

Knowledge – a Core Resource for Development

**Documentation on the Swiss Meeting on Global Knowledge Sharing
and Information and Communication Technologies
held in Berne • Switzerland • March 20, 2001**



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Swiss Association for International Cooperation

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Swiss Meeting on Global Knowledge Sharing and Information and Communication Technologies (ICTs)

Editor: Helvetas (Katarina Thurnheer), May 2001

Helvetas, the Swiss Association for International Co-operation, works towards the elimination of the causes of marginalization and promotes solidarity with the poor in the South and East. Its mission is to actively contribute to the improvement of the living conditions of economically and socially disadvantaged people in Asia, Africa and Latin America. Currently Helvetas runs programmes of co-operation in 20 countries. We concentrate on three working areas, i.e. infrastructure in rural areas, sustainable use of natural resources, and education and culture. Helvetas was founded in 1955 as the first private Swiss development organisation. Much of what was pioneering in our work has become common practice within the Swiss Development Co-operation agencies, a trend which continues today.

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- Bilateral and multilateral development co-operation
- Humanitarian aid, including the Swiss Disaster Relief Unit (SDR)
- Co-operation with Eastern Europe.

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Abstract

Recently, knowledge has become a popular term. Its usage is closely linked with new economic trends and the rapid developments in the field of Information and Communication Technologies (ICTs). By connecting the term knowledge with new technologies an additional divide emerges between Northern and Southern societies, urban and rural areas, wealthy and poorer social groups. According to the criterion of access to ICTs, societies worldwide are perceived as being separated into “information-haves” and “information-have-nots”.

Working to overcome inequalities is the basic aim of international co-operation. The relevance of knowledge to that end has been recognised for a long time. It is therefore a logical consequence for development agencies to consider whether (and in what ways) applying ICTs within projects may yield greater benefits to the local population.

ICT for Development

Helvetas and the Swiss Agency for Development (SDC) wished to stimulate a discussion among development organisations in Switzerland and jointly launched the meeting on “*Knowledge - a Core Resource for Development*”. Held in Berne in March 2001, some 100 participants explored the usefulness of ICTs for development endeavours and learned from the experiences gained in other countries.

In discussing knowledge and the role of ICTs, the meeting concentrated on three dimensions:

- The Socio-political Dimension of Knowledge, the Impact of ICTs and the Digital Divide
- Harnessing Knowledge in the South and for the South
- Knowledge as an Organisational Resource - Managing Knowledge.

The event began with a plenary session dealing with *the Socio-political Dimension of Knowledge*, the Impact of ICTs and the Digital Divide. The four guest speakers pointed out a discrepancy between a high demand for ICTs expressed by various NGOs and the reluctance of some donors to accept these wishes as priorities in development schemes. Thus, discussing the relevance of new ICTs for the development of societies touches upon old, well-known questions in development discourses: Who is in control of the resources? Who actually defines the needs of the would-be beneficiaries? If the people concerned have their say, what do they consider as relevant? What conditions need to be guaranteed so that any technology introduced meets the requirements of an appropriate technology?

Entitled *Harnessing Knowledge in the South and for the South*, the second part of the meeting took a closer look at two projects in which ICTs play a prominent role. First, an initiative in South India provided ample illustration of the opportunities for local residents if ICTs are applied to meet their needs. Another example was given of a project in Cameroon in which Helvetas gained valuable experience from utilising the Geographical Information System (GIS) to analyse complex data. Both presentations described ICTs’ congruency with participatory processes and the concept of appropriate technologies.

Finally, the meeting dealt with *Knowledge as an Organisational Resource - Managing Knowledge*. Knowledge has become a crucial resource for organisations, demanding as comprehensive a cultivation system as possible. Here, ICTs were discussed as instruments to organise expertise and insights gained by members of development agencies. These technologies provide new options promising more efficient operations, yet when applied in small organisations, specific limitations must be considered.

Structure of the Report

The report in hand is structured in three sections according to the issue discussed. Beginning with the welcome address, each section consists of the summaries of the presentations, complemented by the papers handed in by the speakers or some of the tables they used, and the results of the working-groups. The report’s structure should allow readers to focus on each part separately. Consequently, readers who prefer to read the document chronologically are kindly asked to ignore any repetitions. The appendices include the meeting’s programme, a list of the invited speakers, moderators and organisers, as well as two newspaper articles referring to the meeting.

Welcome Address

On behalf of the organisers, *Dora Rapold*, Head of the Thematic and Technical Resources Department at the Swiss Agency for Development (SDC), and *Esther Oettli*, Head of the Foreign Department at Helvetas, welcome all participants to the meeting, thanking particularly the guest speakers who are willing to share their knowledge with a wider public. Exploring new ways of sharing knowledge is in fact the main purpose of this meeting.

With the emergence of the new information and communication technologies (ICTs) yet another gap has grown between Northern and Southern countries; a digital divide separates individuals and societies connected to cyberspace from those who lack this access. Opinions on how to deal with this ever increasing imbalance differ. Some claim access to ICTs is just as important for development as is access to vital resources, such as land, means of production and capital. Others are more sceptical and fear further forms of simply dumping yet another technology in countries of the South. Whatever view is endorsed, there is a wide agreement on the importance of knowledge for the development of societies, and on the recognition, that no amount of simple information, however large, equals knowledge. Similar to the uselessness of installing foreign technologies in a top-down manner, information alone does not necessarily contribute to development.

The initiators of this meeting, however, perceive in ICTs useful tools to reach development goals. During the day this perception will be elaborated on two levels. On the local project level, the new technologies can function as elements within a more comprehensive development approach serving to facilitate people's participation in decision-making processes. In addition, new technologies promise development agencies more efficient ways of processing complex information. On a more general level, ICTs can be applied to organise the vast amount of expertise gained in the development sector. They allow for uncomplicated and creative ways of exchanging experience and insights, irrespective of geographical distance.

The meeting was organised with the wish to initiate a first platform in Switzerland to discuss the opportunities and potential drawbacks of the new technologies as instruments in international collaboration.

Objectives of the Workshop

- Discuss opportunities and risks of ICTs within international co-operation.
- Mutually share experience of activities undertaken in this field so far.
- Inform Swiss development agencies about the topic of knowledge management within and between organisations.
- Develop a set of future options to share knowledge (South/South, North/South, North/North).
- Identify people/organisations interested in following up these topics and engaging in future actions.

The Socio-political Dimension of Knowledge the Impact of ICTs and the

This section of the report consists of three chapters. The first summarises the plenary session moderated by *Gerolf Weigel*, Head Deputy of the Bretton Woods Division at the Swiss Agency for Development and Co-operation (SDC). Its structure derives from the two dimensions which crystallised as being fundamentally important in the discussion concerning the Digital Divide: Firstly, the dimension of access in its physical and technical sense is addressed. Central points are the availability of computers and the costs entailed. Secondly, access in the sense of being in control of what is available is discussed, expressing the need for content to be meaningful to the situations of its users. In the third chapter follow the actual meeting papers of the guest-speakers, *John Afele*, University of Guelph (Canada) and Village Telecom Ghana, *Roberto Bissio*, Third World Institute of Montevideo (Uruguay), *Stella Hughes*, UNESCO, and *Harun-ur-Rashid*, Community Development Library, Dhaka (Bangladesh). Then the results of the corresponding working groups are presented. The section ends with an abstract of an interview with *Roberto Bissio*.

1.1 “Why do the poor need computers?”

Summary of the plenary session

With this provocative question, *Roberto Bissio*, Executive Director of the Third World Institute in Montevideo and a leading figure in the establishment of the first Internet Service Provider (ISP) in Uruguay, opens the debate on the socio-political dimension of the new Information and Communication Technologies (ICTs). It is exactly this question which is the usual reaction whenever he requests development agencies and industry representatives to provide Southern NGOs with the possibilities of accessing the World Wide Web. Such a demand has been pledged by NGOs since at least the beginning of the 1990's. Only with documents being available in digital form and e-mail connections linking capitals in the North with capitals in the South, urban with rural areas, can a true form of global participation at international meetings become possible. Thanks to the initiatives of a global network (Association for Progressive Communications, APC) NGOs at the UN Conference on Environment and Development in Rio (Earth Summit, 1992) were for the first time provided with electronic communication facilities. This allowed activists to communicate worldwide, support or reject proposals and elaborate their own point of view (see also chapter 1.4).

According to *Roberto Bissio*, those who can benefit the most from the new ICTs are those living “far-away”. Once installed, ICTs are inexpensive means bridging geographical distances. In a world described in terms of socio-economical and socio-political power-centres, people living at the margins profit from the centreless nature of the Web. Consequently, developments in this direction may perhaps imply a loss of power at the centres. Whether this may or may not contribute to the reluctance of donors to respond positively to the demands from various representatives of Southern NGOs, the fact remains that funding ICTs for development purposes is often not accepted as a priority. So, following *Roberto Bissio*, this can result in a rather wide discrepancy between the definition of people's needs as seen by decision-makers at the top and experienced by the people at the bottom who are actually concerned. All three co-speakers reiterate this conclusion. *Stella Hughes* of UNESCO points out the need for more publicity about projects within the realm of ICTs for Development, in order to raise awareness among decision-makers of the opportunities that can be derived from making use of ICTs within a broader development scheme.

Community-based Telecentres

In the face of this lack of investment in ICTs for rural people in Southern countries, a variety of creative solutions have been developed at the local level. Best known are community telecentres, where different activities can be pursued or services availed of, such as secretary services, telephone and internet access. According to *Roberto Bissio* such institutions are sought after in Latin-America for instance particularly for the inexpensive communication made possible by e-mail. At a

wledge, “Digital Divide”

time when many residents of poor regions have relatives living abroad, families make use of this new means to exchange private news or request resources from their wage-earning members. Similar to telecentres, the Community Development Library (CDL) at Dhaka maintains a network of 25 information centres in rural Bangladesh. As its Director, *Harun-ur-Rashid*, emphasises, in establishing such sources of information, residents are encouraged to elaborate on their own development models. Another example of current efforts aiming to overcome geographical and social barriers to accessing ICTs is UNESCO's programme of establishing local Community Multimedia Centres (CMC). The centres provide direct access to telecommunication facilities. Depending on age, occupation, and momentary need, visitors may be interested in searching the Web for current market prices, health-related issues or results of national school exams. To ensure that a broad clientele can avail of such opportunities, the services include radio programmes. Such broadcasts reach those - often women - for whom it is difficult to leave their homes. Through occasional visits from the radio teams, the needs of those living in more isolated areas are considered and their voices are heard as well.

With multi-purpose-media-centres installed on community bases the costs of individual access can be significantly reduced. Yet, there is more to this idea than a simple economic rationale. According to *Stella Hughes*, such centres also correspond to an often strong sense of the local population's willingness to share their experience with others, to actively take part in an informal flow of knowledge. Not surprisingly, after introducing ICTs to a community, people first of all are eager to exchange information relevant to their particular region.

Towards Diversity

With this remark, attention is drawn to the question of what the Web has to offer, once access is granted. After all, most Internet content is available in English only. Mere translation cannot be the solution - information produced in the industrial North may be of no relevance to the needs of rural people in the South. Rather, content must be created by the people in the South themselves (compare chapter 2.1). In this context, *John Afele*, Director of the International Programme for Africa at the University of Guelph (Canada) and Executive Director of Village Telecom, Accra, Ghana, speaks of “blending” ICTs with local people's knowledge. Only then can information technologies be truly meaningful to their diverse users. Then, however, ICTs can serve as an effective tool in the efforts to increase the participation and empowerment of marginalized people.

Feeding the Web with experiences from the South furthermore expresses an alternative model of global knowledge-sharing, a model having in common with oral culture systems the traits of informally sharing relevant knowledge. This vision is in line with *Roberto Bissio's* argument mentioned above: The Web lives from breaking through centralised arrangements. With the Web understood as a medium to promote diversity and share knowledge, we may visualize a world in which Northern societies are willing to learn from Southern repertoires. Yet, so far, the North has more often demonstrated its eagerness to appropriate knowledge generated in the South, claiming patents for originally indigenous medical expertise, plant derivatives, design patterns, etc. Similarly, the recent efforts of the World Bank to create a single Internet portal on development issues signals yet again how difficult some Northern organisations find it to give up their self-privileging centre-focused worldview (see also chapter 1.4). Community ownership of projects, as integrated in the CMC-programme of UNESCO, may provide some security by guaranteeing collective decision on what is to be shared and what is better to be kept away from global access, as *Stella Hughes* explains.

1.2 Meeting Papers

1.2.1 Universal Access: Can the Digital Divide be Bridged?

Roberto Bissio, Executive Director of the Third World Institute in Montevideo, Uruguay
www.item.org.uy

The poor lack access

- To safe water
- To land
- To basic health and education
- To justice
- To credit
- ...and to information and communication.

Whose cyberspace?

- Cyberspace is still a playground for white, educated, affluent males
- In Brazil access to the Internet with a local call is only possible in 6% of the 4500 municipalities
- The “browser-less” movement has joined the ranks of the landless and the homeless
- In English, please...
 - 95% of all pages in the World Wide Web are in English
 - 85% of the pages in Spanish are based in the United States.

Access to ICTs is empowering

- Blind users can communicate and find decent jobs
- Small farmers know market prices before they send their produce to town
- Human rights complaints reach a global audience in seconds
- ... etcetera, etcetera, etcetera.

But...

- Industry doesn't see a demand
- Governments and charities do not see a priority
- ... and people are left to imagine their own solutions.

The village phone

- Bangladeshi women run public phone services in the villages
- A cell phone costs the equivalent of one year's average national income: 200 dollars
- Grameen Bank provides credit and connectivity.

Telecentres

- From Lima to Marrakesh to Madras, people get Internet access at one dollar per hour
- Telecentres allow people to connect, learn, buy, sell or relate to the government
- There are 600 Internet “cabins” (telecentres) in Lima.

The barefoot ISP...

- All the hardware and software tools needed to set up an Internet Service Provider (ISP) can be packed into a single “box” for less than 5,000 dollars.

citizen@mycountry.com

- The right to a name and a nationality (passport) is a basic human right. In Costa Rica the government has added the right to an e-mail address: every citizen will be granted free access to his or her e-mail box to handle any transaction with local or national authorities.

How much will it cost?

- To start a telecentre in Uruguay costs less than a taxi
- 100 billion dollars are needed to provide basic ICT access to 2 billion people
- The G7 countries have promised ... 1 billion.

What is to be done?

1. Remove the obstacles
 - Poor countries pay twice as much as the rich to connect to the Net, Southern retailers pay seven times more to access e-commerce
 - Southern sites are “invisible” for search engines
 - Bad regulations still make access to the Net illegal in many countries.
2. Help mobilise resources
 - Empower local connectivity providers
 - Pay for local content
 - Think locally ...
 - Only the mobilisation of local resources can bridge the digital divide in a sustainable way
 - Concerted action of industry, investors, researchers and donors with local authorities and NGOs can empower the local initiatives that will make it happen.

Act now

- To create the enabling environment
- To unleash the capabilities of the other 90% of the world's women and men.

1.2.2 Summary Input “Digital Divide”

*Harun-ur-Rashid, Community Development Library (CDL), Network of Development Information and Communication, Bangladesh
www.sutra.org/cdl*

“Information is the critical missing link between ignorance and enlightenment, between poverty and prosperity, between the dehumanised state and empowerment. The backward and vulnerable peoples and communities have little or no access to vital information, particularly information pertaining to public resources. A well-planned effort aimed at narrowing the knowledge gap in order to attain the required level of awareness in the society would in turn accelerate the process of social, economic and human development.”

The deep-rooted philosophy of any development approach should recognise the gap of knowledge between people, organisation and society. The underlying vision of development is to touch the lives and change the attitudes and behaviour of the people and the society to develop a constituency that is informed, knowledgeable, self-aware, and is capable of taking effective actions for sustainable social and economic development. The development strategy should aim to develop knowledge network to facilitate sustainable, effective, appropriate, affordable exchange of information at local, regional, national and global levels.

Process System of Minimisation with some examples from CDL:

- Opportunities for Human Resource Development through capacity development should be increased with particular focus on women and the disabled.
- Narrowing the Urban and Rural information gap through facilitating the easy, cost-effective and appropriate flow of information.
- Education is another key area for initiating any change. Education for all should be universal in its true sense with provisions to orient people about digital communication.
- Culture and Customs, acts both as challenge and advantage. Packaging the information appropriately to local cultures and customs will increase the likelihood of acceptance of the information.
- Behavioural change should be addressed with comprehensive programme activities along with ICT.
- Government policy plays an important role, direct and active involvement of the government is required in certain support areas such as infrastructure development.
- Infrastructure is one of the critical area. Without adequate and appropriate infrastructure development the disparity of knowledge will persist.
- The private sector should be encouraged to participate in the process, particularly in the infrastructure and human resource development, capacity building and education.

- Co-ordination and sharing information and knowledge needs to be enhanced. For example the initiatives of GKP, IDRC, etc. have paved the way for future development in this area.

1.2.3 Some Thoughts On Development and Communications

*John Afele, Executive Director, Village Telecom, Accra, Ghana and Director, International Programme for Africa, Ontario Agricultural College, University of Guelph, Canada
www.uoguelph.ca/~jafele/aki-bio.htm*

The unprecedented revolutions in Information and Communication Technologies (ICTs) that the global community is experiencing can drive information flows and spur the building of knowledge societies, through access to information, processing into knowledge, dissemination, and utilisation. Principally, ICT has minimised space and time, which means that knowledge sources and impact communities are no longer separated from each other by geography or time. The demand that human communities be more intelligent in resolving the increasing complexity of development challenges requires optimisation of a multitude of factors simultaneously. Consequently, ICT has been heralded as the input factor or power to resolve current human insecurities because ICT would create the interacting spaces for groups to share knowledge. ICT provides the medium in which communities can amass the quality and volume of information and synthesise the knowledge that would optimise development opportunities. Communities that are in need of knowledge could now be in close contact with knowledge sources. Development agencies could, for example, remain in continuous touch with their partners and communities of interest from offices far removed physically. However, no amount of external knowledge alone can create sustainable communities. ICT provides the means to integrate local knowledge with global knowledge and to provide customised solutions.

The current state of globalisation requires that children everywhere have access to the tools of empowerment, which would ensure a fairer future for all. Building digital knowledge bridges therefore requires governments and major development agencies to invest in the future by providing state-of-the-art technologies, developing the human and institutional capital for the future, and setting up favourable regimes for knowledge to impact all activities.

All nations need to develop unique ways in which ICT could empower citizens, e.g.:

- Use ICTs as tools to teach learning skills and make problem solving an integrated, continuous and interactive service.
- Focus on building knowledge communities.

- Groom talents and ideas on behalf of the group that possesses the original idea.
- Create knowledge networks that lead to efficient tools for production and environmental protection.
- Develop mechanisms that make knowledge sharing successful in actualising the individual and household, and in increasing the capacities of businesses and institutions, as well as in uplifting the community.

Developing countries, despite the enormous effort required, should:

- Make every effort to invest in ICT as much as they had invested in classroom education in the “old economy”.
- Opt for technologies that would not become obsolete within a short period of time although the initial cost may be high, e.g., convergent communications.
- Be imaginative in deployment of ICT and not copy models that may not be suitable for their own situation.
- Focus on content development that would meet the majority’s need.
- Transform indigenous practices into continuously evolving and learning systems by digitising their oral cultures.
- Consider telecentres not as conglomerations of tools but as knowledge brokerages.
- Develop networks as brain gain models.
- Argue for new methods of development funding, e.g., programme conceptualisation, implementation and evaluation that are interactive and inclusive of the knowledge assets of the community of interest and that create transparent systems of evaluation and public consultations.

Global development knowledge sharing requires genuine partnerships, transparency, and an understanding that all partners stand to gain. Recognition of civil society, indigenous knowledge, and non-governmental organisations should be without hesitation. Furthermore, as part of creating a transparent development knowledge community, and in order to optimise development funding, the backgrounds of those who review project proposals and their comments could be made public so that groups can comment on the criteria used in distributing diminishing development funds and to ensure that the project funded would meet the local people’s needs.

1.2.4 Panel discussion on the Digital Divide

Stella Hughes, UNESCO, Paris
http://firewall.unesco.org/webworld/highlights/internet_radio_130599.html

The main challenges

Access to ICTs is hampered by problems of connectivity, cost, literacy levels, language barriers, lack of awareness of ICTs, geographical isolation, social exclusion factors (gender, extreme poverty ...), lack of relevant contents.

Options for Bridging the Digital Divide and UNESCO’s contribution

UNESCO proposes a programme for Community Multimedia Centres (CMCs) as a global strategy for addressing the digital divide at the level of poor and underprivileged communities in the developing world. This strategy complements efforts made at the institutional, policy and regulatory levels.

A CMC combines (1) *community radio* by local people in local languages. Low-cost, easy to operate, it not only informs, educates and entertains but also empowers the community by giving a strong public voice to the voiceless, which encourages greater accountability in public affairs, and (2) *the community telecentre*, which offers access to computers, fax, telephone, etc. This allows even the most remote village to communicate and exchange information with the rest of the world and locally manage, produce and access information for development.

The CMC, by integrating these two facilities, actively combines local contact and global contact, local content and global content, with an unbroken continuum of information and communication between the literate and the illiterate, between local, national and international languages, between the spoken and the written word. It ensures that information, communication and knowledge become the basic tools of the poor in improving their own lives through an approach that is:

- *Cost-effective:* CMCs use broadcasting to raise awareness of ICTs and to involve the whole community, the literate and illiterate alike, in accessing, providing and exchanging information. With training sessions and facilitators, many people and not only the best educated use the CMC’s computers. In this way, collective community use of minimal equipment and connectivity offers maximum outreach and impact.
- *Country-differentiated:* CMCs are adapted to individual community needs, to each local and national context. Formulated in response to differing contexts and challenges, they exploit the full range of ICTs and their convergence potential. From large-scale, fully connected networks to local community radio with

modest information centres, CMCs are fully scalable, replicable and transportable.

- *Empowerment-oriented*: Run by, with and for the community, the CMC overcomes barriers of literacy level, language, gender, etc. by actively integrating broadcasting and ICTs. Radio-browsing, in which daily programmes in local languages search the Web in response to listeners' queries, offers indirect but mass access to cyberspace. Information gathered in these programmes builds up a multimedia database for development that is truly created with, by and for the local community. The CMC exists to meet basic human development needs such as health, education, nutrition and income-generation. It recognises and utilises the wealth of skills, initiative and indigenous knowledge within the community.

Switzerland's contribution

Switzerland is this programme's first major sponsor, contributing 1.5 million Swiss francs over three years for the development of CMCs. In grass-roots projects of this kind, partnerships uniting many areas of expertise are important and Swiss NGOs can contribute on technical matters (hardware, software, connectivity, maintenance, renewable energy,...), in training and contents development, information re-packaging, ICT volunteering etc.

1.3 Results of the Working Group

In order to take advantage of the opportunities that ICTs may offer, the following issues need to be addressed:

- Universal access: build infrastructure and provide community access, thereby emphasising the participation of a broader sector of the civil society.
- Human resources:
 - Education
 - Training of intermediaries between World Wide Web and indigenous communities / accompanying ICT projects with ways to cope with an overflow of information.
- Content:
 - Counter the dominance of the English language
 - Recognition of plurality and diversity as an asset.
- Power: There is a great risk of a concentration of power and money, if decentralised options are not realised and the criteria of transparency neglected. An example of this danger is the World Bank's proposals for a Global Development Gateway.

Lessons for donor countries, such as Switzerland:

- Provide funding and support
- Promote diversity
- Encourage the flourishing of a South-to-South exchange. Rather than patronising, the North should learn from initiatives of Southern countries.

1.4 “The Web was created to share knowledge”

Abstract from an interview with Roberto Bissio, Executive Director of the Third World Institute in Montevideo, concentrating on the Digital Divide and Global Development Gateway (21/03/2001)

Recently, talking about the Digital Divide has become fashionable. UN-Agencies and the World Bank have taken up the banner to promote technologies for the South. Yet, Southern NGOs look back on years on stony paths, lobbying these same institutions to that end.

Roberto Bissio recognised the value of the new communication facilities for the work of Southern NGOs early on. The tools promised an end to the unreliable, expensive and time-consuming ways of exchanging information between organisations operating all over the world. Further, they promised them the means of getting involved in international conferences and responding to resolutions which concerned precisely those people not present. Provided, of course, that respective documents were available in digital form. The non-profit Association for Progressive Communications (APC) was founded, and succeeded in organising a first network facilitating activists’ participation at the UN Conference on Environment and Development in Rio, 1992.

In line with the attitude of some international organisations behaving as if they were the discoverers of the new possibilities that ICTs could offer the South are their initiatives to bring together under a single roof the numerous websites of organisations and associations active in the field of development. The World Bank’s plan to create such a portal, the *Global Development Gateway*, was widely rejected by concerned NGOs. As the example above demonstrates, like-minded organisations are already maintaining well-functioning networks of information sharing. There is no need for the World Bank to bring under its control these independent, yet interacting, organisations. What is at stake is comparable to creating an official newspaper to report on the ‘real reality’. Just as a plurality of newspapers acknowledges the right to freedom of expression, a diversity of websites needs to be guaranteed for everyone to search information from the source of his or her own choice. Reacting to worldwide criticism, the World Bank has decided to establish a foundation

to take charge of the portal. However, this hardly means more than a simple internal shift of money, leaving unconsidered the issue of control - in a Southern country such a step might be called corruption... The World Bank should start to develop truly innovative concepts. A very first step would require it to acknowledge the essential benefit of the Web: the absence of centres. At the present the Bank is still captured in its Alexandria-Library mentality, thinking information ought to be concentrated in one place. We all remember the place by the prestige it gained, however, we also remember it eventually vanished.

A vision for the future

The future relies on the present, and today’s needs root in the past. The overwhelming majority of the Web’s content is still in English and generated in the US. Yet, there is an increasing awareness for the empowering aspects of ICTs for those living at the margins.

After having, in a first phase, particularly made use of simplified communication by e-mail, Southern NGOs have since seized the opportunities in the field of disseminating messages. Integrating into the Web the voices from Southern countries is not only a benefit for the South but an enrichment for the whole world. Just as people may enjoy other films than just Hollywood products, a diversity of opinion and knowledge can attract people everywhere. The challenge for the future lies in finding a way to link the need with the interest. This strategy would come to deal with an aspect of the Web which normally remains obscure: Who pays for the services? It has become the rule that information on the Web is offered free of charge. Expenses are glossed over by advertisements or shareholder business. Organisations lacking such forms of subsidies need other solutions to cover the expenses. People pay for a visit to the cinema, for newspapers, why not pay for information on the Web? Some people are willing to pay even more for items produced in accordance with social or environmental standards - would Fair Trade rules also work in financing the activities in the Web? Exploring possible solutions to this challenge is a task for both the South and the North together.

(For more information visit: www.apc.org; www.brettonwoodsproject.org/action/gdg/index.html)

Harnessing Knowledge and ICTs in the South and for the South

A discussion of the potential of new Information and Communication Technologies (ICTs) for Development is well served by looking at concrete examples. This part of the meeting's report begins with a summary of the presentations held to that end. First, attention is brought to the project covering a network of Internet centres in South India presented by its director *Venkataraman Balaji*. After that follows a short version of *Esther Oettli's* illustration of experience Helvetas gained in working with the Geographical Information System in a project in Cameroon. Both speakers argue in favour of introducing ICTs as valuable tools in development endeavours. Within this understanding, ICTs are simply a further, albeit highly effective means of addressing the needs expressed at the grass-root level. The third chapter lists the results of the working group.

2.1 Village Knowledge Centres in Pondicherry, South India

Summary of Venkataraman Balaji's presentation.
For a detailed project description please visit www.helvetas.ch/km/workshop

To assure food security in the future a new paradigm has evolved, replacing agriculture concepts centring on resource-intensity with such emphasising the intensity of knowledge. Particularly in regard to South Asia, knowledge is perceived as the key to achieving not only the goal of more food, but also the necessity of more income and more jobs. ICTs are attributed a prominent role in this new paradigm. Useful in rendering generic information local specific, they are perceived as the tools with which rural families, especially marginal farmers and the assetless, may improve productivity of labour and inputs. These concepts form the basis of a programme to determine the impact of ICTs on the living conditions in rural areas, launched in 1998 by the M.S. Swaminathan Research Foundation (in partnership with the International Development Research Centre, IDRC, Canada) in the Pondicherry region of Tamil Nadu, India.

The project established several so-called knowledge centres on the village level, covering an area of about 300 square kilometres and a population of approximately 22,000 people. A main centre is located in the large village of Villianur which links all the project villages to a data and voice transmission network (Kizhur, Embalam, Veerampattinam, Pooranamkuppam, Pillayarkuppam, Thirukanchi). From the beginning, the project actively involved the local population. Prior to establishing the village knowledge centres a detailed survey on communication lines and habits in the coverage area as well as Participatory Rural Appraisal evaluations were conducted in several hamlets. Only after the whole community had agreed to endorse it was a centre established. While project representatives provide equip-

ment, training and data, it lies within the responsibility of the community to assign a space rent-free and select those young men and women who are to manage the centres on a voluntary basis. Building upon a modest educational background, these people are trained in operating computers, using common software, and are, furthermore, made aware of gender relations in assessing local needs. In fact, the gender component receives special attention in all activities of the project. The problem of frequent power breakdowns is tackled with a system combining line power with solar photovoltaic plant which assures a smooth delivery of services.

Creating local content

Knowledge centres are created to meet local needs. Creating locally relevant content is the key element in the project. To that end, its realisation relied on extensive consultations with the participating villages' inhabitants. It emerged that, predominantly, farmers are keen to know the prices (and availability) of seeds, fertiliser or pesticides, and the sale prices of their products in the region. It is evident that such information can strengthen their position in negotiations with middlemen. Sale prices are also of interest to agricultural labourers, especially women, whose wages are partly in grains. Women are furthermore interested in obtaining health-care information and tips on opportunities to increase family income. Consultations also revealed a great interest in the government list of families living below the official poverty line and who are therefore eligible for various forms of benefits. As was to be expected, in the only coastal project village, Veerampattinam, the information requested centres on the daily concerns of families making their living from the sea. The safety of fishermen at sea is an important issue, leading to the service of downloading the wave height forecasts from a US Navy website. With the exception of the official English-written government list of families eligible for welfare schemes, all data is produced in the Tamil language (available in writing or audio) and accessible in all the centres.

The project does not disregard the question of how to deal with this increase in available information. Village centre volunteers are also trained in acting as intermediaries who assist the actual information-seeker in her or his search. In addition, a close relationship with media professionals resulted in workshops for news gathering and writing for village youth, who form a prominent visitor group.

The centres are open to further development and the addition of new services. One recent attempt, begun in March 2000, aims at stimulating intra-rural commerce. A sort of bulletin-board system informs people about the local availability of materials (seeds, inputs, construction materials), labour (mason, carpenters, plumbers) and entertainers (live-bands).

An analysis of users' registers

Contrary to general experiences with other technologies, available data indicates that the use of ICTs is not restricted to the privileged class. In fact, the group which most frequently makes use of the services is the assetless - followed closely by young people under fourteen. Women make up approximately 18% of the users.

Of the topics offered, information from government sources (for example on welfare schemes) is most frequently requested, making up 40% of the users' inquiries. Information on educational opportunities follows as the second most-sought-after subject with 32%. Young users in particular are interested in finding out how to enter colleges or universities. Interest in agriculture and fisheries, employment and health figures on a smaller scale (see tables below).

An evaluation of the project is in progress in which quantitative data on the impact of ICTs on the communities is to be complemented with qualitative aspects (e.g. stories of persons successfully marketing herbs or planning bus trips, of students receiving their school results quickly, etc.).

Objectives

- Setting up of six village information shops that enable rural families access a basket of modern information and communication technologies.
- Training educated youth, especially females, in rural areas in operating information shops.
- Training the rural youth in the organisation and maintenance of a system that generates locally relevant information from generic information.
- Maintenance, updating and dissemination of information on entitlements to rural families using an appropriate blend of modern and existing channels of communication.
- Impact assessment based on the organisation of surveys, participatory rural appraisal, and other appropriate methods of data gathering.
- Building a model of information dissemination and exchange in rural areas that uses advanced information and communication technologies.

Village Knowledge Centres

- Community Ownership
- A development tool - not a technology demonstrator
- Not associated with just one group / caste.

Value Addition Centre, Villianur: Equipment

- Operated by Project Staff
- Open to public on all working days
- Access to Internet available
 - 3 dial-up accounts
 - 2 telephone lines
- Hub of wireless system & EPABX
- All PCs (6) powered by solar devices
- LAN with WIN-NT
- Room for small-group meetings.

Value Addition Centre, Villianur: Functions

- Gathering and transmission of information
- Commodity prices, weather, govt. announces, daily news
- Generating data: Surveys, library references, discussions
- Issues of bulletins
- Creation / Maintenance of locality-specific databases
 - Local hospitals / doctors
 - Training programme
 - High school / college course guidance
 - Govt. welfare programmes / entitlements
 - Transport
 - Local experts in agriculture & fisheries
 - Key govt. organigrams / contacts
 - Official list of families below poverty line

Analysis of Users' Registers in 5 Village Knowledge Centres

(01 January 1999 - 30 June 2000)

Total Number of Users	15651
• Females	2832
• Assetless Families	4571
• Illiterates	392
• Persons under 14	4421

Analysis of Users' Registers / Patterns (%)

Voice	
• Personal	16.33
• Programme-related Data	1.18
Data	
• Agriculture & Fisheries	6.69
• Education & Training	32.0
• Employment	2.05
• Health	1.51
• Govt. Sector / Entitlements	40.43

Source of tables: Venkataraman Balaji, powerpoint-presentation 20/03/2000.

2.2 Geographical Information System in Development Projects

Summary of Esther Oettli's presentation

In Cameroon, Helvetas gained some experience in the application of a specific set of instruments within the range of computer-based technologies: the Geographical Information System (GIS).¹ Contracted by the World Bank to perform a “rural road sensitisation programme” in Cameroon, these tools were a prerequisite. Helvetas was expected to produce maps of identified farm-to-markets roads (with additional information on their condition, particular traits, estimated costs for new infrastructure, etc.), prepare the local population for building or repairing these roads and, once constructed, to maintain the roads. Moreover, the new technology turned out to be in line with the fundamental working principles of Helvetas including participatory approaches, sustainability, gender equality, and economic and social responsibility.

GIS constitutes an effective way of processing geographical data. A particular advantage lies in its allowing the simultaneous use of several data sources. In no time, complex information on a region can be rendered visible in maps which are easily understood by many different people. Providing an objective basis, such products help project parties to quickly recognise possible problems as well as suitable options and enhance overall participation in decision-making processes.

For example, one of the maps revealed to Helvetas that a road planned by an EU-programme would run right across a national reserve. This document now allows the involved parties to get a rapid overview on potential solutions which respect environmental, political (bordering the reserve is Nigeria) as well as economic considerations - meeting the concerns of the project-organisation, state representatives and local population wishing to be connected to public services. The application of GIS has revealed itself to be useful in another field: Maps which visualise borders of social entities, and for instance include data on the respective quality of the soil, are very helpful tools in preventing or managing conflicts in a region where land-right disputes occur frequently.

In short, working with GIS can increase the quantity as well as the quality of information available. Moreover, such information is made available in a form that facilitates the involvement of the parties concerned in all phases of a project. Applying GIS can therefore contribute to reaching appropriate and holistic solutions and, in the end, to successful realisation of projects. In addition, GIS may serve as tools in the co-ordination of different projects. However, the initial costs of introducing GIS are a drawback. Given budgetary constraints, Helvetas utilised GIS only for specific, geographically-limited areas, whereas sustainability can only be assured through large-scale application. Negotiations to this end have already begun.

¹ The technology was introduced to Cameroon with the support of the Department for Geographic Information System, GISKO, Canton Lucerne.

GIS in development projects: Experiences in Cameroon

- The maps produced were well accepted and in general quickly understood by the majority of the local population. Therefore, GIS's products can serve as very useful tools in enhancing participatory processes in decision-making. Different stakeholders (ethnic groups, political parties, women, etc.) can be involved at a local, regional and national level.
- Resulting information provides the objective basis for more efficient and effective decision-making.
- Once installed, GIS can produce maps more cheaply than conventional methods.

2.3 Results of the Working Group

Recommendations

- Mainstreaming ICTs: It should be a standard to use ICTs in all projects in which they provide additional value.
- Provide for appropriate technology, adequate training and meaningful content.
- Link public interest with income-generating projects. Find a business model for sustainable telecentres in which access to ICTs is complemented by a range of services, including writing letters, making copies, etc. Such centres meet local needs particularly in countries of the South and Eastern Europe.

Needs at the programme level

- Enabling framework
- Infrastructure
- Starting capital
- Human capacity /education
- Publicity on existing projects and models.

Knowledge as an Organisational – Managi

Another, quite well-known field of application for new Information and Communication Technologies (ICTs) lies in the management of knowledge within and between organisations. The first chapter within this section summarises the presentation of *Stephen Denning*, Programme Director for Knowledge Management at the World Bank. The overview begins by describing the developments leading to the establishment of a knowledge sharing system. Then, two lists indicate several points of concern to organisations interested in introducing similar systems. The second chapter takes up this issue and discusses the limits of knowledge management for small organisations as presented by *Marc Steinlin* from Helvetas. One of the objectives of this meeting is precisely to explore among the organisations present future forms of collaboration. As a start, Helvetas has drawn up three proposals. These are included at the end of this section, after listing the results of the working group discussing the topic of knowledge as an organisational resource.

3.1 “Share knowledge or die” - Experiences from the World Bank

Summary of Stephen Denning’s presentation.
For a detailed presentation please visit www.helvetas.ch/km/workshop

In today’s world massive changes affect large and small organisations alike. New, ever more efficient ICTs provide newcomers to the market with great possibilities and confront long established organisations with their vulnerability. In this turbulent time of rapid technological innovation, with all the associated economic changes and global competition, sharing knowledge has become the only strategy for organisations to survive.

The World Bank has always provided advice and information services alongside its main activities as a lending organisation. It was not until early 1996, however, when *Stephen Denning* was told to “have a look at information”, that a knowledge management system began to be developed. The process began when it was recognised that the Bank’s staff was actually drowning in information. And there was the vision of how much more efficient the organisation would be if this flow of knowledge could be processed effectively. Over its fifty years of existence, the Bank had accumulated a lot of know-how in the development sector - wouldn’t it be a benefit to all, if it became possible to share this experience on a large scale both inside and outside the institution? So, the next step was to communicate these insights to superiors and colleagues alike. In this connection *Stephen Denning* discovered the force of storytelling. Concrete examples demonstrating the usefulness of exchanging information proved to be far more convincing than arguing within a framework of bare rationality and definitions. The story of a health-worker in a

small town in Zambia, who in 1995 discovered how to treat malaria through the website of the US-Centres for Disease Control and Prevention (CDC), was more than illustrative. It invited thought about how fruitful the consequences could be for all concerned if the World Bank too would organise its knowledge in a way that would allow others to take advantage of it. This approach worked, and President Wolfensohn officially recognised the need to invest in those systems necessary to enhance the gathering and sharing of development information (October 1996).

Next, efforts shifted to implementing the vision. The first helpful step consisted in a change of terminology. The term knowledge sharing, rather than knowledge management, more suitably expressed what was intended: simply “a better way of doing the organisation’s business”. An early example illustrating what this was all about was the project of road pavement in Pakistan. Here, a request made within a virtual group concerning a particular technology used for paving, immediately elicited valuable responses from all over the world which merely needed to be adapted to local circumstances. Not only was a solution available quickly, but the organisation only then realised that it already possessed considerable knowledge on this specific topic. For such effective communication to happen, ICTs are only one element. Certainly, they are the tools enabling some three hundred people to communicate worldwide. It is however even more crucial for these individuals to actually form a community: groups in which questions of that kind are treated seriously by the members who are in turn keen on suggesting possible solutions. Such communities are the “heart and soul” of a successful system of knowledge sharing. Currently one hundred knowledge-sharing communities exist in the World bank, covering every aspect of the organisation’s undertakings. Plans are to further extend the exchanges, merging country-based with globally operating networks.

Basics of knowledge management

Deriving from the World Bank’s experiences, *Stephen Denning* points out seven basic elements which, persistently pursued, promise a successful sharing of information:

- **Strategy:** In respect to strategy, decisions need to be reached concerning the question of what knowledge is to be shared, and with whom and how it ought to be shared. The basic agreement to share at all must be endorsed at the top of an organisation. Only then can a sharing system be organised on a large-scale.
- **Organisation:** While responsibility and budget are located with line managers, communities of practice are the key instrument for sharing information. Further, it is necessary to establish overall policy-making councils.
- **Budget:** An extra portion of the budget must be allocated to knowledge management (at the World Bank this amounts to three percent). This expenditure covers the time that staff need to engage in interaction.

Resource ng Knowledge

- *Personnel incentives:* There is a need for personnel instructions to encourage the sharing of knowledge. Within the World Bank, learning and knowledge sharing figure as one of the traits in the annual personnel evaluation.
- *Community:* As stated above, communities play the key part in knowledge management. Communities, called thematic groups at the World Bank, crosscut the vertical business units. They unite mainly practitioners in the field, some central staff members and external persons. Rather than “building” such groups, the effort should be oriented to “merging” motivated individuals. Once formed, communities are comparable to gardens: Good development is not achieved through giving orders but through constant nurturing.
- *Technology:* Technical equipment does not need to be state-of-the-art. The most important elements are e-mail, the Web, and, still, face-to-face contacts.
- *Measurements:* It is difficult to measure the impacts of knowledge management. A good basis may be provided by simply asking staff, whether the system is working, information is being exchanged, improvements are being perceived, etc.

Some “laws” on knowledge management

Comparing the Bank’s experiences with that of other organisations, some universal hypotheses on knowledge management have emerged:

- *Knowledge sharing is the key to organisational survival.* Sharing knowledge is recognised as the only way to cope with the knowledge economy - “share knowledge or die”.
- *Communities are the driving force in the system* - no knowledge sharing without communities.
- *The essential characteristic of communities is the passion which motivates their members.* The communities flourish by the interest, commitment and enthusiasm of their members.
- *The upper middle management resists.* Having climbed the ladders, they may need to learn new skills to nurture communities and to develop a new identity.
- *Knowledge management is simply a way of doing the organisation’s business.* Communities support the activities of those in the field. Knowledge sharing does not equal the mere application of information technology. Two distinct approaches are necessary, albeit for different purposes. Managing information entails structure, hierarchy and top-down approaches to order a sea of information. In contrast to this engineering mindset, sharing knowledge relies on an ecological model. The emphasis lies on people interacting passionately along horizontal axes.
- *A key feature of the setting up and keeping alive of successful knowledge sharing networks lies in the art of storytelling.*² The only way to communicate complex things is to give examples, grounding a specific event within its context.

² How storytelling provokes action is the subject of Stephen Denning’s recent book: *The Springboard*, Butterworth Heinemann, 2000.

3.2 Limits in Knowledge Management

Summary of Marc Steinlin’s presentation

The situation of Helvetas demonstrates the obvious importance of effectively managing knowledge resources. As a small organisation operating worldwide, expertise is concentrated in very few collaborators located in distant regions (Helvetas employs approximately 80 collaborators in Switzerland and abroad, and 300 locals). Often, only one person has in-depth competences in one specific field. It therefore becomes vital - for her or his colleagues and for the organisation as a whole - that this person is accessible and transferable at all times. This however, is hardly possible, not least due to her or his involvement in several other tasks. In such situation various forms of sharing experience have certainly always been practised - without being called knowledge management. Yet ICTs do add a new dimension to exchanging information as they offer possibilities for a systematic approach. To make good use of these new options, however two problematic aspects first need to be dealt with.³

First and foremost, there is the criteria of Critical Mass limiting a smooth functioning of knowledge sharing communities as presented before by *Stephen Denning*. Available experience indicates that members of such groups differ in their degree of participation. Very few people within a group take up the lead in networking, supported closely by those actively maintaining ongoing discussions. Many others only occasionally contribute to the debates, while still more merely linger in the background, hardly participating. According to their activity level in discussion, group members may be called leaders, core-members, occasional contributors or lurkers. Obviously, the number of those active within a group is crucial for its survival. Here, studies reveal that only ten percent of a community play the role of core members. Organisations must keep this figure in mind when planning to form thematic groups. While it may work very well for organisations with 5000 collaborators to establish 50 communities, each dealing with one broad topic, the same number of thematic groups in a organisation employing 500 persons would leave a community with only one core-member (compare figure below)!

The second dilemma for small organisations partly arises from the limits of Critical Mass. A very fruitful way of dealing with limited personnel resources would be the exchange of knowledge with colleagues outside one’s own institution. Again, this in itself is not something new, however, a systematic encouragement has not yet occurred. In today’s world, such an approach may even put development organisations into a conflicting situation.

³ Another problem mentioned, yet not further elaborated on, concerns the question of how to deal with the immense flow of information that the use of ICTs may entail.

On the one hand, sharing relevant information can only benefit a project's target groups. In this sense, knowledge sharing confirms and strengthens development agencies' mission statements to address the needs of marginalized people. On the other hand, each organisation has to survive as a distinct agency in an increasingly competitive environment. In the market economy where knowledge has become a commodity, holding back certain information is an established strategy for promoting business. Thus, the challenge might be to demonstrate that sharing knowledge can mean acting in each organisation's own interest.

Future Co-operation

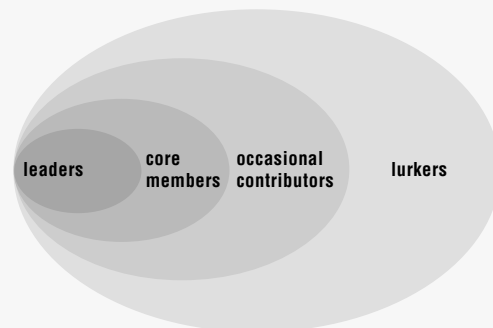
Among development organisations, how will we collaborate in the future

- In the spirit of mutual assistance
- To overcome the limitations of our Critical Mass, While
- Taking into account the reality of an increasingly competitive development market and our legitimate aim to survive as an organisation, and
- Keeping our mission in mind?

Different Roles in Communities

Organisation with **5000 collaborators** and 50 communities:
100 per community → 10 *core members*

Organisation with **500 collaborators** and 50 communities:
10 per community → 1 *core member*



3.3 Results of the Working Group

Questions of comprehension

The working group discussed knowledge management in the sense of knowledge sharing as presented by Stephen Denning. It agreed, that parallel to knowledge sharing communities, organisations must deal with information management.

Lessons learnt (mainly from the presentations)

- Start by building information bases.
- Create communities on different levels: among beneficiaries, among organisation staff, and between the beneficiaries and the staff.
- Knowledge sharing communities / thematic groups require forms of moderation and facilitation, either within the group itself or exercised through other structures of the organisation.
- Bring the people concerned together, through electronic means, but also through face-to-face contact. Knowledge lies in the hands of individuals who decide what items they might want to share.
- It is important to integrate knowledge sharing in the overall work programme. Possibilities include the practice of complementing reports with concrete examples of experience gained, peer-reviews and an evaluation system which grants recognition of knowledge sharing activities.
- Consider and bring into a systematic form experience gained with comparable ad hoc systems of knowledge sharing.
- Small organisations may have to co operate closely in order to manage their knowledge in a sensible way.
- Knowledge sharing implies a change in culture. Upper or middle management may be most concerned with such developments.
- Questions of technology: a variety of tools can serve the purpose of knowledge sharing; there is no need for the most sophisticated equipment.

Remaining Questions

- Power relations: Even though exchanges via the Web and participatory approaches may contribute to diminishing power inequalities, these remain a crucial issue.
- Property rights: who is the owner of a particular knowledge item? Knowledge is partly a private and partly a public commodity. Sharing knowledge is essential, however, the question of ownership needs to be kept in mind.
- Is knowledge accessible free of charge? In what ways does knowledge receive or keep a certain price in a market situation?
- Languages: How are we to make sense of different languages? Is translation software a solution?

3.4 Proposals for Future Forms of Co-operation

The organisers invite all interested parties to participate in the following possible activities:

- Informed round-tables
- Having access to condensed forms of best practices / lessons learnt
- Exchange / collaboration platform
- Follow-up events (specialist conferences).

Appendices

Programme

“Knowledge - a Core Resource for Development”

Swiss Meeting on Global Knowledge Sharing and Information and Communication Technologies (ICTs), March 20, 2001, Berne, Switzerland

Knowledge and Development

Narrowing down the impact of knowledge on development

There is no other term that dominates the current technical language more than “Knowledge”. One finds it in abundant combinations: “knowledge economy”, “knowledge society”, “knowledge based companies”, “knowledge workers”, “knowledge products”, “knowledge business”, and - the most widespread - “knowledge management”.

But in what ways are knowledge and these concomitants relevant to development and development work? We want to know: How does knowledge work influence the work in the South, with beneficiaries as diverse as local communities, indigenous peoples, and marginalized groups? How can they benefit from the knowledge revolution? And, on the other hand, how does knowledge transform organisations engaged in the field of development, as to their mode of operation and co-operation?

New Economy or (C)old Coffee?

The development sector contributes / can contribute to a knowledge revolution worthy of the name

Moreover, we are convinced: Development workers have always recognised the power and importance of knowledge. Knowledge is a business in itself in the development sector. Its leading exponents devote a great deal of their time and effort to capturing indigenous knowledge, to creating new knowledge, to recombining and redistributing it - and they have been doing so not only for some years but for decades, long before knowledge came into vogue for many branches of the “New Economy”. Therefore, we also want to turn the question upside down and ask: In what way can the development sector with its long years of experience contribute to a knowledge revolution that is not just a transient phenomenon but proves itself worthy of the name? What have we learned during the last decades that we can feed back into the debate?

Target Group and Aim of the Meeting

We want to initiate a discussion within our target group - development organisations in Switzerland -, but also establish contact with other actors involved in these issues: in other regions as well as in other branches and the private sector. It is clear however that we can only make a start. Our aim is to open the dialogue among interested groups and to motivate them to get involved into future developments in this sector.

- 9:30** Welcome Address
- 9:45** *The Socio-political Dimension of Knowledge, the Impact of ICTs and the “Digital Divide”*
Principal Presentation by *Roberto Bissio*, Montevideo
Moderation by *Gerolf Weigel* (SDC)
Dramatic changes related to the Information and Communications Technology (ICT), and associated global flows of information and knowledge affect societies in the South and North. The impact of ICTs and the related transformations towards a “Knowledge Society” or “Knowledge-based economy” have become the subject of intense debates. Fears of accelerated dissociation of the South lead to a call for effective and innovative ways of bridging existing gaps. A panel including Roberto Bissio, members of the Global Knowledge Partnership and an international organisation will discuss the scope of the challenges and options related to the “Digital Divide”.
- 10:45** Coffee Break
- 11:00** *Harnessing Knowledge and ICTs in the South and for the South*
Principal Presentation by *Venkataraman Balaji*, Madras
Moderation by *Markus Heiniger* (Helvetas)
The question is not whether ICTs do in fact offer new opportunities, but whether these opportunities are being taken advantage of. How can ICTs be harnessed for the benefit of the people in the South? Some promising examples will be presented.
- 12:00** Lunch Break
- 13:00** *Knowledge as an Organisational Resource - Managing Knowledge*
Principal Presentation by *Stephen Denning*, Washington DC
Moderation by *Urs Heierli* (SDC)
Developmental organisations - as knowledge-based organisations - are highly affected by the emergence of the knowledge area and the ICTs. We want to look into the question of how we can make use of our organisational knowledge (“How can we know, what we know”). We want to find out what we can learn from other branches and what is specific to international co-operation as well as for smaller NGOs. Moreover we want to discuss in which ways knowledge management can benefit from experiences of international co-operation.
- 14:00** *Working Groups*
1 The Socio-political Dimension of Knowledge, the Impact of ICTs and the “Digital Divide”
2 Harnessing Knowledge and ICTs in the South and for the South
3 Knowledge as an Organisational Resource - Managing Knowledge
Participants in the three parallel working groups will have the opportunity to discuss the subjects touched on during the presentations and to formulate a first thesis on a common viewpoint / attitude.
- 15:15** Break
- 15:30** Plenary session I: Compilation and Discussion of the Working Groups’ Theses
- 16:15** Plenary session II: General Co-ordination of Further Activities in Switzerland
- 17:00** Close

List of Speakers and Moderators

Speakers

John Afele	Executive Director of Village Telecom, Accra (Ghana) and Director of the International Programme for Africa, Ontario Agricultural College, University of Guelph (Canada). www.uoguelph.ca
Roberto Bissio	Executive Director of the Third World Institute in Montevideo (Uruguay). www.item.org.uy
Venkataraman Balaji	Former Director of the Informatics Centre and Regional Co-ordinator, Asian Ecotechnology Network and Project Director of the Information Villages Research Project, M.S. Swaminathan Research Foundation, Madras (India). At the time of the meeting he was working at the Centre National de la Recherche Scientifique in Montpellier (France). www.mssrf.org
Stephen Denning	Programme Director for Knowledge Management of the World Bank in Washington DC (USA). www.worldbank.org ; www.stevedenning.com
Stella Hughes	UNESCO Senior Programme Specialist in the Communication and Information Sector, co-ordinator of Community Multimedia Centres Programme. http://firewall.unesco.org/webworld/highlights/internet_radio_130599.html
Esther Oettli	Head of Foreign Department, Helvetas. www.helvetas.ch
Dora Rapold	Head of Thematic and Technical Resources Department, Swiss Agency for Development and Co-operation (SDC). www.deza.admin.ch
Harun-ur-Rashid	Director of the Community Development Library (CDL), Dhaka (Bangladesh), Network of Development Information and Communication. www.sutra.org/cdl
Marc Steinlin	Programme Co-ordinator Knowledge Sharing; Helvetas. www.helvetas.ch

Moderators

Urs Heierli	Division Employment and Income, Swiss Agency for Development and Co-operation (SDC). www.deza.admin.ch
Markus Heiniger	Programme Co-ordinator Education and Culture, Helvetas. www.helvetas.ch
Gerolf Weigel	Head Deputy of Bretton Woods Division, Swiss Agency for Development and Co-operation (SDC). www.deza.admin.ch
Tonino Zellweger	Independent consultant and collaborator at the Swiss Centre for Agricultural Extension. www.lbl.ch

Newspaper Articles

Digitale Gräben und Brücken zum Süden

Informatikmittel als Faktor der Entwicklung

Wenn Wissen eine der Schlüsselressourcen ist, muss dessen Verteilung im Nord-Süd-Verhältnis die Entwicklungspolitik stark interessieren. An einer Tagung sind die Diskrepanzen in der Verfügbarkeit ebenso zur Sprache gekommen wie neue Perspektiven gerade auch für arme Länder. Die Veranstalter, die Helvetas und die Direktion für Entwicklung und Zusammenarbeit, nehmen das Thema auch in ihrer Arbeit auf.

Fischer an der südostindischen Küste laden Prognosen über den Seegang von der Website der US Navy herunter, Bauern informieren sich mittels Internet über die Marktpreise ihrer Produkte, Mütter beziehen Ratschläge zur Kinderpflege: Die modernen Informations- und Kommunikationstechnologien (ICT) für den Alltagsgebrauch können in armen Regionen von elementarer Bedeutung sein. Doch die Privatwirtschaft sieht dort keinen Markt, und manchen Hilfswerken ist das Thema eher fremd. Allerdings befasst man sich nun auch in der Schweiz damit, wie eine erste Tagung in Bern dokumentierte.

Dominanz des Nordens

Die Diskussion wird teilweise unter dem Schlagwort „Digital Divide“ geführt; es wird also die zusätzliche Kluft betont, die sich im elektronischen Zeitalter zwischen Reich und Arm auftut. Nach Roberto Bissio, Direktor des Drittwelt-Instituts in Montevideo, gibt es zum Beispiel nur in 6 Prozent der brasilianischen Gemeinden Zugang zum Internet im Ortsnetz. 95 Prozent aller Websites enthielten englische Texte, und wenn die Sprachhürde überwunden werden kann, ist die Information noch lange nicht für Menschen in Entwicklungsländern relevant. Das Problem liegt also nicht nur bei der technischen Ausrüstung und der Ausbildung im Umgang damit, sondern auch in der Bereitstellung „eigener“ Information. Die Infrastruktur selber ist im Einzelnen nicht unerschwinglich, denkt man etwa an Internet-Stationen, die sich kleingewerblich betreiben liessen. Doch die Investitionen sind vielen zu riskant, und zwei der Referenten führten an, dass die ICT im Norden nicht ohne staatliche Hilfe entwickelt worden seien.

Öffentliche „Telecenters“

Der grosse Bedarf nach Zugang zu modernen Informationsquellen und Kommunikationsmitteln kann in Entwicklungsländern am ehesten mit kollektiven Einrichtungen gedeckt werden, die in gewissem Sinn auch traditionellen Mustern des öffentlichen Informationsaustauschs entsprechen. Die Unesco setzt in einem von der Schweiz mitfinanzierten Programm auf eine Kombination von Lokalradio und „Telecenters“ in Gemeinschafts-Multimediazentren: Die Verbreitung gesprochener Information und elektron-

ische Hörerpost, Zugang zu ICT-Diensten und Anleitung dazu ergänzen sich.

Ein Erfolgsbeispiel aus Indien ist ein von Venkataraman Balaji präsentiertes Projekt der Swaminathan-Stiftung in der Region von Pondicherry. Nach Erhebungen über die Informationsflüsse und die technische Versorgung (Telefone sind selten, Fernsehgeräte stark verbreitet) wurden dörfliche Wissenszentren (knowledge centers) eingerichtet und Freiwillige in der Benützung der wichtigsten Computerprogramme ausgebildet. Darauf entwickelte sich ein lokales Informationsangebot in tamilischer Sprache und Schrift. Für den landwirtschaftlichen Alltag wichtige Daten, Auskünfte über Gesundheitsfragen und auch amtliche Informationen stossen auf Interesse in allen Schichten. Die Kommunikationsmöglichkeiten wirken sich auch positiv auf Selbsthilfeorganisationen aus.

Instrument in Entwicklungsorganisationen

In der Entwicklungszusammenarbeit sind ICT nicht zuletzt ein Mittel für den Wissensaushalt und die Projektstätigkeit. Stephen Denning schilderte, wie er in der Weltbank dem knowledge sharing, dem „horizontalen“, nicht über zentrale hierarchische Stellen laufenden Informationsaustausch, zum Durchbruch verholfen hat. Wissen ist heute zudem neben Finanzen offiziell eine Ressource, welche die Bank zur Verfügung stellt. Die Helvetas, die in sehr viel kleineren Dimensionen an ihrem Wissensmanagement arbeitet, hat in diesem Zusammenhang mit dem Strassenbau in Kamerun die Vorteile eines informatisierten geographischen Informationssystems kennen gelernt: Elektronisch hergestellte Karten eignen sich gut, um mit der Bevölkerung Planungsfragen zu erörtern und Interessenkonflikte zu klären. Nun soll die Verbreitung der ICT-Nutzung auch Ziel der Projektarbeit werden. Vorhaben wie die Vernetzung von Bauern oder die Integration der „digitalen Alphabetisierung“ in die Lehrerausbildung in Bhutan (in Partnerschaft mit dem Zürcher Seminar für pädagogische Grundausbildung) sind in Vorbereitung.

Christoph Wehrli, Neue Zürcher Zeitung, 21/03/2001.

Für kommunale Internet-Stationen

Ein flächendeckendes Netz kommunaler Internet-Stationen für alle ärmeren Regionen der Welt würde rund 100 Mrd. Dollar kosten. An einer Tagung hat Helvetas entsprechende Projekte vorgestellt.

Über ein spezielles Internet-Projekt im Süden Indiens hat an einer Tagung der Hilfsorganisation Helvetas zu den entwicklungspolitischen Konsequenzen der Informatik Venkataraman Balaji berichtet. Dieser war der Verantwortliche für ein Netz kommunaler Internet-Stationen, welche die indische Swaminathan Research Foundation in der Region von Pondicherry errichtete. Das Netz ermöglichte der Bevölkerung von vorerst elf Dörfern mit 21500 Einwohnern den Zugang zum Netz der Netze. Die Bevölkerung solle die von ihr gewünschten Informationen selbst bestimmen können, war die Vorgabe.

Verlangt wurden von den Bauern und Landarbeitern vor allem aktuelle Angaben über die offiziellen und inoffiziellen Marktpreise ihrer Produkte sowie über die Einkaufspreise von Saatgut, Düngemitteln und Pestiziden. Frauen wünschten Informationen zur Gesundheitspflege, vor allem zur Verhütung von Krankheiten ihrer Kinder. Im weiteren wollten sie erfahren, wie sie mit neuen handwerklichen Fertigkeiten ihre Einkommensbasis verbessern können. Der Anteil der Frauen beim Abrufen der Informationen blieb zunächst unterdurchschnittlich.

Internet-Zentren und Lokalradio

Über ähnliche Internet-Initiativen berichteten Harun-ur-Rashid von der Community Development Library aus Bangladesh, John Afele, Exekutivdirektor von Village Telecom aus Ghana, und Roberto Bissio, Exekutivdirektor des Third World Institute Montevideo, Uruguay. Stella Hughes von der Unesco sprach sich für eine Zusammenarbeit örtlicher Internet-Zentren und Lokalradios aus. Damit könne der Zugang zu lebenswichtigen Informationen für alle Bevölkerungsschichten verbessert werden. Vor allem könne erreicht werden, dass die Informationsangebote auf die Bedürfnisse und Ansprüche der gesamten Bevölkerung ausgerichtet werden.

Ein internationales Netzwerk von kommunalen Internet-Stationen würde 100 Mrd. Dollar kosten, erklärte Roberto Bissio. Dieser Aufwand wäre in globalem Rahmen leicht aufzubringen. Mit den Informationen könnten zwei Milliarden Menschen erreicht werden. Zu befürchten sei, dass im Hinblick auf die geringe Kaufkraft der Armen das internationale Interesse bescheiden bleibe. Bisher sicherten die G-7 Staaten nur gerade 1 Mrd. Dollar zu.

Das Netzwerk könnte nach Bissio die bisherige Einseitigkeit des Internet als Instrument der Wohlhabenden vermindern. Heute seien 95% aller Webseiten in Englisch abgefasst. Von den 201 Mio. Internet-Benützern lebten 112,4 Mio. in den USA und Kanada, 47,15 Mio. in Europa. In den USA hätten 26,3 % der Bevölkerung einen Internet-Anschluss, in der Schweiz 22,9%, in Ostasien 0,4%, in den arabischen Staaten 0,2% und in Afrika 0,1%.

Gegen Monopol-Projekte

Stephen Denning von der Weltbank und Esther Oettli von Helvetas hobten die stetig wachsende Bedeutung des raschen Informationsaustausches zwischen den Nichtregierungsorganisationen hervor. Dieser fördere eine koordinierte Willensbildung und diene so dem Ziel, den Stimmen der Armen in einer globalisierten Wirtschaft Gehör zu verschaffen.

In der lebhaften Diskussion wurde vor der Gefahr gewarnt, dass die internationale Informationsvernetzung für eigene Sonderinteressen missbraucht werde. Ins Visier geriet das 150 Mio. Dollar teure Weltbankprojekt eines „Global Development Gateway“, das den Informationsaustausch über Armut und nachhaltige Entwicklung sicherstellen soll. Es gefährde die Autonomie bestehender und projektierter Informatik-Netzwerke, wurde eingewendet. Für spontane Initiativen mit eigenständiger Willensbildung bestehe neben dem aufwändigen Grossprojekt kaum mehr ein realer Spielraum.

Jürg Meyer, Basler Zeitung, 23/03/2001

