of countervailing power, (2) the lack of markets and service delivery institutions at the middle level, and (3) the systematic creaming off of the wealth generated by West African agriculture by pre- and post-independence governments[5].

2.1. Farmers' lack of countervailing power

Without going into too much detail, most observers would agree that the demise of colonialism has left West African countries with a vacuum in terms of checks and balances so that corruption, political adventurism, and exploitation of the powerless could have free play. Part of this picture is the total absence of countervailing power of organised farmers. Farmers have no control over commodity prices, input selling companies, government produce buying schemes and marketing boards, policies to import cheap foodstuffs that undercut local farmers and so forth. If one compares this situation with industrial countries, the sharp contrast stands out.

In most industrial countries, farmers have power that is disproportionate to their numbers, but reflects the fact that they collectively own most of the land of the country. They are extremely well organised, and their representatives can be found in the capillaries of the political system. In fact, in many industrial countries farmers are so powerful that they are able to override concerns for health (e.g., food safety), environmental pollution and toxification, nature protection, sound water management,

[5] De Janvry and Dethier (1985) list the following factors: (1) farmers have no political clout; (2) taxing the beneficiaries of research; (2) lack of co-ordination between technological and economic policies; and (4) little ex-ante analysis and participatory research.

tourism, animal welfare, and even prudent economic practice. Farmers in industrial countries have a well-organised institutional influence on decisions about agricultural research and extension, and they are embedded in networks of service delivery organisations, many of which they own themselves through their own co-operatives.

Based on the experience in industrial countries, one could say that the fastest way to develop West African agriculture is not to strengthen what in Francophone countries are called '*les organismes d' intervention*', but farmers' countervailing power *vis-à-vis* those '*organismes*' (Röling and Jiggins, 1998).

Until quite recently, there was little chance that such advice would be heeded in West African countries. Colonial governments had no interest in farmers' countervailing power. Heaven forbid! They were good at creating the incentive structures required for small-scale farmers to produce the raw products required by their industries. Hut taxes put the pressure on the need to generate cash. And the 'cash crops' such as cotton, cocoa, etc., were the only ones that could generate cash. Carefully designed 'supervised credit' systems that integrated credit delivery, produce buying, input delivery, and farmer payment (after deducting credit repayment and interest) allowed the effective mobilisation of the energy of millions of small farmers across West Africa. The SODECOTON is a good example.

Post-independence Governments had every reason to maintain this mechanism. For this to succeed, farmers needed to remain unorganised, ignorant of the scandalous percentages that governments were creaming off commodity export prices, and powerless to defend themselves against official corruption. Now the situation is changing. Commodity prices have nose-dived. Low prices have made farmers neglect their plantations and crops so that productivity has remained very low, starving governments of revenue. What is more, industrial agricultures, benefiting from years of investment in research and productivity enhancement, are now able to import food grains into West African countries at prices that are a disincentive for West African farmers to produce for the market (Bairoch, 1997). For Kenya in East Africa, it is said, for example, that maize can now be imported into the country at prices that are lower than the cost price of the most efficient local farmers, including large white farmers. Obviously, there is little reason for KARI, the Kenyan Agricultural Research Institute, to invest in maize research in this situation (pers. comm. Dr Cyrus Ndiritu, former KARI Director, July 2003). In West Africa, examples abound of donor schemes, such as Sassakawa 2000, that successfully create the conditions for small farmers to produce 7 tons of maize per hectare, only to find that farmers do not adopt the required practices because they cannot sell the surplus. Perhaps the opportunity for a Green Revolution in West Africa has passed forever.

Whatever be the case, present West African Governments are waking up to the need to provide farmers with a better deal. A good example is the new price policy for cocoa in Ghana. But effective farmer countervailing power over the decisions that affect their lives is still a long way off.

2.2. Failing marketing chains and service institutions

If there is one thing that strikes those who have been acquainted with rural development in West Africa over the years, it is the lagging development of the institutions at the middle level, such as transparent marketing institutions, dependable veterinary health services, affordable credit provision, competitive input delivery mechanisms, accessible extension services, produce transport, etc. The only dependable institution in the West African rural scene seems to be the market trader with her sense for business and trade. Recently imposed structural adjustment policies have largely destroyed whatever public service delivery mechanisms were available. From an economic point of view, this was perhaps the right thing to do; given the low productivity in monetary terms of West African agriculture, investment in service delivery simply does not pay. But the

fact remains that the absence of a network of service institutions in which agriculture is embedded severely constrains agricultural development. Time and again, pilot projects are mounted that artificially create the conditions for a rapid productivity growth. Then, when it comes to scaling up their indeed impressive effects from the pilot level and to replicate the project on a larger scale through existing institutions, the effects collapse. The existing institutions are simply incapable of creating the conditions in which small-scale West African farmers can apply their innovativeness to the benefit of the public cause. As it is, in the absence of a decent monetary income, they focus on subsistence production and are 'organic by default'. Inputs are too expensive to apply, and producing a surplus is irrational. Small wonder, that those who measure agricultural development against the growth of productivity per hectare, are not impressed by West Africa's innovative performance (Chema, et al, 2003). They see only stagnation in what is, in fact, a highly dynamic, innovative and adaptive performance, given very adverse and rapidly changing circumstances.

In all, one can conclude that it has not been possible, to date, to set in motion in most of West Africa the agricultural treadmill by which innovation is propelled by the market and technological advance exerts downward pressure on prices, to the benefit of consumers, and the competitive position of the country's agriculture in the world market. Meanwhile, WTO has incorporated West African agricultures into a global treadmill in which they do not stand a chance. West African agriculture, if it remains unprotected, runs the risk of remaining a source of subsistence until farmers can escape into off-farm jobs.

The situation described has important implications for agricultural research. It is irrelevant to assume goals for technology development, such as productivity increase. It is equally irrelevant to implicitly assume that conditions can be created that will allow large-scale adoption of a technology, if those conditions are not available at present. Further, it is irrelevant to develop technologies that can only be adopted as long as special conditions can be created through small-scale projects.

2.3. Creaming off farmers' wealth

Industrial countries cream off farmers' wealth and exploit their energy through the treadmill mechanism described above. As we have seen, food becomes increasingly cheaper as farmers continue to compete with each other by trying to be ahead of the pack. Farmers' countervailing power does not work in the case of the treadmill mechanism. The influential farmers in the agricultural organisations are the ones that grab the windfall profits; hence they benefit from the treadmill. In no European country have farmers ever protested against the fact that the treadmill annually leads to a 2 – 3 % decrease in the numbers of farmers. The influential farmers buy the land of the dropouts and benefit again.

In West Africa, creaming-off agriculture has taken another route. Since the vast majority of the population was engaged in agriculture at the time of Independence and since the only wealth generated at the time was the revenue from export crops, the new governments had little option but to exploit the wealth generated by agriculture. We have described the consequences in terms of run-down of export industries, low yields per hectare food production, and, according to some, constant mining of the nutrient reserves of West African soils without replenishment (Stoorvogel and Smaling et al, 1990).

At present, things have begun to improve. Urban development creates markets for food commodities that cannot be imported cheaply, such as cassava and various vegetables. The fact that farmers increasingly have alternative sources of income (e.g., through urban wage employment, emigration, etc.) means that they no longer have

to accept any monetary income they can make from export crops. Governments are forced to offer farmers better deals. In other words, new opportunities seem to be emerging, but these are by no means automatic or obvious.

Our (superficial) survey of the West African context shows that it is very different from the one in which the three interlocking dominant narratives emerged. But in a situation where farmers do not have clout, it is all too easy for people, explicitly including Africans educated in the 'Western tradition', to, often implicitly, make decisions that are based on an industrial country context. The most glaring example of this is the tacit assumption that agricultural research serves productivity increase in terms of tonnes per ha. One scheme after another tries to achieve this. The predictable result is overproduction, a rapid fall in prices, yet another wrong prediction of the internal rate of return of a project, and disillusioned farmers. There must be another way. That is the challenge for development communicators.

3. DEVELOPMENT COMMUNICATION IN AGRICULTURAL RESEARCH, EXTENSION AND EDUCATION?

I would not have come down so hard on the three narratives, if it had not been for my long experience in various forums, which has taught me how much money and effort is wasted as a result of informing decisions about objectives, strategies and investment on the basis of these three narratives. What is worse, these three narratives form a screen that filters out new ideas, and make it impossible to invest in local experimentation that might lead to new ideas. With such strong narratives, it even becomes impossible to imagine that an alternative is possible.

It is time for me to become constructive. Where do we go from here? Let me begin by saying that as a social scientist, I am much better at explaining what has happened than at designing a bright new future. For example, Pontius et al (2002) who document the great achievement of the Farmer Field School Movement that emerged from FAO's IMP Programme in rice in Asia acknowledge me as someone 'who helped us to understand what we are doing and why we should continue doing it'. Meanwhile it is they themselves who as dedicated, inspired and highly motivated practitioners, in close collaboration with farmers, Master Farmer Trainers and others, over ten years slowly evolved Farmer Field Schools and Community IPM as practical alternatives to the three dominant narratives. I am very honoured to have been asked to address you as a social scientist. But I am not a designer of recipes for the future. Transfer of Technology does not apply also in my case. What I can do is to suggest some principles.

3.1. Farmers have veto power, better listen to them!

According to Sir Albert Howard (1943: 221), that great pioneer of organic agriculture who designed large-scale agricultural production systems that did not depend on chemical fertilisers, 'the approach to the problems of farming must be made from the field, not from the laboratory. The discovery of things that matter is three-quarters of the battle. In this the observant farmer or labourer, who have spent their lives in close contact with Nature, can be of the greatest help to the investigator'.

As I said, farmers have veto power when it comes to participating in induced innovation. There is no way one can force them to innovate. Therefore, one must listen to them, take them seriously, and involve them in one's work. There seems no other way. It seems to me that development communicators in research, extension and education, especially if they subscribe to the Millennium Goals, must ensure that farmers are given a voice in the development process. An example of a pioneer who developed such an approach is given below.

Tekelenburg (2002) worked for eight years in Cochabamba, Bolivia, in a development project that sought to regenerate ancient degraded mountain lands in the High Andes using Cactus Pear for human, cattle and cochineal feed and for re-vegetating the

barren slopes. Out of this experience, Tekelenburg drew conclusions for the types of 'agricultural research' that were required for a development project that is effective in reaching the rural poor. He suggests the following fundamental questions that must *all* be answered to achieve 'development' outcomes.

1. *What are the useful a-biotic and biotic relationships that can be construed*? For such questions, Tekelenburg had to go right back to fundamental research, for example, for understanding the life cycle of a new pest.
2. *What can technically make a difference*? A great deal of applied experimentation and conventional agricultural research, grounded in international scientific work, had to be carried out for this purpose. What pheromones can be used to attract the males into traps? What natural enemies can be used to control it? The general question is: what are the best available technical means for given (i.e. assumed) human problems? Most agricultural research falls into this category.
3. *What can work in the context*? Answering this question requires an analysis of the context in which small farmers live. This is usually achieved by paying attention to the agro-ecological zone. But equally important is the analysis of the market, input provision, transport availability, risks of theft, etc. As we have seen, it is no use to carry out research on maize productivity in Kenya if you can import it 20% cheaper than it can be produced with the best local technology;
4. *What can work in the farming system*? Here farmers' labour availability, gender differences, knowledge, access to land and other resources, market opportunities, etc., determine the range of appropriate options that fit the local system. At this point, one has to leave a disciplinarian or sectoral perspective altogether and focus on how the outcomes of the research fit into the local system. Will it work within that system? It is the fundamental question of the Farming Systems approach.
5. *What will be acceptable*? What systems do farmers want and need, given their explicit enthusiasms, alternatives, cultural inclinations, experience, livelihood strategies and superior insight into local conditions and constraints? To answer this question, and avoid invoking farmers' veto power, one has to leave behind any pretence that the scientist can determine what is best. The question cannot be answered without engaging farmers as co-researchers and without empowering them to have clout over the research process.
6. *How can the outcomes be scaled up*? Most research projects can be considered expensive, small-scale, pilot efforts that only become socially effective if the experiments are replicated at a societal scale, for example in factories or in markets. In this respect, the work of Latour (1999) on Ferdinand Jolliot, the husband of Marie Curie, who worked to ensure that atomic energy became part of France's policy repertoire, is a classic study of scaling up. Scaling up is not only a question of doing more of the same, i.e., through the diffusion of a given technology among farmers, but especially a question of institutional change in marketing chains, consumption patterns, education, government budgets, etc.

It is important to realise that *all* these questions need to be answered. It is also important to realise that these questions cannot be answered in the sequence in which they are listed above. In fact, one usually runs into these questions time-and-again, as the project progresses, and fundamental research questions might well be the outcome of a project rather than its beginning.

I believe that especially the questions 4 through 6 require attention from development communication. The challenge is to create social spaces for learning (Jiggins and Röling, 2003) in which farmers can be listened to and influence the answers to these questions. I feel that considerable international investment in experimentation with creating such spaces is required.

3.2. Farmers have no negotiating power; better find ways of giving it to them!

One of the principles of IPM is that 'the farmer is an expert'. This principle is increasingly recognised all over the world. One recent example from my own country is the recognition by official Water Management Boards that farmers have considerable local hydrological knowledge that the Boards can use to their benefit. Farmers may be experts, but they lack a collective voice, at least not in many developing countries. This lack of influence of farmers is beginning to be a handicap. In the early days of the Green Revolution, farmers were more or less considered as the lowest rank in the hierarchy. Scientists and administrators determined what needed to happen and farmers were told what to do. In many countries, if farmers did not like the new 'high yield variety' and continued to plant their old varieties, the authorities would not hesitate to call in the army or police to destroy the old crop. Prices were set at the national level, uniform technical packages of varieties, fertilisers and pesticides were recommended across huge domains assumed to be homogeneous. It worked for a while. Now that second generation problems are beginning to be felt (such as pest resistance and emergence), and now that the next advance must come from capturing diversity, a powerless peasantry is no longer the right partner for agricultural development. Farmers must have voice, they must be given full opportunity to help make development work.

The same can be said for the highly diverse, risk prone, rain fed areas where the Green Revolution has not worked. It has proved virtually impossible to 'develop' these areas without involving farmers in inventing the solutions. For scaling up the usually small-scale pilots it is necessary that farmers develop political clout.

Most of us who have seen IPM Farmer Field Schools in action have been impressed especially by the extent to which the process of discovery learning during the Farmer Field School has given farmers a new sense of self-confidence and pride. They have learned to engage in systematic experimentation. They have learned to conduct meetings and draw their own conclusions from observation. They have become empowered. In Indonesia, the IPM Farmer Field Schools eventually led to a Farmer Organisation that can act as a credible partner in policy making. Of course, people who think in terms of the three dominant narratives are unlikely to look at IPM Farmer Field School benefits from this perspective.

It is remarkable that the experience in the industrial world has gone unheeded in this respect. There is not an industrial country where farmers do not have power usually far in excess of their numbers. Such farmer power has been a crucial ingredient in the success of these countries to develop efficient agricultures. Developing the political clout of farmers seems the shortest route to development. To my mind, *that* should be a primary objective of development communication, not the use of ICT, wide screens and megaphones to better zap preconceived messages to farmers.

3.3. Innovation is not the end-of pipe result of a linear process but the emergent property of interaction among multiple stakeholders in an AKIS

I have started off by defining our area of discourse in terms of AKIS, a network of actors in a theatre of innovation. These actors potentially can make complementary contributions towards innovation. The network is based on shared perceptions with respect to the issues at stake. Working in a network mode on a basis of egalitarian interaction is not immediately acceptable in most public agricultural domains where hierarchy, protocol and protection of turf are dominating values. Yet I believe there is much scope for working in an interactive mode, as long as farmers are fully involved as partners. As I said above, an AKIS should not be seen as an organogram, with the Minister on top and a multitude of arrows linking bureaucratic units. An AKIS is a voluntary coalition of interest, made up of people who have come to form a theatre of innovation because they have confidence that a useful play can be enacted in that

theatre. An AKIS is a more or less temporary configuration of actors and institutions considered relevant for bringing improvement to a situation. One can even think of it as a task force or a project team. Sometimes improvement might come from new technologies developed in answer to the questions posed by Tekelenburg above. But in many situations, the priority problems will be institutional, organisational, or political. They will have to do with the creation the framework conditions for agriculture to become more productive, more sustainable and more socially just. It is crucially important to consider such types of change as innovations. Enhancing and facilitating AKIS in this sense is a tremendous challenge for development communication.

One project in my experience that has developed an intelligent and inspiring approach to introducing the kind of changes we are talking about is the Proyecto Nuevo Paradigma (De Souza Silva et al, 2000). It works with a very small staff, located in Costa Rica. The staff acts to inspire, mobilise, train, support and facilitate a network of country teams, each recruited from enthusiasts assigned by their respective Ministries of Agriculture to participate in the project. Each country team experiments in its own country with one or two new approaches. These are discussed and analysed during workshops in which all country teams come together. The country teams are each financed by their home governments, only the project team and its facilitation work are paid by a donor. It is a highly successful and inspiring effort supported by a progressive donor who can tolerate an open-ended outcome.

It is an example of an AKIS of second order. It is an AKIS for generating effective AKIS, a network for networking. I believe that a key to finding alternatives to the deadly mantra of the three narratives that emanates from the cutting edge scientists, the market fundamentalists, and the top managers, is experimentation. Or better still, such an AKIS for generating effective AKIS could support joint experiments that are already under way, where creative people a getting excited because something new is being achieved. I believe a great number of very important lessons are being learned every day in most countries in experiments with different approaches. We just do not take the time to examine them and learn from them because the three narratives have taught us everything we need to know. It is time to shake off our complacency and dare to accept that we have not done very well in terms of development and therefore than we need to accept that the only thing we know is that we don't know. We need to make a greater effort to learn together around concrete field experiments that pioneer new approaches.

In a recent water conservation project in the Netherlands (www.waterconservation.nl), we have learned that it is very effective to bring together concerned stakeholders at the field but also at the agency and provincial policy levels around a concrete problem and to learn together how to deal with it.

3.4. One must involve those who have the power to determine the framework for the agriculture and rural development sector

Alas, it is an all too common experience to see good initiatives thwarted by those who see the world as a set of variables to be manipulated (after Fresco, 1986), i.e., the people who set the conditions in which you must work. It is impossible to achieve goals without involving these 'higher' levels. I believe that development communicators in research, extension and education have an important task in bringing about transformational learning at these higher levels.

4. CONCLUSION

In the agricultural sector, the actors who set the scene tend to be of three kinds, in my experience. First and most ubiquitous are the agronomists, soil scientists, animal scientists, engineers and others who have a natural science background. They tend to think in terms of causes, not human reasons. In second place, I would mention

agricultural economists who do think in terms of human reasons, except that they assume that humans make rational choices on the basis of cost benefit calculations. Thirdly, there are the lawyers who think in terms of systems of norms and design unambiguous regulatory frameworks.

The scientist, the economist and the lawyer each have a necessary contribution to make to development. But in a world in which people's livelihoods are increasingly determined by other people, and where achieving one's goals becomes increasingly determined by the actions of others, the three perspectives leave out a crucial ingredient: *concerted action*. Concerted action is the key ingredient in integrated water catchment management. It is the crucial ingredient in systems innovation with respect to creating realistic opportunities for the poor. It is the crucial ingredient in developing more effective marketing chains. Concerted action increasingly is, to my opinion, the crucial dimension of innovation.

When it comes to concerted action, thinking in causes, in terms of rational choice, or in terms of rules is not of prime importance. Concerted action emerges from interaction. It is based on negotiation, on awareness of interdependence, on reciprocity, and sometimes on solidarity. Concerted action results from learning about and from each other, from slow convergence with respect to goals, ideas, ways of assessing outcomes, and so on.

In my humble opinion, development communicators have a vital contribution to make by elevating concerted action and co-creation of knowledge through interactive learning to the status of a governance mechanism at par with technology, hierarchy and market.

REFERENCES

Bairoch, P. 1997. *New estimates on agricultural productivity and yields of developed countries, 1800-1990. In: A. Bhaduri and R. Skarstein (Eds.). Economic Development and Agricultural Productivity.* Cheltenham: Edward Elgar, pp.: 45-57

Blank, S. 1998. *The End of Agriculture in the American Portfolio.* New York: Greenwood Publishing Group

Brouwers, J. 1993. *Rural People's Knowledge and its Response to Declining Soil Fertility.* The Adja Case (Benin). Wageningen: Agricultural University. Wageningen Papers

Chambers, R. and J. Jiggins 1987. *Agricultural Research for resource-poor farmers. Part I: Transfer-of-Technology and Farming Systems Research. Part II: A parsimonious paradigm. Agric. Administration and Extension*, 27: 35-52 (Part I) and 27: 109-128 (Part II).

Checkland, P. 1981. *Systems Thinking, Systems Practice.* Chicester: John Wiley.

Checkland, P. and J. Scholes 1990. *Soft Systems Methodology in Action.* Chicester: John Wiley.

Chema, S., E. Gilbert and J. Roseboom 2003. *A Review of Key Issues and Recent Experiences in Reforming Agricultural Research in Africa.* The Hague: ISNAR, Research Report 24.

Cochrane, W.W. 1958. *Farm Prices, Myth and Reality.* Minneapolis: Univ. of Minnesota Press. (Especially Chapter 5: The Agricultural Treadmill, pp 85-107.

Defoer, T. 2002. *Moving Methodologies. Learning about integrated soil fertility management in sub-Saharan Africa.* Wageningen: University, published doctoral dissertation

De Janvry, A. and J.J.Dethier 1985. *Technological Innovation in Agriculture: The political economy of its rate and bias.* Washington: World Bank, CGIAR Study Paper 1.

De Souza Silva, J.; J. Cheaz, and J. Calderon 2000. *Building capacity for strategic management of institutional change in agricultural science organisations in Latin America: A summary of the project and progress to date.* San José (Costa Rica) ISNAR at IICA, Proyecto Neuvo Paradigma

Engel. P.G.H. 1995. *Facilitating Innovation: An action-oriented approach and participatory methodology to improve innovative social practice in agriculture.* Wageningen: Agricultural University. Published Doctoral Dissertation.

Engel, P.G.H. and M. Salomon 1997. *Facilitating Innovation for Development.* A RAAKS Resource Box. Amsterdam: KIT

Eveleens, C; J. Jiggins and Lim Guam Sam (Eds.) (In press). *History of IPM in Asia.* Rome: FAO

Evenson, R.E., P.E. Waggoner and V.W. Ruttan 1979. *Economic Benefits from Research: An Example from Agriculture.* Science 205, 14 September: 1101-1107.

FAO and World Bank 2000. *Agricultural Knowledge and Information Systems for Rural Development: strategic vision and guiding principles.* Rome: FAO

Fresco, L.O. 1986 ***Cassava in shifting cultivation. A systems approach to agricultural technology development in Africa.*** Wageningen: Agricultural University. Published Doctoral Dissertation. Published by Royal Tropical Institute, Amsterdam.

Havelock, R.G. 1986. *Modelling the knowledge system.* In: Beal, G.M, W. Dissanayake, and S. Konoshima (Eds.). *Knowledge, Generation, Exchange and Utilisation.* Boulder (Co): Westview Press, pp 77-105

Hounkonnou, D. 2001. *Listening to the Cradle. Local Dynamics for African Renaissance: Case Studies from Benin and Ghana.* Wageningen: University. Published Doctoral Dissertation.

Howard, Sir Albert 1943, 1947. *An Agricultural Testament.* London: Oxford University Press.

Hubert, B. R. Ison and N. Röling 2000. *The 'Problematique' with Respect to Industrialised Country 'Agricultures'. Chapter 1 in: LEARN GROUP (Eds.), Cow Up A Tree: Knowing and Learning for Change in Agriculture. Case Studies from Industrialised Countries.* Paris: INRA Editions, pp.13-30

Jiggins, J. and N. Röling 2003. *Key Informant Study. Report on the 2nd Generation Water Conservation Project in North Brabant and Limburg.* Wageningen: WUR/CIS, unpublished report to the Project Co-ordination Committee. See also www.waterconservation.nl and www.slim.open.ac.uk.

Kline, S. and N. Rosenberg 1986. *An Overview of Innovation.* In: R. Landau and N. Rosenberg (Eds.). *The Positive Sum Strategy. Harnessing Technology for Economic Growth.* Washington (DC): National Academic Press, pp 275-306.

Latour, B. 1999. *Pandora's Hope: Essays on the Reality of Science Studies.* Cambridge: Harvard University Press, 324 pp.

McDermott, J.K. 1987. *Making Extension Effective: The role of extension/research linkages. Chapter 6 in: Agricultural Extension Worldwide.* Rivera, W. and S. Schramm (Eds.). New York: Croom Helm: 89-103

McDowell, G. 2004. *The Agricultural Establishment: giving farmers too much what they want and not enough what they need. Choices and the American Economics Association website.*

McDowell, G. 2001. *Land-grant Universities and Extension into the 21st Century. Renegotiating or abandoning a social contract.* Ames (Ia): Iowa State University Press.

Metcalfe, S. 1995. *The Economic Foundations of Technology Policy: Equilibrium and evolutionary perspectives.* In P. Stoneman (Ed.). *Handbook of Innovation and Technological Change.* Oxford: Blackwell, pp 127-132

Mulder, M. 2004. *Educatie, Competentie en Prestatie. Over opleiding en ontwikkeling in het agro-food complex.* Wageningen: Inaugural Address, March 11, 2004

Nagel, U.J. 1980. *Institutionalisation of Knowledge Flows. Quarterly Journal of International Agriculture.* Vol. 30, special issue

Pontius, J.; R. Dilts and A. Bartlett 2002. *From Farmer Field Schools to Community IPM. Ten Years of IPM Training in Asia.* Bangkok: FAO, Regional Office for Asia and the Pacific.

Quezon, J., G. Feder and R. Murgai (2000). *A Note on the Sustainability of the Farmer Field School Approach to Agricultural Extension.* Washington: World Bank.

Rogers, E.M. 1961,1972,1983, 1995. *Diffusion of Innovations.* New York: Free Press, Fourth Edition.

Röling, N. 1988. *Extension Science. Information Systems in Agricultural Development.* Cambridge: Cambridge University Press. (Blissfully out of print)

Röling, N. and A. Wagemakers (Eds.) 1998. *Facilitating Sustainable Agriculture. Participatory learning and adaptive management in times of environmental uncertainty.* Cambridge: Cambridge University Press.

Röling, N. & Leeuwis, C. 2001. *Strange bedfellows: How knowledge systems became Longer and why they never will be Long.* In Hebinck, P. and Verschoor, G. (Eds.). *Resonances and Dissonances in Development. Actors, networkls and cultural repertoires* (pp. 47-65). Assen: Royal Van Gorcum.

Röling, N. and J. Jiggins 1998. *The ecological knowledge system.* Chapter 16 in: N. Röling and A. Wagemakers (Eds.). *Facilitating Sustainable Agriculture. Participatory Learning and Adaptive Management in Times of Environmental Uncertainty.* Cambridge: Cambridge University Press, p 283-307.

Röling, N., D. Hounkonnou, S. Kwame Offei, R. Tossou, and A. Van Huis (in press.) *Linking Science to Farmers' Innovative Capacity. Diagnostic Studies in Benin and Ghana.* Introduction to Special Issue of the *Netherlands Journal of Agricultural Science (NJAS)*. (to appear end 2004).

Ryan, B. and N. Gross 1943. *The Diffusion of Hybrid Seed Corn in Two Iowa Communities. Rural Sociology*, 8: 15-24.

Stoorvogel, J.J. and E.M.A. Smaling 1990. *Assessment of soil nutrient depletion in Sub-Saharan Africa 1983-2000.* Report 28. *Vol. 1: Main Rep.; Vol. 2: Nutrient balances per crop and per land use system.* Wageningen: SC/DLO

Swanson, B. and W. Peterson 1989. *A field Manual for Analysing Technology Development and Transfer Systems.* Urbana, Champaign (Ill.): University of Illinois, Office of International Agriculture, INTERPAKS report.

Swanson, B. (Ed). 1990. *Global Consultation on Agricultural Extension.* Rome: FAO, report of the Agricultural Education and Extension Service of the Human Resources, Institutions and Agrarian Reform Division

Tekelenburg, A. 2002. *Cactus Pear and Cochineal in Cochabamba. The development of a cross-epistemological management toolkit for interactive design of farm innovation.* Wageningen: University, published doctoral dissertation

Van der Ploeg, J.D. 1994. *Styles of Farming: an introductory note on concepts and methodology.* In: J.D. Van der Ploeg and N. Long (Eds.). *Born from Within: Practice and perspectives of endogenous development.* Assen: Van Gorcum, pp. 7 – 30.

Oostindie H.; J.D. Van der Ploeg and H. Rentink 2003. *Farmers' Experiences with and Views on Rural Development Practices and Processes: Outcomes of a Trans-national European Survey.* In: J.D. van der Ploeg, A. Long and J. Banks (Eds.) *Living Countrysides. Rural Development Processes in Europe, the State of the Art.* Doetinchem: Elsevier Bedrijfsinformatie, pp. 214-230

Van Paassen, A. 2004. *Bridging the Gap: Computer model enhanced learning for natural resource management in Burkina Faso.* Wageningen: University, Published Doctoral Dissertation

ANNEX: PROPOSITIONS FOR DISCUSSION

1. Food and fibre are only two of many ecological services on which humans depend. Other ecological services include drinking water, bio-diversity, climatic stability, control of pests and diseases, health, stable hydrological systems, fuel, building material, pollination and so forth. Both in the South and the North, promoting food and fibre production with total disregard for other ecological services is rapidly becoming irresponsible. Both rich and poor suffer economically, socially and psychologically from ill health (e.g., obesity), degradation, desiccation, pollution, toxification and other negative impacts from agriculture. It is time to look at agriculture in a wider (systems) perspective. Such a wider perspective has far–reaching implications for **Development Communication**. The focus shifts from technology push to the facilitation of co-creation of knowledge in complex and contested resource dilemmas in which multiple stakeholders exert competing claims on limited resources.
2. Innovative performance emerges from interaction among complementary actors in theatres of innovation. The theatres of innovation, complementary actors and their interaction all require active fomentation so as to ensure that they gel into effective knowledge and innovation systems (AKIS). Such process management is a key task for **Development Communication**. Only in few instances can this task effectively be limited to the promotion of component technologies.
3. We as **Development Communicators** must change our narratives from an outdated focus on diffusion, technology transfer and the treadmill, to the new and exciting stories that are emerging everywhere. We must learn to tap into the experiments and learning that are going on at the local level in most developing and industrialised countries. Examples are Community IPM, Landcare, Social Learning, Common Property Resource Management, Participatory Learning and Action, etc.
4. Part of the outdated focus is to regard researchers as knowledge and technology *creators*, extension staff and educators as *delivery mechanisms* of knowledge, information and technology, and farmers as ultimate *receivers and users*. In this scenario, only extension officers and educators are communicators. Modern views of innovation support a totally different view in which the functions of creation, exchange and use are supported by different actors and institutions, including research, extension and education, but also including commercial enterprise, farm women, NGO workers, community leaders, etc., depending on the situation. All these actors are actively involved in shared networks, interactions, learning processes, etc. In other words, they are all active communicators, and to the extent they are not, innovative performance will suffer. **Development Communication** has a 'meta' role to play in helping these actors become better 'interactors'.
5. **Development Communication** runs the risk of being captured by the fast professionals who have learned to regard communication as a tool for promoting commercial interests. Poverty alleviation is a product. Hence the same communication rules apply as in selling toothpaste or condoms. The focus is on clever media use, imaginative market research, etc. While accepting the value of some of these practices, we observe that their focus on *intervention* means they neglect *interaction*. Communication becomes only persuasion, instead of also listening, exchanging ideas, building concerted action and negotiating agreement.
6. An analysis of the context for agricultural development in many developing countries suggests that it is not so much the enhanced power of the '*mechanismes d'intervention*', such as public extension services or research institutions that is required, as the enhanced power of small farmers to countervail those '*mechanismes*'. The history of agricultural development in industrial countries

suggests that such countervailing power is an essential ingredient in effective utilisation of public and private funds. Building such countervailing power is a key task for **Development Communication**.

7. An analysis of the context for agricultural development in many developing countries shows that it not so much technologies that are the factor in the minimum, but institutional frameworks within which technological innovation can make an effective contribution. If they were given concrete marketing and input purchasing opportunities, for example, small African farmers could greatly enhance the productivity of their resources with *existing* technology. It is the task of **Development Communicators** to develop effective strategies to create synergistic networks of commercial input providers, public service agencies, banks, and marketing agents. Hence the old and automatic focus on research, extension and education sets everybody on the wrong foot to begin with.

Facilitating dialogue, learning and participation in natural resource management*

Guy Bessette

FOREWORD

This thematic paper presents conceptual and methodological issues related to the use of communication to facilitate participation among stakeholders in natural resource management (NRM) initiatives. It also introduces a collection of papers that focus on participatory development communication (PDC) and NRM, particularly in Asia and Africa. These papers will be published in a single volume following the IDRC–FAO peer-review workshop and this UN Roundtable on Development Communication.

There are many approaches and practices in development communication, and most of them have been implemented in the field of environment and NRM. We could have adopted a comprehensive global view of these approaches, but we made a deliberate choice to focus on PDC because of its potential to influence communication practices at the community level in NRM.

Even when considering participatory approaches in NRM, communication is often limited to information dissemination activities that mainly use printed materials, radio programmes and educational videos to send messages, explain technologies, or illustrate activities. These approaches, with their strengths and weaknesses, have been well documented.

PDC takes another perspective. This form of communication facilitates participation in a development initiative identified and selected by a community, with or without the external assistance of other stakeholders. The terminology has been used in the past by a number of scholars[1] to stress the participatory approach of communication in contrast with its more traditional diffusion approach. Others refer to similar approaches as *participatory communication for development*, *participatory communication* or *communication for social change*.

In this paper, PDC is considered to be a planned activity that is based on participatory processes and on media and interpersonal communication. This communication facilitates dialogue among different stakeholders around a common development problem or goal. The objective is to develop and implement a set of activities that contribute to a solution to the problem, or the realization of the goal, and which support and accompany this initiative.[2]

---

* *Also published in "People, Land and Water. Participatory Communication for Natural resources Management", edited by Guy Bessette, Earthscan, London, 2006*

[1] *See in particular White, Shirley A, K. Sadanandan Nair, and Joseph Ascroft, 1994. Participatory Communication, Working for Change and Development. Thousand Oaks, New Delhi, and Sage Publications, London; Servaes, J. T. L. Jacobson and S.A. White, 1996, Participatory communication and social change. Sage Publications, New Delhi.*

[2] *See Bessette, G. 2004. Involving the Community: A Facilitator's Guide to Participatory Development Communication. IDRC, Ottawa, and Southbound, Penang.*

This kind of communication requires moving from a focus on information and persuasion to facilitating exchanges between different stakeholders to address a common problem, explore possible solutions and identify the partnerships, knowledge and materials needed to support these solutions.

This paper is also part of a process. First, practitioners from Asia and Africa have been invited to submit papers that offer examples and illustrations of applying PDC to NRM. Second, a peer-review workshop has being organized, in preparation for the Roundtable on Development Communication, to discuss and review these papers. During the roundtable, we expect that the work done within the Communication and Natural Resource Management group will provide new ideas and feedback, which will contribute to the final version of this paper.

These steps will lead to the preparation of a publication that we hope will play a role in both promoting participatory approaches to development communication in the field of environment and NRM and in sharing the points of views of practitioners from Asia and Africa.

1. POVERTY ALLEVIATION, FOOD SECURITY AND ENVIRONMENTAL SUSTAINABILITY: THE CONTRIBUTION OF PARTICIPATORY COMMUNICATION

Poverty alleviation, food security and environmental sustainability are closely linked and represent major development challenges for all actors involved in the field of NRM. Poverty alleviation requires sustained economic growth, but it must also ensure that the poor benefit. Efforts must also be made to increase food security, not only through an increase in productivity but also by ensuring that appropriate conditions are in place for people to be able to access food and share it equitably[3].

Environmental sustainability is predicated upon the achievement of challenging goals such as an end to land degradation, desertification and deforestation, and effective management of water resources and biodiversity.

Strategies to achieve these goals and to address the three interlinked development challenges of poverty alleviation, food security and environmental sustainability must be designed and implemented with the active participation of those families and communities who are struggling to ensure their livelihoods in changing and unfavourable environments. But they must also include other stakeholders such as government technical services, NGOs, development projects, rural media, community organizations and research teams. Finally, local and national authorities, policymakers, and service providers must also be involved in shaping the regulatory environment in which the required changes will take place.

Best practices in NRM research and development point to situations in which community members, research or development team members and other stakeholders jointly identify research or development parameters and participate in decision making. This process goes beyond community consultation or participation in activities identified by researchers or programme managers. In the best scenarios, the research or development process itself generates a situation of empowerment in which participants transform their vision of reality and are able to take effective action.

PDC reinforces this process. It empowers local communities to discuss and address NRM practices and problems, and to engage other stakeholders in the building of an improved policy environment.

---

[3] According to FAO, "food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life".

But what about the issues involved in applying PDC to NRM practices and research? What are the challenges and the difficulties linked to such an approach? What insights and lessons can we learn from our practices in the field? This paper offers a reflection on these practices and suggests orientations to further reinforce NRM practices and research through participation and communication.

2. MOVING FROM INFORMATION DISSEMINATION TO COMMUNITY PARTICIPATION

Traditionally, in the context of environment and natural resources management, many communication efforts focused on the dissemination of technical packages and their adoption by end users. Researchers wanted to "push" their products to communities and development practitioners to receive "buy-in." Not only did these practices have little impact, but they also ignored the need to address conflicts or policies.

PDC takes a different approach. It suggests shifting from informing people to try to change their behaviour or attitudes to focussing instead on facilitating exchanges between various stakeholders.

The focus is not put on the information to be transmitted by experts, but on horizontal communication that both enables local communities to identify their development needs and establishes a dialogue with all stakeholders. The main objective is to ensure that the end users gather enough information and knowledge to carry out their own development initiatives and evaluate their actions.

Such a communication process includes objectives related to increasing the community knowledge-base (both indigenous and modern); modifying or reinforcing common practices related to natural resource management; building and reinforcing community assets; and approaching local and national authorities, policymakers, and service providers. Appropriate communication approaches should also be set up to implement the required initiatives, monitor and evaluate their impact, and plan for future action.

With PDC, researchers and practitioners become facilitators in a process that involves local communities and other stakeholders in the resolution of a problem or the realization of a common goal. This, of course, requires a change of attitude. Acting as a facilitator does not come automatically. One must learn to listen to people, to help them express their views and to assist them in building consensus for action. For many NRM researchers and practitioners, this is a new role for which they have not been prepared. How can they initiate the process of using communication to facilitate participation and the sharing of knowledge?

Some of the papers presented here describe this process in action. In the first paper from Africa, Konate *et al* describe how such an approach was developed in the context of desertification. Communication strategies used to put the accent on information dissemination, mobilization, and persuasion, but they had little impact. An experiment in participatory communication was used to support various local initiatives designed to fight desertification in the Sahel and to facilitate community participation.

The process included four main phases — training, planning, experimentation and evaluation. Training and planning were the foundation because they mobilized all actors to discuss the process of action-research and how communication would be used to facilitate participation. This process facilitated community participation and generated a synergy between different development structures.

These initiatives were successful because the all stakeholders were involved in the decision-making process. The project also demonstrated that halting desertification, like other development challenges, demands community participation and synergy between different development actors. It cannot be programmed in a top-down way.

From Uganda, Odoi tells the story of how the shift was made to implement communication for participation in the context of action-research with banana growers. The banana research programme of NARO (Uganda's National Agricultural Research Organization) wanted to develop a two-way communication strategy to enhance farmer participation in experiments with different banana improvement technologies and foster farmer-to-farmer training using communication tools that were developed in a participatory manner. This research used PDC as a tool to foster the participation of the community in the identification and solution of their NRM problems.

Researchers encouraged farmers to form farmers' groups. They then helped the representatives of the farmers' groups to identify and prioritize their NRM problems within their banana gardens as well as the causes and potential solutions to these problems. The researchers also worked with the farmers to identify their communication needs and objectives regarding the identified problems, activities to alleviate these problems, and communication tools to assist the farmers to share their new knowledge with their groups.

As a result of the research activities, plots of land that farmers had previously abandoned were now yielding good bananas. Farmers also grew confident enough to share their knowledge with other farmers of their community. They learned to use communication tools such as photographs, posters, brochures, songs and dances. The community also created a formal farmers' association through which they could search, access, and share relevant information and services about community problems. As a result of these activities, the farmers have become proactive instead of passively waiting for external assistance.

A research–action project in the basin of the Nakanbe River in Burkina Faso (Collectif Kuma and Sanon) is another example of a participatory communication approach that brought all of the stakeholders together to manage community conflicts related to water.

Approaches to water-resource management are often centralized and allow little participation by the local populations that are actually affected by water issues. Field research conducted in this basin revealed that 50 percent of modern water sources (hand pumps and new wells) that had been established by different projects were non-functional as a result of lack of involvement and ownership by beneficiaries. The participatory communication approach used by the research team emphasized dialogue among the different stakeholders. The approach also focused on local capacity building for organization and decision-making in water-resource management and conflict resolution and in establishing or reinforcing local water-management committees.

Once again, participatory communication was helpful in identifying solutions to conflict situations in the villages and for setting up or reinforcing social institutions such as the water-management committee. It also built the confidence of community members to address their own problems and seek their own solutions. In this case, it also recognized the central role played by women in the management of water resources.

Another case from Vietnam (Le Van *et al*) describes how a participatory communication approach was used to reinforce community-based natural resource management (CBNRM) research with upland communities. The research started after new policies were put in place by the government to protect forests in the uplands. However, following these measures, only one percent of the land was left for agricultural production. Local communities, who used to practice *swidden* agriculture, had to change their practices and move to sedentary farming. This research project tried to help them improve their livelihood in this new context.

Due to these forced changes in their farming system, and to limited access to assets and natural resources, production was low and there were few opportunities for income generation. Participatory communication was used to foster enable local communities identify needs, priorities and ways to improve their livelihoods. For the first time groups of farmers who shared common characteristics and interests were asked what problems they wanted to start working on and what they solutions they wanted to experiment with.

The question of reaching the poor and most disadvantaged groups in the community was a major preoccupation, because these people received few opportunities to participate in research or development programmes. Emphasis was put on the participation of poor farmers and of women. Improving the capacity of leaders and community organizations also helped them to apply participatory approaches so that all stakeholders could contribute to community plans and activities.

3. The NRM practitioner as a communication actor and facilitator

Establishing Relationships

As soon as a researcher or NRM practitioner first contacts a local community to establish a working relationship, that person becomes a communication actor. The way the researcher or NRM practitioner approaches the local community, understands and discusses the issues, and collects and shares information involves communication. The way in which that communication is established and nurtured affects the way in which people will feel involved and participate in the research or development initiatives.

Within this framework, it seems important to promote a multi-directional communication process. The research team or the development workers approach the community through the community leaders and community groups. The community groups define their relationship with the new resource people, other associated stakeholders and other community groups.

Many researchers still perceive community members as beneficiaries and future end users of research results. Even if most people recognize that the one-way delivery of technologies to end users simply has little impact, the shift in attitudes and practices is not easy. For this shift to happen, one must recognize that community members are stakeholders in the research and development process. Therefore, approaching a community also means involving people and thinking in terms of stakeholder participation. Building mutual trust and understanding is a major challenge at this stage and will continue to be so during the entire period of interaction between researchers or practitioners and the community.

Negotiating Mandate

Researchers do not come to a community without their own mandate and agenda. At the same time, communities also want their needs and problems addressed. They will not distinguish between NRM problems, difficulties in obtaining credit or health issues, because these are part of their reality.

Researchers and practitioners should explain and discuss the scope and limitations of their mandate with community members at the outset. In some cases, compromises can be found. For example, it may be possible to involve other resource organizations that could contribute to the resolution of problems that are outside the mandate of the researchers or practitioners. This can often be the case with the issue of credit facilities.

Power Relations and Gender

The management of natural resources is clearly linked to the distribution of power in a community and to its sociopolitical environment. It is also closely associated with

gender roles. This is why social and gender analyses are useful tools for examining the dynamics of power in a community. Failure to use these tools may turn the participatory process into a manipulation process or make it selective of only a few individuals or groups.

The paper on communication and sustainable development (Ouattara and Ouattara), refers to a situation in which a traditional healer had unquestioned authority and used the participatory communication process to reinforce this. The members of the intervention team, who were not used to such behaviour, were *de facto* manipulated by the situation. What kind of participation was then possible?

This situation is not exceptional and can only be prevented by identifying the principal actors in a community before any process is launched. Social analysis, such as gender analysis and identification of local communication systems, tools, and channels, should take place before any intervention.

Understanding the Local Setting: Collecting Data or Co-producing Knowledge?

This attitude change has its corollary in methodology. Researchers have been trained in data collection, which emphasizes an extractive mode that does not facilitate participation. PDC, however, suggests that researchers or practitioners collaborate with community members and other stakeholders to assemble and share baseline information. This points to a process of co-producing knowledge that draws on the strengths of the different stakeholders.

Participatory research appraisal (PRA) and related techniques have been widely adopted in the field of ENRM to assemble baseline information in record time and to facilitate the participation of community members. However, we often find situations in which techniques such as collective mapping of the area, transect walks, problem ranking and development of a timeline are still used in an extractive mode. The information is principally used for the researcher's or the project designer's benefits and little consideration is given to the information needs of the community or to any sharing of results.

In these cases, even with the "participatory" label, these techniques can reinforce a process guided from the outside. PDC stresses the need to adapt attitudes as well as techniques. Co-producing knowledge is different from simply collecting data, and it can play an essential role in facilitating participation in the decision-making processes that is involved in a research or development project.

Understanding the Communication Context

Who are the different groups that comprise the local community? What are the main customs and beliefs regarding the management of natural resources, and how do people communicate among themselves on these issues? What are the effective interpersonal channels of communication? What views are expressed by different stakeholders in specific places? What local associations and institutions do people use to exchange information and points of views? What modern and traditional media does the community use?

Here again, we find value in integrating the biophysical, social, and communication aspects in an integrated effort to understand the local setting. In the same way that they collect general information and conduct PRA activities to gather more specific information, researchers and development practitioners should seek to understand, with the help of the community, its communication channels, tools and contexts.

Identifying and Using Local Knowledge

Identification of the local knowledge that is associated with NRM practices is part of the process of co-producing knowledge. It should also be linked with two other

issues: the validation of that knowledge and the identification of modern and scientific knowledge that could reinforce local knowledge.

Specific local knowledge or practices may be well suited to certain contexts. In other contexts, it may be incomplete or have little real value. Sometimes, specific practices may have been appropriate for previous conditions, but these conditions may have changed. This emphasizes the importance of validating common local knowledge against scientific evidence and through discussions with local experts or elders as well as community members. It may also prove useful to combine modern knowledge with local practices to render the latter more effective or more suited to local needs. Three papers discuss issues related to participatory communication and local knowledge.

A first paper from Mali (Sanou) describes research that based improvements on local knowledge. This research looked closely at the harvesting rules and practices surrounding *karite* (shea nut) and *nere*, two important fruits for Sahelian people. Sanou also studied perceptions of both men and women farmers with regard to these agroforestry species (e.g., quality of trees and fruits, classification criteria of trees, harvesting time, and organization). This work, based on local community knowledge, has proposed solutions to the aging of trees and to the slow regeneration of the parks, as well as filled gaps in the identification of genetic resources.

A second paper (Collectif Kuma) stresses the importance of ensuring transparency during the process of collecting local knowledge. Community members and holders of knowledge must understand how their knowledge will be used. It is equally important to guarantee that a significant part of any benefits from the use of that knowledge should come back to the community. Guarantees must also be given that the information will not be used against the community, which has happened with information relating to land rights.

This paper also raises the issue of women's knowledge, which has long been ignored. In the research conducted by Ouattara and Ouattara on communication and sustainable development, women from the community were trained as facilitators, and separate meetings were conducted for men and women. The facilitators always explained to the women the importance of their knowledge in the search for solutions to a specific problem.

A modern solution to a given problem will also have more chance of being adopted if a similar practice already exists in the community. For example, in the Sahel, the use of rocks to protect fields against erosion found easy acceptance because the people already used dead branches to stop water from invading their fields.

In a third paper, Diarra reports on a case from Mali in which ancient knowledge was used to improve agricultural production and the well being of the community. An old woman in the village could predict years of good rain and drought and direct farmers to cultivate either on higher ground r by the side of the river according to her forecasts. For this reason each family had two plots of land, one by the side of the river and the other in the tablelands. Her well protected secret was that she could make these predictions by observing the height at which sparrows built their nests in the trees near the river.

After her death, and with the permission of the village authorities, her story was told to motivate the community to protect the river from erosion. The villagers agreed to participate in such activities to protect the birds and the knowledge they brought with them each year.

Involving the Local Community in Diagnosis and Planning

PDC also requires that the local community is involved in identifying a development problem (or a common goal), discovering its many dimensions, identifying potential

solutions, and taking a decision on a concrete set of actions to experiment with or implement. It also means facilitating interaction and collaborative action with other stakeholders.

Traditionally, many researchers and practitioners identified a problem in a community and experimented with solutions with the collaboration of local people. With PDC, the researcher or development practitioner becomes a facilitator of a process that involves local communities and other stakeholders in the identification and resolution of a problem or the realization of a common goal.

The communication process should help people to identify a specific problem; discuss and understand its causes; outline possible solutions; and decide on a set of activities with which to experiment. It is useful to stress that this does not happen during the course of a single meeting - time must be allowed for this process to mature.

In some cases the point of departure is not a specific problem but a common goal that a community gives itself. As with the problem-oriented process, the community will decide on a set of actions to achieve that goal.

Ideally, development and research objectives should strengthen and accompany the chosen community initiative. In general, however, these objectives have already been identified in a research and development proposal conceived before the consultation process was undertaken with the community. One solution to this problem is to plan a revision of the initial objectives with the community at the start of the research or development project. But ideally the administrative rules of donor organizations, as well as the research methodology, should be modified to facilitate community participation at the identification phase of a potential initiative.

Developing Partnerships at the Local Level

The concept of developing partnerships between all development stakeholders involved with local communities is central to PDC.

We often find situations in which a research or development initiative is conducted with a local community, but without consideration for other initiatives that may be trying to engage the same community in other participatory processes. This situation can lead to participation fatigue in the communities. Identifying other ongoing initiatives, communicating with them and looking for opportunities for collaboration should be part of the methodology.

These activities with a local community also allow researchers and practitioners to identify possible partners that could be involved in the research or development process. It could be a rural radio, a theatre group or an NGO working with the same community. By establishing contacts at the onset of the project, these groups will feel they can play a useful role in the design of the research project instead of perceiving themselves as mere service providers.

This issue of collaboration is not an easy one. One of the African papers (Collectif Kuma) raises the issue of collaboration with the technicians from governmental services, and more specifically the problem of combining participatory and non-participatory approaches. Technicians are accustomed to executing and implementing programmes already identified by government authorities. Their mandate often consists in making people adopt their recommendations, which contradicts the principles of PDC. Therefore, there is a need to plan for training in PDC for potential partners.

Constraints and Challenges

Constraints and challenges to PDC are sometimes overwhelming. El Dabi gives an example from Egypt in which participatory communication could not be introduced. The project he describes aimed to identify and modify barriers to community participation in a development project in the south of the country. Local authorities were to be

trained in participatory planning and PDC, a communication audit was planned to cover all stakeholders and support was to be given in designing community-level PDC strategies.

However, several obstacles hindered the implementation of this plan. First, participation was perceived as a process to allow stakeholders to voice grievances, not as a mechanism for them to look for ways to overcome these problems. Second, the project did not allow sufficient time for a communication audit or to conduct the training in a participatory way. Third, but not least, insufficient resources were allocated for the institutionalization of participatory approaches. As a result, participatory communication could not be introduced in the context of this project.

Adjibade provides examples of some of the practical difficulties faced when implementing participatory communication, particularly in a rural context. This paper also notes the importance of prior knowledge of local language and communication channels and tools; of negotiating with men to identify conditions for women's participation; of acknowledging time and distance considerations; of the development of partnerships with local organizations; of consideration of local authorities (traditional, administrative and family); and of harmonizing the understanding of participatory communication among all those involved.

Adjibade also reminds us that participatory communication activities usually lead to the expression of the need for material and financial support to implement the solution identified during the process. Provision must be made somewhere to answer these needs, whether in the project itself or through partnerships. The paper also shows that it is not useful to separate participatory communication from development activities, and that resources must be planned to support these two complementary processes.

Another paper presents the experience of introducing communication within a participatory NRM project in the Tonle Sap region of Cambodia (Thompson). The project applied a wide range of tools and methodologies to inform, educate, and promote participation. However, in the absence of a global communication plan, these efforts remained limited. PDC approaches can identify the best-suited community interventions and the management options for each community to ensure community-based NRM. However, the different communication activities must be integrated within a strategic plan to achieve their potential effectiveness.

4. SUPPORTING NRM THROUGH COMMUNICATION STRATEGIES AND TOOLS

With PDC, communication strategies are developed around an initiative that has been identified by the community to tackle a specific problem or achieve a common goal.

After community members have gone through the process of identifying a concrete initiative they want to carry out, the next step is to identify both the various categories of people who are most affected by this NRM problem and the groups that might be able to contribute to the solution.

Addressing a general audience such as "the community" or "the farmers" does not really help involve people in communication. Various sub-groups make up any given community. They can be defined in many ways, including by age, gender, ethnic origin, language, occupation, and social and economic conditions. Each sub-group has its own way of perceiving a problem and its solution, and its own way of taking actions.

Communication needs will vary considerably within each specific community group or stakeholder category. In all cases, however, it is important to pay particular attention to the question of gender and of age. These variables are usually critical in determining rights and responsibilities, access to resources and participation in decision-making.

Communication Needs and Objectives

Development needs can be categorized broadly into material needs and communication needs. Any given development problem, and the attempt to resolve it, will present

needs related to material resources. However, there are complementary needs that involve communication - for sharing information; influencing policies; mediating conflicts; raising awareness; facilitating learning; and supporting decision-making and collaborative action. Clearly, these material and communication aspects should be addressed in a systemic way by any research or development effort.

This being said, PDC puts a greater focus on the second category of needs as identified by all stakeholders, which are then addressed by a series of actions. In the context of NRM, these actions are linked to one or another of the following communication activities: raising awareness; sharing information; facilitating learning; supporting participation, decision-making, and collaborative action; mediating conflicts; and influencing the policy environment.

Using Communication Tools in a Participatory Way

We often find situations in which researchers or practitioners who want to use communication in their activities will want to produce a video, a radio programme, or a play without first trying to identify how it will contribute to the research or development initiative. The expression "communication tools" itself implies that they are not the "product" or the "output" of the communication activities.

PDC takes another perspective. It leads participants through a planning process, which starts with the identification of the specific groups as well as their communication needs and objectives. The research or development team, together with stakeholders, then identify the appropriate communication activities and tools that are needed to reach these objectives.

PDC also put traditional or modern media on the same level as interpersonal communication and learning experiences, like field visits or farmers' schools. The importance of using these communication tools in a way that will support communication must of course be clearly stated at the onset of the project.

Three criteria seem particularly useful in selecting communication tools - their actual use by the community, the cost and constraints of their use and the versatility of their uses. Whenever possible, we should first consider the communication tools already used by the local community, although considerations of cost and sustainability and of different kinds of use should also be examined before taking a decision.

The papers in this publication place specific attention to community discussions, participatory theatre, radio, farmer field schools, videos, photography, posters and brochures.

Community Discussions

Community discussions are considered to be an important communication tool by almost everyone. But these discussions also imply a process and some specific attitudes on the part of the facilitator. A paper from Collectif Kuma gives us two examples of facilitators and the processes that are at work when using this tool.

Thiamobiga, in his paper, describes a case in which community discussions were instrumental in managing bush fires and preserving the natural environment. He stresses the link between participatory communication and the *palabre*, a traditional way to address issues and problems at the community level.

Participatory Theatre

Participatory theatre also appears to be a favourite communication tool. Papers by Collectif Kuma and Thiamobiga discuss how women farmers used theatre-debate as a participatory communication and empowerment tool. Theatre-debate is a tool which uses the format of a play based on a problem followed by a discussion.

Thiamobiga describes how the women farmers used the format to address both the issue of soil fertility and their own status within the community. There is a traditional

ceremony performed in time of drought, when women are allowed to disguise themselves as men to call for rain and the men are not allowed to take offence at the parodying of their gendered behaviour. The women wanted to refer to that ceremony, so that they could bring forward topics that could be addressed directly by the men of the community.

By expressing themselves as (male) actors in a play the women not only articulated the issue of the unequal soil fertility of women's plots, they also gained confidence in themselves and became more assertive. The impact on the community was also stronger because community members were addressing other community members about common issues, rather than development actors from the outside introducing a debate and promoting solutions.

At the same time, such involvement from community members, in this case women farmers, raised expectations that could not be met after the completion of the intervention. There was no direct follow-up, and although the experience was empowering for the participants, there was little impact at a broader level. This issue addresses the importance of planning at the very beginning of the planning phase.

Radio and Participatory Communication

Another paper from Collectif Kuma reminds us that radio is the most popular media in rural Africa, but also that it is still underdeveloped as a participatory communication tool.

His paper describes a project in which radio was used as part of a strategy based on "endogenous" communicators. The programmes were designed on the basis of interviews and discussions with community members and a team that included a radio producer, a farmer, and a representative from a development project.

Other activities were then introduced to complement the media approach and reinforce community participation. The identification of NRM problems and potential solutions was done through discussion groups of women, young people and men. Village-level communication committees were set up to define activities that could respond to prioritized needs. These field activities were then used in the production of radio programmes broadcast by the local rural radio station. Specialists would also comment on these questions and participate in a dialogue with community members.

These activities have opened up a space for dialogue about NRM, while promoting synergy between different development actors intervening in the same locality. This process has engaged community members in a search for solutions instead of waiting for external assistance - they have been able to destroy a pest infesting orange trees, resume a dialogue between farmers and pastoralists and by enable women to have a voice at community meetings.

Nevertheless the paper also highlights the dangers of raising expectations without the possibility of addressing the identified needs. For example, after prioritizing the lack of access to drinking water in the locality, community members and the intervention team did not have many solutions to offer because the communication intervention was neither associated with any specific development action nor equipped with a structure that had the technical and financial resources to address those needs.

A paper from Radio Ada (Larweh) describes a situation in which a community was confronted with a decision to either migrate or renew their waterway, which was choked by weeds, trees and debris, and in fact no longer existed for most of the year. The community radio was part of a process in which the community discussed the situation and decided to clear 40 years of accumulated debris. Neighbouring communities joined in and four years later the river could be used for irrigation and navigation.

Farmer Field Schools

A paper from Zimbabwe (Mhere) presents the case of a farmer field school (FFS) in which the farmers developed the curriculum themselves. FFSs expose farmers to a learning process in which they are gradually presented with new technologies, new ideas, new situations and new ways of responding to problems. The farmers can then adapt their existing technologies and practices and improve their production. But the farmers are not "beneficiaries," they are fully engaged in the development of this communication tool.

A mix of participatory rural appraisal (PRA) techniques and methods is deployed to seek the views of community members on farming operations, problems and possible solutions. A curriculum is designed on the basis of this information and presented and discussed with the stakeholders, and modules are developed for use by the field staff in their daily interaction with farmers.

Video, Photography, Posters and Brochures

In other situations, especially those oriented toward empowerment, community members will take the lead in using or designing communication tools. This is well documented in the Uganda paper (Odoi) on the adoption by rural communities of video production, photography and the making of posters and brochures

This paper tells how farmers were asked to review a video produced by a research team to and instead they rejected it. Convinced that they could do a better job of delivering their own messages and experiences, the farmers decided who should show what and how, fixed a date for the new recording, and signalled to the researchers when they were ready. Such a thing would have never happened if the researchers had not undertaken a process of participatory communication with the farmers. This was a clear manifestation of their empowerment.

The same thing happened with photographs and posters. In fact, after examining a poster depicting proper water and sanitation practices, farmers said it was teaching someone how to write. Clearly, that tool was not adapted to this specific community.

Tools should also be considered from the point of view of their usage. In a case from Lebanon (Hamadeh *et al*) local user networks, which were inspired by a traditional way of communicating and resolving issues, and video were used to manage conflicts and to facilitate the expression of views by marginalized people.

This research was focused on understanding changes in resource management systems in an isolated highland village and on improving prospects for sustainable community development. Community members were involved during different phases, and capacity building was sought through the establishment of a local users' network.

This network acted as a medium to bring together the different stakeholders and used a traditional way of communicating and resolving dilemmas called *majlis*, in which issues are brought up within the community. As the network grew, so did the understanding by the researchers of communication principles and the need to develop specialized sub-networks. Three sub-networks were developed, two dealing with the main production sectors in the village (livestock and fruit growing) and a third addressing women's needs.

Tools and practices were mainly interpersonal - roundtable meetings, community outreach by students, joint field implementation of good NRM practices, and workshops on different NRM themes. Short video documentaries were also produced to involve the community in conflict resolution. Marginal groups, including women, could express their points of view and the images helped shed light on aspects of conflict and dissent. Separate video screenings to different groups were followed by

discussions that were also filmed and documented. A revised video that included the earlier discussions was then shown to the whole village until a positive dialogue started to emerge from the audience.

5. INFLUENCING OR IMPLEMENTING POLICY

Promoting poverty alleviation, food security and environmental sustainability also requires changes to the institutional and legislative environment. Local and national authorities, policymakers and service providers are active in shaping and enforcing the regulatory environment in which the required changes must take place. It is therefore important to facilitate dialogue at that level to support community initiatives.

Two papers from Cambodia (Kimhy and Pinreak) give examples of how participatory communication can influence policy and help in its implementation.

A first paper shares the experiences of indigenous communities who evaluated an NRM project implemented by the government and presented their findings to government officials. The presentation also included recommendations to the government in a context in which government representatives usually tell communities what they should do. In this activity, evaluation was used both as an empowerment tool for community members and as also an advocacy tool for influencing the government.

The second paper describes a situation in which a project team was visiting villages to inform them of a new legislation on land rights. Transferring information across cultural and language barriers is difficult, but it is much more difficult when some of the concepts do not even exist in the vocabulary of one of the parties to the dialogue. This was the case in this situation because concepts such as land title did not exist within the indigenous communities described in the paper. At the same time communication of these concepts was crucial because powerful interests were threatening community lands and resources.

None of the project team members spoke any of the indigenous languages and they had prepared information materials without consulting any one from any of the communities. At first their attempts at communication failed. They then experimented with a participatory communication approach, involved community members in the preparation of the sessions and communication materials. They also included indigenous people as full members in their land rights extension team.

It is interesting to note that the team also used the "livelihood" framework in the course of their discussions with the communities. They presented ideas expressed by the community in pictures that were painted and then revised by the community. The visuals in this case greatly assisted in the discussions and expressions of different points of views.

A paper from the Philippines (Torres) tells how participatory communication helped to implement CBNRM among indigenous communities. When community-based forest management was adopted as a national strategy in the Philippines, issues emerged with regard to the readiness and capacity of communities to handle the tasks and functions.

In the case of the Bayagong Association for Community Development, an upland people's organization, the organization was able to assert, legitimize and sustain control over a piece of forestland they had been *de facto* occupying for years. To do so, community members underwent a year-long process of participatory resource management planning.

This experience helped participants to obtain a better grasp of their resource, to assess their own capacities and weaknesses, and to identify internal and external threats and how these could be handled. It enabled them to gain knowledge, attitudes, and skills to develop rational approaches to forest management. But they also learned to become more open and assertive about their rights.

PDC played a critical role in tempering the socio-political environment so that a climate favourable to the community's take over of the forestland was created. However, success was not only due to communication. Other factors such as social capital, policy presence and external assistance also played a role. What is unique is that participatory communication enabled the evolution of a "participation-as-engagement" process veering away from the usual "participation-as-involvement" process.

A paper from Indonesia (Jahi) tells of a research project that originated from a question researchers asked themselves while they were doing a baseline study in a remote rural area. The researchers wondered whether poor farmers and landless farm labourers could participate in the management of a strip of public land that stretched out along a river and thus be able to derive benefits from that activity.

By law farming activities were prohibited on that land. Only grass and tree cultivation that would help stabilize that strip was permitted (the riverbanks were raised to prevent flooding of the area). At the same time, regardless of the rules, landless farmers continued their farming activities on the riverbanks. Officials of the department of public works would enforce the rules and eradicate their crops. A consensus was developed.

The farmers could continue their activities provided they grew grass on at least the first metre from the river's edge and sheep rearing was encouraged.

The researchers established links between university researchers, local government officials, extension services, village governments and local communities. Communication materials such as slide shows, posters and a comic book were developed and tested with farmers and extension workers. Different topics were developed for different audiences. For example, presentations on the potential of raising sheep were prepared for local policymakers, and aspects of sheep production and rural family budgets were covered in products for extension workers and farmers.

Capacity building for livestock extension workers and farmer leaders was then offered. In-kind loans in the form of sheep were provided to the farmers, who agreed to return a certain number of the offspring to the project. Supervision and backstopping activities were also provided to farmer leaders, who agreed to share the information with other farmers after they had acquired enough experience.

Farmer-to-farmer communication was encouraged and supported and was found to be a more efficient way to raise farmers' interests than what researchers or extension workers used to do. The experience also raised public and private interest in supporting such economic activities as sheep rearing in the district. Fifteen years after the beginning of the project, livestock production in the district has developed significantly, and small farmers can still earn their living with this activity.

Another policy issue is when participatory communication coexists with bad policies. In a paper presenting the case of the Kahusi-Biega National Park in the Democratic Republic of Congo (Mumbu), we find a situation in which a conservation measure (the creation of a park to protect an unique ecosystem and a population of mountain gorillas) was implemented in a top-down way. The local population was excluded from the management of natural resources, and consequently did not participate in supporting the new unpopular measure.

An alternative plan had to be developed. Using environmental communication, the project began to develop, in collaboration with the populations living in the area, community-development activities that were in harmony with the conservation of the park and its natural resources. These activities soon evolved into the development of mechanisms of participatory management. Soon, some 200 "village parliaments" were set up to facilitate the process. Not only have opinions changed toward the park, but the communities started taking charge of its protection.

The promotion of policies goes hand in hand with collective action. One of the papers (Ouoba) illustrates the daily life of a rural woman of the African Sahel and depicts her difficulties with regard to natural resources - lack of access to water and fuel wood; problems of soil fertility; and lack of land-title recognition. It also tells of the efforts of a rural women's association to find collective answers to these individual problems. Solutions to NRM problems experienced by rural women must come from their own efforts, a process that can be facilitated by participatory communication.

In another related paper, Ouoba shares her experiences in elaborating an action plan in NRM with rural women in West Africa. We can see that such initiatives are part of an empowerment process in which marginalized people, who are not used to expressing themselves, develop confidence and learn to voice their difficulties and needs and to formulate specific actions to address these needs.

6. CAPACITY BUILDING

PDC, and more broadly the use of communication in the context of participatory development or participatory research, has to be appropriated by NRM researchers and practitioners. It should also be the subject of exchanges and discussions with the other stakeholders, such as community members, who participate in these activities.

Five papers (Adandedjan; Caballero and Cadiz; Kaumba and Kamlongera; Velasco and Matulac; and Quiamco) discuss the implementation of Isang Bagsak, a learning and research programme in PDC. The expression "Isang Bagsak" comes from the Philippines and means: *arriving at a consensus, an agreement*. Because it refers to communication as a participatory process, it has become the working title for this initiative.

The programme seeks to increase the capacity of development practitioners and researchers active in the field of environment and natural resources management, to use PDC to work more effectively with local communities and stakeholders. It pursues the objectives of improving the capacities of practitioners and researchers to communicate with local communities and other stakeholders and to enable them to plan communication strategies that support community-development initiatives.

The programme combines face-to-face activities with a distance-learning strategy and web-based technology. With the distance component, the programme can answer the needs of researchers and practitioners who could not easily leave work. It is presently implemented in Southeast Asia and Eastern and Southern Africa, and is being planned for the African Sahel.

In Southeast Asia, Isang Bagsak is implemented by the College of Development Communication, the University of the Philippines at Los Banos. It works in the Philippines, Cambodia and Vietnam.

In the Philippines, the programme is implemented in partnership of PANLIPI, an NGO devoted to legal assistance to indigenous Filipinos. In Vietnam, capacity building in PDC aims to improve approaches to coastal resources management, understand how to influence local policies and form a national network in community-based coastal resources management. Furthermore, a Vietnamese version of the Isang Bagsak, Vong Tay Lon, is being prepared.

In Cambodia, participants come from the new Forest Administration department. This national body is responsible for formulating and implementing forest policies, which affect more than half of the country's total land area. By the end of 2004, it will conclude its statement on National Forest Policy, which will be based on a consultative process that will include all stakeholders in national forestry policy formulation.

In Southern and Eastern Africa, the programme is implemented in Zimbabwe, Malawi and Uganda by the SADC Centre of Communication for Development (SADC-CCD). By building capacity in PDC, the programme aims to facilitate collaboration among decision-makers, planners, development agents and communities to improve the management of both the environment and natural resources and research and

development initiatives. The programme works in partnership with the National Agriculture Research Organization in Uganda, the Desert Margins Initiative in Malawi, and the Department of Agricultural Research and Extension in Zimbabwe.

Another programme is being prepared for an agroforestry network in Senegal, Burkina Faso and Mali, which will be led by The International Centre for Research in Agroforestry (ICRAF) Sahel Programme (ICRAF-Sahel). In the Sahel, the starting point for implementing Isang Bagsak is the realization that new agroforestry technologies that should improve lives are not widely adopted in spite of all the efforts made in this direction. The objective of the programme is to reinforce the capacities of the different actors so that they can co-produce and co-disseminate new knowledge.

The issue of capacity building is also discussed in three other papers. Diop suggests that capacity building in PDC should focus on three areas - planning by objectives; the methodology of "observant participation" (endogenous version of participatory observation, a traditional tool of action research); and communication tools.

El Hadidy addresses the issue of capacity building in the context of the Arab region, but situates PDC within the larger framework of participatory development. This paper advocates that practitioners should engage in a critical reflection on their practices. It states that the "delivery of resources" mode of operation in the form of transfer of know-how and skills is not sufficient in itself. It also indirectly implies that resources are transferred from those who have them to those who do not, instead of recognizing that every practitioner has skills and abilities that need to be brought to the surface.

Unlike capacity building that requires a "how-to" approach such as proposal writing or business planning, capacity building in PDC should focus on recognizing that communication is an innate process. It advocates an approach for "facilitation of resourcefulness" rather than "providing resources." This process goes hand in hand with the documentation and discussion of local participatory practices.

The third paper, which is from FAO (Acunzo and Thompson), presents a national capacity-building effort in Cambodia that was designed to help an interministerial communication team design and implement targeted interventions to support plans and efforts made by local communities for NRM. The strategy was based on implementing information and communication strategies at the field level and providing in-service training at the pilot sites. The learning process included participatory analysis, training of villagers, material design and production, and monitoring and evaluation for the improvement of agricultural and fishing practices.

The paper describes the constraints and lessons learned during the course of this initiative. Among the challenges, the authors mention that the lack of operational budgets makes it difficult for the newly trained communication team to apply their new skills. Similar trends have also been observed in other capacity building initiatives. We need to address this situation as part of capacity building efforts and examine how these efforts can be better integrated into the operational plans of targeted institutions.

Finally, capacity building and co-learning efforts should also document and promote a systematic use of participatory development communication to NRM.

First, it is important to state that there is no single, all-purpose recipe to start a participatory development communication process. Each time we must look for the best way to establish the communication among different stakeholders, and use it to facilitate and support participation in a community-driven initiative.

However, participation in the planning process is important and using PDC demands a change of attitude. Traditionally, the way many research teams and practitioners work is to identify a problem in a community and to experiment solutions with the collaboration of the local people. On the communication side, the trend is to create awareness of the many dimensions of that problem and the solution community members should implement (from an expert point of view).

Working with PDC means involving the local community in identifying the development problem (or a common goal), discovering its many dimensions, identifying potential solutions (or a set of actions) and taking a decision on a set of actions to experiment or implement. It is no longer the sole responsibility of the researcher or the development practitioner, and their organizations.

PDC supports a participatory development or research for development process. We usually represent such a process through four main phases, which of course are not separated and flow into one another - problem identification, planning, implementation, and monitoring & evaluation. At the end there is a decision to either return to the beginning of the process (problem identification) and start another cycle or move to a revision of the planning phase, or to scale up efforts, starting another planning, implementation and evaluation cycle. In an NRM context the process looks like this: [4]

Step 1: Establishing a relationship with a local community and understanding the local setting;

Step 2: Involving the community in the identification of a problem, potential solutions, and in a decision to carry out an initiative;

Step3: Identifying the different community groups and other stakeholders concerned by the identified problem (or goal) and initiative;

Step 4: Identifying communication needs, objectives and activities;

Step 5: Identifying appropriate communication tools;

Step 6: Preparing and pre-testing communication content and materials;

Step 7: Facilitating the building of partnerships;

Step 8: Producing an implementation plan;

Step 9 Monitoring and evaluating the communication strategy and documenting the development or research process;

Step 10: Planning the sharing and utilization of results.

This process however is not sequential. Some of those steps can be done in parallel or in a different order. They can also be defined differently depending on the context. But they can guide the NRM researcher or practitioner in supporting participatory development or research through the use of communication.

7. INSTITUTIONAL ASPECTS

Implementing PDC faces the same constraints as the participatory development process it supports. It demands time, resources and practical modalities that can only come from a negotiation with donor organizations.

[4] *See Bessette, G. 2004. Involving the Community: A Facilitator's Guide to Participatory Development Communication. IDRC, Ottawa, and Southbound, Penang.*

Beginning the process

In the traditional development culture, financial support often comes after revision and acceptance of a formal proposal. In order to go through the different levels of revision and acceptance, the development problem or goal must be clearly identified and justified, the objectives outlined with precision and all the activities detailed. The full budget must figure in the proposal with all its budget notes.

Although some organizations are rethinking this process and promoting a programme instead of a project orientation, most are not. It is important to put this issue on the agenda of donor organizations and to demand the revision of such a process. If we want to develop a participatory development process and have community members and other stakeholders have their say at all phases, starting with project identification and planning, this means that we need time and resources to do so.

In the meantime, we can identify two modalities that can be proposed to the donor organization. The first one consists in putting together a pre-proposal that will seek to identify and plan the project with all stakeholders. The second modality - a second choice, in case the first one is not possible - consists in building the proposal in a way that will permit its revision with community members and other stakeholders.

Changes during implementation

Participation brings changes. A participatory development or research process cannot be planned like the construction of a road; as participation is facilitated and more feedback is gathered, more consensuses are developed and decisions made, things change. This is why it is always an iterative process and we must have the possibility of changing plans as we go along in order.

The length of the activities is another problem we face. Often proposals have to be developed on a two or three year timeframe. This is inadequate for a PDC process, but we can design projects so that we can identify research and development indicators to justify continued support. This underlines also the importance of a continuous evaluation mechanism set up during implementation of the process.

8. REGIONAL PERSPECTIVES

Two papers, from Africa and Asia, examine PDC from a regional perspective.

In Asia, Quebral, who was the first to use the term "development communication" more than 30 years ago, retraces the evolution of participatory approaches to development communication. The paper situates this evolution in the context of the communication units, departments and colleges in Asian universities and from the perspective of a fight against poverty and hunger. She notes that development communication does not identify itself with technology *per se*, but with people, particularly the disadvantaged in rural areas. PDC uses the tools and methods of communication to give people the capacity and information they need to make their own decisions.

The paper outlines the beginnings of development communication and confirms the need to build on what has been done. Older models retain their validity in certain situations and can still be used when appropriate. It also presents lessons and observations learned through this Asian experience.

In the context of NRM, Quebral insists on the importance of a balance between technology and the empowerment of people, and on how PDC can help people zero in on their problems and choose the technologies with which they wish to experiment.

Offering another regional perspective, Boafo describes and analyses the application of PDC in Africa and stresses the linkages between communication and the different dimensions of development in the continent. Since the 1960's and 1970's development communication approaches have been employed in numerous development programmes and projects. However much more remain to be done to address the constraints that

confront PDC, particularly in the context of rural and marginalized communities where the majority of the populations in most African countries reside.

In such a context, notes Boafo, community communication access points and traditional media are of particular importance. Effective applications of PDC approaches and strategies at the grassroots and community level should necessarily involve the use and harnessing of these communication resources. With their horizontal and participatory approaches, they can contribute effectively to enhance participation in cultural, social and political change, as well as agricultural, economic, health and community development programmes.

9. CONCLUSION

In the field of NRM, PDC is a tool that reinforces the processes of participatory research and development and encourages the sharing of knowledge needed in these processes. It integrates communication, research and action in an integrated framework and it involves all stakeholders in the different phases of the development process. But, most importantly, PDC points out that NRM must be directly linked to the agenda of communities and seek to reinforce their efforts in fighting poverty and improving their living conditions.

For communication to be effective in addressing the three interlinked development challenges of poverty alleviation, food security, and environmental sustainability, it must fulfill the following functions: ensure the appropriation by local communities of any NRM research or development initiative; support the learning needed to realize the initiative and facilitate the circulation of relevant knowledge; facilitate the building of partnerships and synergies with different development actors working with the same communities; and influence policy and decision-making processes at all levels (family, community, local, and national).

To achieve these objectives, a major effort is required in capacity building — or more exactly, participatory learning — for practitioners in the field of NRM. Development workers, NGOs, researchers, extension workers, and governmental agents responsible for technical services need appropriate communication skills. The ability to work with local communities in a gender sensitive and participatory way, to support learning processes, to develop partnerships with other development stakeholders, and to affect the policy environment should be recognized as being as important as the knowledge needed to address technical issues in NRM.

At the same time, field practitioners, researchers, and community members who are involved in NRM initiatives have experience in using communication within participatory research and development initiatives. There is no recipe that can be used in all situations, but there is much to learn from sharing, discussing and reflecting on experiences. As advocated in the paper by El Hadidy, we should use an approach that *facilitates resourcefulness* rather than *provides resources*.

Of course, such a process goes hand in hand with the documentation and discussion of our NRM-PDC practices. This is why initiatives such as the Isang Bagsak programme and the FAO initiative in Cambodia should be developed, supported and multiplied in various contexts and situations. This is also why participatory learning in PDC for both practitioners and stakeholders should be on the agenda of every organization supporting NRM research and development initiatives. It is only through such efforts that we can make participatory development happen, not only at the level of our discourses but in the field. It is also only through such efforts that we can make sure that local actions can have a global impact, by influencing the policy environment and making the knowledge available to those who really need it.

Finally, it is through such efforts that we can promote and cultivate the values that are at the core of our work, including the one that states that people should be able to participate fully in their own development. In a recent paper, Nora C. Quebral insists

that, "We now need to explicate those values more finely and cultivate them more rigorously in our actions. Our training procedures may have overly stressed skills at the expense of values. We need to make values more explicit, to deliberately pair them with the corresponding skills if necessary. My first challenge, then, to development communicators, is to make development communication values more pronounced in their practice."[5]

The same challenge can be extended to NRM practitioners and researchers. We need to make participatory development happen if we are to support communities and governments in their efforts to address the three interlinked development challenges of poverty alleviation, food security, and environmental sustainability. Participatory development values, local and modern knowledge in NRM, and communication skills needed for this.

BIBLIOGRAPHY

A: Papers submitted to the IDRC–FAO Workshop on Communication and Natural Resource Management

Acunzo, Mario and Jakob Thompson. *Information and Communication for Sustainable NRM in Agriculture: Lessons Learned in Cambodia.*

Adandedjan, Claude and Amadou Niang. *Isang Bagsak Sahel: appuyer la co-production et co-dissémination des innovations agro-forestières au Sahel.*

Adjibade Awa. *Rôles des membres des équipes ayant recours à la communication participative.*

Boafo, Kwame. *Participatory Development Communication: An African Viewpoint*

Caballero, Lourdes Margarita A, and Maria Celeste Cadiz. *Isang Baksak Southeast Asia.*

Collectif Kuma.[6] *Quand les paysans vont à l'école des femmes.*

Collectif Kuma. *Appui aux initiatives communautaires de lutte contre la desertification.*

Collectif Kuma. *Trois questions en débat.*

Collectif Kuma. *Valorisation des savoirs locaux.*

Collectif Kuma. *Rencontres causeries.*

Collectif Kuma. *Théâtre-débat.*

Collectif Kuma. *Radio.*

Collectif Kuma and Karidia Sanon. *Communication participative et gestion des usages conflictuels en eau.*

Diarra, Ngolo. *La vieille femme et les hirondelles.*

Diop, Amadou. *Concepts migrants et formation en communication participative pour le développement.*

El Hadidy, Waad. *Participatory Development and Related Capacity Building Needs in the Arab Region.*

El Dabi, Rawya. *Attempting to Introduce PDC in a Strategic Development Plan.*

Hamadeh, Shadi, M. Haidar, R. Zurayk, M. Obeid, and C. Dick. Goats, Cherry Trees, and Videotapes.

Hani, May. *A Regional Perspective from the Middle East*

Jahi, Amri. *Involving Small Farmers in the Management of Natural Resources*

Kalindekafe, Meya. *The Communication Catchment Approach in Integrated Water*

[5] *Quebral, Nora C. 2002, Reflections on Development Communication (25 Years Later). College of Development Communication, University of the Philippines at Los Banos (UPLB), Los Banos, Philippines.*

[6] *The papers cited as "Collectif Kuma" were written by Kadiatou Ouattara and Souylemane Ouattara on the basis of discussions carried out in June 2003 among four NRM research projects that had been using PDC.*

Management.
Kaumba, Jones, and Chris Kamlongera. *Isang Bagsak Eastern and Southern Africa.*
Kimhy, Lun and Pinreak. *Mainstreaming PDC in Land Right Extension.*
Kimhy, Lun and Pinreak. *Participatory Evaluation.*
Konate, Yacouba, Bellal Medellah, and Amadou Sangare. *Contribution de la communication participative à la lutte à la desertification.*
Larweh, Kofi. *Obane: Going Back to the Basics.*
Le Van An. *Participatory Development Communication in Hong Ha Commune.*
Mhere, Owen. *Farmer Field Schools.*
Mumbu, Pierre. *Communication participative et gestion des ressources naturelles: Cas du parc national Kahusi-Biega et des pygmées du Sud-Kivu.*
Odoi, Nora. *Participatory Development Communication Among Banana Growers.*
Odoi, Nora. *Introducing Villagers to Video Production, Photography, and the Making of Posters and Brochures.*
Ouattara, Kadiatou et Souleymane Ouattara. *La parole qui étanche la soif.*
Ouoba, Rosalie. *Sali Fofana, la Sahélienne qui voulait changer le monde.*
Ouoba, Rosalie. *Parole aux femmes rurales dans l'élaboration d'un plan d'action en gestion des ressources naturelles.*
Quebral, Nora. *Participatory Development Communication: An Asian Perspective*
Quiamco, Madeline B. *Isang Bagsak in Support of CBNRM in Vietnam.*
Sanou, Habi. *Utilisation d'outils de communication et valorisation des savoirs locaux des communautés.*
Sow, Fatoumata. *Enseignements tirés de quatre projets au Burkina Faso, Mali et Tchad.*
Thiamobiga, Jacques. *Récit des femmes paysannes qui apprennent aux populations à entretenir leurs terres.*
Thiamobiga, Jacques. *Récit de la palabre qui sauve la brousse des villages du Burkina Faso.*
Thompson, Jakob. *The Need for Communication in CBNRM: The Tonle Sap Case Study.*
Torres, Cleofe S. *Paving the Way for Creating Space in Local Forest Management.*
Velasco, Theresa H. and Luningning A. Matulac. *Isang Bagsak South East Asia: A Window to the World for the Custodians of the Philippine Forest.*

B. Recent Publications on Communication and Natural Resource Management

Bessette, G. 2004. *Involving the Community: A Facilitator's Guide to Participatory Development Communication.*
IDRC, Ottawa, and Southbound, Penang
http://web.idrc.ca/ev_en.php?ID=52225_201&ID2=DO_TOPIC
Coldevin, G. 2003. *Participatory Communication: A Key to Rural Learning Systems.* FAO, Rome http://www.fao.org/sd/2003/KN10023_en.htm
Dinucci, A. and Z. Fre. 2003. *Understanding the Indigenous Knowledge and Information Systems of Pastoralists in Eritrea.* FAO, Rome
http://www.fao.org/sd/2003/KN11013_en.htm
FAO. 2004. *Etude de la situation et de l'évolution des systèmes de vulgarisation et d'animation forestière en Afrique Sahélienne.* FAO, Rome
Feek, W. and C. Morry. 2003. *Communication and Natural Resource Management, Theory-Experience.* FAO, Rome, and the Communication Initiative, Victoria http://www.fao.org/sd/2003/KN07063_en.htm
Quarry, W. and Ramirez, R. 2004. *Communication for Development: A Medium for Innovation in Natural Resource Management.* IDRC, Ottawa, and FAO, Rome
http://web.idrc.ca/en/ev-63569-201-1-DO_TOPIC.html

Quebral, Nora C. 2002. *IPM Farmer Field Schools: A Work in Progress. College of Development Communication*, UPLB, Los Banos

Rajasunderam,C.V. 2004. *Participatory Development Communication for Natural Resource Management: A Compendium of Support Reference Materials.* Units 1–5, Isang Bagsak Programme. http://www.isangbagsak.org

Shami, S. 2004. *Integrating Communication for Development for Natural Resource Management in the Near East.* FAO, Cairo and Rome

Communication for isolated and marginalized groups

Blending the old and the new

Silvia Balit

EXECUTIVE SUMMARY

International development goals now place high priority on addressing the needs of the poorest of the poor, and with the advent of the Information Age, communication is increasingly recognized as essential to achieving these goals. However, information, communication and knowledge are essential but not sufficient elements to address poverty. Marginal communities do not exist in isolation from wider contexts of social, political and economic forces and unequal power structures. These constraints need to be taken into account, and it must be recognized that information and communication cannot substitute for structural changes.

There have been many changes since the discipline of communication for development began some 50 years ago. Business as usual is no longer possible. There is need for new directions to respond to a changing environment, the effects of globalization, new social actors and the opportunities offered by new information and communication technologies. At the same time, there is a wealth of lessons learned from years of experience working with disadvantaged groups, and a variety of participatory approaches developed in the past are still valid. The paper suggests that there is need to blend the old with the new.

Although there are no- one size fits all – rules, based on what has worked in the past, the paper describes some principles which are still valid as guidelines on how participatory communication can best be used to work with isolated and marginalized groups . The paper also analyses different media and approaches, which are suitable for working at community level. It analyses the potential and limitations of new information and communication technologies for working with the poor and identifies areas for improving local access and appropriation by marginal groups. It concludes that communication practitioners must learn to adapt to the new information age, and select the most appropriate communication channels, making use of all the tools in their toolbox. An essential element for successful and sustainable efforts with the disadvantaged will continue to be dialogue, ownership on the part of communities and integration with existing indigenous communication systems.

As a basis for discussion, the paper asks: Why is it that after so many years of experience there are still few participatory communication processes in programs to alleviate poverty and improve the livelihoods of vulnerable groups? A number of constraints and possible reasons are suggested. The paper also proposes ideas for action, which could help to overcome some of the constraints and improve the effectiveness of communication with isolated and marginalized groups . These include:

For Governments:

- To establish regulatory frameworks and an enabling policy environment for communication with the poor, involving all stakeholders.
- To respect the identities, languages, cultural diversity and traditions of minorities.

For Donors and Development Agencies:

- To plan for strategic communication in poverty alleviation programs, with adequate timeframes and resources.
- To establish units with professional staff in communication for development.
- To provide time and personnel in projects for participatory research, monitoring and evaluation.
- To establish partnerships to promote local access to ICTs for the poor, and ensure meaningful use and social appropriation.

For Communication Practitioners:

- To train communication professionals at all levels, with a focus on participatory approaches for social change.
- To advocate with decision makers for the inclusion of communication in poverty alleviation programs.
- To identify new instruments and indicators for monitoring and evaluation of participatory communication processes with disadvantaged groups.
- To address the issue of sustainability.
- To share more information and experiences of successful participatory communication approaches with marginalized people.

1. SETTING THE SCENE

1.1. Challenges and opportunities

We are living in an era of radical transformation, which presents new challenges as well as opportunities for communication for development practitioners. The images of the attack on the New York Trade towers on 11 September 2001, and the aftermath of the Madrid train bombings on 11 March 2004 reached the remotest corners of the globe in real time. The constant flow of information and images of the War on Terror are there to remind us of the power and potential of the new information age. But how much of this potential is directed towards improving the quality of lives of the poorest? **How is the global information society affecting communication for isolated and marginalized groups?**

1.2. New scenarios

Governments and traditional institutions have withdrawn from certain functions that are now being taken over by civil society and the private sector. Globalisation is shaping the world economy, and privatisation of public services, free markets and international trade agreements have created new scenarios for development with serious effects on governments, local communities and marginalized groups. In addition, globalisation without social justice has created new and dramatic tensions. Political, social, cultural and economic disparities are the root cause of current international problems such as poverty, ethnic conflicts, wars, terrorism, religious fundamentalism, migrations, and Diasporas.

1.3. The communication age

New information and communication technologies (ICTs) have created the so-called information and knowledge society. Communication technologies are becoming more appropriate for developing countries, and experiments with ICTs are demonstrating that the benefits of the information revolution can have positive repercussions for economic and social development. **But infrastructure, access and use are still limited for vulnerable groups in the rural areas of developing countries. They are on the wrong side of the digital divide, and risk further marginalization**.

At the same time, processes of democratisation, decentralisation and pluralism have paved the way for community-based ownership of various communication media such as newspapers, radio, and video and in some cases even the Internet. Thus, horizontal people to people processes are emerging alongside dominant structures and vertical lines of communication. But global media markets are now dominated by a mere handful of multinationals, and **the globalisation of communication is threatening cultural diversity and the traditional values of minorities.**

1.4. Human development

There has been a shift in development thinking from top down approaches based on economic growth and transfer of technology to people centred development, at least on paper. The participation of rural and urban communities in decision-making about their own lives, gender analysis, equity, social factors, holistic approaches and respect for indigenous knowledge are becoming elements of many development programs. **There is more emphasis on the cultural and local dimensions of development. It is also more widely accepted that human development requires dialogue, interaction and sharing of ideas for social change and innovation to occur.**

1.5. International policy

Most major issues on the development agenda in the last decades still remain as challenges facing the world in the new millennium, and are addressed in the eight Millennium Development Goals adopted by the United Nations in 2000. These reflect the multi-dimensional aspects of poverty and the needs of the poorest and traditionally marginalized groups. They include extreme poverty, low incomes and hunger, lack of primary education, gender inequality, high child and maternal mortality, poor health conditions as shown by the spread of HIV/AIDS, malaria and tuberculosis and the lack of environmental sustainability. These are all challenges, which will benefit from participatory processes of social change. Thus, the importance of communication as an essential element in tackling these issues.

With the emphasis on the poorest, the international community recognises that special measures are required to address the needs of vulnerable groups and minorities. For example, a number of initiatives are being promoted for indigenous people, who are among the most disadvantaged and vulnerable groups of people in the world today. In 1994, the United Nations launched the International Decade for the World's Indigenous People (1995-2004) to promote and protect the rights of indigenous people worldwide. Within the framework of this Decade, in 2000 the UN Economic and Social Council created the Permanent Forum on Indigenous Issues, with indigenous participation and membership. The Forum has a mandate to discuss indigenous issues related to economic and social development, culture, the environment, education, health and human rights. It provides advice and recommendations on indigenous issues to the UN; raises awareness and promotes coordination and integration of activities within the UN system; and disseminates information related to indigenous issues. During its last session in May 2004 the Forum adopted recommendations concerning the education of indigenous people. During the discussions the use of communication and appropriate community media were also raised.

Also within the framework of the Decade, The UN Commission on Human Rights is discussing a Universal Declaration on the Rights of Indigenous People. Article 17 deals specifically with communication and states: "Indigenous people have the right to establish their own media in their own languages. They also have the right to equal access to all forms of non-indigenous media. States should take effective measures to ensure that State-owned media duly reflect indigenous cultural diversity."

The most recent international conference, the World Summit on the Information Society, held in Geneva in 2003 and to be followed up in Tunis in 2005, was devoted to putting the potential of knowledge and ICTs at the service of development, and to promote the use of information and knowledge for the achievement of internationally agreed development goals, including those contained in the Millennium Declaration. The Plan of Action stressed the importance of promoting access and use for all, with emphasis on the special requirements of women and girls, indigenous people, older peoples, persons with disabilities, disadvantaged children, and other vulnerable groups. It called upon Governments and other stakeholders to establish sustainable and multipurpose community public access points, providing affordable or free of charge access to the Internet. It emphasized the importance of socially meaningful content in ICTs to empower local communities. The Plan of Action also called upon Governments to create policies that enhance and promote respect for different cultures, languages and traditions. It urged them to give support to media based in local communities, combining the use of traditional media and new technologies to facilitate the use of local languages, to preserve local heritage and nomadic communities. It invited Governments to respect indigenous knowledge and traditions, to enhance the capacity of indigenous people to develop content in their own languages and to enable them to use and benefit from their traditional knowledge in the information society. [1]

1.6. Isolated and marginalized groups

International development goals now place high priority on reaching the poorest of the poor. Who are they? Small subsistence farmers, women, youth in urban and rural areas, indigenous people, nomads, mountain people, refugees, landless labourers, rural artisans, small fishermen, inhabitants of small islands, to mention just a few. In recent years the international environment has created new social actors such as migrant workers, Diasporas, victims of AIDS, the disabled, and victims of war and conflict situations.

The information revolution has also created a new category: **The information poor and the computer illiterates.** (Saik Yoon 2000). Isolated and marginalized groups face particular constraints with regard to access to information and communication, and thus have limited participation and voice in the public sphere and in decision-making processes affecting their lives. They belong to the culture of silence. They are on the wrong side of the digital divide, unable to participate in the Information Society and thus risk further marginalization, politically, socially and economically.

What is their profile?

- They are poor, with practically no or little money to spend on access to communication technology.
- They live in isolated rural areas, or in slums in large cities, or in mountain terrains, or on distant small islands, often without electricity, and telephones.
- They are unemployed, or work as unskilled labour or self-employed subsistence farmers or unskilled agricultural labour.
- They are illiterate or semi-literate, with little access to education and training.
- They are part of minority ethno-linguistic groups.
- They often have social, economic, cultural and political customs that are distinct from those of the dominant societies.

[1] "Shaping Information Societies for Human Needs", the Declaration approved by civil society representatives at the Conference, placed emphasis on people centred development and communication as a process for social change. The Declaration also stressed participatory use of communication and ensuring the involvement of diverse social and linguistic groups, cultures and peoples, rural and urban populations without exclusion, in decision making.

- They are powerless, suffer from social discrimination, and lack recognition of their identities and ways of life.
- They are victims of violence, drugs, wars and new pandemics such as HIV/AIDS.
- In the majority of cases they speak minority languages.

Their communication systems include alternative and small media such as video and audio visuals, popular theatre, local and community radio, poetry, proverbs, storytellers, popular songs and music, loudspeakers, in addition to informal meetings in the street, in the market place and at ritual celebrations. They belong primarily to oral cultures.

At the same time, globalisation and new information technologies have created new identities, which go beyond the boundaries of the state or geographical communities and traditional institutions. Thus, **social movements representing minority and disadvantaged groups make use of new communication networks and information flows to express their concerns, share common interests, and promote social change and action for collective rights.** They have created transnational public spheres without boundaries of time and space. These movements are usually based on common issues and interests such as human rights, the environment, labour standards and gender. Examples include women's associations, human rights groups, ethnic minorities, indigenous groups, migrant workers, Diasporas, religious movements, victims of AIDS, environmental activists, and Dalits.

ICTs have been used successfully to give women a voice and to build up networks for social and political advocacy. Examples include global networks such as Women's Net and ISIS International, and regional networks such as Femnet, SANGONet and APC-Africa-Women in Africa; Depth News and Women's Feature Service in Asia; DAWN (Development Alternatives with Women for a new Era) and CAFRA (Caribbean Association for Feminist Research and Action) in the Caribbean.

The Indigenous Media Network brings together indigenous journalists from all parts of the world to disseminate information from an indigenous perspective and to use as a tool to campaign for the rights of indigenous people worldwide. Transnational networks linking small grass root groups were fundamental in co-ordinating actions to dispute water policies in Bolivia, in challenging Brazilian deforestation policies and drug prices in Africa. (Huesca 2001). And, it is well known that the indigenous Zapatista movement in Chiapas was able to survive and promote its agenda thanks to the international backing received through the use of Internet and other media.

These social movements and their networks make use of the Internet, bulletins, pamphlets, cartoons, video, street theatre, graffiti, radio and any other media available to them.

1.7. Information, Knowledge and Communication

It has been demonstrated that economic and technological inputs will go under-utilised without knowledge, and it is for the sharing of knowledge that communication is indispensable. However, knowledge and communication are essential but not sufficient elements to address poverty. **Marginal communities do not exist in isolation from wider contexts of social, political, economic forces and unequal power structures that are barriers to social change. These constraints need to be taken into account. Information and communication can never substitute for structural changes.** For example, the extent to which subsistence farmers can benefit from information will vary according to other factors such as ownership of land, proximity of markets, available means of transportation, and their productive resources to respond to the opportunities information sources might provide. (Curtain, 2004). In addition, collecting and disseminating information are not the same as knowledge sharing and communication. Communication is a two way process, and

true knowledge is more than information. Knowledge is the meaning that people make of information. And, for societies the world over making sense of information depends on their ability to discuss and debate it. For social change to occur there must be opportunities for dialogue. Only when information helps people communicate, participate and allows them to make informed choices does that information become knowledge. (Panos 1998)

1.8. Need for new and better directions

As communication practitioners our mission has always been to make life better for the poor, and those at risk. The ultimate test of communication for development will continue to be what impact it has on improving the quality of lives of marginal and vulnerable groups. Yet, there have been many changes since the discipline of communication for development began some 50 years ago. There is need for new directions to respond to a changing environment and new social actors. **There is need to create an alternative framework for communication interventions, that is truly people and participation oriented, and not only on paper. It must involve them in assessing the nature of the problem, defining priorities, formulating solutions and managing the processes of change.**

At the same time, we also have lessons learned from years of experience and practice, and a variety of approaches developed in the past are still valid. We need to blend the old with the new. The questions this Roundtable should examine are whether current strategies, experience and knowledge are appropriate for working with marginal and vulnerable groups, and how they should be modified or expanded.

A new approach to HIV/AIDS Communication

The HIV/AIDS pandemic is the most serious public health issue facing developing countries, creating new vulnerable and marginalized individuals. The epidemic is both a cause and an effect of underdevelopment and the spread of HIV/AIDS is linked to issues of gender inequality, discrimination, poverty and marginalization. The fight against AIDS has become a top international priority, and has brought communication in the forefront as a critical tool for influencing behaviour and life styles. Apart from a few notable successes, the record of tackling this new development challenge has been poor, and the pandemic continues to spread. There has been overemphasis on short-term results, while AIDS is a long term and complex problem. Past strategies to bring about behaviour change – formulating and disseminating messages to persuade people to be abstinent, faithful or to use a condom – have not been always successful. Thus, while information dissemination and health messages are essential, they are not sufficient and new approaches and strategies are required.

The Eighth UN Roundtable on Communication for Development held in Nicaragua in 2001 focused on HIV/AIDS and the communication challenges it presents. It concluded that broader and longer term strategies, with a series of complementary and multisectoral approaches were required to address the social, cultural, political and gender aspects of AIDS. Approaches should move from putting out messages to fostering an environment where the voices of those most affected by the pandemic can be heard, and where dialogue and discussion can flourish. Consultation and negotiation to identify the best way forward in a partnership process should be applied rather than trying to persuade people to change behaviours.

(Source: Report of Inter-Agency Roundtable 2001)

2. SOME LESSONS FROM EXPERIENCE

Based on what has worked in the past, the following are some principles, which are still valid as guidelines on how participatory communication for social change can best be used to work with marginal and vulnerable groups:

2.1. Communication as process

The Challenge for Change Program's work with the Fogo Islanders in the 1960s has often been seen as a turning point in the development of participatory communication processes. The Fogo Process was one of the first examples of filmmaking and video as a process to obtain social change in a disadvantaged community. It included a series of working practices that have influenced many participatory communication programs throughout the world and that are still very valid. Key ingredients included:

- Communication as a process for empowerment, for conflict resolution, and to negotiate with decision makers to modify policy.
- Communication technology and media only as tools to facilitate the process.
- Programmes planned and produced with and by the poor themselves, about their social problems, and not just produced by outsiders.
- The professional quality of the product becomes secondary to content and process.
- The importance of interpersonal communication and the role of a facilitator, a community worker or a social animator.
- Community input into the editing of the material, and dialogue with decision makers.

The Fogo Process provides evidence of how local communities who have been marginalized by economic and political structures can become empowered through communication to transform conditions of uneven development. (Crocker, 2003)

2.2. Starting with the People

Listening to people, learning about their perceived needs and taking into account their knowledge and culture is another essential prerequisite for successful communication with marginal groups. Listening, the capacity to read reality through the ear is an important skill developed by oral cultures. People develop listening skills acutely when they rely exclusively on oral communication. Dialogue also requires the capacity to listen and to be silent. Dialogue only takes place where silence is respected (Hamelink, 2004). Listening goes beyond a simple appraisal of needs. It involves listening to what people already know, what they aspire to, what they perceive as possible and desirable and what they feel they can sustain.

Today, compared to many years ago, there are several participatory research methods which have been developed to enable outsiders and communities rapidly to share experiences and learn together about their realities. For example, the SADC Centre of Communication for Development based in Harare, Zimbabwe, has developed a methodology of participatory rural communication appraisal (PRCA). PRCA enables development workers to involve community members in identifying problems and proposing solutions that will be adopted by the community. Research for the design and production of communication programs becomes an interactive process, allowing the community to express its problems and learn about itself. This ensures that the development processes initiated will reflect the perceptions and realities of the rural community, thus encouraging the sustainability of the development innovation. (Anyaegbunam, Mefalopoulos and Moetsabi 1998).

2.3. Preserving indigenous knowledge and culture

Another basic concept underlying participatory communication is **respect for the knowledge, values and culture of indigenous people.** Far away from global information highways marginal communities in rural areas contain a wealth of indigenous knowledge and traditional cultural resources, a rich but fragile heritage which risks to be lost with the advent of modern technology.

"The essence of involving rural people in the process of their own development lies in the sharing of knowledge... the outcome of useful sharing of knowledge is not so much the replacement of traditional techniques by modern ones, as a merging of modern and traditional systems to produce a more appropriate hybrid, one that befits the economic and technical capacities of rural populations as well as their cultural values."(FAO, 1987)

Traditional subsistence farmers in many cases have known better than the agricultural experts what cultivation methods were appropriate in their own environment. Indigenous groups have access to a large volume of traditional knowledge about their environment and are highly efficient users of available resources that have been crucial for their survival. In Arctic Canada, for example, perceptions on climate change have been essential for the survival of aboriginal groups and they have contributed their traditional knowledge and local observations to scientists and decision makers. (Neil Ford, 2000)

The Proderith rural communication system in Mexico has often been cited as an example of communication approaches for participatory planning, peasant empowerment and sharing of knowledge with indigenous people. Respect for their traditional knowledge system, their local culture and indigenous language was an essential ingredient.

Mayan values

"Proderith staff had little idea of how to spark a dialogue among and with the indigenous, Mayan speaking people. The ingenious solution proved to be video recordings with Don Clotilde Cob, an 82-year-old man who could talk about the problems. He was a proud, ex-revolutionary, who had learned Spanish and taught himself how to read and write as an adult. He was articulate and lucid in both Mayan and Spanish. This charismatic old man, with his white hair and neat beard, sat cross-legged in front of a video camera for hours on end. He held forth about the past, about the revolution, about the greatness of Mayan culture, and about life today. He deplored the decline of such Mayan traditions as the family vegetable plot, explained how he cultivated his own maize, and complained that today's young people did not even know to do that properly. He accused the young of abandoning all that had been good in Mayan culture; they would sell eggs to buy cigarettes and soft drinks, and so it was no wonder that diets were worse than they were in his youth.

Scores of people sat in attentive silence in the villages as these tapes were played. In the evening, under a tree, the words in Mayan flowed from the screen, and the old man's eloquent voice and emphatic gestures spread their spell. For many, it was the first time they had ever heard anyone talk about the practical values of their culture. It was also the first time they had seen themselves on "television", and talking their own language. They frequently asked that the tapes be played again and again. The desired effect was achieved: the people began to take stock of their situation and think seriously about their values, and so the ground was prepared for when Proderith began to discuss development plans to eradicate malnutrition and promote food security."

Source: Colin Fraser and Sonia Restrepo-Estrada "Communication for Rural Development in Mexico: in Good Times and in Bad" in Communicating for Development, 1998

The Knowledge Systems of Pastoralists

"Human Survival has been based entirely on knowledge systems and, while most have changed beyond recognition or perished altogether, some remain and continue to thrive. Pastoralism is one of these, a way of life based on its own indigenous knowledge system, which is highly successful in the practices of preserving the environment, in livestock production, in animal health and in the art of predicting and handling natural disasters.

Many advocates of modernisation do not consider these to be knowledge systems – instead they are described as "backward" or "primitive", as falling outside the prism of a certain production and social system. And when pastoralists accept the offer to be "civilised", neither governments nor business communities in the South have been able to harness modernisation for their benefit. So, neither are pastoralists allowed to live as they wish, nor do those who want them to change come up with a meaningful alternative...Knowledge systems other than the dominant discourse need to be recognised not just as knowledge systems per se, but as things that could be pivotal to the preservation of the environment and ensuring means of existence for the great many people who live on the edges of a rapidly modernising world."

Source: Melakou Tegegn, Director Panos Eastern Africa, in Panos Paper – Information, Knowledge and Development, 1998

Communication and culture are closely interwoven. Communication is a product of culture and culture determines the code, structure, meaning and context of the communication that takes place. Culture and history also play an important role in the social development of a community. For generations, rural populations living in isolated villages without access to modern means of communication have relied on the spoken word and traditional forms of communication as a means of transmitting culture, knowledge, history and customs. "The wealth of proverbs, songs, stories, and other entertaining forms have a special function in an oral culture. Eloquence and subtlety are valued; a well-phrased statement is remembered. People listen for hours to a good storyteller. Elders use proverbs to comment on the happenings of the day, and proverbs are devices for communicating the insights and experiences of the past." (Fugelsang 1987)

New information and communication technologies may be used to enhance cultural self-expression or stifle it through what has been variously labelled as cultural imperialism, cultural invasion, cultural synchronisation or cultural homogenisation. (Ansah 2000). One of the effects of digitalisation is the growing concentration of ownership of different media within a very small number of large multinational corporations. The trend now is for powerful multinationals to buy up newspapers, books and magazines, publishing houses, radio and television networks, telecommunication companies and satellite relay facilities. The result is the reduction of communication content, cultural diversity and opportunities for local traditional systems of communication. Large corporations strive to maximise profits and pursue economies of scale by reducing the varieties in their media offerings and trimming back small-scale community services that are rarely viable within large-scale operations. The mega corporations fall back on the models tested in their home markets – invariably an American, western model. The result is the displacement of local programmes with foreign ones, and a narrowing of rich cultural diversity. (Saik Yoon, 2000)

How strong are indigenous communication systems? How fragile? Is cultural diversity threatened by technology? Already we see young people in both urban and rural environments throughout the developing world embracing western models and abandoning pride in the cultural roots of their parents. In today's global world cultures are no longer isolated. They interact and influence each other. Thus, we witness the

emergence of new cultural and knowledge systems which blend rural with urban, local with global, traditional with modern customs and values and which generate "hybrid" cultures and practices. (Servaes 2003) "Glocalisation" is the term now used to define the integration of the global with the local.

To be successful, communication efforts must take into account the cultural values of marginal groups as an avenue for their participation, rather than borrowing communication strategies from outside that promote change without due consideration for culture. Preserving cultural diversity, local languages and traditional systems of communication in the face of globalisation is one of the major challenges for communication practitioners in this Information Age.

3. MEDIA AND APPROACHES

In the past communication specialists relied almost exclusively on alternative media for activities at community level. We must not forget the lessons learned through their experience. But, the advent of new technologies and their convergence now means that new mixes and matches can be made for more effective communication programs with disadvantaged groups. **Communication initiatives should make use of all media channels available, both modern and traditional, and there is merit in combining electronic media with other media that people already like, use and know how to control** (Ramirez 2003).

3.1. Traditional communication systems

The preservation of traditional forms of communication and social change are not mutually exclusive. Traditional communication systems can be important channels for facilitating learning, people's participation and dialogue for development purposes. Indigenous media have been successfully adopted to promote issues of relevance to marginal groups. Popular theatre, puppet shows, music and dance have been used, for instance in health care, to discuss family size, female genital mutilation, teenage pregnancies, HIV/AIDS, and unsettling life styles. They have also been applied in literacy programs, environmental protection and in introducing agricultural practices. Traditional forms of communication can also be integrated with other media such as radio, television, video and audiocassettes. What is important is that they should not be produced only by outsiders. The participation of local artists, storytellers, performers and musicians in the production and use of traditional media ensures respect for traditional values, symbols and realities and, at the same time, ensures that such media productions appeal to communities. It also increases the credibility of media programs and thus their effectiveness as vehicles to share knowledge and bring about social change. (Balit 1999)

An offshoot from traditional and popular media, and the popular culture of telenovelas in Latin America, is the use of melodramatic soap operas for radio and television, which use real or fictional "social models" to promote changes in life styles. These programs are adapted to local cultural contexts and integrate entertainment with awareness raising and education (Edutainment). Educational messages and best practices are woven into the fictional narrative, thereby communicating to the audiences how they can tackle specific issues, often health issues, in their everyday life. (Tufte 2003) The experience of Soul City in South Africa is a well-known successful example of this approach, which among other themes, has focused on HIV/AIDS. The radio and television series have been complemented with interpersonal communication, printed materials and educational training packages.

Yasarekomo: Self evaluation of a communication experience by indigenous people in Bolivia

In 1994, with assistance from FAO, the Asamblea del Pueblo Guaraní (APG), the main Guaranì organization in Bolivia, established a rural communication unit the *Unidad de Comunicación Guaraní (UCG)*, in the Chaco region of Bolivia. The goal of the unit was to improve the quality of life of isolated and marginalized native communities and support indigenous development initiatives. With training from FAO, the Guaranì villagers applied intercultural communication approaches to share knowledge and information using video training packages and community radio. The UCG received assistance from FAO for three years, and then continued independently for an additional six years, generating income by producing intercultural communication materials and implementing communication for development plans agreed with APG and co-funded by the Government, Municipalities and NGOs. The UCG then decided to carry out a self- evaluation in collaboration with the APG and other indigenous organizations of Bolivia. For the first time, indigenous people themselves documented and analyzed in a systematic manner the use of participatory communication media and messages produced by and for Guarani communities, based on the blending of traditional knowledge and customs with modern knowledge and communication techniques. The results of the self-evaluation confirmed the validity of the participatory and intercultural communication approaches applied to advisory services. The study however underlined problems for the future sustainability of the Uni, these included: The need for continued efforts to strengthen the communication capacity of the APG and other indigenous organizations; the importance of "appropriating" new media and acquiring additional equipment and; the need for a national policy recognizing the right of indigenous people to access and provide information and communication services, with financing from local institutions.

Source: FAO, 2004. Yasarekomo, Una experiencia de comunicación indígena en Bolivia.

3.2. Video

Video has for many years been successfully used for participatory planning, empowerment and sharing of knowledge with disadvantaged individuals and communities. Visual images are powerful tools for communicating with illiterate audiences. Cheaper, easy to use video and audio equipment has enabled communities to master production skills thus giving them access to and control over the tools for information and communication generation and exchange. Video Sewa in Ahmedabad, India is a classic example of the use of participatory video for the empowerment of illiterate rural women. Video programmes produced by rural women associated with SEWA (Self-Employed Women's Association) have been used for income generation, occupational health, wage negotiations, legal interventions, teaching new skills and advocating for policy change. Video based approaches can now take advantage of the digitalisation of video coupled with Internet to facilitate production processes and improve networking and sharing of knowledge and information.

3.3. Radio

Radio remains the most widely available and affordable mass medium for disadvantaged groups. In rural areas, it is often the only mass medium available. It can reach large numbers of isolated populations over widespread and geographical areas. In some rural areas it is the only source of information about agricultural innovations, weather and market prices. It is oral and thus corresponds to the culture of poverty, making it more adaptable to many indigenous cultures. Because of low production and distribution costs it can be local. Community radio enables neglected communities, such as women, to be heard and to participate in democratic processes within societies. It reflects their interests, and plays an important role in reinforcing cultural expressions and identity as well as local languages. It can provide timely and

relevant information on development issues, opportunities, experiences, skills and public interests. It thus has the ability to involve rural communities, indigenous people and underprivileged sectors of urban societies in an interactive social communication process. (UNESCO, 2000)

Training Community radio workers for empowerment

A training approach developed in Ghana for community radio workers takes its name from the Kente traditional hand woven cloth of the Ashanti people. The Kente approach is based on the belief that community radio is a different kind of radio and represents a different theoretical and operational model from public and commercial radio. This implies that community radio requires a new kind of "professional" – a community worker with a specific set of values, skills and standards that are focussed on community empowerment. Thus, the training of community workers is woven into the culture of the community and the process of empowerment. It is a practical hand on approach that integrates theory (development communication, communication and culture, management, etc.) with experience and the practice of broadcasting as it applies to community radio, but context based. The four elements/modules of the course include: Knowing self; Knowing the community; Knowing development and Knowing media. The empowerment of the trainees is seen as part of the process of community empowerment, which is itself the end-goal of the training. The approach was initially developed for Radio Ada, the first full-fledged radio station in Ghana, but presently has been extended to other member stations of the Ghana Community Radio Network and to Ethiopia.

Source: Wilna W. Quarmyne, "A Kente Approach to Community Radio Training: Weaving Training into the Community Empowerment Process."

One of the most interesting developments for communication with marginalized people in recent years has been the convergence of local radio with the Internet, creating new models with potential for providing relevant information and knowledge to the poor. The merging of the two technologies presents many opportunities: Radio can deliver information to many listeners, but the Internet enables them to send back information, to ask questions, to request and seek information, and to communicate with specialists. The Internet enables access to information from both national and international sources, while radio can localise, repackage and translate that knowledge to local audiences. (Bennett, 2003). Experiments have been carried out in Asia, Latin America and Africa. These include projects in different environments and seeking to address different sets of problems: To support radio networking and exchanges, community intermediary projects, and projects that link migrants to their home communities. (Bruce Girard, 2003)

Migrant communities are on the increase, and their financial remittances as well as the experience gained abroad are an important contribution to the development of their native communities. **Radio can play an important role in linking the migrant communities with their native communities, language and cultures.** The Internet, radio and telephone combined can extend communication and enable communities to keep in touch despite migration. Stations in the home country will broadcast news from the migrant communities. The airwave messages coming from abroad can include simple greetings, information about money transfers and emergency alerts. The messages inform people who remain in the region about relatives who have left, and for migrants they are a means to keep in touch with their place of origin. In some cases migrant communities have obtained a few hours a week on multi-lingual stations in their new home country and broadcast programs with news and cultural content from home mixed with content related to the new environment. They have become an important tool for preserving culture. (Bruce Girard, 2003).

Selling a buffalo through hybrid radio

In the western part of Nepal, a farmer in Madanpokhara village, located 8 hours drive from Kathmandu, needed to sell his buffalo. There was no better means to market his buffalo than to make an announcement through a community radio station in his village by paying a very nominal fee. The farmer made the announcement and sold his buffalo. Radio Madapokhara is a hybrid community radio serving to give a voice to the community, through local radio but also having access to new ICTs. Programs are centred on topics that affect the everyday life of the community. The station is now also using computers, digital recording and editing hardware and software. It uses satellite technology for distributing and receiving audio data and files through its satellite audio channels. It receives news and other development content programs everyday from Radio Sagarmatha, the central hub of a network based in Kathmandu, and distributes its programs to other radio stations in the network through the satellite system. The radio had received support from UNESCO, Panos and the Media Development Loan Fund of the Czech Republic.

Source: Kishor Pradhan, Panos 2004

3.4. ICTs: Potential and limitations

With the arrival of the Information Revolution, ICTs are getting most of the attention. Governments have adopted national IT policies and liberalised the telecommunication sector to attract investment. Significant sums are being invested by donors, intergovernmental agencies and NGOs to wire the developing world and provide access to computers and the Internet for alleviation of poverty.

There is a vast literature on the benefits and potential of computerised communication to enhance people's daily lives. Experiments with the use of Internet and computers have proven to have positive results in various applications: Improved access to education opportunities, increased transparency and efficiency in government services, increased trade and marketing opportunities for marginalized communities, increased community empowerment through access to information, improved networking and opportunities for women, access to medical information for isolated communities and new employment opportunities are only a few of the examples that have bolstered the belief that these technologies have a key role to play in development.

However people engaged in development work have mixed feelings about the impact of these technologies on the alleviation of poverty. The initial enthusiasm is now being replaced by more critical and cautious perspectives, as lessons are drawn from the first years of experience in the field. It is clear, for example, that although the Internet is a powerful tool for sharing information and knowledge, and thus for human development, it is not a remedy for all development problems. Poverty cannot be divorced from the underlying social, economic and political issues as well as existing power structures. **The emphasis on access to the technologies, though important, must be shifted to the more important issues of meaningful use and social appropriation. Deploying these technologies in ways that benefit the poor requires regulatory frameworks and enabling policy environments, which reflect the needs of all sectors of society.**

Social Dimensions of ICTs

The use of ICTs can also transform the local power structures within communities and disrupt community life. For instance, in Guyana indigenous women were so successful trading their hammocks on the Web, that the power structures were transformed providing women economic independence from their husbands. The impact on the community was so strong that the indigenous women were forced by the male community members to end the trading of the hammocks through the web. This case demonstrates clearly that ICTs also can have negative impacts on communities if their use is not managed properly and the key stakeholders are not supporting their use.

Source: Bjorn-Soren Gigler, World Bank, 2004

3.5. ICTs and the poor

In some areas the ICT revolution has served only to widen existing economic and social gaps, as new information gaps threaten to further marginalize the poor. The bulk of information resources and technologies are in the developed countries. By conservative estimates, at least 80 per cent of the world's population still lack the most basic communication technologies to enter the Internet global village. Although Internet growth is accelerating faster in developing countries than anywhere else, it will continue to be available only to a tiny proportion of people in the poorest countries for many years to come.

The situation is even more serious for rural areas. The Information Revolution has completely bypassed nearly one billion people. They are the rural poor, who constitute 75 percent of the people who live on less than one dollar a day. In many ways the digital divide just reflects all other inequalities: Disparities between urban and rural communities, men and women and between successful farmers and subsistence farmers. In addition, some argue that poor countries cannot afford the cost of telecommunication infrastructure. Money is scarce for economies crippled by external debt and trying to cut back on social sector spending. It is argued that these countries should address instead basic needs such as education, water, health and roads.

3.6. Barriers for the poor

What are the barriers for poor rural people to access new technologies, and the Internet in particular?

- The rural poor lack infrastructure (electricity, telecommunications). ICTs depend on national policies and regulation for telecommunications and broadcasting licences. ICTs require initial capital investment for hardware and software. ICTs also depend on the skills and capacity necessary to use, manage and maintain the technology effectively.
- The rural poor are probably illiterate or semi-literate, with low levels of education. They would not find much in their local language on the Internet.
- They would not find much information relevant to their daily lives.
- They are not usually offered the opportunity to input their own local knowledge. The Web offers them almost no opportunities for local wealth creation.
- They cannot afford the cost of Internet access, and they cannot afford their own computer.

3.7. Public access points

There is a movement in the development community pushing for **the widespread rollout of public access points as a means of extending access to the Internet**

and bringing it closer to disadvantaged communities and the intermediary organisations that provide services to these communities.

Multi-media community centres, or telecentres are a typical example. They are usually established in rural areas where individual access is unavailable or unaffordable. They provide a range of information services that are relevant to the needs of the communities and often training. They can be used by communities to create and share their information with outside audiences. The services are free, or subsidised by governments, NGOs and donors. Cybercafés instead are privately owned commercial operations that focus primarily on providing customers with access to the Internet and the World Wide Web. Their clients tend to be more urban, more educated and able to pay for their services. They are an important tool for minority groups in urban societies such as youth, women, migrant workers and Diasporas.

While both cybercafés and telecentres might offer training in computer skills and web use, the telecentre is more likely to offer other kinds of training, including non formal education and distance learning in agriculture, health, education, entrepreneurship and other fields related to community development and poverty alleviation. But, bridging the last mile of connectivity with rural communities still needs to be carried out by development workers, using more traditional forms of communication such as radio. (Colle and Roman 2001)

Among the problems faced by telecentres for alleviation of poverty has been their lack of sustainability. Often they have been parachuted from outside and not adopted from within. Research on the needs of the communities has not been carried out and they do not provide relevant and useful local content. Often information is not translated into local dialects. Socio-cultural issues have been ignored. Training in communication and management skills has not always been provided to local personnel, who must act as information intermediaries. Participation on the part of marginalized sectors of the communities has been lacking. And finally, financial sustainability has not been achieved.

According to Charles Kenny, "while there is a continued (perhaps growing) role for donors to improve access to a range of ICTs in developing countries, that role probably should not extend to the widespread provision of internet access – at least in the poorer regions of the least developed countries. The nature of extreme poverty in Less Developed Countries - very low incomes, subsistence and unskilled wage labour as the dominant income source, food as the dominant consumption good, low education and high illiteracy, minority language group status and rural location – points to an unsustainably high cost and relatively low benefit of direct internet service provision through telecentres to the very poor. This might suggest that the push for universal Internet access as a tool for poverty relief is misplaced. Instead the paper argues that access programs focused on the telephone and radio might have a higher benefit-cost ratio and lower overall cost as alternatives to and intermediaries for the Internet in poverty alleviation programs." (Kenny, 2002)

3.8. The Mobile Phone

The development of **the mobile phone as a relatively cheap and powerful tool has enabled communities, even in remote rural areas to spontaneously and locally appropriate it for use.** Mobile and satellite telephony are bringing telecommunications within reach not only of the small entrepreneur in developing countries but also of the rural farmer. The Village Pay Phone sponsored by the Grameen Bank in Bangladesh is a classical example of a scheme promoting income-generating activities for the rural poor. It enables illiterate rural women to earn income by renting out mobile phones to members of the community for a fee. A Canadian evaluation

of the program showed that the income derived by operators was on average 24 per cent of their household income – and in some cases it was as high as 40 per cent of household income.[2]

3.9. Local Appropriation and Impact

FAO has compiled two studies of the ICT scene to identify whether poor communities and groups had taken ownership of ICTs for their own use: ("Discovering the Magic Box: Local Appropriation of ICTs" and "Revisiting the Magic Box"). The basis for both papers was to identify examples of community driven and local appropriation of ICTs, to identify what worked and what didn't work, and to contribute to the on-going debate on impact. The studies identify some analytical tools and guiding principles to foster local appropriation of ICTs:

1. Despite an increase in case studies **there is still a need for more empirical evidence to demonstrate impact and understand more about how communities make use of ICTs.** Few projects have paid attention to monitoring and evaluation of outcomes, with the result that there is little data to assess the actual impact of these technologies on the poor and therefore little sound evidence to merit further project investment. Donors have failed to devote resources to research outcomes in any depth. And, more qualitative indicators are required.

   According to UNDP, "There has also been a desire to hide failures on the part of those involved, in many cases. Although many ICT for development initiatives have failed, few failures have been documented. This is due to the lack of incentives in the development system to encourage project managers, development agencies or implementing partners to critically report and make public project shortfalls or failures"(UNDP 2000).

   However, donors and development organisations are now beginning to query approaches based only on access to technology, and wish to address how best to use ICTs to achieve development objectives. It is important to note that some valuable studies do exist and these provide an important basis for developing criteria for assessing what is good practice.[3]
2. In the rush to "wire" developing countries, **little attention has been paid to an ICT conceptual framework or guidelines for ICT utilisation.** The design of ICT programs for the poor must take into account the lessons learned over the years by communication for development efforts.
3. **There needs to be a focus on the needs of communities and the benefits of the new technologies rather then the quantity of technologies available.** The emphasis must be on the use of new technologies as a means of improving the living conditions of the poor, rather than becoming an end in themselves. The real needs of communities must be identified with them and addressed. Successful examples of local appropriation have been those in which ICTs support the priorities and goals of communities, such as increased incomes or

---

[2] Richardson D., Ramirez R. and Haq M. 2000. "Grameen Telecom's Village Pay Phone Programme: A Multi-Media Case Study". CIDA.

[3] These studies are examples of how donors are rethinking their approach to ICTs, and searching for new strategies: UNDP Evaluation Office, 2001."Information Communications Technology for Development, Essentials: Synthesis of Lessons Learned", N.5.
R. Heeks, 2003. "Failure, success and improvisation of information systems projects in developing countries" , Paper N. 11, Development Informatics Working Paper Series, Institute for Development Policy and Management, University of Manchester.
Batchelor S, Norrish P, Scott N, Webb M, 2003. " Sustainable Case Histories Project: Technical Report".
R. Curtain, "Information and Communication Technologies and Development: Help or Hindrance" 2004., a study commissioned by Australian Aid (Aus Aid).

capacity building in business management and marketing, improved agricultural productivity or increased employment opportunities. Or where they strengthen existing traditional communication systems to promote networking and advocacy for social change.

4. **Local content and languages are critical** to enable the poor to have access to the benefits of the information revolution. The creation of local content requires building on existing and trusted traditional communication systems and methods for collecting and sharing information. These include established community media such as radio, which can be enhanced through connection with the Internet. In addition there are new technologies such as digital video that can also be appropriated for the production of local content. To be effective, external content has to be adapted and translated into vernacular languages, before local audiences can understand it. There is therefore a growing need also to develop the capacity for locally based professionals to download and transform global content for local consumption.

3.10. The role of donors and development agencies

There are dozens of new initiatives to promote digital opportunities, but co-ordination between these initiatives is poorly developed and efforts may be duplicated. **There is much greater scope for co-ordination and common effective strategies.** Opinions differ on what donor organisations should be doing to support the growth and use of the Internet and other information technologies in developing countries. It is argued that the spread of ICTs is best left to the private sector, since the proliferation of fax machines and mobiles phones, for example, has not come about through a targeted development intervention. If the market is ensuring that access is spreading in terms of physical availability, then **donors and NGOs should shift their focus to ensuring an appropriate use of the technologies, that the benefits are maximised and that marginalization is minimised.** What is clear is that whereas Internet growth is independent of donor support, access for disadvantaged groups will not grow without support from donors and subsidies from Governments. **Without a specific focus by donors on poor, rural and marginal groups, the digital age will bypass these non-profitable sectors.**

A partnership for community multimedia centres

A number of UN agencies such as ECA, FAO, the ITU, UNDP, UNFPA and the World Bank as well as development agencies such as APC, AMARC, One World, ORBICOM, and VITA are working with UNESCO on a programme to establish Community Multimedia Centres in order to overcome some of the initial limitations of the first generation of telecentres.

The new Community Multimedia Centres combine local media such as community radio produced by local people in their own languages, with ICT applications in a wide range of social, economic and cultural areas. Radio is the bridge that brings the new technologies into people's lives, ensuring that they can participate in identifying, discussing and exchanging information relevant to their needs, without literacy levels or language usage posing barriers. Listeners get access to online information through their radio presenter who explains the contents of web pages of interest to the community directly in the local language. They may then become tempted to come into the Centre, maybe to send an e-mail, dictating it to a facilitator if they are illiterate, or to search for information on the web or on a CD Rom. Currently some 40 pilot CMS are operating in Asia, Africa and the Caribbean with thousands of people from poor and marginalized communities using these facilities to fight social exclusion and improve their livelihoods.

Source: UNESCO, 2004.

3.11. Experimenting with new approaches

So, probably in the coming years we will continue to witness a number of experiments, which will marry new information and communication technologies with old and more traditional approaches. ICTs simply provide a number of new tools for the toolbox. **Communication practitioners must learn to adapt to the new information age, to a changing environment and select the most appropriate communication channels.** They must experiment with new approaches, and learn when it is right to use them. Most likely as one element in a blended communication strategy. **What is important is to apply the lessons learned in participatory communication programs in the past. An essential element for successful and sustainable efforts will continue to be dialogue, ownership on the part of communities and integration with existing indigenous communication systems.**

4. CONCLUSIONS

4.1. Constraints for participatory communication

Experience over the years has confirmed that participatory approaches are essential for communication with marginal and vulnerable groups. **Although there is no unique recipe or model for participatory communication we have learned what are the ingredients for successful programs:** Listening, dialogue, ownership on the part of communities, respect for traditional knowledge, languages and culture as well as integration with local communication systems are some of the essential elements. Where participatory communication processes have been applied they have demonstrated to be a transforming process. For rural and urban communities marginalized by poverty, gender, language, ethnicity and physical isolation, to have a voice and to share control of their communication means has had an empowering effect. The recovery of language and tradition through participation with others has rebuilt pride and strengthened communities. As a result of the ability to make their voices heard, they have no longer been just passive recipients, but become active partners in a collective democratic process and started to promote their own development. (Vidal Hall, 2004) The Fogo Island experience is a classical example.

However, **notwithstanding the emphasis on poverty alleviation and people oriented paradigms, the international community still does not consider communication as an essential ingredient in development programs for the poor, at least when it comes to planning and providing resources. What is the problem? Why is it that after so many years of experience, there are still few participatory communication processes in programs to alleviate poverty and improve the livelihoods of the disadvantaged?**

- Critics say that **process and facilitative communication programs cannot be scaled up** and carried out at national level. **Is this correct or because of their nature should their validity remain at the local level?**
- **Participatory processes are costly and take time.** Participatory processes are difficult to implement within the rigid time frames of project and donor requirements for quick results. Indicators for impact are not quantitative, and thus it is difficult for communication practitioners to demonstrate the value of participatory processes to decision makers and donors. **Can practitioners identify new qualitative indicators and demonstrate the value of participatory processes?**
- **Participatory processes require new facilitative skills**, which often communication practitioners lack. **This raises the question of training**.
- Participatory communication, when dealing with political and social injustices, **can only take place if there is a political will on the part of governments and local authorities.** Authentic participation directly addresses power and its

distribution in society, and usually authorities do not want to upset the status quo, even if they pay lip service to participation. **Does this mean that true participation is utopian? Or simply that one has to be careful in selecting when participatory communication can be usefully applied.**

- **Participation in activities for social change can raise conflicts** within the community, thus methods must be found to engage people meaningfully, while providing adequate protection and conflict management measures. This again relates to the question of the **training of a new communication professional.**

4.2. Notes for an Agenda

The following are some ideas for an agenda, which could help to overcome some of the above constraints and improve the effectiveness of communication with isolated and marginalized communities.

4.2.1. For Governments:

Governments should create **regulatory frameworks and an enabling policy environment for communication with the poor.** Legislation and equitable policies are essential if communication is to become a real tool for poverty alleviation. They should guarantee the right to communicate for marginalized people. Women, refugees, displaced persons, migrant workers, indigenous people should be empowered to express themselves. And policy makers must listen to them. National communication policies should take into account the needs of all sectors of society, including the poorest. All stakeholders, including civil society and the private sector should be involved in policy planning and implementation. Access to new information and communication technologies is insufficient without regulatory frameworks to ensure that they have meaningful use and can be socially appropriated by disadvantaged groups. **The identities, languages, cultural heritage and traditions of minorities should be recognised, preserved and respected.**

4.2.2. For donors and development agencies:

Strategic communication should become **an integral component of programs for the alleviation of poverty. Sufficient time, inputs and resources should be allocated,** recognizing the need for long term and complex interventions. Processes of social change require time, much more than provided for in a typical five-year period. Successful FAO communication projects for marginal communities have had duration of seven to ten years. And World Bank staff goes even further when suggesting that support to extension systems should be designed with a long-term perspective of 15 years. (Coldevin 2003).

Donors and development agencies **should establish units with professional staff in communication for development.** The design of successful communication components also requires participation and inputs from local communities and field based staff. How many organizations have well staffed units, not to mention outposted staff at regional and country levels?

Resources for communication programs should include **time and personnel for participatory research, monitoring and evaluation.** Research and evaluation of what has worked and not worked using ICTs with marginal groups is a new and challenging field, particularly with regard to appropriation and use. The results should form the basis of any new intervention.

Bridging the digital divide requires much more than wiring developing countries. The support of donors should be more focused on ensuring **access for the poor, appropriate use of technologies, that the benefits for disadvantaged groups are maximised and that marginalization is minimized.** It should be recognized

that access for the poor cannot take place without support from donors and subsidies from Governments on a long-term basis. There is need for **more co-ordination and partnerships among donors**, development agencies and NGOs in the planning and implementation of common effective strategies. The program and partnership created by UNESCO for the establishment of community multimedia centres is a good example.

4.2.3. For Communication Professionals:

Communication professionals should adapt to a changing environment and new social actors. They should **assess whether current strategies, experience and knowledge are appropriate for working with marginal and vulnerable groups, and how they should be modified or expanded.** A good example is the recognition of the need to modify approaches for working with individuals and communities affected by HIV/AIDS.

a) Training the new communicator

A shortage of people trained in new functions is another constraint for designing and implementing participatory communication programs. Communication has become a specialised field of development and the profile of the communicator has changed as the role of communication has evolved. (Dagron 2001) The communication specialist now needs to be much more of a facilitator, a mediator and an information intermediary in participatory processes of social change.

Curricula should embrace a wide range of topics with inputs from various fields. They should include new subjects in addition to the social sciences, development, and the art and craft of communication media and technology. Topics such as cross-cultural communication, participatory diagnostic research and problem identification, strategic planning, multi-sectoral and multi-stakeholder approaches, participatory monitoring and evaluation, conflict management, group dynamics, group facilitation and interpersonal communication should form part of study programmes. It is also important to learn how to listen.

Training should take place at different levels: At the graduate and postgraduate university level but also at the technical/intermediate level. There is still much to be done to change the attitudes of field staff, extension workers and farmer trainers/ leaders who have been educated to apply top down, authoritarian approaches with disadvantaged groups. In addition **there is need to train communicators at community level and from marginalized groups.** There is also need to upgrade the quality of existing communication professionals and provide in-service and refresher courses.

Drawing up curricula for various levels is less problematic than finding the financial resources and persuading deans, heads of departments and institutions to include them in their academic and learning programs. It is not only a question of numbers but also of the quality of training. **Participatory approaches require participatory, interactive and experiential learning processes, preferably field based.**

The Rockefeller Foundation and the Consortium for Communication for Social Change (CFSC) have initiated a series of activities to improve the training of communication specialists at different levels. At a meeting in Bellagio in 2003, a group of specialists convened to develop a curriculum for a three-semester university master's level course in Communication for Social Change. The meeting in Bellagio also designed a short course for communication practitioners and an l/2 day orientation session for decision makers.

The success or failure of communication with marginal and vulnerable groups will depend on the ability to provide qualified human resources. Unless we are able to

provide a critical mass of well-prepared specialists at different levels, the discipline will not be recognised as an essential component in programs for the alleviation of poverty.

b) Monitoring and Evaluation

Monitoring and evaluation of social communication processes with vulnerable groups has not been successful in the past due to a number of factors. Monitoring and evaluation should be included from the beginning of any communication initiative, but lack of time and resources allocated for this purpose in project design have often not made this possible.

Facilitative processes are not as easy to assess as agricultural production or communication products. Processes also present difficulties in demonstrating results to donor agencies, who want quick quantitative results. It is easier to report to donors on the establishment of a media centre, the number of people attending training events and the production of audio visual aids than to measure and report on indicators of participation, empowerment and social change. Numerous other social and economic factors can interfere with the objectives of social change, and thus make it difficult to assess the impact of communication alone.

New instruments and indicators are required to effectively assess the impact of participatory communication processes with disadvantaged groups. They must be identified and implemented not only by outsiders but also with the communities participating in the process, and who are familiar with the political, social and cultural context of the place. They are the primary audience for learning about what has worked and not worked, and improving things as a result. **The advent of new ICTs opens up a vast new field for evaluation, particularly with regard to appropriation and use by isolated and marginalized people.**

c) Advocacy with decision makers.

Advocacy with decision makers is an essential priority if communication is to become a core activity in poverty alleviation programs and enabling policies are to be established in developing countries. As communicators we have not succeeded in communicating our message.

What is required is a common communication strategy to reach decision makers and planners at international and national levels. There is need to advocate for communication to be included in projects for poverty alleviation from the planning phase, in a strategic manner, with all the necessary inputs and resources.

Advocacy with decision makers needs to follow all the rules for effective communication, starting with audience analysis. Two surveys have been carried out with decision makers for this purpose. At the request of an Inter-Agency Roundtable, in 1994 Colin Fraser and Arne Fjortoft carried out a survey among 39 decision makers in governments, bilateral and multilateral aid agencies and NGOs. UNICEF and WHO financed the survey. More recently in 2003, Ricardo Ramirez and Wendy Quarry, sponsored by IDRC interviewed 13 decision makers. A number of interesting views came out from both surveys: On the perception of the objectives of communication for development, on the meaning of the term, obstacles to greater application, lack of proof of impact, lack of competent staff, the image of the discipline, problems related to organisational location and political considerations. The findings of these surveys should now be used in efforts to sensitise decision makers and planners.

The implications of these surveys for communication practitioners is that the only way to convince decision makers to devote additional resources to communication is by providing them with concrete examples of the impact and cost-benefits of communication. Simply saying that we need more communication will not be

convincing. **We need to demonstrate through hard facts and results of evaluations the value of communication in achieving poverty alleviation goals.** Anecdotal case studies are no longer sufficient. We must use the tools and approaches, which are suitable for decision makers, such as good videos and concise and punchy presentations. And, we must learn to speak their language. Is this not what we do when we work with rural people?

d) Sustainability of participatory communication

The sustainability of participatory communication efforts with vulnerable and marginal groups is another vital issue, which due to past failures requires creative and innovative thinking in the future. The collapse of many efforts once external assistance terminated is well known. Generation of income and relying on volunteers have been used to provide lasting results, but have not been sufficient. Working with the poor will probably always require subsidies and long term outside interventions.

The failure of many efforts to establish sustainable programs is possibly in part due to the fact that in many cases they were established within government institutions, without the necessary partnerships with all the stakeholders involved in community activities, and without community ownership. And, governments are not always truly interested in empowerment and grass root participation, even though they pay lip service to these concepts. Even if interested, nowadays they cannot afford to finance services at community and grass root levels.

Participation and ownership on the part of the communities involved is essential for sustainability. Policies and institutional frameworks should be pluralistic and promote partnerships among all interested stakeholders. The commitment of the local authorities is also essential for sustainability. Project design should allow for sufficient time to achieve project objectives. And finally, the local resources (media technology, facilities and staff) should be appropriate to conditions in the communities so that they can afford follow up. (Coldevin 2003)

e) Sharing of Information and Experiences

More exchange and analysis of a wide range of practice and experience is essential to improve communication with the poor. There is lack of institutional memory, and many communication specialists work in isolation, sometimes re-inventing the wheel. It is also important to document the vision and experiences of early pioneers who have applied successful participatory communication approaches with marginalized people.

Face to face meetings such as this Roundtable are an occasion to share information and experiences, but it is important that they also identify new partnerships, joint ventures and concrete follow up activities.

On line communication has become the principal source for networking and sharing information. The Communication Initiative is a global platform and provider of news, case studies, strategies, results of evaluations, opinions, events, training and job opportunities. It is an excellent example of a partnership among a number of institutions involved in communication for development. Other networks that concentrate more on discussing ICTs include IICD, Digital Opportunities, Bridges, the Open Knowledge Network, and GKD. However, more initiatives with a regional and country focus, such as Isang Bangsak (IDRC) would also be useful, particularly for local personnel working with disadvantaged communities. A recent workshop on radio and ICTs held in Quito, Ecuador, and organised by FAO, agreed to establish a network and a platform for exchange of information, experiences and joint ventures to promote participatory communication initiatives with vulnerable groups in the region. (La Ond@Rural.)

E-forums are also fruitful provided they are on a specific theme, that they are short and provide good facilitation. An example was the forum on Communication and National Resource Management organised by the Communication Initiative and FAO. Another fruitful forum was organised by the Communication for Development Group in the World Bank.

Publications, journals and case studies continue to be essential. A number of good books have been published recently. The Communication for Social Change Consortium is preparing an on line bibliography and a reader of major pieces on communication for social change to bring together the evolution of the discipline and the body of knowledge. It will be an important tool for scholars and practitioners. And, a new Journal under the leadership of Jan Servaes will shortly begin publication.

"If communication for development is to become a driving force to improve the quality of lives of the poor, it is essential to create bridges between different approaches, promote common understandings and language, share experiences, identify common guidelines and principles, and identify challenges and means to overcome them. We also need to identify what has been learned, and what still needs to be learned. It is a challenge which none of us can ignore." (Report of Eighth Roundtable on Communication for Development)

REFERENCES

Anderson J. et al. 1998. *Applying the Lessons of Participatory Communication and Training to Rural Telecentres* in Don Richardson and Lynnita Pailey (eds) The First Mile of Connectivity: Advancing Telecommunication for Rural Development Through a Participatory Communication Approach. FAO, Rome.

Ansah P.A.V. 1993. *An African Perspective* in David Nostbakken and Charles Morrow (eds), Cultural Expression in the Global Village. Southbound, Penang.

Anyaegbunam, C. Mefalopoulos, P.& Moetsabi, T. 1998. *Participatory Rural Appraisal: Starting with the People.* Harare: SADC Centre of Communication for Development.

Balit S. 1999. *Communication for Development in a Changing World* in The Journal of Development Communication, Number One, Volume Ten, June 1999. AidCom, Kuala Lumpur.

Balit, S. 1998. *Listening to Farmers: Communication for Participation and Change in Latin America* in Loy Van Crowder (ed) Training for Agriculture and Rural Development. FAO, Rome.

Balit, S. 1999. *Voices for Change: Rural Women and Communication.* FAO, Rome.

Batchelor S, Norrish P, Scott N, Webb M 2003. *Sustainable Case Histories Project: Technical Report*, DFID, London.

Bennett N. 2003. *The Russian Rural Information Network* in Bruce Girard (ed) The One to Watch: Radio, new ICTs and interactivity. FAO, Rome.

CIDA 2000. *Grameen Telecom's Village Phone Program in Rural Bangladesh: A Multi-Media Case Study,* Final Report, CIDA.

Coldevin, G. 2003. *Participatory Communication: a key to rural learning systems, FAO, Rome.*

Colle R. and Roman R. 2001. *The Telecenter Environment in 2002. i*n the Journal of Development Communication Number Two, Volume Twelve, Dec. 2001. AidCom Kuala Lumpur.

Communication for Development Roundtable Report 2002. *Focus on HIV/AIDS communication and Evaluation. UNFPA, New York.*

Crocker, S. 2003. *The Fogo Process: Participatory Communication in a Globalizing World* in Shirley White (ed) Participatory Video: Images that Transform and Empower. Sage Publications, New Delhi, Thousand Oaks, London.

Curtain, R. 2004. *Information and Communication Technologies and Development: Help or Hindrance***?** www.Curtain-Consulting.net.au

Dagron Gumucio A. 2001. *Making Waves – Stories of Participatory Communication for Social Change.* Rockefeller Foundation, New York.

Dagron Gumucio A. 2003. *Take Five: A Handful of Essentials for ICTs* in Bruce Girard (ed) The One to Watch: Radio, new ICTs and interactivity. FAO, Rome.

Dagron Gumucio A. 2003: *What can ICTs do for the rural poor?* Keynote address at WSIS at the IFAD Roundtable "Six Years Experience in Bridging the Digital Divide". Geneva.

Deane J. 1998. *Information, Knowledge and Development* in Debate and Development, a series of Panos Perspective Papers, Panos, London.

Deane J. and Scalway T. 2003 *Missing the Message – 20 years of learning from HIV/AIDS.* Panos, London.

Decock Anamaria. 2000. *Tapping Local Cultural Resources for Development* in Jan Servaes (ed) Walking on the Other Side of The Information Highway: Communication, Culture and Development in the 21st Century, Southbound, Penang.

Digital Opportunities Task Force 2002. *Digital Opportunities for All: Meeting the Challenge, Final Report of the Digital Opportunity Task Force.* http:www. Dotforce. org/about

FAO 1987. *Report of Development Support Communication FAO Expert Consultation,* FAO, Rome.

FAO 2004**.** *Yasarekomo: Una experiencia de comunicación indígena en Bolivia***.** FAO, Rome

Ford, N. 2000. *Communicating Climate Change from the Perspective of Local People: A Case Study from Arctic Canada* in The Journal of Development Communication, Number One, Volume Eleven, AidCom, Kuala Lumpur.

Fraser C. And Restrepo-Estrada S. 1998. *Communicating for Development: Human Change for Survival.* I.B. Tauris Publishers. London, New York.

Fugelsang A. 1987. *The paradigm of communication in development: from knowledge transfer to community participation – lessons from the Grameen Bank, Bangladesh.* FAO, Rome.

Fugelsang A. 1982. *AboutUnderstanding – ideas and observations on cross-cultural communication.* Dag Hammarskold Foundation, Uppsala.

G8 Dotforce. 2004**.** ***"Open Knowledge Network: Unlocking economic opportunity in the South through local content."*** http:/www.dgroups.org/groups/OKN/docs/ACF9.doc.

Girard B. 2003. ed. *The One to Watch: Radio, New ICTs and Interactivity*, FAO, Rome.

Heeks, R. 2002. *Failure, success and improvisation of information systems projects in developing countries*, Paper N. 11, Development Informatics Working Paper Series, Institute for Development Policy and Management, University of Manchester.

Kenny, C. 2002. *The Costs and Benefits of ICTs for Direct Poverty Alleviation* World Bank, Washington.

Lee Philip ed. et al. *2004. Many Voices, One Vision, The Right to Communicate in Practice.* Southbound, Penang and WACC, London.

Michiels S. and Crowder L.V. 2001. *Discovering the Magic Box: Local appropriation of information and communication technologies (ICTs).*FAO, Rome.

Mundy P. and Sultan J. 2001. *Information Revolutions,* CTA, Wageningen.

Norrish, P. 1998 *New ICTs and Rural Communities* in Don Richardson and Lynnita Paisley (eds) The First Mile of Connectivity: Advancing Telecommunication for Rural Development Through a Participatory Communication Approach. FAO, Rome.

O'Farrell C. 2004. *Revisiting the Magic Box: Case studies in local appropriation of information and communication technologies.* FAO, Rome.

Plan of Action of World Summit on the Information Society, Geneva 2003. Document WSIS – 03/GENEVA/DOC/5 –E

Ramirez R. 2003.*Bridging Disciplines: The natural resource management kaleidoscope for understanding ICTs.* In the Journal of Development Communication, AidCom, Kuala Lumpur.

Ramirez R. and Quarry W. 2004**.** *Communication by design: a medium for innovation in natural resource management*. IDRC, Canada, FAO, Rome.

Saik Yoon C. 2000. *Development Communication in Asia* in Jan Servaes (ed) Walking on the Other Side of the Information Highway: Communication, Culture and Development in the 21st Century, Southbound, Penang.

Servaes J. 2003. *Hybrid Interactions. Human Rights and Development in Cultural Perspective* in Jan Servaes ed. Approaches to Development: Studies on Communication for Development, UNESCO.

Shaping Information Societies for Human Nee. Civil Society Declaration to the World Summit on the Information Society. Geneva 2003. http://www.wsis-cs.org

The Millennium Development Goals. 2000. www.un.org

Tufte T. 2003 *HIV/AIDS Prevention, Building on the Soul City Experience in South Africa in* Jan Servaes ed. Approaches to Development: Studies on Communication for Development, UNESCO.

UNDP Evaluation Office, 2001, *Information Communications Technology for Development Essentials: Synthesis of Lessons Learned*, N. 5, September, UNDP, New York.

UNDP 2001. Human Development Report 2001 *Making Technologies Work for Human Development*, UNDP, New York, London.

Communication for Development is about dialogue, participation and the sharing of knowledge and information among people and institutions. The 9th UN Roundtable (Rome, September 2004), focused on *"Communication and Sustainable Development"* and addressed three key inter-related themes that are central to this issue: Communication in Research, Extension and Education; Communication for Natural Resource Management; and Communication for Isolated and Marginalized Groups. The selection of key note papers presented in this publication offers views and perspectives that contribute to these themes.

ISBN 978-92-5-105883-1

9 789251 058831

TC/M/Y1476E/1/11.07/1600