Collecting and Propagating Local Development Content

The Case Stories

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CONTENTS

WHY LOCAL CONTENT?

One of the strengths of new information and communication technologies (ICTs) such as the Internet is the way they can help unlock distant expertise, knowledge and markets. However, this access – usually to 'foreign' content with foreign perspectives – has its limitations. Easier access to globalised knowledge is fast turning us into 'consumers' of distant and potentially irrelevant information. More worrying perhaps, developing countries are being 'invaded' by foreign ideas and values that may undermine or overwhelm local cultural heritage and economic livelihoods.

If we are serious about the use of ICTs as an empowerment tool – so poor people can shape decisions that affect their lives, so they can grasp economic and social opportunities, and so they can deal with misfortunes and disasters - then this foreign content must be matched by the expression and communication of local knowledge that is relevant to local situations. To a large extent, this means that ICTs need to be conveyors of locally relevant messages and information. They need to provide opportunities for local people to interact and communicate with each other, expressing their own ideas, knowledge and culture in their own languages.

This is not an easy task. As this report shows, content does not flow of its own accord; it needs owners or originators with the motivation to create, adapt or exchange it. As well as vision, these pioneers need to have the creative, technical and people skills to transform an idea into something that can be disseminated or exchanged. Moreover, since few of us have all the necessary capacities to create and communicate content, partnerships are essential to get the job done. There need to be very strong incentives for all the elements to come together at the right time and place.

Beyond these critical capacity and incentive issues, local content faces intense competition. Even in remote areas, the powers that 'push' global or just non-local content are often much stronger than those 'pushing' local content. This can be seen in television programming, in advertising, in the spread of global brands, in classrooms using imported curricula and examinations, in the use of foreign languages in schools and universities, in the lowly status of local languages, on the Internet, in research, in the dissemination of 'reliable' scientific information, and even in the reliance on foreign technical assistance. With a few exceptions (phones, community radio, or indigenous knowledge systems), most formal content and communication 'channels' in developing countries help to push 'external' content into local communities. Counter efforts to push local content on to global stages, such as African film, African research publications, 'southern voices' in the media, or the e-trading of crafts face an uphill struggle.

In a search for ways to promote local content, we have few guidelines to follow. Should we create more effective 'push' mechanisms, increasing and improving the supply of content? Should we focus on the demand side, so that local content is more highly valued? Should we look at the containers in which content is packaged, making them more attractive and accessible? Should different content types get different treatment?

Some of these answers are addressed in a companion report that presents the results from a consultation process to examine how local content in developing countries is created, adapted, and exchanged. This report contains summaries of the case stories generated by contributors around the world.

ILLUSTRATING LOCAL CONTENT – THE CASE STORIES

From the start of this study, we wanted to gain an appreciation of the diversity of local content initiatives – to understand what content is being created, how, who by, and who for. We sensed that local entrepreneurs and organisations around the world are already contributing to this diversity – experimenting with ICTs, developing local applications, generating local content, working with local languages, and finding creative ways to address local development challenges.

We therefore asked people working with local content to share their ideas and experiences, writing them up as case stories or think-pieces. Several are presented below.

❖ **Exporting handicrafts from Asia**

> By Simon Batchelor, simon@gamos.org

The international handicraft market was stimulated during the 1970's by alternative trading organisations (ATOs). It was seen as a mechanism by which artisans in developing countries could expand their markets thus securing their livelihoods. Since the 1970s the global market for "ethnic" goods has grown, as has the general market for giftware. With this growth, handicraft products have entered the mainstream global market and are not necessarily branded with an ethical mark. Most ATOs have found their own sales becoming more and more difficult, and in some cases they have experienced large losses as a business. In 2001 Oxfam stopped its work with handicraft producer groups because it was found to be loss making (they will continue to source craft products through other ATOs).

Against this changing climate the handicraft producers and ATOs have examined the potential for ICTs to facilitate sales and to improve the supply chain. Most groups have found that email can cut the costs between the exporting ATO (South based) and the importing ATO (North based). Communication between the local ATO and producer groups has been enhanced by telephone and fax, and there is considerable potential for lowering costs on photography by using digital photographs.

A number of groups have attempted to offer their products over the Internet with little success. However, some traders are finding that a CD-ROM can offer cheap and effective advertising.

In India and Bangladesh there are sizeable markets for handicrafts both internationally and locally. Local markets tend to be tourists in India and the wealthier in Bangladesh. BRAC, a leading craft producer in Bangladesh, conducts over 85% of its sales locally through a few shops.

For both local and international markets the display of goods through ICT is becoming increasingly important. Pictures of the crafts are being distributed through CD and online. Since accessing web content even in India is still relatively slow, middlemen prefer to distribute CD-ROMs. A CD-ROM (50 US Cents) can fit thousands of photos at high quality, while an hour in an Internet café can only download a few tens of images (on a good day) and costs 50 US Cents. The traders brand them with a front page describing their contact details and then are willing to distribute them as advertising material.

Digital photography also seems to reduce costs within the supply chain as producers send photos to the ATO for approval of designs. Similarly, both CD-ROMs and the Internet are useful in business-to-business negotiations. Choices can be made and then samples sent.

There is an issue of copying designs of handicrafts. Some groups who have good export markets (such as ASHA Trading, India) only put "last year's" products on the Internet and CD-ROMs. They fear that if they have a new design that appeals to their international contacts, other producer groups or traders will copy it in the same season.

Viewing products on ICTs has its limitations. Many of those who operate Internet sites that provide pictures of craft products note that their sales are very low. Surveys have indicated that people like to touch and feel a product before making the decision whether to buy it or not. Some ATOs such as Ten thousand villages, have decided not to use ICTs to try to sell products because they have found that

people who enter a shop (and have a shopping experience) are ten times more likely to buy something than those who just see a photo (on Internet).

Interviews with traders in India indicate that distribution of CD-ROMs is having its own pay back. Tourists take the CD home and can show their friends. To print a catalogue with thousands of colour photos would cost several tens of pounds, while the CD can be given away (since its cost is less than 50 US Cents).

Traders both ethically (fair trade) branded and "normal commercial", have found that digital photography has its uses for creating cheap advertising material. It is accepted throughout the industry that images alone have their limitations with this hand-crafted product, but nevertheless digital imagery has significantly reduced the costs for the traders of showing their wares.

From a content point of view this experience is important. It shows the capture of ethnic and cultural skills onto a digital media. Training in professional photography was not required and the photographic skill is evolving all the time as the traders get feedback on photos that do not show clearly the product.

Major lessons:

- No formal training was required for most of those interviewed regarding the use of cameras. Local entrepreneurs who operate computer services were able to supply the required technical expertise.

- It is important to share information using several media not just over the Internet. Internet sales have not met expectations and there is very little evidence that there have been significant sales. However, CD-ROM distribution has yielded anecdotal evidence of sales and improved trading performance.

- Local culture can be enhanced by ICTs, as new markets are created and stimulated. Where livelihood options are very limited (such as North East India) this may allow small producers to remain players in a global market when the philanthropic actions of the ATOs wane.

- Handicraft is in itself a poor livelihood option. It is not a repeat product and therefore requires the constant finding of new customers or creation of new products.

❖ **Global e-commerce by small and medium enterprises**

By Daniel Salcedo, dsalcedo@peoplink.org

Global e-commerce combines the two most powerful forces of today – international trade and the Internet. It holds the promise or disintermediating the long chain of middlemen that pay artisans only 10% of the final retail price for their handmade items. PEOPLink has been working with the International Federation for Alternative Trade (www.ifat.org), comprised of 142 organisations in 55 countries representing more than 400,000 artisans.

PEOPLink's recently launched the CatGen (for "catalogue generator") system that enables any enterprise anywhere in the world to create and maintain its own web catalogue. The hardware and software costs are minimal and the human capacity building is the most challenging. PEOPLink has trained 46 IFAT members to use CatGen to create their own web catalogues with thousands of articles. These individual sites are then aggregated into a searchable "catalogue of catalogues" (CoC) that can be seen at www.catgen.com/ifattest. Many IFAT buyers are using this catalogue to make their purchasing decisions.

CatGen is a free downloadable database application that runs off-line so it doesn't require large blocks of expensive on-line accessibility. Then with two mouse clicks the users can upload their datasets (or the most recent changes) to the CatGen server that then creates their updated web sites immediately.

Each dataset is password protected so that many enterprises can share the same computer (such as at a telecentre, Internet café, or chamber of commerce office).

The NGOs that represent the artisan communities maintain product information on thousands of items that buyers in Europe and North America are using increasingly to make purchasing decisions. For

now PEOPLink is covering all costs from donations but it will soon begin to charge a fee (ranging from $10 – 50 per month) for hosting each catalogue plus a small transaction fee.

The tools developed for working with artisans are now available for use by business networks such as chambers of commerce, national export associations, artist guilds, etc.

Major lessons:

- With the proper tools, local entrepreneurs can easily create and maintain their own web catalogues.

❖ Kakoba women's business CD (Uganda)

By Nkamuhebwa Willy, aidts@maf.or.ug

This case study is not written by the creator of the content but by a user. The Agency for Integrated Development Training Services (AIDTS) supports the Kakoba Women Small Enterprise Development (KWSED) through training women in small enterprise development skills.

The KWSED produced a CD on small enterprise development from the point of view of Ugandan women. The CD presents a fairly standard Web layout that can be accessed by a computer and software browser. Its content takes the viewer through the stages of thinking about and planning a business.

One of it distinctions is in its use of voice. All text on a page has been read aloud by a Ugandan woman thereby overcoming semi literacy needs and at the same time creating the necessary identification of the viewer with content. The sound is accessed by placing the cursor on the text and clicking – thereby giving some limited interactivity.

AIDTS has had an opportunity to use this CD developed by Rita Mijumbi that depicts real examples of successful and failed businesses initiated and managed by women. The CD is in a local language and the illustrations help the women to assess their entrepreneurial capacities and attributes in addition to their limitations. Once they have identified their weaknesses then AIDTS develops training content to bridge the gaps. AIDTS invites Rita regularly to use the CD in our women groups, motivating them to develop entrepreneurial skills through illustrations and role models indicated in the CD. Since these women are adults, they learn by sharing experiences after discussing the information on the CD.

The relevant content on this CD to our project beneficiaries include; starting with what you have to create a business, making money from a product or service. Finding the money you need, opportunity perception, business selection, business plan, start-up process, and new ways to make money.

My understanding of this CD is that a grant was given by IDRC and International Women's Tribune Centre to produce the CD locally. Ms Rita Mijumbi produced the CD using a computer and CD Writer. The CDs are produced within Uganda and sold on a cost recovery basis. Locally they are only $5 but if an NGO wants to use them beyond Uganda they ask $20.

The content was generated for rural women in Africa with ideas for earning money. There are costs involved in buying the CDs and in our case AIDTS pays. The information is passed to women entrepreneurs who can own it and apply it to their businesses.

For us, the CD presents the opportunity to start a discussion. Women who come to the centre can view the CD on our computer systems. We encourage groups to use the CD together at the same time. The content is shared among the groups of women of the project while training and continue using the illustrations in their weekly meetings. The women group leaders ensure that in their meetings they reflect on the information discussed during the training and how they can apply in their small enterprise development efforts.

So far, the CD has been able to motivate our women groups to assess their strengths and weaknesses as entrepreneurs and identify areas of support to succeed in business. The CD is only a small part of the training process but it has been very good for getting discussion started. By having technology the people seem to take it more seriously than if we stand and speak ourselves. They believe what is on the CD more than if we talk. Also the CD presents real case studies of women and

their ideas. We find that the women groups can talk freely about the case study, more than if the person who had a failed or good idea was in the room. It gives some neutralness.

Major lessons:

- As users of the CD, the major lesson is that information packaged to address the real needs, and depicting live examples can stimulate self-analysis in order to take appropriate actions.

- However users should be able to access computer facilities. There is need to establish more community centres and equip them to enable users to access and use this information.

- We have noted that many office computers do not have sound and so it is very good to have both the text and the sound. Some people who are secretaries in other offices have used the CD to get ideas about changing their job.

- The major key aspect is the use of local and realistic examples that are practiced by community and not only show how it can be done better.

❖ **Internet promotion and communications for Nigerian artists**

By Andrew Frankel, andy@graviton.net

Nigeria has long been recognized as a rich source of Artistic endeavour. During the 19th and 20th centuries, British colonial leadership supported the extraction and collection of what are now considered some of Africa's finest treasures. In the decade preceding Independence, Nigeria's Arts and intellectual scenes flourished. International recording and publishing companies set up offices in Nigeria soon to be followed by entrepreneurial domestic efforts in the arts industry.

Intellectual centres such as University of Ibadan and Ahmadu Bello University became creative engines for the new elite, and were matched by local movements such as the Oshogbo arts movement. By Independence, Lagos had a flourishing arts scene with theatres, galleries, museums, nightclubs and so forth. These were supported in turn by publishers, distributors, record manufacturers, and a broad network of retail outlets for creative products.

However, from roughly 1970 to 1984, Nigeria's economy diminished, and the arts industries began to show signs of weakness. Decca Records followed by EMI and others closed and sold their domestic operations, Art galleries and publishers began to close or reduce their output, International exchange with and awareness of Nigeria dwindled abroad. It was the fall of the Second Republic in 1983 and the initiation of the IMF's structural adjustment programmes of 1984 that eventually undermined the arts industry in total. Almost all organised artistic efforts became untenable as business ventures and simply ceased to exist

From the mid1980's we saw the beginnings of a new pattern. Nigerian artists each become an industry of their own in order to survive in a diminishing market. Each artist was left to individually replicate all the systems that would normally exist in a healthy industry. Rather than spend their time creating, artists were now forced to split their time between creating, producing, marketing, and distributing their own wares.

Nigeria today has a wealth of artists in every discipline. From the most traditional to the most contemporary, artists in Nigeria are working, creating and innovating more than ever. Yet all Nigerian artists face one significant challenge in common, isolation. The lack of basic industry components such as management, marketing, publishing, and distribution, coupled with Nigeria's lack of basic infrastructure leaves each and every Nigerian artist facing the same challenges individually.

A healthy arts industry contains at least four basic components; creative output provided by the artists themselves, facilitation provided by managers and producers and agents, promotion provided by marketing and brokering agents and distribution provided through distributors to retail networks where products can be reliably sold. In the visual arts, this means galleries and museums, of which Nigeria has few. In the written word, this means publishers and booksellers and Nigeria again has few. In music, this means studios, publishers and record companies and again Nigeria has few. Notwithstanding these gaps, the single biggest challenge facing Nigerian artists is the lack of reliable

telecommunications. Without telecommunications, artists are isolated from their peers and their audiences.

The advent of the Internet has revolutionized communications throughout much of the world. The World Wide Web has proven to be a powerful tool for marketing, information sharing and even sales. Its less glamorous sister email is however the real miracle tool. In the post-industrial Western nations, where arts industries are mature and functionally efficient, the Internet has created revolutionary opportunities for artists themselves. Allowing artists to take more individual control over the marketing and distribution of their works than ever before, some believe that the Internet will make existing arts industries irrelevant.

In Nigeria where artists are isolated, the Internet and particularly email present the most significant opportunity for change of the last two decades. However connectivity is poor and costs are high.

Nigeria-Arts.Net was conceived to meet this situation. It provides an interactive database and web mail system that will: provide each artist with a free, reliable email account; provide each artist with a page with media samples where they can present their talents and provide contact information; organise the artists into a searchable database for easy access and reference searching; and set up a centre (or centres) for artists to access the Internet and to learn about digital media and Internet communications.

Great emphasis has been placed on ensuring local participation and ownership. Each artist is responsible for the content on their page and is offered training and assistance in inputting and updating their materials.

No new content is being generated by Nigeria-Arts.Net. Rather the strategy and resources aim towards the development and implementation of sophisticated presentation tools for existing content. This content falls into two primary categories: artist information (biography, and contact information) and artistic samples (streaming media, digital images, digital publishing and a variety of other artist controllable formats) All content is chosen and provided by the artists themselves.

The intended audiences are many. Direct patrons of the arts, arts presenters, would be managers, agents and other industry professionals are all part of the core audience. Certainly Nigerians within the country and abroad are part of the audience. Finally, the largest audience is intended to be amateurs, fans of the arts interested in learning more about the richness of Nigeria and its artists.

Content will be presented in digitally protected formats where there is little or no chance of intellectual property theft. The artists themselves and their representatives will retain ownership of the works.

Phase 1 of the project has been funded by grants and donations. Second phase revenue generating strategies will include: modest artist registration fees; a commercial segment of the site for commercial enterprises such as galleries, publishers and recording studios; and consulting services for artists in representation or negotiation of work gained through the use of Nigeria-Arts.Net. Phase 3 of the project includes exploration and testing of online pay for use digital access systems that are just beginning to be deployed in Europe and the US.

When fully implemented, the site will provide artists with a potential stream of global revenue while effectively eradicating the need for middlemen and industry that are non-existent in the local Nigerian environment.

Major lessons:

This project was conceived and executed with the belief that local content creation is not an issue. Rather bringing content to the market and to a broader audience are the elusive goals confronting Nigerian artists. While the chosen strategy is no replacement for active industry, developed infrastructure, open borders and a stable economy, it will help artists bypass the hurdles put forth by the lack of these items. We believe it will take at least two years for the direct and benefits to be felt in a broad sense.

We believe this project will form the basis for next tier digital commerce strategies that have been highly touted and largely unrealised in the developed world. The successful deployment and use of this system should produce long-range impacts, which include increased exposure and opportunity for Nigerian artists, new audience and awareness of Nigeria, it are and its issues, increased dialogue and the fostering of community among Nigerian artists.

Major global organisations such as the World Bank and IMF have been touting the generative (and regenerative) powers of developing the arts and particularly the music industries in Africa. However, initial strategies have failed to grapple with and account for "on the ground" challenges such as lack of infrastructure, and local commerce systems. The successful implementation of this project will provide a stepping stone for such larger scale projects, should these prove to be of interest to the artist participating in the project.

❖ Rural development through radio (Nigeria)

By Hajia Salamatu Garba Jibril, wofan@ecnx.net

Rural women in Kano and other northern states of Nigeria have been placed on a subordinate role due to culture, tradition and religion. To break this culture of silence and inequality in the society, the Women Farmers Advancement Network (WOFAN) has been working with the rural groups to improve their status to freedom and equality through the use of various participatory development activities. One of such strategies is a 'Development Through Radio' project (DTR). The project was born as a result of the subordinate position of women to uplift their standard of living, improve their communication skills and sharpen their working relationship towards community development and conflict resolution.

A tripartite one year working relationship between FAMW-SADC Zimbabwe (Federation of African Media Women in the SADC region), WOFAN Kano and the local Radio Kano kicked off in January 2000 to empower women to speak out on issues affecting their well-being and to encourage their participation in community development activities.

In the project, rural women groups formed listeners clubs in 4 Kano communities. Members gather weekly after their income generation activities to listen to a purpose produced broadcast on their radios provided by the project. The women groups mostly listen to Hausa programmes on "You and your family", Politics today, radio request, drama, and of course the popular WOFAN programme called "GUNTUN GATARIN KA" which means self-reliance. At the end of the day, there is a news panorama programme called TASKA - every household listens to that - because it is a radio programme for "hot gossip". All the stated programmes are in the local languages and broadcast on the local radio, which serves about 100,000 people.

They also record some useful programmes, hints, and air their views on pressing issues in the communities, the state and Nigeria in general. The DTR coordinator pays a weekly visit to the four groups to collect their cassettes, listen to their problems and provide advice where necessary. The coordinator listens to the cassette together with the radio personnel (the producer of the programme) and they edit, if necessary, the script to meet the desired airtime provided for the group.

Women stated that the establishment of a rural radio programme to serve their communities has empowered them in the area of speech making. Both women and men submitted that through rural radio programme, they increased their interaction with government officials and people in the urban areas. They have kept alive some of their cultural practices and have shared these with those outside theirs on air. They have gained psychological satisfaction by hearing their voices on air. It has increased the rate of interaction within and between communities.

Even communities that currently fall outside the 15 target communities have been stimulated into action, because, after listening to the aired programmes packaged by their fellow rural community members, many of them have reacted through writing letters and paying visits to both WOFAN and the concerned communities.

❖ **Development through radio in Africa**

By Jennifer Sibanda, famwsadc@ecoweb.co.zw

In several African countries, radio listening clubs (RLCs) provide a participatory communication for development model that can mobilise communities and positively impact on the quality of their lives.

Clubs in Malawi, Sierra Leone, Nigeria, Namibia, Ghana, Zimbabwe, Angola, Zambia and South Africa participate in projects that create and produce radio programmes on the problems and priorities of development as identified by the rural populations in their discussion groups. The projects provide a two-way communication system between the groups and other groups, which helps to break the sense of isolation experienced by some communities. They help rural populations, particularly women, to learn to express themselves through use of the radio, empowering them by making them aware of their basic human rights, and mainstreaming local issues into wider debates.

In essence, programme production happens at three levels. At one level, RLC members gather together at a point to listen to a programme. A discussion of the issues raised in the programme ensues and is moderated and recorded by the monitor. The monitor has been trained in recording and in facilitating the discussions.

In each project, monitors are appointed/elected by their own groups to lead the project. They are trained on use of the radio, how to design a message, how to carry out/facilitate discussions, and how to record the issues that have been articulated by the groups. The groups spell out the burning issues within their communities, which they discuss and prioritise. The issues, in most cases, need responses from various authorities in government, parastatals, NGOs or the private sector. They then record these issues on audiotapes.

At the second level, the broadcaster and the coordinators listen to the recordings and compile a response to the issues raised. The coordinators are also responsible for identifying policy makers and the appropriate resource persons to respond to the issues raised in the discussions.

A project coordinator picks up the audiotapes from the rural areas and listens to them at the broadcasting station. The coordinator then identifies various organisations that need to respond to the issues raised by the local women and arranges interviews to collect responses to the issues raised. The package of community issues and interview responses is then broadcast on local radio. The voices heard are those of the community and those of the respondents.

The women benefit from this rich broadcast, which is full of diverse issues that, in most cases, affect them. The project supplies a radio and the consumables, batteries and tapes, to each group, to ensure that the women meet as a group and produce programmes that affect them as a group. The coordinator ensures that the radios stay in good working condition.

At the third level, the monitor is asked by the RLC to record issues of concern within the community. As in the above scenario, the coordinator solicits for a response from the relevant authority and airs both the request/enquiry, or simply brings back the recorded response to the RLC on a subsequent visit.

Major lessons:

- With such an approach, women or rural communities are able to set the agenda for their programmes, discussing local issues and posing questions to authorities.
- In Malawi and Mozambique, two community radio stations have been set up and are run, managed and controlled by local women.
- When women are given a voice, they are able to articulate issues that concern them.

❖ **Malawi action theatre and creative community mobilisation**

By Louise Keyworth, media@malawi.net

In March 2001, the Story Workshop Action Theatre was commissioned to lead a soil and water conservation (S&WC) mobilisation campaign in three villages in Thondwe, Malawi. The nine-month project aimed to identify the gaps between how the experts talk and how local people talk about the very same things. The campaign comprised four phases: Research; creative mobilisation, culminating in a Grand Festival; implementation support, follow-up and analysis; and development of a practical, illustrated manual on how to create a similar S&WC social mobilisation campaigns.

This case focuses on aspects of the social mobilisation phase. The mobilisation phase used the research findings and presented them to the communities through engaging them in various creative activities, including: Action Theatre performances, community dramas, music, singing, dancing, poetry, house-mural painting, rock painting, Promise Banner sewing, fuel-efficient stove invention and farmer-exchange visits. All activities required individuals of all ages exploring and expressing the S&WC issues. The purpose was to raise local awareness of S&WC issues while boosting creativity, motivation and problem-solving skills.

Creative social mobilisation unlocks existing local content and gives it a form in which people can more easily engage with it. Everyday experiences and skills form the content for activities which are given attention and which are celebrated. New opportunities are born out of what already exists and by bringing a new emphasis to something that is familiar it is possible to highlight local content and empower the owner.

The content creation includes words, sounds, images and objects that were generated by community members of all ages through conversations, performances and different creative activities which gave us and them access to individual understanding, across all sections of the community. The communities created content in the form of talking, arguing, not understanding, singing, rehearsing, moving, painting, drawing and complaining. As a result they owned the content and simultaneously offered us, as project-leaders, the opportunity to see what their various needs were. This provided us with the chance to design activities which would help the communities to address these needs in a way that was tailor made, non-threatening and interesting for willing members of the community.

We facilitated dialogue and activity, which took place, in households, amongst friends and in people's own minds. This brought attention to habits, behaviour, thoughts, beliefs, barriers and misconceptions, which until now had gone unquestioned. We then channelled this attention into constructive and celebratory ways to tackle the soil erosion that threatens their livelihoods. Creative mobilisation puts an onus on the creator's individual role and responsibilities.

Content was shared and shaped: between facilitators and local people, amongst groups and individuals involved in the activities and with onlookers e.g. husbands whose wives had painted the house, parents and peers of teenagers who painted rocks, children who watched and heard groups rehearsing their plays and songs, audiences at the Action Theatre performances and with those people who came to the Final Grand Festival.

TV and press in Malawi came to see and record the events that were then read and watched by people across the country. The project was posted on the Story Workshop website with photos and images from the field. These can be seen at www.storyworkshop.org.

Sharing is a flow of interest and requires energy and will. Without enough of these two the flow stops. This appears to be the case in this particular situation.

There was and still is physical evidence of the accomplishments generated by the communities' content. In the villages over 100 houses are painted with Agro-forestry images and several rocks are painted, which owners and passers-by will by reminded by; brightly embroidered Promise Banners hang in a public place with the names and commitments of over one hundred people in each village.

There is video, photographic and cassette footage of all songs, dances, plays, poems generated by groups and individuals in the communities. There are transcriptions of all interviews and videos of each Action Theatre participatory performance where chief's, men and women from the villages enter the action and express their opinions about the S&WC dilemmas posed in the play.

Reports and an illustrated manual have been written, designed and distributed. Presentations and PowerPoints have been presented. There were TV features and several newspaper articles with photographs. A description of the project can be seen on the organisation's website. The content was

sourced and engaged within the villages. People saw, see, talked and remember what happened and why.

The six-month process of sharing, between those we engaged with, and the amount of attention that was 'paid' to the villages gave weight, energy and momentum to the communities. Whilst our team - on a daily basis - was leading the process, the momentum and energy was constantly fuelled. Each time someone saw us, even if it was in the distance, they were reminded of what we were doing, why we were there and what that meant for them.

The outlook depends on whether this community makes practical use of the knowledge and awareness that was gained through this mobilisation. Further development and sustainability depends on whether they continue to share their information in an open way rather than holding onto the knowledge of S&WC techniques and the contributing factors.

Knowledge is power and we found that any content/knowledge/power in these communities was held onto with force. Sharing with the wider community, outside of family and friends, was rare. During the mobilisation sharing was encouraged, opened up and energised in positive ways. However, without this external encouragement it risks closing up again.

In terms of further development, we believe the project can be taken further, both within this and new communities, in many different countries. The need to understand S&WC issues and creating ways to tackle the language issues associated with that understanding is common.

The manual, produced at the end of the project, provides a practical tool kit for use at grassroots level, on how to organise and facilitate the creative mobilisation activities.

Major lessons:

- It is productive and important to approach people with the attitude that they hold the keys, the power and content/knowledge that we wanted. The long-term presence in the communities gave a realistic picture of the characters, dynamics and practices in the villages. As opposed to short-term activities which cultural formalities/protocol can often hinder and disguise; these formalities often result in people saying what they think you want to hear, rather than what they really think and do.

- The range of creative activities facilitated choice and freedom of expression, as well a positive and new experience using existing knowledge and skills. The results bought pride and a sense of achievement to many people.

- We also learned that communities are unable and unlikely to maintain the enthusiasm and intention on their own. In poverty stricken areas, thinking about and preparing for the long-term is difficult.

- Embracing, guiding and moving with this process of evolution requires flexibility and strong leadership. For some facilitators the element of the 'unknown' and need for on-the-spot initiative was a challenge.

- The project required a massive amount of organisational capacity and input, from the team who lived nearby to the community, the training and management that they required, the research and rehearsals with the actors, the logistics, negotiation and liaison between organisations, the documentation, not to mention the physical endurance, man-hours, conceptualisation and flexibility required.

- Of course, without the grant it could not have happened. To proceed further, government and other staff working permanently in an area would need training on how to run such activities. Most of the individual activities do not incur costs.

- Theatre performance can be a stimulus for change, when the audience recognises and identifies with what it sees. The drama acts like a tinted mirror: the onlookers recognise their problems in the drama, but the mirror sheds new light on these problems, helping the people to see solutions and room for change.

❖ Disseminating agricultural information in Tanzania

By Doris S. Matovelo, d.matovelo@suanet.ac.tz

Agriculture continues to play a central role in Tanzanian's economy. It contributes decisively to key areas like the country's gross domestic product, export earnings and employment. However, for a long time Tanzania's agricultural practices have been backward, a situation that perpetuates poverty. It is with this understanding that the country decided to have a university specializing in agriculture in its widest sense. Thus, one of the country's economic recovery strategies was the establishment of Sokoine University of Agriculture (SUA) in 1984.

A component of the new university was the establishment of the SUA university library, which is also the national library for agriculture known as Sokoine National Agricultural Library (SNAL). The objective of the project is to strengthen the capacity of SNAL in offering and disseminating agricultural information in the most efficient way possible to all its clientele, thus enabling it to fulfil its university and national mandate, and make a contribution to the economic development of Tanzania.

The library collects documents and information related to agriculture in its widest sense including among others: crops and soil science, veterinary medicine, animal science and production, food science, human nutrition, wild life, forestry and nature conservation, environment and gender issues.

Librarians collects documents of relevance from various sources including local and international organisations particularly those dealing with agriculture, government publishers, book and periodical dealers in the country and abroad, documents of research results by university researchers and other agricultural researchers located in zonal agricultural centres throughout the country. Also research publications from research done outside the country, especially those related to Tanzania.

As a university institution, the scope of the content is wide; some of it is much for academic interest while some is for practical use. The local content that is worth mentioning here include, documents and information on indigenous farming systems; methods for plant protection against diseases and pests, indigenous practices in livestock management and disease control, names in Kiswahili and other native languages of indigenous plants, names and characteristics of plants with medicinal /herbal value.

SUA research covers issues related to improvements in traditional farming systems including sustainable livestock development, preservation of environment, and HIV/AIDS and gender as related to agricultural development. Enormous amount of information is produced and published out of the research activities. The information is later re-packaged in form of leaflets, posters and other extension/outreach materials for farmers and other communities where some of the researches were carried out.

Sharing of the content is done using the Current Awareness service through the University Local Area Network (LAN), where users are informed of what have been collected. In addition, the library catalogue has been linked to the library website for a wider access. The catalogue is searchable by author, title, keyword or any word in title. These features simplify dissemination of bibliographic information of the content. The content is also advertised to farmers and other groups of people in need of agricultural information during the farmers' day, which for the past two years has been cerebrated nationally in Morogoro. Further to the above, librarians take the opportunity to make the content known during agricultural related conferences and workshops that are held at the University by presenting papers in some of those meetings.

Both traditional and modern technologies are being used for generating and sharing the content. Printed library guides and accessions bulletins are produced from time to time. Open access policy to the library resources is in use. For modern technology, UNESCO's Micro CDS/ISIS computer software is used for the electronic catalogue including web-based Online Public Access Catalogue (OPAC).

The computerization process has effectively taken off. Electronic catalogue has been obtained and has 20,000 records searchable online. The number of users of our library - apart form the university community - is increasing. It is our assumption that interested people are accessing the catalogue which's database is growing steadily.

The choice for a free of charge software (CDS/ISIS) as opposed to a ready-made commercial library software was made to take into consideration the issue of sustainability. Once the necessary technical skills have been acquired, and satisfactory funding level achieved, the library will be able to use the software optimally or change and acquire a different software altogether to be able to include other

library features other than the catalogue. Other strategies for sustainability of the services include charging a small fee by external library users, photocopying charges and a small charge for some of the Internet based services such as email. In addition the library has included electronic services into the government budgeting process hoping that eventually such services will be treated like any other traditional services that receives at least partial government funding.

❖ **Radio book series: Treatment of *Things Fall Apart* by *Chinua Achebe***

By Veronica Wilson, veronica.wilson@rnw.nl

African Media Productions (AMP) has planned a project for the millennium entitled, **Radio book Series** based on the works of selected African Writers. These selected writers portray the history and culture of African people and the various complex transformations necessary to embrace the new millennium.

In the mid 1990s, Africa began its recovery from an economic and social crisis brought about by poor management in all sectors of governments, international donors and advisors. However despite this recovery, social development continues to lag compared to other regions of the World. Literacy rates among the population 15 years and older is at 41 percent and even **lower** among women. With such staggering statistics, the experience captured by African writers in their books, have no impact on the general population. These writings remain in books, a format mostly accessible only to the elite in society and because they are often published abroad, these books remain beyond the reach of the average African. AMP is taking these books off the shelves and dramatising them for radio. The first novel to be dramatised is *Things Fall Apart* by *Chinua Achebe.*

The radio drama and the interview with the author are broadcast by radio stations so everyone within that transmission radius can hear this dramatised presentation of the contents of these books.

In addition, as radio is the most popular and effective form of communication, these dramatisations are providing Africans, who cannot read or write, a way of experiencing African social dilemmas, challenges and triumphs, as presented by African writers.

Alongside dramatising the books, AMP publishes a Study Guide for Secondary School Pupils to supplement the teaching and understanding of the novels and plays. This teaching aid is designed to be used primarily by teachers and in conjunction with the audio component. The aim is to stimulate pupils' interest in the work and to encourage them to read the entire book as well as other books by the author and others. The Study Guides also addresses some of the issue raised in the West African Examiners Report, chief of which, is to encourage critical thinking/analysis amongst the pupils.

Schools, technical colleges and Departments of Literature at Universities are supplied with the Study Guide and the interview with the author and the dramatised radio play for use in the setting of their classrooms, and so enhancing and giving life to the teaching and appreciation of African Literature.

It is an attempt to get the peoples of Africa to rediscover their heritage and culture, and to popularise the works of African writers outside the continent.

In addition, African writing represents a potent form of cultural expression and remains a domain where writers articulate and communicate their experiences through circumstances, events and conflicts of everyday life for social dialogues. The works of African writers cover a wide range of development issues, such as corruption, human rights, the rights of an individual and so on. The stories told are therefore another way of getting the development message across. Through the radio dramatisations of these stories, the public will hear these stories, relate to them, and hopefully it will assist them to make informed decisions on issues that effect them globally as well as locally.

The two knowledge sharing formats are radio and book. The audio component of the project has been broadcast by: Radio Veritas in Liberia in January 2002, Sierra Leone Broadcasting Service in March 2001, Radio Gambia in March 2002, and on Radio Netherlands in June 2001. It was also picked up and re-broadcast by the Canadian Broadcasting Corporation, Radio Australia, and the South African Broadcasting Corporation.

The study guide (and the audio component) is given to the local ministries of education for distribution to secondary schools. So far, we have supplied ministries in The Gambia, Sierra Leone, Benin, Nigeria, and Liberia.

It is too early to present an evaluation of AMP's achievements. We have produced one pilot project, the treatment of **Things Fall Apart** by **Chinua Achebe.** We received funding to produce a thousand copies. We are in the process of distributing this to Ministries of Education and to radio stations in Ghana, Nigeria, Sierra Leone, The Gambia and Liberia, so the new content we produced is being shared.

Major lessons:

- One of the major obstacles in creating this local content is persuading the owners of the original content (i.e. the writers and their publishers) to grant copyright permission to adapt/share this content in the novels/plays.

- Once we have obtained copyright permission we can create this new content, but its a challenge to get it to the target groups as we are heavily dependent on intermediaries to distribute it to enable us to share this content with the target groups. Implementing the idea and selling it/getting it to the target group is a critical step.

- The idea has to be picked up and implemented by media practitioners and writers. Adapting a play or dramatising a novel for radio is a specialized field of writing. Likewise directing radio drama demands special training.

- The Study Guide will require the skills of an experienced teacher who is also a recognized examiner to produce a work that provides the tools to foster the skills of independent reading and textual analysis.

- All the people working on this project are highly skilled professionals.

❖ Women and ICTs in Uganda

By Dorothy Okello, dokello@wougnet.org

It is widely recognised that women in Africa need increased access to ICTs in order to effectively address local problems of sustainable development and economic empowerment. Women of Uganda Network (WOUGNET) emerged to support this need by capitalising on the opportunities available with email and the Internet. WOUGNET was initiated in May 2000 by several women organisations in Uganda to promote and support the use of ICTs to empower women and women's organisations through access to information and to opportunities for exchange and empowerment.

For eighteen months prior to the formation of WOUGNET, an email list was maintained by Dorothy Okello, a specialist and trainer in communication technology, through which women's organisations in Uganda would share news and announcements, as well as tips on computer and Internet usage. As interest in the list grew, it became apparent that a structure and mechanism were needed to maintain and facilitate this communication. Consultations were held with several well-known women's organisations, and the consensus was that a network should be formed and that WOUGNET, once formed, should establish a companion website on which to profile the work of women's organisations.

Today, the WOUGNET website and mailing lists remain the only sources of information about and for women's organisations in Uganda, and they have become a key resource for its members and other interested partners. In addition to maintaining a website and email list, the network has opened up other opportunities for women's organisations to participate on the net. A WebDesign programme was set up in collaboration with InterConnection.org to develop websites for members, free of charge.

The main goal of WOUGNET is to enhance members' capacities and opportunities for exchange, collaboration and information sharing. The content generated by WOUGNET and members is reflective of the activities and needs of the members. A variety of information is exchanged via the WOUGNET mailing lists and website. These include: Information posted to the WOUGNET mailing list has included conferences and workshops being conducted, project reports, requests for information on current developments in various fields – gender, agriculture, technology, health, etc., as well as postings by potential volunteers for various activities.

Details on upcoming conferences, workshops, training, grants and computer/internet usage are distributed on the list and also posted on the website. The website features profiles on 34 women's

organisations as well as information on projects, activities, and documents produced by members, information and documentation on topics of interest to members and the general public, and links to national and international organisations and projects. A TechTips programme was started in January 2001 to address computer or IT-related queries or issues members may have. The TechTips team also prepares tips on topical issues of interest, for example, keeping one's computer virus free, obtaining and installing Acrobat Reader, etc.

Content is shared via the WOUGNET mailing lists and website: WOUGNET supports two mailing lists. First, the discussion list where all members are free to make postings. Currently, the WOUGNET mailing list has 115 subscribers, 60% of whom are Ugandan women. Second, the WOUGNET update mailing list is an 'announcement' type list used to circulate the Newsletter. Contributions and comments, from members and general public, to the newsletter are submitted directly to WOUGNET. The Newsletter includes information on new postings to the website and on WOUGNET activities. It goes out to members, an additional 157 newsletter subscribers, as well as to mailing lists with a focus on ICTs and/or gender issues.

The WOUGNET website features profiles, project news and other information from members as well as other news and features of interest to members and site visitors. Members/site visitors can contribute information directly online via online forms or by sending us the information via email. The highly popular areas of the WOUGNET website include the following pages: (a) Women Organisations in Uganda (b) Documents on Women's Issues in Uganda (c) Links & Resources (Women & Gender, ICT-related Organisations, Development, Education) (d) Women in Parliament.

In addition, in April 2001, a WebDesign programme was started in collaboration with InterConnection.org to develop websites for WOUGNET members, free of charge. Before this, in collaboration with Kabissa we had conducted an e-mail based workshop on website design.

The costs involved are met by a combination of donations from well-wishers and personal contributions. The website and mailing lists are currently administered on a volunteer basis. Volunteers use their own computer and Internet facilities. Currently, we rely on volunteer support in generating and mobilising content, responding to member requests, etc. However, increasingly, members are asking for additional information related to their specific fields of interest, and for details on funding, training and other opportunities. We are therefore currently seeking funding for a full-time information/research officer.

The primary technologies used to share information are email and the web. Occasionally, we will deliver hard copies of material to members – this is not an option we use often due to the production and delivery costs involved. The use of email and web technologies means that our access and reach are largely limited to the Kampala region – where it is relatively easier to gain Internet access. In light of this, some of the other technologies we are considering include collaborating with community radio stations. Another option is the set up of an Internet information hub where members without their own facilities can still gain access to the Internet and printout material of interest to them to take back and share with their home communities.

Today, the WOUGNET website and mailing lists remain the only sources of information about and for women's organisations in Uganda, and they have become a key resource for its members and other interested partners.

The spread of the Internet has continued to grow across Africa, but this is primarily limited to the major cities – which in Uganda means access by less than 20% of the population. Women in Uganda face additional barriers to accessing the Internet since the majority reside in rural areas, and since women have a lower literacy rate and a lower income level than men. WOUGNET is an opportunity to facilitate information sharing via the Internet with a focus on women – and yes, while largely limited to Kampala, it is a start.

It is important to build and strengthen partnerships with like-minded organisations nationally and internationally to learn and share ideas and experiences of using various technologies for content generation and sharing so as to identify new opportunities and activities as well as best practices.

Major lessons:

- There is great interest by a number of women organisations for a service like WOUGNET that provides a free web/email hosting service and support

- We believe WOUGNET presents a model that can certainly be replicated elsewhere, so long as the key things above (as applicable) are present for the community interested in setting up.

- However, what was not so much of an issue for us before – funding – is now what we need in order to strengthen and broaden our capacity to support networking and information-sharing among Ugandan women and women's organisations.

❖ **Uganda public Information centre on debt**

By Monica Rukundo, info@udn.or.ug

The Uganda Debt Network (UDN) is a coalition of civil society organisations, institutions and individuals that was formed in 1996. UDN is a pro-poor organisation that is committed to making its contribution to ensure that the quality of life of poor people improves. UDN is a leading advocacy and policy analysis organisation in the country. Since its formation, UDN has led the campaign for debt relief for Uganda and presently is involved in mobilising civil society to participate in the monitoring of the Poverty Action Fund (PAF), a mechanism established by government to mobilise savings from debt relief and donors for spending in poverty eradication programmes.

The efficiency and effectiveness of UDNs functions and processes had been severely hampered by a number of factors related to access to information, information sharing facilities, appropriate technology and skills to effectively meet mission objectives.

To address these, a Public Information Centre is all about information gathering, processing or repackaging and finally its dissemination. The project has two main objectives: First, to expand the outreach function of UDN, both to Network Members and to the public. Greater and effective interaction with stakeholders, common interest and public is improving through using existing infrastructure or infrastructure is to be developed. Second, is to strengthen the internal organisation of UDN in a financially sustainable manner.

All kinds of information is being generated. There are reports, releases, appeals and calls for action, publications, leaflets, fliers, newsletters and many more for the campaigns and advocacy work. The content is generated from all levels. There is information from the policy makers like the budgets, which are translated by our local partners for the consumption and use by the people at the grassroots. There are 'performance of the economy' reports from the Ministry of finance, which are distributed to all other partners for analysis purposes. Then there are various calls for action from the people at the grassroots demanding for changes in various polices.

Content is mainly shared through email. However many of the network members will simply collect the information and bring it to UDN of floppies or in hard copy form. There have been different distribution lists created for the purposes to sending information to various people. If the communication is not too lengthy, it can be sent through the short message service to someone's phone. The sharing of information is done by people from all levels with information to pass on. Lately we are making floppies and CD-ROMs and designing the information to be easily accessible. These are created like web pages, which are linked to various information sources to enable the readers to make the most out of the information.

So far, the PIC has facilitated research and development and enabled increased communication, information sharing, and collaboration among researchers and development actors. This has been done through increased communication with both the people at the grassroots and Policy makers. It has encouraged communities in developing the infrastructure necessary for Internet access. Some of our grassroots members have found it important to get email address where information can be availed to them much faster and cheaply. Therefore they have been able to translate some information into there local languages. It has increased the capacity of network members to generate and repackage information resulting from research for availability on the Internet. Currently UDN is working on a weekly newsletter where information collected through out the week can be disseminated weekly. This change has been made because we have realised that a lot of information comes to UDN yet other members do not get access to it. UDN has found its way into many distribution groups and so it's using this capacity to ensure as much information gathering and disseminating as is possible to influence policies.

❖ **Virtual reality for development (Uganda)**

By Peter Schioler, pt.schioler@unesco.org

This project is exploring the how to create relevant ICT based local content for telecentres in Africa by developing using 3D and multimedia techniques - a basic implementation of Virtual Reality.

At the Nakaseke Multipurpose Community Telecentre, modern ICT and library services are being introduced as tools for community development. Most of the computer applications originally available at the telecentre were, however, developed in accordance with western logic and for western users; furthermore a large percentage of the community is functionally illiterate and is therefore barred from making use of most of the services in the telecentre. This wrongly has given the telecentre an image of being 'only for the educated'.

There is a strong need to create local ICT based content, relevant and accessible to the community, in order to make the telecentre truly a <u>community</u> telecentre. ICT based local content must be innovative in making use of both traditional means of communication and information sharing as well as take advantage of the latest advances in computer application development.

With 3D software development tools it is now possible to create simple computer based training applications that simulates a specific learning environment and communicates the message using a range of multimedia techniques rather than text.

A computer based training application was created using 3D and multimedia technology. The community of Nakaseke identified a need for a training application in rural water and sanitation, as well as what should be taught under the topic and how it should be presented. The actual programming was done by Naledi 3D Factory, a company in South Africa, in cooperation with ITEK, which was responsible for testing and adaptation of the application in Uganda, as the nucleus of a national VR application development centre.

The application is targeting specifically children and youth in the community for training and awareness raising on good water sanitation practises. The application can however also be used as a first introduction to computers, as it creates a familiar local environment in images, sounds – but communicated via a PC.

The content, good water sanitation practises for a rural community in East Africa, is communicated by simulating two traditional homesteads with houses, bathing areas, kitchens, pit latrines, water collection, domestic animals etc in a 3D environment. The user moves around in the simulated environment and activates the areas of his/her interest e.g. the bathing area, and investigates objects, e.g. picks up a fruit. When an item is activated the user is informed by a voice in local language (Luganda) about the good sanitation practises connected to this specific area. In some cases video clips are also shown on how to perform specific tasks.

The application is primarily made available at the Nakaseke Multipurpose Community Telecentre where the community accesses it free of charge. UNESCO and Naledi 3D Factory have jointly funded the development of this first prototype.

The project has piloted a new and innovative way of generating local ICT based content to African communities that makes extensive use of traditional oral and visual communication and information means while the use of 3D and multimedia techniques provides a highly individualized and non-linear approach to the learning material.

The application was extensively tested in Nakaseke and was greatly appreciated. An improved version of the application, mainly with some technical improvements, is in preparation. This version will be distributed in the region via telecentre, school networks and others free of charge as part of Unesco's 'PUBLIC@' series of public domain information.

Major lessons:

- That new opportunities are arising for creating and sharing relevant ICT based local content in developing countries. The challenge is now how to create optimal learning applications making use of new and traditional communication and information techniques.

- To create the Nakaseke VR application it was necessary to create a strong team of stakeholders from the community, sanitation and health experts, software developers and others in order to create the storyboard for the application.

- When creating truly local applications one also limits the usefulness of the application on a larger scale. The Nakaseke VR application is simulating the environment in a village in central Uganda and the water sanitation problems encountered there. The same application will not be as useful for communities in, for example, costal or arid zones.

❖ **ICTs for African educators: An endogenous training module**

By Hezekiel Dlamini, h.dlamini@unesco.org

This project explores how to create and/or assemble relevant ICT applications for use in local curricula for secondary schools in Africa by developing using HTML and multimedia techniques.

In Uganda, computer and Internet facilities are being introduced as tools for aiding teaching and learning. Most of the computer applications available at the schools are standard pre-installed general-use packages and are not presented in an easy to learn modes for novice African schools teachers. Furthermore, many schoolteachers in Africa are functionally illiterate in ICTs and are therefore barred from benefiting from powerful computer applications to improve the teaching and learning environment. This wrongly confines delivery systems of secondary school education to the traditional modes where the teacher is viewed as the only source of information.

There is a strong need to create and/or assemble ICT applications that are relevant to local teaching/learning needs, in order to explore innovative ways of delivering education to African schools and even endeavour to open the learning environment to make it accessible to those who are unable to experience formal learning in a classroom, thus providing opportunities for lifelong learning.

With HTML and supplemented by image processing and multimedia programming techniques, it is now possible to develop or assemble simple computer based training applications that effectively illustrate specific teaching/learning methodologies in the local context.

The identification of needed ICT applications for education is done by all the cooperating partners, with the leadership of the Uganda Curriculum Development Centre. The Teacher Training Colleges and Secondary Schools propose subject areas that require ICT-aided teaching/learning. The Makerere Institute for Computer Science searches and assembles existing applications if available, and develops illustrations that are specific to the local curriculum. Where necessary, a simplified step-by-step guide is prepared as an addition to graphic illustrations.

The initial application targets secondary school teachers and students for training and awareness raising on ways of teaching/learning using ICT support. The CD-ROM is designed for self-tutoring and guidance on ICTs in education, including examples of courseware and basic management applications. It can also be used as a first introduction to computers, as it provides focused guidance for busy educators, while developing basic skills in the general use of common software packages and their use in the implementation and management of education programmes.

The 'ICTs for African Educators' application is contained in a CD-ROM that has been evaluated by the co-operating institutions before distribution to Teacher Training Colleges (TTCs) and secondary schools country-wide. All participating institutions have the responsibility of distributing the CD-ROMs and for collecting feedback from users. The development team (at Makerere Institute of Computer Science) is responsible for incorporating improvements as feedback is received from users and for ensuring compatibility with emerging software upgrades. The CD-ROM is being reproduced by UNESCO for free distribution to Teacher Training Colleges and secondary schools and to interested teachers and teacher educators in Africa and other developing regions. It may be copied and shared freely by the users.

The project has piloted a new and innovative way of generating local ICT-based tools for supporting secondary school education in Africa. These tools can also be introduced in primary schools. The content also includes ideas on possible collaborative initiatives that schools can develop among themselves, to promote learning through search methods on topical issues such as HIV/AIDS.

The project has served to demonstrate local capacity building and creativity in Africa. The development of this application is inexpensive given that the main costs were equipment and capacity building which remain with a national team dedicated to further building know-how and developing other applications on a public service basis

Major lessons:

- That new opportunities are arising for creation and sharing of relevant ICT based applications by developing countries for their unique learning environments. The challenge is now how to create optimal learning applications making use of new and traditional communication and information techniques.

- To create the Uganda "ICTs for African Educators" training package it was necessary to provide technical training to the local team of developers and create strong links with the other institutions that play critical roles in the country's educational system.

- When the CD-ROM is introduced in the schools, it will be necessary to ensure that at least the teachers have access to computers, and are willing to use, evaluate the application and provide feedback.

- When creating truly local applications one also limits the usefulness of the application on a larger scale. The Uganda "ICTs for African Educators" training package focuses on the Ugandan secondary school curriculum, but it can serve as an example to other English speaking countries in the region.

- Because of minimal financing and the desire of the Ugandan team to build its basic human capacity, this first application used basic HTML generation technology. In the follow-up phase, the introduction of specialized courseware generating technology would enable the development of applications with greater interactivity and impact, and also enable the development community to be more readily extended to the teachers themselves. However, such as step will require further financial resources, and thus additional public or international investment.

❖ Producing and exchanging audio-visual endogenous productions

By Rosa Gonzalez, r.gonzalez@unesco.org

Despite the fact that the electronic media are the strongest tools of modern societies for cultural expression and for social change, the audio-visual industry is more and more dominated by powerful conglomerates that account for the majority of productions seen by audiences world-wide. UNESCO's action in recent years has focused on improving the endogenous production and distribution of quality audio-visual programmes in developing countries and the promotion of concepts such as public service broadcasting and the potential of the audio-visual media for development.

The organisation has worked on a global project including training, distribution and production activities, being extremely careful to identify local talent and stimulate creativity, avoiding as much as possible influences from Western formatting. The problems addressed include: Inadequate amount of local television content in the developing world, overwhelmed with the presence of foreign programming; Little training opportunities in the developing countries for television professionals; Inadequate financial resources and rudimentary technical facilities for audio-visual production; Underused television as a powerful tool for social change: In Asia alone, almost two billion people of different races, religions and cultures are under the age of 24. The most powerful way of communicating with them is television but the numerous television channels provide mainly entertainment, broadcasting the pop culture of the West; need for distribution mechanisms which support local production, thus enhancing artistic creation, cultural and linguistic diversity.

The local content being generated or exchanged by this project is any television genre (fiction, documentary, magazine) except for advertising. Cinema is excluded.

A selection is made to ensure excellence and public service oriented content. All programmes being produced or screened in activities/events organised under this project have been completely created by local talent, from the scriptwriting to the post-production work. The productions' rights are usually

owned by the local producer, who has sold the non-exclusive rights to the financing bodies. In the case of productions made by local television stations, the owners of the rights are the local televisions and not individual producers.

Despite the existence of production funds for particular purposes (*Agence de la Francophonie* for French-language promotion, church funds for certain value-promoting contents, European Commission's reimbursable loans for European-oriented programmes, etc.), young talent in developing countries have very limited access to seed funding for their productions. Our experience shows that quality, local productions can however be realised with very modest budgets.

The local audio-visual productions are being shared through well-established exchange networks (markets and festivals) and through UNESCO-organised training events gathering those creating the content. This allows those producing the content to get acquainted with the work being created by their peers in other countries and regions.

The material is then made available on UNESCO's website. However, due to current technological limitations and copyright issues, the programmes cannot be viewed. UNESCO acts as a clearinghouse for these local materials proposing it to different partners for numerous international, regional and national activities. Through these activities, international audiences are having access to it: TV Samoa is broadcasting material from Zimbabwe or Uruguay, Afghanistan is getting programming from Mexico or Chad, etc. Local producers are getting to international audiences: A film from Tonga was watched with excitement by an international audience in Canada.

Face-to-face communication cannot be replaced by any technology but the use of a website has proved to be extremely useful in sharing this content. However, technological and copyright limitations have not allowed us so far to go beyond using technology only as a support for interpersonal communication. Trust building through the Internet has not been successful in this area.

So far the project has generated seven concrete endogenous audio-visual productions from Chad, Congo, Mali, Niger, Nigeria, Togo and Zimbabwe. With very limited funding, local stories are told in particularly creative ways. For example, in one Chadian TV production an old Peugeot 404 car becomes the protagonist, questioning African development. In the Congolese documentary "Afro@digital", African artists analyse the use of digital technology in the continent and its consequences on audio-visual expression: the image-makers and the story-tellers question how the new "digital" revolution is to going to change the content and the creation chain. Is the digital technology a budget choice or an artistic one? Is the narration structure going to be modified? Will there be a "digital" way of thinking in Africa?

The project has also created an informal network of close to a thousand talented content producers in developing countries and stimulated the organisation of numerous content-exchange activities. It has contributed to the exchange of content among countries and regions through close to forty international or regional events, each with hundreds if not thousands of attendants. The recently established Festival of African Television would, for example, 'borrow' a selection of works through the network for a special showcase; the New York African Film Festival would do the same. Similarly the International Market of Independent and local broadcasters would set up a special on-line kiosk with digitalised previews of productions from the network. However, the project needs the strength of an international body placed in a privileged position to enhance the exchanges among regions. This has been so far the role of UNESCO.

Major lessons:

- Audio-visual production is a very difficult "content" to handle. Because of the ease that content can be copied and pirated, its circulation has to be closely monitored. Online ventures need to find a solution for clearing the rights in a fair manner for the creator.

❖ **Digital development anthologies for Africa**

By John Rose, j.rose@unesco.org

UNESCO, through its intergovernmental Information for All Programme, is striving to promote development of, and to facilitate access to, the public domain of information which is freely available to all (governmental information, scientific and cultural information, cultural heritage and public archival records). This common heritage is an important seed-bed for development: whether used by development institutions and programmes, individual citizens, or cultural industries developing value-added information products. One element of UNESCO's strategy is preparation of the 'Public@' series of model CD-ROMs to disseminate representative collections of public domain information and other information provided on an 'open access' basis by copyright holders.

The countries of sub-Saharan Africa, particularly the least-developed countries, have significant amounts of public domain information, relevant to grass-roots development needs, which are not widely available to those who can use it because insufficiently known or inadequately distributed. Another constraint is the large number of illiterate or minimally literate potential users.

The purpose of this project was to help countries with similar development situations and needs to collect, evaluate and disseminate development information to the grass roots level through digital libraries, working in two sub-regions as models: the French-speaking Sahel (7 countries) and East Africa (3 countries). The strategy involves: i) assembling coalitions of producers of development information at the national level to ensure open access, ii) building digital development anthologies of sub-regional interest for grass-roots use on CD-ROM, and iii) disseminating and exploiting this information through networks of intermediary institutions.

The approach is not to generate new information but rather to collect, evaluate and make available existing local content on an 'open access' basis. This information includes extension type literature of government agencies and NGOs that are in the public domain or available free of charge, and commercially published information provided by rights holders for free distribution in this project. The development anthologies cover a wide, multidisciplinary range of information needed in development.

At the national level, a coordinator in each country, chosen for experience in grass-roots information needs, collected documents from national publishers in the public service or commercial sectors, selected the relevant documents and dispatched them to UNESCO in Paris. Rights holders were asked to sign a release authorizing free distribution according to negotiated conditions (typically without restrictions, but some restricting republication).

At the international level UNESCO agreed with intergovernmental (CTA, FAO, Institut du Sahel, UNDP, World Bank), governmental (CTA) and non-governmental (AFATTA, Centre Songhaï, Club du Sahel, GRET) organisations, as well as commercial publishers to provide relevant documents under the above conditions. Further documents were provided in digital form by Humanity Libraries project.

UNESCO, in consultation with producers and the national coordinators (through a cooperative electronic workspace in the case of the Sahel), made the final choice of documents, eliminating some which were inappropriate for reason of level or reliability. The final selection for the two CD-ROMs included:

- on the Sahel: 729 documents (59,500 pages) including 421 documents (31,500 pages) collected at the national level and 308 documents (28,000 pages) collected at the international level

- on East Africa: 592 documents (54,550 pages) including 270 documents (27,150 pages) collected at the national level and 322 documents (27,400 pages) collected at the international level

The Sahelian documents are all in French and the East African documents are in English or Kiswahili.

Human Info NGO digitised the documents and produced two CD-ROMs (SAHEL point DOC and East African Development Library) using the open source Greenstone Digital Library Software. The documents not available in digital form were scanned and separated into digitised text and image with the aid of OCR and image processing software. New tables of contents were generated to correspond to the revised pagination.

The Greenstone Digital Library Software, and open source package produced by the University of Waikato in New Zealand, was used to classify, order, compress and index the documents. The Greenstone software enables full text search of a digital library, using Boolean logic or free search

terms, combined with selection according to predefined attributes (in this case subject classification, publisher, language or country of origin).

Most of the information has been selected to target a reader at the lower secondary level, although some is accessible to basic readers. The CD-ROMs are intended for use by patrons of information centres serving grass-roots users, either for direct use or for interpretation and presentation by librarians and information officers.

The cost of collecting and digitising the information and pressing the CD-ROMs was about $140,000, of which the greatest expenses were about $50,000 for digitisation and the remainder mainly for national and international coordination, including the organisation of national workshops to sensitise and mobilize information producers.

In each of the 10 participating countries, one or more distribution centres (generally two per country, but in some cases one or three) were selected by the national coordinator and UNESCO, in consultation with the UNESCO National Commission. These centres are generally public libraries or documentation centres in government development agencies or NGOs. Each of the 20 centres received a PC with printer under the project, along with copies of the CD-ROM for their sub-region for consultation on site and distribution to other interested institutions and individuals.

Multipurpose community telecentres (MCTs) and community multimedia centres (CMCs) sponsored by UNESCO (six in Uganda, one in Tanzania, one in Mali and one in the Sahelian region of Bénin) are additional users, and SAHEL point DOC will be provided to the network of 160 computerized rural radios and 50 development information centres being established under a UNDP project in Niger with UNESCO support.

The CD-ROMs will be provided, free of charge within available stocks, to concerned institutions in the target sub-regions, and also with appropriate caveat on relevance, to requesting institutions in the rest of Africa and other developing regions; these institutions will also be invited to provide feedback. They may be copied without restriction by the users onto hard disks or recordable CD-ROMs for further local distribution.

The project has shown the feasibility of cooperatively producing and sharing digital development anthologies of existing, highly relevant information in developing countries (all but two of which are least developed countries) in sub-Saharan Africa.

The original hope that this project could be sustained under the aegis of appropriate sub-regional organisations does not seem realizable in the near future due to the lack of sufficiently strong integrating institutions in the sub-regions concerned. UNESCO is therefore encouraging the participating countries and institutions to continue this work at the national and institutional levels, encouraging all partners to share information and production capacity in networks.

Major lessons:

- Development support institutions in developing countries, whether governmental or non-governmental, are eager to identify, share and exploit the mass of underused development information available the public domain.

- ICTs, particularly digital library techniques for handling vast stores of information, can greatly facilitate cost effective access to basic or specifically needed information.

- Locally relevant CD-ROMs can play a major role in effective dissemination, even in the absence of telecommunication links, provided that basic computer and printing facilities are available at institutional or communal levels, a situation that is increasingly realized through SchoolNets, community telecentres and other ICT-for-development initiatives.

- Basic promotion and coordination by a national champion were sufficient to mobilize and empower concerned national actors to collect, select, share and disseminate public domain information for development, but the ICT based production support was carried by international funds and partners.

- To proceed further, it will be necessary to enable the participating countries and institutions to obtain and master the technologies for digitisation and production of digital libraries. The latter is not a difficult problem with a tool such as Greenstone; the major issue is therefore how to setting up affordable facilities for scanning and digitisation of documents.

- The vast majority of published development information in developing countries is not available in machine-readable form. And although most formal publications are produced today with computerized techniques, many if not most publishers of hard copy documents are still unable to provide end-users with machine-readable copy compatible with common word processing and desktop publishing programmes. Thus, although the increasing use of desktop and Internet publishing will ultimately reduce the importance of digitisation, it is and will remain in the medium term a major bottleneck to be overcome.

- Since the project conception is independent of the content of the information, and relies on basic technology, replication should be possible in a wide range of developing countries and regions. Such digital development anthologies scale up naturally since, once produced, they can be distributed at nominal cost to new users acquiring suitable computer equipment.

❖ African journals online (Africa)

By Diana Rosenberg, drosenberg@inasp.info

African journals publishers have not been able to take advantage of the opportunities offered by the Internet, because of weak technological infrastructures and costs. Many have ceased publication altogether. African research has suffered, because the means to publish research results are lacking and the results on which to develop further research are not disseminated.

The aim of this project is to encourage African scholars to participate actively in information creation, sharing and dissemination, by providing online access, through one interface, to the tables of contents (TOCs) and abstracts of journals currently published in Africa, backed by a document delivery service.

The project is currently managed and hosted by the International Network for the Availability of Scientific Publications (INASP). Each journal is a member and beneficiary of the service.

Normally, each journal generates TOCs and abstracts and sends these to INASP, as each issue is published. INASP maintains the website and adds other value-added features, like the search feature, links to full text (where available), instructions to authors and document delivery options. Each journal retains copyright of its contents. Funding to maintain the service is raised by INASP from a number of donor agencies.

The contents of over 70 journals, all currently published in Africa, are now available on the website: 9 in agricultural sciences, 20 in science and technology, 13 in health and 29 in social sciences.

The use made of the site shows that it is now a leading source for those wanting access to information and research on Africa. African journals now have a much greater visibility. Users of the service, on the whole, are academics and researchers. A first time user registers and in the first 16 months over 2,500 registered. About 1,300 of these are from North America and Europe and 900 from Africa. Many of those from the West are also Africans. Once registered, the user can access the TOCs and abstracts of journals (by browsing through titles or by searching by key word) and link to full text or request document delivery. Take up of the document delivery option has been, to date, minimal. Access to the TOCs and abstracts is free. A charge is made for document delivery.

An offshoot of AJOL is a project facilitating the full text publication of a number of African journals on the Internet.

The service relies on donor funds for its continuation. African journals have not as yet benefited financially from being featured on AJOL, either through increased numbers of subscriptions or paid-for articles.

Major lessons:

- The project illustrates how the Internet can be used to share, locally, nationally and internationally, local content that has already been created.

- Absolutely necessary is a body committed to the establishment and management of the centralized sharing mechanism.

- To move to self-sustainability, journal publishers will have to see financial benefits so that they can pay for inclusion. The other alternative is for institutions like libraries to take out a subscription to the service. However there is no indication that the information contained in African published journals is, at the moment, vital to them.

- African journals are currently not strong. Therefore it will take a long time before they themselves are able to pay for a service like AJOL. Also many do not have the technical knowledge to upload their own TOCs and abstracts or to publish electronic full text.

- The AJOL model is cheap to maintain once it has been established.

❖ Tanzania Online

By Margareth Nzuki, tzonline@esrf.or.tz

In Tanzania, a lot of data and information is produced, analysed and disseminated as reports, seminar or workshop papers by various resource people, and agencies in the government, non-governmental organisations, the private sector and the donor community, but few people get access to them due to lack of information coordination. As a result, decision-making processes at all levels suffer.

To try and deal with this, Tanzania Online was set up as a gateway to information on development issues in Tanzania. It is a UNDP/UN, Government of Tanzania and Economic and Social Research Foundation (ESRF) initiative to address problems faced by Government officials, policy makers, the private sector, civil society, donor community, researchers and academicians in accessing information on development issues in Tanzania. The Initiative is implemented in the context of aid coordination and, in particular, the Tanzania Assistance Strategy.

The aim is to provide an interactive facility for easy access to a comprehensive set of documents about development in Tanzania, analytic work about priorities in development and progress towards poverty reduction and other development targets. The output of the initiative is an up-to-date online Internet-based database consisting of a comprehensive set of documents in full text on development issues in Tanzania. Tanzania Online expects to improve access and exchange of information among and between key government institutions, the public, donor community and the private sector, civil society, researchers and academicians.

The database includes analytic documents concerning development in Tanzania, work about priorities in development, progress towards poverty reduction and other sector reform developments. The subjects covered are: education, agriculture, mining, tourism, trade, industries, health, poverty reduction, water, environment, women development, the private sector development, science and technology and others on development issues. Emphasis is put on partnership with information producers, consumers and distributors, which include government ministries, donor community, universities, etc.

The database contains government reports, research papers, reports from donor community, books, journal articles and technical reports. Internet based materials that fall under the above category are also included. Documents in their final forms, are collected in electronic format or hard copy. The emphasis is on current information; documents to be included in the database are those published/written from 1990 onwards and key documents that were written before 1990. The database can be queried free via the Internet at www.tzonline.org or at www.tanzania-online.org where documents can be accessed in PDF format. A monthly current awareness list is e-mailed to users with no web access.

What has been achieved? The database is now a tool used to enhance knowledge sharing and networking among stakeholders and it has increased global access to locally generated documents as an information medium for disseminating research results and government documents. The database has so far about 1000 documents online and usage statistics shows that more than 22,000 visitors have visited the site and the amount is increasing daily. So far 540 have registered as subscribers.

The Initiative has formed cooperation with the National Website available at www.tanzania.go.tz that is maintained by the Government through the President's Office (Planning and Privatisation). In the cooperation, Tanzania Online is currently hosting the site in its server and it provides database support. Thus the Government will not need to maintain a different database for government

documents but those documents are kept in Tanzania Online Database and linked to the National Website.

Major lessons

- 90% of documents are collected in hard copy.
- The culture of keeping and volunteering to have documents put online is still not widely accepted.
- The culture in research is shifting slowly towards electronic sources
- The service is not yet selling like 'hot cakes' so it has to continue to be supplied on a promotional and public service basis.

❖ **Africa Pulse (Southern Africa)**

By Alan Finlay, alanf@sn.apc.org

Africa Pulse is an information portal for the Civil Society sector in the Southern African Development Community. It uses state-of-the-art technology to allow organisations throughout the region to publish content directly to the site, whether it be news of the arrest of a journalist in Zambia, the HIV/Aids crisis in South Africa, a profile of an organisation's work in Tanzania, the devastation caused by a flood in Mozambique, an analysis of the war against Unita, or an election update from Harare. Organisations, academics, journalists, researchers, activists and unions are free to publish any material on the portal that is relevant to the Civil Society sector and to the region. There is space for organisations to alert the sector to events, such as protests, book launches, seminars or campaigns, and to advertise job vacancies. A database of website addresses searchable by category and country on anything from education, conflict and governance, to democracy and human rights also provides a valuable resource to the sector.

Africa Pulse aims to specifically address the needs for a portal for development and social advocacy information in Africa, hosted, designed and steered by Africans themselves. It seeks to stimulate the generation of original "grassroots" content throughout the region.

In essence Africa Pulse is a space that needs to be defined by the region. The content on the portal is moderated by a team of regionally-based moderators. While moderators based in Johannesburg will ensure that the portal is kept lively, relevant and current, the portal relies on a 'bottom-up' publishing structure. What we mean by this, is that organisations are given direct access to the portal's publishing space. In a sense, they determine what they want to see published there. Although we have a content partnership programme, the primary aim of the portal is not to re-represent already published material. Rather, it is to provide a regional platform for issues and concerns that are not being voiced in the commercial or non-profit media. It is there to encourage organisations, in the cities and rural areas, to tell their stories, to share their concerns.

The strength of Africa Pulse relies on a transparent and democratic governance structure, which seeks to involve regional organisations directly in the portal's evolution. Each of the 14 SADC countries form country-specific advisory structures according to their own needs and capacity. These feed into a regional advisory committee, which liaises with the secretariat based in Johannesburg. In this way we ensure that Africa Pulse is continually attentive to the changing needs of the region.

Following an Africa Pulse Regional Workshop in November 2001 in Johannesburg, in which 14 regional organisations participated, an Interim Advisory Committee was established. This consists of Link NGO Forum (Mozambique), MACOSS (Mauritius), MWENGO (Zimbabwe), NCRF (South Africa) and SANGONeT (the Secretariat). It is the task of the Interim Committee to steer the development of the portal through the course of 2002, until a fully-fledged Regional Advisory Structure can be formed.

The aim is for grassroots organisations to begin using Africa Pulse as a vehicle for their views, news and organisational information. They publish directly to the site, and the content is facilitated by a team of regionally-based moderators. These moderators will take ownership of thematic content pages, and decide what gets published there. It is a way for organisations to communicate quickly and effectively across the continent, and a way for them to share their stories. It is a way of opening up the 'information borders' and of giving a voice to underrepresented communities and views.

The organisations own and publish their own information. They determine the nature of the content that is published on the portal and, ultimately, the direction of the portal itself. There are costs involved. At the moment SANGONeT (the secretariat, based in Johannesburg) covers most of the costs through funding. However, a number of organisations provide time and funding to the project.

❖ **MetaBase: an online library contributing to social change (Central America)**

By Rosa Cheng, rcheng@acceso.or.cr and María Sáenz, msaenz@acceso.or.cr

There are more than 2,000 document centres and libraries in Central America with a huge number of information resources—resources that are unique and invaluable because they are produced in and for the region and come out of the reality and problems directly affecting the less-favoured inhabitants of these countries.

These documents (work proposals, project breakthroughs, research reports, methodologies, evaluations, and other texts generated out of the practice, reflection and experience of local researchers) are impossible to find in large international information centres because funding is very rarely available for their mass publication and distribution. People working for sustainable human development in the region, however, need these documents in order to get an overall view of Central American reality, improve their decision-making and properly direct their efforts for transforming society.

Traditionally, libraries have devoted themselves to collecting, organising and storing information produced by organisations in their specialized knowledge area. With the incorporation of new information and communication technologies to their daily duties, however, their functions have been renewed with an emphasis on displaying and distributing this information, thus making it available to a wider community.

This process of transforming their duties has not been easy, since most of these centres lack the training, methodology and resources needed to make changes that would enable them to make the transition from a conventional to a digital or virtual library.

MetaBase: An Online Library was launched in 1997 for the purpose of improving public access via the Internet to information resources available in document centres and libraries in Central America. The project is undertaken by the Fundación Acceso with financial support from InfoDev.

MetaBase is a multi-subject bibliographic information service that operates off the web site http://www.metabase.net. It contains the collections of 63 libraries in Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica, specializing in environment, justice and legislation, public administration, gender, health and education, and other topics related to sustainable development. Information produced by civil society organisations, academic bodies and government institutions are combined in these collections. At present, it has more than 373,000 bibliographic entries, of which 400 provide access to the complete text of the document.

Researchers, staff of development projects and programmes, educators, students, and the general public can use this tool, simultaneously and free of charge, to search for reference material.

The result of each search is a list of relevant materials and the complete bibliographic reference for each, as well as the information needed by the user for contacting in person, by telephone or by email the person in charge of the document centre and getting access to the document they want.

MetaBase is a collaborative work proposition that furnishes a window of visibility 24 hours a day on the Internet, with extensive coverage and unlimited access for Internet users. The MetaBase website gets a monthly average of 700,000 hits, thus confirming the interest of researchers in having regional information resources at their disposal.

MetaBase opens up a whole range of options for remote access to information. As a friendly, effective search interface requiring a minimum of technological skills for its use, it gives researchers autonomy in their search for and recovery of data, enabling them to save time and providing them with an overall view of the existing resources and research in Central America.

In addition, MetaBase could become a showcase for authors and researchers, since it provides them with an opportunity to publicize their work on the Internet, with the backing of a library, and get

extensive coverage at minimum cost.

The main strategies MetaBase uses to reach its objectives are:

- Cooperation and exchange among organisations
- Fostering initiatives at local, regional and global levels
- Continuous innovation and technological efficiency
- Pursuit of the system's political and financial sustainability

MetaBase has provided a great opportunity for Central American organisations and libraries to publicize themselves and generate greater demand for their information services. The challenge MetaBase faces in the future is the development of new service alternatives for users, in such a way that the transition from local to regional, loaning to distributing, and displaying to providing real access to information, takes place in a supportive, cooperative environment that benefits the region's development.

❖ **Qwa-Qwa community radio (South Africa)**

By Chris Armstrong, carmstrong@icon.co.za

Qwa-Qwa Radio is a community radio station licensed under the broadcasting legislation and regulations of South Africa. South Africa's legislation and regulations allow for licensing of three types of radio broadcasters – public, commercial and community. Community radio stations have a small broadcast 'footprint'.

To be licensed as a community radio station, the station must be: initiated by people living within the broadcast footprint; supported by the main community groups in the broadcast footprint; non-profit; owned by the community through a community Board of Trustees elected at least every two years by the community members at an Annual General Meeting; and run according to a programme schedule developed with community input.

Qwa-Qwa Radio was awarded a 4-year community radio licence in April 1999. The station went on air on 11 February 2000. It broadcasts 24 hours a day on 100.3 FM. The station's licence allows it to broadcast to a 'footprint' that is 70 kilometres in radius, but due to faulty transmitter installation the radius is currently only about 30 km. The current radius only allows the station to cover the formal Qwa-Qwa territory (about 600 square kilometres) without hitting the outlying villages, farms and towns.

About 60-70 percent of the station's programming is in Sotho (Sesotho), the language spoken by the Sotho people, who make up the vast majority of the station's listeners. The rest is in English, which most of the listeners can comprehend. The station has committed itself, in its licence, to broadcasting 60% talk and 40% music. And regulations dictate that 20 percent of its music content must be local South African.

The station's main competition is Lesedi FM, the Sotho-language national station of the public broadcaster, the South African Public Broadcasting Corporation (SABC). Most listeners in the Qwa-Qwa area listen to both Lesedi FM *and* Qwa-Qwa Radio. Qwa-Qwa Radio's listenership has grown from 36,000 in April 2000 to 114,000 in June 2001 (the time of the last survey). This audience figure is one of the highest among community radio stations in South Africa.

The territory known as Qwa-Qwa is a mountainous, densely populated area. Its population is mostly peri-urban (in Phuthadijhaba) and rural (gathered around villages). There are high levels of unemployment and poverty among the population of about 1 million people. One study said that 88 percent of the people of Qwa-Qwa are living below the poverty line. Unemployment all over the country is estimated to be at about 45 percent.

The purpose of the radio station is to empower the people in the listening area to participate in the sustainable development of the community. This empowerment is to be achieved by: generating empowering content (mostly local) in collaboration with community members and community groups; disseminating content to the listeners through analogue radio broadcasting; and collecting feedback/inputs on content from the community in order to increase the relevance and effectiveness of

the content. The station also entertains with its programming – through music programming, games, contests, storytelling, jokes, dedications.

The station's slogan, in Sesotho, is 'Lentswe la hao,' meaning 'Your Voice.' Its stated mission is to "promote local culture through relevant programmes in tradition, local talent in music, praise and education." The mission statement also puts emphasis on "news at a local level, that will provide a sense of belonging, identity and pride among members of the community, encouraging gender sensitivity and challenging all stereotypes and combating all forms of abuse, ultimately supporting the spirit of co-existence and reconciliation."

The community is generating the content. The station managers, presenters, guests and information contributors are all members of the community.

The most dynamic content generation is spontaneous, when people come directly, unannounced, to the station. Thus groups of workers may arrive at the station to discuss problems like job layoffs that were about to occur. Their concerns are then put on the air.

Many of the programme producer-presenters at both stations are connected to, or work for, local civil society organisations. For instance, the producer-presenter of gender programming at Qwa-Qwa works for a local women's NGO. The producer-presenter of the Qwa-Qwa HIV/AIDS slot works for the local Tshwaranang AIDS Centre, which offers counselling and information.

Other content, mostly pre-packaged nationally-focused educational/public awareness content, is sent to the station on CD by national radio production houses - on topics such as democracy, labour, HIV-AIDS, local government, human rights, and racism/xenophobia. While this is not local content, the stations usually do their own extra programming on the topic to localise the issues. Often the programmes are in English, but sometimes translated versions in the most widely spoken languages - Zulu, Sotho, Xhosa – are provided. The items are usually current affairs features or dramas, of between 5 and 15 minutes in length.

The station also works with the four other community stations in the Free State Province to produce pre-recorded programmes on gender, disability, women, children, crime prevention and HIV/AIDS. These productions, sponsored by the national Department of Communications (DoC) are mostly in Sotho. The station producers gather at one of the 5 stations' studios to produce the items, and then stations further localise the content at the time of broadcast with guests/interviews drawn from their respective areas.

The station does live public awareness talk show/call-in programmes, sponsored by government departments and agencies. The national Education Department has sponsored programmes on school governing bodies, the Independent Electoral Commission (IEC) has sponsored voter education programmes, and donors sponsor programming on health, children, democracy, and labour.

Almost all of the content is owned the community, because the station is community-owned and governed by a community-elected Board of Trustees. The only content not owned by the stations is some of the pre-recorded material provided by production houses.

The members of the community are also doing the sharing. They contribute content to the station, and they work at the station to facilitate the redistribution of the content. The members of the community guide the programme schedule and they give feedback on the programmes through calling in during a show, writing a letter, visiting the station, and, as is often the case, approaching a presenter or a member of station staff in the street. All community members with access to a radio (the vast majority of people in Qwa-Qwa) are accessing the content – and they are the same people who are creating it. The community is "speaking to itself."

Overall, the project is highly successful as a gatherer and sharer of local content. The station has a high degree of "content sustainability." The station's gathering and sharing of local content have become part of the structure of the community that owns the station. The station and its community are interdependent.

Major lessons:

- The importance of local language: The station predominantly uses the indigenous, vernacular language spoken by the people it serves.

- The importance of non-discriminatory, non-elitist communication systems: This case study reaffirms the importance of radio as a communications medium that is inexpensive to consume and requires no reading or writing skills to consume.

- The importance of an accessible medium for people wanting to generate content: The radio station provides people with disabilities, and other traditionally marginalized groups such as women and the elderly, and people without high levels of formal education, with the power to create and share content through a powerful communications platform.

- The importance of commitment to the improvement of one's society: The volunteers who work at the radio station do not do what they do for financial gain. They work to create social gain. They are both the service providers and the "clients." Each success they achieve improves life in the community they inhabit. The volunteers at this station are *real* implementers of change. The community, which owns, governs and runs the station, must be allowed to continue to put social responsibility ahead of revenue generation in its effort to provide an essential public service.

❖ **Revitalising traditional knowledge of Pacific navigation**

By Tarja Virtanen, tarja@unesco.org.ws

The project on Pacific Navigation seeks to strengthen indigenous knowledge transmission from elders to youth, by using new ICTs as a tool for disseminating traditional navigational knowledge and practice – particularly in terms of enhancing dialogue between generations and connecting different states of the Pacific.

It is being implemented in the context of the interdisciplinary UNESCO project on Local and Indigenous Knowledge Systems in a Global Society. The purpose is to illustrate the vitality of indigenous knowledge, know-how and identity in meaningful ways for communities in the Pacific and elsewhere in the world.

The end product will be a CD-ROM, which will function primarily as a learning tool but also as a reference resource. It will also contribute to a process of restitution for local communities by providing them access to relevant archival data, photographs or objects that may be stored in institutions or museums at distant locations.

The CD-ROM will provide information on indigenous knowledge, know-how and practice relating to traditional navigation, addressing both the living traditions of Micronesia and the on-going revival throughout the region. Much of the content will be conveyed visually and acoustically wherever possible. An interactive component may allow users to build/navigate their own boat; following basic boat-building and navigational principles. The materials are being compiled and analysed by experts in Pacific navigation, in consultation with Pacific Voyaging Societies, Museums and local navigators.

It will be distributed to teacher colleges, selected schools, public libraries and museums, as well as voyaging societies and other relevant community-based organisations in the Pacific Islands region. Its main goal is to create bridges among island youth, between indigenous knowledge holders and those wishing to share in that knowledge, between areas of the Pacific where traditional navigation continues to be practiced and areas where there is interest in its revival, and among institutions in the region as well as those abroad that work in this very dynamic field.

The project is using new information and communication technologies to preserve, disseminate and revive traditional knowledge. It focuses in particular upon drawing indigenous youth, through their interest in ICTs, back to their own cultural heritage and the impressive knowledge of their own parents and grandparents. In this manner, it enhances the dialogue between generations, strengthens the transmission of indigenous knowledge, contributes to the preservation of cultural diversity and reinforces the identity and self-confidence of indigenous youth. It also will enhance international appreciation and understanding of Pacific culture, and contribute to exchange of information and experience among indigenous communities worldwide.

This CD-ROM is the second in a continuing series of CD-ROMs on the indigenous knowledge theme of which the first publication, entitled 'DreamTrackers: Yapa Art and Knowledge of the Australian Desert', addresses Aboriginal youth of the Central Australian Desert.

These projects in themselves are concerned with technical and social feasibility, and with sensitisation on the potential of this approach, and are not intended to be sustainable as such. It is hoped that they will serve as models for similar efforts on other themes by other indigenous communities, and to further exchange of information and experience in this area.

Major lessons:

- The project has made extensive use of the knowledge and skills of the indigenous community in collecting, selecting and presenting the information, and thus has helped build capacity for effective dissemination and use of the product, and for possible community driven extension.

- Concerning technical ICT skills, it was chosen to rely on established expertise outside the community. Proceeding further as a continuing endeavour would require an assumption of responsibility by the concerned communities with consideration of business model and questions of necessary partnerships and capacity building.

❖ **Community documentation of indigenous knowledge (Kenya)**

By Yasuyuki Morimoto and Patrick Maundu, y.morimoto@cgiar.org

To the Kamba people of Kitui District in Kenya, the bottle gourd is known locally as 'Kitete.' It is a key item found in virtually every aspect of their traditional and cultural life. In spite of the rich local knowledge and the biological variations in the Kitete, very little information on this gourd has been documented and preserved as most of this information had been passed on verbally. Because much of this knowledge has been available only to the local communities, knowledge and the diversity of this gourd is threatened. Loss of the knowledge will have a far-reaching impact on the community.

The success of any information documentation and technology transfer depends on opportunities such as traditional meetings in town or at open market places and at social gatherings where local people meet to share and transfer traditional or cultural knowledge. The Kamba people generally like telling stories or exchanging and sharing local news at social gatherings as communication by means of the telephone, fax machine, e-mail and the Internet is expensive or even inaccessible. So, through stories, rumour, songs, riddles, poems, myths, superstitious believes, religion and even practical demonstrations, indigenous knowledge is transferred. However, with modern ICT techniques, much of this invaluable traditional knowledge can be saved, documented, and improved upon, not only for the present communities in the country but also for the future generations.

To prevent further loss of such invaluable knowledge, a two-year project to conserve the diversity of Kitete and its associated indigenous knowledge was launched in March 2001. Implemented by the Kyanika Adult Women Group (KAWG), key external partners are the Kenya Resource Centre for Indigenous Knowledge (KENRIK), the Kenya Society of Ethno-ecology and the International Plant Genetic Resources Institute (IPGRI). With the guidance of these partners, the women's group collected knowledge and genetic material of Kitete in their districts. Group members shared knowledge amongst them but were trained by community experts so that they, in turn, could train other community groups to carry out the project work in their respective areas.

The content being generated in the Kyanika village includes written documents, tapes, videos, photographs, a resource centre (where diversity and use information are stored) and experience gained by members through project activities. Contents for the above documentation are provided and owned by the KAWG and partners with the assistance of the KAWG and local community compiled the computer-edited materials.

KAWG identified and invited resource persons to train the group members at a 6 day-seminar. KAWG also organised four seminars in different communities in Kitui. Kitete knowledge, experience and collections are subsequently shared with other people. The materials displayed at the resource centre were used for further training in the Kyanika village. Story telling by elders, sharing myths, songs, dances, riddles, poems, drama, listening to taped materials, photographs, watching videos, reading written reports (in the local Kikamba language), materials displayed at seed/fruit fairs and IK competitions were forms of communications employed in the process of transferring and conserving

the knowledge. Knowledge shared among the KAWG members could be accessed by other community members and participants in the project activities.

A documentation centre with recorded materials, documents, and a collection of Kitete samples and seeds has been established for the use of the local communities and outsiders. The KAWG draft training materials using documented information and techniques acquired during the project activities were used at national and international workshops and presentations made by the KAWG members. As a follow-up activity, the centre will publish training materials and collect and document information for use in educating the community members and school children. To sustain the activity, the group has started income generating content-based activities such as selling decorated or carved Kitetes, making and selling Kitete ornaments, promoting the sale of T-shirts on the Kitete subject, selling rare and popular types of seeds and fruits to the visitors of KAWG.

Major lessons:

- Additional incentives are needed to keep the group active and therefore maintain the biodiversity of Kitete. (e.g. more opportunities to sell their decorated Kitete and support in the form of equipment for collecting data)

- Mass communication media like the radio, TV, newspapers and visits by people from afar also helped to encourage and motivate the group.

- Seed fairs were an effective method for sharing the biological diversity and its related information.

- IK competitions were good for sharing, on a broader base, the traditional techniques and information, which could sometimes be protected as secrets. Such competitions not only encourage the real knowledgeable people to bring forth their traditional know-how and workmanship but they also help to identify important resourceful artisans in the community from whom the young generation could relate and learn in the African traditional way.

- From local community meetings and functions like agricultural shows, church ceremonies, market day gatherings, festivals and other relevant events in the community the local people can gather and pass information especially in IK and genetic resources. Seed fairs or competitions on the size of the pumpkins will be something interesting and effective to keep the subject alive and the programme cost effective and sustainable. Other cultural events include harvest festivals and seed planting ceremonies. These types of traditional events are still common in Asia but many are already lost due to westernisation and religious revolution during the colonial era in Africa.

- ICT tools like the tape recorder can easily facilitate the transfer of oral traditions and traditional knowledge of plants and their uses.

- IK information sharing is possible as long as the subjects we are addressing are those that the communities feel comfortable sharing with others. Sharing information however becomes difficult when we touch on realms where a few individuals have, or the community has given, a mandate and therefore claim supremacy or sole rights. This is aggravated further if there is an economic value at stake, a good case being the use of medicinal plants.

❖ **Documenting indigenous knowledge in Sarawak (Malaysia)**

By Eileen Yen Ee Lee, eileen@sbc.org.my

Located in one of the twelve mega-centres of biological diversity, Sarawak is concerned that its rich biodiversity is conserved and utilized in a sustainable manner to benefit not only the State of Sarawak but also the whole of Malaysia and the rest of the world. In 1998, the government established the Sarawak Biodiversity Centre (SBC) as the focal point and, in time, to become a world class resource centre in Sarawak for biodiversity inventory, monitoring, research, education, utilization, management and conservation of her biodiversity. Among other things, the SBC assists the State to identify priorities for research on biodiversity and the study of the biodiversity of Sarawak in order to enhance understanding, conservation and sustainable utilization of biodiversity, including its traditional use among the local communities.

In Sarawak, there are over 36 ethnic communities. Each has inherited rich arrays of traditional knowledge from their ancestors. There is a distinct trend to find one ethnic group occupying an isolated village, town or district for generations and they therefore know their land and are familiar with their environment. In short, they have learned how to grow food crops and survive under difficult environmental conditions. They know what varieties of crops to plant, when to sow and weed, which plants are poisonous and which can be used for food or medicine, how to cure diseases and how to maintain their environment in a state of equilibrium.

In some communities, the survival of this knowledge is threatened. Focusing on the sugar palm, SBC is implementing a project that seeks to empower local communities to maintain, document and share their IK systems on plant resources that are traditionally used within the community. At the same time, it will promote IK documentation and sharing in local communities using ICT, thereby enabling the development of Community Knowledge Centres to ensure transmission of the knowledge to the young generation and enable the use of the knowledge in sustainable management of biodiversity and development of agriculture and economy within the communities.

This project's use of audio and video recorder in IK documentation is helpful in capturing the knowledge of the community elders to further the younger generations' understanding of the sugar palm as an essential cash crop in the Bidayuh culture.

Plants, fruits and seeds of all known varieties of the sugar palm in the community are being documented and conserved by and for the community. Audio and video recordings of the community's knowledge on the utilization of the sugar palm are made in the community's own language and deposited in the 'community knowledge centre.' With their audio and video recordings, the farmers are able to produce 'papers' that can be registered in the local traditional knowledge/indigenous knowledge register. Once registered, this knowledge can be re-used by the community as well as by research scientists. Any citation made on such "papers" can be traced back to the knowledge holders for benefit sharing and public acknowledgement. The TK/IK Register is a formal system in the state that will give legal protection to any documents that are invested with SBC. Access by scientists is governed by rules set by SBC who represents the government of the Sarawak state.

The project has increased public awareness of biodiversity conservation and economic values in conserving diversity. With such an awareness, communities are better equipped to understand and realize that the traditional knowledge and technology they can share with scientists and other communities are not only means of preserving the biodiversity of their land but also their lives and economy thus alleviating poverty.

Community Knowledge Centres, with their audio and video recordings, are helping to ensure the survival of local languages and especially specific local terms for specific plants.

Major Lessons:

- IK related community biodiversity management can be easily documented by the community with the use of ICT tools such as audio and video tape recorders and allowing documentation in the community's own language for immediate use within the community. ICT provides a means to store the knowledge for communities to trace back and to build upon.

- The TK/IK register helps to protect the rights of the local content owners.

❖ **LI-BIRD Ko Chautari – Nepal participatory rural radio (Nepal)**

By Krishna Prasad Baral and Dr Anil Subedi, kblibird@cnet.wlink.com.np

Conservation of biodiversity can succeed only if people understand the biodiversity distribution and value, and see how these could benefit them in their own lives and aspirations. Public awareness campaigns in Nepal have tried various ways to reach local communities to stimulate greater efforts in this area. Initially, formal meetings, orientation training, personal contacts with key people were organised and some project information in the form of flyers in the community's vernacular language were made available to a wider audience. Despite this, it was realized that the intended messages

were not reaching important members of farming communities, particularly the women folks and young children.

In October 2001 therefore, a local NGO - LI-BIRD - started a local radio programme called 'LI-BIRD Ko Chautari.' Literally, the word 'Chautari' means 'a resting-place under the shade of a tree' – usually the *Ficus religiosa bengalensis* where social, cultural and religious information of value was discussed and exchanged. Traditionally, it is an important place for sharing information. 'LI-BIRD Ko Chautari' is focusing on biodiversity related issues to complement the government's agricultural radio programmes.

This participatory rural radio programme is operating in collaboration with the Annapurna FM Radio Station. It uses materials generated by participatory methods of collecting local knowledge and practices generated from farming communities and their experiences. Technologies developed by the farming community together with the research outputs of university and research stations are also used.

It is part of a wider package of efforts to increase local awareness on the importance of agro biodiversity such as Diversity Fairs, Gramin Kabita Yatra (Rural Poetry Journey), Lokgeet Pratiyogita (Folk song Competition), Gramin Sadak Natak (Rural roadside drama), Community Biodiversity Register, and the Diversity Block. The target groups for these public awareness tools are basically the rural communities. The approaches are deeply rooted in local culture and customs but tools have been modified to suit the purpose of biodiversity conservation.

As indicated above, the methods and approaches developed in the project activities are shared through various means at local, national and international levels. Traditionally local contents are shared during festivals, rituals and dances. However, these materials are also shared through publications, posters, video films and TV programmes. Rural radio "LIBIRD Ko Chautari" is now an additional established concept used to transfer knowledge through the use of the FM radio technologies.

Keeping the objectives of the programme in view, it is hoped that participatory and interactive programmes aired can bring grass root level issues to the attention of the stakeholders. The farming communities are encouraged to provide suggestions and feed backs. Prizes for the best questions and suggestions and the correct answers given for the week have also been introduced to create interest and motivation among the young listeners. Winners are awarded portable FM radio each week – a good way to encourage people to make use of this communication device.

The LI-BIRD Ko Chautari rural radio programme started only on 17th October 2001. Nineteen episodes have been successfully completed and aired. It is too early to assess the impact of the programme but the following results have been achieved:

Increased public awareness of biodiversity issues in the Pokhara valley; Increased direct sharing of new findings and information with target communities; Common forum used for panel discussions between the farming community and high level policy makers; Integrating biodiversity education with traditional culture and literature; Bringing together various stakeholders into common communication links; Documentation of value of local biodiversity; and feed back to local level conservation and development agencies.

Major lessons:

- Biodiversity conservation ideas are more likely to be accepted in rural communities if they are shared via their traditional ways of communication such as through poems, drama, songs and dances, and if immediate knowledge is provided for the community's tangible needs. Sad to say though, such traditional ways of communication is declining and popular technologies like the radio, TV and videos are catching up fast among the young generation. Inculcating awareness of the importance and values of biodiversity and blending popular culture with traditional culture seems to offer a way forward.

- We need to develop local interest and capacity to handle technologies and radio journalism from the community based organisations to the LI-BIRD professionals involved in the activity. Procurement of audio equipment for interviews and live broadcast may be necessary to assist proper human resource development to help conceptualise biodiversity conservation education and awareness and to blend that with local content and methods. In order to make it sustainable, a long term institutional support and linkage must be established.

- A sustainable and popular programme needed to reach the young generation is another challenge to be highlighted. One should develop innovative "crazy" ideas to suit the purpose and occasion.
- Local institutions, interest, content and culture should be the priority areas to be replicated in new areas. The network of such a rural radio programme is a good way to share experiences and ideas for the improvement of the local biodiversity and economy of the communities as well as the community's livelihood.

❖ Documenting traditional knowledge in Yunnan (China)

By Dai Luyuan, daily@public.km.yn.cn

Local communities in China's Yunnan province have teamed up with the Yunnan Academy of Agricultural Sciences (YAAS), the Yunnan Farmers' Specialist and Technician Association (YFSTA), and the International Plant Genetic Resources Institute (IPGRI) to document and exchange local traditional knowledge. The main purpose is to help these farmers apply their knowledge on local biodiversity and become economically autonomous within their communities. Simple ICT tools such as tape recorders are useful for the documentation of their knowledge. The greater volume of knowledge made available through exchange has also encouraged farmers to discover, develop and improve the market value of their local produce.

Three examples show how this traditional knowledge is used to improve local livelihoods while maintaining local ownership of the knowledge.

First, farmers from the 'Bai' minority nationality are documenting their traditional agricultural knowledge in their own language and working with local schools that teach in the local Bai language to disseminate local biodiversity knowledge to youth. The farmers are using this local knowledge as a way to promote Bai language training as well as the increased use of local plant diversity and agricultural practices. ICTs have an important role in this. They have been used to compile an 'E-kit' of Bai agricultural knowledge for use within the community.

They have also been used to share this traditional knowledge with scientists from outside the communities. This has boosted the prestige given to indigenous knowledge. It has also increased public awareness of biodiversity conservation and the economic value of traditional crops and plant products among local farmers. Agricultural scientists are also contributing their practical know-how to the E-kit. The costs incurred are borne mainly by community and farmers organisations. Revenue from sales of this knowledge returns to the farmers and community organisations, as well as to the scientists and the local Bai schools. Compiling the E-kits has also enhanced the computer and Internet skills of Bai youth, helping them get jobs in the local tourist industry.

Second, farmers are using ICTs to share their own knowledge, as a way to discover the value of traditional products, and to benefit from it. Farmers in the local community share traditional cultivation management, traditional use of processing technologies, and special management knowledge in conservation of genetic resources.

Using tape recorders, the farmers document what they know, producing oral 'papers' that can be directly shared in the community. To also share this knowledge with the scientific community, abstracts of tape recordings of traditional knowledge are published in the YAAS Science and Technical Journal. This notion of an 'Indigenous Knowledge Journal' has proved to be useful to document the traditional knowledge in the farmers' own language while also making it 'citable.' The ability to cite such 'papers' ensures that the information can be traced back to the knowledge holders for the benefit of both the community as well as the outside world.

This makes it easier to keep the knowledge and resource under the control of the local communities and for them to use this knowledge as a special resource for their development.

Finally, since the YFSTA has some 100,000 members and the Province is vast, Yunnan Radio Station also disseminates the documented knowledge and promotes the new products. Special programmes about the value of TK and its role in alleviating poverty are generated with contributions from local farmers with the help of scientists. The radio station produces these programmes in order to promote communication between communities as well as farmers. Farmers can use the programmes to better understand the relationship between their TK and modern knowledge, as well as its market potential.

Major lessons:

- IK related community management including genetic resources conservation and sustainable use could be easily documented by the community with the use of certain ICT tools like the tape recorders.

- By allowing documentation in the community's own language for immediate use within the community, ICTs provide a means to store the knowledge as a source for communities to trace the origin of the Traditional knowledge and to build on it.

- ICT tools help communities to record, conserve, re-use and later to transfer their Traditional knowledge to future generations in a way that has never been done before.

- There are significant issues related to property protection and recognition of ownership where communities are involved.

❖ **Difusión del Año Internacional de las Montañas en Bolivia**

By Gabriela Ugarte, gabriela@cebem.com

Por mandato de la Resolución 24 de la 53 Asamblea General de la Organisación de las Naciones Unidas, de 1998, se proclamó al año 2002 como el Año Internacional de las Montañas (AIM).

Durante el 2000 y 2001 se realizó una intensa tarea preparatoria del AIM en Bolivia en la que participaron más de 100 instituciones y organisaciones públicas y privadas que junto al Comité Nacional de Bolivia para el Año Internacional de las Montañas – 2002 elaboraron el Plan de Acción para el 2002. Cuatro líneas estratégicas identifican al Plan de Acción:

- Promover una mejor comprensión de los ecosistemas de montaña, desde la perspectiva natural y sociocultural.

- Coadyuvar en el desarrollo de un proceso de planificación integral de las montañas orientado a la construcción de modelos de desarrollo sostenible.

- omover la construcción de acciones y políticas comunes a los países de la región, sobre la base de las experiencias y conocimiento logrados.

- centivar la movilización y participación poblacional en el marco de la conservación y desarrollo de los ecosistemas de montaña.

El objetivo es desarrollar la comunicación interna y externa electrónica del AIM en/de Bolivia, dar información necesaria de lo que significa su celebración, a nivel internacional y nacional , y en cumplimiento de los objetivos planteados para esta celebración -a través de la generación e intercambio de información, sensibilización y concientización, educación, formación, difusión, en todos los niveles de la población- se emite a partir del mes de enero el **Boletín AIM-2002 Bolivia**, el mismo que tiene una periodicidad mensual.

Este boletín va dirigido a toda la población boliviana involucrada en el manejo de áreas de montaña, a las autoridades de gobierno y de los departamentos montañosos del país, a la cooperación internacional, organisaciones no gubernamentales, institutos de investigación, académicos, comunidades y población base de las montañas en Bolivia, con el propósito de lograr una sensibilización y acción común para la conservación y el desarrollo sustentable de estos ecosistemas frágiles.

La difusión, en forma electrónica e impresa de este boletín informativo, da a conocer los conceptos, objetivos, avances, metas, agenda de eventos, y otras actividades y aspectos relacionados del AIM a nivel nacional e internacional.

La estrategia de comunicación incluye el desarrollo del **sitio web para el AIM 2002 Bolivia**, <www.aim2002bolivia.org> Una vez concluida su construcción se tendrá acceso continuo a todo la información acumulada anunciada y difundida a través del boletín informativo.

La oportunidad aprovechada es que 106 instituciones que participan del AIM 2002 Bolivia durante este año han organizado diferentes actividades y eventos, sin embargo si no se comunican a la agentes y actores de la comunidad y si no se mantiene al grupo informado sobre lo que están haciendo los otros, todos los esfuerzos por sensibilizar sobre los ecosistemas de montaña son vanos ya que no se reconocen los valores y las experiencias que un evento de esta naturaleza promueve.

El sitio web www.aim2002bolivia.org contiene la siguiente información: AIM 2002 Bolivia; Boletín; Calendario nacional e internacional; Documentos; Montañas de Bolivia; Enlaces; AIM en los medios de comunicación

¿Qué ha logrado el proyecto en términos de generar y compartir contenido? - Un espacio abierto, inmediato y actual que permite mantener informado constantemente.

¿Cómo se ve el futuro? - Dentro de las políticas generales, de los objetivos del AIM – Bolivia y del Plan de Acción elaborado se debe tomar en cuenta una estrategia de comunicación más agresiva y activa, que acompañe las diferentes actividades del AIM, a ser difundidas por medios convencionales de comunicación.

Esta estrategia debe tomar en cuenta la comunicación a desarrollar con los diferentes públicos y actores involucrados en lo que es el AIM y lograr que las diferentes actividades que se realizarán en el marco del AIM tengan una visibilidad mediática y social adecuada.

Asimismo, la estrategia de comunicación plantea entre sus objetivos la elaboración de una carpeta de prensa que refuerce la presencia boliviana en el encuentro Rio+10, que se realizará en septiembre en Johannesburgo, Sudáfrica, como seguimiento a lo que fue la cumbre de la Tierra que se llevó a cabo en Río de Janeiro, Brasil, en 1992, donde se aprobó la Agenda 21.

Por lo tanto, el objetivo principal que debe acompañar esta actividad es difundir y acompañar las actividades del Comité Nacional de Bolivia para el Año Internacional de las Montañas – 2002 y los eventos relevantes de los siete puntos focales, a través de los diferentes canales de comunicación; y alcanzar una adecuada visibilidad mediática y social del AIM 2002 en Bolivia.

Major lessons

- La necesidad de integrar experiencias y actores para evitar la repetición de prácticas y dispersión de energías. Mantener a una comunidad informada de los esfuerzos que se realizan en torno a un evento de trascendencia internacional, y que a través del sitio web del AIM 2002 Bolivia tiene a disposición una ventana por la que el resto del mundo conozca las características de las zonas y poblaciones de montaña.

- Destaca también la importancia de que la información del sitio web esté disponible en otros idiomas (tal como el inglés) para que su acceso y conocimiento sea diverso.

- Requisitos importantes son el acopio, organización y sistematización para difundir información en lenguaje claro y pertinente. Otro requisito importante es la voluntad política y apoyo económico para llevar adelante esta labor.

- La participación y responsabilidad de los 7 puntos focales y el trabajo del Comité Nacional de Bolivia es voluntario, por lo que la obligación del cumplimiento es descendente.

- Lograr una conciencia masiva sobre un tema que para muchos parece abstracto, es un proceso que implica una proyección a largo plazo.

- Voluntad institucional y experiencia en el manejo de redes.

❖ Monitor news service (Uganda)

By Charlotte Kawesa, ckawesa@monitor.co.ug

The Monitor Publications Ltd. was founded July 1992 in Kampala, Uganda. Starting as a newspaper company publishing *The Monitor* newspaper, it has expanded its services to include publication of the Monitor Business Directory, school books (readers series, fun books and novels), Islamic studies books and reference books, including *The Uganda Almanac* published annually. It also offers printing

services for magazines, newspapers, books and stationery items.

Monitor Publications Ltd. has been at the forefront of introducing leading edge technology to Uganda and to the newspaper industry in particular. In 1996 *The Monitor* Internet version at http://www.africanews.com/monitor/ was born, making it the first newspaper in black Africa outside South Africa to go onto the Internet. In 1999, the Monitor Publications Ltd. set up a website, http://www.monitor.co.ug which currently averages 950,000 hits a month.

In 2001, the company opened an FM radio station, *Monitor FM*, which is a News/Talk radio, the only one of its kind in Uganda. In the same year, Monitor Publications Ltd., in a joint venture with webmasters Uganda Home Pages, set up a web portal, *My Uganda*, at www.myuganda.co.ug. The portal is a one-stop information source that allows users to search and find online all the information they need about Uganda, including daily news. In 2000, Monitor Publications Ltd. entered into a joint venture with the Nation Media Group of Kenya in a bid to widen its readership beyond Uganda.

This case deals with the content being generated by *The Monitor* newspaper and Monitor FM, and shared with local and international audiences. The case differentiates between information and content in that information is freely available as raw material at no cost, while content is sorted, vetted, collated, assorted and processed information to which costs are attached.[1]

The content being generated by *The Monitor* and Monitor FM includes news, which accounts for largest portion of the company's business, commentary, opinion and features. The news includes national, upcountry news, business, sports and international news, specifically regional (the East African Great Lakes) and African news. National and business news is reported and written by staff reporters and paid correspondents.

For upcountry news, there are bureaus in all the main regions in Uganda, which are responsible for collecting news from their respective areas and sending it to the paper's headquarters in the capital, Kampala. For international news (and photographs), including news from elsewhere on the continent, the paper relies on news wire services, particularly Reuters, AFP and Xinhua. The company pays monthly or annual subscription fees to each of these wire organisations.

In the case of radio, news is gathered from the community, the Internet and the wires. Upcountry correspondents feed the radio station with news from their respective regions, using mobile phones and ordinary tape recorders, which they use to play back sound-bites on their cell phones. In many cases, they report live.

Features take the form of public affairs reports, focussing on human-interest stories about social issues. There is also a children's section that runs thrice a week, a weekend magazine every Saturday and a gender and family section once a week. Staff writers and correspondents, whom are paid by the company, write the features. The paper sometimes uses feature stories that have been published in international media if they are significant for the local audience. These are normally acquired via the wires or the Internet. In either case, work that has not originated from the company is always attributed to its source.

Commentary and opinion is an important component of *The Monitor* newspaper and FM station. *The Monitor* is regarded as the newspaper that delves deeply into issues concerning politics and governance, which the state-owned paper normally downplays, overlooks or leaves out outright. Opinions, commentaries and analyses on politics, economics and social issues are published on a daily basis, with a section: *Society & Politics* specifically and columns catering for them. The authors mostly include renowned social critics, academia, celebrated journalists, politicians (including Members of Parliament), prominent Ugandans in the Diaspora and, in some cases, important foreign personalities, e.g. foreign politicians, analysts and academicians. On radio, the news takes the form of usual news bulletins while commentary is in the form of talk shows and phone-in programmes.

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[1] This difference between information and content as provided by Rudy Nadler-Nir in a presentation on "Repurposing Content for Profit" at the Highway Africa New Media Conference at Rhodes University, Grahamstown, South Africa, September 2001.

❖ Information Dispatch online news service (Zambia)

By Palisa Muchimba, dispatch@journalist.com

For most of the 20th century, Zambia had three government-owned media organisations. There was little media entrepreneurship, apart from *The Post* newspaper, which was established in 1991 when Zambia changed from one party rule to multi-party rule. More than a decade later, Zambia has been through the transition of a liberalised economy that, while it may not have yielded much prosperity, has led to the rise in local entrepreneurship and the arrival of new firms.

The **Information Dispatch Online** endeavours to disseminate information and news to improve the livelihoods of ordinary people. As one of Zambia's online media pioneers, it is an up to date and authentic source of quality information and news in Zambia. It seeks to make available discussion groups on various topics. As an information provider exploring the advantages that come with ICTs, it endeavours also to give updates on the latest happenings in the local ICT market. It also provides survey reports on selected issues happening in Zambia. However, being a new and mini-organisation compared to media organisations that have entrenched themselves in society, the **Dispatch** as an online medium faces greater challenges of establishing itself in many communities, both urban and rural areas around the country.

In the two years of its existence, the **Dispatch** alongside other media organisations such as the Times of Zambia, Zambia Daily Mail, Zambia National Broadcasting Corporation, The Post, The Monitor, etc, etc, have all endeavoured to disseminate what is believed to be the content that the recipients want to have.

Most of this content is from events that occur, basically news. The news in most cases substitutes the content. For instance, the general elections in December 2001 saw the Zambian populace receive a huge amount of information from various sources. Thus, the Dispatch, for example, during the election period gathered information released by different groups and from events. Surveys on different political leaders and issues were also conducted on the Dispatch web site. This content also stimulated interactions, which were transformed into news. Other than political issues, the Dispatch also publishes information on business, environment, health, features, ICT, travel, sports, and African as well as World events. Analyses on different topics are also given from time to time.

Content is generated by editors, reporters, correspondents and sometimes by individual members of the public. The content is generally intended for the masses. Sometimes though, it is targeted at individual groups or organisations. The information generated by the media becomes the property of the organisation itself. But in some instances where an organisation or individual pays to have his information disseminated by the media, he has the right to that information, and therefore owns it. Despite the costs involved, numerous media organisations spend huge amounts for a piece of content. This is in cases where a medium has financial backing from other organisations or has an obligation to an organisation to release that information to the masses.

The media in Zambia or the paper-based media have only very recently established themselves on the Internet. For many years, they had solely communicated through their print versions. But the fact that being paper based, they do not have the flexibility of an online publisher who can report news on the same day, thus making the Dispatch viable. Government media still have the advantage of already having customers, government backing and an already established network of distribution throughout the country.

As to who is doing the sharing of this content, or accessing it, communities everywhere have traditionally shared and accessed information orally. In many communities, both rural and urban, masses accessing information are often in search of livelihood opportunities. Most Zambians live in abject poverty and are therefore constantly on the look out for livelihood developments. Television also plays a role in the sharing or accessing of information.

The Information Dispatch has accomplished what it has endeavoured to do in the two years of its life as a reliable online medium. The Dispatch's flexibility and interactive web site allow people to post information or to interact on issues of concern – as is shown by the responses to the content disseminated, the increase in content submitted to the service by readers, and the levels of interaction and discussion around various issues.

Major lessons

- The technological impact of the Internet has made publishing, once the domain of huge newspaper companies an act of great ease and one in which we can all compete on near equal terms. The old firms have the information from the past but can be beaten at collecting new information. This means that a firm that is good at obtaining old data and building new information can easily become the new publishing master and achieve this with few employees, hard work and relative ease.

- The Information Dispatch is an attempt to better the livelihoods of people, particularly the locals, and to show that Africa can exploit the Internet to its advantage. It shows that Zambia can build an online source of information that will be widespread and accessible to all, one that provides an alternative to the monotony and the lack of quality experienced today.

- Political change in the country has made it easier to obtain information and, more importantly, to disseminate it. This is reflected in bolder criticisms of government by newspapers and other publishing organisations.

- Despite the greater availability of information, there is still very little good quality content on topics like health, economics, ICTs, etc. This means that the search for information on Zambia by people locally and elsewhere often ends up in foreign lands. Nowhere is this more so than when the information is being searched for in electronic media.

❖ **Footsteps – a newsletter for development workers**

By Isabel Carter, isabel.carter@tearfund.org

Footsteps is a free popular quarterly magazine for development actors in the South. It has a circulation of nearly 50,000 and, since issue 10, it has been translated from English into French, Spanish, and Portuguese as well as Hindi, Bengali and Chinese, with Burmese and Russian translations beginning in 2002. A recent survey showed that parts of it are regularly translated informally into another 50 languages.

The magazine articles cover a wide range of development activities and it is intended for grassroot development actors. As such, the articles always reflect the realities and basics of development work. It contains practical hands on articles and seeks to provide a voice and a forum for a South-South exchange of ideas.

Footsteps is sponsored by Tearfund, a North based donor organisation. It has over 450 South based partners that implement its programmes and therefore provide a network for generating content for Footsteps. The UK production is owned by and controlled by Tearfund. Tearfund pays all the costs involved from its donor base. The Hindi translation and production is undertaken by Rainbow Christian Academy, Nagpur and is paid for wholly by Tearfund initially, with subscriptions developing to enable local sustainability. The Bengali translation and production is by HEED, a Bangladesh NGO follows the same model. Cedar Fund translates articles from Footsteps into Chinese on a regular basis and includes them in their own publication, The Dew, and receives no support from Tearfund for this. The Burmese translation is being handled by Myanmar Baptist Convention, also supported initially by Tearfund, UK.

The core sharing of content is by paper – printed copies of the magazine are posted to workers who may or may not have email connections. Most do not have a reliable email connection. A recent survey showed that 57% of respondents had some access to email though not necessarily on a regular basis.

The availability of email has not appeared to increase the number of articles and contributions that come spontaneously from readers. However it certainly enables ease of communication and the ability to interact with authors concerning changes within contributed information. In addition it makes the process of editing easier and faster, in that most articles and articles can now be simply cut and pasted (rather than deciphered from hand written submissions). Further, in the past, local language translations by readers were based on their ability to scan printed copies of Footsteps or to cut and paste local language onto a photocopy. With the wider use of computers, we now send our design files from Quark Xpress on CD-ROMs to a number of organisations on a regular basis. This enhances

local language production. There is also a growing demand for the CD-ROM version – as a sort of mini-Internet on a disc.

Major lessons:

- The growing presence of computers means that in some locations, CD-ROM based material can be a viable alternative to traditional printed formats.

- While we continue to pursue innovative ways of using new technologies, we remain convinced that paper is the most practical, long term and useful means of distribution for the majority of our readers – and certainly for the poorer readers.

- People respond to useful and practical information that is easy for them to replicate. Footsteps articles are short, use simple language, are jargon free and assume local and easily available resources.

❖ **Youths generating local content through local centres**

By Simon Batchelor, simon@gamos.org

Youth Alive stated as a youth organisation to help churches to reach the youth effectively. It is interdenominational and has been working in Soweto since 1959. In Soweto alone well over 30,000 young people have been members of Youth Alive in the last 30 years. They have become an established community resource. The governing board is entirely South African, as are the managers and staff. In Soweto they own and operate a community youth centre in Dube district. They also operate youth clubs in 3 other centres around Soweto. They have extensive links into the community and are networked widely at a grassroots level within Soweto.

The work of Armonia uses a similar model. Armonia describes itself as a non-governmental organisation in the service of the most needy communities in diverse parts of Mexico. Armonia works in a predominantly Catholic area and identifies its work as having a Christian motivation to serve the poor. It works through a Christian Urban Transformation Centre named **CUTC Armonia-Jalalpa** in the west of Mexico City. Armonia was founded in Mexico in December 1987 and from that time onwards has been directed by professional Mexicans with a strong sense of social responsibility.

Both centres attempt to address the problems of slum communities and have undertaken activities ranging from basic childcare, legal advocacy for land rights, rebuilding homes after disasters, and ongoing educational and health care activities.

Both groups proposed to add ICTs to the existing centres in the form of telephones and publicly accessible computers in 1999. In 2001, a consultation was undertaken with each community to identify the objectives of adding ICTs to the community centres and what content might be required.

In late 2001, in Mexico 9 computers were added to the centres, while in Soweto 8 computers were added to the Dube centre. The use of these ICT tools is different from other telecentres in South Africa and Mexico, as follows.

Two very high specification systems are isolated and accessible only by "editorial youth". These young persons from 14 to 24, male and female, are the more responsible members of the community, and they are given unlimited access to the systems. Working in groups of three or four they plan a "product" together – either commissioned by the centre management or their own idea.

In Soweto the products have included health messages on video in Zulu and a multimedia presentation of HIV/AIDS in Zulu. In Mexico the products so far have included VCD video discs with mother and child health messages in Spanish, a 'mini documentary' about Christmas at Armonia, a video highlighting the problems of the elderly in the community, some interactive primary school mathematics content in Spanish, multimedia introduction for youth to the community centre and web pages for the centre.

The young people involved in the editorial work do not necessarily have a background in computing. In both cases, two young men have had short training course on computers. Other youth have undertaken studies in graphic art. Most have basic schooling. Using peer-to-peer learning, the group

skills are increasing at a very rapid rate and the process is not dependent on any one person or champion.

The working groups get together and plan the product. This involves a market analysis; who has requested the work, what is the audience, what will be the delivery system, etc. Brainstorming and other similar techniques are used to generate ideas for content and delivery. Then the group allocates tasks and they work on the product.

The end products are usually available on CD-ROM rather than online as connections in both locations are still poor. In some cases the product is intended for internal consumption – e.g. the multimedia introduction to the youth centre. Other products are sold to other NGOs (and in the near future to the public) – e.g. health messages on video. Products sold lead to some cost recovery and the business plan for the centre suggests that there will be total cost recovery by the end of year 2. CD-ROMs are sold at a profit but at between $2 to $5 each, they remain cheap for other NGOs to access. Marketing to other NGOs is currently the weakest element of the scheme but both NGOs are well networked and are receiving training in dissemination. Any costs recovered are shared between the working group and the community centre.

Inside the centre and nationally, the products are distributed using CD-ROM as this avoids connectivity problems. Internationally – eventually – the products will be placed online. Most of the existing products would require broadband for effective delivery. International sales could be large for Armonia as they are producing Spanish language products relevant to the majority of Latin America. The Soweto products currently have local language that is relevant to Southern Africa. It is important to note that the products are mainly in the local language and most of the images are contextualised. This contributes significantly to their acceptance by the community.

In terms of results, both groups seem to have created a financially sustainable publishing house 'staffed' by local unemployed youth and the community. At the moment some basic health messages and primary educational material have been created. This is being used within the community centres and other local NGO programmes.

The programme looks set to continue production of contextualised content and for its distribution to grow. There are no plans for expansion of the existing centres - mainly because of the dangers of working within the slum environment. Both groups have to be very wary of armed robbery and therefore wish to keep a low profile. The prospect of replication is being explored and the original groups are assisting other centres to start a similar process.

Major lessons:

- Formal training on computers can be helpful but is not necessary. Most people learn their computer skills by trial and error as they attempt to achieve another objective. Peer group learning is an effective way of young people gaining considerable and extensive computer skills.

- A lot of the latest software is intuitive. This means that production of multimedia products can be done even after a short period of practice and exploration.

- Distributing content via CD-ROM is a very effective mechanism in developing countries. It allows the receiver to obtain targeted information directly without endless hours searching a global database.

- A key success factor is that the ICTs are added to an existing community centre, thus embedding any new approaches and tools in existing priorities, actions, structures, etc.

❖ **Armonia - An ICT publishing house for youth (Mexico)**

By Saul Cruz, armonia@mexis.com

The importance of having computer and multi media facilities at Armonia has been discussed among the directors and board members frequently for many years. The only computer equipment Armonia had was second hand and out of date, with the exception of a couple of computers used for the administration of the organisation. There were no computing resources for the community to use in the

community centres and no place where the young members of the community could work in order to use their creativity to generate income.

So when Gamos/Big World with DFID funding created the opportunity to investigate a Telecentre by initiating a dialogue about having hi-tech computing equipment in the community centres we first thought we should recruit adults who would be responsible enough to handle the equipment. However after discussion, consultation and some pilot testing we decided that it would be better to invite young people from the community to make the project happen.

From the community we recruited the young people who seemed to be the most creative and willing to participate. All of them had problems at school. Most of them were participating in the activities of the community centres before this project started, being involved in activities such as teaching and helping younger children with home work. A couple of them are a part of the team that is opening a new Community Centre in the city.

The young people called the project 'studio 5' which, in Spanish, can be written to read 'He is your God'. With the exception of 2, all have remained involved with the project. They have been commissioned to make promotional and educational films for Armonia and have so far produced nine. Many people both inside and outside Mexico have welcomed these.

During the training period, the youth also produced a health education video. This concerned diarrea in children aged under 5. The video was taken in the slum and presented the information with relevant images. They also produced a number of interactive mathematics problems for use with primary school children, and a multimedia challenge to youth to think about their future.

Since the training, the first film was a 'mini documentary' about Christmas at Armonia. It included news and footage from three community centres and included an explanation of the philosophy of Armonia. The film also highlighted the work of the organisation during the cold winter period when many of the poor lack the resources to keep warm and well fed. The video has a good production quality, presents a fresh view of Christmas and reflects clearly the way people in Mexico view events. Copies are being sold for US$3.50 within the community and outside Mexico.

The other film they have produced is designed to promote good health care, specifically to highlight the problems of the elderly in the community. The aim is to create enough publicity about these problems that they can be solved through the participation of the community on behalf of the elderly now and in the future.

We hope that we will be selling enough to recover all the costs of the computers and labour, so that when the computers need changing we will have funds to do so.

The young people initially struggled to learn how to produce Video CDs, which were compatible with both DVD players and computers internationally. However they have learned how to do this and how to transfer the films onto VHS while keeping a good quality. Consequently we foresee success in their work.

To avoid problems with copyright on the music used in the films, the young people are learning to create their own music and are exploring the possibility of recording members of the community singing together. Another aspect of their work that they want to develop is their skills in using images and video recording as narrative. A former member of the organisation who is now a TV anchor has volunteered to give them a short course in how to use the camera as a narrative tool. This is potentially very exciting and could enable them to increase the quality and usefulness of the work they produce enormously in the future.

We believe we will go from strength to strength. The youth are very interested and we now have a good idea of how to use the equipment.

Major lessons:

- External support and funding gave us the initial funding for the equipment and then gave us some training on how to use it. We intend to pick up training as and when we can. We can proceed further without more training but it will be better if we do ask various people to come and give short courses to increase the young peoples knowledge. We are finding that the older youth are training the younger ones, and we are sure that this will continue.

❖ **Annoura: Journal communautaire d'appui aux processus de la décentralisation (Mali)**

By Birama Diallo, diallo@sotelma.ml

La région de Tombouctou, la plus vaste du pays a 500 000km2 pour 500 000 hbts. Population essentiellement nomade et sous informée. Les journaux produits dans la capital située à 1000km n'arrive quasiment pas à Tombouctou à cause de son enclavement dans le désert du Sahara. Les radios au nombre de 6 dans la région, manque curieusement des sources d'information. Les communautés nomades n'ont pas accès aux informations du télécentre, qui lui même est situé dans la ville de Tombouctou. Ainsi le projet pilote de télécentre de Tombouctou (TCP) a mené une étude de base en décembre 1998. Les résultats étaient comme suit : sur 100 personnes interviewées, 85% disaient que les radios de Tombouctou ne font que de la musique. En février 2002 soient 3 ans après la même étude reprise dans les mêmes conditions donnait seulement 5% qui continuait à dire que les radios de Tombouctou ne faisaient que de la musique.

Le TCP après l'analyse de la situation de l'information dans la région a bâtit la stratégie suivante : identifier des jeunes capables d'animer un journal, former ces jeunes aux NTIC et commencer la production du journal Annoura. Annoura contient essentiellement deux parties : Une partie « régionade » qui traite des information recueillie directement sur le terrain dans la région et un autres parties constitués par des informations nationale, internationale et le résultat des recherches sur les thèmes intéressant les nomades.

L'objectif essentielle de ce projet de production de journal est : Collecter l'information de la région et la diffuser dans la région en utilisant les anciennes technologies comme les radios rurales. Sélectionner sur le net les informations nationale et internationale et les diffuser à travers la régions en utilisant les radios rurales pour la diffusion et les jeunes écoliers pour l reventes des journaux.

Le problème essentiel est le manque d'information lié à l'enclavement de la région et au mode de vie(nomade) des communautés. Les institutions impliquées dans ce projet sont : UNESCO, UIT, CRDI, OMS, FAO, Gouvernement du Mali et la communauté de Tombouctou.

Les informations de la commune de Tombouctou, et de l'ensembles des 4 cercles de la régions sont hebdomadairement collectées et diffusées à l'endroit de la communauté de Tombouctou. Aussi les informations nationales et internationales sont téléchargées et diffusées à travers le journal Annoura. Le TCP de Tombouctou dispose d'un département presse qui se charge de la production, de la vente et du marketing du journal dans toute la région et au niveau national. Le journal est produite prioritairement pour les nomades, à travers l'interface radio rurales et ensuite pour la région toute entière. Le journal est créer par un groupe de jeunes diplômés et d'élèves du lycée de la commune de Tombouctou en partenariat avec le TCP, il fonctionne comme un GIE (groupement d'intérêt économique) avec statut et règlement intérieur.

A travers les radios rurales et la radio valise le contenu du journal Annoura est diffusé régulièrement à l'endroit de toutes les communautés nomades et autres possédant des postes radios. Ainsi toutes la communauté de Tombouctou profite des informations téléchargées sur le net et collectées à travers la commune et la région. L'approche utilisée est participative et à deux niveaux : Le journal produit est vendu de porte en porte par les élèves tôt le matin ; Les radios rurales achètent le journal et traitent les informations et les diffusent. A travers cette approches nous arrivons à toucher toutes la population de Tombouctou. Et bientôt il y ara un vente électronique de Annoura sur notre site : www.tombouctou.org.ml.

Il y a évidemment un coût pour le développement de cette approche. Les élèves vendent le journal de porte n porte et ils sont rémunérés à 10% sur chaque unité vendu. Aussi les radios achètent le journal au prix du marché, actuellement 250 F CFA le journal.

Pour le future le TCP a l'intention d'accroître les ventes du journal en procédant à la vente électronique. Aussi nos avons l'intention d'investir dans une véritable imprimerie. Car vus savez que Annoura est les premier et le seul journal produite dans le nord de notre pays qui est vaste de plus de 700 000 km2 avec une population nomade éparpillée et sous informée.

Nous avons dès le début du journal résolu le problème de soutenabilité en vendant l'unité de journal au dessus du prix coûtant. Ce qui fait que le journal dégage des bénéfices ; qui nous permet de faire face à certaine dépense d'innovation. Mais il reste évident que le journal n'a toujours pas les moyens de son ambition, qui est d'avoir une véritable imprimerie.

Leçons

- La leçon essentielle apprise à travers ce cas est le partage de l'information régionale entre les communautés aussi la diffusion rapide des informations du net a contribuer renforce la capacité des acteurs de la vie économique et sociale de la région. En retour le journal a contribuer à renforcer la connaissance des autres services du TCP par la population.

- La maîtrise de l'outil informatique et des logiciels comme « publishers » etc ont été d'un grand apport dans la formation et la maîtrise du travail de production du journal. Aussi la capacité d'identification des besoins communautaires est importante pour continuer à répondre aux besoins des communauté.

- La recherche d'information utile sur Internet et le marketing sont une des autres compétences requises pour ce travail.

- La replicabilité de ce travail n'est pas du tout compliquée, il suffit de la volonté et des équipement pour faire ce travail de production de journal. En plus de la volonté il faut donner les formations en gestion, en marketing, en distribution.

❖ Le logiciel Keyman - L'alphabétisation sur ordinateur (Mali)

By Birama Diallo, diallo@sotelma.ml

Le taux d'analphabétisme au Mali avoisine les 70% et ce taux est plus élevé dans la population féminine et celle du nord de notre pays en particulier. Devant ce problème majeure les femmes de la CAFO (Coordination des Associations et Organisations Féminines) de Tombouctou a identifié le besoin d'utiliser les NTIC pour s'alphabétise et améliorer leur activités de crédit épargne.

L'objectif de ce projet est d'aider les femmes à utiliser 'outil informatique dans la gestion des activités de caisse d'épargne et de crédit.

Le logiciel Keyman transforme le clavier de l'ordinateur en songhay et en touareg. Les femmes gestionnaires de caisse d'épargne et de crédit utilise l'ordinateur pour la gestion de leurs activités. Elle utilise le logiciel Excel pour consigner toutes les informations relative à la gestion d'une caisse de crédit et d'épargne. En partant de cette application les femme maîtrise l'utilisation du clavier et elle passe facilement à l'utilisation de l'Internet.

Avec l'utilisation des logiciels de gestion comme Excel les calculs fastidieux auxquels les membres du bureau de la caisse d'épargne et de crédit étaient confrontés sont simplifiés et les contestations interminables des membres sont finis. La confiance renaît entre les sociétaires de la caisse et les gestionnaire. Chaque membre s'en dette et rembourse sa dette avec confiance. Et cela a créer la confiance totale entre les femmes membres de la caisse et les outils NTIC du télécentre .

Les institutions impliquées dans ce projet sont : l'UNESCO, l'UIT, le CRDI, l'OMS, la FAO et la SOTELMA (Société des Télécommunications du Mali).

Le contenu généré à travers le développement de cette application c'est les tableaux. Nous avons développé ce contenu avec les gestionnaires de la caisse d'épargne et de crédit du quartier d'Abaradjou à Tombouctou. Initialement le nombre de femme impliquée dans le projet était de 5 : La trésorière, la commissaire au compte, la présidente, la vice présidente et l'organisatrice. Ces 4 novatrices étaient chargés d'informer les autres membres du groupement sur les possibilités d'utilisation des NTIC dans le développement de leur business.

A partir du développement de ce contenu(utilisation de l'ordinateur dans le développement des caisses d'épargnes et de crédit en utilisant les langues locales) les femmes ont pris le chemin du télécentre communautaire.

L'approche participative basée sur la formation en situation est utilisé dans le développement de ce contenu. C'est à dire que les femmes utilisent déjà les cahiers , bics et les machines à calculer pour enregistrer les informations relative à la gestion de la caisse de crédit. Le Telecentre communautaire a juste aider les femmes à améliorer leur travail en les initiant à l'informatique tout en gardant la langue de communication qu'est le songay.

Oui il y a un coût car pendant trois mois à raison de 2 heures par jour la formatrice du télecentre a formé les 4 gestionnaires à l'utilisation du logiciel Keyman et au logiciel Excel. Un prix communautaire de 5000 F CFA par femme et par mois a été payé par l'association des femmes. Ce qui fait : 5000 F CFA x 4 femmes x 3mois = 60 000 F CFA. L'association des femmes a été subventionnée par le FAFPA(Fonds d'Appui à la Formation Professionnelle et à l'Apprentissage).

L'ordinateur et le logiciel nommé KEYMAN sont utilisés pour générer ce contenu. Les document de gestion imprimé sont distribuer aux sociétaire de la caisse. Par exemple la liste de distribution du crédit est imprimée et distribuer au membre venu en réunion de distribution du crédit. De la même manière les récupérations sont aussi calculés sous Excel et distribués . Cette façon de faire a créer une grande confiance entre les adhérentes de la caisse et les membres. Avec l'outil informatique les calculs sont effectués de façon fiable.

En terme de contenu et en terme de partage, le logiciel keyman qui transforme le clavier de l'ordinateur en langue songhoi et tamacheq est pour nous un contenu extrêmement important qui nous facilite l'accès de femmes aux outils NTIC. Grâce au logiciel les femmes gère leur activités de caisse d'épargne et de crédit. Elle trace des tableaux de calcul sous Excel ; ceci leur permet d'éviter de faire des erreurs de calcul qui constituent la source essentielle de conflit dans le groupement.

En terme de partage, le projet a participer dans la Bamako a séminaire national sur les innovations dans l'éducation non formelle. L'approche a été bien accepté par ce forum et a même été inscrit dans les recommandations.

Pour le futur, le télécentre compte travailler avec davantage de groupement féminin. Déjà trois demandes motivées sont déposé à notre niveau. Ces demandes d'appui pour améliorer leur gestion proviennent de deux groupements de femmes gestionnaire de petit commerce et d'un groupement de savonnerie.

Leçons

- Nous avons appris à travers cette expérimentation que les femmes n'apprendront et ne s'intéresseront aux NTIC que lorsqu'elles sont hautement motivées. C'est à dire que si les contenues des applications développés améliorent les activités des femmes alors ,elles trouveront un intérêt certain à s'investir dans le projet. Aujourd'hui en plus des 4 novatrices les autres membres du groupement(16 femmes) ont tous visité le télécentre pour venir voir les machines et comprendre. De façon spontanée le partagé de l'information s'effectue au sein du groupement et en dehors(cas des 4 groupements ayant fait des demandes d'appui).

- Les femmes avaient juste besoin d'être alphabétiser jusqu'au niveau de néo(ie savoir lire , écrire et calculer). Nous avons constaté que celle qui savait déjà manipuler une calculatrice de poche avait plus confiance aux résultats des calculs générée par le logiciel excel.

- Nous avons besoin d'avoir plus de machine pour permettre aux femmes de venir s'exercer suivant leur temps libre. Cela nous semble extrêmes important pour une maîtrise rapide de la technologie.

- Nous avons constaté que les femmes après maîtrise de l'outil informatique surfe généralement sans appui. Nous avons juste expliqué le fonctionnement de l'Internet et cela a suffit pour transformé ces femmes Internaute.

- Le logiciel Keyman transcrit seulement les langues africaines affiliées au mandingue. La reproductibilité ne serait possible que dans la meure ou la langue en question est affiliée au mandingue. Aussi il faudra développer des applications qui directement touche et améliore les activités du groupe ciblé.

❖ **AfriAfya: A partnership for health knowledge and communication (Kenya).**

By Caroline Nyamai, cnyamai@afriafya.org

The idea for *AfriAfya* is based on the realization that modern ICTs have done almost nothing for rural communities. In April 2000 therefore, seven agencies got together to establish a partnership to explore how they might harness ICTs for community health in Kenya. The purpose of the partnership is to

establish mechanisms to generate, manage and share health knowledge at community level through active institutional networking.

More specifically, this means exploring and developing mechanisms for harnessing community knowledge and experience; exploring innovative models and technologies for information management and communication at the community level; enhancing the capacity of network members in health leadership, knowledge management and communication; developing training modules for health knowledge management and communication; and documenting and sharing experiences with others.

The partner agencies are: the Aga Khan Health Services, Kenya; African Medical and Research Foundation (AMREF); CARE Kenya; Christian Health Association of Kenya; The Ministry of Health, Kenya; SatelLife HealthNet Kenya; PLAN International; and World Vision International, Kenya.

For the pilot phase of this project, HIV/AIDS was selected as the pathfinder topic to demonstrate the communication system. Content is generated from the experience and questions provided by the communities involved. This is augmented by official publications from the MoH, the National AIDS and STDs Control Programme, *AfriAfya* Partner Agencies, other HIV/AIDS organisations in the country, and from the Internet.

The information is repackaged by the hub and sent to the field centres for use by frontline health workers and change agents, helping them to deal with health problems and questions raised by lay community members.

Questions from the field centres range from simple factual issues (Can one get AIDS from being bitten by the mosquito? How effective is the condom in preventing HIV transmission?) to social issues (How can I deal with the unfaithful drunken husband who will not agree to condom use?), to cultural issues that promote the spread of HIV/AIDS (How can we deal with '*matanga*' - funeral rites that involve a lot of sexual activity thus contributing to spread), to community experiences gained over time (Is it true that engine oil or specified toothpastes can help to relieve HIV-related skin lesions?).

AfriAfya itself does not have the answers to all of these questions, but it can call on its networks and designated advisers to help formulate answers. *AfriAfya* sees itself as a 'Staging Post', accessing and receiving information from local and international sources, adapting it and ensuring it is relevant to their local setting, and then disseminating it to the community-based health intervention sites. The quality of the information is an important input into this whole process. The content generated is owned by all *AfriAfya* participants, and is free of charge for all to use.

The content is shared through email, printed material, diskettes, CD-ROMs, telephone and fax. Group and focus meetings are important tools to ensure a two-way communication process. Plans are under way to share the content through WorldSpace. The Hub running costs and initial equipment purchases were paid by a grant from the Rockefeller Foundation. The partners pay the additional field centre costs.

Launched in early 2001, the project is right at the beginning. So far the project has collected information from the communities that field centres are working in and shared this with other field centres. This was done through a baseline survey on communication methods in use and HIV/AIDS information being communicated to and from the communities. Other information collected was the HIV/AIDS information that the communities have, the information they want, questions that they have in this area and the desired packaging for the information.

Major lessons:

- Networking, collaboration and ongoing partnership between different health organisations and institutions can be successfully developed. At the beginning there were concerns about '*fraternizing with the opposition*', and '*big' partners overshadowing 'small' partners*, but these have since diminished.

- Building on existing structures is quicker than starting from scratch – working with already established health intervention sites has allowed *AfriAfya* to jump-start and bypass many of the very time consuming start-up stages.

- It is important to find out what information people want – rather than supply them with what you know. Two-way communication is essential if the information being provided is to remain relevant to the people on the ground. Keeping the 'right' information flowing – from the users' point of view – is a real challenge.

- Despite the plethora of health information on the Internet, very little is directly suitable for dissemination to poor communities as it is. It needs to be repackaged to ensure local suitability and relevance.

❖ Traditional knowledge and community healthcare (Nigeria).

By John Dada, fantsuam@kabissa.org

Nigeria has a population of about 120 million, and 70% live in rural communities where there is limited access to health and other information. With little disposable income, and the prohibitive cost of hospital bills and medication, many people in rural communities have turned to traditional medicine. This trend initially looked like a setback, but it also presents an opportunity to work with the health knowledge possessed by local people, especially women, with a view to building on it.

Led by the Fantsuam Foundation, the project works with women in the rural communities to (1) understand various traditional healthcare practices and (2) introduce 'best practice' and safer techniques in selected treatments.

The project recognizes the role of traditional medicine, especially in communities where it is the only healthcare available. It also recognizes the often-ignored strategic roles of women as primary caregivers in these communities. The project is entirely driven by the communities and its participatory approach has allayed suspicion of any attempt to undermine traditional medicine or bring it into disrepute. Fantsuam Foundation has previously built up significant credibility with the rural communities through its poverty alleviation programmes. This has made it easier to negotiate access with significant stakeholders in the communities for the project.

The Fantsuam Foundation is a group membership organisation. The members are established women's groups in rural communities in Kaduna State. Fantsuam has a membership of about 80,000 and provides indirect benefit to over 700,000 people through its micro-credit and community learning centre programmes.

The content is a classified description of the common treatments used for common ailments in local communities. These communities have a largely oral tradition with very little information in written form. This project is the first attempt to document their traditional health knowledge and skills. So far information has been categorised in the following areas: Communal hygiene (sewage disposal and drainages), types of fevers, 'bad back' (a musculo-skeletal problem experienced by many middle-aged farmers), leprosy, female genital mutilation, dysmenorrhoea, diet-control in diabetes and hypertension, non-sexual transmission of HIV/AIDS through use of un-sterilised razors for circumcision and facial tribal marks, and hygienic preparation of traditional recreational drugs (these are stimulants prepared from tree barks).

Common treatments used by traditional healers include: the emollients and local anaesthetics of the traditional bone setters, and the use of herbs as an inhalant during labour, to stimulate lactation, and to treat ringworm. In the Kafanhan area where we work, there is no record of collaborations with research departments of the local universities to investigate the biomedical properties of these treatments.

The communities, especially the older members, generate all information held in the catalogue. Such knowledge remains the property of the communities. Staff of the Foundation, within the context of an on-going micro-credit programme, collects and collates this information for the communities.

A medical database is under development for each participating community. This was initially conceived as a vital registration database (births and deaths), but it now incorporates a traditional pharmacopoeia specific to that community. The information is stored on CDs and hard disk and is in the custody of the Village Head. We do not use a 'pure' model comprising solely indigenous health information. Invariably, we find there are always elements of western scientific knowledge that can be grafted to an indigenous health practice to make it safer and more efficient.

In addition to the knowledge and information collected from the population, other sources of health information are regularly consulted for information that can be integrated into the existing body of local knowledge and practices. The health channel of the WorldSpace Radio, Satelife, WHO fact sheets,

and numerous discussion lists are accessed through the Foundation offices where they are translated into the local dialect and shared.

In negotiating access for the project, the Foundation gave an assurance that local knowledge will not be disseminated without the approval of the communities. This condition also applied to the knowledge and skills of specific individuals. This was the community's copyright procedure.

Information sharing is not a problem commonly encountered among the ordinary villagers. There is a willingness to do this with nearby villagers and even with researchers from outside. Much information is common to other rural communities and is usually freely shared among members of the tribe and to outsiders as well. It is the traditional healers who feel threatened by dissemination of their knowledge and skills. Healers are aware of the pool of knowledge that their communities share, and the people still consult them because they are believed to have specialist skills, more advanced knowledge and ability to access supernatural sources of information for various diseases as well as social, political and economic problems. In Nigeria the healers now have an association that acts like a trade union primarily to regulate how information is shared with non-practitioners

Major lessons:

- Start with the knowledge base available within the community and build from there

- Developing local content cannot stand alone - it should be conducted within the context of a wider community health programme to facilitate its sustainability

- It is possible to evolve an information management system that preserves traditional knowledge and practices while making it receptive to new ideas about healthcare.

- Traditional medical knowledge has aspects that can be modified and improved for better healthcare delivery.

- Local content that is largely determined by the host community has a better chance of being adapted, upgraded and improved through additional external information from orthodox medicine.

- Traditional knowledge is amenable to modernization if the effort is one of partnership. Intellectual property rights can be safeguarded while making the knowledge available to all members of the host community

- It is important to have access to regular updates of reliable health information from a variety of sources

- There is a need for local capacity for the translation of externally generated information from sources such as textbooks, newspapers, journals and the Internet into the local dialect.

❖ **Communications for better health (Ghana)**

By Lynda Arthur, hfghana@idng.com

In Ghana, there is an urgent need to improve access to health information. Currently, information is more accessible in urban areas, but is still limited by the high cost of books and journals. Library collections are often outdated, irregular, and incomplete. In rural areas, poverty and lack of telecommunication services make access to important health information extremely difficult, whether print or electronic. This is not something that technology by itself can achieve. Rather, technology and information should be seen as a tool for problem solving, for improving lives, and for achieving better health for more people.

The Communications for Better Health (CBH) programme in Ghana was developed by the Dreyfus Health Foundation (DHF) and is executed by the Health Foundation of Ghana. It aims to improve access to health information for both urban and rural health professionals. It recognizes the 'last mile' problem and aims to ensure that needed, relevant health information is distributed widely throughout Ghana using low-tech devices such as newsletters and paper digests. The two main content tools are a database of local health information plus a local Ghana Health Digest.

The database of local health information is kept in each country's information centre (head office) in paper format (and often electronic format also). This information centre is a hub for medical information as people call and visit the centres for local and international health information. The local team and editorial board review the most pertinent information and include it in our health digests to share it with the country's health professionals, leaders, and community workers. The local database is created by local health professionals and other interested parties, who, working together, select needed information from available international resources, but also help in-country or regional colleagues to bring their experience together and share it with others. Attention is focused on being certain that the information disseminated is both useful and has a practical, measurable impact on various health problems. The programme supports an interactive information centre/process that disseminates international health information as well as relevant local and regional experiences and solutions.

Local experience is collected from various sources, the most important of which is the parallel Problem Solving for Better Health (PSBH) programme, which is designed to generate solutions to pressing health problems. These solutions are designed and put into practice by local health professionals, who then have a relevant body of experience to be included in the country's health information resources. These resources are made available to all health professionals in the country by the CBH program, which utilizes all available delivery methods to get the information out as widely as possible.

The locally prepared 'Ghana Health Digest' is produced containing international health information in the form of abstracts from databases such as MEDLINE and PASCAL. The selection of abstracts takes into consideration local health conditions. The digest also contains relevant articles written by local health specialists, summaries of findings from community health projects, and results of PSBH projects. Other adapted content is presented in the form of personal health experiences, interviews, "Frequently asked Questions," "Questionnaires and Answers," and quizzes. The majority of information used in compiling a digest is from international sources such as Medline, the Internet, encyclopaedias, periodicals, journals, and other publications. Some of the content, however, are examples of personal stories, interviews, and health articles and this information is compiled from local sources and thus does not need adaptation.

To date, basic health information on topics covered included: typhoid fever, meningococcal disease, water borne diseases, diarrhoea, worm infestation, epilepsy, cardio-vascular diseases, HIV/AIDS, maternal health, infertility, teenage pregnancy, jaundice in infants, drugs, immunizations, CPR, and stress. Health articles from specialists have included: An Introduction to Sexually Transmitted Diseases, A Guide to Malaria Prevention and Control, Buruli Ulcers, Sexual Disorders, G-6-DP Deficiency, Relationship Between Circumcision and HIV, Depression Menopause, Dementia, and Anaemia.

All content is collected, organised, and adapted by HFG staff, and is then reviewed and edited by the local editorial board which is composed of faculty from the University of Ghana Medical School and Ghanaian doctors. The target audience is health professionals throughout the 10 regions of Ghana as well as the general public. 2500 copies of the digest are distributed quarterly to health professionals (doctors, nurses, pharmacists, and medical students) via hospitals, clinics, medical libraries and the District Health Management Teams of the Ministry of Health. Also targeted are parliamentarians, teachers, businessmen, government employees, and community leaders.

Alongside the database and the digest, the public is also targeted through the mass media (television and newspaper). Highlights from the digest are read bi-weekly on the "National Morning Breakfast Show" on Ghana Television (GTV) and the Daily Graphic Newspaper has featured several articles for their weekly health column. The Health Foundation of Ghana is also in negotiation with Ghana Broadcasting Corporation (radio) to broadcast information from the digest.

Major lessons:

- There is a host of valuable, current medical information on the Internet, but the majority of the developing world does not have access to it and, equally importantly, does not know how to use it to optimal advantage.

- All levels of technology, even no technology, can be used to target relevant health information to the widest possible audience. These include the Internet, satellite transmission, radio, traditional print digests and newsletters, and workshops and formal and informal meetings

- The majority of health information needs to be adapted for local use.

❖ **Digital health content: Producing health videos for health workers**

By Herman Brouwers, simon@gamos.org

Every week, according to UNICEF, a quarter of a million children die in the developing world. Many millions more live on with ill health and poor growth. A fundamental cause of this tragedy is poverty. Part of that poverty is the scandal that today's knowledge about protecting the health and growth of children has not yet been put at the disposal of the majority. The digital messages that local NGOs in, for instance Cambodia, Moldova, India, or Bangladesh aim to produce will make this information available to target groups that are especially at risk: the illiterate and poor.

This project takes basic Mother and Child health messages as a starting point. Local NGOs who already deliver community health messages by traditional means (written word, pictures, role play drama, discussion) are equipped with a digital video camera and a PC to produce digital video which contains contextualised visuals that enhance the message. This will contribute to changes in health knowledge and practice. One of the strengths of contextualised digital video is its inclusion of illiterate or semi literate clients both in production and presentation. The digital media will be used by health workers as part of their existing health education programmes – strengthening their toolbox in their fight against poverty. The local NGOs acknowledge the principles of adult learning that are vital to a successful health programme and see these videos as one tool in the toolbox of the health worker, not the only tool.

The production is made by health workers filming video in their programme areas. The first messages were edited in the UK by a partnering organisation. Funding is currently being sought for training for editing on site. The resulting videos are owned by the local NGO and they both use them within their programme and sell them to other interested NGOs. They are currently discussing with Red Cross the sale of 3000 VCDs for community programmes throughout Cambodia.

Health workers in the context of ongoing community health programmes are using the videos. Pilots of the video are used by the producing NGO. Once the pilot has been tested and edited according to feedback, then the production VCD is sold on the market. VCD is the means of distribution because VCD players are cheap, robust and portable.

A market system is used for distribution - other NGOs and government departments can purchase the CD at 2 to 5 US dollars. The CD is advertised at the national co-ordinating committee for health. Red Cross in Cambodia have discussed purchasing 3000 CDs for their community groups. The CD represents a small one off cost for an NGO involved in community health programmes. Delivery through VCD players also represents a cost effective mechanism when compared to health volunteer training.

The main technology is digital cameras and computer editing of video to produce digital media in a suitable format for delivery. At the moment portable VCD players are available in Asia locally (retail less than $100) and will be used to connect to existing television sets in the target populations (note as example - slums of Delhi over 35% households have access to televisions, UNICEF report). The digital media files can then be adapted as technology changes, e.g. as DVD becomes the norm, the mpeg files can be upgraded. Health workers will be able to carry the portable players and CD library with them in the course of their work.

Video footage is obtained by a digital video camera (approx $800). Staff can be trained in the use of the camera within a half day. Tip sheets have been developed which makes 80% of the camera work useable by the editor. Storyboards have been developed to get the programme started, but the staff also develops their own storyboards as time goes on. The video editing is being done on state of the art computers. A $1500 investment presents a system that can handle the video editing. Training on such a system can be done within two weeks although in Moldova training was achieved in a morning (with a computer literate member of staff).

So far the programme in each country has produced mother and child messages on diarrhoea and safe motherhood. These messages are being used in urban and rural poverty settings. Initial feedback from 50 health workers using the system is very positive. Health worker users have indicated that their own knowledge is increasing because they hear the message many times. The workers claim that the videos give them greater confidence in discussing the situation and are excellent discussion starters. They note the ability to revisit a point on the video if it was not clear the first time round. Clients have responded well to having information presented in this way (Note this may be novelty factor and the lessons of years of participatory video need to be noted and used to create best practice guidelines).

This programme is still at its early stages. It has been funded from small charitable donations and complements larger community health programmes. Cost recovery looks possible and there is no reason to doubt financial sustainability. The process is not dependent on a single trained staff member, and therefore is **not** vulnerable to staff changes.

Major lessons:

- Many projects in this subject area focus on ICTs as the main entry point for poverty reduction, emphasizing hardware and networks. This project started from proven, high-quality community health practice in developing countries. It uses ICTs as a tool to enhance and improve these existing programmes and multiply their impact.

- The project's emphasis on development of content, instead of development of hardware, is one of its biggest assets. The hardware that is being used is already available in most parts of the world. However, the idea to make it fit with existing community development programmes is one of its innovative attributes.

- Capacity building is essential. From the start the ownership of the deliverables are with the partner NGOs, not with Gamos/Bigworld. The capacity building support exceeds technical instruction, but also includes organisational development, marketing and business skill training.

❖ **National Health Learning Materials Centre (Ghana)**

By Robert Twene, robtwene@yahoo.com

The Ghana Ministry of Health places much emphasis on the provision of quality care to its clients. Therefore it became necessary to set up the National Health Learning Materials Centre in response to the need to produce relevant training/learning materials for health institutions and workers in Ghana.

The National Health Learning Materials Centre (NHLMC) develops learning materials in Public Health and Clinical Care. In addition, the NHLMC supports resource centres at regional level and at health training institutions. Local Resource Officers are identified and trained by the Centre.

The problem being addressed is the lack of current and relevant health learning materials at the district and sub-district level for in-service and pre-service training.

The most important and traditional sources for information for NHLMC staff and authors are the Resource Centres. However, use of the Internet is becoming important and useful to us. The authors are free to source information from anywhere particularly from colleagues and other local sources.

The Human Resource Development Division of the Ministry of Health provides the NHLMC priority areas for health-learning materials. The key people are called for a meeting. During the discussions the available materials are identified and topics to write on are selected and prioritised.

Avoidance of duplication is our watchword. During the meeting with the key people in the priority area, we try as much as possible to identify all the materials that already exist particularly in Ghana and contacts are made for copies to study so that we avoid duplication. Where appropriate, efforts are made to make existing materials available rather than duplicate effort.

The Centre selected and trained 45 potential writers in writing skills who supplied the scripts for the development of the manuals. The targets for these manuals are the district and sub district health staff, as well as health staff in the various training institutions in the Country.

Initially our strategy for reviewing a manual was to invite writers and reviewers of the scripts for a meeting to review the scripts for a minimum of five days. This has been found to be time wasting and very expensive. Now the scripts are sent to the reviewers to review and their comments are sent to the Centre.

PageMaker, Publisher and Corel Draw are used in the design of the manuals. The resource centre also has a computer database for health learning materials and equipment needs of the institutions, which is reviewed yearly for purchase. It also has a database for distribution of learning materials. In terms of communication, very few of the institutions have email or fax services. Therefore

communication is done mainly by telephones or post. The NHLMC has Internet facility and it is the responsibility of the Programme Officers to browse for information, particularly free publications.

A lot has taken place since the establishment of the Centre, in areas of material development and organisation of regional and training institutions resource centres.

The Centre has designed, produced and distributed over 5,000 copies each of public health manuals on the control of communicable diseases, and on nutrition and growth monitoring. The set of 8 posters were designed and produced by the Centre. These posters inform health care workers about issues on quality of care and to enhance effectiveness in the performance of their duties.

As part of its future initiatives, the Centre aims at exploring possibilities of marketing its products to people other than health staff. This will help the Centre to sustain itself. It also hopes to increasingly facilitate the work of tutors in health training institutions in making accessible lecture notes and materials to students with the present change in the curricula for training.

Major lessons:

- There are a lot of potential writers, who are not writing, in the system. They lack the confidence and direction. With a little exposure and direction most of them will be able to write for publications.

- In materials development, we started off with five manuals. It was meant to cut down costs but was later found to be too much for beginners. One or two manuals would have been easier for beginners to carry through all stages of material development.

- Initially the editing team was doing group editing because they were not experienced. This was also found to slow down the pace of work. Now an editor is assigned to a manual to coordinate and edit, after which another editor does proofreading. This has been possible as a result of local and external training organised for the staff.

- We need to have the other editors benefit from formal training in editing and information technology to enable them to work more professionally.

❖ **Training of health workers to use WHO health information packages (Ghana)**

By Sophia Twum-Barima, stbarima@whoghana.org

Provision of health care in most countries in Africa leaves much to be desired. Most hospitals, health centres, clinics and dispensaries do not receive or generate enough funds to offer the services required by the general public, especially women and children. Most clients have to wait for long periods to see a health care provider. Equipment needed for diagnosis and treatment may be unavailable or too expensive for the client to afford.

Sadly, most diseases could be prevented if the clients had simple information. When people are well informed, they are likely to take better care of their health.

Therefore the World Health Organisation Regional Office for Africa (WHO/AFRO) compiled AFROPAC, which contains information on 13 most important and common diseases in Africa today. The package is short and easy to read and gives simple answers to simple questions. In Ghana, the AFROPAC was translated into Twi and Hausa, two languages widely spoken throughout the country, with the help of the National Health Learning Material Centre of the Ministry of Health.

The objectives of the project are: To send health messages in innovative ways that will catch the attention of the listeners; and to have a standardized set of information in local languages that can be easily used and understood by all.

The translated versions of AFROPAC were put onto audiotapes for health workers at the periphery level to use them for public health education. The health information on the audiotapes was prepared by the National Health Learning Materials Centre of the Ministry of Health, in collaboration with the WHO Country Office. The Ministry of Health presently has ownership of the project. WHO paid for the costs involved in translation and dubbing on audiotapes and the training programme.

A training programme was organised to sensitise the health workers to the package and the various ways it could be used. After the training each health worker received a package of 26 audiotapes, in Twi and Hausa.

The health workers play back the cassettes in the waiting rooms of hospitals and clinics, during outreach programmes in remote communities, at maternal and child health clinics, and during market days and other social gatherings. They also use them for specific health education during outbreaks of communicable diseases.

The content of the audio-taped version is communicated through public address systems mounted on vans (mobile) at market places and social gatherings and at community outreach educational programmes, recorders at hospital and clinic waiting rooms and at the maternal and child welfare clinics.

The English and translated copies (hard copy) are used as reference materials in the libraries for health workers and health education officers to update their knowledge and prepare their presentations.

Health workers in all 18 districts of the Ashanti Region are presently using the audio-taped version of AFROPAC for health education programmes. In the Kumasi metropolis, an ongoing bi-weekly health education programme called "Education on Wheels" moves to markets areas and the very busy Central Business District to play back the contents of the AFROPAC.

Due to its usefulness (in terms of content-local language and easy use), NGOs working in health and development have expressed interest. World Vision in Ghana is using the audio-taped version of the AFROPAC in remote project areas.

❖ Disseminating HIV/AIDS information to communities in Kenya

By Allan G. Ragi, kenaids@iconnect.co.ke

The Kenya AIDS NGOs Consortium (KANCO) is a national membership network of NGOs/CBOs and religious organisations with an interest in HIV/AIDS and STI activities in Kenya. It was established in 1990 by a group of major NGOs responding to the HIV/AIDS epidemic. Currently the membership stands at over 650 organisations. KANCO realised that there was a need for up-to-date, practical and relevant information in HIV/AIDS to enable members to implement community-targeted activities that influence behaviour change.

KANCO keeps its members up to date on emerging issues in HIV/AIDS. This is done through production and distribution of thematic information packs, which cover issues such as Gender and HIV/AIDS, Policy Development and Advocacy, Condoms, Youth and HIV/AIDS among others.

The KANCO newsletter '*Partner*' provides members with Consortium news and offers them a chance to share their experiences, lessons learnt and best practices. KANCO also published the East African edition of the *AIDS Action* newsletter and distributes it to readers within Eastern Africa.

KANCO has strengthened district information services through collaboration with existing information services and recently by establishing three regional resource centres covering Western Kenya, Coast and Rift Valley regions. The resource centres collect information materials on HIV/AIDS, which contains books, brochures, journals, newsletters, posters, videos, audiotapes, CD-ROM-based databases among other media. They also offer enquiry and briefing service to member organisations and other users.

The KANCO Resource Centre maintains a members' database (AIDS Information System – AIS) in which profiles of members are stored and used in production of a biannual members directory as well as used for referral of users to organisations offering various services. The directory is a key profile of HIV/AIDS service organisations in Kenya.

The resource centre runs member workshops in Information Management, Programme Planning and Management, Resource Centre Establishment and Management, Community Mobilisation, Counselling and Home-based care.

KANCO promotes the use of HIV/AIDS information through the print and electronic media. KANCO not only provides HIV/AIDS information to the media houses but also participates in talk shows on various

HIV/AIDS issues. Such sessions provide a forum for the members of the public to get an insight into HIV/AIDS issues.

KANCO also shares information with its members and collaborators through email. They are able to inquire about various issues through email as well as receive updates on various issues in HIV/AIDS.

KANCO also holds exhibitions during forums such as major HIV/AIDS workshops, seminars and conferences. This serves to publicise the materials available in the Resource Centre and also staff members are able to interact with the various HIV/AIDS information seekers. These seekers are mainly HIV/AIDS programmes staff, researchers, and care providers among others.

The resource centre project funding caters for most of the costs. The Resource Centre also sells various videotapes and books to interested users.

Major lessons:

- Creation and sharing of local content is a vital activity in HIV/AIDS and other developmental issues. The target communities and community service organisations are able to relate to, and identify with, this information. It facilitates domestication of globally generated content to address local issues.

- Local content should be geared towards community-prioritised issues. The organisation generating the information should use different ICTs to avail this content to the target users as well as to publicize such content to potential users.

❖ **Somos Diferentes…Somos Iguales (Nicaragua)**

By Humberto Abaunza Gutiérrez, humberto.abaunza@puntos.org.ni

Somos Diferentes, Somos Iguales (SDSI) or 'We're Different We're Equal' is a multi-media/multi-method strategy that promotes the individual and collective empowerment of Nicaraguan young people to defend and exercise their human rights in daily life.

The centre of the strategy is our 'social soap' TV series, *Sexto Sentido.* This is complemented by our daily youth talk radio show, and combined with interpersonal and community reinforcement, through: alliances with over 200 organisations around the country; face-to-face capacity building activities with grassroots youth leaders and local journalists; a methodological manual for workshops with young people; distribution of educational resource packs for use by local groups; help in setting up of peer-led support/discussion groups; alliances with over 70 local TV and radio stations to expand coverage and debate; periodic thematic campaigns organised and carried out in conjunction with hundreds of local organisations, service providers and media outlets all over the country; and ongoing monitoring and evaluation and dissemination of the results.

Puntos de Encuentro is the implementing organisation. It is a non-profit making, feminist organisation, dedicated to communication, research and education, composed of a multi-cultural, multi-disciplinary team of men and women adults and young people, with different sexual preferences and from different social backgrounds.

SDSI is multi-thematic. The most important issues are: human rights, HIV/AIDS, sexual and reproductive health and rights and sexuality (negotiation of sexual relationships, sexual identity/orientation, safe sex, condom use, emergency contraception, sexually transmitted infections, etc.); gender and sexual violence (in the home, in couple relationships, etc.); human rights; poverty, migration, social exclusion; commercial/transactional sex and sexual exploitation; substance abuse; discrimination and diversity with equity (gender, age, ethnicity/race, class, sexual orientation, disability); and life skills.

The communication is addressed to teenagers and young adults; their families, youth groups and organisations that work with young people; groups and organisations that work on sexual and reproductive health issues; service providers; national and local media outlets and journalists.

"*Sexto Sentido"* is a weekly ½ hour TV soap opera that follows the daily lives of a group of teenagers and young adults (men and women) as they confront complex situations in a realistic, entertaining and

touching manner. It is the only Nicaragua-produced series of this type on the air. The series is structured with long narrative arcs to allow complex and multi-dimensional themes to be explored over time, without having to "use up" any one theme in a single episode. This is particularly important for complex issues like HIV/AIDS and sexuality in general.

"*A Young Programme without a Name (UPJSN)*" is our nightly live youth talk radio programme. The programme's format, as well as the open telephone line, offers young people a way to converse freely about themes that are important to them. UPJSN deals with the themes that are raised dramatically in Sexto Sentido, promoting debate and more in-depth analysis.

We organise *workshops with local journalists* and media people, both to acknowledge the importance of their contribution and to stimulate interest and analysis of the issues. Currently 11 local cable TV stations re-broadcast Sexto Sentido.

We distribute *educational resource packs* to local organisations, with videocassettes of Sexto Sentido episodes and accompanying discussion guides, to promote reflection and analysis, as well as individual and collective action.

Several times a year, we organise *thematic campaigns* timed in relation to specifically relevant episodes of Sexto Sentido. The campaigns are coordinated with organisational and media allies and include the production and distribution of informational and educational materials. We also produce announcements at the end of the episodes that tell people where to go to get information and support.

Our *yearly youth leadership camp* brings together 100 grassroots youth leaders from organisations all around the country for an intensive 12-day event. Using an experiential and highly participatory methodology, it's a 'first step' for participants to understand the nature of oppression and discrimination. This shift in awareness towards the appreciation of difference prepares young people to build alliances between different social groups, to develop another view of the world and of their own place in this world. Facilitators are young people who have participated in previous camps and have received further training.

We organise workshops on how to use our manual "Somos Diferentes, Somos Iguales: A methodological approach to building alliances among young people, that includes the basic conceptual framework about power relations, discrimination, alliance-building and social change, as well as a step-by-step guide for each activity. We also organise follow-up workshops to strengthen specific leadership and organisational skills.

In coordination with our youth training activities, we organise tours by the cast of Sexto Sentido to high schools, local organisations, radio and TV stations to promote and discuss the issues raised in the show and receive feedback from viewers. The cast also participates in events such as the World AIDS Day commemoration.

Major lessons:

- Our current experience, compared with our previous experience (campaigns) has revealed to us the importance of the reinforcement and the deepening of the issues; the emotional identification created through the characters, the building of alliances and local skilll-building, in order to achieve a longer lasting impact; even though the process may be longer. We had thought the process would be shorter than we now estimate. Campaigns tend to be quicker, but shorter- lived. We now work from the hypothesis that an issue must be treated in its entirety, its complexity, via a process of successive steps towards the point. People live in a network of different relations at the same time. To cover an issue in its different manifestations may help people to think in a more global way. It is recognised that the process of the assimilation of new information takes its time; therefore, we must give each issue appropriate depth and explore them in detail, rather than changing theme constantly or too quickly.

- The building of alliances has been very complex. We periodically evaluate the 'contract' established and analyse the relationships of solidarity, but also we analyse the conflicts, jealousies and competitions that exist or have existed between organisations. The human factor and the quality of empathetic relationships developed by the people responsible for this work has been a fundamental factor in its success.

- Agreements and commitments made between Puntos de Encuentros and other organisations have been structured around common interests, good will and honoured words. Along the way,

some have not been fulfilled. Perhaps it would be better to formalise some of these processes, with written contracts for example.

- Local radios have been extraordinary alliances and an incredibly powerful instrument in terms of the local debate. However, because of the precarious state of their funding, we must contribute to the creation of publicity and support for them.

❖ **Communications for better health – South Africa's Health Systems Trust**

By Fatima Suleman, http://www.hst.org.za/hlink/

It is a paradox that in a country with as many resources as South Africa, there are many areas in which the health services have access to so little. In the light of major health care transformation, it is essential that health workers and planners in South Africa have access to current information about the changes occurring *within* the country, as well as access to international health information.

Different health workers require different types of information, and health planners have different needs as well. Thus a range of content, both electronic and print, was created.

For the frontline health care workers - especially nurses - a monthly newsletter was produced called *Update.* This focuses on one particular issue each month. The aim was to disseminate a wide range of information on health sector restructuring activities, significant research results and recommendations, and activities of the Health Systems Trust. *Update* was one of the major vehicles for documenting current debates that have dominated efforts at health sector restructuring, and was distributed free to approximately 5000 readers nationally and internationally. Distribution was extended to rural clinics and hospitals as well as to universities, health service managers, NGOs and CBOs, parliamentarians, researcher institutions, funders, the private sector, hospitals, the media, libraries, clinics, and others.

Update was disseminated to 5000 subscribers up to February last year (2001). An evaluation was conducted that revealed that other organisations were producing similar information and that information requirements had changed. This publication no longer exists, and plans are underway to produce more policy briefs.

At the moment a publication called *Kwik Skwiz* - a brief designed for busy health service managers and health workers - is being distributed. It aims to keep health service managers informed of progress with health systems development, and to share lessons and experiences from different sites across South Africa.

Electronic mailing lists and discussion fora were created to enable information to be disseminated to designated groups of people based on specific areas of interest. An example of such a distribution list is the Healthlink Bulletin, which provides a snapshot of the health issues making news. *Mailadoc* (see below) is an example of a discussion forum that is being used by rural doctors to share problems and ideas.

Healthlink also maintains an organisational website <http://www.hst.org.za> to provide access to information, while striving to ensure that all these resources are also available to off-line users, and to others who only have email access. Content relates to areas of health systems research, equity, district systems development, as well as providing links to emerging legislation in the country.

All of these services are provided free of charge, and the costs are covered by means of accessing donor funding for these activities.

We also host a variety of websites on behalf of organisations that do not have the capacity to run their own services. A nominal charge is levied for such a service. A lot of our current lists are focus group lists - and basically fulfil a practical information sharing function for committees, societies, groups of researchers collaborating on a particular issue for a certain time period.

Print publications, including *Update*, are posted to all health facilities, tertiary education institutions, research units and national and international researchers. Electronic information is disseminated via electronic discussion lists and the website.

Information is received from researchers and/or health care workers commissioned by Health Systems Trust, or from national media. Also, information is received from the national and provincial Departments of Health. NGOs submit relevant information to the Editor of the publication voluntarily.

We also produce and distribute CDs, with information from the HST website.

Mailadoc is open to any health professional or person who works in a rural health setting, or has a close interest in this area - most of the members are rural doctors in South Africa. The original intention was to enable a simple form of store-and-forward telemedicine - so that doctors in rural hospitals without specialists or much clinical support could post clinical queries (case studies) to the list and receive input from the relevant specialist from another hospital. Initially we put a fair amount of effort into recruiting 'rural-friendly' specialists from urban areas and the university to participate on the list with the express purpose of providing this support to rural doctors - this is also linked to the policies of some of the university medical schools to provide ongoing continuing education and support to rural doctors. The list has indeed been used for this purpose - numerous examples. It is a fascinating discussion about practical solutions that other doctors have made in resource-poor settings, and there is sometimes debate and disagreement about the clinical handling of various cases.

When questions are posed that cannot be answered by anyone on the list, we try and proactively send those messages out to the relevant organisation for input and response back to the list - e.g. we often pick up drug information queries, send these to the Medicines Information Centre, and give the response back to the list.

Major lessons:

- We have sometimes attempted to use email discussion lists to systematically collect local knowledge and experience around a health issue. It is feasible, although often response is poor - it seems to depend largely on the general success factors of the list as outlined above, and the level of the participation. This has worked quite well in the case of the district health system / local government list, where a lot of policy issues and information has been debated and developed. This usually works best with active moderation, and when structured questions are posed that are clear and can therefore elicit definite responses. The process needs to be driven, and it also requires a fair amount of work to process and distil the response, and provide this back to the list in an organised and summaries fashion.

- Our experience has shown that maximum value is achieved from information dissemination when it is closely linked to other interventions - such as training, facilitation and other communication with the audience - for example in the sites where we have facilitators, and the audience know the people who are writing / distributing the information there is much more trust, feedback and opportunity to assess and ensure that a difference is made through the intervention. This is especially true at grassroots level. With academics and to some extent doctors it is easier to just make information available, because these categories of users are information literate and hungry, and usually require little or no training/incentive to make use of information.

- There is great need for local content. However, a careful assessment of the information needs is required, as well as an in-depth analysis of the technologies that can be used to meet these information needs. Buy-in from major stakeholders is essential to assist in both distribution and content generation (print and electronic).

- Projects were initiated on a small scale and then expanded, especially electronic communication. Initial support and encouragement is essential to overcome the fear of expressing opinions in discussion fora. Once the usefulness of this is demonstrated, then discussion fora gather a momentum of their own.

- An initial 'road-show' was organised to explain the areas of electronic communication that the project would offer. Also, there was on-site training and management of email services.

❖ **Developing a health knowledge network (South Africa)**

By J.A. Louw, jalouw@mrc.ac.za

Health status in South Africa is the result of a complex system, involving diverse players including researchers, health services, industry, health policy makers and communities in an iterative process and also forms the basis for the Essential National Health Research (ENHR) approach, adopted by

the South African Medical Research Council and the South African national Department of Health, as a planning framework. For ENHR to succeed it must be supported by efficient knowledge management – promoting the logical transformation of data first to information then to knowledge in a systematic way, thereby enabling the innovation process for the creation of new knowledge and knowledge dissemination aimed at implementation of findings.

In general, information systems in the South African health context are disparate and not integrated. Although there is an abundance of web sites, no single entry point existed at the time of initiating this project, to provide access to quality-controlled health information resources, or to allow for reciprocal sharing of information. It was therefore clearly evident that the need existed to establish a virtual knowledge network, which will provide for specific applications that will support and stimulate innovation through efficient knowledge management – and serve as a decision-support instrument for government and the health services sector.

SA Health*Info* (http://www.sahealthinfo.org/) aims to provide a one-stop interactive forum / resource, for quality-controlled and evidence-based health research information, to a wide spectrum of users, at various levels of aggregation, with the necessary security arrangements and facilities for interaction among users to promote explicit (codified) and tacit knowledge flow and therefore to stimulate the process of innovation within the South African health system.

SA HealthInfo is made up of a number of modules, currently there are twelve, focusing on various essential health priorities. These modules include: Bio-informatics; Chronic Diseases; Ethics in Health Research; Evidence-based information; HIV /AIDS; Malaria; Medical Inventions; Mental Health; Nutrition; Traditional Medicines; Tuberculosis; and Violence and Injury.

The health knowledge network modules serve as information clearinghouses for focused research content areas. It is our aim to provide access to relevant hyper-linked static information and databases and therefore the modules are embedded within a comprehensive 'support' system that allows interdependency and links with relevant information systems on remote servers. Each module has specified content providers responsible for content submission and maintenance. These content providers are experts in their respective fields and provide value-added and relevant information.

The following groups of SA Health*Info* users have been identified: (1) The general public and/or communities (with access to the internet); (2) Health Policy Makers (i.e. Government); (3) Healthcare service providers (i.e. Clinics, Hospitals, Doctors etc.); (4) Industry (i.e. Insurance and Pharmaceuticals) groups; (5) Health researchers.

A significant challenge for the knowledge network was to develop an architecture that supports powerful searching capability and, at the same time, provide access to information in a fast and generally accessible way. Another key element is the logical integration and structuring of information and matching with appropriate target audiences via appropriate network and access control mechanisms.

Most of the information provided by the knowledge network is public domain and therefore freely available through the Internet web site, but in order to be useful to researchers and stimulate innovation, it is necessary that access to private information or information to be shared within groups is restricted. A three-tier client server model allows access control to be implemented in the middle tier. In addition, a coarser level of access control has been implemented by restricting access at the web server level (user ID and password controlled). All knowledge network resources are kept secure and situated behind an Internet firewall.

Although the knowledge network should use the latest appropriate IT, it should also cater for communities that are poor in terms of telecommunication infrastructure. In this regard it should link with initiatives to provide appropriate knowledge flow to communities via multi-purpose community information centres or telecentres in areas accessible by the community.

For a health knowledge network to be of value to the players in the health system involved in the innovation process, and for improved decision-making, particular care must be taken to populate the network with quality information. In this regard it would be necessary to establish a mechanism (such as peer-review panels) to vet information sources which will become modules of the knowledge network, as well as those which might be pointed to via hyperlinks. All content published on the modules is evaluated by the module owners making use of a system of peer review in their domain. The project's management team, consisting of researchers and information specialists, scrutinizes links to relevant Internet sites. Nevertheless the project has to warn users that it cannot vouch 100% for the content and therefore has published a specific disclaimer.

The National Health Knowledge Network is an ambitious project as it seeks to consolidate disparate sources of information hosted and stored in numerous different geographical locations, by different organisations on different and often incompatible technologies and networks and platforms. The intellectual property protection requirement as well as the various political and funding scenarios as well as a large and disparate potential user group do not make the implementation of the SA Health*Info* any easier.

The content of SA Health*Info* has grown exponentially, starting with only 4 modules and growing to its current state of 12 modules. Researchers have been given creative ways to interact, for example there is a process in place for researchers in certain modules to send newsflashes, fact sheets, upcoming events and frequently asked questions on an ongoing basis. These are received in word processing format and converted to html. We also receive technical reports/articles in PDF format as they become available. This is then published in the appropriate module. End-users are also invited in some areas to forward their own contributions for moderation and inclusion. The result is that, through SA Health*Info,* the end user can get access to the databases, PDF documents, and html articles via the web. There is also an online feedback form via which they can report problems that might have occurred or ask more questions as well as a call desk. If the end users want to order articles, they can do so via the document delivery system (online form).

Major lessons:

- When initiating the information gathering arm of the project it is important to obtain an inventory of data sources from each of the potential module owners.

- Human resources for the project included: a project manager, a project administrator and secretarial staff, systems developers, and a web design and development specialist in addition to the staff supporting the content providers. Fundamental to the successful implementation of the project was the existing technical infrastructure including networks, servers and technical facilities, security and information services incl. document delivery and call desk.

- A critical role in the ongoing growth of the site is that of content provider. A champion must be identified for each content-specific area to (a) allow regular flow of evidence-based quality-assessed information and (b) stimulate interaction within communities of practice through discussion groups.

- When developing and planning a site of this nature it is vital that the content, navigation, design and interactive factors be carefully considered.

- The issue of the digital divide requires concerted action by players at country-specific and global level. It is therefore important to link an initiative such as SA Health*Info* to other initiatives aimed at providing access to the web at community level - such as multi-purpose community centres (telecentres) and health way stations. Wireless technology, where appropriate, should be considered for such access.

- The availability and value of information can be enhanced through the translation into other local official languages.

- Although the technology supporting this project continues to evolve, the main focus should be on content provision and not technology. The constant provision of relevant, quality-controlled content is paramount, and content providers need to be clear about their roles and expectations. The ability to classify the content in a multi-dimensional fashion created difficulty, as no one system could be found to cut across disparate criteria, e.g. topic related, source of info, format of info, target audience.

- Understanding the target audiences' needs is difficult when using web technology, as the user-base is effectively the entire world. It is recommended that a few target groups of similar needs and interests be selected to try to meet their requirements.

❖ **ACT e-health: A Tanzanian electronic health network**

By Michael Burke, act@maf.or.tz

Electronic distribution of information of all kinds, including health, is fundamental to continued development and to participation in the global network of information exchange. Tanzania is a stable country of sub Saharan Africa that is demonstrating an emerging interest and capacity in electronic information. The number of Internet cafes is major towns is increasing steadily. Distribution of information is a major challenge in this the context of Tanzania. A model of health information exchange by electronic means has been developed.

The objective is to model the use of electronic distribution of health material in our East African context. Electronic distribution is fast and less expensive than conventional paper means. A number of services are being provided: Email distribution of health material for health workers and community members; Electronic notice boards on sexual and reproductive health, health consumers issues, and health sector reform have been created; and Internet sites are being developed to further strengthen access to information opportunities in health.

Learning materials are being formatted for CD distribution. A research programmes under way to compare CD based learning vs. conventional learning in a collaborating Clinical Officer Training school.

Collaboration is occurring with the Distance Education Unit Ministry of Health, Anglican Church of Tanzania, Ugandan Protestant Medical Bureau, Continuing Medical Education Uganda, International Family Health (UK) and a wide range of NGOs and individual community members.

Content on local issues related to malaria, HIV and AIDS, health sector reform and reproductive health issues is being generated. Information on meetings, job opportunities, funding opportunities and study programme is also distributed.

The information is generated by ACT E-HEALTH as lead agent, in collaboration with other network members. The target audience includes health workers, health consumers, health managers and participants in a collaborating programme. The material is sent to a wide range of government and NGOs throughout Tanzania and also in Uganda and Kenya.

The programme was run on a shoestring budget for an initial period. Some minor donor support is now being directed to the programme.

The content is distributed in this initial phase by email. Movement towards CD utilization has commenced, and development of supplementary websites is underway.

The project has run for two years and has generated an awareness and an acceptance for its role in health information distribution. It has been presented in forums such as the Tanzania Public Health Association meeting, the Christian Social Services Commission annual meeting, the International Conference on AIDS and STIS in Africa, Burkina Faso.

Major lessons:

- In Tanzania, there is an issue of the language of content – should it be Swahili, or should it be English. The majority of materials have been in English, while some have been prepared in Kiswahili.

- A formal agreement with the Local Ministry of Health would strengthen options for local content.

❖ **Health information dissemination centres in East and Southern Africa**

By Renuka Bery, rbery@aed.org

Promotion of health policy and programmatic changes requires access to current research findings, prepared in formats that are easy to use. The purpose of this activity was to increase the use of research, analysis, and information in support of improved health and nutrition in East and Southern Africa.

Commonwealth Regional Health Community Secretariat (CRHCS) and the Support for Analysis and Research in Africa (SARA) project had numerous regional health publications but no mechanism to systematically disseminate them within countries in the region.

This project was developed to strengthen the capacity of African institutions to collect, collate, and distribute relevant information in a timely manner and increase information access at the policy and programmatic levels in the areas of reproductive health and nutrition. A joint CRHCS/SARA assessment identified existing institutions to serve as information dissemination centres for reproductive health and nutrition.

The role of these country dissemination centres was to disseminate regional information, collect country-specific information and grey literature and to conduct greater outreach to ensure that policy makers and programme managers had access to the information. They operated with support from a technical task force that guided the activities. Eight dissemination centres from seven countries received small seed grants from the SARA project to support information dissemination centre (IDC) activities. The coordinating regional institution was CRHCS. The SARA project, Academy for Educational Development in Washington provided technical and financial assistance to CRHCS. SARA is funded by USAID's Bureau for Africa, Office of Sustainable Development.

This case focuses on two project activities that took place during the period 1995-1999: 1. Collecting grey literature and repackaging it for country-level audiences and 2. Organising policy seminars to share regional research findings on maternal mortality.

Dissemination centre coordinators gathered existing research from institutions around the country on reproductive health and nutrition. Most centres collected research studies and wrote annotations that were produced as an annotated bibliography. If funds were available, the centre produced and disseminated paper copies of this annotated bibliography to its mailing list, other institutions, and CRHCS. The purpose for the annotated bibliographies was to prevent replication of research and to inform managers and policy makers of the research findings.

Each centre collected the information in different ways. In Kenya, for example, the IDC coordinator trained nutrition research assistants who understood the content to locate and gather the fugitive literature on nutrition. These research assistants received a small stipend and travel/per diem costs to gather the information around the country. In Malawi, the IDC coordinator and one or two colleagues visited different regions of the country and identified the relevant information and if possible, retained a copy for the IDC library. Malawi planned to incorporate this information into a searchable database so researchers, health managers, and policy makers could locate this information easily.

IDC coordinators indicated that collecting the information was at times difficult since the researchers were not always willing to share the materials. Also, funds were generally needed to make copies for the IDC. Sometimes the funds were not available and sometimes there was no place to make copies. In the IDCs that did not receive seed grants, the production and distribution of annotated bibliographies was limited, but all IDCs did develop annotated bibliographies.

In 1995 CRHCS conducted groundbreaking research on the consequences of unsafe abortion that was published as a research monograph. CRHCS staff then packaged the study results into a PowerPoint presentation and presented it at the annual health minister's conference. Based on recommendations from the health ministers, CRHCS then repackaged the study results into a short (18-page), user-friendly booklet: *Addressing the Complications of Unsafe Abortion in Sub-Saharan Africa, Programme and Policy Actions*. This booklet was widely disseminated, particularly through the IDCs.

Five IDCs organised a policy seminar around the issue of unsafe abortion/maternal mortality. All centres used this seminar to disseminate and discuss the issues in the policy booklet described above. In Kenya, a scientific writer and the CRHCS assistant information coordinator repackaged some research on maternal mortality that was conducted in three districts. The IDC decided not to hold a national level seminar because they felt they could influence decision makers from different sectors at the district level. The IDC held a seminar in one district, where the district medical officer was convinced of the importance of maternal mortality. But lack of funds prevented seminars in other districts.

The Zambia, the IDC reprinted country-specific research results from the study in the Zambia Health Information Digest, a publication of the University of Zambia's Medical Library.

IDCs indicated that policy makers did not realize how complications of unsafe abortion were so important to maternal mortality in their country. In Zimbabwe, the seminar participants developed

action plans on the social and medical consequences of abortion. The Uganda seminar participants developed recommendations for the Ministry of Health. In all cases the media were invited and in most countries they helped to widen the debate to the general public. To keep the debate alive, the Zimbabwe IDC hired a local theatre company to adapt the policy booklet into a play. The theatre company did and performed this play to a number of different audiences, however, when this play became the focus of another donor-supported project, the issue of ownership surfaced.

Why are researchers not willing to share information? There seem to be a number of reasons the countries found that researchers would not share their research. Sometimes it related to trust issues. Researchers were certain how their research was going to be used, so did not want to give it out. Kenya found that hiring trained research assistants to collect the information helped because they could anticipate these issues and train people how to build trust. Also, if researchers were promised a copy of the bibliography, they were more likely to share.

Another issue was access. Often only one copy of the research report existed and the office or library did not have a working photocopier, or, there were no funds to make a copy. In Malawi, the IDC found that sometimes the document was locked up in someone's office and was therefore inaccessible to all but that person.

The IDCs indicated that people see information as power and sometimes they do not want to give up that information because they think their power will be diminished.

No socio-cultural factors were evident among countries, however, they may provide some of the underlying causes for not sharing information.

Ownership needs to be clarified from the beginning, but groups should not become too proprietary of information because many actors are needed to achieve change and holding back information because someone "owns" it, is defeating the purpose. As long as those who create the information and those who sponsor it both get credit as the information is shared, all parties should be satisfied.

The bibliographies were produced as hard copy documents and shared by the IDCs. They were sent to policy makers, research institutions, ministry officials, NGOs, CRHCS via post and shared with IDCs from other countries at a regional meeting. It takes funding to produce the materials and to send them out. In some cases donor funds were used, and in some cases institutional funds were used.

The monograph was sent to health ministers, donors, and other selected organisations. CRHCS distributed the repackaged policy booklet widely by mail and on request to ministries, policy makers, NGOs, donors, IDCs. The information from these documents was also repackaged into PowerPoint presentations that were presented to donors and policy makers. The information was also repackaged into a play that was performed for the public. The media also reported on this information in a limited way.

Adapting information. For information to be valuable and used, it has to be in the right format for the various audiences. Also, the more different formats and different channels that are used to share the information, the more likely it will be used. The process: CRHCS repackaged the long research monograph into a short booklet that highlighted policy actions. This in turn was used by a theatre company in Zimbabwe as the basis for their play about unsafe abortion. Then the play was adapted to the context of another country, Zambia. In addition to this, the media was also used to get the information out. They wrote articles about the seminars in the different countries and in many this started a public debate in the press about unsafe abortion. In Zambia, young people from a school presented the play to audiences in Lusaka. This stirred a public debate about whether adolescents should be involved in such issues. The debate brought the issue into the open.

Perhaps the most important point is that content experts and information experts need to collaborate to determine who the key target audiences are, what the best formats and delivery channels are to reach these audiences, and share the information in as many different ways as possible. Funders, too, have to be flexible and aware of this need. Finally, information must be shared and not kept as something proprietary.

Major lessons:

- Creating and sharing local content is a huge responsibility and increasingly demanding and complex. To achieve results, more investment is needed in terms of time, facilities, staff, training, and more support and stronger commitment is required from governments and donors.

- Collection of grey literature is not easy. Researchers are sometimes uncooperative or unwilling to share information, and facilities and funds to copy the information are not always available. However, compilation of bibliographies and production of issue summaries may stimulate researchers to contribute their work.

- Country dissemination centres are strategically placed to assist in organising information so that it is accessible to researchers, policy makers, media, etc. but this function needs to be supported with additional small amounts of funding. This started with the bibliographies and policy seminars, but could continue with centralizing collection of information and searchable electronic databases. However, when adding work to an existing centre that already has a full complement of activities, results take longer to achieve.

- The greatest challenge facing any dissemination activity is the need to repackage information differently for various audiences. These skills are critical, yet scarce. Moreover, repackaging information takes valuable resources that are often unavailable.

- Content experts or a team of experts are required to identify what research needs to be repackaged. But who should be trained to repackage material; technical content experts or information specialists, or are both required to do the job?

- The most active centres had a technical person who championed the activities of the centre and provided leadership, vision, motivation, support and guidance to the IDC coordinators.

❖ OptoNews: Promoting visual and eye health in Africa

By Frank Magupa, ona@ona.kabissa.org

African countries suffer up to seven times the rate of blindness as compared with the rest of the world. The awareness of the magnitude of the problem is growing and so is the realization that we all must do something about it. If not, the number of cases of preventable blindness will have doubled before we know it – rather than be eliminated. Africa has about 27000 eye care staff. This includes Optometrists, Ophthalmologists and ophthalmic nurses/assistants. Nevertheless there is no reliable or comprehensive source of information with regard to the state of optometry in Africa.

OptoNews Africa addresses this problem with reasonable precision in order to approach the shortage of reliable information and use of a peculiar information system to promote visual and eye health in Africa.

Since its formation in 1988, OptoNews Africa has continued to exist as a non-governmental network and a collaborative activity of The Tanzania Optometrists Association. It is dedicated to maximize the public benefit of the science and practice of optometry and improve visual and eye health in Africa. On a non-for-profit basis, OptoNews Africa facilitates information sharing and distribution among optometrists and other eye care staff as its major activity.

Optonews Africa maintains formal and non-formal collaborations with various organisations to develop strategic partnerships.

The Tanzania Optometrists Association for a number of years has been backing up ONA as a guardian organisation. Yahoo has contributed much to the achievement of ONA's goals. Our popular, useful and effective electronic discussion group is powered by Yahoo, free of charge. Kabissa, a space for change for Africa is equally credited for its support through hosting our website free of charge. VisionCare has taken responsibility for hosting ONA's office. Providing both premises and staff. It has also become an official financial back up organisation for OptoNews Africa. The International Centre for Eyecare Education – ICEE and other organisations have shown interest in a joint project for creating a reliable and durable database of Optometry in Africa.

The content is generated around eye health with a particular focus on optometry as an area of interest in the whole exercise of eliminating preventable blindness. It is generated by qualified optometrists who have shown a keen interest on eliminating preventable blindness in Africa.

The content is basically intended for optometrists. However, the information has turned to be an invaluable source of information for optical companies and organisations that needs to know the current state of optometry in Africa for planning of future activities and projects.

The content is shared through three major ways, which includes electronic discussion group, newsletter and resource centre.

OptoNews Africa collects, maintains, preserves and distributes information. This information is made available to be accessed by eye care staff, organisations, policy makers, governments and students in the eye care field. In most cases that information is send to the end-user in a regular basis through newsletter. Alternatively, the electronic discussion group enables end users to specifically request for particular information, which in normally discussed in order to ascertain that information. The resource centre requires a person to either visit our office or make a contact to receive the required information. The costs are largely incurred in delivering information in the form of a solid copy.

This network has accomplished much through its activities. First, it has drawn attention of many eye health practitioners both in Africa and beyond. Also it has awakened the spirit of sharing useful information. Third, is the fact that the project has drawn the attention of the Word Council of Optometry closer to Africa, now local optometric community in Africa can directly contact the president of WCO. Fourth, because of availability of reliable local content international organisations have developed an interest on the aspect of optometry in Africa. Fifth, the local content enables the end user in the target area to further their skills and experience in the field. It is a more digestible content because it confirms to local beliefs, values and language.

Major lessons:

- This case shows that local content creation and sharing is the most effective and yet cheap way of promoting health. Some means of sharing content e.g. Tele-conferencing are expensive and thus not suitable for developing countries. It has been found that paper form of content transfer is expensive yet slow. Finally, although they may not be very reliable, the use of free services can boost the project activities while keeping running cost at minimum.

- The idea of this project was born following a training session in basic information technology of which the director attended. Thus the understanding of some aspects of IT was crucial. Information management skills are also important.

- Inadequate fund is the major limiting factor of content creation and delivery. Funds are needed to reach more end users. Regular training sessions are important to keep contents processors updated.

❖ **Electronic networking and communication support on HIV/AIDS**

By Tim France, info@hdnet.org

Home and Community Care (HCC) plays a vital role in providing acceptable, essential, quality care and support to people with HIV and AIDS. Limited attention has been given to HCC in the past at all levels - especially in international discourses. Grass-roots workers seldom have a voice at the international level - thus expertise and lessons learnt in the field are seldom shared. While international conferences provide opportunities to share lessons, there is often little continuity between them, and the discussion is limited to the few able to attend such events.

The Insight Initiative project provided electronic networking and communication support to two regional events, spanning two continents: southern Africa and Asia and the Pacific - the First SADC Community Home Based Conference held in Gaborone (1st CHBC), Botswana from 5th to 8th March 2001; and the Fifth International Home and Community Care for Persons Living with HIV/AIDS Conference (5thHCC) which took place in Chiang Mai, Thailand from the 17-20th December 2001. These were unique opportunities to facilitate and document the generation of local content, share experiences, learn new lessons and work together to strengthen community participation in home and community care.

In brief, this project focused on using electronic networking as a means to increase the number of voices and perspectives in the preparation and follow-up to the two events, and to facilitate exchange of relevant content between the southern Africa and Asia Pacific regions. The aim was to ensure that as many voices as possible were heard and have the opportunity to participate in the conference, especially those who cannot attend in person.

The project described below was organised and managed by Health and Development Networks (HDN; www.hdnet.org) in collaboration with the Botswana Ministry of Health, the Thailand Red Cross Society, the World Health Organisation, the Royal Thailand Government, SATELLIFE, and the Harvard AIDS Institute – with financial support from AusAID and UNAIDS.

Most importantly, the Insight Initiative, and the information dissemination it facilitated, aimed to capture, share and contrast the southern African and Asia Pacific perspectives and experiences on community based care – highlighting the differences and similarities between HIV/AIDS care needs in the two regions, but also identifying areas in which valuable lessons from the temporally more 'advanced' African response could be transplanted to the relatively 'new' epidemic in Asia and the Pacific.

Two specific time-limited moderated structured discussions related to the conferences (2 and 7 months respectively) were held using the ProCAARE e-mail discussion forum. (ProCAARE is a discussion forum managed by SATELLIFE, the Harvard AIDS Institute, and Health & Development Networks.) A new theme was introduced every month. The moderation team introduced each new theme with a set of clearly designed questions, aimed to guide and focus the discussions.

In addition, 26 Key Correspondents from Asia, Africa, Latin America and Eastern Europe were recruited to write articles that fed into the conference discussions as well as provide session coverage from the actual events. The KC Team comprises capable and experienced country-based writers from around the globe. Members of the Team come from diverse backgrounds, and have a wide variety of technical HIV/AIDS expertise, such as nursing, law, medicine/epidemiology, counselling/training, journalism, programme management, and policy/strategic planning. They ensured local and country perspectives in the structured discussions as well as the conference coverage.

During the conferences the team worked intensively to provide critical analysis on the presentations they heard as well as talking to participants to get their views on what was presented.

Following the events, post-conference structured discussions were facilitated where the conference coverage, local content and emerging issues around HCC were discussed and evaluated and put forward for further attention. Continuity was facilitated between the two events by including KCs who had covered the Gaborone conference in the Chiang Mai team as well as incorporating material and declarations from the Gaborone conference into the pre-conference discussions leading into the Chiang Mai event.

Using innovative methods including deliberative dialogue to stimulate and engage people, the active participation in the discussion was unprecedented in HDN's experience, as illustrated by its extensive regional coverage, including contributions from Asia, Africa, Latin America and the US and its generation of a wide range of content and views from communal, institutional and individual perspectives.

2483 participants took part in the forum as of the end of December 2001 (increase from 700 at the start of August 2001)

The main approaches involved the use of deliberative dialogue and electronic networking and the engagement of Key Correspondents, or country-based writers, to ensure diversity and grounded perspectives from the field.

Although 2400 members directly received the postings, we know from previous evaluations of structured discussions, that on average 80% pass on messages to people they know (Stigma-AIDS Survey, 2001, STOP-TB survey, 2002 – see HDN website).

Major lessons:

- To encourage local content creation, the key skills required are good facilitation and moderation skills. The content exists, and is shared on a daily basis at exclusive events, meetings and workshops - it is our collective responsibility to bring this content out into broader forums, so that it can have an influence on daily practices as well as wider audiences, such as policy-makers and international organisations.

- Electronic networking is a valid and viable means of providing learning, dialogue and highlighting issues as well as creating virtual conferences among those who cannot attend in person. At a fraction of the cost of conventional meetings.

- These forums can, and do, effectively attract participation from people in developing countries, despite issues of electronic connectivity and access.

❖ Health information for continuing professional development - CPD[2] (Uganda)

By David A. Tibbutt, david@tibbutt.co.uk

The initiative for a CPD/CME (continuing medical education) Programme in Uganda for all healthcare professionals came from within Uganda. The requirement for such a CPD / CME Programme became enshrined in Ugandan law 1996. The Councils for the professional groups were made responsible for the implementation. A National Continuing Medical Education Steering Committee was created with representatives of all stakeholder groups (doctors, nurses, allied health professionals and pharmacists) as well as the Councils, Makerere Medical School and the Professional Associations. Dr. David Tibbutt was appointed to the role of "Advisor for CME" in June 1998. He remained in Uganda for two years and since has continued support, especially for the Newsletter.

The purpose of the project is to design and evolve a programme for CPD/CME that would eventually include all healthcare professionals in Uganda. The problems being addressed included: A lack of understanding among all groups for the need of CME and the meaning of life-long learning; a lack of a philosophy of collective CME; a lack of clinical team working between the professions; gradually the "psychological infrastructure" was cultured by numerous and widespread personal visits to hospitals so that now most hospitals have regular place-of-work-based CME meetings to which all staff are invited; a recording system for personal CME performance was missing. This has been introduced for all doctors in the form of a simple "CME Diary". A similar system is to be introduced gradually for the nurses and other professions; availability of health information was grossly inadequate. The "Uganda CME Newsletter" was established to address this need. Above all the improvement of the care of the patients within the resource poor setting was a high priority and the development of the CPD / CME Programme was considered to be a crucial element in this.

Content of the *Uganda CME Newsletter* includes: General review articles using sources from recent and appropriate medical literature; case reports provided by doctors, clinical officers and nurses; questions from up-country: These are questions about clinical issues, and are raised by doctors and clinical officers; abstracts from published research that has been carried out in Uganda; other important extracts from the medical literature; and a multiple choice question quiz for which a prize is given for the best entry.

The content of the *Newsletter* is collated and edited by Dr. David Tibbutt. The local contributions ("Case reports", "Questions from up-country") are received from healthcare professionals. These are edited and then correspondence takes place with the authors and eventually articles are published under the name of the authors only. About 90 contributions have been received in the last three years. Two of these were subsequently published in *Tropical Doctor*.

The Newsletter: acts as "distance education" based on "real patient care", increases clinical interest, generates pride and teaches the techniques of medical writing.

Answers to clinical questions are returned to the questioner as speedily as possible. The question and the answer are then published in the *"Newsletter"*. The advantage of this approach is that it answers a real clinical need. It is also likely to cover topics of interest to other health professionals within Uganda and provides ideas for future areas to be discussed in the *"Newsletter"*.

The target audience for the *"Newsletter"*: doctors and clinical officers. A few articles have come from nurses (including a piece of joint research by a nurse and a doctor on "Child sexual abuse") and there is other evidence that some nurses have access, e.g. two quizzes have been won by nurses.

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[2] The term "Continuing Professional Development" (CPD) is often used synonymously with "Continuing Medical Education" (CME) but CPD implies the inclusion of other aspects of learning (e.g. management, planning, communication skills) as well as the skills needed for direct medical (including surgical, nursing, etc.) care (CME). However, in this document the term CME will be used often because there has been an emphasis on this although the other aspects of CPD have not been forgotten.

Certainly all hospitals in Uganda receive a copy of the *"Newsletter"*. For many this is the only regular supply of health learning material.

An unexpected bonus of the Newsletter has been that it has enabled the results of donor-supported biomedical research carried out in Uganda and elsewhere in Africa to be seen by healthcare providers *in* Uganda and elsewhere. This has been made possible by the inclusion of research findings summarized by the 'ID21 Health' programme at the Institute of Development Studies, UK. Ironically, the findings of this research would not otherwise have reached the vast majority of healthcare providers in Uganda.

In order for the *"Newsletter"* to become totally Ugandan-owned an "Editor" is needed with medical writing, organisational and teaching skills. These would require training and a salary so costs would arise.

There remains a need for a parallel newsletter (and the resources to go with it) for the nursing profession – perhaps also for the laboratory technologists, technicians and assistants.

Major lessons:

- The design of a clear CPD / CME programme structure (and vision) jointly owned by all of the stakeholders with a

- Simultaneous "bottom-up" approach creating personal contacts with healthcare professionals especially in the rural areas. This in turn leads to an

- Understanding of, and the satisfaction from, the value that arises from participation in the programme with co-professionals and similarly from

- Having a *"Uganda CME Newsletter"* to which anyone may contribute.

- This has broadened the concept of "distance education" making it immediately relevant to clinical practice.

- There is a latent enthusiasm to be involved in CPD / CME but it requires constant nurturing.

- It was easier than expected to engage the active involvement of nurses (and the allied health professionals) with doctors in joint CME activity was. This rapidly expanded during the two years from 1998

- Distribution of the *"Newsletter"* needs to use all methods available with the realisation that e-mail (and the Internet) is not available to the majority (yet!).

- The only way to confirm the value of a CPD / CME is by (clinical) audit. This has been carried out to a limited extent and is being actively fostered but, as was in the West, the establishment of a culture of clinical audit will take time and patience. Comments from individuals give cause for optimism: "We wish there were more of you", "The CME programme has encouraged us to work together and gives us more interest in our work", "My publication in the *"Newsletter"* has encouraged others at the hospital to do the same".

❖ **AfricaSHARED: Access to medical research in Africa**

By Samson Katikiti, skatikiti@healthnet.zw

The SHARED initiative (Scientists for Health and Research for Development) started as collaboration of European and African countries sharing information on health research. This brief description will focus on the implementation on the initiative in Zimbabwe where a pilot case was initiated to test the feasibility of sharing of information and networking among researchers could be achieved within the SHARED initiative.

The long-term objective of the project is to enhance the utilization of research work in policy formulation and decision-making. This is achieved by ensuring access to the research work taking place, while also ensuring an arrangement in which there will be continuous updating of the

information by the participating scientists and institutions. The project also seeks to enhance networking among researchers based on the content of the work they are caring.

The implementation of the project in Zimbabwe involved the project secretariat, which was largely responsible for spearheading the project, and training the various users of the system, as well as monitoring the quality of the content of the information submitted. The participating institutions and scientists are responsible for contributing information on the research they are working on. The decentralization of the entering and updating on information on the website is done to the scientist level to ensure that the information supplied is as close to the source as possible. The participating institutions participated through the personnel responsible for information dissemination within their institutions and this included research institutes, universities, the Ministry of Health and Child Welfare as well as other NGOs working in the health sector.

The sharing of information is through the websites (www.shared.de and www.africashared.org) for those who have access to the Internet. For those who have slow or no access to the Internet, a special CD-ROM version was developed, which is updated periodically. Arrangements are also being made to enable libraries and other points of access to health information to have updated versions of the database.

The content is a description of the various research initiatives taking place in the country. This covers proposed research, ongoing research as well as completed research.

The information is targeted to a wider audience interested in health research from researchers, policy makers, the public and health practitioners. They use the information in different ways, e.g. researchers for finding partners, health practitioners for finding out the latest research findings, and policy makers for identifying advisors and best practices.

The costs of the project have largely been on the development of the technology for the system, and also the introduction of the project in the participating countries. These costs have been largely funded from the initial grant from the European Commission. However once the initial phase of the project is complete and the project has reached a stable phase (where people have information on the initiative are utilizing it), the cost of entering and managing of the information will be shared among the participating scientists and institutions with the only constant cost being that of maintaining the server hosting the website (currently hosted in Germany and partly in Zimbabwe).

The technology developed for SHARED allows the localisation of any (combination of) text(s) and expertise, anywhere in the world, with extremely high speed, keeping heavy data transfer to a minimum. For future developments and marketing purposes this technology has been turned into a professional product by a private company named Collexis® (www.collexis.nl) but remains freely available including eventual updates, for the SHARED network and other initiatives that work to improve equity in the South with the name of IKON (Interactive Knowledge Networking). An arrangement was also made that a certain amount of the profits from the commercial use of the SHARED technology will be use for the purposes of the SHARED project and this will cater for future expenses.

This Knowledge Management System is a web-based information product that enables widespread knowledge networks to communicate collective intelligence of the network members. The system stimulates each and every member to keep personal data in optimal shape as a routine with very simple browser-operated tools.

An offline version in a CD-ROM to facilitate the use in places with connectivity problems was developed in another EC project and is in the testing period. In this case, the information is sent by XML files at once from time to time, allowing updates of the contents in a safe and inexpensive way. Alternative update systems are in process, like the use of Satellite in Africa, for instance.

In Zimbabwe, the project - in partnership with the Medical Research Council of Zimbabwe, the Universities, Ministry of Health and Child Welfare and other institutions working on health research - has managed to bring online more that 1100 research projects.

The offline version of the SHARED database has also been installed on the computers of many institutions and also officials in the Ministry of Health and Child welfare. While the utilization of the system cannot be quantified, what can be said at the moment is that there now exists a database in which the scientific community in Zimbabwe can have access to what research work is proposed, currently ongoing and was carried out in the country and by which scientists and institutions.

There has also been a general increase in the awareness of the health research and research results from the research currently taking place in the country. For example, through the cooperation with the

Research Council of Zimbabwe, SAFAIDS, Blair Research Institute, University of Zimbabwe HIV/AIDS Unit, CDC Life Project and other partners a special site www.shared.de/aids was prepared to profile the research work carried in the field of HIV and aids and more than 500 projects have been conducted in this area. These are now accessible to people on the net and through the offline version. At the moment there is also work to periodically print a booklet of the research work being carried out in Zimbabwe and this will be conducted by SHARED in collaboration with the Medical Research Council of Zimbabwe. Similar initiatives have also been conducted with other programmatic areas like malaria (www.shared.de/samc) and this is set to increase with more partnerships coming up.

The next stage of the initiative involves increasing the utilization of the system and also facilitating access to this resource by as many stakeholders in the health field as possible while maintaining the continuous updating of the database. A key player in this regard are the current participating scientists and institutions which will continue updating their projects and also the Medical Research Council of Zimbabwe which will ensure that every new project is indicated in the database before being continuously updated by the scientists and institutions. This will ensure the continuous updating of the database.

The project is sustainable in that the responsibility of entering and management of the projects is decentralized to the scientists level and the Medical Research Council of Zimbabwe (a statutory board responsible for approving medical research in Zimbabwe) will also ensure the continuous updating of the database.

The immediate further development of the system will involve the launching of the offline version (project entering system) and also the linking of the research work in SHARED with publications in other journals through the indexing system. This will also make it easy to find publications in a specific area of research done by matching you proposal with publications and research in other databases like Medline.

Major lessons:

- Local information has normally been available in bits and pieces with a comprehensive exercise necessary at the beginning to give people access to what has been done before is a very tedious process but very necessary for the success of the project.

- People tend to identify more with information coming from their peers and within their locality and this enhances the appreciation and participation in an initiative.

- While Internet technologies are excellent for sharing of information for those who have access to the Internet, many institutions in Zimbabwe do not have as much access to the Internet and back-up facilities need to be in place to enhance the dissemination of Internet generated information to a wider audience.

- In many cases, scientists are very busy people who normally do not have as much time to sit and enter and manage projects within the SHARED database and in most cases this was done by their assistants.

- People tend to participate more in an initiative if they see a benefit in doing so and for most institutions and scientists, the benefit of being identified with certain expertise was led to their participation in the initiative.

- The issue of intellectual property rights came up very much in the discussions with many scientists and head of institutions. However giving people the responsibility to manage the information which is made public is important in getting more and more people participating in initiatives which involves sharing their information with others.

❖ **Current Health Information Zimbabwe: A digest for health professionals**

By Helga Patrikios, Patrikios@healthnet.zw

Good information support for health professionals is essential to an effective health service, but the support may be lacking when there are more urgent demands on financial resources. Anecdotal reports of information deficiencies of practitioners working at a distance from the UZ Medical Library in

Harare, Zimbabwe encouraged the Medical Librarian, in 1984, to try to establish the extent of the deficiencies by carrying out a survey of the information needs and priorities of district hospital doctors and clinical officers in Zimbabwe.

Our basic impression of a lack of systematic provision of information and of unmet needs was borne out by the survey. Responses (which came from 74% of the 4-page questionnaire sent to both named and unnamed doctors and nurses in district and mission hospitals) confirmed the lack of current books, journals, access to journal articles and newsletters. A degree of desperation was conveyed in some of the responses to open-ended questions on the effects of the information deficiencies: requests for professional contact, consultant visits, feedback on referred patients, and medical updating newsletters; they included the following complaints: "we are forgotten", "we have no contact ", "no communication". Over 90% of respondents felt they were "disadvantaged" or "severely disadvantaged" by their distance from the main centre.

In a second survey of academic staff at the University of Zimbabwe Medical Faculty, also carried out in 1984, no respondents reported serious deficiencies in information.

The results of the survey presented the Medical Library with a clear call for action to redress this imbalance. Efforts by the Library and the Ministry of Health to acquire and distribute core collections of textbooks were greatly appreciated; but meanwhile, few hospitals received more than 2 or 3 current journal subscriptions. The need for a source of update material generated the idea of a Current Health Information Zimbabwe (CHIZ) digest, which would provide regular news of developments in international and regional health issues.

We discussed our suggestion of an abstracts digest with medical practitioners who had knowledge and experience of working in remote rural areas; all agreed that a selection of references with abstracts from the world's major database of health literature – MEDLINE – would be of value to isolated health workers. The Medical Library would provide full texts of the references to requestors.

Initially, until the Library acquired its own MEDLINE database on CD-ROM, in 1988, the WHO (Geneva) library provided us with abstracts retrieved on a search profile of the major health issues in the sub-Region. The UZ Medical Library regularly refined and focussed the search profile, and with MEDLINE on CD-ROM the production of the abstracts became a simple automated monthly process, which took three to five minutes. Volunteers among faculty selected the most relevant abstracts; these were compiled under broad subject headings; photocopies of the contents pages of several journals were added to make a total of 50 or so pages. Local news items are occasionally included.

Two A4 pages were reduced to one, and these were printed and collated by the University of Zimbabwe's Reprographics Department at cost (masters and paper only).

Initially a local donor provided the grant needed for production, for three years. The costs of printing the digest have been taken on over the years by other donors – IDRC, and now WHO's Country office (which is presently reviewing the grant). The last issue in production is for 2000. Originally quarterly, an acute staff shortage has recently reduced us, temporarily, we hope, to annual production. We hope to restore the quarterly issues as part of a new project for information dissemination.

Copies of the digest are addressed by Library staff, but are distributed to recipients by the Ministry of Health. Recipients are District and Provincial medical officers, clinical officers, environmental health officers and technicians, pharmacists, academic and technical staff in Harare, WHO offices and Ministries of Health in neighbouring countries.

The original MEDLINE searches from Geneva were done by TELNET, in 1987-88. By 1989 the UZ Medical Library had its own CD-ROM databases, and made its own searches. We could use MEDLINE in PUBMED now to do the SDIs; but CD-ROM is more stable and faster for a lengthy search profile. The digest will soon, we hope, be distributed by e-mail to the growing numbers of doctors who have email access. When Internet access becomes more widespread, the digest may also be mounted on the UZ Medical Library's website.

The Library continues to receive written request for copies of CHIZ. A number of letters of appreciation have been received over the years. For many health professionals CHIZ provides their only access to international and significant local developments in management and treatment of locally prevalent diseases and disorders, and to changes in public health policies.

The digest has existed for thirteen years, and we expect that funding for printing costs from WHO will continue into the future. The digest has been used as a model in four other African countries.

Major lessons:

- This digest has been a low-cost way of distributing 1200 copies of an updating tool consisting of easily selected abstracts and journal contents pages to possibly double that number of readers.

- Localised content can be found outside the country, in international databases. Internet websites and other sources of locally relevant information must be better exploited. Google searches on Zimbabwe AND specific health issues are very rewarding – tools of this kind on more specialised topics than CHIZ's kind could be produced on a regular basis. A database of local health literature developed some years ago at this medical library has content of very mixed quality, far from meeting the demands of Evidence based medicine. It has also languished, as staffing shortages have grown acute. However a database of postgraduate theses produced by this medical school will emerge from a new project of the Association of African Universities, the Database of African Theses and Dissertations - DATAD)

- The specific need had to be demonstrated; the concept of an updating digest of abstracts had to be developed, with opinion and experience tapped in the right quarters; funding had to be solicited – which needed PR and networking skills; much persistence in maintaining both funding and editorial assistance (in the selection of abstracts), compilation and distribution, has been needed. It still is.

❖ Continuing medical education for through distance education (Uganda)

By Sr. Aquilla Priscilla Omwangangye, prispam@yahoo.co.uk

Health workers acquire the knowledge, skills and attitudes during basic professional training. Upon completion of their training, they are deployed to begin implementing what they learnt. However, in practice, things change: Some things they learn may become irrelevant. They may forget things that are relevant. They may have to deal with things they were not taught during basic training: new approaches, practices, techniques, drugs, diseases, conditions and responsibilities.

Health workers, particularly those in rural areas, work in deprived environments which are characterized by: Heavy workloads, little or no supervision, lack of access to libraries for self-study, limited opportunities for sharing of experiences with other professionals. All this results into a problem of unsatisfactory performance in delivery of Health services by the health workers.

Such Health Workers need Continuing Medical Education (CME) - any form of education in health that carries on throughout one's career. The Ministry of Health in the country recognizes Distance Education as a viable strategy in ensuring CME to Health Workers because of its positive attributes: Wide coverage, accessibility, reduced costs in training (meals, accommodation, allowances and transport costs not incurred). Distance Education refers to the various forms of study where the learner is not in direct contact cadres with his/her teachers but benefits from the multimedia approach in the form of print, radio, audio, cassettes, television, video and human among others.

The project objective is to improve the health of the people of Uganda through improved performance of Health workers.

The content being generated is that which addresses the training needs of health workers in implementing the Uganda National Minimum Health Care Package (UNMHCP). The content is developed by content area specialist invited from relevant departments and programmes within the Ministry of Health. The content specialists work closely with the technical staff in material development based at the Health Manpower Development Centre. Sometimes the team is further strengthened by co-course development with technical staff from a sister programme in AMREF Nairobi Kenya.

The content is developed for use by health workers in the country. These include nursing and midwifery cadres, clinical officers and the Allied Health professionals (Radiographers, Anaesthetists, Physiotherapists, Occupational therapists, Laboratory technicians and Technologists, Orthopaedic Officers, Health inspectors and Assistants etc). Sometimes, the content is made use of by pre-service Health Training Institution who come to know about its relevancy.

In this particular case story, the Distance Education Programme uses print media, face-to-face tuition, and tutorials and radio programmes. The content is shared through postal means, telephone, posters,

brochures and person-to-person publicity and counselling in workshops, meetings and within health facilitates.

In terms of content generation and sharing, the Distance Education Programme has developed 11 courses; set up a local training programme of personnel to work as Tutors, Coordinators and clerks; established 23 functional Distance Education Coordinating Units; enrolled 10,439 Health Workers since the DEP started in 1985. Plans are in place to expand the content to address the CME needs of other Health cadres not specially taken care of currently. These include Medical Officers and the Allied Health professionals. The technologies used will also be diversified to include the Internet, computer mediated learning and video conferencing among others.

Major lessons:

- Content needs to be varied to be able to meet the different varied needs of the target audience.

- Local content is better developed collaboratively by a team of subject, learning material and media specialists.

- Content generation and maintenance is time consuming and as such needs proper planning, scheduling and a co-team of technical and motivated personnel.

- Content development is capital intensive and for this case study in particular it is donor dependant.

- Decentralisation of delivery points improves accessibility of sharing content.

- Knowledge and context are dynamic and maintaining content relevant calls for investment in research and prompt utilization of research findings.

- A core full time staff is necessary as backbone to content generation and sharing.

❖ Personal health information files for frontline health workers (Zimbabwe)

By Helga Patrikios, patrikios@healthnet.zw

Frontline health workers have shown in surveys in Zimbabwean and other contexts that they are disadvantaged in their work by lack of access to current information of all kinds and in particular to instructional material on treatment and management of common clinical cases they encounter in their daily work. Already disadvantaged by severe deficits in personnel, drugs, equipment etc., they are further handicapped by the lack of appropriate and locally relevant information to enable them to do their work as effectively as possible. Collections of books and manuals occasionally provided to hospitals tend to diminish and disappear, and/or be locked up and inaccessible for emergencies. A further difficulty is that available information usually emanates from clinical settings in the West, and cannot be applied readily to local conditions.

Responses to a recent postal survey (May 2000) of information access, needs and priorities of district hospital doctors and senior nurses gives a discouraging picture. It also lists some details of specific wants. Seventy-three per cent rated clinical guidelines as first or second priority, while 63% rated Continuing Medical Education (CME) as first or second priority. A systematic coverage of common diseases and disorders is urgently needed, which also takes account of local limitations of the health services.

To ensure 24-hour access to key information, the concept of personal health information files or portfolios was developed. HI files or Portfolios could become standard issue for health professionals in training, as a part of their studies and practice as a stethoscope of white coat. Collections of individual guideline and protocol papers kept in sturdy ring-binders, can serve each health practitioner as his or her own secure and private library, available 24 hours a day, its contents updatable, expandable, disposable.

The project aims to create, adapt and revise locally and internationally-produced health information and establish a bank or virtual library of reference materials for health practitioners in Zimbabwe. A priority of the project is to produce locally a set of standard treatment regimens, therapeutic guidelines and protocols that are appropriate for local conditions and which allow for the current availability of personnel, equipment and drugs.

Content is to be commissioned from experts in the Clinical Epidemiology Unit, or other Departments of the Medical School, who will create guidelines on AIDS/HIV, STIs, TB – covering epidemiology, diagnosis, treatment, social support facilities etc. Experts can integrate material from outside sources and yet ensure the local relevance of their output. The content will be aimed at practice in secondary and primary care facilities.

Material can be borrowed and adapted from the Uganda CME programme, which distributes locally-produced guidelines and update newsletters on a wide range of medical and surgical problems to district hospital doctors. That project, led by missionary expatriate doctors, has grown in recent years and generates contributions from hospital doctors, as well as their requests for fresh coverage of specific medical and surgical conditions, There are other examples of locally-produced material in, e.g., the Zimbabwean EDLIZ handbook (Essential Drugs List for Zimbabwe with standard treatment guidelines); the somewhat outdated ZEDAP (Zimbabwe Essential Drugs Action Programme) modules covering broad disciplines - Paediatrics, Obstetrics and Gynaecology, STIs etc.; the Kenyan handbook of clinical guidelines, the Papua New Guinea standardised action manuals on patient management, and others.

The kinds of health literature to be produced and disseminated by the IDU would fall into broad categories of guidelines, updates, newsletters, journal articles and other documents. These would be disseminated along an electronic print path, via one or more relay stations or staging posts, as downloads from websites, transmission by e-mail as attached files; locally-produced CD-ROMs, and print documents.

The last mile in the electronic print chain, reaching to health facilities lacking reliable telephones, or computers and printers, would be completed with documents, papers, guidelines printed out for general distribution or in response to individual requests.

The IDU will compile contents for the generic HI files, in their initial production stage. Once distributed, individuals can request updates or further guidelines as needed.

The project has the potential to provide the kinds of health information most needed by health professionals – to initiate a tradition of local production of health literature; to make this literature available at low cost to varying levels and large numbers of health practitioners, using electronic transmission or print to bring it to distant health workers

Major lessons:

- The commissioning and creation of local content will take, in initial stages of production, both time and money.

- We anticipate that access to internationally available electronic health information resources will be needed, for integration into local resources, to achieve adequate and current coverage of the target topics, and to update the local products.

- One or more local Champions in other potential provincial or country sites are essential to getting such a project off the ground.

- The availability of local expertise for adaptation of material to fit local conditions is critical (this could be provided by an international organisation - ideally WHO). However, the need for a strong evidence base for standardised therapeutic guidelines is likely to be an obstacle to getting the backing of a major international NGO, and to any reasonably rapid production. Locally acceptable best practice should determine the content in a project of this kind.

There are serious barriers to local production of content. They are essentially economic. First a relentlessly growing Brain Drain has taken thousands of Africa's best qualified scientists, medical practitioners, nurses and teachers off to greener pastures in the North and the Antipodes, where salaries of around $100 000 look good to professionals presently earning $1000 to $2000 a year.

In Zimbabwe we have seen hundreds of doctors, and thousands of nurses emigrate to Britain, Ireland, Australia and New Zealand in the past three years alone. The demoralisation of those who remain grows, as they are not only very poorly rewarded but increasingly overworked.

While the loss of skilled manpower in Zimbabwe is greatly exacerbated by the political situation, other countries have been experiencing such losses of skilled manpower for several decades.

The remaining experts who are well-qualified to write the appropriate guidelines or Continuing Medical Education material are forced to take on excessive workloads: second or third jobs, private practice,

multiple consultancies – to compensate for the erosion of the value of their public sector salaries. To engage their involvement and their contributions to a significant pool of local health information resources there must be strong financial incentives. Volunteerism is a luxury enjoyed by professionals in industrialised countries. Altruistic activities don't pay for mortgages, school fees, grocery bills, or reliable cars…

❖ BDHealthInfo: Using ICTs to share health knowledge in Bangladesh

By Md Shahid Uddin Akbar, unisys@bdonline.com

BDHealthInfo is an initiative to establish links between ICT professionals and health professionals and other beneficiary groups, with the goal of using ICT for development of the health service sector.

The objective of the project is to establish a network of Digital Platforms (telecentres) for local health professionals, making them aware of Internet resources available on the web, and to ensure access to the web. And also to provide a support service for sharing ICT based services and knowledge.

There are about 26 medical journals (not all are regular) and 5 newsletters published in Bangladesh by government, different medical associations, NGOs and pharmaceutical companies. None of these are currently available on the Internet except the JHPN of the International Centre for Diarrhoeal Disease Research. There is no national web site for health professionals.

Unicorn Systems and EngenderHealth are extending financial support. We are working to partner with local publishers for collection of the contents of the journals to make them available on the Net, and to contribute content for *BDHealthInfo* - a newsletter for health professionals, health service workers, researchers, medical students and patients.

We collect the content of the locally published journals for our Journal Service and have an arrangement with the Bangladesh Medical Association for content collection. We also have a very good network of health consultants who will work in our BDHealthInfo project as advisors and contributors for local content collection and development.

Communication is through mailings (newsletter), CDs, floppy disks, hard copies, seminars, workshops and offline information dissemination service. BDHealthInfo will go online within a short period of time as soon as it gets financial support and logistics. BDHealthInfo shares its resources among the beneficiary groups accessing the services offered. The approaches have been designed to reach the target groups through strategic alliances with different medical and health associations and government institutions. We mail the *BDHealthInfo* Bulletin to members who don't have access to the Internet, or even to a computer, especially those at the Thana level, where health workers are the most deprived of updated health information.

BDHealthInfo is using a combination of old and new technologies to generate, share, communicate and disseminate information resources. For content collection and development, we use traditional technologies. Our goal is to use the Internet as the ultimate tool to disseminate information. Simultaneously, we will use old technologies like direct mailing.

❖ Shasthya Sanglap / Health Dialogue (Bangladesh)

By M. Shamsul Islam Khan, msik@icddrb.org

Shasthya Sanglap is a 4-monthly magazine that publishes articles on various diseases and health problems in Bangladesh. It contains articles on various diseases and health problems, highlighting underlying causes, signs and symptoms, treatment, prevention, etc. The articles are contributed by the doctors and researchers of the Centre for Health and Population Research (ICDDR,B) and are written in simple native (Bangla) language understandable even to the half-literate rural people of Bangladesh. The magazine is published by ICDDR,B at its own cost, and distributed free among health workers and local readers at large.

The magazine is printed from a private printing press. DTP outputs (camera-ready copies, i.e. made-up pages) are supplied from the Publications Services Section under the Dissemination and Information Services Centre (DISC) of ICDDR,B. From December 2001, the magazine is also available through our website: http://www.icddrb.org in PDF.

Local health workers (and general readers) are being educated on various aspects of important diseases and health problems, including treatment and prevention. Attempts are being made to obtain feedback in the form of a readers survey to improve the contents and quality of presentation and production

Major lessons

- Publication of health-related magazines in simple native language is instrumental in uplifting the health awareness of people

- Good editorial skills and good knowledge of DTP is essential.

❖ **COLARIS - Latin American Centre for Resources and Information on Eye Health**

By Juan Carlos Serrano, jcamacho@intercable.net.co and Juan Camilo González

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In Colombia, there is a lack of reliable information on preventable diseases causing blindness. This information includes general knowledge, primary care, prevention, epidemiological data and statistics. An information centre was therefore created to share information about eye care and prevention of blindness in Colombia and across Latin America.

This information would be replicated as educational material for people working in eye health: health professionals, social workers, health students and volunteers, among others. In this way, they can build and support programmes of prevention of blindness according to the specific needs of each locality.

The institutions involved in COLARIS are: FOSCAL (www.foscal.com.co), the International Centre for Eye Health, and the Christoffer Blindenmission.

The information generated by the Centre falls into two categories: Materials originally created and developed by the Centre, and the translations and reproductions of material from other sources. We share the content through the COLARIS library and via seminars and courses. In addition, a Mobile Ophthalmology Unit travels through the country allowing educational material to reach local hospitals in every town.

In this manner, COLARIS has created local information according to the country's specific situation: the materials take into account cultural, religious, and economic issues. COLARIS shares the content with other groups who share the same goals of creating material on eye health. We want to share our experience with international groups. Our final goal is to decrease the incidence and prevalence of blindness caused by diseases in our communities by promoting different attitudes in the community towards eye health.

Major lessons:

- The educational material offered by some NGOs is sometimes not as useful as it could be because of the disparity of requirements in each community in terms of content, language and orientation, among others.

- For example, we have received training videos in English for local ophthalmologists. The videos refer to old surgical techniques that are no longer used in Colombia. Also, we were sent material on how to prevent blindness caused by Vitamin A deficiency, which is not prevalent in Colombia. By undertaking our own surveys and studies, we can identify problems that are relevant to our country and then generate appropriate material.

- To proceed further, we need to have a wider vision of the different health groups working on communication, in order to create new ideas. We also would like further advanced training on how to generate specific educational material. We would like to show and share our content worldwide. The globalisation of a programme like this would have benefits for both our centre and for the international community involved in fighting preventable blindness.

❖ Generating data on the incidence of induced abortion in Nigeria

By Boniface Oye-Adeniran, oye@beta.linkserve.com

Abortion is illegal in Nigeria except to save the life of the woman. But thousands of women resort to it each year. Information on the incidence of abortion and on the consequences of abortion outside the health care system is needed to develop policies and programme that will address the problem.

The Campaign Against Unwanted Pregnancy (CAUP) is a non-governmental, not-for-profit, multidisciplinary initiative comprising doctors, women's rights activists, lawyers, nurses, media practitioners, social scientists and other Nigerians committed to the promotion of women's sexual and reproductive health and rights.

The group was formed in 1991 out of concern for the problem of unsafe induced abortion in Nigeria. The overall goal of the CAUP is to reduce the rates of unwanted pregnancies and unsafe abortion in Nigeria. The strategy is to create a conducive, political, legal and socio-cultural climate in the country, which will allow women to decide freely whether and when they want to have babies. This is supported by Family Planning Information and Services as well as the provision of safe and accessible abortion care services for those who need such services and comprehensive sexuality education.

In 1999, research was conducted across Nigeria to generate data on the status of abortions. The research showed that each year Nigerian women obtain approximately 610,000 abortions, a rate of 25 abortions per 1,000 women aged 15-44. Researchers concluded that policies to improve access to contraceptive services would reduce unplanned pregnancy and abortion and, along with greater access to safe abortion, would help preserve the health and lives of Nigeria women.

The results of the first research collaboration were formally presented to the Nigerian Public at the Nigerian Institute for International Affairs (NIIA), Lagos on 3rd February 1999. Participants included representatives from the media, government, medical and nursing professions, national and international non-governmental organisations (NGOs), the donor and international agencies and religious bodies. We also produced numerous fact sheets and newsletters from the results of the study.

The fact sheets and the article on: *"The Incidence of Induced Abortion in Nigeria,"* were distributed to government ministries, health professionals and NGOs, including those affiliated with the MacArthur Foundation, International Women's Health Coalition (IWHC), The Ford Foundation and IPAS. The CAUP also organised a National Conference on Induced Abortion July 24 – 28 with the results of the study as a resource document.

The results were used in a capacity building workshop on sexual and reproductive health and rights for policy makers from Federal Ministries of Health, Women's Affairs and Youth Development, Education, Justice and Information and the equivalent committees of The Senate and House of Representatives of the Nigerian National Assembly.

The five year old data of the first research are still the only national source of information on abortion incidence in Nigeria. This is why there is a need for a follow-up research to update the data on unsafe abortion so that The CAUP can continue to sensitise and mobilize public support for informed public policy change on Sexual and Reproductive Health and Rights in Nigeria.

Major lessons

- The collection of data was made easy because of the prior endorsement of the Nigerian Medical Association (NMA) and the Association of General and Private Medical Practitioners of Nigeria (AGPMPN).

- Both associations have excellent networking structures. Each has a national (central) body and branches in all the 36 states and Federal Capital Territory of Nigeria. This helps in the collection of data.

- The release of the results was made a nationwide country affair with the participation of the key ministries: Health, Women's Affairs and Information.

❖ **Service Brings Reward - Distance education radio for health workers (Nepal)**

By Diane Summers

The unique ability of radio to reach, entertain, and educate isolated, less educated, rural health workers and communities makes it an ideal medium in Nepal for attempting to improve the quality of health services. Radio reaches service providers living in isolated communities in difficult terrain and gives them a chance to receive standardized instruction in an appealing format.

The Radio Communication Project (RCP) consists of two radio drama serials and several reinforcing components. 'Service Brings Reward' is an entertainment distance education programme aimed primarily at the approximately 15,000 grassroots health workers. 'Cut Your Coat According to Your Cloth' was aimed at the general public to improve public perception of health service providers and increase demand for services. These programmes followed a mutually reinforcing approach by simultaneously increasing provider skills and client demand for services.

The Radio Communication Project has been developed with the following objectives to:

- Upgrade the knowledge and skills of rural health workers on family planning, reproductive health and interpersonal communication and counselling.

- To strengthen and improve the family planning and reproductive health knowledge of the general public through the health workers and promote health behaviour changes.

- Build community communication capacity through RCP Listeners Groups.

The technical content of the distance education serial was based on the Nepal Medical Standards guide. Radio programme reinforcing components include print materials (programme guide, reference manual, posters, wall hangings, calendars, method-specific brochures and flipcharts) and Interpersonal Communication and Counselling trainings.

The RCP incorporated messages about the well-planned family, conception and contraception, modern contraceptive methods, the role of the caring husband, communication and counselling, maternal and child health, HIV/AIDS, immunization, and adolescent reproductive health. The intended audience of 'Service Brings Rewards' distance education programme is rural health workers. The programme is aimed at updating and increasing their knowledge and skills so that they can provide effective health services to their clients. These radio programmes are produced with the technical assistance from Johns Hopkins University/Population Communication Services and with funding from USAID. Ownership of the programme lies with the Nepal Ministry of Health: National Health Education Information Communication Centre (NHEICC), National Health Training Centre (NHTC) and Family Health Division (FHD).

A guiding principle of the RCP was message consistency across the various communication channels and audiences. To ensure that appropriate, accurate and consistent content was incorporated into both radio drama serials, as well as the interpersonal communication and counselling and print components, the Design Document Approach was used. The Design Document Approach is an internationally proven method for systematic and collaborative programme development, production, implementation and evaluation. All the stakeholders (government, INGOs, NGOs, technical experts, writers, producers and audience members) met together to produce the design document which spelled out in detail: the content of each radio programme episode, responsibilities for different aspects of the project, a production and implementation schedule and an evaluation strategy. This design document was the project blueprint.

Based on this design document, the scriptwriter developed the story in the Nepal social context and incorporated health messages gradually and subtly. The radio programmes are produced in the local

studio in Kathmandu and aired from the central transmission of Radio Nepal through Short Wave and Medium Wave bands.

Major lessons

- Essential elements are: a comprehensive needs assessment, strategic planning, an entertaining story, accurate and technically updated messages, and stakeholder involvement in the process.

❖ **Manuals for HIV/AIDS health care providers (Nigeria)**

By P.O. Samuel, swaan@cyberspace.net.ng

The project aims to provide HIV/AIDS counselling and home-based care services for people living with HIV/AIDS and others requiring the service. These projects are augmented with the production of information manuals for those who will carry out the services, particularly health care providers. The health care providers range from social workers, voluntary health workers, nurses, counsellors, health officers, based in hospitals, health centres, schools, prisons and in the work place.

The manuals help care providers to effectively carry out their tasks. For HIV/AIDS counselling, the manual emphasizes the need for it, and gives information on what HIV/AIDS counselling is, counselling for prevention and antibody testing, special techniques in counselling, special issues in HIV/AIDS counselling, factors that may affect counselling, etc. The home-based care manual teaches how to provide care in the home, how to treat common opportunistic infections, how to prevent infection at home, herbal remedies as is common in Nigeria, how to live positively with the diseases, as well as when to seek hospital care and care of the dying.

A National Committee raised for this purpose generated the content of these manuals. Most members of the Committee are health care workers and have received the WHO training in HIV/AIDS counselling. People living with HIV/AIDS were also involved at a stage. The manuals are copyrighted by the *Society for Women and Aids in Africa, Nigeria (*SWAAN). The content of these manuals is shared during Information exchange and communication activities, training workshops and seminars. The manuals themselves are given to these participants at the end of the various sessions or workshops. SWAAN members do the sharing to the health care providers.

So far, the project has accomplished the task of generating the interest of health care providers in HIV/AIDS work and realizing the importance of HIV/AIDS counselling. It has also generated improved acceptance of people living with HIV/AIDS in communities with high level of discrimination.

Major lessons

- We have learnt that involving the target audience while gathering information made this information shared more acceptable.

- We got this far through the unwavering support of donor agencies and with the support of target communities gotten through advocacy and sensitisation strategies.

ACKNOWLEDGEMENTS

This project itself has often felt like an exercise in local content expression in which a disparate community has gradually expressed many and varied experiences and insights.

During the process, we have found ourselves emulating some of the key messages of the study.

❖ We have valued local content. We sought to locate our own 'local' content; to track and document the knowledge embedded in the brains of practitioners working in this field. We particularly sought to learn from projects in developing countries.

❖ We have motivated local content. In some cases there were small financial motivations to document experiences. More generally, case writers would be first in line to join a workshop in Tanzania. But as the initiative gained momentum, the flow of contributions far exceeded expectations. In hindsight, perhaps the greatest incentive for contributors was a perceived opportunity to highlight their experiences and to interact in some way with processes like the DOT Force and with the donor community.

❖ We are making local content visible. An original objective of the project is to make local content processes visible, by telling some stories, and by making them widely available. All the content is available through the IICD and iConnect online websites. Some content has been further worked into articles for publication elsewhere.

❖ We have engaged in joint action. This was a project with a short timeline and a massive potential agenda. It could only have been achieved through the collaboration and willing contributions of many organisations and individuals. We are indebted to them all. They are listed below.

Ms. Edith Adera	IDRC, Kenya – contribution
Mr. Md Shahid Uddin Akbar	BDHealthInfo, Bangladesh – case writer
Mr. Chris Armstrong	National Community Radio Forum, South Africa – workshop participant; case writer
Ms. Lynda Arthur	Health Foundation of Ghana, Ghana – workshop participant; case writer
Mr. Imruh Bakari	Zanzibar International Film Festival, Tanzania – think piece
Mr. Krishna Baral	Local Initiatives for Biodiversity, Research and Development, Nepal – workshop participant; case writer
Mr. Simon Batchelor	Gamos Ltd, UK – workshop participant; case story coordinator and writer
Mr. Herman Brouwer	Gamos Ltd, UK – case writer
Mr. Wietse Bruinsma	NUFFIC, Netherlands – contribution
Mr. Habby Bugalama	Sengerema Multipurpose Community Telecentre, Tanzania – workshop participant
Mr. Jumanne Bwamkuu	Tanzania Commission for Science and Technology, Tanzania – workshop participant
Ms. Isabel Carter	Tearfund, UK – case writer
Ms. Rosa Cheng	Fundacion Acceso, Costa Rica – case writer
Mr. Andrew Chetley	Healthlink Worldwide, UK – workshop participant

Mr. Roy Colle	Cornell University, USA – contribution
Mr. Saul Cruz	Armonia, Mexico – case writer
Mr. David Curtis	Healthlink Worldwide, UK – contribution
Mr. John Dada	Fantsuam Foundation, Nigeria – workshop participant; case writer
Ms. Jemima Dennis-Antwi	Ministry of Health, Ghana – case writer
Ms. Jennifer DePasquale	Dreyfus Health Foundation, USA – case writer
Mr. Birama Diallo	Timbuctu Community Multimedia Centre, Mali – case writer
Mr. Hezekiel Dlamini	UNESCO, Kenya – case writer
Mr. Mohamed Dume	IPP Media, Tanzania – workshop participant
Mr. Laurent Elder	IDRC, Senegal – contribution
Mr. Pablo Eyzaguirre	International Plant Genetic Resources Institute, Italy – workshop participant; case coordinator
Mr. Alan Finlay	SANGONeT, South Africa – case writer
Mr. Tim France	Health and Development Networks, Thailand – case writer
Mr. Andrew Frankel	Rakumi Arts International, USA – case writer
Ms. Rosa M. Gonzalez	UNESCO, France – case writer
Mr. Juan Camilo González	Latin American Centre for Resources and Information on Eye Health, Colombia – case writer
Mr. Humberto Abaunza Gutiérrez	Fundación Puntos de Encuentro, Nicaragua – case writer
Mr. Abdallah Hassan	Economic and Social Research Foundation, Tanzania – workshop participant
Mr. Aaron Hirsch	Consultant, USA – workshop participant; experience review; think piece; case writer
Mr. Russell Honeyman	Africa Film & TV, Netherlands – case writer
Ms. Stella Hughes	UNESCO, France – workshop participant; case story coordinator
Ms. Salamatu Jibril	Women Farmers Advancement Network, Nigeria – workshop participant; case writer
Ms. Racheal Wamae Julius	Kyanika Adult Women Group, Kenya – workshop participant
Mr. Jackton Kaijage	Research Consultant, Tanzania – workshop participant
Ms. Charlotte Kawesa	Monitor Publications Ltd, Uganda – case writer
Ms. Louise Keyworth	The Story Workshop, Malawi – workshop participant; case writer
Mr. M. Shamsul Islam Khan	Centre for Health and Population Research, Bangladesh – case writer
Mr. Philemon Kilassa	Tanzania Commission for Science and Technology, Tanzania – workshop participant
Mr. Ajay Kumar	Kerala State Electronics Development Corporation Ltd, India – contribution
Mr. Dai Luyuan	Yunnan Academy of Agricultural Sciences, China – case writer
Ms. Doris Matovelo	Sokoine University of Agriculture, Tanzania – workshop participant; case writer
Mr. Patrick Maundu	Kenya Resource Centre for Indigenous Knowledge, Kenya – workshop participant; case writer
Mr. Theophilus Mlaki	Tanzania Commission for Science and Technology, Tanzania – local workshop host
Mr. Yasujuki Morimoto	International Plant Genetic Resources Institute, Kenya – workshop participant; case writer

Mr. Kelvin Mow	Dreyfus Health Foundation, USA – workshop participant; case writer
Ms. Palisa Muchimba	Information Dispatch, Zambia – workshop participant; case writer
Ms. Beatrix Mugishagwe	Abantu Visions, Tanzania – workshop participant
Mr.Lars Otto Naess	FAO, Italy – contribution
Mr. Douglas Nakashima	UNESCO, France – case writer
Mr. Felician Ncheye	Sengerema Multipurpose Community Telecentre, Tanzania – workshop participant
Mr. Innocent Ngalinda	Tanzania National Website, Tanzania – workshop participant
Mr. Hamisa Nguli	Tanzania Commission for Science and Technology, Tanzania – workshop participant
Mr. Willy Nkamuhebwa	Uganda – case writer
Mr. Simbo Ntiro	eThinkTank, Tanzania – workshop participant; local workshop organiser
Ms. Caroline Nyamai	AfriAfya, Kenya – workshop participant; case writer
Ms. Margareth Nzuki	Economic and Social Research Foundation, Tanzania – workshop participant; case writer
Ms. Dorothy Okello	Women of Uganda Network, Uganda – case writer
Ms. Aida Opoku-Mensah	United Nations Economic Commission for Africa, Ethiopia – workshop participant; keynote for workshop
Mr. Don Osborn	Bisharat – contribution
Mr. Quirinus Oyugi	Agency for promoting Sustainable Development Initiatives, Uganda – case writer
Mr. Paul van Paaschen	Hivos, Netherlands – contribution
Mr. Neil Pakenham-Walsh	International Network for the Availability of Scientific Publications, UK - workshop participant; case story coordinator; think piece writer
Ms. Helga Patrikios	University of Zimbabwe, Zimbabwe – workshop participant; casewriter
Mr. Kwesi K. Prah	Centre for Advanced Studies of African Society, South Africa – workshop participant
Mr. Paul Quek	International Plant Genetic Resources Institute, Malaysia – case story coordinator
Mr. Allan Ragi	Kenya AIDS NGOs Consortium, Kenya – case writer
Ms. Sandra Rattley	Worldspace Foundation, US – contribution
Mr. Don Richardson	TeleCommons Development Group, Canada – contribution
Mr. John Rose	UNESCO, France – case writer
Ms. Diana Rosenberg	International Network for the Availability of Scientific Publications, UK – case writer
Ms. Ester Rugakingira	Tanzania Commission for Science and Technology, Tanzania – assisted in the workshop.
Ms. Monica Rukundo	Uganda Debt Network, Uganda – case writer
Mr. Leopold Rweyemamu	DigIT Africa, Tanzania – workshop participant
Ms. María Sáenz	Fundacion Acceso, Costa Rica – case writer
Mr. Daniel Salcedo	Peoplink, USA – case study writer
Mr. Peter Schioler	UNESCO, France, case writer

Mr. Juan Carlos Serrano	Latin American Centre for Resources and Information on Eye Health, Colombia – case writer
Ms. Jennifer Sibanda	Federation of Media Women's Association, Zimbabwe – case writer
Mr. David Silver	Friendship Bridge, USA – Contribution
Mr. Anil Subedi	Local Initiatives for Biodiversity, Research and Development, Nepal – case writer
Ms. Fatima Suleman	Health Systems Trust, South Africa – case writer
Mr. David A. Tibbutt	UK – case writer
Mr. Robert Twene	Ministry of Health, Ghana – case writer
Ms. Gabriela Ugarte	CEBEM, Bolivia, case writer
Ms. Judith Veldhuizen	International Institute for Communication and Development, Netherlands – organised all the IICD elements of the workshop
Mr. Rob Vincent	Healthlink Worldwide, UK – contribution
Mr. Tarja Virtanen	UNESCO, Fiji – case writer
Ms. Leonie Vlachos	Bridges.org, South Africa – workshop participant
Mr. Mike Webb	Big World, UK – case writer
Ms. Veronica Wilson	African Media Productions, Netherlands – workshop participant; case writer
Ms. Deirdre Williams	Saint Lucia - contribution
Mr. Dylan Winder	DFID, UK – contribution
Ms. Eileen Yen Eelee	Sarawak Biodiversity Centre, Malaysia – workshop participant; case writer
Mr. Keith Yeomans	DFID, UK – contribution
Mr. John Young	Overseas Development Institute, UK – contribution

IICD PROFILE

The International Institute for Communication and Development (IICD) assists developing countries to realise locally owned sustainable development by harnessing the potential of information and communication technologies (ICTs).

IICD realises its mission through two strategic approaches. First, Country Programmes bring local organisations together and help them to formulate and execute ICT-supported development policies and projects. The approach aims to strengthen local institutional capacities to develop and manage Country Programmes, which are currently being implemented in Bolivia, Burkina Faso, Ghana, Jamaica, Mali, Tanzania, Uganda and Zambia.

Second, Thematic Networks link local and international partners working in similar areas, connecting local knowledge with global knowledge and promoting South-South and South-North exchanges. Thematic Networks focus on sectors and themes like education, health, governance, the environment, livelihood opportunities – especially agriculture – and training.

These efforts are supported by various information and communication activities provided by IICD or its partners. IICD is an independent non-profit foundation, established by the Netherlands Ministry for Development Cooperation in 1997. Its core funders include the Directorate-General for Development Cooperation (DGIS), the UK Department for International Development (DFID) and the Swiss Agency for Development and Cooperation (SDC).